Template Version Number: 01-2021

U.S. Department of Commerce
U.S. Patent and Trademark Office

Privacy Impact Assessment
for the
Secure Access Service Edge (SASE)

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☒ Concurrence of Senior Agency Official for Privacy/DOC Chief Privacy Officer
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U.S. Department of Commerce Privacy Impact Assessment
USPTO Secure Access Service Edge (SASE)

Unique Project Identifier: EIPL-IHSN-08-00

Introduction: System Description

Provide a brief description of the information system.

Security Access Service Edge (SASE) is a system that provides a number of security capabilities focused on increasing security and network resilience for improved policy enforcement and reduced latency associated with security monitoring. The USPTO's implementation of SASE will focus on the following three Security Service Edge (SSE) capabilities:

- Zero Trust Network Access (ZTNA)
- Cloud Access Security Broker (CASB)
- Secure Web Gateway (SWG)

The Netskope SASE solution provides USPTO a hybrid-cloud, remote access solution that converges multiple security technologies and into a scalable, elastic platform that delivers timely network and security services such as (but not limited to) Site Risk Confidence scoring and Data Loss Prevention (DLP). Now combined with the network transport The Netskope SASE solution better offers greater protection for USPTO staff, its applications and its data through telemetry provided to USPTO Cyber Security teams, improving situational awareness. The solution also helps USPTO improve its ability to comply with Presidential Executive Order 14028 regarding the need for agencies to improve cyber security (Zero Trust).

Address the following elements:

(a) Whether it is a general support system, major application, or other type of system
SASE is a General Support System (GSS).

(b) System location
The primary location of SASE is in Alexandria, Virginia, with an alternative site in Manassas, Virginia.

(c) Whether it is a standalone system or interconnects with other systems (identifying and describing any other systems to which it interconnects)
SASE interconnects with the following systems:

- **Identity Credential Access Management Identity as a Service (ICAM-IDaaS)**: ICAM-IDaaS is an infrastructure information system that provides authentication and

authorization service to secure all USPTO enterprise applications and provides audit ability to user activity.

- **Security and Compliance Services (SCS):** SCS is a general support system comprised of subsystems that work together to provide enterprise level monitoring to the USPTO.
- **Enterprise Software Services (ESS):** secures PTO Resources by enabling authentication/authorization services through EDS (Enterprise Directory Services).

(d) The way the system operates to achieve the purpose(s) identified in Section 4

The system allows the USPTO to analyze encrypted traffic for malware and policy violations. All Event and Incidents are delivered to USPTO Security Information and Event Management (SIEM) for further analysis and to store incident records as required by law.

(e) How information in the system is retrieved by the user

A select number of Security and Network personnel within USPTO will be given access to an Admin Console (through Single Sign-On (SSO) Authentication with ICAM-IDaaS) to query the data and develop reports and analytics. The data will also be delivered to the Cyber Operations teams through the SIEM.

(f) How information is transmitted to and from the system

Information to and from the system is transported encrypted through Internet Protocol Security (IPSec) tunnels and Generic Routing Encapsulation (GRE) tunnels.

(g) Any information sharing

Logs are sent to QRadar and Splunk in accordance with M-21-31 (Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents).

(h) The specific programmatic authorities (statutes or Executive Orders) for collecting, maintaining, using, and disseminating the information

5 U.S.C. 301 and 35 U.S.C.2

(i) The Federal Information Processing Standards (FIPS) 199 security impact category for the system

Moderate

Section 1: Status of the Information System

1.1 Indicate whether the information system is a new or existing system.

☒ This is a new information system.

☐ This is an existing information system with changes that create new privacy risks. *(Check all that apply.)*

Changes That Create New Privacy Risks (CTCNPR)					
a. Conversions	☐	d. Significant Merging	☐	g. New Interagency Uses	☐
b. Anonymous to Non-Anonymous	☐	e. New Public Access	☐	h. Internal Flow or Collection	☐
c. Significant System Management Changes	☐	f. Commercial Sources	☐	i. Alteration in Character of Data	☐
j. Other changes that create new privacy risks (specify):					

☐ This is an existing information system in which changes do not create new privacy risks, and there is not a SAOP approved Privacy Impact Assessment.

