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



Privacy Impact Assessment for the **Legal Document Management System-Cloud (LDMS-C)**

Reviewed by: Henry J. Holcombe, Bureau Chief Privacy Officer

\boxtimes	Concurrence of Senior Ag	gency Official t	for Privacy/DOC	Chief Privacy Officer
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☐ Non-concurrence of Senior Agency Official for Privacy/DOC Chief Privacy Officer

Users, Holcombe, Henry Digitally signed by Users, Holcombe, Henry Date: 2024.02.13 09:43:46 -05'00'

U.S. Department of Commerce Privacy Impact Assessment USPTO Legal Document Management System-Cloud (LDMS-C)

Unique Project Identifier: EBPL-LT-02-00

Introduction: System Description

Provide a brief description of the information system.

The Legal Document Management System-Cloud (LDMS-C) is a commercial Software as a Service (SaaS) implemented with Federal Risk and Authorization Management Program (FedRAMP)- authorized NetDocuments software. This SaaS will support the Office of General Counsel's (OGC) document management requirements as they provide advice to USPTO clients on the full range of federal agency legal issues: fiscal, procurement, rulemaking, administrative law, labor and employment, and information law. The system provides a centralized repository for easy storage, search, and retrieval of documents relating to legal matters.

Address the following elements:

- (a) Whether it is a general support system, major application, or other type of system LDMS-C is FedRAMP-authorized commercial SaaS and minor application.
- (b) System location
 LDMS-C is SaaS hosted in NetDocuments Cloud in Microsoft Azure U.S. Government
 (Virginia and Texas).
- (c) Whether it is a standalone system or interconnects with other systems (identifying and describing any other systems to which it interconnects)
 LDMS-C is hosted in the NetDocuments Cloud in Microsoft Azure U.S. Government Cloud and accessed by users via a web browser. It interconnects with the following systems:

Identity, Credential, and Access Management-Identity as a Service (ICAM-IDaaS): ICAM-IDaaS is the USPTO system by which users are authenticated to enable single sign-on (SSO) to LDMS-C.

PTONet: PTONet provides the common network that connects all USPTO applications and network access for employees, contractors, Public Search Room visitors to applications and systems in information technology (IT)-East and IT-West data centers.

- (d) The way the system operates to achieve the purpose(s) identified in Section 4 LDMS-C is an application located within the NetDocuments Cloud hosted in Microsoft Azure Cloud that will be accessible to the Office of General Law (OGL) to develop a centralized repository of USPTO documents pertaining to legal advice and guidance in support of the USPTO mission. It will enable for efficient document storage, retrieval, search, redaction, versioning, sharing, and knowledge management.
- (e) How information in the system is retrieved by the user LDMS-C is a web application that allows authorized users to access and view information in the system using a web browser.
- (f) How information is transmitted to and from the system LDMS-C users use a web browser to make a Hypertext Transfer Protocol Secure (HTTPS) connection to the web application.
- (g) Any information sharing LDMS-C does not share any information outside of the USPTO.
- (h) The specific programmatic authorities (statutes or Executive Orders) for collecting, maintaining, using, and disseminating the information
 LDMS-C supports OGC and OGL. OGL provides advice and written legal opinions on areas concerning the administration and management of the USPTO. The OGL also represents USPTO in various administrative proceedings. As such, there are several authorizing statutes including but not limited to 5 U.S.C. 301, Federal Rules of Civil Procedures, Freedom of Information Act, Privacy Act, Administrative Procedures Act, Principles of Federal Appropriations Law (Red Book), Federal Advisory Committee Act, Merit System Principles, E.O. 10450, E.O. 11478, E.O. 12107, and E.O. 12564.
- (i) The Federal Information Processing Standards (FIPS) 199 security impact category for the system

