Stage 2 Alternatives Analysis

California Department of Technology, SIMM 19B.2 (Ver. 3.0.7, 02/28/2022)

2.1 General Information

1. **Agency or State Entity Name:** 7350 - Industrial Relations, 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:** Cal/OSHA Data Management System (DMS) Project
3. **Department of Technology Project Number (0000-000):** 7350-094
4. **S2AA Version Number:** Version 1
5. **CDT Billing Case Number:** CS0047619

   Don't have a Case Number? Click here to get one.

2.2 Submittal Information

1. **Contact Information**

   Contact Name: Benjamin

   Contact Email: Bonte

   Contact Phone: 510-286-0945

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 an update or resubmission: (List all the sections that changed.)

   Minor update to dollar amounts in Alternatives and to match supported BCP.

   Summary of Changes: (Summarize updates made.)

   Click or tap here to enter text.

3. **Attach Project Approval Executive Transmittal to your email submission. Attached in a separate document: *2. DIR CalOSHA DMS_S2AA_2.2.3_SIMM 19.G1_Project Approval Executive Transmittal_10Jun2022***

4. **Attach Procurement Assessment Form to your email submission. Attached in a separate document: *3. DIR CalOSHA DMS_S2AA_2.2.4_Primary STP Procurement Assessment Form_26May2022***

   Note: Per form instructions to be completed by The CDT STP Procurement Officer in collaboration with the CDT Project Approvals & Oversight (PAO) Manager and the DIR Dedicated Procurement Official. This form will be completed in Stage 3.

Conditions from Stage 1 Approval (Enter any conditions from the Stage 1 Business Analysis approval letter issued by CDT or your AIO): S1BA approved by CDT on 4/7/22. No conditions.

2.3 Baseline Processes and Systems

1. **Current Business Environment (Describe the current business environment of which the effort will be understood and assessed in 500 words)**

   The Department of Industrial Relations (DIR)'s Division of Occupational Safety and Health (DOSH), commonly known as Cal/OSHA, is responsible for the enforcement of regulations protecting workers from health and safety hazards in California's workplaces. In addition, Cal/OSHA provides free onsite consultation services to employers upon request through the Cal/OSHA Consultation Unit. To this end, Cal/OSHA enforces occupational safety and health standards by issuing citations, orders, and notices; proposing civil penalties and specifying abatement requirements and dates to correct unsafe conditions. Receivables from penalties assessed by Cal/OSHA are collected by DIR's Accounting Unit. Appeals of the citations issued by Cal/OSHA are handled by Occupation Safety and Health Appeals Board (OSHAB), which is a board within DIR.

   Cal/OSHA has 28 enforcement offices (known as district offices), with 17 of these offices separated into four geographical regions, each headed by a regional manager. Additionally, there are two High Hazard offices (HHUs), one located in Oakland (HHU North) and another in Santa Ana (HHU South), which conducts programmed inspections of employers in high hazard industries. The Process Safety Management (PSM) has four offices, located in Concord (PSM North) and two located in Santa Ana (PSM South). There are also three Mining and Tunneling Unit offices in California whose mandate is to inspect tunnels and mines. There are also two Labor Enforcement Task Force (LETF) unit offices, one located in Oakland (LETF North) and another in Santa Ana (LETF South), which targets employers in the underground economy in partnership with other state agencies. The Crane Unit and the Pressure Vessel Unit assist compliance safety and health officers (CSHOs) by providing technical expertise for cranes, hoisting equipment, and pressure vessels.

   Cal/OSHA currently uses and enters data in the Federal OSHA Information System (Federal OIS) since Cal/OSHA does not have its own system. Federal OIS costs Cal/OSHA over $1,000 per user per year, and the costs are expected to rise. Federal OIS is cumbersome, time consuming, and labor intensive to use which increases inspection lapse time and delays

citations which decreases the number of inspections due to more time required per inspection and data input. Furthermore, Cal/OSHA is currently dependent on a system geared towards supporting federally-mandated requirements but not focused on capturing California requirements. No fields in Federal OIS capture the data for additional California requirements, which result in Cal/OSHA using paper case files outside of Federal OIS.

There is also a Change Order process for Federal OIS but it takes years to implement changes to its federal system. Federal OSHA's limitations of implementing changes that meet its own federal needs and needs of the 28 different State Plans renders the process ineffective for Cal/OSHA's business needs. Therefore, the requirements specific to a new Cal/OSHA system are beyond what the current Federal OIS could provide currently and in the future. In addition, data needed for operational and management reporting, data analytics, penalty calculations, and document management are some of the requirements for Cal/OSHA that are not supported adequately by the subset of features in Federal OIS. Differences in data confidentiality between the Federal and State requirements are also at issue because Federal OSHA makes data public that we consider protected in California.

Cal/OSHA proposes to modernize its program by acquiring a new system that will meet federal and state-mandated requirements, consolidate information into a central database/repository, interface to other DIR systems, and automate manual processes across its units. This project will encompass enhanced case management including: workflow capability, electronic document management/storage, automated upload of manual forms, accidents and complaints by external users via email or online reporting, and support for additional interfaces to other DIR systems for both Enforcement branch and Consultation Services.

Attach relevant documentation to email submission (i.e., business process, workflow, problem analysis, user/stakeholder list, research findings). **Attached in a separate document:**

4. DIR CalOSHA DMS_S2AA_2.3.1 Current Business Environment_AS IS_Attachment_25May2022

If these types of documents are not available, please indicate "Not Available," and explain the reason below:

Not available reason: Click or tap here to enter text.

2. **Technical Context (Describe the technical environment of which the effort will be understood and assessed in 500 words)**

Cal/OSHA does not have a system of its own for data collection and case management but instead relies on the use of a system hosted by Federal OSHA for both Enforcement and Consultation Services. It does not adequately meet needs to handle both federal- and state-mandated requirements, which results in paper case files and manual forms, nor does Federal OSHA support interfaces with other DIR systems. Cal/OSHA Data Management System (DMS) will enable automatic data upload, data cleansing before data enters the system, and automated workflow that can be customized and changed as business needs change. It will be accessible by Cal/OSHA program staff on mobile technology platforms using a variety of devices.

This project will make the work of Cal/OSHA staff more efficient through providing a means for faster data collection in the office, out in the field, online, and with other DIR systems. It will also help Cal/OSHA increase its performance with more reliable and current data, support decision-making, and real-time dashboards of key performance indicators for both Enforcement branch and Consultation Services. The need for Cal/OSHA to have a new system which combines the federal and state mandated requirements in a central database/repository is great and it also help address the automation needs for Cal/OSHA and more flexibility in working with other systems at DIR.

Attach relevant documentation to email submission (i.e., logical system environment diagrams, system interactions, business rules, application flows, stakeholder information, data flow charts). **Attached in a separate document:**

5. DIR CalOSHA DMS_S2AA_2.3.2_TechnicalContext_Diagrams_Attachment_25May2022

If these types of documents are not available, please indicate "Not Available," and explain the reason below:

Not available reason: Click or tap here to enter text.

3. **Data Management (Enter the information to indicate the data owner and custodian of the current system, if applicable.) – N/A, no current system for Cal/OSHA. Federal OIS is hosted and owned by Federal OSHA.**

Data Owner Name: Jeff Killip

Data Owner Title: Cal/OSHA Chief

Data Owner Business Program area: Cal/OSHA

Data Custodian Name: Jack Chu

Data Custodian Title: IT Manager

Data Custodian Technical area: Enterprise Architecture

IT Manager/Data Custodian	Fillable Information
Name	Jack Chu
Contact Number	(510) 286-6820
E-mail Address	JChu@dir.ca.gov
Organization Unit/Office	DIR OIS/IT Manager

Security - Data Classification and Categorization Yes

Security - Privacy Threshold & Impact Assessment. Yes

4. **Existing Data Governance and Data (Note: Answers same as in approved S1BA)**

a) Do you have existing data that must be migrated to your new solution?

