

IT Security Procedural Guide:
Security and Privacy Requirements
for IT Acquisition Efforts
CIO-IT Security-09-48

Revision 9 January 15, 2025

IMPORTANT!

This guide defines security and privacy requirements for GSA IT acquisition contracts involving externally hosted contractor information systems that do not connect to the GSA network, information systems hosted in GSA facilities that directly connect to the GSA network, Low Impact Software-as-a-Service systems, cloud information systems; mobile applications, and nonfederal systems and organizations with Controlled Unclassified Information (CUI). The security and privacy requirements are appropriately formatted to allow the respective security and privacy contract requirements to be placed in-line within a statement of work for each system type. Alternatively, this entire document can be incorporated into the statement of work or contract.

The security and privacy requirements are appropriately formatted to allow the respective security and privacy contract requirements to be added within a statement of work based on the type of system within the acquisition. Blanket purchase agreements (BPAs) may leverage this guide as an attachment to the BPA and require the specific contract language per information system type to be directly included in individual Task Orders. Appendix A contains best practices on Cloud SLAs for consideration when preparing acquisitions that include Cloud services.

NOTE: Throughout this guide there are highlighted SELECT statements. The requirements office, in coordination with the contracting officer, will complete the selections prior to their incorporation into a contract or statement of work. See example below for the intended use of the SELECT statements.

The guide text states:

At the Moderate impact level and higher, the <SELECT: contractor or Government> is responsible for providing an independent Security Assessment/Risk Assessment in accordance with GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk.

The requirements office in coordination with the contracting officer would determine for the specific SOW/contract being prepared whether the contractor or the Government was responsible for the independent assessment and change the statement accordingly. For example, if the contractor is required to provide an independent assessment the statement would state:

At the Moderate impact level and higher, the contractor is responsible for providing an independent Security Assessment/Risk Assessment in accordance with GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk.

Pre-award solicitations can be submitted to <u>IS Contract Review Intake</u> for review and approval. The review ensures GSA IT contracts have the IT Security language consistent with GSA and Federal policy and will identify any C-SCRM risks to minimize contract modifications and delays.

VERSION HISTORY/CHANGE RECORD

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
		Revision 1 - November 6, 2009		
1	Bo Berlas	Minor Changes to GSA 800-53 R3 Control Tailoring workbook in Appendix A	GSA 800-53 Control Tailoring Workbook Update	17
		Revision 2 – November 7, 2014		
1	John Sitcharing/ Blanche Heard	Minor changes to verbiage regarding Penetration Testing	Update Penetration Testing verbiage	9
2	John Sitcharing/ Blanche Heard	CISO mandated change in Penetration Testing requirement/ naming conventions based on consolidation efforts	CISO Mandate	Entire document
		Revision 3 – February 2, 2017		
1	Bo Berlas	Added Essential Security controls to Section 2	Security Controls Update	9
2	Bo Berlas	Added sections 3-5	Updated to Provide Requirements for Internal Systems, Cloud Systems, and Mobile Applications	22-55
		Revision 4 – January 25, 2018		
1	Feliksa/ Klemens	 Incorporated security references from MV 16-01 and additional references. Added a section on LiSaaS, Privacy controls, and updated Privacy and other sections to align with GSA policy and procedures. 	Incorporate MV 16-01 and consolidate GSA Cybersecurity and Privacy Guidance.	Throughout
		Revision 5 – August 25, 2020		
1	Desai, Klemens, Speidel	 Incorporated NDAA/FAR clauses that prohibit the acquisition from covered entities. Added information on coordinating NDAs with OGC and NDA templates. Updated to reflect LiSaaS and External Information System Monitoring guides. Updated guidance regarding a number of controls and deliverables. 	Incorporate requirements from the NDAA and FAR, coordination with OGC on NDAs, and updated GSA guidance.	Throughout
2	Berlas, Speidel, Desai, Klemens	 Added section on Nonfederal System and Organizations, revised Internal Information Systems definition. Clarified the provision of deliverables. 	Incorporate requirements from NIST SP 800-171, "Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations"	Sections 1 and 7

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
		Revision 6 – April 15,2021		
1	Dean	Revisions include: • Updated to NIST SP 800-53, Revision 5 controls. • Replaced Sensitive But Unclassified with Controlled Unclassified Information • Updated references	Update to NIST SP 800-53, Revision 5.	Throughout
l		Revision 7 – July 25, 2023		
1	Klemens/ Desai	Revisions include: Added requirements regarding CISA Directives. Added prohibition of TikTok/ByteDance services and applications. Added language regarding compliance with the Federal Cybersecurity Coordination, Assessment, and Response Protocol (C-CAR). Updated references, formatting, and style. Updated controls, implementation guidance, deliverables, and stipulations in accordance with latest guides/guidance.	Update to align with Federal and GSA mandates/requirements.	Throughout
li .		Revision 8 – October 14, 2024		
1	Normand, Salamon, Turnau, Brust, Klemens, McCormick	Revisions include: Revised the instructions to state the specific requirements in the guide per type of system are to be included in a SOW. Added information regarding the IS Contract Review Intake form. Added IoT Act and OMB 22-18/23-16 requirements. Updated the Cloud and Mobile Application sections to align with GSA's requirements. Updated essential controls and guidance, deliverables sections, C-SCRM requirements, and privacy requirements, as necessary. Changed Appendix A to Cloud Acquisition SLA Best Practices.	Update to align with Federal and GSA mandates/requirements.	Throughout
		Revision 9 – January 15, 2025		
1	Klemens	Revisions include: Removed Separation of Duties Document/Matrix from annual deliverables.	Separation of duties already documented in SSPP deliverable and align with GSA guidance.	7, 13, 14, 17, 36, 52

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
		 Added Static Code Analysis as a deliverable. Changed SCRM Plan to biennial requirement. 		

APPROVAL

IT Security Procedural Guide 09-48: Security and Privacy Requirements for IT Acquisition Efforts, Revision 9, is hereby approved for distribution.



This guide will be available on the <u>IT Security Procedural Guides Webpage</u> and <u>GSA.gov</u> when revised.

Table of Contents

1	Introduction	1
	1.1 Scope	
	1.2 Purpose	
2		
	2.1 Required Policies and Regulations for GSA Contracts	
	2.2 GSA Security Compliance Requirements	
	2.3 Essential Security Controls	
	2.4 Assessment and Authorization (A&A) Activities	
	2.5 Reporting and Continuous Monitoring	
	2.6 GSA Privacy Requirements 2.7 Additional Stipulations	
	·	
3		
	3.1 Required Policies and Regulations for GSA Contracts	
	3.2 GSA Security and Privacy Compliance Requirements	
	3.3 Essential Security Controls	
	3.4 Assessment and Authorization (A&A) Activities	
	3.6 GSA Privacy Requirements	
	3.7 Additional Stipulations	
	·	
4	, , , , , , , , , , , , , , , , , , ,	
	4.1 Assessment of the System	
	4.3 Inability to Maintain LiSaaS ATO Requirements	4 2
	4.4 Protection of Information	
	4.5 Data Ownership and Unrestricted Rights to Data	
	4.6 Privacy Requirements	
	4.7 Data Availability	
	4.8 Data Release	
	4.9 Confidentiality and Nondisclosure	44
	4.10 Section 508 Compliance	45
	4.11 Additional Stipulations	
	4.12 Terms of Service	
	4.13 References	48
5	Cloud Information Systems – IT Security and Privacy Requirements	48
	5.1 Assessment and Authorization	
	5.1.1 Assessment of the System	
	5.1.2 Authorization of the System	
	5.2 Reporting and Continuous Monitoring	
	5.3 Personnel Security Requirements	
	5.4 Sensitive Information Storage	
	5.5 Protection of Information	
	5.5.1 Unrestricted Rights to Data	
	5.5.2 Personally Identifiable Information	
	5.5.4 Data Release	
	5.6 Data Ownership	
	5.7 Confidentiality and Nondisclosure	
	,	

	5.8	GSA Non-Disclosure Agreement	58
	5.9	Additional Stipulations	58
) References	
6	Мо	bbile Application - IT Security and Privacy Requirements	61
-		General Mobile Application Guidelines	
		Mobile Device Security	
		Application Sources	
		Terms of Service (ToS)	
		GSA Privacy Requirements	
		GSA App Development, Assessment, Authorization and Deployment	
	6.7	· · · · · · · · · · · · · · · · · · ·	
	6.8	Confidentiality and Nondisclosure	
		GSA Non-Disclosure Agreement	
		Personnel Security Requirements	
		Additional Stipulations	
7	No	onfederal Systems and Organizations – IT Security and Privacy Requirements	70
•		Required Policies and Regulations for GSA Contracts	
		GSA Security Compliance Requirements	
		Security Assessment Activities and Required Documentation	
		Reporting and Continuous Monitoring	
		Privacy Assessment Activities and Required Documentation	
		Additional Stipulations	
		·	
Αı	pper	ndix A: Cloud Acquisition Best Practices	79

Introduction

The U.S. General Services Administration (GSA) must provide information security for the information systems that support the operations and assets of the agency, including those provided or managed by GSA, another agency, contractor, or other source. The Federal Information Security Modernization Act of 2014 (FISMA of 2014) describes Federal agency security and privacy responsibilities as including "information systems used or operated by an agency or by a contractor of an agency or other organization on behalf of an agency." This includes services which are either fully or partially provided; including other agency hosted, outsourced, and cloud computing solutions. Agency information security programs apply to all organizations (sources) which possess or use Federal information – or which operate, use, or have access to Federal information systems (whether automated or manual) – on behalf of a Federal agency, information systems used or operated by an agency or other organization on behalf of an agency.

1.1 Scope

This guide provides security and privacy requirements for the GSA information system types outlined below:

- **External Information Systems.** External information systems reside in contractor facilities and typically do not connect to the GSA network. External information systems may be government owned and contractor operated or contractor owned and operated on behalf of GSA or the Federal Government (when GSA is the managing agency).
- Internal Information Systems. Internal information systems reside on premise in GSA facilities and may connect to the GSA network. Internal systems are operated on behalf of GSA or the Federal Government (when GSA is the managing agency).
- Low Impact Software as a Service (LiSaaS) Systems. LiSaaS systems must adhere to GSA IT Security Procedural Guide 16-75: Low Impact Software as a Service (SaaS) Authorization Process. LiSaaS systems are cloud applications that are implemented for a limited duration, involve low or very low/negligible risk, and would cause limited harm to GSA, and cost less than \$100,000 annually to deploy.
- Cloud Information Systems. Includes Infrastructure as a Service (laaS), Platform as a Service (PaaS), or SaaS. The service offering must be FedRAMP authorized, inprocess, or ready; see Section 5 for additional details.
- **Mobile Applications.** A mobile application, most commonly referred to as an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer.
- Nonfederal Systems and Organizations. A system or organization: (1) when Controlled Unclassified Information (CUI) is resident in a nonfederal system and organization; (2) not collecting or maintaining information on behalf of a federal agency or using or operating a system on behalf of an agency¹; and (3) where there are no specific safeguarding requirements for protecting the confidentiality of CUI prescribed by the authorizing law, regulation, or governmentwide policy for the CUI category listed in the CUI Registry.

¹ Nonfederal organizations that collect or maintain information on behalf of a federal agency or that use or operate a system on behalf of an agency, must comply with the requirements in FISMA of 2014, including the requirements in FIPS 200 and the security controls in NIST SP 800-53. (See [44 USC 3554] (a)(1)(A) and Section 2.1 for referenced documents).

1.2 Purpose

The purpose of this document is to define and establish consistent security and privacy requirements for GSA IT acquisition contracts involving externally hosted information systems that do not connect to the GSA network; information systems hosted in GSA facilities that may connect to the GSA network; LiSaaS systems, cloud information systems; mobile applications; and nonfederal systems with CUI. The security and privacy requirements are appropriately formatted to allow the respective security and privacy contract language to be placed in-line within a statement of work for each system type. The security and privacy requirements identified in this guide will ensure compliance with the appropriate provisions of FISMA of 2014, OMB Circular A-130, and NIST Special Publication (SP) 800-53, Revision 5.

2 External Information Systems – IT Security and Privacy Requirements

2.1 Required Policies and Regulations for GSA Contracts

Federal Laws, Regulations, and Guidance:

The contractor shall comply with all applicable Federal Laws and Regulations.

- 40 U.S.C. 11331, "Responsibilities for Federal Information Systems Standards"
- <u>Cybersecurity & Infrastructure Security Agency (CISA) Cybersecurity Directives</u> Listing of Emergency and Binding Operational Directives
- Executive Order (EO) 13556, "Controlled Unclassified Information"
- FISMA of 2014, "The Federal Information Security Modernization Act of 2014"
- HSPD 12, "Homeland Security Presidential Directive 12 Policy for a Common Identification Standard for Federal Employees and Contractors"
- OMB Circular A-130, "Managing Information as a Strategic Resource"
- Privacy Act of 1974, "5 USC, § 552a"
- Public Law 116-207, "Internet of Things Cybersecurity Improvement Act of 2020"
- National Archives and Records Administration (NARA) Controlled Unclassified Information (CUI) Registry
- OMB Memoranda, OMB Memoranda are mandatory when their requirements are in scope for a system or components of a system. The following OMB Memos are listed due to their requirements being included in the requirements for External Information Systems – IT Security and Privacy Requirements:
 - OMB M-10-23, "Guidance for Agency Use of Third-Party Websites and Applications"
 - OMB M-14-03, "Enhancing the Security of Federal Information and Information Systems"
 - OMB M-15-13, "Policy to Require Secure Connections across Federal Websites and Web Services"
 - OMB M-17-12, "Preparing for and Responding to a Breach of Personally Identifiable Information"
 - OMB M-21-07, "Completing the Transition to Internet Protocol Version 6 (IPv6)"
 - OMB M-21-31, "Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents"
 - OMB M-22-09, "Moving the U.S. Government Toward Zero Trust Cybersecurity Principles"
 - OMB M-22-18, "Enhancing the Security of the Software Supply Chain through Secure Software Development Practices"

 OMB M-23-16, "Update to Memorandum M-22-18, Enhancing the Security of the Software Supply Chain through Secure Software Development Practices"

Federal Standards and NIST Publications:

The contractor shall comply with all applicable Federal Information Processing Standards (FIPS). NIST Special Publications (800 Series) are guidance, unless required by a FIPS publication, in which case usage is mandatory.

- <u>FIPS PUB 199</u>, "Standards for Security Categorization of Federal Information and Information Systems"
- <u>FIPS PUB 200</u>, "Minimum Security Requirements for Federal Information and Information Systems"
- FIPS PUB 140-3, "Security Requirements for Cryptographic Modules"
- NIST SP 800-18, Revision 1, "Guide for Developing Security Plans for Federal Information Systems"
- NIST SP 800-30, Revision 1, "Guide for Conducting Risk Assessments"
- NIST SP 800-34, Revision 1, "Contingency Planning Guide for Federal Information Systems"
- NIST SP 800-37, Revision 2, "Risk Management Framework for Information Systems and Organizations: A System Life Cycle Approach for Security and Privacy"
- NIST SP 800-47, Revision 1, "Managing the Security of Information Exchanges"
- NIST Special Publication 800-52, Revision 2, Guidelines for the Selection, Configuration, and Use of Transport Layer Security (TLS) Implementations
- NIST SP 800-53, Revision 5, "Security and Privacy Controls for Information Systems and Organizations"
- NIST SP 800-53A, Revision 5, "Assessing Security and Privacy Controls in Information Systems and Organizations"
- NIST Special Publication 800-61, Revision 2, Computer Security Incident Handling Guide
- NIST SP 800-63-3, "Digital Identity Guidelines"
- NIST SP 800-81-2, "Secure Domain Name System (DNS) Deployment Guide"
- NIST SP 800-122, "Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)"
- NIST SP 800-137, "Information Security Continuous Monitoring (ISCM) for Federal Information Systems and Organizations"
- NIST SP 800-161, Revision 1, "Supply Chain Risk Management Practices for Federal Information Systems and Organizations"
- NIST SP 800-213, "IoT Device Cybersecurity Guidance for the Federal Government: Establishing IoT Device Cybersecurity Requirements"
- NIST SP 800-218, "Secure Software Development Framework (SSDF) Version 1.1: Recommendations for Mitigating the Risk of Software Vulnerabilities"
- NIST Special Publication 1800-16, "Securing Web Transactions: TLS Server Certificate Management"

GSA Policies:

The contractor shall comply with the following GSA Directives/Policies.

- <u>GSA Order CIO 1878.3</u>, "Developing and Maintaining Privacy Threshold Assessments, Privacy Impact Assessments, Privacy Act Notices, and System of Records Notices"
- GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy"

- GSA Order ADM 2181.1, "Homeland Security Presidential Directive-12 Personal Identity Verification and Credentialing Policy, and Background Investigations for Contractor Employees"
- GSA Order CIO 2183.1, "Enterprise Identity, Credential, and Access Management (ICAM) Policy"
- GSA Order CIO 2200.1, "GSA Privacy Act Program"
- GSA Order CIO 9297.2, "GSA Information Breach Notification Policy"
- GSA MV-2023-02, Supplements 1-2, Ensuring Only Approved Software is Acquired and Used at GSA
- GSAM 510.002, Pre-Award Procedures
- GSAM 511.170, Information Technology Coordination and Standards
- GSAM 511.171, Requirements for GSA Information Systems
- GSAM 539, Acquisition of Information Technology

The GSA policies listed in this paragraph must be followed, if applicable.

- GSA Order CIO 2103.2, "Controlled Unclassified Information (CUI) Policy"
- GSA Order CIO 2104.1, "GSA Information Technology (IT) General Rules of Behavior"
- GSA Order CIO 2185.1, "Use of Artificial Intelligence at GSA"

GSA Procedural Guides:

GSA IT Security Procedural Guides are guidance, unless required by a GSA Directive/Policy, in which case usage is mandatory.

Note: GSA's IT Security Procedural Guides are updated frequently; to make sure you have the most recent version of publicly available procedural guides, visit <u>GSA.gov</u>. If a non-publicly available guide is needed, contact the contracting officer who will coordinate with the GSA Office of the Chief Information Security Officer to determine if it can be made available.

2.2 GSA Security Compliance Requirements

FIPS PUB 200, "Minimum Security Requirements for Federal Information and Information Systems," is a mandatory federal standard that defines the minimum security requirements for federal information and information systems in seventeen security-related areas. Information systems supporting GSA must meet the minimum security and privacy requirements through the use of security controls in accordance with NIST Special Publication 800-53, Revision 5 (hereafter identified as NIST 800-53), "Security and Privacy Controls for Information Systems and Organizations."

To comply with the Federal standard, GSA must determine the security category of the information and information system in accordance with FIPS PUB 199, "Standards for Security Categorization of Federal Information and Information Systems," and then the contractor shall apply the appropriately tailored set of Low, Moderate, or High impact baseline security controls in NIST 800-53, as determined by GSA. NIST 800-53 controls requiring organization-defined parameters (i.e., password settings) shall be consistent with GSA specifications. The GSA-specified control parameters and supplemental guidance defining more specifically the requirements per FIPS PUB 199 impact level are available in the GSA Control Tailoring Workbook.

The Contractor shall use GSA technical guidelines, NIST guidelines, Center for Internet Security (CIS) guidelines (Level 1), or industry best practice guidelines in hardening their systems.

2.3 Essential Security Controls

All NIST 800-53 controls must be implemented as per the applicable FIPS PUB 199 Low (L), Moderate (M), or High (H) baseline. Controls in the Privacy baseline are applicable if PII data is being collected, stored, or transmitted. The following table identifies essential security controls from the respective baselines to highlight their importance and ensure they are implemented. The Contractor shall make the proposed system and security architecture of the information system available to the Security Engineering Division, in the Office of the Chief Information Security Officer for review and approval before commencement of system build (architecture, infrastructure, and code).

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance (if applicable)	
AC-02	Account Management	L, M, H	Account management systems must leverage or integrate with existing GSA account management solutions or processes, as applicable and defined in the GSA IT ICAM Roadmap (see GSA Order CIO 2183.1, "Enterprise Identity, Credential, and Access Management (ICAM) Policy."	
AC-17 (03)	Remote Access Managed Access Control Points	M, H	All remote accesses from internal users/systems to the external information system must be routed through GSA's managed network access control points, subjecting them to security monitoring.	
AU-02	Event Logging			Information systems shall implement audit configuration requirements as documented in applicable GSA IT Security Technical Hardening Guides (i.e., hardening and technology implementation guides); for web applications see GSA IT Security Procedural Guide 07-35, Section 2.8.10, What to Log.
		L, M, H	For technologies where a Technical Guide and Standard does not exist, events from an industry source such as vendor guidance or Center for Internet Security benchmark, recommended by the GSA S/SO or Contractor to be approved and accepted by the GSA AO shall be used.	
AU-06(01)	Audit Record Review, Analysis, and Reporting Automated Process Integration	M, H	Systems must integrate or deploy automated mechanisms in support of audit record review, analysis, and reporting, in accordance with GSA IT Security Procedural Guide 01-08, Audit and Accountability (AU).	
AU-11	Audit Record Retention	L, M, H	Systems must maintain 12 months of audit logs online and 18 months in cold storage, in accordance with GSA IT Security Procedural Guide 01-08, Audit and Accountability (AU).	
CA-08(02)	Penetration Testing Red Team Exercises	H, HVA systems	In accordance with CIO Order 2100.1, all FIPs 199 High impact and HVA systems must have Red Team exercises performed as part of their A&A and annually thereafter.	
CM-06	Configuration Settings	L, M, H	Information systems, including vendor owned/operated systems on behalf of GSA, shall configure their systems in agreement with GSA technical guidelines, NIST	

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance (if applicable)
			guidelines, Center for Internet Security guidelines (Level 1), or industry best practice guidelines, as reviewed and accepted by the GSA AO.
CP-07	Alternate Processing Site	М, Н	FIPS PUB 199 Moderate and High impact systems must implement processing across geographically disparate locations to ensure fault tolerance. Cloud Infrastructure as a Service (IaaS) architectures shall implement a multiregion strategy (multiple availability zones in a single region are not sufficient).
CP-08	Telecommunications Services	M, H	FIPS PUB 199 Moderate and High impact information systems must implement alternate telecom services to support resumption when the primary telecommunications capabilities are unavailable at either the primary or alternate processing or storage sites.
	Identification and Authentication		All information systems shall implement multi-factor authentication for privileged accounts.
IA-02(01) (Organiza Users) N Authentic	(Organizational Users) Multifactor Authentication to Privileged Accounts	L, M, H	Information systems shall comply with GSA IT ICAM Roadmap, as applicable, (<u>GSA Order CIO 2183.1</u> , "Enterprise Identity, Credential, and Access Management (ICAM) Policy").
	Identification and Authentication (Organizational Users) Multifactor Authentication to Non-Privileged Accounts	L, M, H	All information systems must implement multi-factor authentication for non-privileged accounts.
IA-02(02)			Information systems shall comply with GSA IT ICAM Roadmap, as applicable, (<u>GSA Order CIO 2183.1</u> , "Enterprise Identity, Credential, and Access Management (ICAM) Policy").
			The information system shall implement authentication to FIPS PUB 140-3/140-2 compliant encryption modules as specified in the respective standards.
IA-07	Cryptographic Module Authentication	L, M, H	Note: NIST has issued FIPS 140-3 and no longer accepts FIPS 140-2 modules for validation. However, previously validated 140-2 modules will be accepted through September 22, 2026. For additional information see the NIST Cryptographic Module Validation Program Validated Modules.
MP-04	Media Storage	M, H	Digital media including magnetic tapes, external/removable hard drives, flash/thumb drives, diskettes, compact disks, and digital video disks shall be encrypted using a FIPS PUB 140-3/140-2 validated encryption module.
MP-05	Media Transport	M, H	Digital media including magnetic tapes, external/removable hard drives, flash/thumb drives and digital video disks shall be encrypted using a FIPS PUB 140-3/140-2 validated encryption module during transport outside of controlled areas.

