

**Conceptual**

**System Architecture Review (SAR)**

|  |  |
| --- | --- |
| **Agency/Dept. Name** |  |
| **Project Name** |  |
| **Application Name** |  |
| **Tactical Plan Tracking #** |  |
| **Estimated Start Date** |  |
| **Estimated Completion Date** |  |
| **Document Creator** | Name:  Email:  Phone Number: |
| **Business Sponsor’s Name** | Name:  Email:  Phone Number: |
| **Agency Technical Contact**  **(If Applicable)** | Name:  Email:  Phone Number: |
| **CIO Informed** | Yes  No |
| **Date Submitted** |  |
| **CSAR held** |  |

|  |  |  |
| --- | --- | --- |
| **ABOUT THIS DOCUMENT** | | |
| The System Architecture Review, or SAR, is intended to assure that technology solutions for the State are conceived, designed, developed and deployed to maximize the benefits and functionality of the technology, while minimizing costs and risks. The SAR ensures compliance with cybersecurity, architecture standards and best practices, controlled introduction of new technologies, and appropriate reuse of existing technology, in order to increase returns on investment. | | |
| **Purpose** | The **Conceptual SAR (CSAR)**:   * Allows the business owner to enumerate, document and prioritize the business problem that the project is addressing. * Ensures that State and/or Federal cybersecurity requirements are understood and classifies the digital assets to be managed in the proposed solution. * Allows for discussion regarding new technologies and informs the business owner of existing State assets that could possibly be leveraged, as well as considering how the proposed solution might be leveraged by others * Ensures awareness and support from all operational units and forms the baseline for subsequent reviews * Ensures that the project aligns with relevant State enterprise IT infrastructure, processes and standards and how that infrastructure might be impacted * Identifies, at a high level, whether the project might impact IT capacity so that proper planning can take place   + - * Identifies the costs and risks of certain decisions | |
| The Conceptual SAR is not a “purchase approval” mechanism and no procurement can be made until the appropriate SAR reviews are held. The outcome of the Conceptual SAR is one factor in a purchase decision review. **When a CSAR is needed? Refer to:**<http://nj.gov/it/services/governance.shtml> | | |
| This document must adhere to the following standard naming convention for the SAR document file.  “Agency Initials-Tactical Plan Number-Project Name-yyyymmdd-SAR Type”.  Example: OIT-042a180006-Project Name-20180120-CSAR | | |
| **Milestones** | | * **Conceptual SAR**:  Once the completed documents are received a CSAR meeting is scheduled. * Completion of Business Impact Analysis – if applicable * Discuss Disaster Recovery requirements with OARS – if applicable * Begin Certification and Accreditation Form * **Completion of Logical SAR** * Completion of Business Entity/IT Services/Firewall Rules -  Appendices A, B, C, or D – If applicable * Physical design approval by Network and Information Security areas * **Completion of Physical SAR** * Schedule Vulnerability Assessment Scans * Schedule and perform Stress Testing * Completion of Vulnerability Assessment Scans * Completion of Risk Management Remediation Form – If applicable * Completion of Certification and Accreditation Form * Completion of Exception Request Form – If applicable * **Completion of Implementation Review:** 2 weeks before deployment * **Deploy to Production** |

|  |
| --- |
| 1. **BASIC PROJECT INFORMATION** |

1. Please provide a detailed description of the project including its purpose, scope and high level business requirements:

1. What problem(s) or untapped opportunity is this project addressing?

1. How do you categorize this project:

Refresh  New Build  Enhancement  Data Publishing

Other:

1. What approaches are you considering for the development of this solution?

(Please check all that apply)

Cloud-hosted, (XaaS) Xas-a-Service Solution

COTS/Packaged Solution

COTS/Packaged Solution with Customization

Custom, Vendor-developed, Purpose-built Solution

Custom, Internally Developed, Purpose-built Solution

Extension/Enhancement of Existing Solution

Unknown at this time

Other

1. What criteria will determine that the project implementation has been successful?

1. Are there any risks related to:

* Funding:

No  Yes, explain:

* Schedule:

No  Yes, explain:

* Licensing, funding, mandates or other constraints that cause the start or end date to be inflexible?

