Stage 2 Alternative Analysis

California Department of Technology, SIMM 19B.2 (Rev. 2.5, July/2021)

2.1 General Information

Agency or State Entity Name: Department of Industrial Relations

If agency/entity not in list then enter here.

Organization Code: 7350

Proposal Name: **EAMS Modernization Project-Court**

Department of Technology Project Number (0000-000): **7350-093**

2.2 Preliminary Submittal Information

Removed. Stage 2 Preliminary Assessment information moved to Stage 1 Business Analysis, Section 1.10.

2.3 Stage 2 Preliminary Assessment

Removed. Stage 2 Preliminary Assessment information moved to Stage 1 Business Analysis, Section 1.10.

2.4 Submittal Information

Contact Information

Contact First Name: Benjamin

Contact Last Name: Bonte

Contact Email: bbonte@dir.ca.gov

Contact Phone: 510-286-0945

Submission Date: **12/31/2021**

Project Approval Executive Transmittal (attach file to your email submission.)

Submission Type: Updated Submission (Post-Approval)

If Withdraw, select Reason: Choose an item.

If Other, specify reason here:

Sections Updated

Sections Changed (List all the sections that have been updated.)

2.51, 2.52, 2.6, 2.7, 2.9.2, 2.10.1-2.10.7 and 2.11

Summary of Changes (Summarize updates made.)

Removed all the claims system components since EAMS Modernization Project is splitting into two projects: EAMS Modernization Project-Court and EAMS Modernization Project-Claims. [Claims to be submitted as a separate project.]

Condition(s) from Previous Stage(s)

Condition #:

Condition Category: Choose an item.

If Other, specify:

Condition Sub-Category: Choose an item.

If Other, specify:

Condition:

Assessment: Choose an item.

If Other, specify:

Agency/State Entity Response:

Status: Choose an item.

If Other, specify:

***NOTE**: Use **Ctrl+c** and **Ctrl+v** to copy and paste as needed throughout the template.*

TIP: Copy and paste to add Conditions as needed.

2.5 Baseline Processes and Systems

2.5.1 Description

The Division of Workers' Compensation (DWC) and Workers' Compensation Appeals Board (WCAB) within the Department of Industrial Relations (DIR) monitor the administration of workers' compensation claims and provide administrative and judicial services to assist in resolving disputes that arise in connection with claims. DWC procured an Electronic Adjudication Management System (EAMS) to be designed, developed and implemented by Deloitte Consulting. EAMS went live in August 2008.

EAMS was designed to support the following business process areas: 1. Case Management: Provide the ability to initiate cases, process documents to create workflow and capture case information; 2. Calendaring: Provide the ability to schedule all types of court hearings and create schedules that do not conflict with various parties' availability while at the same time fully utilizing the resources (rooms, judges and timeslots) of DWC district offices. 3. Document Management: Provide the ability to accept and manage documents, and 4. Business Intelligence: Provide the ability to access, analyze and act on information by exploring data, data relationships and trends. The major components of EAMS are: 1. Curam – a COTS Case Management, Calendaring, and Cashiering System. Curam has been substantially modified since August 2008. 2. FileNet – a COTS Document Management System and 3. Cognos- a COTS reporting software tool. EAMS currently supports approximately 7.5 million cases. The system is used primarily to manage the adjudication of benefit related issues, including the scheduling of hearings to review the issues brought before the DWC, and as a document intake/repository for case related court documents. EAMS is currently licensed for 4,300 total users—1,300 internal users and 3,000 external users.

2.5.2 Business Process Workflow

See attached documents: 2.5.2a Business Process Workflow, 2.5.2b Process Flow for Liens, 2.5.2c Special Lien Adjudication Process for Convicted Providers in EAMS

(Attach file to the email submission.)

2.5.3 Current Architecture Information

Business Function/Process(es)

See attached document: 2.5.3 Business Function-Process

TIP: Copy and paste to add business processes with the same application, system, or component; COTS, MOTS or custom solution; runtime environment; system interfaces, data center location; and security.

Application, System, or Component: Curam, FileNet, DIR coding, Cognos and CDT SAFE

COTS, MOTS, or Custom: COTS

Name/Primary Technology: Java/JEE and SFTP/Java

TIP: Copy and paste to add Applications, Systems, or Components as needed.

Runtime Environment

Cloud Computing Used: No

If "Yes," specify: Choose an item.

Server/Device Function: Web Server/App Server

Hardware: HP ProLiant

Operating System: Microsoft Windows

System Software: IBM WebSphere

System Interfaces:
1. OCR
2. Cognos 11
3. FileNet 5.2
4. Business Tone
5. IBM Payment Gateway
6. Lien Payment processor, First Data
7. Lien correspondence
8. Refunds
9. JET
10. SAFE –CDT
11. EAMS Batch, Holding tank
12. Electronic Data Exchange System (EDEX)
13. E-form Filing

Data Center Location: State data center operated by CDT

If Other, specify:

Security

Access: *(answer Yes or No to all choices)*

Public: **Yes**

Internal State Staff: **Yes**

External State Staff: No

Other: No Specify:

Type of Information *(answer Yes or No to all choices)*

Personal: **Yes**

Health: **Yes**

Tax: No

Financial: No

Legal: **Yes**

Confidential: **Yes**

Other: **Choose an item.** Specify:

Protective Measures *(answer Yes or No to all choices)*

Technical Security: **Yes**

Physical Security: **Yes**

Backup and Recovery: **Yes**,

Identity Authorization and Authentication: **Yes**

Other, specify:

Data Management

Data Owner Name: George Parisotto

Data Owner Title: Administrative Director

Data Owner Business Program: Division of Workers' Compensation

Data Custodian Name: Dave Cohen

Data Custodian Title: EAMS IT Administrator

Data Custodian Business Program: DIR Office of Information Systems

TIP: Copy and paste to add Business Functions/Processes as needed.

2.5.4 Current Architecture Diagram

See attached document: 2.5.4_EAMS Production Infrastructure

2.5.5 Security Categorization Impact Table

See attached document: 2.5.5 Security Categorization Impact Table

SECURITY CATEGORIZATION IMPACT SUMMARY

Confidentiality: Medium

Integrity: Medium

Availability: Medium

2.6 Mid-Level Solution Requirements

See attached document: 2.6 Mid Level Solution Requirements Court

2.7 Assumptions and Constraints

.Assumptions/Constraints: Subject matter experts and other resources are available when expected.

