Stage 1 Business Analysis

California Department of Technology, SIMM 19A.3 (Ver. 3.0.8, 02/01/2022)

1.1   General Information

1. **Agency or State entity Name:** 5225 - Corrections and Rehabilitation, Department of

   If Agency/State entity is not in the list, enter here with the organization code.

   Click or tap here to enter text.

2. **Proposal Name and Acronym: BIS Migration to S4 HANA (BIS2S4)**

3. **Proposal Description: (Provide a brief description of your proposal in 500 characters or less.)**

California Department of Corrections and Rehabilitation (CDCR), Administrative Solutions (AS) proposes migration of CDCR's current Enterprise Resource Planning system (ERP), SAP/Business Information System (BIS) to SAP's new ERP system/platform offering, S/4 HANA. Support for BIS will expire in 2027. To continue receiving vendor supported security patches, software updates, and ensure CDCR business operational continuity, BIS data will migrate into the S/4 Hana system before end of life in 2027. The migration will be funded by an augmentation to the General Fund of $8.1 million in fiscal year (FY) 2023-24, $9.0 million in FY 2024-25 and $7.5 million in FY 2025-26. The new S/4 Hana system is cloud enabled with analytic data architecture. CDCR will be able to make data driven decisions in real time because of S/4 Hana's updated reporting capability.

4. **Proposed Project Execution Start Date: 7/3/2023**

5. **S1BA Version Number: Version 2**

1.2   Submittal Information

1. **Contact Information**

   Contact Name: Tammy Cason

   Contact Email: Tammy.Cason@cdcr.ca.gov

   Contact Phone: 9166286216

2. **Submission Type:** **New Submission**

   If Withdraw, select Reason: Choose an item.

      If Other, specify reason here: Click or tap here to enter text.

   Sections Changed, if this is a Submission Update: (List all sections changed.)

   No changes

   Summary of Changes: (Summarize updates made.)

   NA

3. **Attach Project Approval Executive Transmittal** to your email submission.

4. **Attach Stage 1 Project Reportability Assessment** to your email submission.

1.3   Business Sponsorship

1. **Executive Champion (Sponsor)**

   Title: CDCR AIO

   Name: Kristin Montgomery

   Business Program Area: Enterprise Information Services (EIS)

2. **Business Owner**

   Title: Information Technology Manager I

   Name: Tammy Cason

   Business Program Area: Administrative Solutions Product Line

3. **Product Owner**

   Title: Information Technology Manager I

   Name: Bruce Henry

   Business Program Area: Administrative Solutions Product Line

TIP: Copy and paste or click the + button in the lower right corner on any section to add additional Executive Champions, Business Owners, or Product Owners with their related Business Program Areas as needed.

1.4   Stakeholder Assessment

The Stakeholder Assessment is designed to give the project team an overview of communication channels that the state entity needs to manage throughout the project. More stakeholders may result in increased complexity to a project.

1. **Indicate which of the following are interested in this proposal and/or the outcome of the project. (Select 'Yes' or 'No' for each.)**

    State Entity Only: Yes

    Other Departments/State Entities: Yes

    Public: No

    Federal Entities: No

    Governor's Office: No

    Legislature: No

    Media: No

    Local Entities: No

    Special Interest Groups: No

    Other: No

2. **Describe how each group marked 'Yes' will be involved in the planning process.**

    BIS Staff and Other Departments/State Entities will serve as subject matter experts, providing input into the business case and justification. Additionally, the User Acceptance Testing will include Subject Matter Experts (SMEs) from these areas.

1.5   Business Program

1. **Business Program Name:** CDCR

2. **Program Background and Context:** (Provide a brief overview of the entity's business program(s) current operations.)

    In 2007, CDCR purchased SAP Enterprise Resource Planning (ERP) software for the BIS project/system with the goal of providing transparency, ease of reporting and the ability to perform essential tasks easily for both CDCR and CCHCS (California Correctional Health Care Services). Prior to SAP, CDCR lacked integrated, standardized and cost-effective administrative systems. Since the final go live of the BIS project and SAP in 2011, many vital CDCR and CCHCS functions have been developed and refined and are now performed in SAP such as purchasing for all institutions, budgetary and accounting functions, inventory control, warehousing, asset tracking, plant maintenance, time and shift tracking, and employee health and safety data. SAP has grown to become the system of record for CDCR and CCHCS. It allows

effective and efficient management of resources and the ability to provide timely responses to control agency requests regarding CDCR's financial/budget, human resources and supply chain related activities.

The implementation of the SAP project was originally funded for $176m and currently has an annual operation budget of $16m and 59 PYs. The funding and positions that BIS currently utilizes are applied entirely to maintain the current SAP system.

3. **How will this proposed project impact the product or services supported by the state entity?**

The goal of the BIS2S4 project is to perform a system conversion of CDCR source SAP ECC 6.0 system to the target SAP S/4 Hana system hosted on a hyper-scaler provider. There will be an increase work load for the technical and Business Subject Matter Experts (SME). Because they will working to identify migration requirements and fit gap business processes from within the work-streams of BIS2S4 project.