 Moderate

Section 1: Status of the Information System

.1	Indicate whether the info	rmatic	n s	ystem is a new or ex	xistin	g system.	
	☐ This is a new information	systen	n.				
	☐ This is an existing informa	ation s	yste	em with changes tha	at crea	ate new privacy risks. (C	Check
	all that apply.)						
	Changes That Create New Pri	ivacy R	isks	(CTCNPR)			
	a. Conversions		d.	Significant Merging		g. New Interagency Uses	
	b. Anonymous to Non-		e.	New Public Access		h. Internal Flow or	

Anonymous			Collection	
c. Significant System		f. Commercial Sources	i. Alteration in Character	
Management Changes			of Data	
j. Other changes that create nev	v priva	cy risks (specify):		

\square This is an existing information system in which changes do not create ne	w privacy risks,
and there is not 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*	\boxtimes	f. Driver's License	\boxtimes	j. Financial Account	\boxtimes
b. TaxpayerID	\boxtimes	g. Passport	\boxtimes	k. Financial Transaction	\boxtimes
c. EmployerID	\boxtimes	h. Alien Registration		l. Vehicle Identifier	
d. Employee ID	\boxtimes	i. Credit Card	\boxtimes	m. Medical Record	\boxtimes
e. File/Case ID	\boxtimes				

n. Other identifying numbers (specify):

Explanation for the business need to collect, maintain, or disseminate the Social Security number, including truncated form:

The LDMS-C is a document repository comprised of emails containing legal advice and attachments from the Office of General Law. The marked categories identified above and below may be included in this system, by virtue of being included in email correspondence, or attached document, that is saved to LDMS-C. The Social Security Number would be incidentally a piece of a record. We estimate that it is rare for any of this private information to be included, but in light of OGC operations that involve employee matters, it is possible.

This system is not used as a primary means for collecting, maintaining, or disseminating any of the data listed in 2.1. The PII/BII that is incidentally contained in these emails is in reference to federal employees, contractors and members of the public.

General Personal Data (GPD)						
a. Name	\boxtimes	h. Date of Birth	\boxtimes	o. Financial Information	\boxtimes	
b. Maiden Name	\boxtimes	i. Place of Birth	\boxtimes	p. Medical Information	\boxtimes	
c. Alias	\boxtimes	j. Home Address	\boxtimes	q. Military Service	\boxtimes	
d. Gender	\boxtimes	k. Telephone Number	\boxtimes	r. CriminalRecord	\boxtimes	
e. Age	\boxtimes	l. Email Address	\boxtimes	s. MaritalStatus	\boxtimes	
f. Race/Ethnicity	\boxtimes	m. Education	\boxtimes	t. Mother's Maiden Name		

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

g. Citizenship	n. Religion					
u. Other general personal data (specify):						
Work Doloted Date (WDD)						
a. Occupation		e. Work Email Address		i. Business Associates	\boxtimes	
b. Job Title		f. Salary	\vdash	j. Proprietary or Business		
		,		Information		
c. Work Address	\boxtimes	g. Work History	\boxtimes	k. Procurement/contracting records	\boxtimes	
d. Work Telephone Number		h. Employment Performance Ratings or other Performance Information				
l. Other work-related data (s	pecify):				
Distinguishing Features/Bio	metric	s(DFR)				
a. Fingerprints		f. Scars, Marks, Tattoos		k. Signatures		
b. Palm Prints		g. HairColor		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 feat						
T8		(-F)).				
System Administration/Aud	it Data					
a. User ID	\boxtimes	c. Date/Time of Access	\boxtimes	e. IDFiles Accessed	\boxtimes	
b. IP Address	\boxtimes	f. Queries Run	\boxtimes	f. Contents of Files		
g. Other system a dministrat	ion/auc	lit data (specify):				
Other Information (specify)						
(4)						
2.2 Indicate sources of the	ne PII/	BII in the system. (Check	all the	at apply.)		
Directly from Individual about Whom the Information Pertains						
In Person		Hard Copy: Mail/Fax		Online		
Telephone		Email	\boxtimes			
Other(specify):						
Government Sources						
Within the Bureau	\boxtimes	Other DOC Bureaus	\boxtimes	Other Federal Agencies	\boxtimes	
			1/\		1/\	