Description/Potential Impact: The availability of subject matter experts and project resources affects the ability for the project to meet milestones and follow the projected timeline.

.Assumptions/Constraints: A structured Organizational Change Management (OCM) approach is being communicated and applied to the EAMS modernization project. An experienced OCM Manager and OCM team have been identified. Business and IT teams have established an Organizational Change Management plan that will integrate with the project management plan.

Description/Potential Impact: OCM focuses on identifying, preparing and managing the internal/external stakeholders, employees, and customers that will be impacted by the new solution. Change management drives the successful adoption and usage of change within the business. It gives employees the opportunity to understand and commit to the shift and work effectively during it. OCM uses communication and feedback processes to determine how effectively change is being adopted by Stakeholders.

.Assumptions/Constraints: Data cleansing and data mapping will be completed before data migration occurs. Bad and incomplete data will be identified and fixed. Only complete and accurate data will be migrated to the new system.

Description/Potential Impact: If bad data is migrated into the new system, it will affect the quality and accuracy of reports and data analytics efforts.

TIP: Copy and paste to add Assumptions/Constraints and Descriptions/Impacts as needed.

2.8 Dependencies

Dependency Element: Data cleansing and data mapping will occur prior to Go Live.

Dependency Description: Without good quality data, the system will not be able to provide accurate reports and metrics for data analytics or policy decision making purposes.

TIP: Copy and paste to add Dependency Elements and Descriptions as needed.

2.9 Market Research

2.9.1 Market Research Methodologies/Timeframes

Methodologies Used to Perform Market Research

Request for Information (RFI): **Yes**

Internet Research: No

Vendor Forums/Presentation: **Yes**

Trade shows: No

Published Literature: No

Leveraged Agreements: No

Collaboration with other Agencies/state entities or governmental entities: No

Other: **Choose an item.** Specify: .

Time spent conducting market research: Over 1 Year

Date market research was started: 1/2/2020

Date all market research was completed: 11/13/2021

2.9.2 Results of Market Research:

The RFI vendors will be used as a reference, but we will not be selecting a specific vendor at this stage. The Attached RFI spreadsheet further details the project team's analysis. See attached document: 2-9-2 Results of Market Research. [NOTE: No formal RFI was released; consultant utilized RFI questions as a guide for the M.R. results.]

We selected 21 major functions from the current business needs to evaluate the vendors' proposed solutions. We evaluated 4 vendors: OnCore (RAPID Framework), Journal Technologies (eCourt), CapTech (Custom built Framework) and eSystems (Salesforce). The custom-built approach satisfied 19 of the 21 major court functions.

2.10 Alternative Solutions

2.10.1 Solution Type (Recommended or Alternative): **Recommended**

2.10.2 Name: **Custom Built Approach**

2.10.3 Description: DWC and the Workers' Compensation Appeals Board (WCAB) operate similarly to other court systems. However, they are unique in that their business processes are affected by recurring workers' compensation reforms that come from the California state legislature. The new regulations often require them to introduce new procedures and system functionality in a limited amount of time.

For example, in 2016, the California state legislature approved Senate Bill (SB) 1160 and Assembly Bill (AB) 1244. The anti-fraud provision of the bills focused on reducing fraudulent providers and their liens in the workers' compensation system. In response DIR created new business requirements and processes within a few months in order to comply with the mandate. These changes included the creation of a new declaration form which required external filers meet specific criteria to submit the form, the creation of new system statuses for liens, the ability for users with authority to apply/remove the status to the thousands of affected liens, and the creation of an entire new business unit, the Special Adjudication Unit (SAU), with different calendaring parameters, to consolidate and adjudicate the identified allegedly fraudulent liens.

According to the EAMS Information Technology Needs Assessment Report dated 6/29/2011, over 40% of the current EAMS (COTS) system contains customized code, and yet it is still not able to fully meet business needs. It is even more customized now. Therefore, DWC's workers' compensation case management will benefit from a fully custom-built solution that can meet the WCAB's unique requirements.

Approach *(Answer Yes or No to all choices)*:

Increase staff – new or existing capabilities: **Yes**

Modify the existing business process or create a new business process: **Yes**

Reduce the services or level of services provided: No

Utilize new or increased contracted services: **Yes**

Enhance the existing IT system: No

Create a new IT system: **Yes**

Perform a business-based procurement to have vendors propose a solution: No

Other: **Choose an item.** Specify: .

2.10.4 Benefit Analysis

Benefits/Advantages for custom built court case management system: Custom built systems can be altered to accommodate changes in business processes. This will allow for adaptability in DWC's workers' compensation case management environment.

Benefits/Advantages for custom built court case management system: Cost-effective: Cost of customization may reduce license costs and maintenance costs.

Benefits/Advantages for custom built court case management system: Streamlined reporting capabilities and data analytics will aid executive team in making policy decisions and in responding to public inquiries.

Benefits/Advantages for custom built court case management system: User-centered design will reduce the amount of navigation and eliminate the number redundant tasks.

Benefits/Advantages for custom built court case management system: Can be maintained in-house.

Benefits/Advantages for custom built court case management system: Will ultimately be able to incorporate other processes into the system. DWC currently has multiple other units within the division that have various antiquated systems in-place. DWC will be able to fully integrate all aspects of the division's work within a customized system with future projects. This will streamline the division's work, increase communication and better serve the workers' compensation community.

TIP: Copy and paste to add Benefits/Advantages as needed.

Disadvantages: Custom built software can be more expensive than COTS.

Disadvantages: Custom built software will require considerably more time and additional resources to identify business rules, requirements, use cases, user roles, permissions, screen design/layout, test cases, and build the solution.

TIP: Copy and paste to add Disadvantages as needed.

Anticipated Time to Achieve Objectives After Project Go-Live

(Choose one: Within 1 Year, 2 Years, 3 Years, 4 Years, Over 4 Years)

Objective Number: 1 Objective Timeframe **Within 1 year**

Objective Number: 2 Objective Timeframe **Within 1 year**

Objective Number: 2.1 Objective Timeframe **Within 1 year**

Objective Number: 2.2 Objective Timeframe **Within 1 year**

Objective Number: 2.3 Objective Timeframe **Within 1 year**

Objective Number: 2.4 Objective Timeframe **Within 1 year**

Objective Number: 4 Objective Timeframe **Within 1 year**

Objective Number: 4.1 Objective Timeframe **Within 1 year**

TIP: Copy and paste to add Objective Numbers and Timeframes as needed.