No  Yes, explain:

* Resources:

No  Yes, explain:

* Other, explain:

1. Is this project a result of legislative mandate?

No

Yes, indicate if this is a:  State Mandate  Federal Mandate

Please identify compliance requirement, legislative source and reference number:

|  |
| --- |
| 1. **ARCHITECTURE CONFORMANCE** |

## Business Architecture

1. Is this project consistent with the Agency or Steering Committee’s Business Plan?

**Yes**

**To Be Determined** –be prepared to discuss at the review.

**No** – align this initiative to the Business Plan before submitting.

## Technology Architecture

1. Have you reviewed the current New Jersey Shared IT Architecture (NJ SITA) document?

**No** – you are required to review this document before the CSAR meeting.

<http://www.nj.gov/it/ps/Shared_IT_Architecture.pdf>

**Yes**

1. Are you proposing to use any technologies not defined in the NJ SITA?

**No** – it is anticipated that all technologies will be conforming.

**To Be Determined** –be prepared to discuss possible technologies at the review.

**Yes** – submit a document describing the anticipated technology in detail, and provide a justification that includes functionality, cost, and ongoing support comparisons.

Initiatives that will be developed consistent with the Agency or Steering Committee’s Business Plan and the NJ Shared IT Architecture will receive expedited review.

## Security Architecture

1. Provide the name of Agency’s Information Security Officer? :
2. Has your Information Security Officer reviewed the conceptual design of this project to insure the intended compliance of the State of New Jersey Information Security Policy’s and Standards?

**No**

**Yes**

A cybersecurity review is required to be completed by the agency and reviewed with The Office of Homeland Security and Preparedness/NJCCIC. OHSP/NJCCIC will provide a copy of the State of New Jersey baseline security controls questionnaire to agency representatives and their Information Security Officer.

|  |
| --- |
| 1. **BUSINESS AND BENEFIT IMPACT** |

1. What is the impact if this project is not completed on schedule?
2. Does this initiative/project have an impact to health, safety, security, or privacy?

No

Yes, explain how it pertains and who is impacted:

1. Who benefits from this project?

Citizens?  No  Yes, explain the benefit impact:

State Employees?  No  Yes, explain the benefit impact:

Employers / Businesses?  No  Yes, explain the benefit impact:

Others?  No  Yes, explain the benefit impact:

Will other Agencies or Departments benefit from this project in any way?

No  Yes, explain the benefit impact:

1. Time and Cost increase or decrease of this project:
2. Will this project save time; for example, will a former manual task now be automated?

Unknown at this time

No

Yes, how much time will be saved?

How will this time savings be used to benefit the State?

1. Will this project reduce current costs?

Unknown at this time

Yes What is the current cost for doing these tasks?

What is the anticipated future cost for doing these tasks?

No Will this project result in an increase in costs?

No

Yes What is the anticipated cost increase?

Why is this cost unavoidable?

1. Are you avoiding costs by leveraging available shared services?

Yes  No

Explain:

**Potential for Revenue generation**:

1. Will this project generate any increased revenues for the State?

No

Yes How much potential revenue will it generate?

How was this figure calculated?

|  |
| --- |
| 1. **FUNDING** |

1. Do you have funding for this project?  No  Yes

If yes, what is the funding source?  State  Federal  Other, explain:

Who is the funding Stakeholder?

1. What is the estimated cost for this project (if known)? $0.00

Current FY: $0.00

Current FY +1: $0.00

Current FY +2: $0.00

Additional comments:

1. Are any funds at risk?  No  Yes, explain:

|  |
| --- |
| 1. **PROCUREMENTS** |

1. **Identify any anticipated procurements necessary for the project:**

**Hardware or Infrastructure as a Service**

Estimated Hardware Cost: $0.00

PCs: Estimated Quantity:

Servers: Estimated Quantity:

Describe any additional anticipated hardware needs:

Where is the expected hardware installation site?