State	e, Local, Tribal	\boxtimes	Foreign					
Othe	r(specify):				•			
Non-	-government Sources							
	ic Organizations	\boxtimes	Private Sector			\boxtimes	Commercial Data Brokers	
Third	l Party Website or Applic					\boxtimes		
Othe	r(specify):							
22 5	S '1 1 4		0.1 . 0	, •	1		. 1	
2.3 I	Describe how the accu	uracy	of the informa	at10	n in the sy	stem	is ensured.	
LDM	(C Cwill follower actable	liah a d .	ana aaga fan myshlig	hin	and deletin	mot	eria ls in the NetDocuments	
							administrative, physical, and	
techi	nical sa feguards in a ccord	ance w	ith the National I	nst	itute of Stan	dards a	and Technology (NIST) and	
							datory IT a wareness and role-ba	
							to handle, retain, and dispose of eve undergone vetting and suital	
scree	en. The USPTO maintains	anau	dit trail and perfo	rms	random, pe	riodic 1	reviews (quarterly) to identify	
							strative account holder data and	
roies	. Inactive accounts are de	acuvai	ed and roles are t	ieie	tea from the	аррис	ation.	
2.4 I	s the information cov	ered 1	by the Panerw	ork	Reduction	n Act	?	
2 1	s the information cov	CI CG	by the ruperw	011	reduction	11 1 100	•	
	Yes, the information is	covere	dby the Paperwo	ork i	Reduction A	ct.		
	Provide the OMB conti						ection.	
\boxtimes	No, the information is n	ot cov	ered by the Pape	rwo	rk Reduction	n Act.		
2.5 Inc	dicate the technologie	es use	d that contain	PII	BII in way	ys tha	t have not been previously	
de	deployed. (Check all that apply.)							
	Technologies Used Containing PII/BII Not Previously Deployed (TUCPBNPD)							
	rt Cards				Biometrics			
Calle	er-ID				PersonalId	dentity	Verification (PIV) Cards	
Othe	r(specify):							
\boxtimes	There are not any techn	ologie	s used that contai	n P	II/BII in way	ys that	have not been previously deploy	yed.
	M Market Marke							

Section 3: System Supported Activities

Activities			
Audio recordings		Building entry readers	
Video surveillance		Electronic purchase transactions	
Other (specify): Click or tap here to enter te	xt.		
☐ There are not any IT system supported a	ctivities v	which raise privacy risks/concerns.	
ection 4: Purpose of the System 1.1 Indicate why the PII/BII in the IT sy (Check all that apply.)	ystem is	s being collected, maintained, or dissemina	ated.
Purpose			
For a Computer Matching Program		For a dministering human resources programs	
For a dministrative matters	\boxtimes	To promote information sharing initiatives	
Forlitigation	\boxtimes	For criminal law enforcement activities	
For civil enforcement activities		For intelligence activities	T
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): ection 5: Use of the Information			
by the IT system, describe how the will be used. Indicate if the PII/BII	PII/BII I identif	s processes, missions, operations, etc.) support that is collected, maintained, or disseminated in Section 2.1 of this document is in , member of the public, foreign national, v	ated
The LDMS-C is a document repository comprion of General Law.	sed of em	nails containing legal advice and attachments from	the

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 a ttack a gainst the system by a dversarial or foreign entities, any potential PII data stored within the system could be exposed or corrupted. To a void a breach, the system has certa in security controls in place to ensure that 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 handing of information. The system is FedRAMP approved and consequently is FIPS 140-3 compliant.

In addition to policies and training, this system may be accessed only by a very limited number of individuals that include attorneys, paralegals, information technology (IT) support staff, and a small number of a dministrative support staff. This population is highly experienced in accessing and protecting private/confidential information in light of the sensitive matters with which OGL regularly works.