Answer (Unknown, Yes, No): Yes

If data migration is required, please rate the quality of the data.

Select data quality rating: Some issues identified with the existing data.

b) Does the Agency/state entity have an established data governance body with well-defined roles and responsibilities to support data governance activities?

Answer (Unknown, Yes, No): No

Note: DIR has identified a Governance Board and Data Stewardship Council and plans to convene in 2022. Artifacts will be submitted during Stage 3.

If Yes, include the data governance organization chart as an attachment to your email submission. -

c) Does the Agency/state entity have data governance policies (data policies, data standards, etc.) formally defined, documented, and implemented?

Answer (Unknown, Yes, No): No

Note: Data dictionaries are maintained for all large systems and several data cleansing efforts are underway. A full data management policy will be created by the Governance Board and Data Stewardship Council once it is established. Artifacts will be submitted during Stage 3.

If Yes, include the data governance policies as an attachment to your email submission. -

d) Does the Agency/state entity have data security policies, standards, controls, and procedures formally defined, documented, and implemented?

Answer (Unknown, Yes, No): Yes

If Yes, attach the existing documented security policies, standards, and controls used to your email submission.

All IT Security policies can be found here:
http://web.dir.ca.gov/informational/Portal.asp?goto=polandproc/PolicyMain.htm

Attached in a separate document:

6. DIR CalOSHA DMS_S2AA_2.3.4d_DIR IT Policies_Attachment_25May2022

e) Does the Agency/state entity have user accessibility policies, standards, controls, and procedures formally defined, documented, and implemented?

Answer (Unknown, Yes, No): Yes

If Yes, attach the existing documented policies, accessibility governance plan, and standards used to the email submission. **Attached in a separate document:**

7. DIR CalOSHA DMS_S2AA_2.3.4e_DIR Accessibility Policies_Attachment_25May2022

5. **Security Categorization Impact Table Attached S1BA-PIA/PTA in a separate document:**

8. DIR CalOSHA DMS_S2AA_ 2.3.5_S1BA_PIA PTA_SIMM-5310C_Attachment_25May_2022

Consult the SIMM 5305-A Information Security Program Management Standard - Security Categorization Impact Table.

Questions	Answers
New Project Name:	Cal/OSHA Data Management System
Brief description of the project/process/system/program (if a project include the system and business process(es) being developed within the scope of the project).	DIR proposes to acquire an integrated online system for its Division of Occupational Safety and Health (DOSH), better known as "Cal/OSHA." The new system will support customizable workflow and reporting, more readily adapt to business needs and provide better management of the data flowing between Cal/OSHA and the Federal OSHA Information System (OIS).
Data Classification: **(per SIMM 5305-A)** ***please check all that apply**	☒ Confidential ☒ Sensitive ☒ Public
Security Categorization (NIST 800-53) **(per FIPS 199)** ***select only one**	☐ High ☒ Medium ☐ Low

Attach a table (in PDF) that categorizes and classifies the agency/state entity's information assets related to this effort (e.g., paper and electronic records, automated files, databases requiring appropriate protection from unauthorized use, access, disclosure, modification, loss, or deletion). Each information asset for which the agency/state entity has ownership responsibility shall be inventoried and identified.

6. **Security Categorization Impact Table Summary**

Consult the SIMM 5305-A Information Security Program Management Standard - Security Categorization Impact Table to provide potential impact levels of the following areas:

Confidentiality: Medium

Integrity: Medium

Availability: Medium

7. **Technical Complexity Score: 2.3**

(Attach a SIMM Section 45 Appendix C with Business and Technical Complexity sections completed to the email submission.) **Attached as a separate document:**
9. DIR CalOSHA DMS_S2AA_2.3.7_SIMM_45_Appendix_C_Technical Complexity_Attachment_14Jun2022

2.4 Requirements and Outcomes

At this time in the project planning process, requirements and outcomes should be documented and indicative of how the Agency/State Entity envisions the final solution. This shall be accomplished either in the form of **mid-level requirements (predictive methodology)/business capabilities or representative epics and user stories** (adaptive methodology) that will become part of the product backlog. The requirements or representative epics and user stories must tie back to the Objectives detailed in the Stage 1 Business Analysis. Regardless of which tool/method is used, an understanding of the following, at a minimum, must be clearly articulated:

- Functional requirements
- Expected user experience(s)
- Expected system outcome
- Expected business operations (e.g., How do you envision operations in the future?)
- Alignment to the project's objectives identified in Stage 1
- Product ownership (e.g., Who owns these requirements?); and
- Verification of need(s) fulfillment (e.g., How will success be measured?)

Tip: If providing requirements, the recommended range of requirements is between 50 and 100.

Attach Requirements and/or Outcomes narratives, mid-level requirements, and/or epics/user stories to submission email. **Attached as a separate document:**

10. DIR CalOSHA DMS_S2AA_2.4_Midlevel_Requirements_Attachment_6Jun2022

2.5 Assumptions and Constraints

Relevant assumptions and constraints help define boundaries and opportunities to shape the scope and complexity of the project.

Assumption: The project budget will be approved.

Description/Potential Impact: If budget for the project is not approved, the project will not proceed.

Assumption: Executive sponsorship will continue through project completion.

Description/Potential Impact: Constant support from executive sponsors will ensure resources are continuously available for the project.

Assumption: CDT/DOF will review and approve the project.

Description/Potential Impact: Control agency support is necessary to start the project and will ensure external influences will not impact the successful completion of the project.

Assumption: Suppliers, vendors, consultants, and State staff will perform their assignments related to the project in a competent and timely manner.

Description/Potential Impact: Delays by any of the project partners could adversely impact the project schedule.

Assumption: Issues will be resolved and risks mitigated on a timely basis.

Description/Potential Impact: Issues and risks that are not addressed on a timely basis could impact the project scope, budget, and/or schedule.

Constraint: Budgetary constraints and/or difficulties in hiring required Cal/OSHA and DIR IT staff may result in reductions to project scope.

Description/Potential Impact: If budget or staffing become limited, the Cal/OSHA Data Management System (DMS) project will be reduced in scope.

Constraint: Federal OIS will not be enhanced to include mandated California inspection and compliance information elements.

Description/Potential Impact: California mandates for additional information collection in the area of workers' safety, citations, hearings, and compliance require a new Cal/OSHA Data Management System (DMS)

Assumption: Click or tap here to enter text.

Description/Potential Impact: Click or tap here to enter text.

Constraint: Click or tap here to enter text.

Description/Potential Impact: Click or tap here to enter text.

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

2.6 Dependencies

Dependencies are elements or relationships in a project reliant on something else occurring before the function, service, interface, task, or action can begin or continue.