☐ This is an existing information system in which changes do not create new privacy risks, and there is a SAOP approved Privacy Impact Assessment.

Section 2: Information in the System

2.1 Indicate what personally identifiable information (PII)/business identifiable information (BII) is collected, maintained, or disseminated. *(Check all that apply.)*

Identifying Numbers (IN)					
a. Social Security*	☐	f. Driver's License	☐	j. Financial Account	☐
b. Taxpayer ID	☐	g. Passport	☐	k. Financial Transaction	☐
c. Employer ID	☐	h. Alien Registration	☐	l. Vehicle Identifier	☐
d. Employee ID	☐	i. Credit Card	☐	m. Medical Record	☐
e. File/Case ID	☐				
n. Other identifying numbers (specify):					
*Explanation for the business need to collect, maintain, or disseminate the Social Security number, including truncated form:					

General Personal Data (GPD)					
a. Name	☒	h. Date of Birth	☐	o. Financial Information	☐
b. Maiden Name	☐	i. Place of Birth	☐	p. Medical Information	☐
c. Alias	☐	j. Home Address	☐	q. Military Service	☐
d. Gender	☐	k. Telephone Number	☐	r. Criminal Record	☐
e. Age	☐	l. Email Address	☒	s. Marital Status	☐
f. Race/Ethnicity	☐	m. Education	☐	t. Mother's Maiden Name	☐
g. Citizenship	☐	n. Religion	☐		
u. Other general personal data (specify):					

Work-Related Data (WRD)					
a. Occupation	☐	e. Work Email Address	☒	i. Business Associates	☐
b. Job Title	☐	f. Salary	☐	j. Proprietary or Business Information	☐

c. Work Address	☐	g. Work History	☐	k. Procurement/contracting records	☐
d. Work Telephone Number	☐	h. Employment Performance Ratings or other Performance Information	☐		
l. Other work-related data (specify):					

Distinguishing Features/Biometrics (DFB)					
a. Fingerprints	☐	f. Scars, Marks, Tattoos	☐	k. Signatures	☐
b. Palm Prints	☐	g. Hair Color	☐	l. Vascular Scans	☐
c. Voice/Audio Recording	☐	h. Eye Color	☐	m. DNA Sample or Profile	☐
d. Video Recording	☐	i. Height	☐	n. Retina/Iris Scans	☐
e. Photographs	☐	j. Weight	☐	o. Dental Profile	☐
p. Other distinguishing features/biometrics (specify):					

System Administration/Audit Data (SAAD)					
a. User ID	☒	c. Date/Time of Access	☒	e. ID Files Accessed	☒
b. IP Address	☒	f. Queries Run	☒	f. Contents of Files	☐
g. Other system administration/audit data (specify):					

Other Information (specify)

2.2 Indicate sources of the PII/BII in the system. *(Check all that apply.)*

Directly from Individual about Whom the Information Pertains					
In Person	☐	Hard Copy: Mail/Fax	☐	Online	☒
Telephone	☐	Email	☐		
Other (specify):					

Government Sources					
Within the Bureau	☒	Other DOC Bureaus	☐	Other Federal Agencies	☐
State, Local, Tribal	☐	Foreign	☐		
Other (specify):					

Non-government Sources					
Public Organizations	☐	Private Sector	☐	Commercial Data Brokers	☐
Third Party Website or Application			☐		

Other (specify):

2.3 Describe how the accuracy of the information in the system is ensured.

The system is secured using appropriate administrative physical and technical safeguards in accordance with the National Institute of Standards and Technology (NIST) security controls (encryption, access control, and auditing). Mandatory IT awareness and role-based training is required for staff who have access to the system and address how to handle, retain, and dispose of data. All access has role-based restrictions and individuals with privileges have undergone vetting and suitability screening. The USPTO maintains an audit trail and performs random, periodic reviews (quarterly) to identify unauthorized access and changes as part of verifying the integrity of administrative account holder data and roles. Inactive accounts will be deactivated and roles will be deleted from the application.

