

Nuclear Regulatory Commission Computer Security Office Computer Security Template

Office Instruction: CSO-TEMP-0052

Office Instruction Title: System Cybersecurity Coordination Process for New Systems and System Changes - Final Architecture and Design Template

Revision Number: 1.0

Effective Date: March 31, 2015

Primary Contacts: Kathy Lyons-Burke, SITSO

Responsible Organization: CSO/PCT

Summary of Changes: CSO-TEMP-0052, "System Cybersecurity Coordination Process for New Systems and System Changes - Final Architecture and Design Template" provides the template that must be used to provide the final architecture and design information for new systems and system changes. This template simply adds to the information provided in CSO-TEMP-0051, "System Cybersecurity Coordination Process for New Systems and System Changes - Initial Architecture and Design Template"

Training: Upon Request

ADAMS Accession No.: ML14307A618

Concurrences			
Primary Office Owner	Policy, Standards, and Training		
Responsible SITSO	Kathy Lyons-Burke		Date of Concurrence
Directors	CSO	Thomas Rich (J Feibus for) /RA/	20-Nov-14
Other Stakeholders	PCT	Kathy Lyons-Burke /RA/	20-Nov-14
	CSA	Thorne Graham	

Concurrence Meeting Conducted on 20-Nov-14			
Attendees:	Jon Feibus	Kathy Lyons-Burke	

Computer Security Template

CSO-TEMP-0052

System Cybersecurity Coordination Process for New Systems and System Changes - Final
Architecture and Design Template

1 PURPOSE

The purpose of CSO-TEMP-0052, "System Cybersecurity Coordination Process for New Systems and System Changes - Final Architecture and Design Template" is to provide the template that must be used to provide information for new systems and system changes that is relevant to the initial architecture and design.

The template instructions and all explanatory information up through the change history table apply to the template only. The template instructions and explanatory information must be removed before completing and submitting the information identified in this template.

2 TEMPLATE INSTRUCTIONS

The template sections are completed by the project manager for the new system or system change in coordination with the system Information System Security Officer (ISSO) and the system owner in accordance with CSO-PROS-1321, "System Cybersecurity Coordination Process for New Systems and System Changes." Information in <blue> in the template is replaced with the required information and the font color returned to black before submitting the authorization form.

This template contains a lot of the same information requested in CSO-TEMP-0051, "System Cybersecurity Coordination Process for New Systems and System Changes - Initial Architecture and Design Template." The information provided previously using CSO-TEMP-0051 is updated and more comprehensive at this stage of the project.

If the required information exists in another document that is readily available and the information is recognizable as the information that is requested, the section can simply refer to the document accession number and document title of the document in the Agencywide Documents Access and Management System (ADAMS).

The name of the project is provided wherever <Project Name> is shown.

The name of the system is provided wherever <System Name> is shown.

The system acronym is placed wherever <System Acronym> is shown.

If this project is for a subsystem of the system, the name of the subsystem is provided wherever <Subsystem Name> is shown, and the subsystem acronym is placed wherever <Subsystem Acronym> is shown.

The date the document was finalized (do **not** set to auto-update) is provided where <Date of Document> is shown in the format: Month Day, Year.

All identified changes must include both the “from” and “to” state.

2.1 Initial Text

If the project is to develop a new system, the following text is used and the alternate text is deleted:

[This is a new system development effort that is named <System Name> (<System Acronym>) and has an Enterprise Architecture Identifier of <EA-ID>

If the project is to modify a system or subsystem, the following text is used and the alternate text is deleted:

<System Name> (<System Acronym>)/<Subsystem Name> (<Subsystem Acronym>)], with an Enterprise Architecture Identifier of <EA-ID> is being changed.

The NRC assigned enterprise architecture identifier assigned to the system is provided where <EA-ID> is shown.

If the modification is to the system and not just to a subsystem, the subsystem reference is removed.

2.2 Description of Business Need

A full description of the business need that is implementation independent is provided where {Full description of business need that requires this project.} is shown.

Example:

The Office of Research (RES) must move out of their current location in Church Street back to the White Flint Headquarters (HQ) complex by May 2015. They currently have a High Performance Computing (HPC) system that will be relocating with them and must be moved by May 2015.

2.3 Project Vision

A description of the vision associated with the project is provided where {Vision for project} is shown. The vision includes the following information, at a high level:

- Short logical summary of the solution
- what does it do
- what does it interact with and how
- description of data to be processed
- security categorization or modification of system security categorization
- what equipment will be required
- What are the types of users
- how will each type of user use it
- what is the approximate time frame

- development project plan time frame to include milestones
- benefit of change

Example:

The RES HPC system must be moved to the 3WFN Data Center as NRC HQ offices are consolidated into the HQ complex. This must occur no later than May 2016.