Dependency Element	Dependency Description
Development Tools	Develop a standard for the development methods and tools that the vendors will use during the project. This will ensure that the technology transition is consistent with DIR staff knowledge and skills for ongoing system maintenance and operations, once the project is completed.
Testing Strategy	The testing strategy will serve as a guide for verifying how the major aspects of the solution shall be developed.
Preparing Environments	Environments for the development, integration testing (IT), system testing (ST), user acceptance testing (UAT), and training will need to be set up and configured. Development and IT environments would need to be available before the vendor can start the analysis and design phases of the project. ST and UAT environments will be established before testing can begin. Additionally, the training environment will need to be established to allow curriculum development in order to train the users.
Business and System Requirements	The tracing of Cal/OSHA detailed requirements and use cases will be essential in testing, troubleshooting, and building the solution. Traceability from business requirements to system requirements to code and from business requirements to use cases and test cases will ensure that minimal errors are introduced into the DIR production environment.
Software Development Life Cycle (SDLC)	DIR plans to adopt a hybrid waterfall/Agile Software Development framework. The project will be dependent on the specific framework that DIR chooses during the solicitation phase and implementation.
Technology Platform	The project is dependent on the technology platform used to modernize all of the legacy applications. The following technology platforms may be considered for the solution: ▪ Analytics ▪ API Platforms ▪ Application Platforms ▪ Business Intelligence ▪ Computing Platforms ▪ Content and Document Management Systems ▪ Database Platforms ▪ Mobile Platforms ▪ Operating Systems ▪ Security ▪ Storage Platforms ▪ Web Platforms
Proof of Concept and Demos	DIR plans to conduct demonstrations for proof of technology to ensure that the project is progressing in the right direction. Need further discussion with STP and DIR Procurement in Stage 3.

Dependency Element: Click or tap here to enter text.

Dependency Description: Click or tap here to enter text.

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

2.7 Market Research

Market Research (CDT Market Research Guidelines) determines whether products or services available in the marketplace can meet the business needs identified in this proposal. Market Research can also determine whether commercial practices regarding customizing/modifying products or tailoring services are available, or even necessary, to meet the business needs and objectives of the business.

Before undertaking a Market Research approach. Contact your PAO Manager to schedule a collaborative review to review planning to date and discuss the procurement approach.

1. **Project Management Methodology:** Hybrid
2. **Procurement approach recommended:** Challenge-based Procurement
3. **Market Research Approach**

Market Research Methods and Activities

DIR used several methods to perform market research.

- Internet research

DIR conducted extensive research on the internet to identify potential solution approaches to meet CAL/OSHA requirements. DIR researched commercial off-the-shelf solutions (COTS) and platform-as-a-solution (PaaS) providers offering solutions based on cloud architecture and interviewed four other State governments using OSHA in-house IT solutions that might be able to meet the scale and scope of CAL/OSHA DATA MANAGEMENT SYSTEM (DMS) requirements.

- Request for Information to Arizona, North Carolina, South Carolina, Washington, Oregon

DIR developed a Request for Information (RFI) with a survey set of questions for contacts in the OSHA branches of five other states and followed up with interviews with OSHA contacts at those states willing to describe and demonstrate their current solutions for OSHA information processing. Several states provided demonstrations of their OSHA IT solution components. DIR also requested and received a completed RFI from the single COTS provider about its solution. The RFI is attached. Individual states' responses to the RFI are available as well.

- Demonstrations

The RFI included vendor solution criteria developed in February 2022 for use in market research and analysis, including key functional and technical requirements for CAL/OSHA DATA MANAGEMENT SYSTEM (DMS). DIR received demonstrations from five states on their solution approaches, as shown above.

Summary of State Responses to DIR Market Research

State Organization Name	Solution Type	RFI / Interview Date	Presented Demonstrations
1. State of Oregon – OSHA	Custom development	3/18/2022	Yes
2. State of Washington – OSHA	Custom development	3/16/2022	Yes
3. State of North Carolina	OSHA Express – COTS/MOTS	3/29/2022	Yes

4. State of South Carolina	OSHA Express – COTS/MOTS	3/30/2022	No, but willing
5. State of Arizona	Salesforce – PaaS	4/01/2022	Yes
COTS Provider Organization Name	**Solution Type**	**RFI / Interview Date**	**Presented Demonstrations**
6. Assured Consulting Services, Inc. – OSHA Express	OSHA Express – COTS/MOTS	3/25/2022 (RFI only)	Earlier to DIR, in Dec. 2020

Alternatives Assessment

Core members of the CAL/OSHA DATA MANAGEMENT SYSTEM (DMS) project procurement team created high-level solution functional and technical requirements in a questionnaire/RFI form to serve as evaluation criteria to guide demonstrations and interviews with other states.

Market research results enabled DIR to identify three different solution approaches that might meet the requirements for CAL/OSHA DATA MANAGEMENT SYSTEM (DMS):

- COTS/MOTS (OSHA Express)
- Custom Development
- PaaS offerings (Salesforce)

Internet Research and Published Literature

DIR studied the available COTS offerings on the internet; only one, OSHA Express, is built for state government OSHA functions. The product is offered by Assured Consulting Services, Inc., and features its client list here, several of whom are using its OSHA Express COTS/MOTS solution: http://assuredconsulting.com/clients.htm. While other OSHA COTS products exist, they are for smaller government jurisdictions and focus on a minor subset of the functionality DIR requires. DIR also researched which other states created their own systems, using custom development approaches, Salesforce or other PaaS solutions, or OSHA Express. Eight other states have built such systems to improve their information processing beyond what the federal OIS can deliver.

Summary of Findings from Market Research

One of the key findings from the market research performed for Cal/OSHA Data Management System (DMS) is that there is no one-size-fits-all solution. A dozen or more years ago, some states adopted and modified OSHA Express, or built a solution themselves with available staff and a minimum of consultants. More recently, states are using PaaS solutions to meet current technology expectations and a desired speed of development. Each state interviewed by California has chosen a solution that best fits its needs and unique situation and has implemented it in a phased approach—generally two to three phases. The Consultation modules and Enforcement modules are typically separately built at different times, as the new system features and interfaces become tested and familiar and project funding becomes available. The breakdown in phases is unique to each state, with consideration of the logical components, services supported, risk, budget, staff support available, and overhead. States responding to Cal/OSHA's market outreach efforts focused on ease of use and solution architecture as key solution elements, as well as cost. Lessons learned from other states were shared with California in the five interviews held with other states. DIR plans to incorporate what it learned from market research in the project planning, detailed requirements development, solution configuration, and procurement strategy for Cal/OSHA Data Management System (DMS).

Summary of Solution Approaches and Differences

COTS/MOTS Strengths and Weaknesses

OSHA Express is the only publicly available COTS/MOTS solution for state OSHA organizations. It has the opportunity to meet some of DIR's needs for CL/OSHA OIS but does not meet DIR's information technology standards and is built on client/server architecture. Unable to support browser-based access, it cannot support a mobile workforce, and offers no cloud hosting or cloud storage options, now a California standard. The founder and chief programmer of the OSHA Express solution (through consulting firm Assured Consulting Services, or ACS) is to some extent a one-man show, and personally addresses the maintenance and enhancements of his state clientele. The states that Cal/OSHA interviewed mentioned contractual clauses requiring the source code of OSHA Express be held in a software escrow account in case the company or product does not continue. The advantage to OSHA Express is that core functions are already built within the product and interfaces with the Federal OIS would require a minimum of rework. However, the OSHA Express workflow, while used by other states and embedded in the product, would still require extensive gap analysis from DIR to assess the variance between the flows and routing in the product and its unique needs. Interfaces between Cal/OSHA data and the federal OIS would require extensive analysis prior to development, as for any solution approach considered.

Custom Development Strengths and Weaknesses

DIR has developed custom solutions for some of its organizational functions, including Accounting, in recent years. However, staffing limitations exist, due in part to difficulty in hiring by California agencies during the still-prevalent COVID-19 pandemic. Currently at DIR, insufficient staff are available to provide an adequate team for custom development for Cal/OSHA. DIR can consider using a system integrator to develop a custom solution, but cost and time-to-market are factors weighing against this approach.