2.4 Is the information covered by the Paperwork Reduction Act?

☐	Yes, the information is covered by the Paperwork Reduction Act. Provide the OMB control number and the agency number for the collection.
☒	No, the information is not covered by the Paperwork Reduction Act.

2.5 Indicate the technologies used that contain PII/BII in ways that have not been previously deployed. *(Check all that apply.)*

Technologies Used Containing PII/BII Not Previously Deployed (TUCPBNPD)			
Smart Cards	☐	Biometrics	☐
Caller-ID	☐	Personal Identity Verification (PIV) Cards	☐
Other (specify):			

☒	There are not any technologies used that contain PII/BII in ways that have not been previously deployed.

Section 3: System Supported Activities

3.1 Indicate IT system supported activities which raise privacy risks/concerns. *(Check all that apply.)*

Activities

Audio recordings	☐	Building entry readers	☐
Video surveillance	☐	Electronic purchase transactions	☐
Other (specify): Click or tap here to enter text.			

☒	There are not any IT system supported activities which raise privacy risks/concerns.

Section 4: Purpose of the System

4.1 Indicate why the PII/BII in the IT system is being collected, maintained, or disseminated. *(Check all that apply.)*

Purpose			
For a Computer Matching Program	☐	For administering human resources programs	☐
For administrative matters	☒	To promote information sharing initiatives	☐
For litigation	☐	For criminal law enforcement activities	☐
For civil enforcement activities	☐	For intelligence activities	☐
To improve Federal services online	☐	For employee or customer satisfaction	☒
For web measurement and customization technologies (single-session)	☐	For web measurement and customization technologies (multi-session)	☒
Other (specify):			

Section 5: Use of the Information

5.1 In the context of functional areas (business processes, missions, operations, etc.) supported by the IT system, describe how the PII/BII that is collected, maintained, or disseminated will be used. Indicate if the PII/BII identified in Section 2.1 of this document is in reference to a federal employee/contractor, member of the public, foreign national, visitor or other (specify).

User's full name is displayed to Administrators in the Admin settings section to be able to verify a user is correctly synced from Active Directory (AD). The User's Name is not shown on report or traffic data and is only read from AD as a way to distinguish which people are managed by the system (and use a license from the vendor).

User's work email is used as a User ID for all traffic events and incidents captured by the system.

At a maximum a user's personal email may be collected but the SASE solution's DLP capabilities prevent the collection of any other PII. This includes if/when a user accesses their personal work email when using the Government-Furnished Equipment (GFE) device.

5.2 Describe any potential threats to privacy, such as insider threat, as a result of the bureau's/operating unit's use of the information, and controls that the bureau/operating unit has put into place to ensure that the information is handled, retained, and disposed appropriately. (For example: mandatory training for system users regarding appropriate handling of information, automatic purging of information in accordance with the retention schedule, etc.)

In the event of computer failure, insider threats, or attach against the system by adversarial or foreign entities, any potential PII data stored within the system could be exposed. To avoid a breach, the system has certain security controls in place to ensure the information is handled, retained, and disposed of appropriately. Access to individual's PII is controlled through the application, and all personnel who access the data must first authenticate to the system at which time an audit trail is generated when the database is accessed. These audit trails are based on application server out-of-the-box logging reports reviewed by the Information System Security Officer (ISSO) and System Auditor and any suspicious indicators such as browsing will be immediately investigated and appropriate action taken. Also, system users undergo annual mandatory training regarding appropriate handling of information. NIST security controls are in place to ensure that information is handled, retained, and disposed of appropriately. For example, advanced encryption is used to secure the data both during transmission and while stored at rest. Access to individual's PII is controlled through the application and all personnel who access the data must first authenticate to the system at which time an audit trail is generated when the database is accessed. USPTO requires annual security role based training and annual mandatory security awareness procedure training for all employees. All offices of the USPTO adhere to the USPTO Records Management Office's Comprehensive Records Schedule that describes the types of USPTO records and their corresponding disposition authority or citation.