SME(s) and technical support staff will participate in the following work-streams.
*   CDCR will be converting and transforming the historical data from the source system into the new target system.
*   CDCR will reviewing the custom code in the in the source system and conduct fit gap analysis and process reengineering to reduce customizations in the target system.
*   CDCR will be conducting process discovery workshops to identify strategic business and IT objectives, including current pain points and stale business processes. Then use native target application solutions and processes that provide the most benefit to the business.
*   CDCR will conduct technical workshops and application document reviews to build out a host target environment.
*   CDCR will be conducting training for staff on the new business and technical processes.

The source system will be maintained alongside the target system until cutover.
Cut over to the target S/4 Hana system will take 2-3 day and can be scheduled over a weekend.
The business may experience 2 days of system downtime because of cutover activities.

1.6   Project Justification

1. **Strategic Business Alignment**

    Enterprise Architect

    Title: Information Technology Specialist III

    Name: Daniel Marshall

    Last Updated? 1/3/2020

    Strategic Business Goal: Sustainable Infrastructure

    Alignment: Yes

The BIS2S4 project aligns to CDCR's Sustainable Infrastructure goals because the project migrates from a system that is not sustainable due to End of Life to a sustainable system that will be vendor supported with security patches and software updates beyond 2027.

Mandate(s): None

Bill Number/Code, if applicable: Click or tap here to enter text.

Add the Bill language that includes system-relevant requirements:

Click or tap here to enter text.

TIP: Copy and paste or click the + button in the lower right corner to add Bill Numbers/Codes and relevant language as needed.

2. **Business Driver(s)**

    Financial Benefit: No

    Increased Revenue: No

    Cost Savings: Yes

    Cost Avoidance: No

    Cost Recovery: No

    Will the state incur a financial penalty or sanction if this proposal is not implemented? No

    If the answer to the above question is "Yes," please explain:

    Click or tap here to enter text.

    Improvement

    Better Services to the People of California: No

    Efficiencies to Program Operations: Yes

    Improved Equity, Diversity, and/or Inclusivity: No

    Improved Health and/or Human Safety: No

    Improved Information Security: Yes

    Improved Business Continuity: Yes

    Improved Technology Recovery: Yes

    Technology Refresh: Yes

    Technology End of Life: Yes

1.7   Business Outcomes Desired

Executive Summary of the Business Problem or Opportunity:

1. One of the business problems that CDCR faces is that CDCR's BIS system will reach End of Life in 2027. To continue receiving vendor supported security patches, software updates, and ensure business operational continuity, CDCR source system data will need to migrate into S/4 Hana system before 2027. It is important to begin the migration effort because the timeline to complete the BIS2S4 project is shrinking. The migration will take three years and would finish June 30, 2026 if the project was to start July 3, 2023.

    Migration to the new S/4 HANA platform sooner than later will also allow time to mitigate any issues that may arise during migration and resolve those issues before the impending deadline.

2. To shed the customization that is currently in the source system and adopt standard processing whenever advantageous for the business. Seizing the opportunity of reducing maintenance and operations (M&O) costs by reducing customization.

3. Another benefit of the BIS2S4 migration is the new S/4 platform will be hosted on a cloud provider with Disaster Recovery (DR) services. CDCR's current BIS data center does not have DR services. If there was a disaster at the data center where BIS is hosted, it could take several months before BIS was operational again. Having a DR solution allows for systems to be operational in days/hours after a disaster affecting the hosting data center.

Objective ID: 1

Objective: Want to preserve the CDCR's business processes by migrating to new system before end of life, so end of life of current system does not affect CDCR's ability to conduct business.

Metric:
- Deliver Final Migration: Perform final migration from existing system(s) to the target system, by electronic or manual methods and perform selected integration, response time and capacity, end-to-end, and user-acceptance testing to validate that the solution is ready for production. CDCR Migration Acceptance Criteria is measured by the following successful business outcomes:
  - Completion of Cutover Checklist including timely end user validation of key/critical processes:
    - Most-used and critical reports
    - Fiori apps
    - Master data updates (e.g. Vendor & Customer Master Data, Business Partner Master Data, Employee Master Data, Grants, Internal Order request & changes, Cost & Fund Center requests & changes, General ledger account requests & changes, Fund request & changes.)
    - Purchase Order processing

- Payment processing for all payment types (AP and Payroll, etc.)
- Period end processing (Month-end, Quarter-end, Fiscal Year-end)
- Other processes as defined
  - Successful delivery and processing of all daily interfaces (inbound and outbound) that Contractor was responsible for.
    - Six (6) successful month-end GL closes
    - Six (6) successful months of payroll processing periods, including all related incoming and outgoing interfaces posting to internal and external partners.
    - Signed Project Implementation Acceptance Form
    - Successful year-end financial close.

Baseline: SAP Enterprise Central Core (ECC) 6.0

Target Result: S/4 HANA 2.0 system version

Objective ID: 2

Objective: CDCR will reduce customization in the new target system whenever advantageous for the business.