**Software OR Software as a Service**

Estimated Software Cost: $0.00

Describe anticipated software needs:

**Training**

Estimated Training Cost: $0.00

Describe anticipated training needs:

**Consulting**

Estimated Consulting Cost: $0.00

Describe anticipated consulting needs:

**Other**

Estimated Cost: $0.00

Describe anticipated needs:

**To Be Determined**, explain:

***NOTE:*** *If* ***To Be Determined*** *is selected, this CSAR Plan must be updated before the submission of the procurement package. No hardware or software can be procured until a Logical SAR has been held.*

1. **STATE GOALS & AGENCY CORE MISSION ACKNOWLEDGEMENT & ALIGNMENT**
2. Is this project consistent with the State Enterprise Goals?

No, explain why not:

Yes, check the goal(s) and/or objective(s) below:

**State Enterprise Goals**

#### **Goal 1—Governance**

Provide State Government IT leadership and governance by implementing appropriate IT organizational structures, processes, standards, policies and procedures, with an emphasis on accountability.

#### **Goal 2—Emerging Technology**

Identify and evaluate emerging technologies and innovative IT solutions.

#### **Goal 3— E-Government (Internet Commerce)**

Develop an integrated package of e-government services that provides “one-stop self service” for businesses and the public.

#### **Goal 4—Enterprise Architecture**

Implement an Enterprise Architecture Program that aligns technology investments continuously with the core business goals and strategic objectives of the Executive Branch of New Jersey State Government.

**GOAL 5—Statewide Efficiencies**

Maximize the efficient delivery of agency services through the cost effective use of state Information Technology resources.

#### **Goal 6—Security**

Protect valuable information resources by defining and adopting an information security framework that ensures the availability, confidentiality, and integrity of state information assets.

#### **Goal 7—IT Workforce Management**

Develop a comprehensive IT workforce management program that addresses the state’s needs for IT skills and staffing.

1. **Agency Core Mission Alignment:**
   1. To what agency core mission does this project relate?

* 1. Explain how this project relates to the core mission area(s) identified above:

**NOTE:** Agency core mission areas can be found at: <http://nj.gov/transparency/performance/>

1. **GENERAL PROJECT TECHNOLOGY**

Answers to this section help to identify the different groups within OIT and/or the Agency that may need to be involved during the development process. It is recognized that all needs may not be fully identified at this stage in the project lifecycle and that selected options should be considered an indication of possibilities, not a committed requirement.

1. What are the anticipated Project Technology Needs:

**NOTE:** The State department or agency must be able to demonstrate that the initiative will follow the Shared Services as stated in the **Shared IT Architecture** document. <http://www.nj.gov/it/ps/Shared_IT_Architecture.pdf>

**If you check** the E-Payment Processing box, contact the Division of Revenue and Enterprise Services at 609.984.3997 or [DorInfo@treas.nj.gov](mailto:DorInfo@treas.nj.gov) for information on use of Enterprise level payment/revenue recording services.

**Technologies**

|  |  |
| --- | --- |
| Asset Management Portal | E-Payment Processing (Needs to be PCI Compliant) |
| Telephony (i.e. IVR) | GIS (includes address verification/cleansing) |
| Video Conferencing | Wireless/Mobile Computing  Reeeelakjg;iaujtseoriutwe;roitubewp9r98beypo  Re |
| Data Transfer | Remote Access (VPN, GoToMyPC, CITRIX) |
| Authentication/Authorization | Other: |
| Identity Management, explain: | |

**Infrastructure**

Clustering  Printing

Distributed Architecture  SAN

Mainframe Architecture  Virtualization

Network Infrastructure (i.e. Bandwidth)

**Automated Record Management/Storage Systems and Services**

**If you check** any of the boxes below, contact the Division of Revenue and Enterprise Services at 609.984.3997 or [DorInfo@treas.nj.gov](mailto:DorInfo@treas.nj.gov) for information on use of Enterprise level electronic image processing services and/or best practices for e-mail archiving.