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance (if applicable)
PL-08	Security and Privacy Architectures	L, M, H	All information system security architectures must be formally reviewed and approved by the Office of the Chief Information Security Officer, Security Engineering Division during the system develop/design stages of the SDLC and prior to Security Assessment and Authorization.
RA-05	Vulnerability Monitoring and Scanning	L, M, H	All systems must complete the following vulnerability scans:
RA-08	Privacy Impact Assessments	L, M, H	RA-08 is included in all FIPS 199 Baselines to ensure all systems complete a Privacy Threshold Assessment (PTA) to determine if a Privacy Impact Assessment (PIA) is required.
SA-22	Unsupported System Components	L, M, H	All systems must be comprised of software and hardware components that are fully supported in terms of security patching for the anticipated life of the system; software must be on GSA's Enterprise Architecture IT Standards List.
SC-08	Transmission Confidentiality and Integrity	M, H	Implemented encryption algorithms and cryptographic modules shall be FIPS-approved and FIPS PUB 140-3 validated, respectively**.
SC-08(01)	Transmission Confidentiality and Integrity Cryptographic Protection	L, M, H	 Digital signature encryption algorithms Block cipher encryption algorithms Secure hashing algorithms For web services connections, implement end to end encryption terminating the connection at the web server; connections terminated at a load balancer, Firewall, and/or WAF shall employ re-encryption techniques to ensure end to end encryption.
			ALL associated URLs must have their second-level domain HTTP Strict Transport Security (HSTS) preloaded and have no weak ciphers, have no weak protocols, and preload .gov domains. (see Binding Operational Directive (BOD) 18-01, Enhance Email and Web Security).
			SSL/TLS implementations shall align with GSA IT Security Procedural Guide 14-69: SSL/TLS Implementation.
			**Federal Policy requires implementation of FIPS PUB 140-3/140-2 validated encryption modules and FIPS-approved ciphers suites. Encryption of GSA sensitive data (e.g., PII, PCI, Authenticators, other business

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance (if applicable)
			sensitive data) at rest and in transit shall be with FIPS validated encryption modules wherever possible; exceptions require Acceptance of Risk (AOR) to be signed by the GSA CISO and AO.
SC-13	Cryptographic Protection	L, M, H	Implemented encryption algorithms and cryptographic modules shall be FIPS-approved and FIPS PUB 140-3/140-2 validated, respectively. Digital signature encryption algorithms Block cipher encryption algorithms Secure hashing algorithms
SC-17	Public Key Infrastructure Certificates	M, H	Implement appropriate creation, use, and signing of crypto certs in agreement with GSA IT Security Procedural Guide 14-69, "SSL/TLS Implementation," and NIST Special Publications 800-52, Revision 2 and 1800-16.
SC-18	Mobile Code	M, H	Systems must adhere to GSA's requirements regarding IT Standards and CIO-IT Security-07-35: Web Application Security and CIO-IT Security-17-81: Web Browser Technologies Hardening, as applicable, to ensure only approved code (including mobile code) is used.
SC-22	Architecture and Provisioning for Name / Address Resolution Service	L, M, H	Information systems shall be Domain Name System Security Extensions (DNSSEC) compliant. Reference NIST SP 800-81-2, which provides deployment guidelines for securing DNS within an enterprise.
			**Systems that process Personally Identifiable Information (PII), Payment Card Industry (PCI) data, Authenticators (e.g., passwords, tokens, keys, certificates, hashes, etc.), and other sensitive data as determined by the AO, shall encrypt that data everywhere (i.e., at file level, database level, at rest, and in transit). For databases, encryption of the whole database, table, column, or field levels is acceptable, as appropriate. Other methods including, but not limited to, application encryption or tokenization are also acceptable.
SC-28(01)	Protection of Information at Rest Cryptographic Protection	L, M, H	For web services connections, implement end to end encryption terminating the connection at the web server; connections terminated at a load balancer shall employ re-encryption techniques to ensure end to end encryption.
			**Federal Policy requires implementation of FIPS PUB 140-3/140-2 validated encryption modules and FIPS-approved ciphers suites. Encryption of GSA sensitive data (e.g., PII, PCI, Authenticators, other business sensitive data) at rest and in transit shall be with FIPS validated encryption modules wherever possible; exceptions require Acceptance of Risk (AOR) to be signed by the GSA CISO and AO.

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance (if applicable)
			All projects and systems must be adequately tested for flaws; all Critical, High, and Moderate risk findings must be remediated prior to go-live. Post go-live vulnerability remediation timelines are as follows: • 14 days for CISA Known Exploited Vulnerabilities
SI-02	Flaw Remediation	L, M, H	 (KEV) 15 days for Critical vulnerabilities for Internet-accessible systems or services 30 days for Critical and High vulnerabilities 90 days for Moderate vulnerabilities 180 days for Low vulnerabilities
SI-03	Malicious Code Protection	L, M, H	
SI-04	System Monitoring	L, M, H	All information systems must be monitored internally and across ingress/egress points for potentially malicious activity.
SI-10	Information Input Validation	M, H	All systems accepting input from end users must validate the input in accordance with industry best practices and published guidelines, including GSA_IT Security Procedural Guide 07-35, "Web Application Security," and OWASP Top 10 Web Application Security Vulnerabilities.
SR-02	Supply Chain Risk Management Plan	L, M, H	Tier 3 (Information System) level plans for each system should be developed consistent with the template in Appendix E of NIST SP 800-161.
SR-06	Supplier Assessment and Reviews	M, H	Contractor owned/operated systems must perform their own system-specific Supplier Assessments and Reviews consistent with NIST SP 800-161.
PM-21	Accounting of Disclosures	See note below	Requires accounting of disclosures of PII.
PM-25	Minimization of Personally Identifiable Information Used in Testing, Training, and Research	See note below	Requires implementation of policies and procedures to minimize PII used in testing, training, and research.
PT-05	Privacy Notice	See note below	Privacy notices help inform individuals about how their personally identifiable information is being processed by the system or organization
PT-05(02)	Privacy Notice Privacy Act Statements	See note below	Include Privacy Act statements on forms that collect information that will be maintained in a Privacy Act system of records or provide Privacy Act statements on separate forms that can be retained by individuals.
PT-06	System of Records Notice	See note below	Federal agencies must publish a system of records notice in the Federal Register upon the establishment and/or modification of a Privacy Act system of record
PT-07(01)	Specific Categories of Personally	See note below	Federal law and policy establish specific requirements for organizations' processing of Social Security numbers;

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance (if applicable)
	Identifiable Information Social Security Numbers		organizations take steps to eliminate unnecessary uses of Social Security numbers and other sensitive information and observe any particular requirements that apply.
SI-12(01)	Information Management and Retention Limit Personally Identifiable Information Elements	See note below	Limit personally identifiable information being processed in the information life cycle to specified elements.

Note: Privacy controls are not associated with a FIPS PUB 199 baseline. Controls are applicable if PII data is being collected, stored, or transmitted.

2.4 Assessment and Authorization (A&A) Activities

The implementation of a new Federal Government IT system requires a formal approval process known as Assessment and Authorization (A&A). NIST Special Publication 800-37, Revision 2 (hereafter described as NIST 800-37) and GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, provide guidelines for performing the A&A process. The Contractor system/application must have a valid assessment and authorization, known as an Authorization to Operate (ATO) (signed by the Federal government), before going into operation and processing GSA information. The failure to obtain and maintain a valid ATO will result in the termination of the contract. The system must have a new A&A conducted (signed by the Federal government) when significant changes are made to the system, and as specified in GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, and the guides for GSA's other A&A processes referenced therein.

Assessing the System

- 1. The Contractor shall comply with Assessment and Authorization (A&A) requirements as mandated by Federal laws and policies, including making available any documentation, physical access, and logical access needed to support this requirement. The Level of Effort for the A&A is based on the System's FIPS PUB 199 impact level and applicable A&A documentation requirements. The contractor shall create, maintain, and update the following A&A documentation:
 - System Security and Privacy Plan (SSPP) completed in agreement with NIST Special Publication 800-18, Revision 1, "Guide for Developing Security Plans for Federal Information Systems" and completed in accordance with GSA SSPP requirements and templates. The SSPP template includes specific instructions on documenting control implementations. Each control implementation must address all the control requirements and how they are achieved (i.e., who, what, when, where). Appendices shall be included to support control implementations, when necessary. The SSPP shall include; as an appendix, a completed GSA Control Tailoring Workbook (CTW). The column in the CTW titled "Vendor/Contractor Defined Values" shall be used to document all contractor implemented parameter settings that differ from the GSA Defined Value and the

Vendor/Contractor defined value when the value is deferred to the Vendor/Contractor. GSA's approval will be documented in the CTW column titled "GSA Approval of Vendor/Contractor Defined Values."

Note: A description of how the system will transition to IPv6, as required by OMB M-21-07, must be included as part of the system's SSPP.

- Contingency Plan completed in agreement with NIST Special Publication 800-34 and GSA IT Security Procedural Guide 06-29: Contingency Planning.
- Business Impact Assessment completed in agreement with NIST Special Publication 800-34 and GSA IT Security Procedural Guide 06-29: Contingency Planning.
- Contingency Plan Test Report completed in agreement with GSA IT Security Procedural Guide 06-29: Contingency Planning.
- Incident Response Plan completed in agreement with NIST Special Publication 800-61, "Computer Security Incident Handling Guide" and GSA IT Security Procedural Guide 01-02: Incident Response.
- Incident Response Test Report completed in agreement with NIST Special Publication 800-61, "Computer Security Incident Handling Guide" and GSA IT Security Procedural Guide 01-02: Incident Response.
- Configuration Management Plan completed in agreement with GSA IT Security Procedural Guide 01-05: Configuration Management.
- Plan of Action & Milestones completed in agreement with GSA IT Security Procedural Guide 09-44: Plan of Action and Milestones (POA&M).
- Penetration Test Report documenting the results of vulnerability analysis and exploitability of identified vulnerabilities. Note: Penetration testing is required for all Internet accessible, all FIPS 199 High, and all High Value Asset (HVA) information systems. These systems are required to complete an independent penetration test and provide an Independent Penetration Test Report documenting the results of the exercise as part of the A&A package. Reference GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk and GSA IT Security Procedural Guide 11-51: Conducting Penetration Test Exercises for penetration testing guidance.
- Red Team Exercise Report documenting the results of the Red Team exercise in accordance with CIO Order 2100.1. Note: A Red Team exercise is required for FIPS PUB 199 High and HVA systems.
- Information Exchange Agreements documented in accordance with GSA IT Security Procedural Guide 24-125: Managing Information Exchange Agreements and NIST Special Publication 800-47, Revision 1, "Managing the Security of Information Exchanges."
- 2. Information systems must be assessed and authorized every three (3) years or whenever there is a significant change to the system's security posture in accordance with NIST Special Publication 800-37, Revision 2, "Risk Management Framework for Information Systems and Organizations: A System Life Cycle Approach for Security and Privacy," and CIO IT Security 06-30: Managing Enterprise Cybersecurity Risk or via continuous monitoring based on GSA CIO IT Security 12-66: Information Security Continuous Monitoring (ISCM) Strategy & Ongoing Authorization (OA) Program that is reviewed and accepted by the GSA CISO. Systems designated as an HVA must be assessed in accordance with the CISA HVA Program Management Office and GSA guidance per CIO-IT Security-24-131: Managing High Value Assets.

- At the Moderate impact level and higher, the <SELECT: contractor or Government> is responsible for providing an independent Security Assessment/Risk Assessment in accordance with GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk.
- 4. If the Government is responsible for providing any assessment artifact (e.g., SAR, Penetration Test Report), the Contractor shall allow GSA employees (or GSA designated third party contractors) to conduct A&A activities to include control reviews in accordance with NIST 800-53/NIST 800-53A and GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, and if applicable CIO-IT Security-24-131. Review activities include but are not limited to operating system vulnerability scanning, web application scanning, and database scanning of applicable systems that support the processing, transportation, storage, or security of GSA information. This includes the general support system infrastructure.
- 5. Identified gaps between required NIST 800-53 controls and the contractor's implementation as documented in the Security Assessment/Risk Assessment report shall be tracked for mitigation in a Plan of Action and Milestones (POA&M) document completed in accordance with GSA IT Security Procedural Guide 09-44: Plan of Action and Milestones (POA&M). Depending on the severity of the gaps, the Government may require them to be remediated before an Authorization to Operate is issued. For systems designated as an HVA a remediation plan shall be prepared based on guidance in CIO-IT Security-24-131.
- 6. The Contractor is responsible for mitigating all security risks found during the A&A and continuous monitoring activities. Vulnerabilities must be mitigated as follows:
 - 14 days for CISA Known Exploited Vulnerabilities (KEV)
 - 15 days for Critical vulnerabilities for Internet-accessible systems or services
 - 30 days for Critical and High vulnerabilities
 - 90 days for Moderate vulnerabilities
 - 180 days for Low vulnerabilities
- 7. The Government will determine the risk rating of vulnerabilities.

Authorization of the System

- 1. Upon receipt of the documentation (A&A Package) described in GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk and NIST Special Publication 800-37 as documented above, the GSA Authorizing Official (AO) for the system (in coordination with the GSA Chief Information Security Officer (CISO), System Owner, Information System Security Manager (ISSM), and Information System Security Officer (ISSO) will render an authorization decision to:
 - Authorize system operation w/out any restrictions or limitations on its operation;
 - Authorize system operation w/restriction or limitation on its operation, or;
 - Not authorize for operation.
- 2. The Contractor shall provide access to the Federal Government, or their designee acting as their agent, when requested, in order to verify compliance with the requirements for an Information Technology security program. At its option, the Government may choose to conduct on site surveys. The Contractor shall make appropriate personnel available for interviews and documentation during this review.

2.5 Reporting and Continuous Monitoring

Maintenance of the security authorization to operate will be through continuous monitoring of security controls of the external system and its environment of operation to determine if the security controls in the information system continue to be effective over time in light of changes that occur in the system and environment. Through continuous monitoring, security controls and supporting deliverables are updated and submitted to GSA per the schedules below. The submitted deliverables (or lack thereof) provide a current understanding of the security state and risk posture of the information systems. They allow GSA AOs to make credible risk-based decisions regarding the continued operations of the information systems and initiate appropriate responses as needed when changes occur.

Vendor deliverables as identified below will be reviewed and accepted or rejected by the process described in GSA CIO IT Security Procedural Guide 19-101: External Information System Monitoring. In addition to the deliverable requirements specified, systems designated as an HVA shall comply with reporting, monitoring, and re-assessment requirements as identified by the CISA HVA Program Management Office and in GSA CIO-IT Security-24-131.

Deliverables to be provided Quarterly to the GSA ISSO, ISSM, and/or COR (Reference: CIO-IT Security-08-39).

- 1. Vulnerability Monitoring and Scanning (Due NLT 25th of the third month each quarter) Reference: NIST 800-53 control RA-05 Provide the most recent Web Application and Operating System vulnerability scan reports. GSA's control parameter for RA-05, Vulnerability Monitoring and Scanning, specifies the following type and frequency of scans; weekly authenticated scans of operating systems (OS)-including databases, monthly unauthenticated scans of web applications, annual authenticated scans of web applications.
- Plan of Action & Milestones (POA&M) Update (Due NLT the 1st day of the third month of each quarter)
 Reference: NIST 800-53 control CA-05
 Provide POA&M updates in accordance with requirements and the schedule set forth in GSA CIO IT Security Procedural Guide 09-44: Plan of Action and Milestones (POA&M).
- Static Code Analysis required prior to code base changes being placed into production (Due NLT 25th of the third month each quarter) Reference: NIST 800-53 control SA-11(01) Provide the most recent static code analysis report, as applicable (i.e., if code base changes were placed into production in the quarter).
- 4. FISMA Quarterly Metrics data, as necessary (i.e., when a FISMA quarterly data call is issued that is applicable to the system). (Due per data call request deadline)

Deliverables to be provided Annually (or when there is a major change) to the GSA ISSO, ISSM, and/or COR (Due dates for annual deliverables are as indicated in the following lists.)

Note: Deliverables annotated with a "*" below may be attested to via an attestation letter as described in GSA CIO-IT Security-19-101, "External Information System Monitoring."

Annual Deliverables due NLT February 25th (Reference: CIO-IT Security-19-101).

1. Annual FISMA Self-Assessment

Reference: NIST 800-53 control CA-02

Deliver the results of the annual FISMA self-assessment conducted per GSA IT Security Procedural Guide 04-26: Federal Information Security Modernization Act (FISMA) Implementation. Based on the controls selected for self-assessment, the GSA OCISO will provide the appropriate test cases for completion.

2. Updated A&A documentation including the SSPP, Contingency Plan, and Business Impact Analysis

a. SSPP

Reference: NIST 800-53 control PL-02

Review and update the SSPP annually to ensure the plan is current and accurately describes implemented system controls and reflects changes to the contractor system and its environment of operation. The SSPP must be in accordance with NIST 800-18, Revision 1, "Guide for Developing Security Plans for Federal Information Systems."

b. Contingency Plan

Reference: NIST 800-53 control CP-02

Provide an annual update to the contingency plan completed in accordance with NIST 800-34, "Contingency Planning Guide for Federal Information Systems," and GSA IT Security Procedural Guide 06-29: Contingency Planning (CP).

c. Business Impact Analysis (as an appendix or attachment to the Contingency Plan)

Reference: NIST 800-53 control CP-02

Provide an annual update to the business impact analysis completed in accordance with NIST 800-34, "Contingency Planning Guide for Federal Information Systems", and GSA IT Security Procedural Guide 06-29: Contingency Planning (CP).

3. Contingency Plan Test Report

Reference: NIST 800-53 control CP-04

Provide a contingency plan test report completed in accordance with GSA IT Security Procedural Guide 06-29: Contingency Planning (CP). A continuity test shall be conducted annually prior to mid-July of each year. The continuity test can be a tabletop test while the system is at the FIPS PUB 199 Low Impact level. The tabletop test must include Federal and hosting Contractor representatives. Functional exercises must be completed once every three years for FIPS PUB 199 Moderate impact systems and annually for FIPS PUB 199 High impact systems.

4. Incident Response Test Report

Reference: NIST 800-53 control IR-03

Provide an incident response test report documenting results of incident reporting per GSA IT Security Procedural Guide 01-02: Incident Response (IR).

5. User Certification/Authorization Review Documents

Reference: NIST 800-53 control AC-02

Provide the results of the annual review and validation of system users' accounts to ensure the continued need for system access. The user certification and authorization documents will illustrate the organization establishes, activates, modifies, reviews, disables, and removes information system accounts in accordance with documented account management procedures.

Annual Deliverables due NLT June 25th (Reference: CIO-IT Security-19-101).

6. Penetration Test Report (if applicable)

Reference: NIST 800-53 control CA-08

All Internet accessible systems, all FIPS PUB 199 High impact systems, and all High Value Asset (HVA) systems are required to complete an independent penetration test and provide a Penetration Test Report documenting the results of the exercise as part of their A&A package. Annual penetration tests are required for these same systems in accordance with GSA Order CIO 2100.1 and CIO-IT Security-11-51: Conducting Penetration Test Exercises.

7. Red Team Exercise Report (if applicable)

Reference: NIST 800-53 control CA-08(02)

Red Team Exercise Report documenting the results of the Red Team exercise in agreement with GSA IT Security Procedural Guide 24-130: Conducting Red Team Exercises. Note: A Red Team exercise is required for FIPS 199 High and HVA systems.

8. *Information Security Awareness and Training Records

Reference: NIST 800-53 control AT-04

Provide the results of the literacy training and awareness (AT-02) and role-based information security technical training (AT-03). AT-02 requires basic security awareness training for employees and contractors that support the operation of the contractor system. AT-03 requires information security technical training for information system security roles. Training shall be consistent with the requirements contained in C.F.R. Part 5 Subpart C (5 C.F.R 930.301) and conducted at least annually.

9. *System(s) Baseline Configuration Standard Document

Reference: NIST 800-53 control CM-02

Provide a well-defined, documented, and up-to-date specification to which the information system is built.

10. Information Exchange Agreements (if applicable)

Reference: NIST 800-53 control CA-03

Provide Interconnection Security Agreements (ISAs)/Information Exchange Agreements (IEAs)/Memorandum of Agreements (MOAs), completed in accordance with NIST 800-47, "Managing the Security of Information Exchanges" and GSA-IT Security Procedural Guide 24-125: Managing Information Exchange Agreements, for existing and new interconnections. Agreements shall be submitted as attachments as part of the annual SSPP submission. Agreements shall include, if applicable, any changes since the last submission and must be updated as defined in the agreement, and at least as part of any ATO renewal.

11. *Rules of Behavior

Reference: NIST 800-53 control PL-04

Define and establish Rules of Behavior for information system users. Rules of Behavior shall be submitted as an appendix to the SSPP.

12. Configuration Management Plan

Reference: NIST 800-53 control CM-09

Provide an annual update to the Configuration Management Plan for the information system.

13. *Personnel Screening and Security

Reference: NIST 800-53 control PS-03, NIST 800-53 control PS-07

Furnish documentation reflecting favorable adjudication of background investigations for all personnel (including subcontractors) supporting the system. Contractors shall comply

with GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy" and GSA Order ADM 2181.1, "Homeland Security Presidential Directive-12 Personal Identity Verification and Credentialing Policy, and Background Investigations for Contractor Employees." GSA separates the risk levels for personnel working on Federal computer systems as follows:

- A favorable initial fitness/suitability determination must be granted, and a Tier 1
 or higher background investigation initiated before access to the GSA network or
 any GSA IT system. There shall be no waivers to this requirement for GSA
 network and IT system access for GSA employees or contractors.
- A favorable initial fitness/suitability determination must be granted, and a Tier 2 or higher background investigation initiated before access to PII/CUI is granted. The authority and access shall be determined by the appropriate GSA Supervisor (for GSA employees) or CO (for contract personnel), Data Owner, and the System's AO. Each System's AO, with the request of the GSA Supervisor, Data Owner, or CO, shall evaluate the risks associated with each such request.
- A favorable suitability determination must be completed at a Tier 2 or higher background investigation before privileged access to the GSA network or IT systems is granted. A waiver may be requested in order to maintain GSA business operations; however, such requests should be used judiciously and not incur unnecessary risks to GSA.

If final adjudication of a background investigation is unfavorable, GSA network and IT system access must be revoked, and any GFE, including the GSA PIV card, must be retrieved and returned to OMA.

14. System Configuration Settings Verification (e.g., scans) Reference: NIST 800-53 control CM-06/CM-06(01)

Establish and document mandatory configuration settings for information technology products employed within the information system that reflect the most restrictive mode consistent with operational requirements. Configuration settings are the configurable security-related parameters of information technology products that compose the information system. Systems should be configured in agreement with GSA technical guidelines, NIST guidelines, Center for Internet Security guidelines (Level 1), or industry best practice guidelines in hardening systems, as reviewed and accepted by the GSA AO.

Provide the most recent operating system Configuration Settings Compliance scan report.

Annual Deliverable due NLT August 30th (Reference: CIO-IT Security-19-101).

15. HVA Data Call (if applicable)

Reference: CISA HVA Program Management Office

Respond to the annual HVA data call, if applicable (i.e., when an HVA Data call is issued that is applicable to the vendor/contractor system).

Deliverables to be provided Biennially to the GSA ISSO, ISSM, and/or COR (Due NLT June 25th in even numbered years per CIO-IT Security-19-101).