There are two possible paths toward moving the RES HPC system to 3WFN. Both of the following plans will begin simultaneously. Only one plan will be implemented. A go, no-go date for each will be determined early. The project will be completed by the end of May 2015.

Plan A: Move RES HPC equipment to the 3WFN Data Center. Provide necessary infrastructure and IT services to preserve RES current HPC capabilities. HPC will run on its own power independent from the NRC network power. HPC will run on its own physically separated network.

Plan B: Move RES HPC equipment to the TWFN Data Center by May 2015. Provide necessary infrastructure and IT services to preserve RES current HPC capabilities. HPC will run on its own power independent from the NRC network power. HPC will run on its own physically separated network. RES HPC will be moved to the 3WFN Data Center by May 2016.

2.4 Impacted Systems

Provide information regarding other systems that may be impacted by the project in Table 1. If no other systems are impacted by the project, place N/A in all 3 columns of the first row and delete the remaining rows.

If other systems will or may be impacted by the project (including the need to add bandwidth, change firewall rules, etc.), add the following information to Table 1:

- The full system name of each impacted system where [<System Name>](#) is shown.
- The acronym of each impacted system where [<System Acronym>](#) is shown.
- The anticipated impact to the system due to project implementation where [<impact>](#) is shown.

2.5 Project Scope

A description of the full scope of the project that clearly defines items that are in and out of scope is provided where [{Project Scope}](#) is shown.

Example:

This is a Fixed-Price Contract. Contractor commitment estimate is U.S. \$750,000.00. Upon completion, the new property will include the following as described in the detailed specifications and blueprint:

- Landscaping
- Foundation (with basement)—poured concrete and concrete block

- Driveway—2000 feet, concrete with brick inlay
- Main home—4500 square feet, brick/stucco
- Deck / Patio / Screen Room
- Garage—1600 square feet, two story

2.6 Points of Contact

Provide point of contact information for all roles pertinent to the project. The roles identified in the table are required. Additional roles can be added where those roles are important to understand the project.

The name of the individual with the role is provided where [<full name>](#) is shown in the format of last name, first name middle initial.

The organization where the individual with the role resides is provided where [<organization>](#) is shown in the format of office or region/division/branch.

The telephone number of the individual with the role is provided where [<nnn-nnn-nnnn>](#) is shown.

The email address of the individual with the role is provided where [<name@nrc.gov>](#) is shown.

Primary and alternate ISSO and system owner information for impacted systems are included in this table.

2.7 Stakeholders

This section identifies all individuals that have a reason why they need to know about the project. For example, if the project provides information to licensees, they would be a stakeholder.

The type of stakeholder and the stakeholder organization (where appropriate) are provided where [<stakeholder type>](#) is shown. For example, if the stakeholder type is licensees or system administrators, no organization is required. However, if the stakeholder is reactor license reviewers, the organization associated with individuals in NRC that review reactor licenses is provided.

The reason why the stakeholder is a stakeholder is provided where [<stakeholder reason>](#) is shown.

2.8 Users

Users of the result of the project are captured by role in this section in Table 3. A row is entered for each unique combination of user role, user access type, and user function.

The user role (e.g., system administrator, approver, data input) is entered where [<user role>](#) is shown.

The method of access the user uses, including whether the access is remote or local, is provided where [<user access type>](#) is shown.

The function the user performs using the access type is provided where [<user function>](#) is shown.

2.9 Change Significance

If the project is for a new system, the following text is used:

This is a new system, so the change significance is significant, requiring a full system authorization.

If the project is a change to an existing system, the following text is used:

The accession number of the change significance determination memo from the PCT SITSO is: [<accession number>](#).

The accession number of the change significance determination memo from the PCT SITSO is provided where [<accession number>](#) is shown.

2.10 Functional Business Requirements

Implementation independent functional business requirements are provided where [<implementation independent functional business requirement>](#) are shown. All functional business requirements are provided.

2.11 Cybersecurity Requirements

In many cases, the project has known cybersecurity requirements that must be met. Any of these cybersecurity requirements are provided where [<implementation independent cybersecurity requirement>](#) is shown.

CSO will provide additional cybersecurity requirements as the scope of the project is better understood.

2.12 New Technology Identification

All technologies that are expected to be part of the project should be in the NRC Technical Reference Model.