Anticipated Time to Achieve Financial Benefits after Project Go-Live

Increased Revenues: **Choose an item.**

Cost Savings: **Choose an item.**

Cost Avoidance: **Within 1 year**

Cost Recovery: **Choose an item.**

2.10.5 Assumptions and Constraints

(List the assumptions and constraints, and describe the impact to the project):

.Assumptions/Constraints: Subject matter experts and other resources are available when expected.

Description/Potential Impact: The availability of subject matter experts and project resources affects the ability for the project to meet milestones and follow the projected timeline.

.Assumptions/Constraints: A structured Organizational Change Management (OCM) approach will be communicated and applied to the EAMS modernization project. An experienced OCM Manager and OCM team have been identified. Business and IT teams have established an Organizational Change Management plan that will integrate with the project management plan.

Description/Potential Impact: OCM focuses on identifying, preparing and managing the internal/external stakeholders, employees, and customers that will be impacted by the new solution. Change management drives the successful adoption and usage of change within the business. It gives employees the opportunity to understand and commit to the shift and work effectively during it. OCM uses communication and feedback processes to determine how effectively change is being adopted by Stakeholders.

.Assumptions/Constraints: Data cleansing and data mapping will be completed before data migration occurs. Bad and incomplete data will be identified and fixed. Only complete and accurate data will be migrated to the new system.

Description/Potential Impact: If bad data is migrated into the new system, it will affect the quality and accuracy of reports and data analytics efforts.

TIP: Copy and paste to add Assumptions/Constraints as needed.

2.10.6 Implementation Approach

Identify the type of existing IT system enhancement or new system proposed

(Answer Yes or No for each)

Enhance the current system: No

Develop a new custom solution: **Yes**

Purchase a Commercial off-the-Shelf (COTS) system: No

Purchase or obtain a system from another government agency (Transfer): No

Subscribe to a Software as a Service (SaaS) system: No

Other: **Choose an item.** Specify: .

Identify cloud services to be leveraged *(Answer Yes or No for each)*

Software as a Service (SaaS) provided by OTech: No

Software as a Service (SaaS) provided by commercial vendor: **Yes**

Platform as a Service (PaaS) provided by OTech: No

Platform as a Service (PaaS) provided by commercial vendor: **Yes**

Infrastructure as a Service (IaaS) provided by OTech: No

Infrastructure as a Service (IaaS) provided by commercial vendor: No

If no cloud services will be leveraged by this alternative, provide a justification of why cloud services are not being leveraged:

Identify who will modify the existing system or create the new system *(Select Yes or No for each)**:***

Agency/state entity IT staff: **Yes**

A vendor will be contracted: **Yes**

Inter-agency agreement will be established with another governmental agency. No

Specify agency name(s):

Other: **Choose an item.** Specify:

Identify the implementation strategy:

All requirements will be addressed in this proposed project in a single implementation. No

Requirements will be addressed in incremental implementations in this proposed project. **Yes**

Some requirements will be addressed in this proposed project. The remaining requirements will be addressed at a later date: **Yes**

Specify the year when the remaining requirements will be addressed: Defer to Stage 3.

Identify if the technology for the proposed project will be mission critical and public facing:

The technology implemented for this proposed project will be considered mission critical and public facing. **Yes**

2.10.7 Architecture Information – Court System (Custom Built)

Business Function/Process(es): The proposed high-level solution architecture is designed with a cloud-based software approach. This focuses on supporting data-driven workflows by creating an optimized, guided experience for external stakeholders, implementing tools for robust stakeholder management, and driving internal staff towards the information DWC needs in real-time. The Business Architecture details will be deferred to PAL Stage 3 Solution Development.

TIP: Copy and paste to add business processes with the same application, system, or component; COTS, MOTS, or custom solution; runtime environment; system interfaces, data center location; and security.

Application, System, or Component: Will be deferred to PAL Stage 3 Solution Development.

TIP: Copy and paste to add an Application, System, or Component as needed.

COTS, MOTS, or Custom: Custom

Name/Primary Technology: Will be deferred to PAL Stage 3 Solution Development.

Runtime Environment

Cloud Computing Used: **Yes**

If "Yes," specify: PaaS - Platform as a Service

Server/Device Function: Will be deferred to PAL Stage 3 Solution Development.

Hardware: Will be deferred to PAL Stage 3 Solution Development.

Operating System: Will be deferred to PAL Stage 3 Solution Development.

System Software: Will be deferred to PAL Stage 3 Solution Development.

TIP: Copy and paste to add system software information if the application, system, or component uses additional system software.

System Interfaces:

Cognos 11, FileNet 5.2, DWC EAMS eForms, Public Search, BusinessTone, IBM Payment, Lien Payment, Lien correspondence, Refunds, JET, SAFE – CDT, EAMS batch, EDEX (Electronic Data Exchange System). The number of interfaces may change in PAL Stage 3

Solution Development.

Data Center Location: Commercial data center

If Other, specify: Will defer to PAL Stage 3 Solution Development

Security

Access: *(answer Yes or No to all choices)*

Public: **Yes**

Internal State Staff: **Yes**

External State Staff: No

Other: **Choose an item.** Specify:

Type of Information *(answer Yes or No to all choices)*

Personal: **Yes**

Health: **Yes**

Tax: No

Financial: **Yes**

Legal: **Yes**

Confidential: **Yes**

Other **Choose an item.** Specify:

Protective Measures *(answer Yes or No to all choices)*

Technical Security: **Yes**

Physical Security: **Yes**

Backup and Recovery: **Yes**

Identity Authorization and Authentication: **Yes**

Other, specify:

Data Management

Data Owner Name: George Parisotto

Data Owner Title: Administrative Director

Data Owner Business Program: Division of Workers' Compensation

Data Custodian Name: Dave Cohen

Data Custodian Title: EAMS IT Administrator

Data Custodian Business Program: Division of Workers' Compensation

2.10.1 Solution Type (Recommended or Alternative): **Alternative**

2.10.2 Name: **#2 - Configurable COTS approach (not recommended)**

2.10.3 Description: A configurable COTS system made for court case management. Data and document ownership would reside with the customer while the system and source code are owned by vendor. System costs would be based on a yearly subscription lease-based model. This approach would require DWC to re-engineer some of their business processes fit into the available COTS features. DWC's benefits from a COTS system may be limited due to their numerous unique requirements.