Note: Deliverables annotated with a "*" below may be attested to via an attestation letter as described in GSA CIO IT Security Procedural Guide 19-101, "External Information System Monitoring."

Policies and Procedures

Develop and maintain policies, procedures, and plans for the following control families:

- a. *Access Control (NIST 800-53 AC-01 Policy and Procedures)
- b. *Awareness and Training (NIST 800-53 AT-01 Policy and Procedures)
- c. *Audit and Accountability (NIST 800-53 AU-01 Policy and Procedures)
- d. *Identification and Authentication (NIST 800-53 IA-01 Policy and Procedures)
- e. *Incident Response (NIST 800-53 IR-01 Policy and Procedures) reporting timeframes are documented in GSA IT Security Procedural Guide 01-02: Incident Response (IR)
- f. *System Maintenance (NIST 800-53 MA-01 Policy and Procedures)
- g. *Media Protection (NIST 800-53 MP-01 Policy and Procedures)
- h. *Physical and Environmental Protection (NIST 800-53 PE-01 Policy and Procedures)
- i. *Personnel Security (NIST 800-53 PS-01 Policy and Procedures)
- j. *PII Processing and Transparency (NIST 800-53 PT-01 Policy and Procedures) (if applicable)
- k. *System and Information Integrity (NIST 800-53 SI-01 Policy and Procedures)
- *System and Communication Protection (NIST 800-53 SC-01 Policy and Procedures)
- m. *Key Management Policy (NIST 800-53 SC-12 Cryptographic Key Establishment and Management)
- n. *Supply Chain Risk Management (NIST 800-53 SR-01 Policy and Procedures)
- o. *Supply Chain Risk Management Plan (NIST 800-53 control SR-02)

2.6 GSA Privacy Requirements

Personally identifiable information (PII) <SELECT: is or is not> in the scope of the acquisition and PII <SELECT: is or is not> expected to be stored, processed, or transmitted in the vendor's information system. The collection, maintenance, or dissemination of any PII that is subject to the Privacy Act and/or the E-Government Act will be handled in full accordance with all GSA rules of conduct and in accordance with GSA Privacy Program requirements.

The contractor shall work with GSA to prepare a Privacy Threshold Assessment (PTA) to confirm and document PII is not in scope, or to determine which categories of information will be stored, processed, or transmitted by the system. The PTA must be completed before development begins and whenever a change with a privacy impact (e.g., a new category of information is collected) is made to an existing system. PTAs are required as part of GSA's process to determine whether a Privacy Impact Assessment (PIA) and/or a System of Records Notice (SORN) is required, and if any other privacy requirements apply to the information system. Information regarding PIAs can be found in GSA Order CIO 1878.3.

PII (should it come into scope) will require the following guidelines be adhered to.

- The vendor's information system must be authorized at least at the FIPS PUB 199 Moderate level.
- For any system that collects, maintains, or disseminates PII, a PIA must be completed by the contractor and provided to the GSA Privacy Office for review along with the other authorization to operate (ATO) documents.

- If the system retrieves information using PII, the Privacy Act applies and it must have a system of records notice (SORN) published in the Federal Register.
- If PII is collected from individuals by the system, a Privacy Act Statement (i.e., Privacy Notice) must be provided to users prior to their use of the application on what data is being collected and why, as well as the authority for the collection and the impact of not providing some or all of it. The Privacy Act Statement must be available to the individual directly on the form used to collect the information. Providing a link back to the Statement from the form is acceptable.

Per OMB A-130 Privacy Act Statements must include:

- the authority (whether granted by statute or executive order) that authorizes the solicitation of the information and whether disclosure of such information is mandatory or voluntary;
- (2) the principal purpose(s) for which the information is intended to be used;
- (3) the published routine uses to which the information is subject;
- (4) the effects on the individual, if any, of not providing all or any part of the requested information; and
- (5) an appropriate citation (and, if practicable, a link) to the relevant SORN(s).

An example Privacy Act Statement is available at <u>GSA's Privacy Act Statement for Design</u> <u>Research webpage</u>.

Note: Systems that access data a user creates must assume a user may include privacy data/PII in the system unless the data creation is restricted to data controlled by the system.

All contractor staff who have significant privacy information responsibilities must complete GSA's mandatory privacy awareness and role-based training courses. This includes contractors who work with PII as part of their work duties (e.g., Human Resource staff, Finance staff, and managers/supervisors).

2.7 Additional Stipulations

- 1. Security documentation will be marked as follows:
 - a. Attestation letters, PTAs, and PIAs will not be marked.
 - b. CP, BIA, and CP Test Reports will be marked CUI//EMGT.
 - c. All other security documentation will be marked CUI//ISVI.
 - d. Documents will be marked in bold text on the top of all pages. Spelling out of acronyms is not required.
 - e. The cover page of each CUI document must contain the following statement on the lower left of the page.

Controlled by: General Services Administration OCISO ISP Division: ispcompliance@gsa.gov.

- f. External transmission/dissemination of CUI to or from a Government system must be encrypted. A FIPS PUB 140-3/140-2 validated encryption module must be used to encrypt the CUI data.
- 2. The Contractor shall certify applications are fully functional and operate correctly as intended on systems using benchmarks from GSA technical guidelines, NIST guidelines, Center for Internet Security guidelines, or industry best practice guidelines, as reviewed

and accepted by the GSA AO. The standard installation, operation, maintenance, update, and/or patching of software shall not alter the configuration settings from the approved benchmark configuration. Information technology for Windows systems should use the Windows Installer Service for installation to the default "program files" directory and should be able to silently install and uninstall. Applications designed for normal end users shall run in the standard user context without elevated system administration privileges. The contractor shall use tools to verify their products operate correctly with the approved benchmark configurations and do not alter the benchmark settings.

- 3. The Contractor shall provide software self-attestation letter(s) regarding conformity to NIST guidance² on secure software development as required by OMB M-23-16, "Update to Memorandum M-22-18, Enhancing the Security of the Software Supply Chain through Secure Software Development Practices."
 - a. Attestation must be provided as part of an acquisition, upon contract award, and upon major version upgrades as specified in OMB M-23-16, GSA MV-2023-02 Supplements 1-2, and <u>self-attestation letter templates</u> provided by GSA.
 - b. Any gaps in meeting the software development practices required by the attestation form that cannot be attested to, the Contractor must provide mitigating practices in place (if any) and provide a POA&M to monitor any gaps and their resolution.
- 4. The Contractor shall cooperate in good faith in defining non-disclosure agreements (NDAs) that other third parties must sign when acting as the Federal government's agent.

Note: GSA's Office of the General Counsel (OGC) is available to coordinate on defining NDA requirements. Upon request, GSA OGC can advise on NDA development.

- 5. The Government has the right to perform manual or automated audits, scans, reviews, or other inspections of the vendor's IT environment being used to provide or facilitate services for the Government. The Contractor shall be responsible for the following privacy and security safeguards:
 - a. The Contractor shall not publish or disclose in any manner, without the Contracting Officer's written consent, the details of any safeguards either designed or developed by the Contractor under this contract or otherwise provided by the Government. Exception Disclosure to a Consumer Agency for purposes of A&A verification or to the Connect.gov portal. To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the Contractor shall afford the Government access to the Contractor's facilities, installations, technical capabilities, operations, documentation, records, and databases within 72 hours of the request. Access to support incident investigations, shall be provided as soon as possible but not longer than 72 hours after request.

The program of inspection shall include, but is not limited to:

 Authenticated and unauthenticated operating system/network vulnerability scans

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² NIST guidance for secure software development per OMB M-22-18 consists of NIST SP 800-218 and NIST Software Supply Chain Security Guidance

- Authenticated and unauthenticated web application vulnerability scans
- Automated scans can be performed by Government personnel, or agents acting on behalf of the Government, using Government operated equipment, and Government specified tools. If the vendor chooses to run its own automated scans or audits, results from these scans may at the Government's discretion, be accepted in lieu of Government performed vulnerability scans. In these cases, scanning tools and their configuration shall be approved by the Government. In addition, the results of vendor-conducted scans shall be provided in full to the Government.
- b. If new or unanticipated threats or hazards are discovered by either the Government or the Contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.
- 6. The Contractor shall comply with 52.204-23 of the Federal Acquisition Regulation (FAR). It prohibits under Section 1634 of Public Law 115-91 the use of any hardware, software, or services developed or provided, in whole or in part, by— (1) Kaspersky Lab (or any successor entity); (2) any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or (3) any entity of which Kaspersky Lab has majority ownership.
- 7. The Contractor shall comply with 52.204-25 of the FAR. It prohibits, under Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232), contractors from providing to the Government any equipment, system, or service that uses telecommunications equipment or video surveillance services from certain named companies as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. It also prohibits, under Section 889(a)(1)(B), contractors from using any equipment, system, or service that uses telecommunications or video surveillance equipment or services from certain named companies as a substantial or essential component of any system or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. The proscribed companies are Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, and Dahua Technology Company and their subsidiaries and affiliates.
- 8. The Contractor shall comply with 52.204-27 of the FAR. It prohibits under Section 102 of the Consolidated Appropriations Act 2023, Public Law 117-328, the presence or use of TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited from being used on any information technology as defined in 40 U.S.C. § 11101(6) that is owned or operated by an agency, or used by a contractor under a contract with the agency, or requires the use of such technology expressly or to a significant extent in the performance of a service or the furnishing of a product for an agency.
- The Contractor shall comply with requests for data or perform actions based on DHS issued requirements per the Federal Cybersecurity Coordination, Assessment, and Response (C-CAR) Protocol.

- 10. The Contractor shall comply with all actions specified in DHS Cybersecurity, Federal Acquisition Security Council (FASC) exclusion orders, FASC removal orders, and GSA covered procurement actions in accordance with the SECURE Technology Act, if the action is applicable to the Contractor's system or the components therein. In addition, contractors shall update their vulnerability management procedures in accordance with BOD 22-01, including:
 - <u>Subscribing</u> to the CISA KEV Catalog automated updates;
 - Remediating vulnerabilities as identified for control <u>SI-2</u> above;
 - Providing within 7 days from the required remediation date an email to the ISSO/ISSM or COR certifying remediation consistent with BOD 22-01 requirements.

If GSA receives additional cyber supply chain risk information indicating supply chain risk, GSA may direct remediation related to the components and/or configuration of the system.

- 11. The Contractor shall comply with all actions specified in Federal mandates, including but not limited to Federal Laws, Executive Orders, and OMB Memoranda, when the mandate is applicable to their system or the components therein. The contractor shall provide data to support compliance with the applicable Federal mandates when requested.
- 12. All Internet of Things (IoT) devices, as defined in GSA Order CIO 2100.1, GSA IT Security Policy, included by the Contractor shall comply with NIST SP 800-213 or receive a waiver from GSA under one of the conditions of the "IoT Cybersecurity Improvement Act of 2020."
- 13. For information systems including a Cloud solution:
 - a. For FedRAMP authorized Cloud Solution Providers (CSPs), the CSP must comply with the FedRAMP Service Level Agreement (SLA) requirements.
 - b. For non-FedRAMP authorized CSPs, the Contractor shall establish an SLA with the CSP to support the Contractor's ability to meet requirements specified for External Information Systems IT Security and Privacy Requirements.

3 Internal Information Systems - IT Security and Privacy Requirements

3.1 Required Policies and Regulations for GSA Contracts

Federal Laws, Regulations, and Guidance:

The contractor shall comply with all applicable Federal Laws and Regulations.

- 40 U.S.C. 11331, "Responsibilities for Federal Information Systems Standards"
- <u>Cybersecurity & Infrastructure Security Agency (CISA) Cybersecurity Directives</u> Listing of Emergency and Binding Operational Directives
- Executive Order (EO) 13556, "Controlled Unclassified Information"
- FISMA of 2014, "The Federal Information Security Modernization Act of 2014"
- HSPD 12, "Homeland Security Presidential Directive 12 Policy for a Common Identification Standard for Federal Employees and Contractors"
- OMB Circular A-130, "Managing Information as a Strategic Resource"

- Privacy Act of 1974, "5 USC, § 552a"
- Public Law 116-207, "Internet of Things Cybersecurity Improvement Act of 2020"
- National Archives and Records Administration (NARA) Controlled Unclassified Information (CUI) Registry
- OMB Memoranda, OMB Memoranda are mandatory when their requirements are in scope for a system or components of a system. The following OMB Memos are listed due to their requirements being included in the requirements for Internal Information Systems – IT Security and Privacy Requirements:
 - OMB M-10-23, "Guidance for Agency Use of Third-Party Websites and Applications"
 - OMB M-14-03, "Enhancing the Security of Federal Information and Information Systems"
 - OMB M-15-13, "Policy to Require Secure Connections across Federal Websites and Web Services"
 - OMB M-17-12, "Preparing for and Responding to a Breach of Personally Identifiable Information"
 - OMB M-21-07, "Completing the Transition to Internet Protocol Version 6 (IPv6)"
 - OMB M-21-31, "Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents"
 - OMB M-22-09, "Moving the U.S. Government Toward Zero Trust Cybersecurity Principles"
 - OMB M-22-18, "Enhancing the Security of the Software Supply Chain through Secure Software Development Practices"
 - OMB M-23-16, "Update to Memorandum M-22-18, Enhancing the Security of the Software Supply Chain through Secure Software Development Practices"

Federal Standards and NIST Publications:

The contractor shall comply with all applicable Federal Information Processing Standards (FIPS). NIST Special Publications (800 Series) are guidance, unless required by a FIPS publication, in which case usage is mandatory.

- <u>FIPS PUB 199</u>, "Standards for Security Categorization of Federal Information and Information Systems"
- <u>FIPS PUB 200</u>, "Minimum Security Requirements for Federal Information and Information Systems"
- FIPS PUB 140-3, "Security Requirements for Cryptographic Modules"
- NIST SP 800-18, Revision 1, "Guide for Developing Security Plans for Federal Information Systems"
- NIST SP 800-30, Revision 1, "Guide for Conducting Risk Assessments"
- NIST SP 800-34, Revision 1, "Contingency Planning Guide for Federal Information Systems"
- NIST SP 800-37, Revision 2, "Risk Management Framework for Information Systems and Organizations: A System Life Cycle Approach for Security and Privacy"
- NIST SP 800-47, Revision 1, "Managing the Security of Information Exchanges"
- NIST SP 800-53, Revision 5, "Security and Privacy Controls for Information Systems and Organizations"
- NIST SP 800-53A, Revision 5, "Assessing Security and Privacy Controls in Information Systems and Organizations"
- NIST Special Publication 800-61, Revision 2, Computer Security Incident Handling Guide

- NIST SP 800-63-3, "Digital Identity Guidelines"
- NIST SP 800-81-2, "Secure Domain Name System (DNS) Deployment Guide"
- NIST SP 800-122, "Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)"
- NIST SP 800-137, "Information Security Continuous Monitoring (ISCM) for Federal Information Systems and Organizations"
- <u>NIST SP 800-161, Revision 1</u>, "Supply Chain Risk Management Practices for Federal Information Systems and Organizations"
- NIST SP 800-213, "IoT Device Cybersecurity Guidance for the Federal Government: Establishing IoT Device Cybersecurity Requirements"
- NIST SP 800-218, "Secure Software Development Framework (SSDF) Version 1.1: Recommendations for Mitigating the Risk of Software Vulnerabilities"
- NIST Special Publication 1800-16 "Securing Web Transactions: TLS Server Certificate Management"

GSA Policies:

The contractor shall comply with the following GSA Directives/Policies.

- <u>GSA Order CIO 1878.3</u>, "Developing and Maintaining Privacy Threshold Assessments, Privacy Impact Assessments, Privacy Act Notices, and System of Records Notices"
- GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy"
- GSA Order ADM 2181.1, "Homeland Security Presidential Directive-12 Personal Identity Verification and Credentialing Policy, and Background Investigations for Contractor Employees"
- GSA Order CIO 2183.1, "Enterprise Identity, Credential, and Access Management (ICAM) Policy"
- GSA Order CIO 2200.1, "GSA Privacy Act Program"
- GSA Order CIO 9297.2, "GSA Information Breach Notification Policy"
- GSA MV-2023-02, Supplements 1-2, Ensuring Only Approved Software is Acquired and Used at GSA
- GSAM 510.002, Pre-Award Procedures
- GSAM 511.170, Information Technology Coordination and Standards
- GSAM 511.171, Requirements for GSA Information Systems
- GSAM 539, Acquisition of Information Technology

The contractor shall comply with the following GSA policies listed below when inside a GSA building or inside a GSA firewall.

• GSA Order ADM 9732.1, "Personnel Security and Suitability Program Handbook"

The GSA policies listed in this paragraph must be followed, if applicable.

- GSA Order CIO 2103.2, "Controlled Unclassified Information (CUI) Policy"
- GSA Order CIO 2104.1, "GSA Information Technology (IT) General Rules of Behavior"
- GSA Order CIO 2185.1, "Use of Artificial Intelligence at GSA"

GSA Procedural Guides:

GSA IT Procedural Guides are guidance, unless required by a GSA Directive/Policy, in which case usage is mandatory.

Note: GSA's Procedural Guides are updated frequently; to make sure you have the most recent version of publicly available procedural guides, visit <u>GSA.gov</u>. If a non-publicly available guide is needed, contact the contracting officer who will coordinate with the GSA Office of the Chief Information Security Officer to determine if it can be made available.

3.2 GSA Security and Privacy Compliance Requirements

FIPS PUB 200, "Minimum Security Requirements for Federal Information and Information Systems," is a mandatory federal standard that defines the minimum security requirements for federal information and information systems in seventeen security-related areas. Information systems supporting GSA must meet the minimum security and privacy requirements through the use of the security controls in accordance with NIST Special Publication 800-53, Revision 5 (hereafter identified as NIST 800-53), "Security and Privacy Controls for Information Systems and Organizations."

To comply with the federal standard, GSA must determine the security category of the information and information system in accordance with FIPS PUB 199, "Standards for Security Categorization of Federal Information and Information Systems," and then the contractor shall apply the appropriately tailored set of Low, Moderate, or High impact baseline security controls in NIST 800-53, as determined by GSA. NIST 800-53 controls requiring organization-defined parameters (i.e., password settings) shall be consistent with GSA specifications. The GSA-specified control parameters and supplemental guidance defining more specifically the requirements per FIPS PUB 199 impact level are available in the GSA Control Tailoring Workbook.

The Contractor shall use GSA technical guidelines, NIST guidelines, Center for Internet Security (CIS) guidelines (Level 1), or industry best practice guidelines in hardening their systems. Where a GSA security hardening benchmark exists, it must be used. GSA security hardening benchmarks may be exceeded but not lowered. GSA benchmarks are available on the GSA Intranet and will be provided by GSA upon request.

3.3 Essential Security Controls

All NIST 800-53 controls must be implemented as per the applicable FIPS PUB 199 Low (L), Moderate (M), or High (H) baseline. Controls in the Privacy baseline are applicable if PII data is being collected, stored, or transmitted. The following table identifies essential security controls from the respective baselines to highlight their importance; ensure they are implemented; and identify integration requirements with GSA's IT and IT Security environment. Systems shall have these essential security controls implemented. Further, the proposed system and security architecture of the information system shall be reviewed and approved by the Security Engineering Division, in the Office of the Chief Information Security Officer before commencement of system build (architecture, infrastructure, and code).

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance
AC-02	Account Management	L, M, H	Account management systems must leverage or integrate with existing GSA account management solutions or processes, as applicable and defined in the GSA IT ICAM Roadmap (see GSA Order CIO 2183.1, "Enterprise Identity, Credential, and Access Management (ICAM) Policy."
AC-17 (03)	Remote Access Managed Access Control Points	M, H	All remote accesses to the internal information system must be routed through GSA's managed network access control points, subjecting them to security monitoring.
		Event Logging L, M, H	Information systems shall implement audit configuration requirements as documented in applicable GSA IT Security Technical Hardening Guides (i.e., hardening and technology implementation guides); for web applications see GSA IT Security Procedural Guide 07-35, Section 2.8.10, What to Log.
AU-02	Event Logging		For technologies where a Technical Guide and Standard does not exist, events from an industry source such as vendor guidance or Center for Internet Security (CIS) benchmark, recommended by the GSA S/SO or Contractor to be approved by the GSA AO shall be used.
			Internal Information systems shall send all logs listed in CIO-IT Security-01-08: Auditing and Accountability (AU) to GSA's central Enterprise Logging Platform (ELP) to support information system monitoring. System audit logs not able to be transmitted to the ELP, system owners must coordinate with the ISSO to ensure AU-02 requirements are met.
AU- 06(01)	Audit Record Review, Analysis, and Reporting Automated Process Integration	M, H	Internal systems must integrate with GSA's Security Stack as specified in GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, which supports review of audit log events via GSA's Enterprise Logging Platform (ELP). Audit logs not able to be transmitted to the ELP and logs for web applications, databases, and other tools when PII is in scope must be reviewed by the system team.
AU-11	Audit Record Retention	L, M, H	Internal systems must integrate with GSA's Security Stack as specified in GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, which supports audit log retention via GSA's Enterprise Logging Platform (ELP) for 18 months in cold storage. System teams must retain 12 months of audit logs online.
CA- 08(02)	Penetration Testing Red Team Exercises	Н	In accordance with CIO Order 2100.1, all FIPs 199 High impact and HVA systems must have Red Team exercises performed as part of their A&A and annually thereafter.

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance
CM-06	Configuration Settings	L, M, H	Information systems shall implement GSA benchmarks for system hardening. GSA benchmarks may be exceeded but not lowered. Where a GSA benchmark does NOT exist, GSA technical guidelines, NIST guidelines, Center for Internet Security guidelines (Level 1), or industry best practice guidelines, as reviewed and accepted by the GSA AO.
			Further, all workstations and servers connected to the GSA network shall have BigFix agents installed and operating as expected.
CM-07	Least Functionality	L, M, H	Internal systems must integrate with GSA's Security Stack as specified in GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, which supports least functionality via GSA's implementation of CarbonBlack.
CP-07	Alternative Processing Site	М, Н	FIPS PUB 199 Moderate and High impact systems must implement processing across geographically disparate locations to ensure fault tolerance. Cloud Infrastructure as a Service (laaS) architectures shall implement a multiregion strategy (multiple availability zones in a single region are not sufficient).
CP-08	Telecommunications Services	M, H	FIPS PUB 199 Moderate and High impact information systems must implement alternate telecom services to support resumption when the primary telecommunications capabilities are unavailable at either the primary or alternate processing or storage sites.
IA-02(01)	Identification and Authentication (Organizational Users) Multifactor Authentication to Privileged Accounts	L, M, H	All information systems shall implement multi-factor authentication for privileged accounts.
			Information systems shall technically integrate with a GSA privileged access and authentication solution, as applicable and defined in the GSA IT ICAM Roadmap (see GSA Order CIO 2183.1, "Enterprise Identity, Credential, and Access Management (ICAM) Policy").
IA-02(02)	Identification and Authentication (Organizational Users) Multifactor Authentication to Non-Privileged Accounts	L, M, H	All information systems must implement multi-factor authentication for non-privileged accounts.
			Information systems shall technically integrate with a GSA supported enterprise authentication solution (e.g., support SAML 2.0 or OIDC with an GSA enterprise SSO solution), , as applicable and defined in the GSA IT ICAM Roadmap (GSA Order CIO 2183.1, "Enterprise Identity, Credential, and Access Management (ICAM) Policy").