Section 6: Information Sharing and Access

6.1 Indicate with whom the bureau intends to share the PII/BII in the IT system and how the PII/BII will be shared. *(Check all that apply.)*

Recipient	How Information will be Shared		
	Case-by-Case	Bulk Transfer	Direct Access
Within the bureau	☒	☒	☒
DOC bureaus	☐	☐	☐
Federal agencies	☒	☐	☐
State, local, tribal gov't agencies	☐	☐	☐
Public	☐	☐	☐

Private sector	☐	☐	☐
Foreign governments	☐	☐	☐
Foreign entities	☐	☐	☐
Other (specify):	☐	☐	☐

☐	The PII/BII in the system will not be shared.

6.2 Does the DOC bureau/operating unit place a limitation on re-dissemination of PII/BII shared with external agencies/entities?

☒	Yes, the external agency/entity is required to verify with the DOC bureau/operating unit before re-dissemination of PII/BII.
☐	No, the external agency/entity is not required to verify with the DOC bureau/operating unit before re-dissemination of PII/BII.
☐	No, the bureau/operating unit does not share PII/BII with external agencies/entities.

6.3 Indicate whether the IT system connects with or receives information from any other IT systems authorized to process PII and/or BII.

☒	Yes, this IT system connects with or receives information from another IT system(s) authorized to process PII and/or BII. Provide the name of the IT system and describe the technical controls which prevent PII/BII leakage: SASE interconnects with ICAM-IDaaS, SCS, and ESS, which all have PIAs in place. NIST security controls are in place to ensure that information is handled, retained, and disposed of appropriately. For example, advanced encryption is used to secure the data both during transmission and while stored at rest. Access to individual's PII is controlled through the application and all personnel who access the data must first authenticate to the system at which time an audit trail is generated when the database is accessed. USPTO requires annual security role based training and annual mandatory security awareness procedure training for all employees. All offices of the USPTO adhere to the USPTO Records Management Office's Comprehensive Records Schedule that describes the types of USPTO records and their corresponding disposition authority or citation.
☐	No, this IT system does not connect with or receive information from another IT system(s) authorized to process PII and/or BII.

6.4 Identify the class of users who will have access to the IT system and the PII/BII. *(Check all that apply.)*

Class of Users			
General Public	☐	Government Employees	☒
Contractors	☒		
Other (specify):			

Section 7: Notice and Consent

7.1 Indicate whether individuals will be notified if their PII/BII is collected, maintained, or disseminated by the system. *(Check all that apply.)*

☒	Yes, notice is provided pursuant to a system of records notice published in the Federal Register and discussed in Section 9.	
☒	Yes, notice is provided by a Privacy Act statement and/or privacy policy. The Privacy Act statement and/or privacy policy can be found at: https://www.uspto.gov/privacy-policy	
☒	Yes, notice is provided by other means.	Specify how: For employees/contractors notice is provided in the computer banner (see Appendix A).
☐	No, notice is not provided.	Specify why not:

7.2 Indicate whether and how individuals have an opportunity to decline to provide PII/BII.

☐	Yes, individuals have an opportunity to decline to provide PII/BII.	Specify how:
☒	No, individuals do not have an opportunity to decline to provide PII/BII.	Specify why not: Individuals do not have an opportunity to decline to provide PII/BII because it is part of the employment process. They are informed that the use of all Government IT systems will be monitored.

7.3 Indicate whether and how individuals have an opportunity to consent to particular uses of their PII/BII.

☐	Yes, individuals have an opportunity to consent to particular uses of their PII/BII.	Specify how:
☒	No, individuals do not have an opportunity to consent to particular uses of their PII/BII.	Specify why not: Individuals do not have an opportunity to decline to provide PII/BII because it is part of the employment process. They are informed that the use of all Government IT systems will be monitored.

7.4 Indicate whether and how individuals have an opportunity to review/update PII/BII pertaining to them.

☐	Yes, individuals have an opportunity to review/update PII/BII pertaining to them.	
☒	No, individuals do not have an opportunity to review/update PII/BII pertaining to them.	Specify why not: Individuals do not have the opportunity to update their PII/BII pertaining to them per Federal audit requirements.