E-Mail Archiving Platforms

Electronic Government (e.g. web-based/secure bulk filing)

Indexing and storage of public documents and any related services including document screening and preparation

Manual/Electronic Scanning

Work Flow Application

Other, explain:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **Asset Classification -** *Classification of the system is used to determine the necessary security safeguards* | | | | | | | | |
| **Public** | Information that is authorized for release to the public. | | | | | |  | |
| **Secure** | Information that is available to business units and used for official purposes and would not be released to the public unless specifically requested and authorized | | | | | |  | |
| **Sensitive** | Information that is available only to designated personnel and **would not** be released to the public.  Indicate data types:  Criminal Investigation Homeland Security FEIN  Personal Financial  Personal Medical Social Security #  Personally Identifiable Business  Other | | | | | | | |
| 1. **User Access Controls** | | | | | | | | |
| (a) How do you expect users to access the system? (check all that apply)  Public Internet State Intranet Partner Extranet | | | | | | | | |
| (b) Will users view or edit sensitive data? No Sensitive Data shown  View  Edit | | | | | | | | |
| 1. **Potential Loss Impact:** *For each category below, select the level of impact to that best identifies the protection needed from unauthorized alteration or access to the data, or loss of system access. (*FIPS PUB 199) | | | | | | | | |
| **Security Objective** | | **LOW** | | **MODERATE** | | **HIGH** | | |
| ***Confidentiality***  Preserving authorized restrictions on **information access and disclosure**, including means for protecting personal privacy and proprietary information.  [44 U.S.C., SEC. 3542] | | The unauthorized disclosure of information could be expected to have a **limited adverse** effect on organizational operations, organizational assets, or individuals. |  | The unauthorized disclosure of information could be expected to have **a serious adverse** effect on organizational operations, organizational assets, or individuals. |  | The unauthorized disclosure of information could be expected to have a **severe or catastrophic adverse** effect on organizational operations, organizational assets, or individuals. | |  |
| ***Integrity***  Guarding against improper information **modification or destruction**, and includes ensuring information non-repudiation and authenticity.  [44 U.S.C., SEC. 3542] | | The unauthorized modification or destruction of information could be expected to have a **limited adverse** effecton organizational operations, organizational assets, or individuals. |  | The unauthorized modification or destruction of information could be expected to have a **serious adverse** effect on organizational operations, organizational assets, or individuals. |  | The unauthorized modification or destruction of information could be expected to have a **severe or catastrophic adverse** effect on organizational operations, organizational assets, or individuals. | |  |
| ***Availability***  Ensuring **timely and reliable access** to and use of information.  [44 U.S.C., SEC. 3542] | | The disruption of access to or use of information or an information system could be expected to have a **limited adverse** effect on organizational operations, organizational assets, or individuals. |  | The disruption of access to or use of information or an information system could be expected to have a **serious adverse** effect on organizational operations, organizational assets, or individuals |  | The disruption of access to or use of information or an information system could be expected to have a **severe or catastrophic adverse** effect on organizational operations, organizational assets, or individuals. | |  |
| **NOTE:** See [130 – Information Asset Classification and Control Standard](http://nj.gov/it/ps/08-04-S1-NJOIT_130-01_Asset_Classification_Control_Standard.pdf) for information on State of New Jersey and Federal Government Information Asset Classification | | | | | | | | |

1. Is your Availability either Moderate or High? No Yes

If “Yes”: You **must** complete a Business Impact Analysis (BIA).

Once the Business Impact Analysis is completed, please submit the signed form to [OIT-DR@tech.nj.gov](mailto:OIT-DR@tech.nj.gov) for review.