Any technologies that are not currently deployed in the NRC operational environment are listed in the table. For each product:

- The name of the product to be used is provided where [<product name>](#) is shown.
- The version of the product to be used is provided where [<version>](#) is shown.
- The vendor of the product to be used is provided where [<vendor>](#) is shown.
- A “yes” is placed in the “In TRM?” column if the product is currently in the TRM approved for this purpose. If it is not, a “no” is placed in that column.
- The security standards that apply to the product to be used are provided where [<security standard>](#) is shown.

2.13 Project Description

The expected contribution to the NRC mission as a result of the project is provided where [<mission support description>](#) is shown.

Select from the list of possible users and place all that apply where [\[NRC Staff, NRC Contractors, <Agency Name>, licensees, <other>\]](#) is shown.

The names of any other agencies that are expected to use the results of the project are provided where [<Agency Name>](#) is shown.

The identification of any other users not listed is provided where [<other>](#) is shown.

If the project is a change to a system, the following text is used:

The change proposed for [<System Acronym>](#) is [<proposed change>](#).

The reason for the proposed change is [<rationale>](#).

The desired impact of the proposed change is [<impact>.](#)}

A description of the proposed change to the system is provided where [<proposed change>](#) is shown.

The reason why the change is being made is provided where [<rationale>](#) is shown.

2.14 Boundary

If this is a new system, provide one system diagram and use the text: This is a new system, and the system diagram is shown in figure 1.

If this is a change to a system, and the system boundary does not change as a result of the project, provide one system diagram and use the text: There are no changes to the [<System Acronym>](#) system boundary, and the system diagram is shown in figure 1.

If this is a change to a system, and the system boundary changes as a result of the project, provide both a before and after system diagram and use the text: The boundary of [<System Acronym>](#) is being changed to include [<list of new inclusions>](#) and to exclude [<list of exclusions>](#). The current system diagram is shown in figure 1 and the proposed change is shown in figure 2.

2.15 Hardware and Software

If the project is for a new system, the following text is used:

[<System Acronym>](#) hardware includes the following:

- [<hardware>](#), [<TRM Reference>](#)
- [<hardware>](#), [<TRM Reference>](#)

[<System Acronym>](#) software includes the following:

- [<software>](#), [<TRM Reference>](#)

- [<software>](#), [<TRM Reference>](#)

Each hardware type that is part of the project is provided where [<hardware>](#) is shown. The hardware type must include the brand and model.

The specific reference in the TRM where the item is approved for NRC use for this purpose along with the description of the specific use approved is provided where [<TRM Reference>](#) is shown. For example, TRM reference 2.15 is for Integrator forProject and this Server Software product is approved for use. The TRM reference for this is provided as: TRM reference 2.15, server software, approved for use on servers in the NRC environment.

Each software type that is part of the project is provided where [<software>](#) is shown. The software type must include the name, version, and vendor.

If the project is for an existing system and there aren't any hardware or software changes, the following text is used: There are no changes to the system hardware or software.

If the project is for an existing system and there are hardware or software changes, the following text is used:

[<System Acronym>](#) hardware is being modified in the following way:

- [<hardware modification>](#)
- [<hardware modification>](#)

[<System Acronym>](#) software is being modified in the following way:

- [<software modification>](#)
- [<software modification>](#)

Each hardware modification that is part of the project is provided where [<hardware modification>](#) is shown.

Each software modification that is part of the project is provided where [<software modification >](#) is shown.

2.16 Cybersecurity Controls

Cybersecurity controls are important in protecting the confidentiality, integrity, and availability of the system. A minimal set of required controls is available in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53, "Security and Privacy Controls for Federal Information Systems and Organizations."

If the project is for a new system, the following text is used:

The following cybersecurity controls will be part of the new system:

- [<Cybersecurity control>](#)
- [<Cybersecurity control>](#)

Each project cybersecurity control is provided where <Cybersecurity control> is shown.

If the project is for an existing system and there aren't any cybersecurity control changes, the following text is used: There are no changes to the system cybersecurity controls.

If the project is for an existing system and there are cybersecurity control changes, the following text is used:

The following cybersecurity control changes are part of the proposed change:

- <Cybersecurity control change>
- <Cybersecurity control change>

Each project cybersecurity control that will change as a result of the project is provided where <Cybersecurity control change> is shown.