Section 8: Administrative and Technological Controls

8.1 Indicate the administrative and technological controls for the system. *(Check all that*

apply.)

☒	All users signed a confidentiality agreement or non-disclosure agreement.
☒	All users are subject to a Code of Conduct that includes the requirement for confidentiality.
☒	Staff (employees and contractors) received training on privacy and confidentiality policies and practices.
☒	Access to the PII/BII is restricted to authorized personnel only.
☒	Access to the PII/BII is being monitored, tracked, or recorded. Explanation: The use of Admin console in Netskope generates Audit events that will be reviewed periodically by the ISSO and other Cyber teams (that audit data is delivered to the SIEM and available on the Admin console).
☒	The information is secured in accordance with the Federal Information Security Modernization Act (FISMA) requirements. Provide date of most recent Assessment and Authorization (A&A): 11/9/2023 ☐ This is a new system. The A&A date will be provided when the A&A package is approved.
☒	The Federal Information Processing Standard (FIPS) 199 security impact category for this system is a moderate or higher.
☒	NIST Special Publication (SP) 800-122 and NIST SP 800-53 Revision 4 Appendix J recommended security controls for protecting PII/BII are in place and functioning as intended; or have an approved Plan of Action and Milestones (POA&M).
☒	A security assessment report has been reviewed for the information system and it has been determined that there are no additional privacy risks.
☒	Contractors that have access to the system are subject to information security provisions in their contracts required by DOC policy.
☒	Contracts with customers establish DOC ownership rights over data including PII/BII.
☐	Acceptance of liability for exposure of PII/BII is clearly defined in agreements with customers.
☐	Other (specify):

8.2 Provide a general description of the technologies used to protect PII/BII on the IT system. *(Include data encryption in transit and/or at rest, if applicable).*

PII within the system is secured using appropriate management, operational, and technical safeguards in accordance with NIST requirements. Such management controls include a review process to ensure that management controls are in place and documented in the System Security Privacy Plan (SSPP). The SSPP specifically addresses the management, operational, and technical controls that are in place and planned during the operation of the system. Operational safeguards include restricting access to PII/BII data to a small subset of users. All access has role-based restrictions and individuals with access privileges have undergone vetting and suitability screening. Data is maintained in areas accessible only to authorized personnel. The system maintains an audit trail and the appropriate personnel is alerted when there is suspicious activity. Data is encrypted in transit and at rest.

Section 9: Privacy Act

9.1 Is the PII/BII searchable by a personal identifier (e.g, name or Social Security number)?

☒ Yes, the PII/BII is searchable by a personal identifier.

☐ No, the PII/BII is not searchable by a personal identifier.

9.2 Indicate whether a system of records is being created under the Privacy Act, 5 U.S.C. § 552a. *(A new system of records notice (SORN) is required if the system is not covered by an existing SORN).*

As per the Privacy Act of 1974, "the term 'system of records' means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual."

☒	Yes, this system is covered by an existing system of records notice (SORN). Provide the SORN name, number, and link. *(list all that apply)*: Commerce/Dept 25: Access Control and Identity Management System Commerce/PAT-TM-17: USPTO Security Access Control and Certificate Systems
☐	Yes, a SORN has been submitted to the Department for approval on (date).
☐	No, this system is not a system of records and a SORN is not applicable.

Section 10: Retention of Information

10.1 Indicate whether these records are covered by an approved records control schedule and monitored for compliance. *(Check all that apply.)*

☒	There is an approved record control schedule. Provide the name of the record control schedule: GRS 5.1:020: Non-recordkeeping copies of electronic records GRS 3.2: 020: Computer security incident handling, reporting, and follow-up reports GRS 3.2: 010: System and data security records GRS 3.2:030 and 031: System Access Records
☐	No, there is not an approved record control schedule. Provide the stage in which the project is in developing and submitting a records control schedule:
☒	Yes, retention is monitored for compliance to the schedule.
☐	No, retention is not monitored for compliance to the schedule. Provide explanation: All SaaS data will be delivered to the SIEM and that data will then be governed by the SIEM's retention policies.