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance
IA-07	Cryptographic Module Authentication	L, M, H	The information system shall implement authentication to FIPS PUB 140-3/140-2 compliant encryption modules as specified in the respective standards. Note: NIST has issued FIPS 140-3 and no longer accepts FIPS 140-2 modules for validation. However, previously validated 140-2 modules will be accepted through September 22, 2026. For additional information see the NIST Cryptographic Module Validation Program Validated Modules.
MP-04	Media Storage	M, H	Digital media including magnetic tapes, external/removable hard drives, flash/thumb drives, diskettes, compact disks, and digital video disks shall be encrypted using a FIPS PUB 140-3/140-2 validated encryption module.
MP-05	Media Transport	M, H	Digital media including magnetic tapes, external/removable hard drives, flash/thumb drives and digital video disks shall be encrypted using a FIPS PUB 140-3/140-2 validated encryption module during transport outside of controlled areas.
PL-08	Security and Privacy Architectures	L, M, H	All information system security architectures must be formally reviewed and approved by the Office of the Chief Information Security Officer, Security Engineering Division during the system develop/design stages of the SDLC and prior to Security Assessment and Authorization.
RA-05	Vulnerability Monitoring and Scanning	L, M, H	All systems must integrate with the GSA vulnerability scanning tool set managed by the Security Operations Division in the Office of the Chief Information Security Officer. Information systems shall coordinate integration with the scanning program by contacting SecOps@gsa.gov.
RA-08	Privacy Impact Assessments	L, M, H	RA-08 is included in all FIPS 199 Baselines to ensure all systems complete a Privacy Threshold Assessment (PTA) to determine if a Privacy Impact Assessment (PIA) is required.
SA-22	Unsupported System Components	L, M, H	All systems must be comprised of software and hardware components that are fully supported in terms of security patching for the anticipated life of the system; software must be on GSA's Enterprise Architecture IT Standards List.

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance
SC-08	Transmission Confidentiality and Integrity	M, H	Implemented encryption algorithms and cryptographic modules shall be FIPS-approved and FIPS PUB 140-2 validated, respectively**.
SC- 08(01)	Transmission Confidentiality and Integrity Cryptographic Protection	L, M, H	 Digital signature encryption algorithms Block cipher encryption algorithms Secure hashing algorithms
			For web services connections, implement end to end encryption terminating the connection at the web server; connections terminated at a load balancer, Firewall, and/or WAF shall employ re-encryption techniques to ensure end to end encryption.
			ALL associated URLs must have their second-level domain HTTP Strict Transport Security (HSTS) preloaded and have no weak ciphers, have no weak protocols, and preload .gov domains. (see Binding Operational Directive (BOD) 18-01, Enhance Email and Web Security).
			SSL/TLS implementations shall align with GSA IT Security Procedural Guide 14-69: SSL/TLS Implementation.
			**Federal Policy requires implementation of FIPS PUB 140-3/140-2 validated encryption modules and FIPS-approved ciphers suites. Encryption of GSA sensitive data (e.g., PII, PCI, Authenticators, other business sensitive data) at rest and in transit shall be with FIPS validated encryption modules wherever possible; exceptions require Acceptance of Risk (AOR) to be signed by the GSA CISO and AO.
SC-13	Cryptographic Protection	L, M, H	Implemented encryption algorithms and cryptographic modules shall be FIPS-approved and FIPS PUB 140-3/140-2 validated, respectively.
SC-17	Public Key Infrastructure Certificates	M, H	Implement appropriate creation, use, and signing of crypto certs in agreement with GSA IT Security Procedural Guide 14-69: SSL/TLS Implementation, and NIST Special Publications 800-52, Revision 2 and 1800-16.
SC-18	Mobile Code	M, H	Systems must adhere to GSA's requirements regarding IT Standards and CIO-IT Security-07-35: Web Application Security and CIO-IT Security-17-81: Web Browser Technologies Hardening, as applicable, to ensure only approved code (including mobile code) is used.

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance
SC-22	Architecture and Provisioning for Name / Address Resolution Service	L, M, H	Information systems shall be Domain Name System Security Extensions (DNSSEC) compliant. Reference NIST SP 800-81-2, which provides deployment guidelines for securing DNS within an enterprise
	Protection of Information at Rest Cryptographic Protection	L, M, H	**Systems that process Personally Identifiable Information (PII), Payment Card Industry (PCI) data, Authenticators (e.g., passwords, tokens, keys, certificates, hashes, etc.), and other sensitive data as determined by the AO, shall encrypt that data everywhere (i.e., at file level, database level, at rest, and in transit). For databases, encryption of the whole database, table, column, or field levels is acceptable, as appropriate. Other methods including, but not limited to, application encryption or tokenization are also acceptable.
SC- 28(01)			For web services connections, implement end to end encryption terminating the connection at the web server; connections terminated at a load balancer shall employ re-encryption techniques to ensure end to end encryption.
			**Federal Policy requires implementation of FIPS PUB 140-3/140-2 validated encryption modules and FIPS-approved ciphers suites. Encryption of GSA sensitive data (e.g., PII, PCI, Authenticators, other business sensitive data) at rest and in transit shall be with FIPS validated encryption modules wherever possible; exceptions require Acceptance of Risk (AOR) to be signed by the GSA CISO and AO.
			All projects and systems must be adequately tested for flaws; all Critical, High, and Moderate risk findings must be remediated prior to go-live. Post go-live vulnerability remediation timelines are as follows:
SI-02	Flaw Remediation	L, M, H	 14 days for CISA Known Exploited Vulnerabilities (KEV) 15 days for Critical vulnerabilities for Internet-accessible systems or services 30 days for Critical and High vulnerabilities 90 days for Moderate vulnerabilities 180 days for Low vulnerabilities
SI-03	Malicious Code Protection	L, M, H	All internal information systems must incorporate CarbonBlack and FireEye HX agents on supported operating systems. These agents will be provided.

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance
SI-04	System Monitoring	L, M, H	All information systems must be monitored internally and across ingress/egress points for potentially malicious activity. In addition, all internal information systems must incorporate CarbonBlack and FireEye HX agents on supported operating systems. These agents will be
			provided.
SI-10	Information Input Validation	M, H	All systems accepting input from end users must validate the input in accordance with industry best practices and published guidelines, including GSA_IT Security Procedural Guide 07-35, "Web Application Security," and OWASP Top 10 Web Application Security Vulnerabilities.
SR-02	Supply Chain Risk Management Plan	L, M, H	Tier 3 (Information System) plans for each system should be developed consistent with the template in Appendix E of NIST SP 800-161.
PM-21	Accounting of Disclosures	See note below	Requires accounting of disclosures of PII.
PM-25	Minimization of Personally Identifiable Information Used in Testing, Training, and Research	See note below	Requires implementation of policies and procedures to minimize PII used in testing, training, and research.
PT-05	Privacy Notice	See note below	Privacy notices help inform individuals about how their personally identifiable information is being processed by the system or organization
PT- 05(02)	Privacy Notice Privacy Act Statements	See note below	Include Privacy Act statements on forms that collect information that will be maintained in a Privacy Act system of records or provide Privacy Act statements on separate forms that can be retained by individuals.
PT-06	System of Records Notice	See note below	Federal agencies must publish a system of records notice in the Federal Register upon the establishment and/or modification of a Privacy Act system of record
PT- 07(01)	Specific Categories of Personally Identifiable Information Social Security Numbers	See note below	Federal law and policy establish specific requirements for organizations' processing of Social Security numbers; organizations take steps to eliminate unnecessary uses of Social Security numbers and other sensitive information and observe any particular requirements that apply.

Control ID	Control Title	GSA Baseline	GSA Implementation Guidance
SI-12(01)	Information Management and Retention Limit Personally Identifiable Information Elements	See note below	Limit personally identifiable information being processed in the information life cycle to specified elements.

Note: Privacy controls are not associated with a FIPS PUB 199 baseline. Controls are applicable if PII data is being collected, stored, or transmitted.

3.4 Assessment and Authorization (A&A) Activities

The implementation of a new Federal Government IT system requires a formal approval process known as Assessment and Authorization (A&A). NIST Special Publication 800-37, Revision 2 (hereafter described as NIST 800-37) and GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk provide guidelines for performing the A&A process. The system/application must have a valid assessment and authorization, known as an Authorization to Operate (ATO) (signed by the Federal government), before going into operation and processing GSA information. The failure to obtain and maintain a valid ATO will result in the termination of the contract. The system must have a new A&A conducted (signed by the Federal government) when significant changes are made to the system, and as specified in GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, and the guides for GSA's other A&A processes referenced therein.

Assessing the System

- 1. The Contractor shall comply with Assessment and Authorization (A&A) requirements as mandated by Federal laws and policies, including making available any documentation, physical access, and logical access needed to support this requirement. The Level of Effort for the A&A is based on the System's NIST Federal Information Processing Standard (FIPS) Publication 199 categorization. The contractor shall create, maintain, and update the following A&A documentation:
 - System Security and Privacy Plan (SSPP) completed in agreement with NIST Special Publication 800-18, Revision 1, "Guide for Developing Security Plans for Federal Information Systems" and completed in accordance with GSA SSPP requirements and templates. The SSPP template includes specific instructions on documenting control implementations. Each control implementation must address all the control requirements and how they are achieved (i.e., who, what, when, where). Appendices shall be included to support control implementations, when necessary. The SSPP shall include; as an appendix, a completed GSA Control Tailoring Workbook (CTW). The column in the CTW titled "Vendor/Contractor Defined Values" shall be used to document all contractor implemented parameter settings that differ from the GSA Defined Value and the Vendor/Contractor defined value when the value is deferred to the Vendor/Contractor. GSA's approval will be documented in the CTW column titled "GSA Approval of Vendor/Contractor Defined Values."

Note: A description of how the system will transition to IPv6, as required by OMB M-21-07, must be included as part of the system's SSPP.

- Contingency Plan completed in agreement with NIST Special Publication 800-34 and GSA IT Security Procedural Guide 06-29: Contingency Planning.
- Business Impact Analysis completed in agreement with NIST Special Publication 800-34 and GSA IT Security Procedural Guide 06-29: Contingency Planning.
- Contingency Plan Test Report completed in agreement with GSA IT Security Procedural Guide 06-29: Contingency Planning.
- Incident Response Plan completed in agreement with NIST Special Publication 800-61, "Computer Security Incident Handling Guide" and GSA IT Security Procedural Guide 01-02: Incident Response.
- Incident Response Test Report completed in agreement with NIST Special Publication 800-61, "Computer Security Incident Handling Guide" and GSA IT Security Procedural Guide 01-02: Incident Response.
- Configuration Management Plan completed in agreement with GSA IT Security Procedural Guide 01-05: Configuration Management.
- Plan of Action & Milestones completed in agreement with GSA IT Security Procedural Guide 09-44: Plan of Action and Milestones (POA&M).
- Penetration Test Reports documenting the results of vulnerability analysis and exploitability of identified vulnerabilities. Note: Penetration testing is required for all Internet accessible, all FIPS 199 High, and all High Value Asset (HVA) information systems. These systems are required to complete an independent penetration test and provide an Independent Penetration Test Report documenting the results of the exercise as part of the A&A package. Reference GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk and GSA IT Security Procedural Guide 11-51: Conducting Penetration Test Exercises for penetration testing guidance.
- Red Team Exercise Report documenting the results of the Red Team exercise in accordance with CIO Order 2100.1. Note: A Red Team exercise is required for FIPS 199 High and HVA systems.
- Information Exchange Agreements documented in accordance with GSA IT Security Procedural Guide 24-125: Managing Information Exchange Agreements and NIST Special Publication 800-47, Revision 1, "Managing the Security of Information Exchanges."
- 2. Information systems must be assessed and authorized every three (3) years or whenever there is a significant change to the system's security posture in accordance with NIST Special Publication 800-37 Revision 2, "Risk Management Framework for Information Systems and Organizations: A System Life Cycle Approach for Security and Privacy," and GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk or via continuous monitoring based on GSA IT Security Procedural Guide 12-66: Information Security Continuous Monitoring (ISCM) Strategy & Ongoing Authorization (OA) Program that is reviewed and accepted by the GSA CISO. Systems designated as an HVA must be assessed in accordance with the CISA HVA Program Management Office and GSA guidance per CIO-IT Security-24-131: Managing High Value Assets.
- At the Moderate impact level and higher, the <SELECT: contractor or Government> is responsible for providing an independent Security Assessment/Risk Assessment in accordance with GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk.

- 4. If the Government is responsible for providing any assessment artifact (e.g., SAR, Penetration Test Report), the Contractor shall allow GSA employees (or GSA designated third party contractors) to conduct A&A activities to include control reviews in accordance with NIST 800-53/NIST 800-53A and GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, and CIO-IT Security-24-131 if applicable. Review activities include but are not limited to operating system vulnerability scanning, web application scanning, and database scanning of applicable systems that support the processing, transportation, storage, or security of GSA information. This includes the general support system infrastructure.
- 5. Identified gaps between required NIST 800-53 controls and the contractor's implementation as documented in the Security Assessment/Risk Assessment report shall be tracked for mitigation in a Plan of Action and Milestones (POA&M) document completed in accordance with GSA IT Security Procedural Guide 09-44: Plan of Action and Milestones (POA&M). Depending on the severity of the gaps, the Government may require them to be remediated before an Authorization to Operate is issued. For systems designated as an HVA a remediation plan shall be prepared based on guidance in CIO-IT Security-24-131.
- 6. The Contractor is responsible for mitigating all security risks found during the A&A and continuous monitoring activities. Vulnerabilities must be mitigated as follows:
 - 14 days for CISA Known Exploited Vulnerabilities (KEV)
 - 15 days for Critical vulnerabilities for Internet-accessible systems or services
 - 30 days for Critical and High vulnerabilities
 - 90 days for Moderate vulnerabilities
 - 180 days for Low vulnerabilities.
- 7. The Government will determine the risk rating of vulnerabilities.

Authorization of the System

- 1. Upon receipt of the documentation (A&A Package) described in GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk and NIST Special Publication 800-37 as documented above, the GSA Authorizing Official (AO) for the system (in coordination with the GSA Chief Information Security Officer (CISO), System Owner, Information System Security Manager (ISSM), and Information System Security Officer (ISSO) will render an authorization decision to:
 - Authorize system operation w/out any restrictions or limitations on its operation;
 - Authorize system operation w/restriction or limitation on its operation, or;
 - Not authorize for operation.
- 2. The Contractor shall provide access to the Federal Government, or their designee acting as their agent, when requested, in order to verify compliance with the requirements for an Information Technology security program. At its option, the Government may choose to conduct on site surveys. The Contractor shall make appropriate personnel available for interviews and documentation during this review.

3.5 Reporting and Continuous Monitoring

Maintenance of the security authorization to operate will be through continuous monitoring of security controls of the contractor's system and its environment of operation to determine if the

security controls in the information system continue to be effective over time in light of changes that occur in the system and environment. Through continuous monitoring, security controls and supporting deliverables are updated and submitted to GSA per the schedules below. The submitted deliverables (or lack thereof) provide a current understanding of the security state and risk posture of the information systems. They allow GSA AOs to make credible risk-based decisions regarding the continued operations of the information systems and initiate appropriate responses as needed when changes occur.

In addition to the deliverable requirements specified below, systems designated as an HVA shall comply with reporting, monitoring, and re-assessment requirements as identified by the CISA HVA Program Management Office and in GSA CIO-IT Security-24-131.

Deliverables to be provided Quarterly to the GSA ISSO, ISSM, and/or COR. (Reference: CIO-IT Security-08-39).

- 1. Plan of Action & Milestones (POA&M) Update (Due NLT the 1st day of the third month of each quarter)
 - Reference: NIST 800-53 control CA-05
 - Provide POA&M updates in accordance with requirements and the schedule set forth in GSA CIO IT Security Procedural Guide 09-44: Plan of Action and Milestones (POA&M).
- 2. FISMA Quarterly Metrics data, as necessary (i.e., when a FISMA quarterly data call is issued that is applicable to the system). (Due per data call request deadline)

Deliverables to be provided Annually (or when there is a major change) to the GSA ISSO, ISSM, and/or COR (Due dates for annual deliverables are designated per deliverable in the following lists.)

Annual Deliverables due NLT March 25th (Reference: CIO-IT Security-08-39).

1. Annual FISMA Self-Assessment

Reference: NIST 800-53 control CA-02

Deliver the results of the annual FISMA self-assessment conducted per GSA IT Security Procedural Guide 04-26: Federal Information Security Modernization Act (FISMA) Implementation. Based on the controls selected for self-assessment, the GSA OCISO will provide the appropriate test cases for completion.

- 2. Updated A&A documentation including the SSPP, Contingency Plan, and Business Impact Analysis
 - a. SSPP

Reference: NIST 800-53 control PL-02

Review and update the SSPP annually to ensure the plan is current and accurately describes implemented system controls and reflects changes to the contractor system and its environment of operation. The SSPP must be in accordance with NIST 800-18, Revision 1, "Guide for Developing Security Plans for Federal Information Systems."

b. Contingency Plan

Reference: NIST 800-53 control CP-02

Provide an annual update to the contingency plan completed in accordance with NIST 800-34, "Contingency Planning Guide for Federal Information Systems" and GSA IT Security Procedural Guide 06-29: Contingency Planning (CP).

c. Business Impact Analysis

Reference: NIST 800-53 control CP-02

Provide an annual update to the business impact analysis completed in accordance with NIST 800-34, "Contingency Planning Guide for Federal Information Systems", and GSA IT Security Procedural Guide 06-29: Contingency Planning (CP).

3. Contingency Plan Test Report

Reference: NIST 800-53 control CP-04

Provide a contingency plan test report completed in accordance with GSA IT Security Procedural Guide 06-29: Contingency Planning (CP). A continuity test shall be conducted annually prior to mid-July of each year. The continuity test can be a tabletop test while the system is at the FIPS PUB 199 Low Impact level. The tabletop test must include Federal and hosting Contractor representatives. Functional exercises must be completed once every three years for FIPS PUB 199 Moderate impact systems and annually for FIPS PUB 199 High impact systems.

4. Incident Response Plan

Reference: NIST 800-53 control IR-08

Provide an incident response plan documenting the system's incident response and handling capability GSA IT Security Procedural Guide 01-02, Incident Response (IR).

5. Incident Response Test Report

Reference: NIST 800-53 control IR-03

Provide an incident response plan test report documenting results of incident reporting process per GSA IT Security Procedural Guide 01-02, Incident Response (IR).

6. User Certification/Authorization Review Documents

Reference: NIST 800-53 control AC-02

Provide the results of the annual review and validation of system users' accounts to ensure the continued need for system access. The user certification and authorization documents will illustrate the organization establishes, activates, modifies, reviews, disables, and removes information system accounts in accordance with documented account management procedures.

Annual Deliverables due NLT July 25th (Reference: CIO-IT Security-08-39)

7. Penetration Test Report

Reference: NIST 800-53 control CA-08

All Internet accessible systems, and all FIPS PUB 199 High impact systems are required to complete an independent penetration test and provide a Penetration Test Report documenting the results of the exercise as part of their A&A package. Annual penetration tests are required for these same systems in accordance with GSA Order CIO 2100.1 and CIO-IT Security-11-51: Conducting Penetration Test Exercises.

8. Red Team Exercise Report (if applicable)

Reference: NIST 800-53 control CA-08(02)

Red Team Exercise Report documenting the results of the Red Team exercise in agreement with GSA IT Security Procedural Guide 24-130: Conducting Red Team Exercises. Note: A Red Team exercise is required for FIPS 199 High and HVA systems.

9. Information Exchange Agreements (if applicable)

Reference: NIST 800-53 control CA-03

Provide Interconnection Security Agreements (ISAs)/Information Exchange Agreements (IEAs)/Memorandum of Agreements (MOAs), completed in accordance with NIST 800-47, "Managing the Security of Information Exchanges" and GSA-IT Security Procedural

Guide 24-125: Managing Information Exchange Agreements, for existing and new interconnections. Agreements shall be submitted as attachments as part of the annual SSPP submission. Agreements shall include, if applicable, any changes since the last submission and must be updated as defined in the agreement, and at least as part of any ATO renewal.

10. Configuration Management Plan

Reference: NIST 800-53 control CM-09

Provide an annual update to the Configuration Management Plan for the information system.

11. Personnel Screening and Security

Reference: NIST 800-53 control PS-03, NIST 800-53 control PS-07 Furnish documentation reflecting favorable adjudication of background investigations for all personnel (including subcontractors) supporting the system. Contractors shall comply with GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy" and GSA Order ADM 2181.1, "Homeland Security Presidential Directive-12, Personal Identity Verification and Credentialing, and Background Investigations for Contractors." GSA separates the risk levels for personnel working on Federal computer systems as follows:

- A favorable initial fitness/suitability determination must be granted, and a Tier 1
 or higher background investigation initiated before access to the GSA network or
 any GSA IT system. There shall be no waivers to this requirement for GSA
 network and IT system access for GSA employees or contractors.
- A favorable initial fitness/suitability determination must be granted, and a Tier 2 or higher background investigation initiated before access to PII/CUI is granted. The authority and access shall be determined by the appropriate GSA Supervisor (for GSA employees) or CO (for contract personnel), Data Owner, and the System's AO. Each System's AO, with the request of the GSA Supervisor, Data Owner, or CO, shall evaluate the risks associated with each such request.
- A favorable suitability determination must be completed at a Tier 2 or higher background investigation before privileged access to the GSA network or IT systems is granted. A waiver may be requested in order to maintain GSA business operations; however, such requests should be used judiciously and not incur unnecessary risks to GSA.

If final adjudication of a background investigation is unfavorable, GSA network and IT system access must be revoked, and any GFE, including the GSA PIV card must be retrieved and returned to OMA.

Annual Deliverable due NLT September 13th (Reference: CIO-IT Security-08-39).

12. HVA Data Call (if applicable)

Reference: CISA HVA Program Management Office

Respond to the annual HVA data call, if applicable (i.e., when an HVA Data call is issued that is applicable to the vendor/contractor system).

Biennial Deliverable due NLT July 25th every other year (Reference: CIO-IT Security-08-39).

13. Supply Chain Risk Management Plan Reference: NIST 800-53 control SR-02 Non-GSA IT systems must have their own system specific C-SCRM Plans consistent with NIST SP 800-161, their SSPP may fulfill the requirement if the system's parent organization has a Tier 2 plan that is inherited by the system.

3.6 GSA Privacy Requirements

Personally identifiable information (PII) <SELECT: is or is not> in the scope of the acquisition and PII <SELECT: is or is not> expected to be stored, processed, or transmitted in the vendor's information system. The collection, maintenance, or dissemination of any PII that is subject to the Privacy Act and/or the E-Government Act will be handled in full accordance with all GSA rules of conduct and in accordance with GSA Privacy Program requirements.

The contractor shall work with GSA to prepare a Privacy Threshold Assessment (PTA) to confirm and document PII is not in scope, or to determine which categories of information will be stored, processed, or transmitted by the system. The PTA must be completed before development begins and whenever a change with a privacy impact (e.g., a new category of information is collected) is made to an existing system. PTAs are required as part of GSA's process to determine whether a Privacy Impact Assessment (PIA) and/or a System of Records Notice (SORN) is required, and if any other privacy requirements apply to the information system. Information regarding PIAs can be found in GSA Order CIO 1878.3.

PII (should it come into scope) will require the following guidelines be adhered to.

- The vendor's information system must be authorized at least at the FIPS PUB 199 Moderate level.
- For any system that collects, maintains, or disseminates PII, a PIA must be completed by the contractor and provided to the GSA Privacy Office for review along with the other authorization to operate (ATO) documents.
- If the system retrieves information using PII, the Privacy Act applies and it must have a system of records notice (SORN) published in the Federal Register.
- If PII is collected from individuals by the system, a Privacy Act Statement (i.e., Privacy Notice) must be provided to users prior to their use of the application on what data is being collected and why, as well as the authority for the collection and the impact of not providing some or all of it. The Privacy Act Statement must be available to the individual directly on the form used to collect the information. Providing a link back to the Statement from the form is acceptable.