2.17 Ports, Protocols, and Services

The following information related to the network ports, protocols, and services (NPPS), used in the system is important to understand how the project will be used and how the project implementation will interact with other parts of the system and other systems:

- **NPPS:** Each network port, protocol, and service
- **Purpose:** The purpose for the NPPS (e.g., the purpose for the PPS of the Secure Shell [SSH] service using the Transmission Control Protocol [TCP] on port 22 could be remote administration).
- **Associated Networks & Direction of Communication:** The network(s) associated with the system and interconnected systems defined within CSO-STD-4000, "Network Infrastructure Standard," where network communication for the identified NPPS occurs within or traverses (whether ingress, egress, or both). If the communication occurs between the system and an interconnected system, the interconnected system must also be identified.

Example:

Consider the scenario of an external web server using the Hypertext Transfer Protocol (HTTP) network service (using TCP over port 80) used by the general public. The following information provides an example of the associated information that could be provided for that specific NPPS in a system (among all NPPS in use within the system):

- NPPS:
 - Port: 80
 - Protocol: TCP
 - Service: HTTP
- Purpose: Supports user access to the system web application.
- Associated Networks & Direction of Communication: Ingress traffic from the Internet, which is identified as an external network in CSO-STD-4000, to the system DMZ.

The following table provides an example row:

Port	Protocol	Service	Purpose	Associated Networks & Direction of Communication
80	TCP	HTTP	Supports user access to the system web application.	Ingress traffic from the Internet, which is identified as an external network in CSO-STD-4000, to the system DMZ.

If the project is for a new system, Table 6 is not used, the following text is used, and the text [Current] is not used and is deleted from the Table 5 title:

Table 5 identifies the ports, protocols, and services that are used in the new system.

Each port, protocol, and service that are part of the new system are provided where <port>, <protocol> and <service> are shown in Table 5, and the Associated Networks & Direction of Communication for each is provided where <associated_nets&comm_direction> is shown.

If the project is for an existing system and there aren't any ports, protocols, or services, the following text is used: <Project Name> does not change any ports, protocols, or services for any system.

If the project is for an existing system and there are ports, protocols, or services changes, the following text is used:

Table 5 identifies the ports, protocols, and services that are currently used in the system and Table 6 identifies the changes to those ports, protocols, and services as a result of <Project Name>. The text [Current] is used in the Table 5 title with the brackets removed. The ports, protocol, and service information for the system before implementation of the project are provided in Table 5 and the ports, protocol, and service information that will be in place after project implementation is provided in Table 6.

2.18 Physical Environment and Location

If the project is for a new system, the following text is used:

The following system physical environments and locations are part of the project:

- <Physical environment or location>
- <Physical environment or location>

A description of the physical environment and location for the system along with the portions of the system that reside in each is provided where <Physical environment or location> is shown.

If the project is for an existing system and there aren't any physical environment or location changes, the following text is used: There are no changes to the system physical environment or location.

If the project is for an existing system and there are physical environment or location changes, the following text is used:

The following changes to the system physical environment and location are part of the proposed change:

- <Physical environment or location change>
- <Physical environment or location change>

A description of the changes to the physical environment and location for the system along with the portions of the system that reside in each is provided where <Physical environment or location change> is shown.

2.19 Interconnections

All interconnections related to the project must be provided in this section. Any system for which there is an interconnection that is new or has changed must be listed in the impacted systems section of the document.

If the project is for a new system, Table 8 is not used, the following text is used, and the text [Current] is not used and is deleted from the Table 7 title:

Table 7 identifies the ports, protocols, and services that are used in the new system.

Each interconnection that is part of the new system is identified in a separate row in Table 7. The system acronym for the source and destination system of the interconnection are provided in the first 2 columns where <system acronym> is shown. The information types flowing across the interconnection are provided where <information type> is shown. The purpose of the interconnection is provided where <Connection_purpose> is shown. . The type of connection (see CSO-STD-4000 to network type identification) is provided where <connection type> is shown.

If the project is for an existing system and there aren't any interconnection changes, the following text is used: <Project Name> does not change any interconnections for any system.

If the project is for an existing system and there are interconnection changes, the following text is used:

Table 7 identifies the interconnections that are currently used in the system and Table 8 identifies the changes to those interconnections as a result of <Project Name>]. The text [Current] is used in the Table 7 title with the brackets removed. The ports, protocol, and service information for the system before implementation of the project are provided in Table 5 and the ports, protocol, and service information that will be in place after project implementation is provided in Table 8.

2.20 Information Type and Sensitivity

If the project is for a new system, the following text is used:

The information types and information sensitivity for the new system include the following:

- <information type and information sensitivity>

- [<information type and information sensitivity>](#)

Each information type and the confidentiality, integrity, and availability sensitivity is provided where [<information type and information sensitivity>](#) is shown. The information type is shown followed by “(Confidentiality [<low, moderate, high>](#); Integrity [<low, moderate, high>](#); Availability [<low, moderate, high>](#))” where the appropriate sensitivity level is selected.