The current EAMS system is COTS. DWC is often required to alter our processes due to changes in legislation, regulation and policies. As a result the system has had to be altered/upgraded multiple times over the years. It is not uncommon that we are unable to make the needed changes due to the limitations in EAMS. Our experience is that a COTS system does not fit our needs. Further, DWC hopes to incorporate all of the DWC systems in future projects. A COTS system would limit this ability.
We believe that a COTS system will limit our ability to meet the goals of the division, serve our stakeholders and provide the required changes when needed to comply with legislative and regulatory mandates. We also believe that due to the limitations of a COTS system the long term costs in both upgrades and personnel will far exceed the additional costs of starting with a customizable approach.

Approach *(Answer Yes or No to all choices):*

Increase staff – new or existing capabilities: **Yes**

Modify the existing business process or create a new business process: **Yes**

Reduce the services or level of services provided: No

Utilize new or increased contracted services: **Yes**

Enhance the existing IT system: No

Create a new IT system: **Yes**

Perform a business-based procurement to have vendors propose a solution: No

Other: **Choose an item.** Specify:

2.10.4 Benefit Analysis

Benefits/Advantages: Costs for a COTS system solution are typically less expensive than a custom-built solution including lower maintenance costs and effort than a custom-built

solution. The vendor will responsible for security patches, bug fixes, upgrades and an annual release of a new version. DIR IT staff will be trained to support the upgrades.

Benefits/Advantages: Project implementation length will be shorter than a custom-built solution. System is ready to deliver functionality based on a generic set of requirements for that product. There may be some time needed to configure existing functions, but configurations can be applied quickly once the business decides how to use the available options.

Benefits/Advantages: An off-the-shelf software has been tested for defects and has undergone various usability tests.

TIP: Copy and paste to add Benefits/Advantages as needed.

Disadvantages: DWC may need to re-engineer or adapt an undetermined percentage of their business processes.

Disadvantages: Limited scope of customization. The system may not allow for initial customizations to meet DWC's unique requirements and future mandated legislative needs.

Disadvantages: COTS products may include expensive features the business does not need.

Disadvantages: DWC often needs to change business processes due to changes in legislation. A COTS system has in the past created severe limitations in the ability to make these required changes.

TIP: Copy and paste to add Disadvantages as needed.

Anticipated Time to Achieve Objectives After Project Go-Live

(Choose one: Within 1 Year, 2 Years, 3 Years, 4 Years, Over 4 Years)

Objective Number: 1 Objective Timeframe Within 1 year

Objective Number: 2 Objective Timeframe Within 1 year

Objective Number: 2.1 Objective Timeframe Within 1 year

Objective Number: 2.2 Objective Timeframe Within 1 year

Objective Number: 2.3Objective Timeframe Within 1 year

Objective Number: 2.4 Objective Timeframe Within 1 year

Objective Number: 2.5 Objective Timeframe Within 1 year

Objective Number: 4 Objective Timeframe Within 1 year

Objective Number: 4.1 Objective Timeframe Within 1 year

TIP: Copy and paste to add Objective Numbers and Timeframes as needed.

Anticipated Time to Achieve Financial Benefits after Project Go-Live

Increased Revenues: **Choose an item.**

Cost Savings: **Choose an item.**

Cost Avoidance: **Within 1 year**

Cost Recovery: **Choose an item.**

2.10.5 Assumptions and Constraints

(List the assumptions and constraints, and describe the impact to the project):

.Assumptions/Constraints: Subject matter experts and other resources are available when expected.
.Description/Potential Impact: The availability of subject matter experts and project resources affects the ability for the project to meet milestones and follow the projected timeline.

.Assumptions/Constraints: A structured Organizational Change Management (OCM) approach is being communicated and applied to the EAMS modernization project. An experienced OCM Manager and OCM team have been identified. Business and IT teams have established an Organizational Change Management plan that will integrate with the project management plan.
.Description/Potential Impact: OCM focuses on identifying, preparing and managing the internal/external stakeholders, employees, and customers that will be impacted by the new solution. Change management drives the successful adoption and usage of change within the business. It gives employees the opportunity to understand and commit to the shift and work effectively during it. OCM uses communication and feedback processes to determine how effectively change is being adopted by Stakeholders.

.Assumptions/Constraints: Data cleansing and data mapping will be completed before data migration occurs. Bad and incomplete data will be identified and fixed. Only complete and accurate data will be migrated to the new system.
.Description/Potential Impact: If bad data is migrated into the new system, it will affect the quality and accuracy of reports and data analytics efforts.

.Assumptions/Constraints: UEBTF/SIBTF business unit functions will be handled in a separate system.
.Description/Potential Impact: UEBTF/SIBTF should have their own separate system that focuses on claims benefit administration functions. The current system is largely a court case management system adapted from an Irish social welfare system.

DUP'S???
.Assumptions/Constraints: Subject matter experts and other resources are available when expected.
.Description/Potential Impact: The availability of subject matter experts and project resources affects the ability for the project to meet milestones and follow the projected timeline.

.Assumptions/Constraints: A structured Organizational Change Management (OCM) approach is being communicated and applied to the EAMS modernization project. An experienced OCM Manager and OCM team have been identified. Business and IT teams have established an Organizational Change Management plan that will integrate with the project management plan.
.Description/Potential Impact: OCM focuses on identifying, preparing and managing the internal/external stakeholders, employees, and customers that will be impacted by the new solution. Change management drives the successful adoption and usage of change within the business. It gives employees the opportunity to understand and commit to the shift and work effectively during it. OCM uses communication and feedback processes to determine how effectively change is being adopted by Stakeholders.

.Assumptions/Constraints: Data cleansing and data mapping will be completed before data migration occurs. Bad and incomplete data will be identified and fixed. Only complete and accurate data will be migrated to the new system.

Description/Potential Impact: If bad data is migrated into the new system, it will affect the quality and accuracy of reports and data analytics efforts.

TIP: Copy and paste to add Assumptions/Constraints as needed.