*The template for the BIA can be found at* [*http://nj.gov/it/services/governance.shtml*](http://nj.gov/it/services/governance.shtml)

*In addition, you are required to contact* [*OIT-DR@tech.nj.gov*](mailto:OIT-DR@tech.nj.gov) *to discuss your Disaster Recovery requirements and build a recovery plan if your system/application is hosted within an OIT infrastructure.* Submission of the BIA does **NOT** ensure system recovery.

|  |  |
| --- | --- |
| [See full size image](http://www.tgpn.com.au/images/600px-warning_icon_svg.png) | **If you are aware of or have criteria for high-level technology needs, please proceed to the next section.** |

**ELSE**

|  |  |
| --- | --- |
| stop | Please submit your completed CSAR request to:  [SAR@TECH.NJ.GOV](mailto:sar@tech.nj.gov) |

## H. DATABASE AND APPLICATION INFORMATION (if Applicable)

1. What do you require for this project?

Application – New Development  Application – Modification to existing platform

Publishing Data on Data.NJ.Gov

N/A – No application development (Go to Section J)

1. Is there a business preference for a specific database platform?

No

Yes - On what database platform (e.g. Oracle, SQL etc)?

1. Will the data from an existing system need to be moved into the new system?

No  Yes  NA – No existing application

1. Does a retention schedule exist for this data?

No

Yes

**If Yes:** Are the records and informational content scheduled for retention and disposition as required by N.J.S.A. 47:3-15 through 32 and N.J.A.C. 15:3-2.2 (a)?

Yes

No**\***

\***If No,** contact the **Division of Revenue and Enterprise Services** to establish the required retention schedule at 609.530.3234 or [DorInfo@treas.nj.gov.](mailto:DorInfo@treas.nj.gov.)

1. Do you anticipate integrating with any existing systems, processes, functionalities or services?

No  Yes, describe:

1. Will this application publish or present data on the Internet to anonymous users, such as financial, operational, or performance data or data that would otherwise be subject to OPRA requests?

(The data can be in static documents or files or dynamically delivered from a database.)

No  Yes

*\* If YES, you must contact the Treasurer's Transparency Steering Committee before proceeding.*

1. Who do you expect or anticipate will perform the development, installation and/or support work?

In-House Agency IT Staff

OIT

Vendor/Consultant

## I. HARDWARE, HOSTING AND STORAGE INFORMATION

1. Do you anticipate the system to be hosted within the NJ Shared IT Infrastructure (NJ SITI)?

Yes

No Do you anticipate that it will be hosted at:

An Agency Data Center - Address:

A vendor data center

Other, please explain:

Will it use technologies not available in the NJ SITI?

No

Yes, identify the technologies:

1. Do you have a preferred Hardware platform?

No

Yes, please indicate (e.g. AIX, SUN, WINDOWS, etc)?

1. Do you have a preferred Middleware Platform?

No

Yes, on what platform (e.g. Apache, Oracle/Sun, .Net, Web Logic etc)?

1. Do you require Data Storage?

No

Yes, estimated Storage Size?

1. Please indicate if you anticipate the project to require the following:  
    Maintenance – Standard work week   
    Maintenance – 24x7
2. Do you anticipate using the Enterprise Java Application Server Environment?

No

Yes

If ‘YES’ please review the Java Application Standards document and comply before requesting any deployment to the Java Application Server Environment. This document can be found in the Portal document library (login at [www.state.nj.us](http://www.state.nj.us/)) at the following path: /WEBDevelopers/Technology Standards/Application Layer/Glass Fish (Ver. 9) SUN Application Server Guide.doc

If you do not have Portal/Web Developer access, please send an email to:   
OIT-[deploy-request@tech.nj.gov](mailto:deploy-request@tech.nj.gov) and include the Name, e-Mail Address, Department and Phone Number of the person requiring access.

If you have any additional question or concerns please reach out to your OIT Liaison Contact.