PaaS Solution Strengths and Weaknesses

PaaS solution providers offer pre-built modules and features to address a number of DIR's CAL/OSHA DATA MANAGEMENT SYSTEM (DMS) objectives, including a unified view of customer data, business intelligence/data mining capabilities, integration across modules, and flexibility for product customization, modern interface capabilities, easy-to-set-up workflow, and streamlined reporting. Available PaaS also provide pre-built client-facing services, with customizable workflow, alerts, and client-specific business rules, and state-of-the-art communication features (email/chat/text). Time-to-implementation is shorter for such platforms, as DIR would define its workflow components into these highly automated applications more swiftly than in a COTS/MOTS or custom development scenario. Operational silos of data can be minimized using modern APIs and underlying data structures provided by the solutions. The PaaS alternative provides built-in functionality to take care of back-end concerns such as security, infrastructure, and data integration, using no-code and low-code development tools. Salesforce, along with MS Dynamics, are market leaders in the "magic quadrant" of the Gartner Group's 2020 report on customer relationship management solutions. These two PaaS solutions include the following state-of-the-art technology features:

- Flexible customization using a standard user interface, requiring little code to write
- Automatic email notifications or new task creation through triggers/workflow rules
- Roles and permissions configured as needed for enhanced security
- Tools provided to set up complex sequences of steps for business logic
- Schedulers with the ability to run jobs at predefined intervals
- Ability to build custom objects to store business-specific data
- Ability to define rich HTML email templates
- Integration with apps like Amazon Web Services, DocuSign, chat services, and more

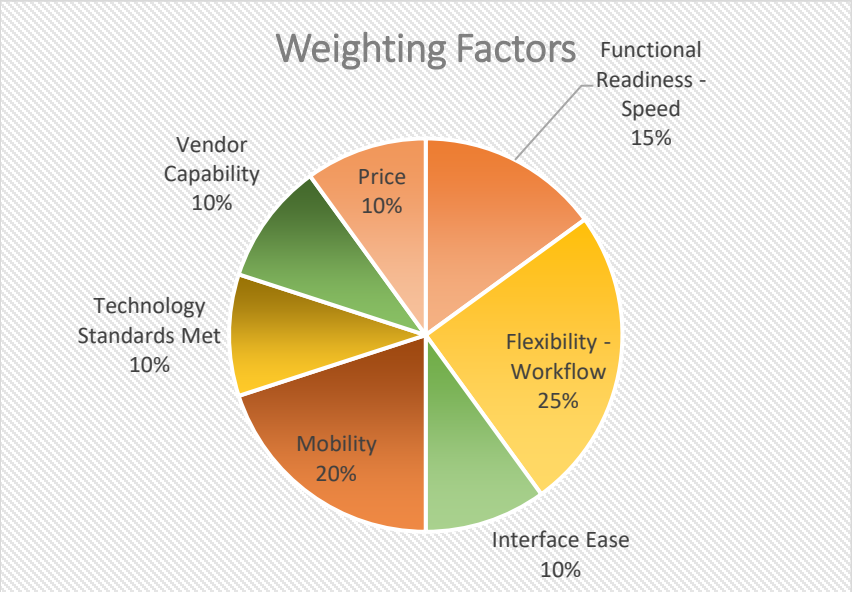
DIR already uses Salesforce for its Cal/Atlas system, developed several years ago successfully, and which would

integrate with its Cal/OSHA solution. Both Salesforce or MS Dynamics would work with the DIR's Oracle database standard and would be cloud-hosted and browser-accessible.

Market research also made it clear that documenting DIR business process sub-steps in detail, performing data cleansing and migration, and decisions about replacing or avoiding various existing system interfaces would be required for all three alternatives.

SOLUTION EVALUATION CRITERIA

DIR scored the three solution approaches using weighted criteria shown in the scorecard below.



A detailed description of each weighting factor used in evaluating the three feasible solution alternatives is provided in the table below.

Solution Approach Evaluation Criteria	Weight %
FUNCTIONAL READINESS – SPEED TO IMPLEMENT How likely is the solution approach to meet DIR needs in terms of **pre-built** components?	15%
FLEXIBILITY – WORKFLOW Will the solution approach allow DIR to customize the product and make changes easily (legislation, new business needs, etc.) via streamlined, flexible workflow?	25%
INTERFACE EASE Does the solution approach provide an integrated platform for interfaces such as to Accounting?	10%
MOBILITY – BROWSER, CLOUD Does the solution approach address needs for mobile service channels, browser-supported on the cloud?	20%
VENDOR CAPABILITY Are sufficient system integrators available to implement the solution approach?	10%
PRICE How well does the solution approach fit into a reasonable budget set by DIR for the project?	10%
ABILITY TO MEET DIR TECHNOLOGY STANDARDS Does the solution approach meet DIR's standards for security, auditing, Oracle RDBMS, browser access, and cloud hosting, along with other IT standards?	10%

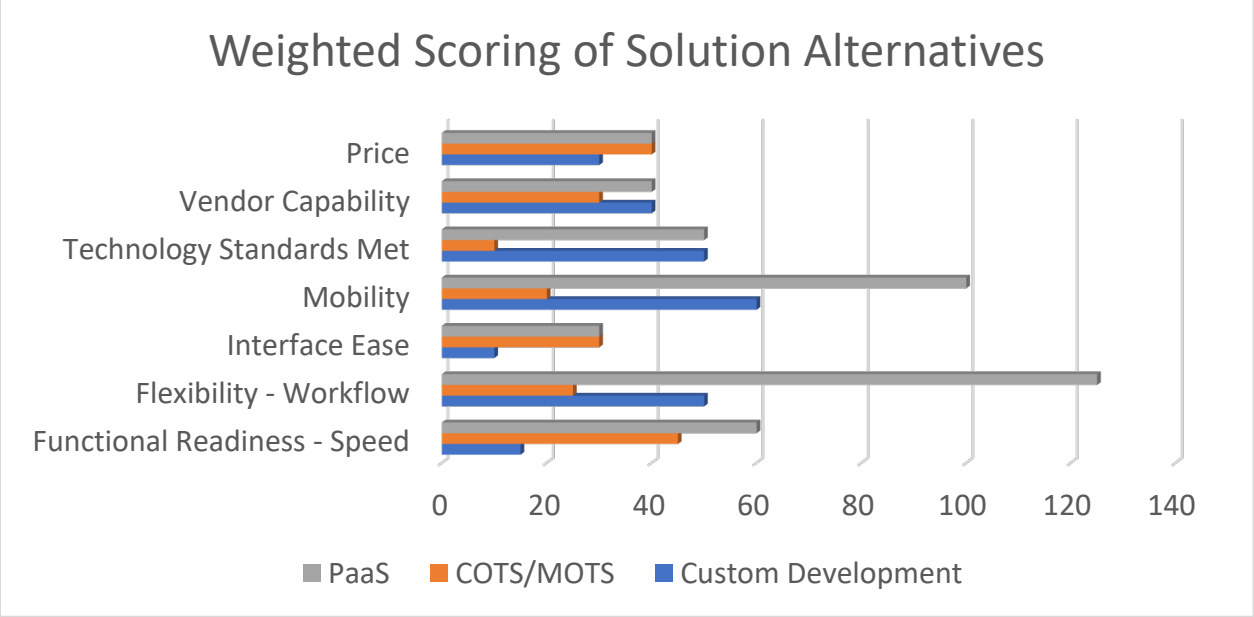
EVALUATION OF THE THREE FEASIBLE SOLUTIONS

DIR scored the three solution approaches in the following summary table.