2.10.6 Implementation Approach

Identify the type of existing IT system enhancement or new system proposed *(Answer Yes or No for each)*

Enhance the current system:NO

Develop a new custom solution: No

Purchase a Commercial off-the-Shelf (COTS) system: **Yes**

Purchase or obtain a system from another government agency (Transfer): **No**

Subscribe to a Software as a Service (SaaS) system: **Yes**

Other: No Specify:

Identify cloud services to be leveraged *(Answer Yes or No for each)*

Software as a Service (SaaS) provided by OTech: No

Software as a Service (SaaS) provided by commercial vendor: **Yes**

Platform as a Service (PaaS) provided by OTech: No

Platform as a Service (PaaS) provided by commercial vendor: No

Infrastructure as a Service (IaaS) provided by OTech: No

Infrastructure as a Service (IaaS) provided by commercial vendor: No

If no cloud services will be leveraged by this alternative, provide a justification of why cloud services are not being leveraged:

Identify who will modify the existing system or create the new system *(Select Yes or No for each):*

Agency/state entity IT staff: **Yes**

A vendor will be contracted: **Yes**

Inter-agency agreement will be established with another governmental agency. No

Specify agency name(s):

Other: No Specify:

Identify the implementation strategy:

All requirements will be addressed in this proposed project in a single implementation. No

Requirements will be addressed in incremental implementations in this proposed project. **Yes**

Some requirements will be addressed in this proposed project. The remaining requirements will be addressed at a later date: **Yes**

Specify the year when the remaining requirements will be addressed: The specific year is unknown because no existing COTS software address all of the Court system needs.

Identify if the technology for the proposed project will be mission critical and public facing:

The technology implemented for this proposed project will be considered mission critical and public facing. **Yes**

2.10.7 Architecture Information – Court System

Business Function/Process(es): The proposed high-level solution architecture is designed with cloud-based configurable out of the box solution.

TIP: Copy and paste to add business processes with the same application, system, or component; COTS, MOTS, or custom solution; runtime environment; system interfaces, data center location; and security.

Application, System, or Component: Will defer to PAL Stage 3 Solution Development

TIP: Copy and paste to add an Application, System, or Component as needed.

COTS, MOTS, or Custom: COTS

Name/Primary Technology: Will defer to PAL Stage 3 Solution Development

Runtime Environment

Cloud Computing Used: **Yes**

If "Yes," specify: SaaS - Software as a Service

Server/Device Function: Will defer to PAL Stage 3 Solution Development

Hardware: Will defer to PAL Stage 3 Solution Development

Operating System: Will defer to PAL Stage 3 Solution Development

System Software: Will defer to PAL Stage 3 Solution Development

TIP: Copy and paste to add system software information if the application, system, or component uses additional system software.

System Interfaces:
Cognos 11, FileNet 5.2, DWC EAMS eForms, Public Search, BusinessTone, IBM Payment, Lien Payment, Lien correspondence, Refunds, JET, SAFE – CDT, EAMS batch, EDEX (Electronic Data Exchange System). The number of interfaces may change in PAL Stage 3 Solution Development.

Data Center Location: Commercial data center

If Other, specify:

Security

Access: *(answer Yes or No to all choices)*

Public: **Yes**

Internal State Staff: **Yes**

External State Staff: No

Other: **Choose an item.** Specify:

Type of Information *(answer Yes or No to all choices)*

Personal: Yes

Health: **Yes**

Tax: No

Financial: No

Legal: **Yes**

Confidential: **Yes**

Other **Choose an item.** Specify:

Protective Measures *(answer Yes or No to all choices)*

Technical Security: **Yes**

Physical Security: **Yes**

Backup and Recovery: **Yes**

Identity Authorization and Authentication: **Yes**

Other, specify:

Data Management

Data Owner Name: George Parisotto

Data Owner Title: Administrative Director

Data Owner Business Program: Division of Workers' Compensation

Data Custodian Name: Dave Cohen

Data Custodian Title: EAMS IT Administrator

Data Custodian Business Program: DIR Office of Information Systems

TIP: Copy and paste to add Business Functions/Processes as needed,

2.10.1 Solution Type (Recommended or Alternative): **Alternative**

2.10.2 Name: **#3 - Upgrade and/or further customize the current EAMS components-- Curam, FileNet and Cognos - Not recommended.**

2.10.3 Description:

Cúram requires significant enhancements and bug fixes to meet the current business needs. The original implementation plan had almost 700 requirements as part of the contract, but only an estimated 400 of those requirements were actually delivered. Developers are still trying to catch up with these shortcomings while responding to changes in laws, upgrades and business modifications.

There is currently a backlog of change requests that require further analysis and prioritization before they can be addressed/implemented. An additional challenge is that Curam's source code has been locked by IBM. Therefore, there are limitations in what the technical team will be able to implement. To keep business operations going, DWC users have created system workarounds to address the deficient system functionalities.

Cognos (business intelligence software tool) provides standard features for reporting. However, the current user interface does not allow for business users to easily create a report based on defined parameters. In many cases, business must request the assistance from the technical team to query needed information. In addition, the returned data is often deemed incomplete or inaccurate and required repeated entries of different parameters to achieve the desired results.

Approach *(Answer Yes or No to all choices)**:***

Increase staff – new or existing capabilities: **No**

Modify the existing business process or create a new business process: **Yes**

Reduce the services or level of services provided: No

Utilize new or increased contracted services: **Yes**

Enhance the existing IT system: **Yes**

Create a new IT system: No

Perform a business-based procurement to have vendors propose a solution: No

Other: **Choose an item.** Specify:

2.10.4 Benefit Analysis

Benefits/Advantages: Because this is our currently existing system, the business and technical teams are familiar with the system functions. There would be less of a learning curve or need for change management activities to update it.

TIP: Copy and paste to add Benefits/Advantages as needed.

Disadvantages: The current licensing model limits the number of internal and external users able to use EAMS. DWC is unable to add additional users without incurring a significant increase in costs.

Disadvantages: The reports produced by Cognos will continue to lack key information due to the limitations of Curam's database structures.

Disadvantages: Users will continue to execute manual processes because of the design of the current system. DWC may need to hire additional staff to address work backlogs if current system cannot handle needed changes.

Disadvantages: IBM has locked the source code. This makes both code modifications and troubleshooting much more difficult. This also decreases the flexibility required to respond to constantly changing business needs.

Disadvantages: Expensive COTS customization continue to be required to initiate and maintain long-term upgrades.

Disadvantages: Injured workers have scarce and unsatisfactory access to the current system because the current licensing model is very restrictive and expensive.

