



Stage 2 Preliminary Assessment

Department of Technology, SIMM 19B, Revision 7/1/2015

2.1 General Information

Agency or State Entity Name:

Technology, Department of

Organization Code:

7502

Proposal Name:

Oceanic Invasive Species Program Database Upgrade

Department of Technology Project Number:

7502-999

2.2 Preliminary Submittal Information

Contact Information:

Contact First Name:

Jeanne

Contact Last Name:

Smith

Contact Email:

Jeanne.Smith@state.ca.gov

Contact Phone Number:

(916) 999-9999

Preliminary Submission Date:

7/13/2015

Preliminary Project Approval Executive Transmittal:



Any Dept 7502-999 Oceanic Invasive Species Program DB Upgrade PrelimTransmittal 201512.pdf
Adobe Acrobat Document
243 KB

2.3 Stage 2 Preliminary Assessment

2.3.1 Impact Assessment

Yes No

1. Has the Agency/state entity identified and committed subject matter experts from all business sponsors and key stakeholders?

2. Are all current baseline systems that will be impacted by this proposal documented and current (e.g., data classification and data exchange agreements, privacy impact assessments, design documents, data flow diagram, data dictionary, application code, architecture descriptions)?

3. Does the Agency/state entity anticipate needing support from the Department of Technology's Statewide Technology Procurement Division to conduct market research for this proposal (Market Survey, Request for Information)?

4. Does the Agency/state entity anticipate submitting a budget request to support the procurement

- activities of this proposal?
5. Could this proposal involve the development and/or purchase of systems to support activities included in Financial Information System for California (FI\$CAL) (e.g., financial accounting, asset management, human resources, procurement/ordering, inventory management, facilities management)?
6. Does the Agency/state entity have a designated Chief Architect or Enterprise Architect to lead the development of baseline and alternative solutions architecture descriptions?
7. Will the Agency/state entity's Information Security Officer be involved in the development and review of any security related requirements?
8. Does the Agency/state anticipate performing a business-based procurement to have vendors propose a solution?

2.3.2 Business Complexity Assessment

Business Complexity: Business Complexity Zone: High Medium Low

Stage 2 Alternative Analysis

2.4 Submittal Information

Contact Information: (Use Contact Information from Preliminary Submittal Information)

Contact First Name:

Jeanne

Contact Last Name:

Smith

Contact Email:

Jeanne.Smith@state.ca.gov

Contact Phone Number:

(916) 999-9999

Submission Date:

11/20/2015

Submission Type:

- New Submission Updated Submission (Post-Approval)
 Updated Submission (Pre-Approval) Withdraw Submission

Project Approval Executive Transmittal:



Any Dept 7502-999 Oceanic
 Invasive Species Program DB
 Upgrade Executive Transmittal
 201512.pdf
 Adobe Acrobat Document
 254 KB

Condition(s) from Previous Stage(s):

Condition #

1

Condition Category

Project Management

Condition Sub-Category

General

Condition

	Project must be managed by a qualified Project Manager provided by CA Government Agency or the Statewide Project Management Office.
Assessment	Transfer
Agency/state Entity Response	A CA Government Agency Project Manager has been assigned to the project.
Status	Completed
Condition #	2
Condition Category	Organizational Readiness
Condition Sub-Category	General
Condition	Organizational Readiness Self-Assessment provided by Department of Technology must be completed. This condition was waived by Department of Technology, Information Technology Project Oversight Deputy Director on October 15, 2015.
Assessment	Mitigation
Agency/state Entity Response	Department has requested the Organizational Readiness Assessment from Department of Technology and are still waiting for it to be provided.
Status	Completed

2.5 Baseline Processes and Systems

2.5.1 Description

Currently, the California Department of Oceanic Control (Department) Oceanic Facilities Division (OFD) is charged with oversight of the state's Oceanic Invasive Species Program (OISP) to prevent the introduction of non-native plants and animals from commercial ships.

The current OISP application is a custom developed web-based application with approximately 40 active Department users. The major modules of the current application are:

- Vessel Schedule: provides functions and data associated with identifying vessels that arrive at California ports for inspection purposes;
- Browse Vessel: provides functions and data associated with vessel information and history such as port arrival history, ballast water and biofouling management history, and inspection history;
- Working Inspections: provides functions and data associated with tracking inspection of a vessels, includes a workflow queue associated with specific user roles in the system;
- Reports: contains five reports that may be selected and generated for the user; and,
- Administrative: allows for user creation and maintenance, creation and assignment of users roles and permissions, and entity and contact creation and maintenance.