LDMS-C has put certain security controls in place to ensure that information is handled, retained, and disposed of appropriately. For example, a dvanced 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 a uthenticate to the system at which time an audit trail is generated when the database is accessed. USPTO requires a nnual security role-based training and annual mandatory security a wareness 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					
Recipient	Case-by-Case	Bulk Transfer	Direct Access			
Within the bureau	\boxtimes					
DOC bureaus						
Federalagencies						
State, local, tribal gov't agencies						
Public						

Foreign entities							
Other(specify):							
The PII/BII in the system will not be sh	nared.						
.2 Does the DOC bureau/operating unit place a limitation on re-dissemination of PII/BII shared with external agencies/entities?							
Yes, the external a gency/entity is requidissemination of PII/BII.	red to verif	y with the l	DOC bureau/operating u	unit before re-			
	-	•	•	ng unit before re-			
•	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 a nother 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: LDMS-C connects with ICAM-IdaaS, which provides authentication and authorization services to all enterprise USPTO applications and information systems. PTONet provides the common network that connects all USPTO applications and network access for employees, contractors, Public Search Room visitors to applications and systems in IT-East and IT-West data centers. LDMS-C has put certain security controls 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 a trest. 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 a cessed. USPTO requires annual security role-based training and annual mandatory security a wareness 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.							
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		Governm	nent Employees (OGL (only)			
Contractors			1 / (- ==				
Other(specify):							

Private sector

Foreign governments

Sectio	on 7: Notice and Consent					
7.1	Indicate whether individuals will be disseminated by the system. (Chec	e notified if their PII/BII is collected, maintained, or ek all that apply.)				
	Yes, notice is provided pursuant to a sys discussed in Section 9.	stem of records notice published in the Federal Register and				
	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:					
	Yes, notice is provided by other means.	Specify how: This system will consist of attorney and paralegal work product that may incidentally contain BII/PII. Any PII and/or BII contained in this system is initially collected and stored in other systems. If and when that happens, employees receive notice of the collection upon collection (through Privacy Act and Paperwork Reduction Act notices).				
	No, notice is not provided.	Specify why not:				
7.2	Indicate whether and how individu	als have an opportunity to decline to provide PII/BII.				
	Yes, individuals have an opportunity to decline to provide PII/BII.	Specify how:				
\boxtimes	No, individuals do not have an opportunity to decline to provide PII/BII.	Specify why not: The system is not set up to collect PII/BII directly from individuals. Any changes required would be the responsibility of the source system.				
7.3	Indicate whether and how individu their PII/BII.	als have an opportunity to consent to particular uses of				
	Yes, individuals have an opportunity to consent to particular uses of their PII/BII.	Specify how:				
\boxtimes	No, individuals do not have an opportunity to consent to particular uses of their PII/BII.	Specify why not: The system is not set up to collect PII/BII directly from individuals. Opportunity to consent would be the responsibility of the source system.				
7.4	Indicate whether and how individu pertaining to them.	als have an opportunity to review/update PII/BII				
	Yes, individuals have an opportunity to review/update PII/BII pertaining to them.	Specify how:				

П	\boxtimes	No, individuals do not have an	Specify why not: The system does not collect PII/BII directly
	_	opportunity to review/update PII/BII	from individuals. Any changes required would be the
		pertaining to them.	responsibility of the source system.