Disadvantages: Below are the technical shortcomings:

- The original system design uses Java for certain referential integrity aspects rather than Oracle database capabilities. As such, it's impossible to take 1-2% sample of database to use for testing, etc.
- The system navigation is unwieldly, requiring excessive unnecessary clicks.
- Many deprecated methods are still being used in the current build, which are marked for removal in future releases.
- DIR technical staff can no longer modify the core code: IBM has locked it down. This makes many needed code modifications impossible and makes troubleshooting much more difficult.
- The original system is not built with a Service Oriented Architecture. Instead, it is Closely Coupled, which makes it inadequate and difficult to modify many portions of the system.
- Because of Word integration issues, the current version of Cúram only supports IE 11 with specific extra settings, even though Microsoft no longer supports IE due to inherent security issues and recommends upgrading to Edge.
- External users object to using EAMS due to security issues and have difficulty learning it because it is not intuitive, antiquated and unnecessarily complex.

TIP: Copy and paste to add Disadvantages as needed.

Anticipated Time to Achieve Objectives After Project Go-Live

(Choose one: Within 1 Year, 2 Years, 3 Years, 4 Years, Over 4 Years)

Objective Number: 1 Objective Timeframe Within 1 year

Objective Number: 2 Objective Timeframe Within 1 year

Objective Number: 2.1 Objective Timeframe Within 1 year

Objective Number: 2.2 Objective Timeframe Within 1 year

Objective Number: 2.3Objective Timeframe Within 1 year

Objective Number: 2.4 Objective Timeframe Within 1 year

Objective Number: 2.5 Objective Timeframe Within 1 year

Objective Number: 4 Objective Timeframe Within 1 year

Objective Number: 4.1 Objective Timeframe Within 1 year

TIP: Copy and paste to add Objective Numbers and Timeframes as needed.

Anticipated Time to Achieve Financial Benefits after Project Go-Live

Increased Revenues: Choose an item.

Cost Savings: Choose an item.

Cost Avoidance: Choose an item.

Cost Recovery: Choose an item.

2.10.5 Assumptions and Constraints

(List the assumptions and constraints, and describe the impact to the project):

DIR technical staff can no longer modify the core code: IBM has locked it down. This makes both code modifications and troubleshooting much more difficult. In addition, DWC might not be able to modify the system to accommodate new regulations set forth by the legislature.

TIP: Copy and paste to add Assumptions/Constraints as needed.

2.10.6 Implementation Approach

Identify the type of existing IT system enhancement or new system proposed

(Answer Yes or No for each)

Enhance the current system: **Yes**

Develop a new custom solution: No

Purchase a Commercial off-the-Shelf (COTS) system: No

Purchase or obtain a system from another government agency (Transfer): No

Subscribe to a Software as a Service (SaaS) system: No

Other: **Yes** Specify: Working on the change requests and upgrade the existing system as scheduled.

Identify cloud services to be leveraged *(Answer Yes or No for each)*

Software as a Service (SaaS) provided by OTech: No

Software as a Service (SaaS) provided by commercial vendor: No

Platform as a Service (PaaS) provided by OTech: No

Platform as a Service (PaaS) provided by commercial vendor: No

Infrastructure as a Service (IaaS) provided by OTech: No

Infrastructure as a Service (IaaS) provided by commercial vendor: No

If no cloud services will be leveraged by this alternative, provide a justification of why cloud services are not being leveraged: Current EAMS system components: Curam, FileNet and Cognos are not in cloud services.

Identify who will modify the existing system or create the new system *(Select Yes or No for each):*

Agency/state entity IT staff: **Yes**

A vendor will be contracted: **Yes**

Inter-agency agreement will be established with another governmental agency. No

Specify agency name(s):

Other: **Choose an item.** Specify:

Identify the implementation strategy:

All requirements will be addressed in this proposed project in a single implementation. No

Requirements will be addressed in incremental implementations in this proposed project. **Yes**

Some requirements will be addressed in this proposed project. The remaining requirements will be addressed at a later date: **Yes**

Specify the year when the remaining requirements will be addressed: **The year is unknown because the current system is unable to meet all of the Court system needs.**

Identify if the technology for the proposed project will be mission critical and public facing:

The technology implemented for this proposed project will be considered mission critical and public facing. **Yes**

2.10.7 Architecture Information – Court System

Business Function/Process(es): EAMS integrates commercial case management, calendaring, cashiering and document management software, and supports the following business processes:
1. Electronic document filing, routing, storing and retrieval as well as data entry
2.Filing Applications for Adjudication of Claim and creating new case files
3.Adding and deleting parties and representatives and updating addresses
4. Calendaring hearings
5. Tracking cases status
6. Providing information and assistance to parties
7. Coordinating information available to the court, rating unit, and special funds
8. Securing the integrity of court records against alteration, damage, theft or loss
9. Preventing unauthorized access to records.

TIP: Copy and paste to add business processes with the same application, system, or component; COTS, MOTS, or custom solution; runtime environment; system interfaces, data center location; and security.

Application, System, or Component: Curam, FileNet, Cognos, and CDT SAFE/DIR Coding

TIP: Copy and paste to add an Application, System, or Component as needed.

COTS, MOTS, or Custom: COTS

Name/Primary Technology: Java, Java/JEE and SFTP/Java

Runtime Environment

Cloud Computing Used: No

If "Yes," specify: Choose an item.

Server/Device Function: Web Server/App Server

Hardware: HP ProLiant

Operating System: Microsoft Windows

System Software: IBM WebSphere

TIP: Copy and paste to add system software information if the application, system, or component uses additional system software.

System Interfaces:
Cognos 11, FilNet 5.2, DWC EAMS eForms, Public Search, BusinessTone, IBM Payment, Lien Payment, Lien correspondence, Refunds, JET, SAFE – CDT, EDEX (Electronic Data Exchange System).