If the project is for an existing system and no information types or information sensitivity changes exist, the following text is used: There are no changes to the system information types and information sensitivity.

If the project is for an existing system and there are information types and information sensitivity changes, the following text is used:

The following changes to the system information types or information sensitivity are part of the proposed change:

- [<information type and information sensitivity change>](#)
- [<information type and information sensitivity change>](#)

Each information type and the confidentiality, integrity, and availability sensitivity is provided where [<information type and information sensitivity>](#) is shown. The information type is shown followed by “(Confidentiality [<low, moderate, high>](#); Integrity [<low, moderate, high>](#); Availability [<low, moderate, high>](#))” where the appropriate sensitivity level is selected.

2.21 System Functionality

If the project is for a new system, the following text is used:

The new system will meet the functionality requirements identified in Section 2.7.

If the project is for an existing system and there aren't any system functionality changes, the following text is used: There are no changes to the system functionality.

If the project is for an existing system and there are system functionality changes, the following text is used:

The following changes to the system functionality are part of the proposed change:

- [<system functionality change>](#)
- [<system functionality change>](#)

Each change to system functionality is provided where [<system functionality change>](#) is shown.

2.22 System Access Method

If the project is for a new system, the following text is used:

The system access methods for the new system include the following:

- [<system access method>](#)

- [<system access method>](#)

Each access method that can be used to gain access to the system (including access methods for user access and device access) are provided where [<system access method>](#) is shown. The access method description must indicate which types of devices or users can gain access using the method.

If the project is for an existing system and there aren't any access method changes, the following text is used: There are no changes to the system access methods.

If the project is for an existing system and there are access method changes, the following text is used:

The following changes to the system access methods are part of the proposed change:

- [<system access method change>](#)
- [<system access method change>](#)

Each access method that can be used to gain access to the system (including access methods for user access and device access) are provided where [<system access method change>](#) is shown. The access method description must indicate which types of devices or users can gain access using the method.

2.23 System Requirements

If the project is for a new system, the following text is used:

The system requirements for the new system are provided in Section 5.

If the project is for an existing system, the following text is used:

The following changes to the system requirements are part of the proposed change:

- [<system requirements change>](#)
- [<system requirements change>](#)

A description of each change to a system requirement is provided where [<system requirements change>](#) is shown.

2.24 Rules of Behavior

If the new or changed system does not have a system-specific rules of behavior, the following text is used:

The system does not have system-specific rules of behavior.

If the project is for a new system with system-specific rules of behavior, the following text is used:

The new system has the following system-specific rules of behavior:

- <system-specific rule of behavior>
- <system-specific rule of behavior>

Each system-specific rules of behavior is placed where <system-specific rule of behavior> is shown.

If the project is for an existing system and there aren't any system-specific rules of behavior changes, the following text is used: There are no changes to the system-specific rules of behavior.

If the project is for an existing system and there are system-specific rules of behavior changes, the following text is used:

The project requires the following changes to the system-specific rules of behavior:

- <system-specific rule of behavior change>
- <system-specific rule of behavior change>

Each change to a system-specific rule of behavior is placed where <system-specific rule of behavior change> is shown.

2.25 Risk Analysis

The risk analysis is performed in accordance with NIST SP 800-37, "Guide for Applying the Risk Management Framework to Federal Information Systems."

The risk analysis for the project is placed where {initial project risk analysis} is shown.

2.26 Trade-Off Analysis

The product trade-off analysis for the project is provided where {product trade-off analysis} is shown. This enables CSO to propose an alternative should a significant cybersecurity risk be identified for a proposed product.

2.27 Project Plan

The project plan for development through deployment that includes cybersecurity touch points is provided where {project plan} is shown. The plan must include testing and authorization dates.

2.28 Architecture and Design

The accession number for the final project architecture and design document is provided where <accession number> is shown.

2.29 Assets

The project may interface or change assets that are in the operational environment. Table 9 provides information about assets that may be impacted in some way by deployment of this project.

Any asset that could be impacted by the project must be identified in the table.

Each asset is declared to be part of a system boundary. The acronym of that system is provided where <System Acronym> is shown.

The name of the asset is provided where <asset name> is shown and the asset unique identifier is provided where <unique identifier> is shown.

The type of asset is provided where <type> is shown.

The region (i.e., HQ, RI, RII, RIII, RIV, TTC), building, and room number are provided where <location> is shown in the format region/building/room.