## J. NETWORKING

1. Who do you anticipate accessing this application and by what methods?

State employees over state internal network

State employees over public internet

Public internet users

Other, please explain:

1. Do you require Vendor/Contractor access to your application over an extranet or the internet?

No  Yes

|  |  |
| --- | --- |
| stop | Please remember to submit your completed CSAR request to:  [SAR@TECH.NJ.GOV](mailto:sar@tech.nj.gov) |

The sections following will be completed **during the CSAR meeting** based upon the discussion of the information contained within this document.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appendix 1: Authentication Requirements Assessment** | | | | |
| 1. Potential Impact Categories for Authentication Errors | **1** | **2** | **3** | **4** |
| **Inconvenience, distress or damage to standing or reputation where** :  **Low**: At worst, limited short-term inconvenience, distress, or embarrassment to any party  **Moderate**: At worst, serious short term or limited long-term inconvenience, distress, or damage to the standing or reputation of any party  **High**: Severe or serious long term inconvenience, distress or damage to the standing or reputation of any party | Low | Low-Mod | High-Mod | High |
|  |  |  |
| **Financial loss or agency liability where**:  **Low**: At worst, an insignificant or inconsequential unrecoverable financial loss to any party, or at worst, an insignificant or inconsequential agency liability.  **Moderate**: At worst, a serious unrecoverable financial loss to any party, or a serious agency liability.  **High**: Severe or catastrophic unrecoverable financial loss to any party; or sever or catastrophic agency liability | Low | Low-Mod | High-Mod | High |
| **Harm to agency programs or public interests where**:  **Low**: At worst, a limited adverse effect on organizational operations or assets, or public interests. Example: Mission capability degradation to the extent and duration that the organization is able to perform its primary functions with *noticeably* reduced effectiveness  **Moderate**: At worst, a serious adverse effect on organizational operations or assets, or public interests. Example: Significant mission capability degradation to the extent and duration that the organization is able to perform its primary functions with *significantly* reduced effectiveness  **High**: A severe or catastrophic adverse effect on organizational operations or assets, or public interests. Example: Severe mission capability degradation or loss of to the extent and duration that the organization is unable to perform one or more of its primary functions | N/A | Low | Mod | High |
| **Unauthorized release of sensitive information where**:  **Low**: at worst, a limited release of personal, U.S. government sensitive, or commercial sensitive information to unauthorized parties resulting in a loss of confidentiality with a low impact as defined in FIPS PUB 199  **Moderate**: at worst, a release of personal, U.S. government sensitive, or commercial sensitive information to unauthorized parties resulting in a loss of confidentiality with a moderate impact as defined in FIPS PUB 199  **High**: a release of personal, U.S. government sensitive, or commercial sensitive information to unauthorized parties resulting in a loss of confidentiality with a high impact as defined in FIPS PUB 199 | N/A | Low | Mod | High |
| **Personal Safety where**:  **Low**: at worst, minor injury not requiring medical treatment  **Moderate**: at worst, moderate risk of minor injury or limited risk of injury requiring medical treatment  **High** – a risk of serious injury or death | N/A | N/A | Low | Mod or  High |
| **Civil or criminal violations where**:  **Low**: At worst, a risk of civil or criminal violations of a nature that would not ordinarily be subject to enforcement efforts  **Moderate**: At worst, a risk of civil or criminal violations that may be subject to enforcement efforts  **High**: A risk of civil or criminal violations that are of specific importance to enforcement programs. | N/A | Low | Mod | High |

Based on the determinations above, the level of assurance needed for user access and authentication is determined to be:

|  |  |
| --- | --- |
|  | **Level 1**: No identity proofing – Little or no confidence exists in the asserted identity. |
|  | **Level 2**: Identity Information is collected. On balance, confidence exists that the asserted identity is accurate. |
|  | **Level 3**: Identity information is collected and verified. Appropriate for transactions needing high confidence in the asserted identity’s accuracy. |
|  | **Level 4**: Identity information is collected in person and verified. Appropriate for transactions needing very high confidence in the asserted identity’s accuracy. |

|  |
| --- |
| NEXT STEPS |

* Completion of Business Impact Analysis – if applicable
* Discuss Disaster Recovery requirements with the DR Team – if applicable.
* Begin Certification and Accreditation Form
* Begin Logical Architecture discussion and design

|  |  |
| --- | --- |
| stop | Please remember to submit your completed CSAR request to:  [SAR@TECH.NJ.GOV](mailto:sar@tech.nj.gov) |