Per OMB A-130 Privacy Act Statements must include:

- the authority (whether granted by statute or executive order) that authorizes the solicitation of the information and whether disclosure of such information is mandatory or voluntary;
- (2) the principal purpose(s) for which the information is intended to be used;
- (3) the published routine uses to which the information is subject;
- (4) the effects on the individual, if any, of not providing all or any part of the requested information: and
- (5) an appropriate citation (and, if practicable, a link) to the relevant SORN(s).

An example Privacy Act Statement is available at <u>GSA's Privacy Act Statement for Design</u> Research.

Note: Systems that access data a user creates must assume a user may include privacy data/PII in the system unless the data creation is restricted to data controlled by the system.

All contractor staff who have significant privacy information responsibilities must complete GSA's mandatory privacy awareness and role-based training courses. This includes contractors who work with PII as part of their work duties (e.g., Human Resource staff, Finance staff, and managers/supervisors).

3.7 Additional Stipulations

- 1. Security documentation will be marked as follows:
 - a. PTAs, and PIAs will not be marked.
 - b. CP, BIA, and CP Test Reports will be marked CUI//EMGT.
 - c. All other security documentation will be marked CUI//ISVI.
 - d. Documents will be marked in bold text on the top of all pages. Spelling out of acronyms is not required.
 - e. The cover page of each CUI document must contain the following statement on the lower left of the page.

Controlled by: General Services Administration OCISO ISP Division: ispcompliance@gsa.gov.

- f. External transmission/dissemination of CUI to or from a Government system must be encrypted. A FIPS PUB 140-3/140-2 validated encryption module must be used to encrypt the CUI data.
- 2. The Contractor shall certify applications are fully functional and operate correctly as intended on systems using benchmarks from GSA technical guidelines, NIST guidelines, Center for Internet Security guidelines, or industry best practice guidelines, as reviewed and accepted by the GSA AO. The standard installation, operation, maintenance, update, and/or patching of software shall not alter the configuration settings from the approved benchmark configuration. Information technology for Windows systems should use the Windows Installer Service for installation to the default "program files" directory and should be able to silently install and uninstall. Applications designed for normal end users shall run in the standard user context without elevated system administration privileges. The contractor shall use tools to verify their products operate correctly with the approved benchmark configurations and do not alter the benchmark settings.
- 3. The Contractor shall provide software self-attestation letter(s) regarding conformity to NIST guidance³ on secure software development as required by OMB M-23-16, "Update to Memorandum M-22-18, Enhancing the Security of the Software Supply Chain through Secure Software Development Practices."
 - Attestation must be provided as part of an acquisition, upon contract award, and upon major version upgrades as specified in OMB M-23-16, GSA MV-2023-02 Supplements 1-2, and <u>self-attestation letter templates</u> provided by GSA.
 - b. Any gaps in meeting the software development practices required by the attestation form that cannot be attested to, the Contractor must provide mitigating

³ NIST guidance for secure software development per OMB M-22-18 consists of <u>NIST SP 800-218</u> and <u>NIST Software Supply Chain Security Guidance</u>

practices in place (if any) and provide a POA&M to monitor any gaps and their resolution.

4. The Contractor shall cooperate in good faith in defining non-disclosure agreements (NDAs) that other third parties must sign when acting as the Federal government's agent.

Note: GSA's Office of the General Counsel (OGC) is available to coordinate on defining NDA requirements. Upon request, GSA OGC can advise on NDA development.

- 5. The Government has the right to perform manual or automated audits, scans, reviews, or other inspections of the IT environment being used to provide or facilitate services for the Government. The Contractor shall be responsible for the following privacy and security safeguards:
 - a. The Contractor shall not publish or disclose in any manner, without the Contracting Officer's written consent, the details of any safeguards either designed or developed by the Contractor under this contract or otherwise provided by the Government. Exception Disclosure to a Consumer Agency for purposes of A&A verification or to the Connect.gov portal. To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the Contractor shall afford the Government access to facilities, installations, technical capabilities, operations, documentation, records, and databases used to provide or facilitate services for the Government within 72 hours of the request. Access to support incident investigations, shall be provided as soon as possible but not longer than 72 hours after request.

The program of inspection shall include, but is not limited to:

- Authenticated and unauthenticated operating system/network vulnerability scans.
- Authenticated and unauthenticated web application vulnerability scans
- Automated scans can be performed by Government personnel, or agents acting on behalf of the Government, using Government operated equipment, and Government specified tools. If the vendor chooses to run its own automated scans or audits, results from these scans may at the Government's discretion, be accepted in lieu of Government performed vulnerability scans. In these cases, scanning tools and their configuration shall be approved by the Government. In addition, the results of vendorconducted scans shall be provided in full to the Government.
- b. If new or unanticipated threats or hazards are discovered by either the Government or the Contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.
- 6. The Contractor shall comply with 52.204-23 of the Federal Acquisition Regulation (FAR). It prohibits under Section 1634 of <u>Public Law 115-91</u> the use of any hardware, software, or services developed or provided, in whole or in part, by— (1) Kaspersky Lab (or any successor entity); (2) any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or (3) any entity of which Kaspersky Lab has majority ownership.

- 7. The Contractor shall comply with 52.204-25 of the FAR. It prohibits, under Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232), contractors from providing to the Government any equipment, system, or service that uses telecommunications equipment or video surveillance services from certain named companies as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. It also prohibits, under Section 889(a)(1)(B), contractors from using any equipment, system, or service that uses telecommunications or video surveillance equipment or services from certain named companies as a substantial or essential component of any system or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. The proscribed companies are Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, and Dahua Technology Company and their subsidiaries and affiliates.
- 8. The Contractor shall comply with 52.204-27 of the FAR. It prohibits under Section 102 of the Consolidated Appropriations Act 2023, Public Law 117-328, the presence or use of TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited from being used on any information technology as defined in 40 U.S.C. § 11101(6) that is owned or operated by an agency, or used by a contractor under a contract with the agency, or requires the use of such technology expressly or to a significant extent in the performance of a service or the furnishing of a product for an agency.
- The Contractor shall comply with requests for data or perform actions based on DHS issued requirements per the Federal Cybersecurity Coordination, Assessment, and Response (C-CAR) Protocol.
- 10. The Contractor shall comply with all actions specified in CISA Cybersecurity <u>Directives</u>, Federal Acquisition Security Council (FASC) exclusion orders, FASC removal orders, and GSA covered procurement actions in accordance with the SECURE Technology Act, if the action is applicable to the Contractor's system or the components therein. In addition, contractors shall update their vulnerability management procedures in accordance with BOD 22-01, including:
 - Subscribing to the CISA KEV Catalog automated updates;
 - Remediating vulnerabilities as identified for control SI-02 above:
 - Providing within 7 days from the required remediation date an email to the ISSO/ISSM or COR certifying remediation consistent with BOD 22-01 requirements.

If GSA receives additional cyber supply chain risk information indicating supply chain risk, GSA may direct remediation related to the components and/or configuration of the system.

11. The Contractor shall comply with all actions specified in Federal mandates, including but not limited to Federal Laws, Executive Orders, and OMB Memoranda, when the mandate is applicable to their system or the components therein. The contractor shall provide data to support compliance with the applicable Federal mandates when requested.

- 12. All Internet of Things (IoT) devices, as defined in GSA Order CIO 2100.1, GSA IT Security Policy, included by the Contractor shall comply with NIST SP 800-213 or receive a waiver from GSA under one of the conditions of the "IoT Cybersecurity Improvement Act of 2020."
- 13. For information systems including a Cloud solution:
 - a. For FedRAMP authorized Cloud Solution Providers (CSPs), the CSP must comply with the FedRAMP Service Level Agreement (SLA) requirements.
 - b. For non-FedRAMP authorized CSPs, the Contractor shall establish an SLA with the CSP to support the Contractor's ability to meet requirements specified for External Information Systems IT Security and Privacy Requirements.

4 Low Impact Software as a Service (LiSaaS) – IT Security and Privacy Requirements

To be considered for award, the contractor must comply with GSA IT's LiSaaS review process. The successful vendor will need to ensure any SaaS provided under this contract meets GSA security and privacy requirements prior to invoicing the government for services received under this contract. This includes working with GSA to ensure the SaaS passes the current LiSaaS authorization process, as outlined in GSA IT Security Procedural Guide 16-75: Low Impact Software as a Service (LiSaaS) Solutions Authorization Process.

4.1 Assessment of the System

The contractor shall provide evidence in support of meeting the requirements for the review activities stated in GSA IT Security Procedural Guide 16-75: Low Impact Software as a Service (LiSaaS) Solutions Authorization Process, and as summarized below. As stated in the guide items (3)-(7) in the list below, may be satisfied by a letter of attestation submitted by the Office of the Chief Security Officer ISSO Support Division (IST) Information System Security Officer (ISSO) or Information System Security Manager (ISSM), based on a demonstration and review of artifacts. Templates as referenced below will be provided to the contractor, as applicable.

- (1) Completion of the LiSaaS Solution Profile Template. This profile provides a summary of the service function and purpose provided by the LiSaaS solution. It includes the who, what, when, where, and how of the solution, including the following information and capabilities, as applicable. Instructions are contained in the template.
- (2) Completion of a LiSaaS Solution Review Checklist Template (including supporting artifacts) with the ISSO. The LiSaaS checklist will go into specific detail regarding the actual GSA implementation of the LiSaaS.
- (3) Document how system and security parameters deferred to customers are implemented. Do not use the vendor-supplied defaults for system passwords and other security parameters. GSA security policies and best practices should be used to the greatest extent possible.
- (4) Submit latest web application vulnerability scan results (e.g., Invicti, NetSparker, Acunetix, Burp Suite Pro, etc.).
- (5) Submit latest operating system (OS) vulnerability scan results (e.g., Tenable Nessus, Qualys, nCircle, McAfee Vulnerability Manager, etc.). Reference NIST SP 800-53 control RA-05 Vulnerability Monitoring and Scanning.

- a. Vendors that are Payment Card Industry Data Security Standard (<u>PCI DSS</u>) compliant or have the <u>TrustedSite Certification</u> or <u>TrustGuard Seal</u> may provide the results of their latest PCI DSS Compliant, McAfee TrustedSite or TrustGuard quarterly scan.
- b. Vendors that do not meet the PCI DSS, McAfee, or TrustGuard standards listed, must provide their most recent OS vulnerability scan results.
- (6) Document an acceptable flaw remediation process. Vendors must be able to identify and remediate information system flaws in a timely manner (i.e., the process must describe how often scans are completed and how vulnerabilities are remediated). Reference NIST 800-53 Control SI-2: Flaw Remediation.
- (7) Results of one of the following audits/certifications:
 - <u>Service Organization Control (SOC) 2/Statements on Standards for Attestation Engagements (SSAE) 18</u>
 - SysTrust/WebTrust
 - ISO/IEC 27001
 - PCI DSS

Note: Although the basic requirement is for the SSAE/SOC 2 audit report or one of the vendor certifications; the GSA AO and the CISO will take a holistic view of the application based on all of the documentation presented to determine the overall risk of the application as well as any residual risks that may need to be accepted when considering the application for use. If the documentation presented does not provide an adequate understanding of the systems security posture and/or is deemed insufficient to make a risk determination; additional information will be required.

4.2 Authorization of the System

The LiSaaS solutions must not have any Critical/Very High or High vulnerabilities identified in their scans before an ATO can be granted.

The ATO package must include documentation and validation of the requirements identified above, and consists of:

- LiSaaS Solution Profile
- LiSaaS Checklist
- FIPS 199 Security Categorization
- Latest vulnerability scan results (e.g., web, OS, container), as applicable
- LiSaaS Attestation Letter, if applicable
- LiSaaS ATO Letter

The authorization process supports an ATO valid for:

- No more than one year if the application is determined to be Low Risk based on the evidence provided.
- Up to three years if the application is determined to be a commodity ancillary service that presents Very Low/Negligible Risk based on the evidence provided.

If not already FedRAMP authorized, any application granted a one-year ATO must obtain a FedRAMP tailored authorization (at a minimum) within one year of its ATO. If, within three months of receiving its one-year ATO, progress towards a FedRAMP Tailored authorization has

not been observed, GSA will start to cease engagement with the vendor and pursue alternative solutions. For detailed requirements of FedRAMP Tailored Li-SaaS, download the FedRAMP Tailored Authorization Toolkit available on the <u>FedRAMP Baselines webpage</u>. Without a LiSaaS approval, GSA will not be able to use the software for the base year of the contract, and without FedRAMP approval, GSA will be unable to use the product for the option years of the contract.

The contractor's agreement to the LiSaaS and FedRAMP requirements are required. If the contractor does not agree, no contract award will be made.

4.3 Inability to Maintain LiSaaS ATO Requirements

If at any time, the vendor is either unwilling or unable to meet any of the LiSaaS ATO process requirements as specified in GSA IT Security Procedural Guide 16-75: Low Impact Software as a Service (LiSaaS), GSA may choose to cancel the contract and terminate any outstanding orders.

The vendor shall report if its audit report/certification renews or expires and if any of the other required activities cannot be supported.

4.4 Protection of Information

The contractor shall be responsible for properly protecting all information used, gathered, disclosed, or developed as a result of work under this contract. The contractor shall also protect all Government data, etc. by treating the information as sensitive. All information gathered or created under this contract should be considered as confidential information. It is anticipated that this information will be gathered, created, and stored within the primary work location. If contractor personnel must remove any information from the primary work area, they should protect it to the same extent they would their proprietary data and/or company trade secrets. The use of any information that is subject to the Privacy Act will be utilized in full accordance with all rules of conduct as applicable to Privacy Act Information. Personnel shall adhere to the Privacy Act, Title 5 of the U. S. Code, Section 552a and applicable agency rules and regulations.

4.5 Data Ownership and Unrestricted Rights to Data

All Government data collected in the system is the property of the Federal Government. The Government will retain unrestricted rights to government data. The ordering activity retains All data collected by the system shall be provided by the Contractor (system provider) as requested during the contract period and at the completion of the contract period.

Government data rights of software deliverables shall be in accordance with FAR 52. 227-19 Commercial Computer Software License and/or FAR 52. 227-14 Rights in Data - General. Ownership of data entered into any and all systems, system documentation, all deliverables produced in the performance of this contract, and other related system information shall reside with the Government.

The Contractor shall place the following copyright notice on all materials, documents, deliverables, etc. developed during the performance of this contract:

For purposes of clarity, the intent of the government is for intellectual property to be vested in the federal government for work paid for by the federal government. All documents, graphics, and code created under this contract are the intellectual property of the federal government including, but not limited to, plans, reports, schedules, software code, software designs, graphics, etc. In the event that the federal government implements under this contract open-source software and pays for the cost of the implementation of open-source software, the final changes and edits to the code and configuration (such as work to integrate plug-ins) are the intellectual property of the federal government.

4.6 Privacy Requirements

<u>Personally identifiable information (PII)</u> data **is not** allowed to be transmitted, processed, or stored in the vendor's LiSaaS solution. The contractor shall work with GSA to prepare a Privacy Threshold Assessment (PTA) pertaining to the LiSaaS data usage.

Privacy data (should it come into scope) will require that the vendor's SaaS solution be FedRAMP authorized at least at the FIPS 199 Moderate level. The management of any PII data is subject to GSA Order CIO 2180.2, "GSA Rules of Behavior for Handling Personally Identifiable Information (PII)."

4.7 Data Availability

The data must be available to the Government upon request within one business day or within the timeframe negotiated with the Contractor and shall not be used for any other purpose other than that specified herein. The contractor shall provide requested data at no additional cost to the government.

4.8 Data Release

Contractor will not disclose Customer Data to any government or third party or access or use Customer Data; except in each case as necessary to maintain the SaaS solution or to provide the SaaS solution to Customer in accordance with this contract, or as necessary to comply with the law or a valid and binding order of a governmental or regulatory body (such as a subpoena or court order). Unless it would be in violation of a court order or other legal requirement, the Contractor will give the Government reasonable notice of any such legal requirement or order, to allow the Government to seek a protective order or other appropriate remedy.

4.9 Confidentiality and Nondisclosure

Personnel (contractor/subcontractor employee) working on any of the described tasks, may at Government request, be required to sign formal non-disclosure and/or conflict of interest agreements (NDA/CUI) to guarantee the protection and integrity of Government information and documents. The Contractor shall submit to the COR a completed confidentiality and NDA form for each individual contractor/subcontractor.

Additionally, any information made available to the Contractor by the Government shall be used only for the purpose of carrying out the provisions of this contract and shall not be divulged or made known in any manner to any persons except as may be necessary in the performance of the contract. In performance of this contract, the Contractor assumes responsibility for protection of the confidentiality of Government records and shall ensure that all work performed by its subcontractors shall be under the supervision of the Contractor or the Contractor's responsible employees. Each officer or employee of the Contractor or any of its subcontractors to whom any Government record may be made available or disclosed shall be notified in writing by the Contractor that information disclosed to such officer or employee can be used only for that purpose and to the extent authorized herein. Further disclosure of any such information, by

any means, for a purpose or to an extent unauthorized herein, may subject the offender to criminal sanctions imposed by 18 U. S. C. §§ 1030.

Note: GSA's Office of the General Counsel (OGC) is available to coordinate on defining NDA requirements. Upon request GSA OGC can advise on NDA development.

4.10 Section 508 Compliance

The Contractor(s) shall provide accessibility based on Section 508 of the Rehabilitation Act of 1973 (29 U. S. C. 794d). All information and communication technology (ICT) delivered must meet the applicable revised accessibility standards at 36 CFR 1194, unless an agency exception to this requirement exists. The 36 CFR 1194 implements Section 508 of the Rehabilitation Act of 1973, as amended. All deliverables will be Section 508 compliant and will be reviewed for compliance by the government which reserves the right to reject the deliverable(s) until remediation of deficiencies has been successfully completed by the Contractor. Complete technical descriptions are provided on the following website: http://www.section508.gov.

Where appropriate, the Contractor(s) shall indicate whether each product or service is compliant or noncompliant with the accessibility standards at 36 CFR 1194. Further, the quote must indicate where full details of compliance can be found (e. g., vendor product accessibility template/accessibility conformance report (VPAT/ACR), vendor's website or other exact location).

4.11 Additional Stipulations

- 1. Security documentation will be marked as follows:
 - a. Attestation letters will not be marked.
 - b. All other security documentation will be marked CUI//ISVI.
 - c. Documents will be marked in bold text on the top of all pages. Spelling out of acronyms is not required.
 - d. The cover page of each CUI document must contain the following statement on the lower left of the page.

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- e. External transmission/dissemination of CUI to or from a Government system must be encrypted. A FIPS PUB 140-3/140-2 validated encryption module must be used to encrypt the CUI data.
- 2. The Contractor shall provide software self-attestation letter(s) regarding conformity to NIST guidance⁴ on secure software development as required by OMB M-23-16, "Update to Memorandum M-22-18, Enhancing the Security of the Software Supply Chain through Secure Software Development Practices."
 - Attestation must be provided as part of an acquisition, upon contract award, and upon major version upgrades as specified in OMB M-23-16, GSA MV-2023-02 Supplements 1-2, and <u>self-attestation letter templates</u> provided by GSA.

⁴ NIST guidance for secure software development per OMB M-22-18 consists of NIST SP 800-218 and NIST Software Supply Chain Security Guidance

- b. Any gaps in meeting the software development practices required by the attestation form that cannot be attested to, the Contractor must provide mitigating practices in place (if any) and provide a POA&M to monitor any gaps and their resolution.
- 3. The contractor shall cooperate in good faith in defining NDAs that other third parties must sign when acting as the Federal government's agent.
 - **Note:** GSA's Office of the General Counsel (OGC) is available to coordinate on defining NDA requirements. Upon request GSA OGC can advise on NDA development.
- 4. The Government has the right to perform manual or automated audits, scans, reviews, or other inspections of the vendor's IT environment being used to provide or facilitate services for the Government. The Contractor shall be responsible for the following privacy and security safeguards:
 - a. To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the Contractor shall afford the Government access to the Contractor's facilities, installations, technical capabilities, operations, documentation, records, and databases within 72 hours of the request. Access to support incident investigations, shall be provided as soon as possible but not longer than 72 hours after request.
 - b. Physical Access Considerations If the SaaS provider is operated within an IaaS that is FedRAMP authorized (e. g., AWS); physical access to the physical datacenter environment will be governed by the terms of access allowed by the underlying infrastructure provider as defined in the FedRAMP A&A authorization package.
 - c. The program of inspection shall include, but is not limited to:
 - Authenticated and unauthenticated operating system/network vulnerability scans
 - Authenticated and unauthenticated web application vulnerability scans
 - Automated scans can be performed by Government personnel, or agents acting on behalf of the Government, using Government operated equipment, and Government specified tools. If the vendor chooses to run its own automated scans or audits, results from these scans may at the Government's discretion, be accepted in lieu of Government performed vulnerability scans. In these cases, scanning tools and their configuration shall be approved by the Government. In addition, the results of vendorconducted scans shall be provided in full to the Government.
 - d. If new or unanticipated threats or hazards are discovered by either the Government or the Contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.
- 5. The Contractor shall comply with 52.204-23 of the Federal Acquisition Regulation (FAR). It prohibits under Section 1634 of <u>Public Law 115-91</u> the use of any hardware, software, or services developed or provided, in whole or in part, by— (1) Kaspersky Lab (or any successor entity); (2) any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or (3) any entity of which Kaspersky Lab has majority ownership.

- 6. The Contractor shall comply with 52.204-25 of the FAR. It prohibits, under Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232), contractors from providing to the Government any equipment, system, or service that uses telecommunications equipment or video surveillance services from certain named companies as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. It also prohibits, under Section 889(a)(1)(B), contractors from using any equipment, system, or service that uses telecommunications or video surveillance equipment or services from certain named companies as a substantial or essential component of any system or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. The proscribed companies are Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, and Dahua Technology Company and their subsidiaries and affiliates.
- 7. The Contractor shall comply with 52.204-27 of the FAR. It prohibits under Section 102 of the Consolidated Appropriations Act 2023, <u>Public Law 117-328</u>, the presence or use of TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited from being used on any information technology as defined in 40 U.S.C. § 11101(6) that is owned or operated by an agency, or used by a contractor under a contract with the agency, or requires the use of such technology expressly or to a significant extent in the performance of a service or the furnishing of a product for an agency.
- 8. The Contractor shall comply with requests for data or perform actions based on DHS issued requirements per the Federal Cybersecurity Coordination, Assessment, and Response (C-CAR) Protocol.
- 9. The Contractor shall comply with all actions specified in CISA Cybersecurity <u>Directives</u>, Federal Acquisition Security Council (FASC) exclusion orders, FASC removal orders, and GSA covered procurement actions in accordance with the SECURE Technology Act, if the action is applicable to the Contractor's system or the components therein. In addition, contractors shall update their vulnerability management procedures in accordance with BOD 22-01, including:
 - Subscribing to the CISA KEV Catalog automated updates;
 - Remediating vulnerabilities as identified for control SI-2 above:
 - Providing within 7 days from the required remediation date an email to the ISSO/ISSM or COR certifying remediation consistent with BOD 22-01 requirements.

If GSA receives additional cyber supply chain risk information indicating supply chain risk, GSA may direct remediation related to the components and/or configuration of the system.

10. The Contractor shall comply with all actions specified in Federal mandates, including but not limited to Federal Laws, Executive Orders, and OMB Memoranda, when the mandate is applicable to their system or the components therein. The contractor shall provide data to support compliance with the applicable Federal mandates when requested.