Data Center Location: State data center operated by CDT

If Other, specify:

Security

Access: *(answer Yes or No to all choices)*

Public: **Yes**

Internal State Staff: **Yes**

External State Staff: No

Other: **Choose an item.** Specify:

Type of Information *(answer Yes or No to all choices)*

Personal: **Yes**

Health: **Yes**

Tax: No

Financial: No

Legal: **Yes**

Confidential: **Yes**

Other **Choose an item.** Specify:

Protective Measures *(answer Yes or No to all choices)*

Technical Security: **Yes**

Physical Security: **Yes**

Backup and Recovery: **Yes**

Identity Authorization and Authentication: **Yes**

Other, specify:

Data Management

Data Owner Name: George Parisotto

Data Owner Title: Administrative Director

Data Owner Business Program: Division of Workers' Compensation

Data Custodian Name: Dave Cohen

Data Custodian Title: EAMS IT Administrator

Data Custodian Business Program: DIR Office of Information Systems

2.11 Recommended Solution

2.11.1 Rationale for Selection:

DWC is recommending that the modernization of the EAMS court system be completed by a customized solution. To further support the rationale behind a customized system for the courts versus a COTS system DWC offers the following:

DWC started the EAMS program with a COTS system. This system was difficult to adapt to California's complex workers' compensation system and has never met DWC's needs. Over the last 15 years the OIS team as well as outside vendors have added layer upon layer of customized code to allow EAMS to function within the DWC framework. Currently, EAMS has 3.81 million lines of customized code. A recent evaluation of the EAMS system by the CDT stabilization service team had the following conclusion when evaluating the problems of layering significant custom coding onto a COTS system:

When configuration does not permit the desired features, some COTS products allow the addition of custom code. Small amounts of custom code in a COTS product can be added without jeopardizing the value proposition of a COTS product. However, as custom code increases, the TCO will approach custom software. COTS products are not designed for significant custom code and IT organizations expecting a COTS TCO might be unprepared for the consequences. The federal government's General Services Administration had this to say on this subject in their De-risking government technology field guide:

> *Modifying COTS software eliminates most of the benefits of using COTS. Customized COTS is often modified to the point where routine software updates can no longer be applied. At this point, the software requires expensive custom updates for the duration of the software's life. It also locks the agency into a long-term (and often sole source) relationship with that contractor. Without a path to replace highly modified COTS software or to bring it back into compatibility with developer updates, these systems require substantial maintenance expenses over time. Though COTS itself is an appealing way to gain desired functionality rapidly, the hidden costs of modification and the timeline to implement these changes may eventually outweigh these benefits.*

In the case of EAMS, there are roughly 9.6 million total lines of code. 5.87 million lines of code (~60%) are "out of the box" Cúram functionality, and 3.81 million lines of code (~40%) is "custom". The custom code is a combination of automatically generated code from Rational System Architect with hand-written implementation code. This combined with manual quality assurance (QA) has likely led to some combination of long development times, increased bug counts, challenging troubleshooting, performance degradation, and a higher-than-expected total cost of ownership

To ensure that DWC is cognizant of all available options regarding its EAMS modernization project, the Division utilized the RFI process. And although DWC saw some products that would fit some of DWC's needs, all COTS options would again need significant custom coding. This additional time and expense as well as the concerns brought to our attention during the evaluation of the EAMS system make it clear that a customized system is more advantageous, cost effective, and a more prudent approach for this project. DWC must be able to make significant changes when legislative, regulatory, or policy changes occur within the workers' compensation system. This customized approach will better allow DWC to make those changes quickly and efficiently. Further, the CDT stabilization service team has also determined that a COTS system is not sufficient to meet DWC's needs.

However, DWC will continue to remain open to whatever option is best when the final determination is made. If there is a COTS solution for at least part of the project DWC is open to looking at all options. In fact, we do intend to use a COTS system to support the UEBTF and SIBTF where we expect that existing off the shelf California workers' compensation claims software can be used with little modification. Currently the claims adjusting function of UEBTF and SIBTF are handled, in part, by EAMS. This part of the project can be handled by a COTS solution.

(Attach rationale documentation to the email submission.)

2.11.2 Technical/Initial CA-PMM Complexity Assessment

(Reference section 2.11.2 in the Stage 2 Alternative Analysis Preparation Instructions, SIMM19B.1 and Complexity Assessment instructions SIMM Section 45D.)

Technical Complexity Score: 2.9

Complexity Zone: Zone II/III - Medium Criticality/Risk

2.11.3 Procurement and Staffing Strategy

Select an **Activity**: **Requirements Elicitation**

Responsible *(answer Yes or No to all choices)*

Agency/state entity staff: **Yes**

STP staff: **Yes**

CDT Project Approvals and Oversight staff: **Yes**

CA-PMO staff: **Yes**

DGS staff: No

Contractor: **Yes**

Other: **Choose an item.** Specify:

When Needed *(answer Yes or No to all choices.)*

Stage 3 Solution Development: **Yes**

Stage 4 Project Readiness and Approval: **Yes**

After project is approved (after Stage 4 Project Readiness and Approval): **Yes**

Cost Estimate Verification *(answer Yes or No to all choices)*

Market research conducted (MR): **Yes**

Cost estimate provided (CE): **Yes**

CDT CE: **Yes**

DGS CE: No

Request for Information (RFI) conducted: **Yes**

Comparable vendor services have been used on previous contracts (CV): No

Leveraged Procurement Agreement (LPA): No

Complete Only if Contractor Responsible for Activity

Procurement Vehicle: Formal Solicitation (IFB/ RFP)

If Other, specify:

Contract Type**:** Fixed Price (FP)

If Other, specify:

Select an **Activity**: **Solicitation Development**

Responsible *(answer Yes or No to all choices)*

Agency/state entity staff: **Yes**

STP staff: **Yes**

CDT Project Approvals and Oversight staff: **Yes**

CA-PMO staff: **Yes**

DGS staff: No

Contractor: No

Other: **Choose an item.** Specify:

When Needed *(answer Yes or No to all choices.)*

Stage 3 Solution Development: **Yes**

Stage 4 Project Readiness and Approval: **Yes**

After project is approved (after Stage 4 Project Readiness and Approval): **Yes**

Cost Estimate Verification *(answer Yes or No to all choices)*

Market research conducted (MR): **Yes**

Cost estimate provided (CE): **Yes**

CDT CE: **Yes**

DGS CE: No

Request for Information (RFI) conducted: **Yes**

Comparable vendor services have been used on previous contracts (CV): No

Leveraged Procurement Agreement (LPA): No

Complete Only if Contractor Responsible for Activity

Procurement Vehicle: None

If Other, specify:

Contract Type**:** Choose an item.