The existing manual OISP processes include collection, data entry, reconciliation, analysis, and storage of approximately 10,500 complex vessel-submitted reporting forms annually. This labor intensive process uses 3.7 PYs annually (over 6700 staff hours) to accomplish the Program's legislatively mandated responsibilities, diverting staff resources from other programmatic requirements. The current process results in the need to store and maintain approximately 30,000 pages annually due to legal requirements; the current year (e.g. 2015) along with seven previous years (e.g. 2008 - 2014) of reports are required to be stored onsite. Significant onsite storage requirements are necessary to accommodate the retention of these reports. Additionally, older records, dating back to the inception of the program (January 2000), must be archived off-site in perpetuity.

The current system provides the ability to collect data, but due to the labor intensive nature of the current process, staff have difficulty retrieving data in a timely fashion to provide accurate, near real-time information for a variety of internal and external reporting purposes (e.g. legislative reports, stakeholder requests for data,

compliance monitoring). Upgrading the OISP database will improve efficiency allowing the redirection of staff to other program objectives (e.g. compliance assessment and enforcement of new regulations) and system support.

2.5.2 Business Process Workflow

 File Attachment

2.5.3 Current Architecture Information

Business Function/Process(es)

Collect and Report OISP data

Application, System or Component: OISP System

COTS, MOTS or Custom: Custom Application

Name/Primary Technology: Visual Basic .Net Framework version 4

Runtime Environment

Cloud Computing Used? Yes No

If "Yes", Specify: Select...

Server/Device Function: Production and Test - WebApp Server SQL Server

Hardware: VMWare at CGA

Operating System: Windows 2008 R2

System Software: IIS and SQL Server 2008 R2

System Interfaces:

Data Center Location: Agency/State Data Center Operated by Agency/state entity

Security

Access: (check all that apply) Public Internal State Staff External State Staff
 Other, specify:

Type of Information: (check all that apply) Personal Health Tax Financial Legal Confidential
 Other, specify: Public

Protective Measures: (check all that apply) Technical Security Identity Authorization and Authentication
 Physical Security Backup and Recovery
 Other, specify:

Data Management

Data Owner	Name:	Olivia Morrow
	Title:	Environmental Program Manager
	Business Program:	Oceanic Intrusive Species Program
Data Custodian	Name:	Alex Bradley
	Title:	Chief Information Officer
	Business Program:	Information Services Section (ISS)

2.5.4 Current Architecture Diagram

2.5.5 Security Categorization Impact Table

 File Attachment

SECURITY CATEGORIZATION IMPACT TABLE SUMMARY

SECURITY OBJECTIVE	LOW	MODERATE	HIGH
Confidentiality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.6 Mid-Level Solution Requirements

Requirements:

 File Attachment

2.7 Assumptions and Constraints

Assumptions/Constraints	Description/Potential Impact
The project receives the funding requested.	Department and Department of Finance support and commit the funding required for this project.
Maritime industry will support and utilize this solution.	The maritime industry is an important part of the process, and their support is required for project to successfully meet objectives.
Project will continue to be a high priority for Department.	The priority of this project is high, and it will remain at that level for the duration of the project.
Technology is available to create a solution.	The appropriate technology is available and will be used in the development and implementation of the project.
Oceanic Intrusive Species Control Fund (OISCF) will fund the OISP project.	Oceanic Intrusive Species Control Fund (OISCF) will provide the appropriate level of funding required for the OISP project.
Leverage existing infrastructure.	This project will leverage from the existing infrastructure used by the current internal application.
Existing database will be used.	The existing database used for the current application will be used and extended where required for this project.
Project resources are available and engaged in project activities.	The resources required for this project are available in a timely manner and are engaged in project activities.
Application is hosted in Tier III data center.	All public facing applications must be hosted in a Tier III or equivalent data center.
Application and business process is not mission critical.	The application and business processes are not mission critical.

2.8 Dependencies

Element	Description
Define the unique classification required for each external entity.	Identify unique user name and profile content for the external users of the application.
The Assumptions and Constraints are also dependencies for this project and must be addressed correctly and in a timely manner to ensure project success.	