- 11. All Internet of Things (IoT) devices, as defined in GSA Order CIO 2100.1, GSA IT Security Policy, included by the Contractor shall comply with NIST SP 800-213 or receive a waiver from GSA under one of the conditions of the "IoT Cybersecurity Improvement Act of 2020."
- 12. Cloud Service Level Agreements (SLAs):
 - For FedRAMP authorized Cloud Solution Providers (CSPs), the CSP must comply with the FedRAMP SLA requirements.
 - For non-FedRAMP authorized CSPs, the Contractor shall establish an SLA with the CSP to support the Contractor's ability to meet requirements specified for Cloud Information Systems – IT Security and Privacy Requirements.

4.12 Terms of Service

Many terms found in commercial ToS or End User License Agreements (EULA) are not acceptable when the Government is the end user. The Office of Chief Information Officer (OCIO) requires that software and services within the GSA Enterprise have approved ToS or EULA.

The Contractor's SaaS will undergo a formal review by GSA as part of the review/approval process. The Contractor's ToS shall be found to be acceptable to the government or a modified ToS negotiated as part of the approval review, prior to final authorization.

4.13 References

Executive Order (EO) 13556, "Controlled Unclassified Information"

<u>Cybersecurity & Infrastructure Security Agency (CISA) Cybersecurity Directives</u> - Listing of Emergency and Binding Operational Directives

<u>FIPS PUB 199</u>, "Standards for Security Categorization of Federal Information and Information Systems"

FedRAMP CSP Authorization Playbook

GSA IT Security Procedural Guide 16-75: Low Impact Software as a Service (LiSaaS) Solutions Authorization Process

5 Cloud Information Systems – IT Security and Privacy Requirements

Cloud computing products and services (such as Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS)) that create, collect, process, store, or maintain Federal information on behalf of GSA are required to be FedRAMP authorized. FedRAMP provides for a standardized, reusable approach to security assessments and authorizations for cloud computing products and services to ensure the security of Federal information.

Organizations," and includes a set of additional controls for use within systems providing cloud services to the federal government.

The contractor shall generally, substantially, and in good faith follow FedRAMP guidelines and Security guidance. The FedRAMP program overview document FedRAMP CSP Authorization Playbook, available on the FedRAMP.gov website, details program requirements; the Documents and Templates section on the FedRAMP website provides a detailed and comprehensive list of all current documents and templates necessary to facilitate a FedRAMP authorization. In situations where there are no FedRAMP or GSA procedural guides, the contractor shall use generally accepted industry best practices for IT security.

GSA may choose to cancel the contract and terminate any outstanding orders if the contractor has its FedRAMP authorization revoked and the deficiencies are greater than GSA risk tolerance thresholds.

5.1 Assessment and Authorization

5.1.1 Assessment of the System

- 1. If the Cloud Service Provider (CSP) SaaS or PaaS is FedRAMP authorized (i.e., listed as FedRAMP authorized on the <u>FedRAMP Marketplace website</u>), GSA will leverage the CSP's FedRAMP Assessment and Authorization package to document and assess the Customer Responsibility Matrix (CRM) controls for which GSA has responsibility for the agency's instance of the CSP's SaaS or PaaS offering. The CSP shall support GSA's Leveraged FedRAMP assessment and authorization process of CRM controls as specified in CIO-IT Security-06-30: Managing Enterprise Cybersecurity Risk, as necessary.
- 2. If the CSP SaaS or PaaS offering is NOT already FedRAMP authorized, the contractor shall comply with FedRAMP requirements as mandated by Federal laws and policies, including making available any documentation, physical access, and logical access needed to support this requirement. The Level of Effort for the A&A is based on the System's FIPS PUB 199 impact level and applicable A&A documentation requirements. The contractor shall create, maintain, and update FedRAMP required documentation, as applicable per categorization type, using FedRAMP requirements and templates, which are available at FedRAMP.gov; and the following GSA required supplemental documents to capture additional system details, as applicable. This list could include but is not limited to the following:
 - Expanded ports protocols and services template
 - Expanded data sensitivity template
 - External services template
 - Alternative Implementation / Risk Acceptance Template
 - GSA container guidance document
 - GSA mobile application guidance document
 - Secure Configuration Template (SCP), an expanded CIS/CRM document
- 3. Information systems must be assessed by an accredited FedRAMP Third Party Assessment Organization (3PAO) initially and whenever there is a significant change to the system's security posture in accordance with the FedRAMP Continuous Monitoring Plan.
- 4. The Government reserves the right to perform Security Assessment and Penetration

Testing (of its instance). If the Government exercises this right, the contractor shall allow Government employees (or designated third parties) to conduct Security Assessment and Penetration Testing activities to include control reviews in accordance with FedRAMP requirements. Penetration shall be supported by mutually agreed upon Rules of Engagement (RoE). Review activities include but are not limited to manual penetration testing; automated scanning of operating systems, web applications; wireless scanning; network device scanning to include routers, switches, and firewall, and IDS/IPS; databases and other applicable systems, including general support structure, that create, collect, process, store, or maintain of Government information for vulnerabilities.

- 5. The contractor shall provide access to the Federal Government, or their designee acting as their agent, when requested, in order to verify compliance with the requirements for an Information Technology security program. The Government reserves the right to conduct on-site inspections. The contractor shall make appropriate personnel available for interviews and provide all necessary documentation during this review.
- 6. Physical Access Considerations If the CSP is operated within an IaaS that is FedRAMP authorized (e.g., AWS); physical access to the physical datacenter environment will be governed by the terms of access allowed by the underlying infrastructure provider as defined in the FedRAMP A&A authorization package.
- 7. Identified gaps between required FedRAMP Security Control Baselines and Continuous Monitoring controls and the contractor's implementation as documented in the Security Assessment Report shall be tracked by the contractor for mitigation in a Plan of Action and Milestones (POA&M) document. Depending on the severity of the gaps, the Government may require them to be remediated before a GSA authorization is issued.
- 8. The contractor is responsible for mitigating all security risks found during A&A and continuous monitoring activities. Vulnerabilities must be mitigated as follows:
 - 14 days for CISA Known Exploited Vulnerabilities (KEV)
 - 15 days for Critical vulnerabilities for Internet-accessible systems or services
 - 30 days for Critical and High vulnerabilities
 - 90 days for Moderate vulnerabilities
 - 180 days for Low vulnerabilities
- 9. The Government will determine the risk rating of vulnerabilities.

5.1.2 Authorization of the System

- 1. FedRAMP Authorized CSP Offerings. If the CSP SaaS or PaaS is already FedRAMP authorized (i.e., listed as FedRAMP authorized on the FedRAMP Marketplace website), GSA will leverage the CSP's FedRAMP Assessment and Authorization package and GSA's assessment of the customer responsibility matrix (CRM) controls to issue a GSA leveraged ATO for the agency's instance of the CSP's SaaS or PaaS offering. The CSP shall support GSA's Leveraged FedRAMP authorization process as specified in CIO-IT Security-06-30: Managing Enterprise Cybersecurity Risk, as necessary.
- 2. **Not FedRAMP Authorized CSP Offerings.** If the CSP SaaS or PaaS offering is NOT already FedRAMP authorized and is required to be FedRAMP authorized consistent with

the scope of FedRAMP as identified in M-24-15, "Modernizing the Federal Risk and Authorization Management Program (FedRAMP)," it shall:

- a. Operate on a CSP laaS environment that is FedRAMP authorized; AND
- b. Be listed on the FedRAMP Marketplace as either "FedRAMP Ready" or "In Process"; AND provide GSA a copy of the system FedRAMP Readiness Assessment Report (RAR), completed by an A2LA.org approved FedRAMP 3PAO, following the FedRAMP Readiness Assessment Guidelines, within two weeks of contract award. The FedRAMP Readiness Assessment Review demonstrates the CSPs overall readiness for FedRAMP authorization and whether it has a viable path to achieve a FedRAMP authorization within one (1) year of the contract award. If the CSP does not provide a FedRAMP Readiness Assessment as prescribed or the assessment demonstrates a significant gap in capabilities that will preclude achievement of a FedRAMP authorization within 1 year of the contract award, then, GSA will terminate the contract: OR
- c. If the CSP is not already listed as "FedRAMP Ready" or "In-Process" on the FedRAMP Marketplace, OR the CSP does not have a RAR, they shall develop and deliver one within 90 days of contract award for a Tailored/Low system or 180 days for a Moderate/High system. The FedRAMP RAR shall be completed by an <u>A2LA.org</u> approved FedRAMP 3PAO, following the FedRAMP Readiness Assessment Guidelines.
- d. All applicable FedRAMP controls for the appropriate FedRAMP baseline (i.e., High, Moderate, Tailored-LiSaaS, Low) must be implemented aligned to the FedRAMP control parameters and implementation guidance, as applicable. The table below identifies the essential FedRAMP security controls. The CSP shall make the proposed system and security architecture of the information system available to the Security Engineering Division, in the Office of the Chief Information Security Officer for review and approval before commencement of system build (architecture, infrastructure, and code [as applicable]) and/or the start of A&A activities.

Control ID	Control Title	FedRAMP Baseline
AC-02	Account Management	H, M, T, L
AC-03	Access Enforcement	H, M, T, L
AC-17	Remote Access	H, M, T, L
AU-02	Audit Events	H, M, T, L
AU-03	Content of Audit Records	H, M, T, L
AU-06	Audit Record Review, Analysis, and Reporting	H, M, T, L
AU-06(03)	Correlate Audit Record Repositories	H, M
CM-02	Baseline Configuration	H, M, T, L

Control ID	Control Title	FedRAMP Baseline
CM-06	Configuration Settings	H, M, T, L
CP-07	Alternative Processing Site	M, H
CP-08	Telecom Services	M, H
IA-02(01)	Identification and Authentication (Organizational Users) Network Access to Privileged Accounts	H, M, T, L
IA-02(2)	Identification and Authentication (Organizational Users) Network Access to Non-Privileged Accounts	H, M, T, L
IA-02(12)	Identification and Authentication (Organizational Users) Acceptance of PIV Credentials	H, M, T, L
IA-07	Cryptographic Module Authentication	H, M, T, L
IA-11	Re-Authentication	H, M, T, L
IA-12	Identity Proofing	H, M
PL-08	Information Security Architecture	H, M, T, L
RA-03(01)	Risk Assessment / Supply Chain Risk Assessment	H, M, T, L
RA-05	Vulnerability Scanning	H, M, T, L
RA-05(05)	Vulnerability Monitoring and Scanning Privileged Access	Н, М
RA-08	Privacy Impact Assessments	N/A (required by GSA)
SA-09	External System Services	H, M, T, L
SA-11(01)	Static Code Analysis	H, M
SC-02	Separation of System and User Functionality	H, M
SC-07	Boundary Protection	H, M, T, L
SC-07(08)	Boundary Protection Route Traffic To Authenticated Proxy Servers	H, M
SC-07(10)	Boundary Protection / Prevention Exfiltration	Н
SC-08/ SC-08(01)	Transmission Confidentiality and Integrity / Transmission Confidentiality and Integrity Cryptographic Protection	H, M, T, L
SC-10	Network Disconnect	H, M

Control ID	Control Title	FedRAMP Baseline
SC-12	Cryptographic Key Establishment and Management	H, M, T, L
SC-13	Cryptographic Protection	H, M, T, L
SC-17	Public Key Infrastructure Certificates	H, M
SC-28(01)	Protection of Information at Rest Cryptographic Protection	H, M, T, L
SI-02	Flaw Remediation	H, M, T, L
SI-04(18)	Analyze Traffic and Convert Exfiltration	H, M
SI-07(02)	Software, Firmware, and Information Integrity Automated Notifications of Integrity Violations	Н
SI-10	Information Input Validation	H, M
SR-02	Supply Chain Risk Management Plan	H, M, T, L

FedRAMP Baseline designations: H=High, M=Moderate, T=Tailored Li-SaaS, L=Low

- e. If requirements a-d, as defined above, are met, the CSP will have one (1) year from the date of contract award to achieve FedRAMP authorization. During this transitional period, GSA may issue an agency specific authorization (i.e., not FedRAMP) not to exceed one (1) year (to allow the CSP to achieve FedRAMP compliance) leveraging either:
 - an existing ATO with another Federal Department/Agency (D/A) (with supporting A&A Package) OR
 - a new ATO based on the A&A processes described in GSA IT Security
 Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk including:
 - GSA LiSaaS ATO (For Low Impact) For the LiSaaS authorization process the CSP shall, in collaboration with GSA, complete a LiSaaS solution profile and checklist, provide the most recent vulnerability scans for the solution and provide documentation on how flaws/vulnerabilities are remediated.
 - GSA MiSaaS ATO (For Moderate Impact) For the MiSaaS authorization process the CSP shall document NIST SP 800-53 control implementations in an SSPP template agreed to with GSA and engage an assessor concurred to with GSA to perform an assessment of the NIST SP 800-53 controls, and document POA&Ms to resolve findings and recommendations from the assessment.

The CSP shall commit to supporting the effort required for an agency specific authorization. The CSP shall make available any existing assessment and authorization package for GSA review and provide necessary documentation and

access to facilitate the completion of the appropriate GSA A&A process (i.e., LiSaaS or MiSaaS). If a FedRAMP authorization is not obtained within one (1) year of contract award, OR the assessment of the CSP offering demonstrates a significant gap in capabilities that will preclude achievement of a FedRAMP authorization then GSA will not be able to use the offering and shall terminate the contract. After achieving FedRAMP authorization, the CSP shall support efforts for GSA to issue a Leveraged FedRAMP authorization as described in Item 1 above, FedRAMP Authorized CSP Offerings.

5.2 Reporting and Continuous Monitoring

- 1. If the CSP SaaS or PaaS is FedRAMP authorized:
 - Maintenance of the FedRAMP Authorization will be through continuous monitoring and periodic audit of the operational controls within a contractor's system, environment, and processes to determine if the security controls in the information system continue to be effective over time in light of changes that occur in the system and environment. Through continuous monitoring, security controls and supporting deliverables are updated in agreement with FedRAMP guidelines and submitted to the Connect.gov Portal or repository designated by the FedRAMP program.
 - The submitted deliverables (or lack thereof) provide a current understanding of the security state and risk posture of the information systems. The deliverables will allow the Federal Departments/Agencies leveraging the services providers' cloud offering to make credible risk-based decisions regarding the continued operations of the information systems and initiate appropriate responses as needed when changes occur. Contractors will be required to provide updated deliverables and automated data feeds as defined in the FedRAMP Continuous Monitoring Plan.
- 2. If the CSP SaaS or PaaS offering is NOT already FedRAMP authorized, the contractor shall provide continuous monitoring deliverables in support of a one (1) year conditional authorization until FedRAMP authorization is achieved at which time the contractor will follow the FedRAMP process. Deliverables to be provided during this conditional authorization shall include:
 - Quarterly, provide the most recent Web Application and Operating System vulnerability scan reports. GSA's control parameter for RA-05, Vulnerability Monitoring and Scanning, specifies the following type and frequency of scans; weekly authenticated scans of operating systems (OS)-including databases, monthly unauthenticated scans of web applications, annual authenticated scans of web applications (deliverable shall include raw results and findings shall be included in the POA&M document);
 - Quarterly, provide POA&M updates in accordance with requirements and the schedule set forth in GSA CIO IT Security Procedural Guide 09-44: Plan of Action and Milestones (POA&M).
 - Annually, provide A&A Package updates including the System Security Plan, Contingency Plan, Business Impact Analysis, Configuration Management Plan, Contingency Plan Test Report, and Annual FISMA Assessment.

Upon achievement of FedRAMP authorization, GSA will accept the FedRAMP A&A and continuous monitoring documentation made available on the Connect.gov Portal or a repository designated by the FedRAMP program in agreement with FedRAMP quidelines to satisfy the continuous monitoring requirement.

5.3 Personnel Security Requirements

Contractor shall furnish documentation reflecting favorable adjudication of background investigations for all personnel (including subcontractors) supporting the system. Contractors shall comply with GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy," and GSA Order ADM 2181.1, "Homeland Security Presidential Directive-12, Personal Identity Verification and Credentialing Policy, and Background Investigations for Contractor Employees." GSA separates the risk levels for personnel working on Federal computer systems as follows:

- A favorable initial fitness/suitability determination must be granted, and a Tier 1 or higher background investigation initiated before access to the GSA network or any GSA IT system. There shall be no waivers to this requirement for GSA network and IT system access for GSA employees or contractors.
- A favorable initial fitness/suitability determination must be granted, and a Tier 2 or higher background investigation initiated before access to PII/CUI is granted. The authority and access shall be determined by the appropriate GSA Supervisor (for GSA employees) or CO (for contract personnel), Data Owner, and the System's AO. Each System's AO, with the request of the GSA Supervisor, Data Owner, or CO, shall evaluate the risks associated with each such request.
- A favorable suitability determination must be completed at a Tier 2 or higher background investigation before privileged access to the GSA network or IT systems is granted. A waiver may be requested in order to maintain GSA business operations; however, such requests should be used judiciously and not incur unnecessary risks to GSA.

If final adjudication of a background investigation is unfavorable, GSA network and IT system access must be revoked, and any GFE, including the GSA PIV card, must be retrieved and returned to OMA.

GSA shall sponsor the investigation when deemed necessary. No access shall be given to government computer information systems and government sensitive information without a background investigation being verified or in process. If results of background investigation are not acceptable, then access shall be terminated.

The Contractor shall provide a report of separated staff on a monthly basis, beginning 60 days after execution of the option period.

5.4 Sensitive Information Storage

Controlled Unclassified Information (CUI), data, and/or equipment will only be disclosed to authorized personnel on a need-to-know basis. The contractor shall ensure that appropriate administrative, technical, and physical safeguards are established to ensure the security and confidentiality of this information, data, and/or equipment is properly protected. When no longer required, this information, data, and/or equipment will be returned to Government control, destroyed, or held until otherwise directed. Destruction of items shall be accomplished by following NIST Special Publication 800-88, Revision 1, "Guidelines for Media Sanitization." The

destruction, purging or clearing of media specific to the CSP will be recorded and supplied upon request of the Government.

5.5 Protection of Information

The contractor shall be responsible for properly protecting all information used, gathered, or developed as a result of work under this contract. The contractor shall also protect all Government data, equipment, etc. by treating the information in accordance with its FISMA system categorization.

All information about the systems gathered or created under this contract should be considered as CUI information. If contractor personnel must remove any information from the primary work area that is included in the ATO boundary, they should protect it to the same FedRAMP requirements. The use of any information that is subject to the Privacy Act will be utilized in full accordance with all rules of conduct as applicable to Privacy Act Information.

5.5.1 Unrestricted Rights to Data

The government will retain unrestricted rights to government data. The ordering activity retains ownership of any user created/loaded data and applications hosted on vendor's infrastructure, as well as maintains the right to request full copies of these at any time.

5.5.2 Personally Identifiable Information

Personally identifiable information (PII) **SELECT:** is or is not in the scope of acquisition and PII **SELECT:** is or is not expected to be stored in the vendor's cloud solution. The vendor shall prepare a Privacy Threshold Assessment (PTA) to either document PII is not in scope, or determine which categories of information will be stored, processed, or transmitted by the system. The use of any information that is subject to the Privacy Act will be utilized in full accordance with all rules of conduct as applicable to Privacy Act Information.

PII (should it come into scope) will require the following guidelines be adhered to.

- The vendor's information system must be authorized at least at the FIPS PUB 199 Moderate level.
- For any system that collects, maintains, or disseminates PII, a PIA must be completed by the contractor and provided to the GSA Privacy Office for review along with the other authorization to operate (ATO) documents.
- If the system retrieves information using PII, the Privacy Act applies and it must have a system of records notice (SORN) published in the Federal Register.
- If PII is collected from individuals by the system, a Privacy Act Statement (i.e., Privacy Notice) must be provided to users prior to their use of the application on what data is being collected and why, as well as the authority for the collection and the impact of not providing some or all of it. The Privacy Act Statement must be available to the individual directly on the form used to collect the information. Providing a link back to the Statement from the form is acceptable.

5.5.3 Data Availability

The data must be available to the Government upon request within one business day or within the timeframe negotiated with the Contractor and shall not be used for any other purpose other

than that specified herein. The contractor shall provide requested data at no additional cost to the government.

5.5.4 Data Release

Any information made available to the Contractor by the Government shall be used only for the purpose of carrying out the provisions of this contract and shall not be divulged or made known in any manner to any persons except as may be necessary in the performance of the contract. In performance of this contract, the Contractor assumes responsibility for protection of the confidentiality of Government records and shall ensure that all work performed by its subcontractors shall be under the supervision of the Contractor or the Contractor's responsible employees. Each officer or employee of the Contractor or any of its subcontractors to whom any Government record may be made available or disclosed shall be notified in writing by the Contractor that information disclosed to such officer or employee can be used only for that purpose and to the extent authorized herein. Further disclosure of any such information, by any means, for a purpose or to an extent unauthorized herein, may subject the offender to criminal sanctions imposed by 18 U.S.C. §§ 1030.

Contractor will not disclose Customer Data to any government or third party or access or use Customer Data; except in each case as necessary to maintain the Cloud Services or to provide the Cloud Services to Customer in accordance with this contract, or as necessary to comply with the law or a valid and binding order of a governmental or regulatory body (such as a subpoena or court order). Unless it would be in violation of a court order or other legal requirement, the Contractor will give the Government reasonable notice of any such legal requirement or order, to allow the Government to seek a protective order or other appropriate remedy.

5.6 Data Ownership

All Government data collected in the system is the property of the Federal Government. All data collected by the system shall be provided by the Contractor (system provider) as requested during the contract period and at the completion of the contract period.

5.7 Confidentiality and Nondisclosure

Personnel working on any of the described tasks, may at Government request, be required to sign formal non-disclosure and/or conflict of interest agreements to guarantee the protection and integrity of Government information and documents.

Additionally, any information made available to the Contractor by the Government shall be used only for the purpose of carrying out the provisions of this contract and shall not be divulged or made known in any manner to any persons except as may be necessary in the performance of the contract. In performance of this contract, the Contractor assumes responsibility for protection of the confidentiality of Government records and shall ensure that all work performed by its subcontractors shall be under the supervision of the Contractor or the Contractor's responsible employees. Each officer or employee of the Contractor or any of its subcontractors to whom any Government record may be made available or disclosed shall be notified in writing by the Contractor that information disclosed to such officer or employee can be used only for that purpose and to the extent authorized herein. Further disclosure of any such information, by any means, for a purpose or to an extent unauthorized herein, may subject the offender to criminal sanctions imposed by 18 U.S.C. §§ 1030.

5.8 GSA Non-Disclosure Agreement

Each individual contractor/subcontractor employee who performs work on this contract is required to sign an Employee NDA. The Contractor shall submit to the COR a completed confidentiality and NDA for each individual contractor/subcontractor.

The Contractor and all contractor/subcontractor employees may have access to sensitive data, proprietary, or confidential business information of other companies or the Government in the course of performing official duties on this contract. The term "proprietary information" means any information considered so valuable by its owners that it is held in secret by them and their licensees and is not available to the public.

All information that is (1) obtained related to or derived from this contract, and (2) results from or derived from any actual tasks assigned to contractor employees while participating on this contract is considered proprietary.

The Contractor and all contractor/subcontractor employees will not use vendor proprietary information except as necessary to perform this contract and shall agree not to disclose such information to third parties, including any employee of the contractor/subcontractor who has not executed this NDA, or use such information in any manner inconsistent with the purpose for which it was obtained. Anyone failing to comply with the agreement may be subject to disciplinary action or termination of employment by the contractor/subcontractor, and possible administrative, civil, or criminal penalties.

Note: GSA's Office of the General Counsel (OGC) is available to coordinate on defining NDA requirements. Upon request, GSA OGC can advise on NDA development.