Metric:
- CDCR will be converting and transforming the historical data from the source system into the new target system.
- CDCR will review the custom code in the in the source system, conduct fit gap analysis and process reengineering to reduce 1,266 customizations in the target system.
- CDCR will be conducting process discovery workshops to identify strategic business and IT objectives, including current pain points and stale business processes. BIS will then use native target application solutions and processes that provide the most benefit to the business.

Baseline: 1,266 customizations in the source system.

Target Result: Reduce number of customizations in the target system.

Objective ID: 3

Objective: BIS target system disaster recovery capability

Metric:
- The disaster recovery site will be located within the United States in a geographic region other than a disaster recovery site located in California.
- The disaster recovery service will be warm, which could be operational in a few hours, or cold, which could be operational in several hours. Cost and business need will determine if the DR Service will be warm or cold.
- Recovery Point Objective (RPO) maximum target is 10 minutes.
- Recovery Time Objective (RTO) maximum target is 8 hours.

- A disaster recovery fail over test will be conducted on the target system once the migration has taken place and the target system has been in a Run state for 1 year.

Baseline: Legacy system without disaster recovery capability

Target Result: SAP S4 HANA target host systems with disaster recovery capability

TIP: Copy and paste or click the + button in the lower right corner to add Objectives as needed. Please number for reference.

1.8 Project Management

1. **Project Management Risk Score: 0.8**

   (Attach a completed [Statewide Information Management Manual (SIMM) Section 45 Appendix A Project Management Risk Assessment Template](#) to the email submission.)

2. **Project Approval Lifecycle Completion and Project Execution Capacity Assessment**

   Does the proposal development or project execution anticipate sharing resources (state staff, vendors, consultants, or financial) with other priorities within the Agency/state entity (projects, PALs, or programmatic/technology workload)?

   Answer: Yes

   Does the Agency/state entity anticipate this proposal will result in the creation of new business processes or changes to existing business processes?

   Answer (No, New, Existing, or Both)**:** Both New and Existing Processes

1.9 Initial Complexity Assessment

1. **Business Complexity Score:** 1.2

   (Attach a completed [SIMM Section 45 Appendix C](#) to the email submission.)

2. **Noncompliance Issues:** (Indicate if your current operations include noncompliance issues and provide a narrative explaining how the business process is noncompliant.)

   Programmatic regulations: No

   HIPAA/CIIS/FTI/PII/PCI: No

   Security: No

   ADA: No

   Other: Yes

   Not Applicable: No

   Noncompliance Description:

CDCR's current BIS data center does not have DR services. If there was a disaster at the data center where BIS is hosted, it could take several months before BIS was operational again. Having a DR solution allows for systems to be operational in days/hours after a disaster affecting the hosting data center.

3. **Additional Assessment Criteria**

If there is an existing Privacy Threshold Assessment/Privacy Information Assessment, include it as an attachment to your email submission.

How many locations and total users is the project anticipated to affect?

Number of locations: 37 Institutions located throughout the state. All Staff Teleworking can access the application over VPN or VDI through CDCR's network

Estimated Number of Transactions/Business Events (per cycle):

- Issued 2,820 travel advances
- Processed over 299,406 accounts payable invoices totaling approximately $2.7B
- Took vendor discounts saving CDCR $7.8M
- Processed over 25,000 inmate releases totaling approximately $5.4M
- Processed over one million deposits to inmate trust accounts for nearly $235.6M
- Collected and remitted over $41M in restitution
- Issued over 13,135 salary advances
- Recorded 51,058 payroll accounts receivables
- Issued 9,265 AR Invoices for a total of over $199M
- Reclassified costs of over $48M to ensure alignment of reimbursement receipts with reimbursable expenditures
- Processed a total of 3,006 deposits amounting to over $278M
- Posted 73,894 non-inmate receipts for a total amount processed of $318M
- Remitted $264M to the Centralized Treasury System

Approximate number of internal end-users: 7000

Approximate number of external end-users: 0

1.10 Funding

Planning

1. Does the Agency/state entity anticipate requesting additional resources through a budget action to **complete planning** through the project approval lifecycle framework? Yes

If Yes, when will a budget action be submitted to your Agency/DOF for planning dollars?

9/1/2022

2. Please provide the Funding Source(s) and dates funds for planning will be made available:

General Fund   7/01/2023

Project Implementation Funding

1. Has the funding source(s) been identified for *project implementation*? Yes

   If known, please provide the Funding Source(s) and dates funds for implementation will be made available:

   General Fund

   Will a budget action be submitted to your Agency/DOF? Yes

   If "Yes" is selected, specify when this BCP will be submitted: September 2022

2. Please provide a rough order of magnitude (ROM) estimate as to the total cost of the project: Between $10 Million and $50 Million

End of agency/state entity document.

Please ensure ADA compliance before submitting this document to CDT.

When ready, submit Stage 1 and all attachments in an email to ProjectOversight@state.ca.gov.

Department of Technology Use Only

Original "New Submission" Date: 8/1/2022

Form Received Date: 8/1/2022

Form Accepted Date: 8/1/2022

Form Status: In Analysis

Form Status Date: 8/1/2022

Form Disposition: Approved

　　　If Other, specify: Click or tap here to enter text.

Form Disposition Date: 1/23/2023

Department of Technology Project Number (0000-000): 5225-180