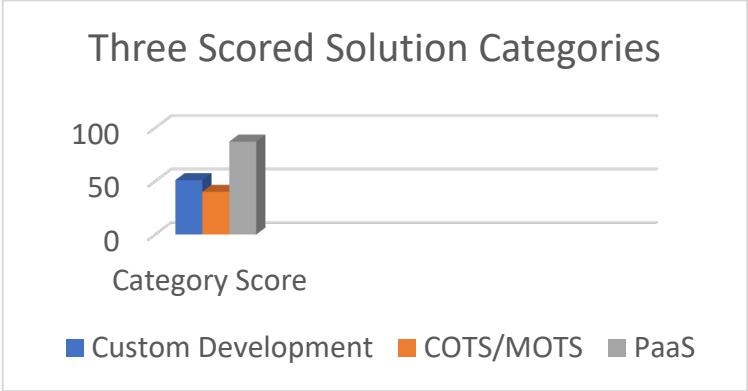
UNWEIGHTED SCORES	Custom Development	COTS/MOTS	PaaS
Functional Readiness-Speed	1	3	4
Flexibility - Workflow	2	1	5
Interface Ease	1	3	3
Mobility	3	1	5
Technology Standards Met	5	1	5
Vendor Capability	4	3	4
Price	3	4	4
Average:	2.7	2.3	4.3

Solution approaches received scores for each category (cost, speed to implement, technology architecture, and solution flexibility) based on a 1-to-5 rating scale, with 5 being high, as shown in the following chart. Based on evaluations of the three solution approaches, the DIR selected the SaaS model technology as the preferred solution.

WEIGHTED SCORES	Custom Development	COTS/MOTS	PaaS	% Weight
Functional Readiness - Speed	15	45	60	15
Flexibility - Workflow	50	25	125	25
Interface Ease	10	30	30	10
Mobility	60	20	100	20
Technology Standards Met	50	10	50	10
Vendor Capability	40	30	40	10
Price	30	40	40	10
Total Score	255.0	200.0	445.0	100
Average Category Score	36.4	28.6	63.6	
% of Total Possible Points	51%	40%	89%	



Multiplying each solution factor score by the weighting factor percentage, as shown in the chart above, gives an average weighted score. Results using these weighting factors to compare and select the preferred solution are shown in the two-dimensional column chart below.



Based on the scoring and weighting factors, the highest score went to PaaS as a preferred alternative approach, nearly twice the score of COTS and custom development approaches.

PROCUREMENT VEHICLE CHOICES

Based on the market research, demonstrations, and subsequent scoring, DIR expects to select a PaaS offering as the preferred solution.

DIR favors a "challenge-based" procurement (CBP) for the system integrator to design, develop, and implement the Cal/OSHA solution, and has experience using this procurement method, having earlier issued such solicitations for two recent successful IT projects for both custom-built and SaaS solutions.

The CBP procurement has a three-phased solicitation process. First a solicitation document is released, with bidder questions and answers to follow, and bidders develop Phase 1 responses. The state evaluates Phase 1 responses and selects at least three bidders to move to Phase 2. In Phase 2, proof-of-concept (POC) solutions are developed by bidders based on state-provided scenarios. The results are evaluated by the state, and bidders provide Phase 2 responses. Following evaluation of Phase 2 responses by the state, the best-value bidder moves forward to Phase 3 for contract negotiations and makes its best and final offer for state evaluation and contract award.

DIR will procure Salesforce (or other PaaS) licenses and ongoing product support using the Standard Licensing Purchase (SLP) price lists available from Salesforce resellers to obtain lowest-cost pricing for these subscription services.

4. Market Research Artifacts

Market Research Artifacts can include internet research, collaboration with other governmental entities, or other documentation.

Attach Market Research artifacts to the email submission.

Attached as a separate document: Formal Market Research Report showing the Requests for Information and results of outreach to multiple other states and vendors.

11. DIR CalOSHA DMS_S2AA_2.7.4_ Market Research Artifacts_Attachment_25May2022

2.8 Viable Alternative Solutions (Updated costs)

The CDT expects Agencies/state entities to conduct a thorough analysis of all feasible alternatives that will meet the proposal's objectives and requirements. Agencies/state entities should provide at minimum the three (3) most viable solutions, one (1) of which could be leveraging and/or enhancing the existing solution (if applicable).

1. Viable Alternative Solution #1

Name: SaaS/PaaS (Preferred Solution)

Description: PaaS solution providers offer pre-built modules and features to address a number of DIR's CAL/OSHA DATA MANAGEMENT SYSTEM (DMS) objectives, including a unified view of customer data, business intelligence/data mining capabilities, integration across modules, flexibility for product customization, modern interface capabilities, easy-to-set-up workflow, and streamlined reporting. Available PaaS also provide pre-built client-facing services, with customizable workflow, alerts, and client-specific business rules, and state-of-the-art communication features (email/chat/text).

Why is this a viable solution? Please explain:

Time-to-implementation is shorter for such platforms, as DIR would define its workflow components into these highly automated applications more swiftly than in a COTS/MOTS or custom development scenario. Operational silos of data can be minimized using modern APIs and underlying data structures provided by the solutions. The PaaS alternative provides built-in functionality to take care of back-end concerns such as security, infrastructure, and data integration, using no-code and low-code development tools.

Approach

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 -- Note: Not applicable; no DIR IT system exists

Modify Statute/Policy/Regulations: No

Please Specify: Click or tap here to enter text.

Create a new IT system: Yes

Other: No Specify: Click or tap here to enter text.

Architecture Information

Business Function(s)/Process(es): *Support Cal/OSHA enforcement and consultation business processes.*

TIP: Copy and paste or click the + button in the lower right corner to add business processes with the same application, system, or component; COTS/Cloud Technology or custom solution; runtime environment; system interfaces, data center location; and security.

Conceptual Architecture

Attach a copy of the conceptual architecture to your email submission. **Attached as a separate document:**

12. DIR CalOSHA DMS_S2AA_2.8_Viable Alternatives Solution_Conceptual Architecture_Attachment_26May2022

COTS/SaaS/Cloud Technology or Custom: COTS/SaaS/Cloud Technology

Name/Primary Technology: Salesforce or MS Dynamics

Hosted on Cloud such as Amazon Web Services, etc.

TIP: Copy and paste or click the + button in the lower right corner to add system software information if the application, system, or component uses additional system software.

Explain Existing System Interfaces: Federal OIS to Cal/OSHA AR, OSHAB OASIS to Cal/OSHA AR, EDD to Cal/OSHA AR, Cal/OSHA AR to CARS to FI$Cal.

Explain New System Interfaces: The new Cal/OSHA DMS will interface with Federal OIS, OSHAB OASIS, DOSH Legal eAttorney, DLSE RCI CalAtlas, and Cal/OSHA AR.

Data Center Location of the To-be Solution: Commercial data center

Hosted on Cloud such as AWS.

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

Security

Access

Public: Yes (in part)

Internal State Staff: Yes

External State Staff: Yes

Other: No Specify: Click or tap here to enter text.

Type of Information (Select Yes or No for each to identify the type of information that requires protection. See the SAM Section 5305.5 for more information.)

Personal: Yes

Health: Yes

Tax: Yes

Financial: Yes

Legal: Yes

Confidential: Yes

Other: No Specify: Click or tap here to enter text.

Protective Measures (Select Yes or No to identify the protective measures used to protect information.)

Technical Security: Yes

Physical Security: Yes

Backup and Recovery: Yes

Identity Authorization and Authentication: Yes

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

~~NoYesOtherClick or tap here to enter text.~~

Total Viable Alternative #1 Solution Cost (copy from FAW – Executive Cost Summary tab, cells E7 through E11):

Planning Costs:	$ 3,517,308
One-Time (Project) Costs:	$ 52,223,048
Total Future Ops. IT Staff OE&E Costs:	$ 12,292,123
Total Proposed Cost:	**$ 68,032,479**
Annual Future Ops. Costs (M&O):	$ 12,292,123

2. Viable Alternative Solution #2

Name: OSHA Express (COTS/MOTS)

Description: OSHA Express is the only publicly available COTS/MOTS solution for state OSHA organizations. The advantage to OSHA Express is that core functions are already built within the product and interfaces with the Federal OIS would require a minimum of rework. However, the OSHA Express workflow, while used by other states and embedded in the product, would still require extensive gap analysis from DIR to assess the variance between the flows and routing in the product and its unique needs.