5.9 Additional Stipulations

- 1. If the CSP SaaS or PaaS is FedRAMP authorized security documentation will be marked in accordance with FedRAMP guidelines.
- 2. If the CSP SaaS or PaaS offering is NOT already FedRAMP authorized security documentation will be marked as follows:
 - a. PTAs, PIAs, and self-attestation letters will not be marked.
 - b. CP, BIA, and CP Test Reports will be marked CUI//EMGT.
 - c. All other security documentation will be marked CUI//ISVI.
 - d. Documents will be marked in bold text on the top of all pages. Spelling out of acronyms is not required.
 - e. The cover page of each CUI document must contain the following statement on the lower left of the page.
 - Controlled by: General Services Administration OCISO ISP Division: ispcompliance@gsa.gov.
 - f. External transmission/dissemination of CUI to or from a Government system must be encrypted. A FIPS PUB 140-3/140-2 validated encryption module must be used to encrypt the CUI data.

Note: NIST has issued FIPS 140-3 and no longer accepts FIPS 140-2 modules for validation. However, previously validated 140-2 modules will be accepted through September 22, 2026. For additional information see the NIST Cryptographic Module Validation Program Validated Modules.

- 2. The Contractor shall provide software self-attestation letter(s) regarding conformity to NIST guidance⁵ on secure software development as required by OMB M-23-16, "Update to Memorandum M-22-18, Enhancing the Security of the Software Supply Chain through Secure Software Development Practices."
 - a. Attestation must be provided as part of an acquisition, upon contract award, and upon major version upgrades as specified in OMB M-23-16, GSA MV-2023-02 Supplements 1-2, and <u>self-attestation letter templates</u> provided by GSA.
 - b. Any gaps in meeting the software development practices required by the attestation form that cannot be attested to, the Contractor must provide mitigating practices in place (if any) and provide a POA&M to monitor any gaps and their resolution.
- 3. The contractor shall cooperate in good faith in defining an NDA that other third parties must sign when acting as the Federal government's agent.
 - **Note:** GSA's Office of the General Counsel (OGC) is available to coordinate on defining NDA requirements. Upon request, GSA OGC can advise on NDA development.
- 4. The contractor shall comply with any additional FedRAMP privacy requirements.
- 5. The Government has the right to perform manual or automated audits, scans, reviews, or other inspections of the vendor's IT environment being used to provide or facilitate services for the Government. The Contractor shall be responsible for the following privacy and security safeguards:
 - a. The Contractor shall not publish or disclose in any manner, without the Contracting Officer's written consent, the details of any safeguards either designed or developed by the Contractor under this contract or otherwise provided by the Government. Exception Disclosure to a Consumer Agency for purposes of A&A verification or to the Connect.gov portal. To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the Contractor shall afford the Government access to the Contractor's facilities, installations, technical capabilities, operations, documentation, records, and databases within 72 hours of the request. Access to support incident investigations, shall be provided as soon as possible but not longer than 72 hours after request.
 - b. Physical Access Considerations If the SaaS provider is operated within an IaaS that is FedRAMP authorized (e.g., AWS); physical access to the physical datacenter environment will be governed by the terms of access allowed by the underlying infrastructure provider as defined in the FedRAMP A&A authorization package.
 - c. The program of inspection shall include, but is not limited to:
 - Authenticated and unauthenticated operating system/network vulnerability scans
 - Authenticated and unauthenticated web application vulnerability scans
 - Automated scans can be performed by Government personnel, or agents acting on behalf of the Government, using Government operated equipment,

⁵ NIST guidance for secure software development per OMB M-22-18 consists of <u>NIST SP 800-218</u> and <u>NIST Software Supply Chain Security Guidance</u>

and Government specified tools. If the vendor chooses to run its own automated scans or audits, results from these scans may at the Government's discretion, be accepted in lieu of Government performed vulnerability scans. In these cases, scanning tools and their configuration shall be approved by the Government. In addition, the results of vendor-conducted scans shall be provided in full to the Government.

- d. If new or unanticipated threats or hazards are discovered by either the Government or the Contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.
- 6. The Contractor shall comply with 52.204-23 of the Federal Acquisition Regulation (FAR). It prohibits under Section 1634 of <u>Public Law 115-91</u> the use of any hardware, software, or services developed or provided, in whole or in part, by— (1) Kaspersky Lab (or any successor entity); (2) any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or (3) any entity of which Kaspersky Lab has majority ownership.
- 7. The Contractor shall comply with 52.204-25 of the FAR. It prohibits, under Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232), contractors from providing to the Government any equipment, system, or service that uses telecommunications equipment or video surveillance services from certain named companies as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. It also prohibits, under Section 889(a)(1)(B), contractors from using any equipment, system, or service that uses telecommunications or video surveillance equipment or services from certain named companies as a substantial or essential component of any system or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. The proscribed companies are Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, and Dahua Technology Company and their subsidiaries and affiliates.
- 8. The Contractor shall comply with 52.204-27 of the FAR. It prohibits under Section 102 of the Consolidated Appropriations Act 2023, Public Law 117-328, the presence or use of TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited from being used on any information technology as defined in 40 U.S.C. § 11101(6) that is owned or operated by an agency, or used by a contractor under a contract with the agency, or requires the use of such technology expressly or to a significant extent in the performance of a service or the furnishing of a product for an agency.
- 9. If the CSP SaaS or PaaS is NOT FedRAMP authorized, the Contractor shall comply with all actions specified in Federal mandates, including but not limited to Federal Laws, Executive Orders, and OMB Memoranda, when the mandate is applicable to their system or the components therein. The contractor shall provide data to support compliance with the applicable Federal mandates when requested.
- 10. All Internet of Things (IoT) devices, as defined in GSA Order CIO 2100.1, GSA IT Security Policy, included by the Contractor shall comply with NIST SP 800-213 or

receive a waiver from the GSA CIO under one of the conditions of the "IoT Cybersecurity Improvement Act of 2020."

- 11. Boundary considerations (e.g., inclusion of mobile and/or desktop app) or additional capabilities included in the GSA's use case for the CSP's offering shall be included as part of the assessment and authorization of the system.
- 12. Cloud Service Level Agreements (SLAs):
 - For FedRAMP authorized Cloud Solution Providers (CSPs), the CSP must comply with the FedRAMP SLA requirements.
 - For non-FedRAMP authorized CSPs, the Contractor shall establish an SLA with the CSP to support the Contractor's ability to meet requirements specified for Cloud Information Systems – IT Security and Privacy Requirements

5.10 References

Public Law 116-207, "Internet of Things Cybersecurity Improvement Act of 2020"

FIPS PUB 140-3, "Security Requirements for Cryptographic Modules"

<u>FIPS PUB 199</u>, "Standards for Security Categorization of Federal Information and Information Systems"

NIST SP 800-53, Revision 4, Security and Privacy Controls for Information Systems and Organizations

NIST SP 800-88, Revision 1, "Guidelines for Media Sanitization"

NIST SP 800-145, "The NIST Definition of Cloud Computing"

NIST SP 800-218, "Secure Software Development Framework (SSDF) Version 1.1:

Recommendations for Mitigating the Risk of Software Vulnerabilities"

FedRAMP CSP Authorization Playbook

GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy"

GSA Order ADM 2181.1, "Homeland Security Presidential Directive-12 Personal Identity Verification and Credentialing Policy, and Background Investigations for Contractor Employees"

6 Mobile Application - IT Security and Privacy Requirements

The contractor shall generally, substantially, and in good faith follow GSA IT Security Policy and Guidelines including GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy" and GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices. In situations where there is no procedural guidance, the contractor shall use generally accepted industry best practices for IT security.

6.1 General Mobile Application Guidelines

- 1. The Mobile Application (App) shall be integrated with GSA's Mobile Device Management (MDM) solutions.
- 2. The contractor shall provide to the GSA IT Contracting Officer Representative (COR) the source code and all supporting artifacts of the app for security testing. The contractor shall actively participate to remediate all findings before the app is accepted by GSA. Once the contract is awarded, GSA will provide a copy of GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices to the contractor.

- 3. The contractor shall provide clear and concise documentation so that future developers and programmers can understand the processes used and are able to enhance, edit or build upon the original App. All source code information prepared for this App is the property of the GSA Federal Acquisition Service and GSA IT.
 - The contractor shall provide detailed process and code documentation.
 - The contractor shall provide App features documentation.
 - The contractor shall support development and updates of a security authorization package for the App following the process requirements documented in GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices.

6.2 Mobile Device Security

The contractor shall adhere to the following requirements and guidelines for developing mobile applications. All requirements and guidelines are found in the GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices, which will be provided upon contract award.

A mobile application, most commonly referred to as an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer. Mobile applications frequently serve to provide users with similar services to those accessed on PCs. Apps are generally small, individual software units with limited capabilities and isolated functionality. The simplest apps are developed to utilize the web browser of the mobile device to provide a feature set integration much like what is found on a user's PC. However, as mobile app development has grown, a more sophisticated approach involves developing applications specifically for the mobile environment, taking advantage of both its limitations and advantages. For example, apps that use location-based features are inherently built from the ground up with an eye to mobile devices given that you do not have the same concept of location on a PC. With this new paradigm in both mobile platforms and the applications loaded on them, GSA will concentrate security focus on the following goals:

- All apps loaded have an initial assessment by GSA for acceptability and then a security assessment & authorization.
- All apps are deployed from only trusted sources, following the security/assessment process – as described in GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices. GSA's MDM solutions may also be used, once retrieved from these trusted sources, for enterprise deployment.
- Terms of Service (ToS) discipline is adhered to, based on acceptability of an app either as an individual user or for GSA as an Agency.
- Apps deemed to be unacceptable are not allowed.
- Mobile apps allowed on GSA devices is managed by GSA's MDM solutions.
- GSA developed apps are assessed, evaluated, and approved by the AO for the system they support before deployment.

6.3 Application Sources

Allowing mobile apps to be loaded from an unknown source presents one of the greatest risks to GSA's environment when using mobile devices. "Side loading" of apps is a process where a user installs an application from a source other than the Apple App store or Google Play store. If a user jailbreaks a device, side loading can occur as well. Jailbreaking, or rooting, is a process where an Operating System (OS) of a mobile device grants a user or application root level

access to the OS. While iOS devices that are not jailbroken/rooted protect against sideloading, the Android OS allows a user to turn such protection on/off (allow unknown sources) if not managed by MDM.

As such, the following policies apply to all GSA devices (Government and Bring Your Own Device) used in the environment to protect against side loading of apps:

- Devices shall not be jailbroken/rooted by users or apps loaded by users. GSA's MDM solution shall immediately notify an administrator of all such incidents immediately for remediation.
- Unknown sources shall not be enabled by users or applications. GSA's MDM solution shall immediately notify an administrator of all such incidents for remediation.
- Production deployment of GSA developed apps may only be done after completion of the assessment and approval processes defined in GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices.

The GSA Store may be employed for enterprise deployments, but only after the app has undergone the review/approval processes outlined GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices.

6.4 Terms of Service (ToS)

Many terms found in commercial ToS or End User License Agreements (EULA) are not acceptable when the Government is the end user. The Office of Chief Information Officer (OCIO) requires that software within the GSA Enterprise have approved ToS or EULA. The Contractor's ToS shall be found to be acceptable to the government or a modified ToS negotiated as part of the approval review, prior to final authorization.

6.5 GSA Privacy Requirements

Personally identifiable information (PII) **SELECT:** is or is not in the scope of the acquisition and PII **SELECT:** is or is not expected to be stored, processed, or transmitted in the vendor's App. The collection, maintenance, or dissemination of any PII that is subject to the Privacy Act and/or the E-Government Act will be handled in full accordance with all GSA rules of conduct and in accordance with GSA Privacy Program requirements.

The contractor shall work with GSA to prepare a Privacy Threshold Assessment (PTA) to confirm and document PII is not in scope, or to determine which categories of information will be stored, processed, or transmitted by the App. The PTA must be completed before development begins and whenever a change with privacy impact (e.g., a new category of information is collected) is made to an existing App. PTAs are required to determine whether a Privacy Impact Assessment (PIA) and/or a System of Records Notice (SORN) is required, and if any other privacy requirements apply to the App. Information regarding PIAs can be found in GSA Order CIO 1878.3.

PII (should it come into scope) will require the following guidelines be adhered to.

- The vendor's App must be authorized at least at the FIPS PUB 199 Moderate level.
- For any system that collects, maintains, or disseminates PII, a PIA must be completed
 by the contractor and provided to the GSA Privacy Office for review along with the other
 authorization to operate (ATO) documents.

- If the system retrieves information using PII, the Privacy Act applies and it must have a system of records notice (SORN) published in the Federal Register.
- If PII is collected from individuals by the system, a Privacy Act Statement (i.e., Privacy Notice) must be provided to users prior to their use of the application on what data is being collected and why, as well as the authority for the collection and the impact of not providing some or all of it. The Privacy Act Statement must be available to the individual directly on the form used to collect the information. Providing a link back to the Statement from the form is acceptable.

Per OMB A-130 Privacy Act Statements must include:

- the authority (whether granted by statute or executive order) that authorizes the solicitation of the information and whether disclosure of such information is mandatory or voluntary;
- (2) the principal purpose(s) for which the information is intended to be used;
- (3) the published routine uses to which the information is subject;
- (4) the effects on the individual, if any, of not providing all or any part of the requested information; and
- (5) an appropriate citation (and, if practicable, a link) to the relevant SORN(s).

An example Privacy Act Statement is available at <u>GSA's Privacy Act Statement for Design</u> <u>Research webpage</u>.

Note: Apps that access data a user creates must assume a user may include privacy data/PII in the application unless the data creation is restricted to data controlled by the App.

All contractor staff who have significant privacy information responsibilities must complete GSA's mandatory privacy awareness and role-based training courses. This includes contractors who work with PII as part of their work duties (e.g., Human Resource staff, Finance staff, and managers/supervisors).

6.6 GSA App Development, Assessment, Authorization and Deployment

GSA developed apps are designed to take advantage of the concept of working anytime and anywhere to allow GSA users and customers to access GSA data while mobile. As such, as GSA business lines develop apps for use on the iOS and Android environment, these apps must undergo an assessment and authorization process before being deployed. With that in mind, the following guidelines are to be followed:

- A GSA developed app that supports a GSA FISMA system must be documented in the System Security and Privacy Plan and authorized to operate as part of a current ATO letter from the respective AO before deployment. GSA IT Security Procedural Guide 06-30: Managing Enterprise Cybersecurity Risk, is to be followed for this process. Any app that is not directly tied to an already existing system authorized to operate must have an assessment performed and subsequently approved for release by the Chief Information Security Officer (CISO).
- Any mobile app development shall result in a minimum of the release of both an iOS and Android version of the app. This ensures coverage to all users within GSA and the maximum coverage for apps released to the public. Any additional application versions

- for alternate OS mobile platforms may be developed for such apps, but iOS and Android shall remain as the core base OSs for GSA developed mobile apps for all releases.
- All GSA developed apps must follow the respective application review and publication guidelines for the OS to which they were developed as outlined in Section 8.5 of GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices.
- The GSA Store is authorized for enterprise deployment of apps to GSA user devices once that app has been assessed, authorized, and published according to the guidelines in GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices.
- Mobile app scanning throughout development is critical to successful deployment of an app. Before being approved for use, a mobile app must be scanned by the OCISO Security Operations (ISO) Division using an approved scanner. As with all applications in GSA, no High/Critical findings are allowed from these scan results. Moderate findings should be documented in the respective POA&M for the system by which the app is authorized and accepted by the AO; Low and Informational findings should be taken into consideration by the developers for their next iteration of app development.
- All mobile application development shall take into consideration the Open Web Application Security Project (OWASP) Mobile Security Project when developing mobile apps either within GSA or for use by the general public. The guidelines for mobile application security testing from OWASP are linked below:
 - OWASP Mobile Security Project Home Page
 - OWASP Mobile Security Testing Guide
- GSA developed mobile apps must undergo an assessment review and approval process before being released for use. These apps fall into two categories that shall have slightly different processes for approval, with many common steps.
- Mobile apps that are developed as part of another system with a current ATO and provide access to an application using a different form factor (smartphones/tablets), such apps must be documented in the System Security and Privacy Plan for the system they support as specified in GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices.
- Mobile apps designed for a specific purpose not part of a current ATO stand alone in their ATO. As these apps do not have a parent system they support, they shall be separately assessed as specified in GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices.

6.7 Intellectual Property

This task order is funded by the United States Government. All intellectual property generated and/or delivered pursuant to this Statement of Work will be subject to appropriate federal acquisition regulations which entitle the Government to unlimited license rights in technical data and computer software developed exclusively with Government funds, a nonexclusive "paid-up" license to practice any patentable invention or discovery made during the performance of this task order, and a "paid-up" nonexclusive and irrevocable worldwide license to reproduce all works (including technical and scientific articles) produced during this task order.

6.8 Confidentiality and Nondisclosure

The preliminary and final deliverables and all associated working papers and other material deemed relevant by the agency that have been generated by the contractor in the performance of this contract, are the property of the U.S. Government and must be submitted to the COR at the conclusion of the contract. The U.S. Government has unlimited data rights to all deliverables and associated working papers and materials.

All documents produced for this project are the property of the U.S. Government and cannot be reproduced or retained by the contractor. All appropriate project documentation will be given to the agency during and at the end of this contract. The contractor shall not release any information without the written consent of the Contracting Officer.

Personnel working on any of the described tasks may, at Government request, be required to sign formal non-disclosure and/or conflict of interest agreements (NDA/COI) to guarantee the protection and integrity of Government information and documents.

Additionally, any information made available to the Contractor by the Government shall be used only for the purpose of carrying out the provisions of this contract and shall not be divulged or made known in any manner to any persons except as may be necessary in the performance of the contract. In performance of this contract, the Contractor assumes responsibility for protection of the confidentiality of Government records and shall ensure that all work performed by its subcontractors shall be under the supervision of the Contractor or the Contractor's responsible employees. Each officer or employee of the Contractor or any of its subcontractors to whom any Government record may be made available or disclosed shall be notified in writing by the Contractor that information disclosed to such officer or employee can be used only for that purpose and to the extent authorized herein. Further disclosure of any such information, by any means, for a purpose or to an extent unauthorized herein, may subject the offender to criminal sanctions imposed by 18 U.S.C. §§ 1030.

6.9 GSA Non-Disclosure Agreement

Each individual contractor/subcontractor employee who performs work on this contract is required to sign an Employee NDA. The Contractor shall submit to the COR a completed confidentiality and NDA form for each individual contractor/subcontractor.

The Contractor and all contractor/subcontractor employees may have access to sensitive data, proprietary, or confidential business information of other companies or the Government in the course of performing official duties on this contract. The term "proprietary information" means any information considered so valuable by its owners that it is held in secret by them and their licensees and is not available to the public.

All information that is (1) obtained related to or derived from this contract, and (2) results from or derived from any actual tasks assigned to contractor employees while participating on this contract is considered proprietary.

The Contractor and all contractor/subcontractor employees will not use vendor proprietary information except as necessary to perform this contract and shall agree not to disclose such information to third parties, including any employee of the contractor/subcontractor who has not executed this NDA, or use such information in any manner inconsistent with the purpose for which it was obtained. Anyone failing to comply with the agreement may be subject to

disciplinary action or termination of employment by the contractor/subcontractor, and possible administrative, civil, or criminal penalties.

Note: GSA's Office of the General Counsel (OGC) is available to coordinate on defining NDA requirements. Upon request, GSA OGC can advise on NDA development.

6.10 Personnel Security Requirements

Contractor shall furnish documentation reflecting favorable adjudication of background investigations for all personnel (including subcontractors) supporting the system. Contractors shall comply with GSA Order 2100.1, "GSA Information Technology (IT) Security Policy" and GSA Order ADM 2181.1, "Homeland Security Presidential Directive-12, Personal Identity Verification and Credentialing, and Background Investigations for Contractors." GSA separates the risk levels for personnel working on Federal computer systems as follows:

- A favorable initial fitness/suitability determination must be granted, and a Tier 1 or higher background investigation initiated before access to the GSA network or any GSA IT system. There shall be no waivers to this requirement for GSA network and IT system access for GSA employees or contractors.
- A favorable initial fitness/suitability determination must be granted, and a Tier 2 or higher background investigation initiated before access to PII/CUI is granted. The authority and access shall be determined by the appropriate GSA Supervisor (for GSA employees) or CO (for contract personnel), Data Owner, and the System's AO. Each System's AO, with the request of the GSA Supervisor, Data Owner, or CO, shall evaluate the risks associated with each such request.
- A favorable suitability determination must be completed at a Tier 2 or higher background investigation before privileged access to the GSA network or IT systems is granted. A waiver may be requested in order to maintain GSA business operations; however, such requests should be used judiciously and not incur unnecessary risks to GSA.

If final adjudication of a background investigation is unfavorable, GSA network and IT system access must be revoked, and any GFE, including the GSA PIV card, must be retrieved and returned to OMA.

GSA shall sponsor the investigation when deemed necessary. No access shall be given to government computer information systems and government sensitive information without a background investigation being verified or in process. If results of background investigation are not acceptable, then access shall be terminated.

The Contractor shall provide a report of separated staff on a monthly basis, beginning 60 days after execution of the contract.

6.11 Additional Stipulations

- 1. If the following documentation regarding a Mobile app is provided, it will be marked as follows:
 - a. PTAs and PIAs will not be marked.
 - b. CP, BIA, and CP Test Reports will be marked CUI//EMGT.
 - c. All other security documentation will be marked CUI//ISVI.
 - d. Documents will be marked in bold text on the top of all pages. Spelling out of acronyms is not required.

e. The cover page of each CUI document must contain the following statement on the lower left of the page.

Controlled by: General Services Administration OCISO ISP Division: ispcompliance@gsa.gov.

- f. External transmission/dissemination of CUI to or from a Government system must be encrypted. A FIPS PUB 140-3/140-2 validated encryption module must be used to encrypt the CUI data.
- 2. The Contractor shall certify mobile applications are fully functional and operate correctly as intended on mobile devices in accordance with GSA IT Security Procedural Guide 12-67: Securing Mobile Applications and Devices. The standard installation, operation, maintenance, update, and/or patching of mobile applications shall not alter configuration settings as documented in CIO-IT Security-12-67. Mobile applications designed for normal end users shall run in the standard user context without elevated administrator privileges.
- 3. The Contractor shall provide software self-attestation letters regarding conformity to NIST guidance⁶ on secure software development as required by OMB M-23-16, "Update to Memorandum M-22-18, Enhancing the Security of the Software Supply Chain through Secure Software Development Practices."
 - a. Attestation must be provided as part of an acquisition, upon contract award, and upon major version upgrades as specified in OMB M-23-16, GSA MV-2023-02 Supplements 1-2, and self-attestation letter templates provided by GSA.
 - b. Any gaps in meeting the software development practices required by the attestation form that cannot be attested to, the Contractor must provide mitigating practices in place (if any) and provide a POA&M to monitor any gaps and their resolution.
- 4. The Contractor shall cooperate in good faith in defining NDAs that other third parties must sign when acting as the Federal government's agent.

Note: GSA's Office of the General Counsel (OGC) is available to coordinate on defining NDA requirements. Upon request, GSA OGC can advise on NDA development.