Section 8: Administrative and Technological Controls

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

\boxtimes	All users signed a confidentiality a greement or non-disclosure agreement.
\boxtimes	All users are subject to a Code of Conduct that includes the requirement for confidentiality.
\boxtimes	Staff (employees and contractors) received training on privacy and confidentiality policies and practices.
\boxtimes	Access to the PII/BII is restricted to authorized personnel only.
\boxtimes	Access to the PII/BII is being monitored, tracked, or recorded. Explanation: Audit logs.
\boxtimes	The information is secured in a ccordance with the Federal Information Security Modernization Act (FISMA) requirements. Provide date of most recent Assessment and Authorization (A&A): 9/19/2023
	☐ This is a new system. The A&A date will be provided when the A&A package is approved.
\boxtimes	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 5 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).
\boxtimes	A security assessment report has been reviewed for the information system and it has been determined that there are no additional privacy risks.
\boxtimes	Contractors that have a ccess 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 lia bility for exposure of PII/BII is clearly defined in a greements 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 with in the system is secured using a ppropriate management, operational, and technical sa feguards in a ccordance with NIST and FedRAMP requirements. Such management controls include the life cycle 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 sa feguards include restricting a ccess 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 authorize personnel. The system maintains an audit trail and the appropriate personnel is a lerted when there is suspicious activity. Data is encrypted in transit and at rest.

Sccuon 7. I II vacy Ac	Section	9:	Privacy	Ac
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9.1	.1 Is the PII/BII searchable by a personal identifier (e.g, name or Social Security number			number)?				
	\boxtimes	Yes, the PII/BII is searchable	by a p	ersonal 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."							
\boxtimes		is system is covered by an existing system the SORN name, number, and link.						
	Commerce/Dept-5, Freedom of Information Act and Privacy Act Request Records Commerce/Dept-14, Litigation, Claims, and Administrative Proceeding Records Commerce/Dept-18, Employees Personnel Files Not Covered by Notices of Other Agencies							
	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 applied				RN is not applicable.				
10.1	Indicate	Retention of Information e whether these records are covered for compliance. (Check all		y an approved records control sch	edule and			
There is an approved record control schedule. Provide the name of the record control schedule: GRS 2.5, item 030, Records Documenting Capture of Institutional and Specialized Knowledg 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.				lge				
				dule:				
	No, retention is not monitored for compliance to the schedule. Provide explanation:							
10.2		e the disposal method of the PI	I/BII.	(Check all that apply.)				
	posal edding			Overwriting				
	er (specify	7).		Deleting				
Oth	er (specif	<i>1)</i> .						

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 a vailability could be expected to have a limited adverse
	effect on organizational operations, organizational assets, or individuals.
\boxtimes	Moderate – the loss of confidentiality, integrity, or a vailability could be expected to have a serious
	a dverse effect on organizational operations, organizational assets, or individuals.
	High – the loss of confidentiality, integrity, or a vailability 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: The system contains identifying numbers including sensitive PII; extensive general personal data and workrelated data; several distinguishing features/biometrics; and system a dministration and audit data.
	Quantity of PII	Provide explanation: The quantity of PII will be determined by the amount of legal correspondence that employees determine appropriate for transfer into LDMS-C (as duplicates). PII is incidental and will not be the norm for most of the records in LDMS-C. We estimate that the quantity of records that contain PII will be low and intend to minimize the collection of PII in the system.
	Data Field Sensitivity	Provide explanation: LDMS-C may inadvertently contain PII/BII data. The combination of the data in the fields identified in section 2.1 could together make the data fields more sensitive.
	Context of Use	Provide explanation: LDMS-C is a document repository for exclusive OGL use to disseminate legal guidance and a dvice regarding the USPTO mission to other OGL colleagues.
	Obligation to Protect Confidentiality	Provide explanation: NIST Special Publication (SP) 800-122 and NIST SP 800-53 Revision 5 recommended security controls for protecting PII are in place and functioning as intended; or have an approved Plan of Action and Milestones (POA&M); Privacy Act of 1974.
\boxtimes	Access to and Location of PII	Provide explanation: The data is stored in the Microsoft Azure U.S. Government cloud and is protected by FedRAMP privacy and security controls.
	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.)

System users undergo annual mandatory training regarding appropriate handling of information. Physical access to servers is restricted to only a few authorized individuals. The servers storing the potential PII are located in a highly sensitive zones within the cloud and logical access is segregated with network firewalls and switches through an Access Control list that limits access to only a few approved authorized accounts. USPTO 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 when in appropriate 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:
\boxtimes	No, the conduct of this PIA does not result in any required business process 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.

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