Why is this a viable solution? Please explain:

If DIR were to accept a client/server application architecture, OSHA Express would bring speed and pre-built features targeted to OSHA state government needs for enforcement and consultation business processes. DIR could obtain cloud-hosting and cloud-storage services as an option if choosing this alternative approach.

Approach

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 -- Note: Not applicable; no DIR IT system exists

Modify Statute/Policy/Regulations: No

Please Specify: Click or tap here to enter text.

Create a new IT system: Yes

Other: No Specify: Click or tap here to enter text.

Architecture Information

Business Function(s)/Process(es): *Support Cal/OSHA enforcement and consultation business processes.*

TIP: Copy and paste or click the + button in the lower right corner to add business processes with the same application, system, or component; COTS/Cloud Technology or custom solution; runtime environment; system interfaces, data center location; and security.

Conceptual Architecture

Attach a copy of the conceptual architecture to your email submission. **Attached as a separate document:**

12. DIR CalOSHA DMS_S2AA_2.8_Viable Alternatives Solution_Conceptual Architecture_Attachment_26May2022

COTS/SaaS/Cloud Technology or Custom: COTS/SaaS/Cloud Technology

Name/Primary Technology: OSHA EXPRESS (COTS)

TIP: Copy and paste or click the + button in the lower right corner to add system software information if the application, system, or component uses additional system software.

Explain Existing System Interfaces: Federal OIS to Cal/OSHA AR, OSHAB OASIS to Cal/OSHA AR, EDD to Cal/OSHA AR, Cal/OSHA AR to CARS to FI$Cal.

Explain New System Interfaces: The new Cal/OSHA DMS will interface with Federal OIS, OSHAB OASIS, DOSH Legal eAttorney, DLSE RCI CalAtlas, and Cal/OSHA AR.

Data Center Location of the To-be Solution: Commercial data center

Hosted on Cloud such as AWS.

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

Security

Access

Public: Yes (in part)

Internal State Staff: Yes

External State Staff: Yes

Other: No Specify: Click or tap here to enter text.

Type of Information (Select Yes or No for each to identify the type of information that requires protection. See the SAM Section 5305.5 for more information.)

Personal: Yes

Health: Yes

Tax: Yes

Financial: Yes

Legal: Yes

Confidential: Yes

Other: No Specify: Click or tap here to enter text.

Protective Measures (Select Yes or No to identify the protective measures used to protect information.)

Technical Security: Yes

Physical Security: Yes

Backup and Recovery: Yes

Identity Authorization and Authentication: Yes

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

Total Viable Alternative #2 Solution Cost (copy from FAW – Summary tab, cell AL33):

Total Proposed Cost: $61,964,979

3. Viable Alternative Solution #3

Name: Custom Development

Description: Using this alternative, DIR would build the solution itself with the help of system integrator staff.

Why is this a viable solution? Please explain:

DIR has developed custom solutions for some of its organizational functions, including Accounting, in recent years and has retained several skilled IT developers in its organization.

Approach

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 -- Note: Not applicable; no DIR IT system exists

Modify Statute/Policy/Regulations: No

Please Specify: Click or tap here to enter text.

Create a new IT system: Yes

Other: No Specify: Click or tap here to enter text.

Architecture Information

Business Function(s)/Process(es): *Support Cal/OSHA enforcement and consultation business processes.*

TIP: Copy and paste or click the + button in the lower right corner to add business processes with the same application, system, or component; COTS/Cloud Technology or custom solution; runtime environment; system interfaces, data center location; and security.

Conceptual Architecture

Attach a copy of the conceptual architecture to your email submission. **Attached as a separate document:**

12. DIR CalOSHA DMS_S2AA_2.8_Viable Alternatives Solution_Conceptual Architecture_Attachment_26May2022

COTS/SaaS/Cloud Technology or Custom: Custom

Name/Primary Technology: Oracle RDBMS

Hosted on Cloud such as Amazon Web Services, etc.

TIP: Copy and paste or click the + button in the lower right corner to add system software information if the application, system, or component uses additional system software.

Explain Existing System Interfaces: Federal OIS to Cal/OSHA AR, OSHAB OASIS to Cal/OSHA AR, EDD to Cal/OSHA AR, Cal/OSHA AR to CARS to FI$Cal.

Explain New System Interfaces: The new Cal/OSHA DMS will interface with Federal OIS, OSHAB OASIS, DOSH Legal eAttorney, DLSE RCI CalAtlas, and Cal/OSHA AR.

Data Center Location of the To-be Solution: Commercial data center

Hosted on Cloud such as AWS.

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

Security

Access

Public: Yes (in part)

Internal State Staff: Yes

External State Staff: Yes

Other: No Specify: Click or tap here to enter text.

Type of Information (Select Yes or No for each to identify the type of information that requires protection. See the SAM Section 5305.5 for more information.)

Personal: Yes

Health: Yes

Tax: Yes

Financial: Yes

Legal: Yes

Confidential: Yes

Other: No Specify: Click or tap here to enter text.

Protective Measures (Select Yes or No to identify the protective measures used to protect information.)

Technical Security: Yes

Physical Security: Yes

Backup and Recovery: Yes

Identity Authorization and Authentication: Yes

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

Total Viable Alternative #3 Solution Cost (copy from FAW – Summary tab, cell AL50):
Total Proposed Cost: $64,607,013

2.9 Project Organization

Project planning includes the process of identifying how and when specific labor skill sets are needed to ensure that the proposed project has sufficient staff with the appropriate knowledge and

experience by the time the project moves into execution. All staff identified in the following sections should be included in the Financial Analysis Worksheet to be completed in Section 2.12.

1. Project Organization Chart:

Attach the Project Organization Chart to your email submission. **Attached as a separate document:** ***13. DIR CalOSHA DMS_S2AA_2.9.1_Project Org Chart_Attachment_25May2022***

2. Is the department running this project as a matrixed or projectized organization?

Matrixed

In each of the following sections, provide a concise description of the approach to staffing of the proposed project including contingencies for business/program, IT, or administrative areas to maintain ongoing operations in conjunction with the proposed project.

1. Administrative

DIR will provide the following staff for the administrative needs of the project:

1. Project Manager (DIR OIS)
The project manager (PM) will have experience with project implementation and will manage the project from initiation to closing. The PM will ensure that the project team completes the project for their designated functions. The PM will facilitate the development of project plans, manage contractor performance of project tasks, and communicate with control agencies. The PM secures acceptance of deliverables from the project sponsor and stakeholders. The PM is responsible for communication, including status reporting, risk management, and escalation of issues that cannot be resolved by the project team.

2. Procurement Team (CDT, DIR Contracts, DIR OIS, and Programs) - The procurement team will include CDT's Statewide Technology Procurement Division (STP), DIR Contract experts, DIR OIS experts, and management from each affected program.
The procurement team will develop the Procurement Management Plan in accordance with CDT guidelines and will facilitate approval. The procurement team will review the solicitation document(s) and submit the final version(s), as appropriate, based on the procurement vehicle being utilized. The procurement team will facilitate the evaluation of proposals/offers. It will also develop (with CDT STP) the evaluation and selection report for each formal procurement and submit it for procurement documentation to support contract(s) award.

3. Contracts Manager (CDT, DIR Procurement, OIS) - The contract manager is responsible for the oversight of the software contract, System Integrator contract, and any other contracts supporting the project. The individual will participate in contractor performance reviews by reviewing and evaluating deficiencies, provide interpretation of project contracts to project team, recommend course of action on contractual issues, participate in procurement and contract meetings, monitor contractor deliverables, and monitor, analyze, and mitigate procurement-related risks and issues.