- 5. The Government has the right to perform manual or automated audits, scans, reviews, or other inspections of the vendor's IT environment being used to provide or facilitate services for the Government. The Contractor shall be responsible for the following privacy and security safeguards:
 - a. The Contractor shall not publish or disclose in any manner, without the Contracting Officer's written consent, the details of any safeguards either designed or developed by the Contractor under this contract or otherwise provided by the Government. Exception - Disclosure to a Consumer Agency for purposes of A&A verification or to the Connect.gov portal. To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the Contractor shall afford the Government access to the Contractor's facilities, installations,

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⁶ NIST guidance for secure software development per OMB M-22-18 consists of NIST SP 800-218 and NIST Software Supply Chain Security Guidance

technical capabilities, operations, documentation, records, and databases within 72 hours of the request. Access to support incident investigations, shall be provided as soon as possible but not longer than 72 hours after request.

The program of inspection shall include, but is not limited to:

- Authenticated and unauthenticated operating system/network vulnerability scans
- Authenticated and unauthenticated web application vulnerability scans
- Authenticated and unauthenticated database application vulnerability scans
- Automated scans can be performed by Government personnel, or agents acting on behalf of the Government, using Government operated equipment, and Government specified tools. If the vendor chooses to run its own automated scans or audits, results from these scans may at the Government's discretion, be accepted in lieu of Government performed vulnerability scans. In these cases, scanning tools and their configuration shall be approved by the Government. In addition, the results of vendorconducted scans shall be provided in full to the Government.
- b. If new or unanticipated threats or hazards are discovered by either the Government or the Contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.
- 6. The Contractor shall comply with 52.204-23 of the Federal Acquisition Regulation (FAR). It prohibits under Section 1634 of <u>Public Law 115-91</u> the use of any hardware, software, or services developed or provided, in whole or in part, by— (1) Kaspersky Lab (or any successor entity); (2) any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or (3) any entity of which Kaspersky Lab has majority ownership.
- 7. The Contractor shall comply with 52.204-25 of the FAR. It prohibits, under Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232), contractors from providing to the Government any equipment, system, or service that uses telecommunications equipment or video surveillance services from certain named companies as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. It also prohibits, under Section 889(a)(1)(B), contractors from using any equipment, system, or service that uses telecommunications or video surveillance equipment or services from certain named companies as a substantial or essential component of any system or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. The proscribed companies are Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, and Dahua Technology Company and their subsidiaries and affiliates.
- 8. The Contractor shall comply with 52.204-27 of the FAR. It prohibits under Section 102 of the Consolidated Appropriations Act 2023, Public Law 117-328, the presence or use of TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited from being used on any information technology as defined in 40 U.S.C. § 11101(6) that is owned or operated by an agency,

- or used by a contractor under a contract with the agency, or requires the use of such technology expressly or to a significant extent in the performance of a service or the furnishing of a product for an agency.
- 9. The Contractor shall comply with all actions specified in Federal mandates, including but not limited to Federal Laws, Executive Orders, and OMB Memoranda, when the mandate is applicable to their system or the components therein. The contractor shall provide data to support compliance with the applicable Federal mandates when requested.
- The Contractor shall comply with requests for data or perform actions based on DHS issued requirements per the Federal Cybersecurity Coordination, Assessment, and Response (C-CAR) Protocol.
- 11. The Contractor shall comply with all actions specified in DHS Cybersecurity <u>Directives</u>, Federal Acquisition Security Council (FASC) exclusion orders, FASC removal orders, and GSA covered procurement actions in accordance with the SECURE Technology Act, if the action is applicable to the Contractor's system or the components therein. In addition, contractors shall update their vulnerability management procedures in accordance with BOD 22-01, including:
 - Subscribing to the CISA KEV Catalog automated updates
 - Remediating vulnerabilities as identified for control SI-02 above;
 - Providing within 7 days from the required remediation date an email to the ISSO/ISSM or COR certifying remediation consistent with BOD 22-01 requirements.
 - If GSA receives additional cyber supply chain risk information indicating supply chain risk, GSA may direct remediation related to the components and/or configuration of the system.
- 12. Cloud Service Level Agreements (SLAs):
 - For FedRAMP authorized Cloud Solution Providers (CSPs), the CSP must comply with the FedRAMP SLA requirements.
 - For non-FedRAMP authorized CSPs, the Contractor shall establish an SLA with the CSP to support the Contractor's ability to meet requirements specified for Cloud Information Systems – IT Security and Privacy Requirements.

7 Nonfederal Systems and Organizations – IT Security and Privacy Requirements

7.1 Required Policies and Regulations for GSA Contracts

Federal Laws, Regulations, and Guidance:

The contractor shall comply with all applicable Federal Laws, Regulations, and Guidance.

- CUI Regulation 32 CFR Part 2002, "Controlled Unclassified Information (CUI)"
- Privacy Act of 1974, "5 USC, § 552a"
- E-Government Act of 2002 section 208, "44 USC 3501"

- OMB Circular A-108, "Federal Agency Responsibilities for Review, Reporting, and Publication under the Privacy Act"
- OMB M-03-22, "OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002"
- <u>Title 44 U.S. Code, Sec. 3554</u>, "Federal agency responsibilities"

Federal Standards and NIST Publications:

The contractor shall comply with the following Federal Information Processing Standards (FIPS) and NIST guidelines.

- <u>FIPS PUB 199</u>, "Standards for Security Categorization of Federal Information and Information Systems"
- <u>FIPS PUB 200</u>, "Minimum Security Requirements for Federal Information and Information Systems"
- NIST SP 800-53, Revision 5, "Security and Privacy Controls for Information Systems and Organizations"
- NIST SP 800-53A, Revision 5, "Assessing Security and Privacy Controls in Information Systems and Organizations"
- NIST SP 800-60, Volume I, Revision 1, "Volume I: Guide for Mapping Types of Information and Information Systems to Security Categories"
- NIST SP 800-60, Volume II, Revision 1, "Volume II: Appendices to Guide for Mapping Types of Information and Information Systems to Security Categories"
- NIST 800-63B, "Digital Identity Guidelines, Authentication and Lifecycle Management"
- NIST SP 800-161, Revision 1, "Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations"
- NIST SP 800-171r3, "Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations"
- NIST SP 800-171Ar3, "Assessing Security Requirements for Controlled Unclassified Information"
- NIST SP 800-172, "Enhanced Security Requirements for Protecting Controlled Unclassified Information: A Supplement to NIST Special Publication 800-171"
- NIST SP 800-172A, "Assessing Enhanced Security Requirements for Controlled Unclassified Information"

GSA Policies, Procedures, and Guidance:

The contractor shall comply with the following GSA Directives/Policies:

- GSA Order CIO 1878.3, "Developing and Maintaining Privacy Threshold Assessments, Privacy Impact Assessments, Privacy Act Notices, and System of Records Notices"
- GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy"
- GSA Order CIO 2103.1, "Controlled Unclassified Information (CUI) Policy"
- GSA Order CIO 2200.1, "GSA Privacy Act Program"
- GSA Order CIO 9297.2, "GSA Information Breach Notification Policy"
- GSA MV-2023-02, Supplements 1-2, Ensuring Only Approved Software is Acquired and Used at GSA
- GSAM 510.002, Pre-Award Procedures
- GSAM 511.170, Information Technology Coordination and Standards
- GSAM 511.171, Requirements for GSA Information Systems
- GSAM 539, Acquisition of Information Technology

The GSA CIO-IT Security Procedural Guides listed below are available on the <u>GSA.gov IT</u> Security Procedural Guides page.

- GSA CIO-IT Security-01-02: Incident Response (IR)
- GSA CIO-IT Security-09-44: Plan of Action and Milestones (POA&M)
- GSA CIO-IT Security-11-51: Conducting Penetration Test Exercises (Recommended)
- GSA CIO-IT Security-21-112: Protecting Controlled Unclassified Information (CUI) in Nonfederal Systems and Organizations Process

Note: GSA's Procedural Guides are updated frequently; to make sure you have the most recent version of publicly available procedural guides, visit <u>GSA.gov</u>. If a non-publicly available guide is needed, contact the contracting officer who will coordinate with the GSA Office of the Chief Information Security Officer to determine if it can be made available.

7.2 GSA Security Compliance Requirements

To comply with the Federal standard, nonfederal systems and organizations shall implement the specific security requirements in GSA CIO IT Security Procedural Guide 21-112, "Protecting Controlled Unclassified Information (CUI) in Nonfederal Systems and Organizations Process." NIST SP 800-171 and NIST SP 800-172 controls requirements have been tailored for nonfederal entities, eliminating requirements, controls, or parts of controls that are uniquely Federal, not directly related to protecting the confidentiality of CUI; or expected to be routinely satisfied by nonfederal organizations without specification. NIST SP 800-171 and NIST SP 800-172 controls are derived from FIPS PUB 200, "Minimum Security Requirements for Federal Information and Information Systems," the moderate security control baseline in NIST SP 800-53, Revision 5, "Security and Privacy Controls for Information Systems and Organizations," and are based on the CUI regulation 32 CFR Part 2002, "Controlled Unclassified Information." For systems storing, processing, or transmitting Personally Identifiable Information (PII) selected Privacy requirements from NIST SP 800-53, Revision 5, "Security and Privacy Controls for Information Systems and Organizations" are also required.

The basic and derived security requirements in NIST SP 800-171, NIST SP 800-172, and NIST SP 800-53-when applicable, provide protection from unauthorized disclosure and unauthorized modification of CUI. The requirements apply only to the components of non-federal systems that process, store, or transmit CUI, or that provide security protection for such components.

7.3 Security Assessment Activities and Required Documentation

The non-federal system/organization shall implement the NIST SP 800-171, Revision 2 and NIST SP 800-172 controls; conduct an independent security assessment using NIST SP 800-171A, "Assessing Security Requirements for Controlled Unclassified Information" and NIST SP 800-172A, "Assessing Enhanced Security Requirements for Controlled Unclassified Information" with results documented in a security assessment report; and security vulnerabilities or gaps in security requirements documented in a Plan of Action and Milestones (POA&M) as stated in GSA CIO-IT Security-21-112: Protecting Controlled Unclassified Information (CUI) in Nonfederal Systems and Organizations Process. The resultant documents including the System Security and Privacy Plan (SSPP), Security Assessment Report (SAR), and POA&M will be critical inputs to a risk management decision by the GSA to process, store, or transmit CUI on a system hosted by a nonfederal organization and whether it is advisable to pursue an agreement or contract with the non-federal organization. The failure to implement the security requirements and controls identified in GSA CIO-IT Security-21-112 and maintain the supporting

documentation will result in the termination of the contract. The non-federal system must have a new independent security assessment conducted at least every three (3) years or at the discretion of the GSA when there is a significant change to the system's security posture or via continuous monitoring. Documents that contain CUI must be marked as such. Not all deliverables contain CUI. When in question, the contractor should use the NARA CUI Registry to help determine the appropriate designation for marking, handling, or transmitting. The contractor shall create, maintain, and update the following security documentation and make available to the Government:

- System Security and Privacy Plan (SSPP) completed in accordance with GSA CIO-IT Security-21-112, including all attachments identified therein. The SSPP will document the system's implementation of NIST SP 800-171, SP 800-172, and NIST SP 800-53 (required if PII is in scope) using the template provided by the GSA.
- Security Assessment Report (SAR) completed in accordance with GSA CIO-IT Security-21-112, including all attachments identified therein. The SAR will document the assessment results for the system using the template provided by the GSA. Nonfederal information systems must have an independent assessment performed and authorized every three (3) years or whenever there is a significant change to the non-federal system's security posture. The independent assessor shall be a FedRAMP accredited Third Party Assessment Organizations (3PAOs) or be approved by the GSA if not a 3PAO. A Penetration Test Report (not required; recommended only) shall be included as an attachment (if performed) documenting the results of an independent exercise. Reference GSA CIO-IT Security-11-51: Conducting Penetration Test Exercises for penetration testing guidance.
- Plan of Action & Milestones (POA&M) document completed in accordance with GSA CIO-IT Security-21-112, including updates based on the requirements and schedule set forth in CIO-IT Security-09-44: Plan of Action and Milestones (POA&M), using the template provided by the GSA.
- **Penetration Test Report** (Not required; recommended only) documenting the results of an independent exercise. Reference GSA IT Security Procedural Guide 11-51: Conducting Penetration Test Exercises for penetration testing guidance.

7.4 Reporting and Continuous Monitoring

Maintenance of security will be through continuous monitoring of security controls of the non-federal system and its environment of operation to determine if the security controls in the information system continue to be effective over time in light of changes that occur in the system and environment. Through continuous monitoring, security controls and supporting deliverables are updated and submitted to GSA per the schedules below. The submitted deliverables (or lack thereof) provide a current understanding of the security state and risk posture of the information system(s). They allow GSA to make credible risk-based decisions regarding the continued usage of non-federal systems and initiate appropriate responses as needed when changes occur.

Deliverables to be provided Quarterly to the GSA Information System Security Officer (ISSO), Information System Security Manager (ISSM), and/or Contracting Officer (COR). (Reference CIO-IT Security-21-112)

 Vulnerability Scanning Reference: NIST SP 800-171, Revision 2 Security Requirement 3.11.2 Scan for vulnerabilities in organizational systems and applications periodically and when new vulnerabilities affecting those systems and applications are identified. Provide the most recent Web Application and Operating System vulnerability scan reports.

- 2. Plan of Action & Milestones (POA&M) Update
 Reference: NIST SP 800-171, Revision 2 Security Requirement 3.12.2
 Develop and implement plans of action designed to correct deficiencies and reduce or eliminate vulnerabilities in organizational systems. Provide POA&M updates in accordance with requirements and the schedule set forth in GSA CIO-IT Security-09-44: Plan of Action and Milestones (POA&M).
- 3. Shared Drive Access Review
 The Vendor and GSA ISSO shall review the membership and access to the shared collaboration drive.

Quarterly Deliverables are due one month prior to the completion of each quarter in the government fiscal year, ending on September 30. Due dates are the last workday of the months listed:

- Quarter 1 November
- Quarter 2 February
- Quarter 3 May
- Quarter 4 August

Deliverables to be provided to the GSA ISSO, ISSM, and/or COR annually or when there is a major change to the system. (Reference CIO-IT Security-21-112)

1. Updated SSPP

Reference NIST SP 800-171, Revision 2 security requirement 3.12.4 Develop, document, and periodically update system security plans that describe system boundaries, system environments of operation, how security and privacy requirements are implemented, and the relationships with or connections to other systems. The SSPP must be in accordance with GSA CIO-IT Security-21-112, using the SSPP template provided by the GSA.

2. Penetration Test (Recommended)

Reference NIST SP 800-53, Revision 2, CA-08, Penetration Testing Penetration testing is recommended for Internet accessible information systems. Guidance on penetration testing is available in the GSA IT Security Procedural Guide CIO-IT Security-11-51, "Conducting Penetration Test Exercises."

Annual deliverables are due two months prior to completion of the government fiscal year, ending on September 30. Due date is the last workday of July.

Deliverables to be provided to the GSA ISSO, ISSM, and/or COR every three years or when there is a major change to the system. (Reference CIO-IT Security-21-112)

Security Assessment Report
Reference: NIST 800-171, Revision 2 Security Requirement 3.12.1
Periodically assess the security controls in organizational systems to determine if the
controls are effective in their application. Deliver the results of the security assessment
conducted by a 3PAO/independent security assessor using the assessment procedures
in NIST SP 800-171A, "Assessing Security Requirements for Controlled Unclassified

Information, to be completed using the SAR template provided by the GSA. The SAR is completed in accordance with a security assessment plan that is mutually agreed upon by the GSA, the vendor, and the 3PAO/independent security assessor following the process requirements in CIO-IT Security 21-112.

The SAR is due 34 months after the previous SAR or within 2 months after a major change.

7.5 Privacy Assessment Activities and Required Documentation

Assessment of the privacy posture of the non-federal system and its environment of operation will be through continuous monitoring of privacy controls to determine if they remain effective over time in light of changes that occur in the system and environment. Through continuous monitoring, privacy controls and supporting deliverables are updated and submitted to GSA per the schedules below. The submitted deliverables (or lack thereof) provide a current understanding of the privacy risk posture of the information system(s). They allow GSA to make credible risk-based decisions regarding the continued protection of CUI residents in non-federal systems and initiation of appropriate responses as needed when changes occur.

Deliverables to be provided to the GSA ISSO, ISSM, and/or COR every three years or when there is a major change to the system.

1. Privacy Threshold Assessment (PTA) Reference: NIST SP 800-53⁷, Revision 5, RA-08, Privacy Impact Assessments (Note: RA-08 is used to ensure a PTA is completed to determine if a PIA is required.) The contractor shall prepare a PTA to confirm and document whether Personally Identifiable Information (PII) is in scope or not, and to determine which other categories of CUI will be stored, processed, or transmitted by the system. The PTA must be completed before GSA begins using the non-federal system.

If through the initial PTA GSA finds that no PII or other CUI is in scope, then vendor shall both:

- Recertify the PTA every three years to confirm the absence of such sensitive information; AND
- b. Update the PTA any time there is a change that may impact the privacy posture of the system or its environment of operation (e.g., collection of a new information type (see OMB Circular A-108, paragraph 6(b) for additional examples of significant changes requiring a PTA update).

If PII is in scope, deliverables to be provided to the GSA ISSO, ISSM, and/or COR every three years or when there is a major change to the system.

Privacy Impact Assessment (PIA)
 Reference: NIST SP 800-53, Revision 5, RA-08, Privacy Impact Assessments
 For any system that collects, maintains, or disseminates PII or other CUI, a PIA must be
 completed by the contractor and provided to the GSA Privacy Office for review. The
 vendor shall:

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⁷ NIST SP 800-53 provides guidance on security and privacy controls for systems and organizations

- Limit system access to those with a Lawful Government Purpose; display login notifications or warning banners that CUI is present in the system and must be protected consistent with the CUI Program;
- b. Prohibit any CUI from being posted or processed on publicly accessible systems;
- c. Recertify the PIA every three years to confirm the collection, maintenance, or dissemination of such sensitive information;
- d. Update the PIA any time there is a change that may impact the privacy posture of the system or its environment of operation (e.g., collection of a new information type (see OMB Circular A-108, paragraph 6(b) for additional examples of significant changes requiring a PIA update).

OMB's PIA guidance: <u>OMB Guidance for Implementing the Privacy Provisions of the E-</u> Government Act of 2002

GSA's PIA guidance: Guidance is included in the CUI Non Federal PTA and PIA templates available on the GSA's InSite IT Security Forms and Aids page.

If PII is in scope, the vendor shall include the following NIST SP 800-53, Revision 5 controls in its SSPP. Privacy controls are the administrative, technical, and physical safeguards employed within organizations to protect and ensure the proper handling of PII.

Control ID	Control Title		
AC-03(14)	Access Enforcement Individual Access		
AC-21	Information Sharing		
PL-08	Security and Privacy Architectures		
PM-25	Minimization of Personally Identifiable Information Used in Testing, Training, and Research		
PM-26	Complaint Management		
PT-03	Personally Identifiable Information Processing Purpose		
PT-04	Consent		
PT-05	Privacy Notice		
RA-08	Privacy Impact Assessments		
SA-09	External System Services		
SI-12(02)	Information Management and Retention Minimize Personally Identifiable Information in Testing, Training, and Research		
SI-18	Personally Identifiable Information Quality Operations		

A Privacy Policy/Notice shall be provided to users prior to their use of the application on what data is being collected and why, as well as the impact of not providing some or all of it. The Privacy Policy/Notice must be available to the individual directly on the form used to collect the information. Providing a link back to the Policy/Notice from the form is acceptable.

7.6 Additional Stipulations

- 1. Security documentation will be marked as follows:
 - a. PTAs and PIAs will not be marked.
 - b. CP, BIA, and CP Test Reports will be marked CUI//EMGT.
 - c. All other security documentation will be marked CUI//ISVI.
 - d. Documents will be marked in bold text on the top of all pages. Spelling out of acronyms is not required.
 - e. The cover page of each CUI document must contain the following statement on the lower left of the page.

Controlled by: General Services Administration OCISO ISP Division: ispcompliance@gsa.gov.

f. External transmission/dissemination of CUI to or from a Government system must be encrypted. A FIPS PUB 140-3/140-2 validated encryption module must be used to encrypt the CUI data.

Note: NIST has issued FIPS 140-3 and no longer accepts FIPS 140-2 modules for validation. However, previously validated 140-2 modules will be accepted through September 22, 2026. For additional information see the NIST <u>Cryptographic Module Validation Program Validated Modules</u>.

- 2. The Contractor shall comply with 52.204-23 of the Federal Acquisition Regulation (FAR). It prohibits under Section 1634 of Public Law 115-91 the use of any hardware, software, or services developed or provided, in whole or in part, by— (1) Kaspersky Lab (or any successor entity); (2) any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or (3) any entity of which Kaspersky Lab has majority ownership.
- 3. The Contractor shall comply with 52.204-25 of the FAR. It prohibits, under Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232), contractors from providing to the Government any equipment, system, or service that uses telecommunications equipment or video surveillance services from certain named companies as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. It also prohibits, under Section 889(a)(1)(B), contractors from using any equipment, system, or service that uses telecommunications or video surveillance equipment or services from certain named companies as a substantial or essential component of any system or as critical technology as part of any system, unless an exception or waiver is granted per the FAR. The proscribed companies are Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, and Dahua Technology Company and their subsidiaries and affiliates.
- 4. The Contractor shall comply with 52.204-27 of the FAR. It prohibits under Section 102 of the Consolidated Appropriations Act 2023, Public Law 117-328, the presence or use of

TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited from being used on any information technology as defined in 40 U.S.C. § 11101(6) that is owned or operated by an agency, or used by a contractor under a contract with the agency, or requires the use of such technology expressly or to a significant extent in the performance of a service or the furnishing of a product for an agency.

Appendix A: Cloud Acquisition Best Practices

This table should be updated, as appropriate, and referenced in acquisitions including cloud services to reflect SLA responsibilities for GSA, the Cloud Service Provider (CSP), and reseller of the cloud service, if applicable.

Best Practice	Definition of Best Practice	Responsibility of GSA	Responsibility of Reseller	Responsibility of CSP
Guaranteed system availability level (SLA)	Also known as Service Level Agreement, this is the guaranteed or minimum service level for each service as determined by the service provider.	Maintain awareness of CSP SLAs and deploy important workloads and applications in such a way that they continue to operate in the event an SLA is not met. Such approaches may incorporate the hybrid cloud model, possibly deploying across a combination of resources from multiple cloud providers. GSA will be responsible for maintaining appropriate SLA's associated with any GSA-owned equipment or GSA-operated services used with the cloud service.	Directly provide to GSA, via flow-through, the [CLOUD SERVICE] SLAs committed to by [CSP]. Assist GSA in obtaining any Service Credits to which GSA is entitled. Meet any time-sensitive reseller requirements specified in the acquisition.	Provide GSA with an SLA applicable to [CLOUD SERVICE] cloud services. Process requests for Service Credits.
Reporting of service level metrics	Includes the method by which the service level metric is calculated, the frequency of reporting and the method the reports are distributed or communicated.	Monitor performance against service level metrics using GSA and cloud service provider tools and information. Compare availability, performance, and other measures with published cloud service provider service commitments on a monthly basis.	Facilitate obtaining responses to GSA questions involving service delivery and service level metrics.	Upon request, assist GSA by providing information about service outages for purposes of enabling the evaluation of availability against the service level agreement.

Best Practice	Definition of Best Practice	Responsibility of GSA	Responsibility of Reseller	Responsibility of CSP
Penalties for not meeting service levels	Compensation from the CSP for not meeting minimum guaranteed service levels as stated in the SLAs.	Monitor CSP services utilized and submit claims for service credits to the Reseller when published CSP SLA's are not met.	Directly provide to GSA, via flow-through, the SLAs committed to by [CSP]. Assist GSA in obtaining any Service Credits to which GSA is entitled.	Process GSA claims for service credits submitted by the reseller in a timely manner.