

Security Impact Analysis Worksheet

Date	
Request Number	CMR-
System	

Purpose:

The purpose of this checklist is to develop a set of questions for conducting a Security Impact Analysis (SIA) as required by IT0125-M – *Configuration Management Plan*. This checklist is intended for use as a guide when analyzing Change Requests for potential security risks.

Element	Description
Detailed description of system and change(s), including ALL additions, deletions, and modifications.	
Is the change initiator and/or change implementer aware of any potential security-related issues or challenges associated with the change(s)? If so, describe.	
Known baseline changes (to security configuration baselines)	
Systems and subsystems impacted by change(s)	
Current security categorization of impacted system	

Impact to Controls:

The following section is used to identify the controls that will be impacted through the implementation of the requested change.

Control	Impact	Yes	No
AC	Will change(s) to system effect how the system limits: (i) information system access to authorized users, processes acting on behalf of authorized users or devices (including other information systems); and (ii) the types of transactions and functions that authorized users are permitted to exercise.	<input type="checkbox"/>	<input type="checkbox"/>
Description			
AT	Will change(s) affect required system training to ensure that personnel are adequately trained to carry out their assigned information security-related duties and responsibilities?	<input type="checkbox"/>	<input type="checkbox"/>
Description			
AU	Will change(s) affect how system audit requirements to (i) create, protect, and retain information system audit records to the extent needed to enable the monitoring, analysis, investigation, and reporting of unlawful, unauthorized, or inappropriate information system activity; and (ii) ensure that the actions of individual information system users can be uniquely traced to those users so they can be held accountable for their actions.	<input type="checkbox"/>	<input type="checkbox"/>
Description			
CM	Will change(s) to the system impact the (i) baseline configuration and inventory of organizational information systems; (ii) establishment and enforcement of security configuration settings; and (iii) ability to monitor and control changes to the baseline configurations and to the constituent components of the systems (including hardware, software, firmware, and documentation) throughout the respective system development life cycle.	<input type="checkbox"/>	<input type="checkbox"/>
Description			
CP	Will change (s) to the system impact the (i) contingency plans for emergency response, backup operations, and disaster recovery for organizational information systems (ii) availability of critical information resources and continuity of operations in emergency situations.	<input type="checkbox"/>	<input type="checkbox"/>
Description			
IA	Will change(s) to the system impact how it (i) identifies users, processes acting on behalf of users, or devices; and (ii) authenticates (or verifies) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.	<input type="checkbox"/>	<input type="checkbox"/>
Description			

Impact to Controls continued

Control	Impact	Yes	No
IR	Will change(s) to the system impact the (i) operational incident handling capability for information system, including, detection, analysis, containment, recovery, and user response activities, (ii) the ability to effectively track, document and report incidents to CMS or other external entities.	<input type="checkbox"/>	<input type="checkbox"/>
Description			
MP	Will change(s) to the system impact how (i) information contained in the systems in printed form or on digital media is protected; (ii) access to information in printed form or on digital media removed from the systems is limited to authorized users; and (iii) how digital media is sanitized or destroyed before disposal or release for reuse.	<input type="checkbox"/>	<input type="checkbox"/>
Description			
PE	Will change(s) to the system/system environment change how (i) physical access to information systems, equipment, and the respective operating environments is limited to authorized individuals; (ii) the physical plant and support infrastructure for information systems is protected; (iii) supporting utilities for information systems is provided; (iv) and (v) appropriate environmental controls in facilities are provided.	<input type="checkbox"/>	<input type="checkbox"/>
Description			
SC	Will change(s) to the system effect how (i) communications (i.e., information transmitted or received by organizational information systems) are monitored, controlled, and protected at the external boundaries and key internal boundaries of the information systems; and (ii) architectural designs, software development techniques, and systems engineering principles that promote effective information security are implemented.	<input type="checkbox"/>	<input type="checkbox"/>
Description			
SI	Will change(s) to the system effect how (i) system flaws are identified, reported, and corrected in a timely manner; (ii) malicious code protection is employed; (iii) system events are monitored and detected; (iv) the correct operation of security functions is verified; and (v) information is checked for accuracy, completeness, validity, and authenticity	<input type="checkbox"/>	<input type="checkbox"/>
Description			

Impact to Security:

The following questions are used in order to identify potential security risks prior to hardware and software acquisitions, architecture modifications, code modifications, and/or new code development.

Security Impact Questions	Y	N	NA	Comments/ Explanations
Additional Software: Will additional software be used? If so, what application and version?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IP Addresses: Will additional IP addresses be introduced? If so, what are those addresses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Network Ports: Will new ports, protocols, etc. be opened/created on the system? If so, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Interconnections: Are any new interconnections (internal or external) being introduced? If so, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Authentication Methods: Are authentication methods being added or modified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are credentials encrypted both in transit and at rest?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sensitive Data: Is there sensitive/PII data in PPRD?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the data is sensitive, is it the same as the data in PROD?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the sensitive data encrypted in transit and at rest?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are any new reports, emails, etc. being created that include PII?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do new reports, emails, etc. include provisions and markings to alert the recipient/reader that the information may be sensitive?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Categorization: Will a new information type be processed, stored, or transmitted on the system? If so, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Will the new information type change the categorization of the system? If so, what is the new categorization?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Least Functionality: Will additional functions be performed by the system as a result of the change? If so, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Separation of Duty: To address least privilege access, will the users have access to only those functions and data required to perform their job responsibilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there any combination of duties / access to be granted that violates segregation of duties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Will access be removed as soon as it is no longer needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is any data stored on removable media?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has appropriate documentation been updated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Results and Recommendations:

Summary of Security Impact
Primary Proposed Solution
Alternate Proposed Solution

Recommendation(s)	Approval
	<input type="checkbox"/> Approved <input type="checkbox"/> Not Approved <input type="checkbox"/> Return for Additional information