4. IT Support Team (OIS) – The IT support team will include experts from OIS that will assist the PM throughout the project to facilitate hardware, software, interfaces, and migration activities. The IT support team will provide system support through the development and implementation of this project to facilitate a successful

implementation and transition. In-house current staff is expected to be augmented by additional resources for the project.

2. Business Program

Each Program will designate a product owner. The product owners will team with the PM during project development and delivery to test and validate system functions. The product owners will act as the key decision maker on system functionality and will work closely with the PM and vendor team on a daily basis through the project phase. Additionally, each Program will dedicate one or more SMEs. The SMEs will work with the selected vendor and the PM to implement the solution. Program SMEs will be dedicated to the project and will also serve as the system's user acceptance testers and execute testing at the direction of the PM and product owner. Staff experts will also perform data validation activities. In order for this project to be successful, it is required that staff prioritize it and dedicate the time necessary to ensure its completion.

3. Information Technology

DIR will assign support resources to work with the vendor and program staff to address issues encountered when accessing the proposed solution via a web browser from DIR workstations. The resources will have experience with DIR browser, system, and security configurations. The IT resources will be available throughout the project lifecycle to address system implementation and interface issues.

4. Testing

All product owners and SMEs will act as testers. Under guidance of the project manager and informed by the vendor's expertise, the testers will participate in software requirements meetings, as needed, to understand the business and functional requirements that the software must meet. They will perform testing based on the test plan and document any issues in a defect and enhancement tracking tool. Once the issue has been resolved, the testers will retest and declare it fixed or report it again until the requirement has been successfully tested.

5. Data Conversion/Migration

OIS staff, the product owners, and staff experts (technical resources) will participate in data migration activities with the System Integrator. The supporting activities related to data migration (e.g., data mapping, data mapping review, and data validation) will be completed by the Programs with the coordination and support of OIS resources and additional contractor resources. In addition, Federal OIS technical staff will support the migration of data on the project.

6. Training

Training for the recommended solution will be conducted by the vendor and included in the procurement contract. The vendor and PM will work with the product owners and/or SMEs to train key program staff on how to utilize the software. DIR program staff will serve as trainers to supplement the vendor provided training and provide on-site support and business process documentation as necessary to mitigate any business process change issues. DIR will use a train-the-trainer approach and have the system integrator provide initial training and knowledge transfer. DIR trainers will perform most of the training onsite with business program users.

7. Organizational Change Management

In-house staff will be sufficient for the project's need for OCM.

8. **Resource Capacity/Skills/Knowledge for Stage 3 Solution Development**

This narrative should include the experience level and quantity of procurement, contract management, and budget staff who will be responsible for the Stage 3 Solution Development.

For Stage 3 Solution Development, DIR procurement staff have robust experience in dealing with the procurement vehicles identified for this project. Aside from leading the procurement phases of two large projects with similar scope (OASIS, EAMS), DIR has successfully executed the purchase of many items using leveraged procurement agreements (CMAS, etc.). DIR in-house procurement, contract management and budget staff with work with DIR's established Project Management Office to conduct the Stage 3 activities.

2.10 Project Planning

1. **Project Management Risk Assessment Note: Attached as a separate document:**

   14. DIR CalOSHA DMS_S2AA_2.10.1_SIMM_45_Appendix_A_PM Risk Assessment_Attachment_25May2022

   Updated Project Management Risk Score: 1.8

   Attach Updated PM Risk Assessment to your email submission. SIMM Section 45A

2. **Project Charter**

   Is your project charter approved by the designated Agency/state entity authority and available for the Department of Technology to review? **Choose**: 'Yes,' 'No,' or 'Not Applicable.' If 'No' or 'Not Applicable,' provide the artifact status in the space provided.

   Project Charter (Approved): Yes

   Status:

   Attach a copy of the Project Charter to your email submission. **Attached as a separate document:**

   15. DIR CalOSHA DMS_S2AA_2.10.2_ Project_Charter_Attachment_25May2022

3. **Project Plans Attached as a separate document: *16. DIR CalOSHA DMS_S2AA_2.10.3_Project Management Plans_Attachment_25May2022***

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

   Note: For Low to medium complexity and cost projects, discuss with your PAO manager the option of submitting a Master Project Management Plan in place of individual plans.

   Scope Management Plan (Approved): Yes

   Status: Included in S2AA

Communication Management Plan (Approved): Yes

Status: Included in S2AA

Schedule Management Plan (Approved) : Yes

Status: Included in S2AA

Procurement Management Plan (Approved): No

Status: To Be Addressed in Stage 3

Requirements Management Plan (Approved): No

Status: To be Developed in Stage 3 with detailed requirements/user stories/outcomes.

Stakeholder Management Plan (Draft): Yes

Status: Included in S2AA

Governance Plan (Draft): Yes

Status: Included in S2AA

Contract Management Plan (Draft): No

Status: To be determined in Stage 3.

Resource Management Plan (Draft): Yes

Status: Included in S2AA

Change Control Management Plan (Draft): No

Status: To be developed in Stage 3.

Risk Management Plan (Draft + Risk Log): Yes

Status: Included in S2AA

Issue and Action Item Management Plan (Draft + Issue Log): Yes

Status: Included in S2AA

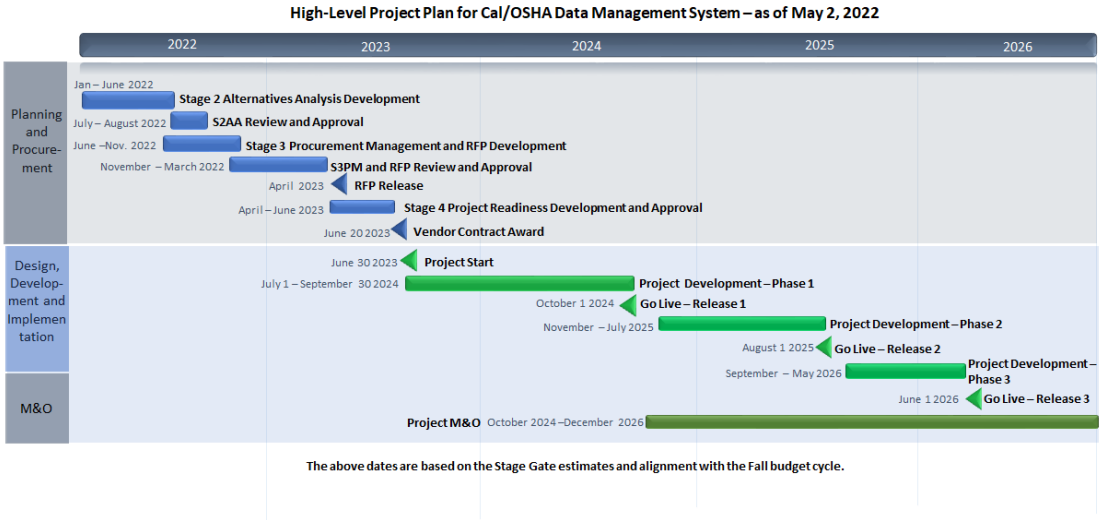
Cost Management Plan (Approved if planning BCP approved): Yes