If Other, specify:

Select an **Activity**: **Conduct Procurement**

Responsible *(answer Yes or No to all choices)*

Agency/state entity staff: **Yes**

STP staff: **Yes**

CDT Project Approvals and Oversight staff: **Yes**

CA-PMO staff: **Yes**

DGS staff: No

Contractor: No

Other: **Choose an item.** Specify:

When Needed *(answer Yes or No to all choices.)*

Stage 3 Solution Development: **Yes**

Stage 4 Project Readiness and Approval: **Yes**

After project is approved (after Stage 4 Project Readiness and Approval): **Yes**

Cost Estimate Verification *(answer Yes or No to all choices)*

Market research conducted (MR): **Yes**

Cost estimate provided (CE): **Yes**

CDT CE: **Yes**

DGS CE: No

Request for Information (RFI) conducted: **Yes**

Comparable vendor services have been used on previous contracts (CV): No

Leveraged Procurement Agreement (LPA): No

Complete Only if Contractor Responsible for Activity

Procurement Vehicle: None

If Other, specify:

Contract Type**:** Choose an item.

If Other, specify:

TIP: Copy and paste to add Activities as needed.

DGS Delegated Purchasing Authority

Will any of the activities identified above result in a competitive or non-competitive solicitation that will be over the agency/state entity's DGS delegated purchasing authority? **Yes**

2.11.4 Enterprise Architecture Alignment: This project will align with CDT's "Cloud First" policy, which directs State departments to shift toward cloud computing solutions for all new reportable and non-reportable IT projects in accordance with SAM 4983 and 4983.1

Information Technology Capability *(Select Yes or No to identify capabilities that may be needed for this project.)*

Public or Internal Portal/Website: Existing Enterprise Capability to be Leveraged

Public or Internal Mobile Application: New Enterprise Capability Needed

Enterprise Service Bus: Existing Enterprise Capability to be Leveraged

Identity and Access Management: Existing Enterprise Capability to be Leveraged

Enterprise Content Management *(including document scanning and eForms capabilities):* Existing Enterprise Capability to be Leveraged

Business Intelligence and Data Warehousing: New Enterprise Capability Needed

Master Data Management: New Enterprise Capability Needed

Big Data Analytics: New Enterprise Capability Needed

2.11.5 Project Phases

Phase Title: Defer to PAL Stage 3

Description: Defer to PAL Stage 3

Phase Deliverable: Defer PAL Stage 3

TIP: Copy and paste to add Project Phases as needed.

2.11.6 High Level Proposed Project Schedule

Proposed Project Planning Start Date: 10/4/2021

Proposed Project Planning End Date: 9/29/2023

Proposed Project Execution Start Date: 10/2/2023

Proposed Project Execution End Date: 6/30/2027

Activity Name: Requirements

Start Date: 2/1/2022

End Date: 12/31/2022

Activity Name: Stage 3 Solution Development

Start Date: 9/1/2022

End Date: 12/31/2022

Activity Name: Solicitation Development

Start Date: 1/3/2023

End Date: 6/1/2023

Activity Name: Solicitation Release

Start Date: 6/5/2023

End Date: 8/4/2023

Activity Name: Solicitation Award

Start Date: 8/31/2023

End Date: 10/2/2023

Activity Name: Stage 4 Project Readiness and Approval

Start Date: 9/4/2023

End Date: 9/29/2023

TIP: Copy and paste to add Activities as needed.

2.11.7 Cost Summary

Total Proposed Planning Cost: $	6,761,965
Total Proposed Project Cost: $	106,295,579
Total Proposed Future Operations IT Staff & OE&E Cost (Continuing): $	32,220,559
Total Proposed Project Cost: $	**145,278,103**
Total Proposed Annual Future Operations IT Cost (M&O): $	19,934,653

2.12 Staffing Plan

2.12.1 Administrative
Defer to Stage 4

2.12.2 Business Program
Defer to Stage 4

2.12.3 Information Technology
Defer to Stage 4

2.12.4 Testing
Defer to Stage 4

2.12.5 Data Conversion/Migration
Defer to Stage 4

2.12.6 Training and Organizational Change Management
Defer to Stage 4

2.12.7 Resource Capacity/Skills/Knowledge for Stage 3 Solution Development
Defer to Stage 4

2.12.8 Project Management

2.12.8.1 Project Management Risk Assessment

Project Management Risk Score: **1.6**

(Attach PM Risk Assessment to the email submission. SIMM Section 45C)

2.12.8.2 Project Management Planning

Are the following project management plans or project artifacts complete, approved by the designated agency/state entity authority, and available for Department of Technology review? *(Choose: Yes, No, Not Applicable. If No or Not Applicable, provide the artifact status in the space provided.)*

Project Charter: **Yes**, See attached

Scope Management Plan: **Yes**, See attached

Risk Management Plan: **Yes**, See attached

Issue and Action Item Management Plan: **Yes**, See attached

Communication Management Plan: **Yes**, See attached

Schedule Management Plan: **Yes**, ..

Human Resource Management Plan: **Yes**, ..

Staff Management Plan: **Yes**, ..

Stakeholder Management Plan: **Yes**, ..

Governance Plan: **Yes**, ..

2.12.9 Organization Charts:

See attached document: 2.12.9 EAMS Modernization Org Chart-Court

(Attach Organization Charts to the email submission.)

2.13 Data Conversion/Migration

Identify the status of each of the following data conversion/migration activities. If Not Applicable, explain why the activity is not applicable, or if Not Started, explain when the activity is planned to begin and anticipated to be completed:

GENERAL NOTE: The DIR intends to hire a consultant to conduct data cleansing, conversion and migration as needed.

Data Conversion/Migration Planning: Not Started, Plan to begin after S4 Approval.

Data Conversion/Migration Requirements: Not Started, Plan to begin after S4 Approval.

Current Environment Analysis: Not Started, Plan to begin in Stage 3.

Data Profiling: Not Started, Plan to begin after S4 Approval.

Data Quality Assessment: Not Started

Data Quality Business Rules: Not Started

Data Dictionaries: **In Progress**

Data Cleansing and Correction: Not Started

2.14 Financial Analysis Worksheets

(Attach Financial Analysis Worksheet(s) to the email submission.)

See attached document: 2.14- FAW-EAMS Modernization_Court

Department of Technology Use Only

Original “New Submission” Date: 12/31/2021

Form Received Date: 12/28/2022

Form Accepted Date: 12/28/2022

Form Status: Completed

Form Status Date: 1/10/2023

Form Disposition: Approved

Form Disposition Date: 1/10/2023