The manner in which the asset is impacted by the project is provided where <asset impact> is shown.

2.30 Cybersecurity Plan

The plan for the project to ensure cybersecurity is placed into ADAMS. The accession number for the plan is provided where <accession number> is shown.

The plan includes that standard operating procedure, the concept of operations, and addresses how cybersecurity will be maintained at an acceptable level, including staffing and funding.

2.31 Implementation Plan

The project implementation plan for the project is placed into ADAMS. The accession number for the draft is provided where <accession number> is shown.

2.32 Deviations

Some projects have expected deviation requests. If the project does not have any, the following text is used and the table deleted:

This project does not anticipate any deviations.

Otherwise, Table 10 is used to identify all anticipated deviations that will be requested for the project.

The requirement where there is an expected deviation is provided where <requirement> is shown.

The deviation that will be requested is provided where <requested deviation> is shown.

The rationale for why a deviation should be granted is provided where <rationale> is shown.

2.33 System Security Plan

The security plan for each system impacted by the project is placed into ADAMS. The accession number for the plan is provided where <accession number> is shown, and the sentence is repeated for each impacted system.

2.34 System Contingency Plan

The contingency plan for each system impact by the project is placed into ADAMS. The accession number for the plan is provided where <accession number> is shown, and the sentence is repeated for each impacted system.

Attachment

System Cybersecurity Coordination Process for New Systems and System Changes - Final Architecture and Design Template

System Cybersecurity Coordination for <Project Name> Final Architecture and Design

[This is a new system development effort that is named <System Name> (<System Acronym>) and has an Enterprise Architecture Identifier of <EA-ID>. or

<System Name> (<System Acronym>)/<Subsystem Name> (<Subsystem Acronym>)], with an Enterprise Architecture Identifier of <EA-ID> is being changed.

1 DESCRIPTION OF BUSINESS NEED

{Full description of business need that requires this project.}

2 PROJECT VISION

{Vision for project}

3 IMPACTED SYSTEMS

Table 1 identifies other systems that are expected to be impacted by the project.

Table 1: <Project Name> Impacts to Other Systems

System Name	System Acronym	Anticipated Impact
<System Name>	<System Acronym>	<impact>
<System Name>	<System Acronym>	<impact>
<System Name>	<System Acronym>	<impact>
<System Name>	<System Acronym>	<impact>
<System Name>	<System Acronym>	<impact>

4 POINTS OF CONTACT

Table 2 provides the points of contact for <project name>.

Table 2: <Project Name> Points of Contact

Role	Name	Organization	Telephone	Email
System Owner	<full name>	<organization>	<nnn-nnn-nnnn>	<name@nrc.gov>
<impacted system acronym> System Owner	<full name>	<organization>	<nnn-nnn-nnnn>	<name@nrc.gov>
System ISSO -	<full name>	<organization>	<nnn-nnn-nnnn>	<name@nrc.gov>

Table 2: <Project Name> Points of Contact

Role	Name	Organization	Telephone	Email
Primary System ISSO - Alternate	<full name>	<organization>	<nnn-nnn-nnnn>	<name@nrc.gov>
Project Manager	<full name>	<organization>	<nnn-nnn-nnnn>	<name@nrc.gov>
Information Owner - <information type>	<full name>	<organization>	<nnn-nnn-nnnn>	<name@nrc.gov>
<impacted system acronym> ISSO - Primary	<full name>	<organization>	<nnn-nnn-nnnn>	<name@nrc.gov>
<impacted system acronym> ISSO - Alternate	<full name>	<organization>	<nnn-nnn-nnnn>	<name@nrc.gov>

5 PROJECT SCOPE

{Project Scope}

6 STAKEHOLDERS

The following organizations are stakeholders in the project:

- <stakeholder type>, <stakeholder reason>
- <stakeholder type>, <stakeholder reason>

7 USERS

Table 3 identifies the user types for the system.

Table 3: <Project Name> Users

User Role	User Access Type	User Function
<user role>	<user access type>	<user function>
<user role>	<user access type>	<user function>
<user role>	<user access type>	<user function>
<user role>	<user access type>	<user function>
<user role>	<user access type>	<user function>
<user role>	<user access type>	<user function>
<user role>	<user access type>	<user function>

8 CHANGE SIGNIFICANCE

[This is a new system, so the change significance is significant, requiring a full system authorization.

or

The accession number of the change significance determination memo from the PCT SITSO is: <accession number>.]

9 REQUIREMENTS

The following sections provide the functional business requirements and the cybersecurity requirements for the project.