10.2 Indicate the disposal method of the PII/BII. *(Check all that apply.)*

Disposal			
Shredding	☐	Overwriting	☒
Degaussing	☒	Deleting	☒
Other (specify):			

Section 11: NIST Special Publication 800-122 PII Confidentiality Impact Level

11.1 Indicate the potential impact that could result to the subject individuals and/or the organization if PII were inappropriately accessed, used, or disclosed. *(The PII Confidentiality Impact Level is not the same, and does not have to be the same, as the Federal Information Processing Standards (FIPS) 199 security impact category.)*

☒	Low – the loss of confidentiality, integrity, or availability could be expected to have a limited adverse effect on organizational operations, organizational assets, or individuals.
☐	Moderate – the loss of confidentiality, integrity, or availability could be expected to have a serious adverse effect on organizational operations, organizational assets, or individuals.
☐	High – the loss of confidentiality, integrity, or availability could be expected to have a severe or catastrophic adverse effect on organizational operations, organizational assets, or individuals.

11.2 Indicate which factors were used to determine the above PII confidentiality impact level. *(Check all that apply.)*

☒	Identifiability	Provide explanation: Name, Work Email, and to a limited extent, personal Email Address (when used as a UserID in non USPTO systems) are collected by the system and could be used to identify individuals..
☒	Quantity of PII	Provide explanation: The quantity of PII ranges in the thousands since it collects user login but the PII is non-sensitive.
☒	Data Field Sensitivity	Provide explanation: Data fields include Name, Work Email, and personal email.
☒	Context of Use	Provide explanation: The purpose of SASE is to enhance USPTO security capabilities for increased security and network resilience and to improve policy enforcement and reduce latency associated with detail security monitoring.
☒	Obligation to Protect Confidentiality	Provide explanation: Vendor is obliged by FedRAMP and USPTO Contract to protect all metadata captured by the system.
☒	Access to and Location of PII	Provide explanation: Role-Based Access restricts access to a limited number of USPTO employees and contractors. All Data are stored in FedRAMP-approved US Data Centers/Cloud locations.
☐	Other:	Provide explanation:

Section 12: Analysis

12.1 Identify and evaluate any potential threats to privacy that exist in light of the information collected or the sources from which the information is collected. Also, describe the choices that the bureau/operating unit made with regard to the type or quantity of information collected and the sources providing the information in order to prevent or mitigate threats to privacy. (For example: If a decision was made to collect less data,

include a discussion of this decision; if it is necessary to obtain information from sources other than the individual, explain why.)

The PII in this system poses a minimal if exposed as it is just the metadata of Network traffic. System users undergo annual mandatory training regarding appropriate handling of information. Physical access to servers is restricted to only a few authorized individuals as verified by FedRAMP continuous monitoring. The Cloud servers storing any potential PII are managed by vendor and follow security protocols agreed to with FedRAMP. Vendor monitors, in real-time, all activities and events within the servers storing the potential PII data and personnel review audit logs received on a regular bases and alert the appropriate personnel including USPTO and DHS when inappropriate or unusual activity is identified.

12.2 Indicate whether the conduct of this PIA results in any required business process changes.

☐	Yes, the conduct of this PIA results in required business process changes. Explanation:
☒	No, the conduct of this PIA does not result in any required business process changes.

12.3 Indicate whether the conduct of this PIA results in any required technology changes.

☐	Yes, the conduct of this PIA results in required technology changes. Explanation:
☒	No, the conduct of this PIA does not result in any required technology changes.

Appendix A


UNITED STATES PATENT AND TRADEMARK OFFICE
DEPARTMENT OF COMMERCE
This is a government computer system and is intended for official and other authorized use only. Unauthorized access or use of the system is prohibited and subject to administrative action, civil, and criminal prosecution under 18 USC 1030. All data contained on this information system may be monitored, intercepted, recorded, read, copied, or captured and disclosed by and to authorized personnel for official purposes, including criminal prosecution. You have no expectations of privacy regarding monitoring of this system. Any use of this computer system signifies consent to monitoring and recording, and compliance with USPTO policies and their terms.