Status: Included in S2AA

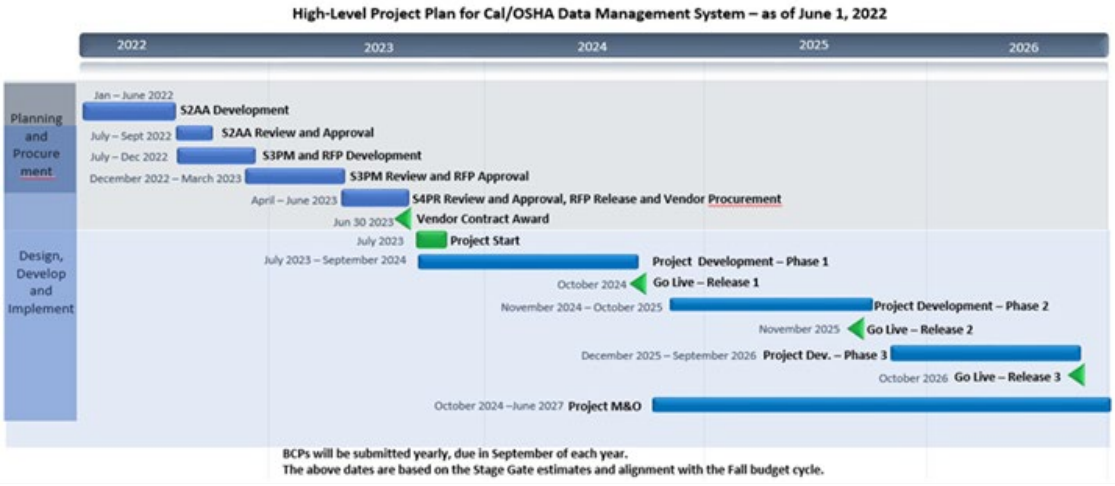
4. **Project Roadmap (High-Level)**

Attach a high-level Project Roadmap showing remainder of planning phase and transition into execution phase to the email submission. **Attached as a separate document:**

17. DIR CalOSHA DMS_S2AA_2.10.4_Project Roadmap HL_Attachment_1Jun2022



Updated info added on 9/22/22 – Subject to changes in Stage 3 and 4



Please note these estimated dates are subject to change in Stages 3 and Stage 4.

1. Phase 1/Release 1: Estimated 7/1/2023 – 9/30/24; go live 10/1/24 (multiple sprints (design/build), testing, training, release, pilot to few offices, and roll-out to rest of offices in CA)
2. Phase 2/Release 2: Estimated 11/1/24-10/31/25; go live 11/1/25 (multiple sprints (design/build), testing, training, release, pilot to few offices, and roll-out to rest of offices in CA)
3. Phase 3/Release 3: Estimated 12/1/25-9/30/26; go live 10/1/26 (multiple sprints (design/build), testing, training, release, pilot to few offices, and roll-out to rest of offices in CA)
4. Maintenance Period: 10/1/24 – 6/30/27 to support existing releases, **stabilize** all releases and fixes, knowledge transfer and training to DIR Support; then hand-off to DIR Support

Table 1. Sample Cal/OSHA DMS Implementation Release Approach from S2AA – Subject to changes in Stages 3 and 4

Release 1 Functionality 7/1/2023 – 9/30/24: Go Live 10/1/24	Pilot of Release 1 and office roll-out throughout CA	Release 2 Functionality 11/1/24 – 10/31/25: Go Live 11/1/25	Release 3 Functionality 12/1/25 – 9/30/26: Go Live 10/1/26	Maintenance Period: 10/1/24 – 6/30/27 and ongoing DIR Support
ENFORCEMENT • Enforcement case management • Enforcement document management • Migration of active Enforcement Program cases into DMS • E-mail client (Microsoft Outlook) • Field inspection tool • One-way outbound to Fed OIS 2.0 Enforcement case interface • One-way inbound from OASIS interface • Two-way interface with Cal/OSHA AR. Outbound accounts receivable data from DMS to Cal/OSHA AR; inbound payment-in-full data and judgement date from Cal/OSHA AR to DMS	• Enforcement District Office • Enforcement Regional Office • Accounting/Collections to make sure new interfaces for Cal/OSHA AR and DMS work properly • Plan release to other offices • Provide training to new system • Provide training to new field tools • Scheduled release to other offices with "sneaker support"	• Permit FileMaker Pro functionality encompassed • Migration of all cases within document retention timelines • Interface with Legal Unit's eAttorney • Interface with Division of Labor Standards Enforcement's RCI • Public Portal available for Enforcement • Plan release to other offices • Provide training to new system • Provide training to new field tools • Scheduled release to other offices with "sneaker support"	CONSULTATION • Consultation Program case management • Consultation document management • Migration of all Consultation cases still within document retention timelines • Public Portal available for Consultation • Pilot in a single Area Office for Consultation • Plan release to other offices • Provide training to new system • Provide training to new field tools • Scheduled release to other offices with "sneaker support"	MAINTENANCE AND OPERATIONS • Support existing releases • Stabilize all releases and fixes • Knowledge Transfer • Documentation Manual • Training • Hand-off Support to DIR Support • Change requests • Service Requests

a) Planning Start Date: 12/13/2021

b) Estimated Planning End Date: 6/30/2023

c) Estimated Project Start Date: 7/3/2023

d) Estimated Project End Date: 6/30/2027

2.11 Data Cleansing, Conversion, and Migration

If in Section 2.3 (above) the answer to the question "Do you have existing data that must be migrated to your new solution?" was marked "Yes," please complete this section.

The California Department of Technology recommends having a Data Consultant start data cleansing, conversion, and migration activities as soon as possible.

GENERAL NOTES: The Department will utilize the procured system integrator to conduct Data Conversion and Migration activities to support the transition from sole reliance on paper files and the federal OIS to the new DMS. It expects a minimal set of field element device configuration data to require migration from the federal OIS system, but will refine the data conversion/migration requirements in Stage 3. Staffing needs for conversion and migration will be addressed by the system integrator and estimates are provided in the FAWs attached. Data migration is dependent on the efforts of the Program and selected solution vendor, and is planned to be accomplished after each phased implementation is complete (starting in October 2024 as Phase 1 is completed).

1. **Current Environment Analysis: Not Started**

   The procured system integrator team will include a lead consultant to perform data conversion/migration tasks, including this particular activity.

2. **Data Migration Plan: Not Started**

   The procured system integrator team will include a lead consultant to perform data conversion/migration tasks, including this particular activity.

3. **Data Profiling: Not Started**

   The procured system integrator team will include a lead consultant to perform data conversion/migration tasks, including this particular activity.

4. **Data Cleansing and Correction: Not Started**

   The procured system integrator team will include a lead consultant to perform data conversion/migration tasks, including this particular activity.

5. **Data Quality Assessment: Not Started**

   The procured system integrator team will include a lead consultant to perform data conversion/migration tasks, including this particular activity.

6. **Data Quality Business Rules: Not Started**

   The procured system integrator team will include a lead consultant to perform data conversion/migration tasks, including this particular activity.

7. **Data Dictionaries: Not Started**

   The procured system integrator team will include a lead consultant to perform data conversion/migration tasks, including this particular activity.

8. **Data Conversion/Migration Requirements: Not Started**

   The procured system integrator team will include a lead consultant to perform data conversion/migration tasks, including this particular activity.

2.12 Financial Analysis Worksheets (Updated FAWs)

Attach F.2 Financial Analysis Worksheet(s) to the email submission.

Attached as a separate document: Updated FAW to match revised BCP 23/24

18. Final Revised_DIR CalOSHA DMS_S2AA_ 2.12_FAWs_Attachment_27Dec2022

End of agency/state entity document.

Please ensure ADA compliance before submitting this document to CDT.

When ready, submit Stage 2 and all attachments in an email to ProjectOversight@state.ca.gov.

Department of Technology Use Only

Original "New Submission" Date: 4/7/2022

Form Received Date: 12/27/2022

Form Accepted Date: 12/27/2022

Form Status: Completed

Form Status Date: 1/10/2023

Form Disposition: Approved

Form Disposition Date: 1/10/2023