9.1 Functional Business Requirements

<Project Name> has the following implementation independent functional business requirements:

- 1) <implementation independent functional business requirement>
- 2) <implementation independent functional business requirement>
- 3) <implementation independent functional business requirement>

9.2 Cybersecurity Requirements

<Project Name> has the following implementation independent cybersecurity requirements that are known by the project team:

- 1) <implementation independent cybersecurity requirement>
- 2) <implementation independent cybersecurity requirement>
- 3) <implementation independent cybersecurity requirement>

Additional cybersecurity requirements will be provided by the Computer Security Office (CSO) Points of Contact (POCs).

10 NEW TECHNOLOGY IDENTIFICATION

<Project Name> includes the new technologies identified in **Table 4**.

Table 4: <Project Name> New Technologies

Product Name	Product Version	Product Vendor	In TRM?	Known Product Security Standard
<product name>	<version>	<vendor>	[yes, no]	<security standard>
<product name>	<version>	<vendor>	[yes, no]	<security standard>
<product name>	<version>	<vendor>	[yes,	<security standard>

Table 4: <Project Name> New Technologies

Product Name	Product Version	Product Vendor	In TRM?	Known Product Security Standard
<product name>	<version>	<vendor>	no [yes, no]	<security standard>
<product name>	<version>	<vendor>	[yes, no]	<security standard>

11 <PROJECT NAME> DESCRIPTION

The purpose of <Project Name> is to provide NRC with <mission support description>. The system is used by [NRC Staff, NRC Contractors, <Agency Name>, licensees, <other>]

{The change proposed for <System Acronym> is <proposed change>.

The reason for the proposed change is <rationale>.

The desired impact of the proposed change is <impact>.

12 <PROJECT NAME> BOUNDARY

[There are no changes to the <System Acronym> system boundary. or

The boundary of <System Acronym> is being changed to include <list of new inclusions> and to exclude <list of exclusions>. or

This is a new system.]

<before system diagram>

<after system diagram>

13 HARDWARE AND SOFTWARE

[There are no changes to the system hardware or software or

<System Acronym> hardware is being modified in the following way:

- <hardware modification>, <TRM Reference>
- <hardware modification>, <TRM Reference>

<System Acronym> software is being modified in the following way:

- <software modification>, <TRM Reference>
- <software modification>, <TRM Reference>

Or

<System Acronym> hardware includes the following:

- <hardware>, <TRM Reference>
- <hardware>, <TRM Reference>

<System Acronym> software includes the following:

- <software modification>, <TRM Reference>
- <software modification>, <TRM Reference>

]

14 CYBERSECURITY CONTROLS

[There are no changes to the system cybersecurity controls or

The following cybersecurity control changes are part of the proposed change:

- <Cybersecurity control change>
- <Cybersecurity control change>

or

The following cybersecurity controls will be part of the new system:

- <Cybersecurity control>
- <Cybersecurity control>

]

15 PORTS, PROTOCOLS, AND SERVICES

[Table 5 identifies the ports, protocols, and services that are used in the new system.

or

<Project Name> does not change any ports, protocols, or services for any system.

or

Table 5 identifies the ports, protocols, and services that are currently used in the system and Table 6 identifies the changes to those ports, protocols, and services as a result of <Project Name>]

Table 5: <Project Name> [Current] Ports, Protocols, and Services

Port	Protocol	Service	Purpose	Associated Networks & Direction of Communication
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>

Table 5: <Project Name> [Current] Ports, Protocols, and Services

Port	Protocol	Service	Purpose	Associated Networks & Direction of Communication
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>

Table 6: <Project Name> [Changed] Ports, Protocols, and Services

Port	Protocol	Service	Purpose	Associated Networks & Direction of Communication
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>
<port>	<protocol>	<service>	<PPS_purpose>	<associated_nets&comm_direction>

16 PHYSICAL ENVIRONMENT AND LOCATION

[The intended physical environment and location of the new system includes the following:

- <physical environment and location>
- <physical environment and location> or

There are no changes to the system environment or location or

The following changes to the system physical environment and location are part of the proposed change:

- <Physical environment or location change>
- <Physical environment or location change>]

17 INTERCONNECTIONS

[The interconnections for the new system include the following:

- <interconnection>
- <interconnection> or

There are no changes to the system interconnections.

or

[Table 7 identifies the interconnections that are used in the new system.

or

<Project Name> does not change any interconnections for any system.

or

Table 7 identifies the interconnections that are currently used in the system and Table 6 identifies the changes to interconnections as a result of <Project Name>]

Table 7: <Project Name> [Current] Interconnections

Source	Destination	Information Type(s)	Purpose	Connection Type
<system acronym>	<system acronym>	<information type>	<Connection_purpose>	<connection type>
<system acronym>	<system acronym>	<information type>	<Connection_purpose>	<connection type>
<system acronym>	<system acronym>	<information type>	<Connection_purpose>	<connection type>
<system acronym>	<system acronym>	<information type>	<Connection_purpose>	<connection type>
<system acronym>	<system acronym>	<connection type>	<Connection_purpose>	<connection type>

Table 8: <Project Name> Changed Interconnections

Source	Destination	Information Type(s)	Purpose	Connection Type
<system acronym>	<system acronym>	<connection type>	<Connection_purpose>	<connection type>
<system acronym>	<system acronym>	<connection type>	<Connection_purpose>	<connection type>

Table 8: <Project Name> Changed Interconnections

Source	Destination	Information Type(s)	Purpose	Connection Type
m acronym>	acronym>	type>		
<system acronym>	<system acronym>	<connection type>	<Connection_purpose>	<connection type>
<system acronym>	<system acronym>	<connection type>	<Connection_purpose>	<connection type>
<system acronym>	<system acronym>	<connection type>	<Connection_purpose>	<connection type>

18 INFORMATION TYPE AND SENSITIVITY

[The information types and information sensitivity for the new system include the following:

- <information type and information sensitivity>
- <information type and information sensitivity> or

There are no changes to the system information types or information sensitivity or

The following changes to the system information types or information sensitivity are part of the proposed change:

- <information type or information sensitivity change>
- <information type or information sensitivity change>]

19 SYSTEM FUNCTIONALITY

[The new system will meet the functionality requirements identified in Section 2.7.

or

There are no changes to the system functionality.

or

The following changes to the system functionality are part of the proposed change:

- <system functionality change>
- <system functionality change>]

20 SYSTEM ACCESS METHOD

[The system access methods for the new system include the following:

- <system access method>
- <system access method> or

There are no changes to the system access methods or

The following changes to the system access methods are part of the proposed change:

- <system access methods change>
- <system access methods change>]

21 SYSTEM REQUIREMENTS

[The system requirements for the new system are provided in Section 5.

or

The following changes to the system requirements are part of the proposed change:

- <system requirements change>
- <system requirements change>]

22 RULES OF BEHAVIOR

[The system does not have system-specific rules of behavior.

or

The new system has the following system-specific rules of behavior:

- <system-specific rule of behavior>
- <system-specific rule of behavior> or

There are no changes to the system-specific rules of behavior.

or

The project requires the following changes to the system-specific rules of behavior:

- <system-specific rule of behavior change>
- <system-specific rule of behavior change>]

23 RISK ANALYSIS

{project risk analysis}

24 TRADE-OFF ANALYSIS

{product trade-off analysis}

25 PROJECT PLAN

{project plan}

26 ARCHITECTURE AND DESIGN

The final project architecture and design document is available using accession number <accession number>.

27 ASSETS

Table 9 identifies the operational assets that may be impacted in some way by deployment of this project.

Table 9: <Project Name> Impacted Assets

System	Asset Identification	Type	Location	How Impacted by Project
<System Acronym>	<asset name> (<unique identifier>)	<type>	<location>	<asset impact>
<System Acronym>	<asset name> (<unique identifier>)	<type>	<location>	<asset impact>
<System Acronym>	<asset name> (<unique identifier>)	<type>	<location>	<asset impact>
<System Acronym>	<asset name> (<unique identifier>)	<type>	<location>	<asset impact>
<System Acronym>	<asset name> (<unique identifier>)	<type>	<location>	<asset impact>

28 CYBERSECURITY PLAN

The cybersecurity plan is available using accession number <accession number>.

29 IMPLEMENTATION PLAN

The implementation plan is available using accession number <accession number>.

30 DEVIATIONS

Table 10 identifies the anticipated deviations that will be requested for the project.

Table 10: <Project Name> Anticipated Deviation Requests

Requirement	Deviation	Rationale
<requirement>	<requested deviation>	<rationale>
<requirement>	<requested deviation>	<rationale>
<requirement>	<requested deviation>	<rationale>
<requirement>	<requested deviation>	<rationale>
<requirement>	<requested deviation>	<rationale>

31 SYSTEM SECURITY PLAN

The system security plan for the <system acronym> system is available using accession number <accession number>.

32 SYSTEM CONTINGENCY PLAN

The system contingency plan for the <system acronym> system is available using accession number <accession number>.