2.9 Market Research

2.9.1 Market Research Methodologies/Timeframes

Methodologies used to perform market research (check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> Request for Information (RFI) | <input type="checkbox"/> Trade shows |
| <input type="checkbox"/> Internet Research | <input type="checkbox"/> Published Literature |
| <input type="checkbox"/> Vendor Forums/Presentation | <input type="checkbox"/> Leveraged Agreements |
| <input type="checkbox"/> Collaboration with other Agencies/state entities or governmental entities | <input type="checkbox"/> Other, specify: |

3 months

Time spent conducting market research:

Date market research was started:

3/30/2015

Date all market research was completed:

6/26/2015

2.9.2 Results of Market Research

2.10 Alternative Solutions

2.10.1 Solution Type

- Recommended Alternative

2.10.2 Name

Implement a MOTS in a SaaS environment to add external facing, web-based portal.

2.10.3 Description

Engage an external vendor to configure and implement a solution which will add an external, web-based portal to the OISP application that will enable external entities to enter data into the OISP application. This alternative would be the implementation of a MOTS in a SaaS environment, and would provide the ability to configure the solution to meet Department requirements.

(Note: Alternative 1 in FAW)

Approach (check all that apply)

- Increase staff - new or existing capabilities
- Modify the existing business process or create a new business process
- Reduce the services or level of services provided
- Utilize new or increased contracted services

- Enhance the existing IT system
- Create a new IT system
- Perform a business-based procurement to have vendors propose a solution
- Other, specify:

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2.10.4 Benefit Analysis

Benefits/Advantages

The SaaS services being considered are encouraged by Department of Technology and supports the "Cloud First" directive.

This solution meets the strategic direction of the Department ISS Enterprise Architecture.

MOTS/SaaS leverages a ready-made platform, which has already been provisioned, implemented, and tested by the SaaS provider. Most modifications would be configurations with little/no specialized coding required.

External (public) access is managed by the service, so there is not a need to set up a DMZ and maintain firewall rules. Solution would meet all security protocols set forth in SIMM, Section 5300, California Government Code 11546.1, and NIST.

The system is fully hosted in a government approved Cloud data center, therefore the cost for internal resources to support the application will be very low compared to the other alternatives.

The SaaS service enables operational agility to decouple different elements of the application in different environments and interoperability to interface with and deliver bi-directional data exchange with state-owned systems allowing the Department to control its data.

The solution would use an on-premise foundation combined with strategic use of SaaS to obtain the best value for the funds expended and provide scalability as demands increase with a one-time initial investment.

SaaS services would provide an environment that supports the Department IT staff learning and understanding the technology and being able to provide support for a public facing web-system.

The solution reduces implementation risks and user acceptance failure by leveraging industry best practices based on the vendor's business experience.

Disadvantages

The solution may required additional development/configuration because of the integration between the existing database and new application infrastructure.

The solution may not address all of Department requirements.

Since the solution is an out-sourced SaaS solution, the ongoing licensing cost is higher than other alternatives.

Department's resources are not familiar with this type of technology, so additional time may be required because of the learning curve. Current Department IT staff do not have the knowledge, skills, or experience to develop a public facing web application environment.

Anticipated Time to Achieve Objectives After Project Go-Live

Objective Number	Within 1 Year	2 Years	3 Years	4 Years	Over 4 Years
1.1	<input type="checkbox"/>				
1.2	<input type="checkbox"/>				
1.3	<input type="checkbox"/>				
2.1	<input type="checkbox"/>				
3.1	<input type="checkbox"/>				
4.1	<input type="checkbox"/>				
5.1	<input type="checkbox"/>				
6.1	<input type="checkbox"/>				

Anticipated Time to Achieve Financial Benefits After Project Go-Live

Financial Benefit	Within 1 Year	2 Years	3 Years	4 Years	Over 4 Years
Increased Revenues	<input type="checkbox"/>				
Cost Savings	<input type="checkbox"/>				
Cost Avoidance	<input type="checkbox"/>				
Cost Recovery	<input type="checkbox"/>				

2.10.5 Assumptions and Constraints

This OISP upgrade is a very common application type that allows for external entities to enter standard form data from standard browsers and allows Department to validate data accuracy (workflow) and produce multiple report outputs. Similar implementations are readily available, and a SaaS provider could implement the basic requirements as known.

2.10.6 Implementation Approach

Identify the type of existing IT system enhancement or new system proposed (check all that apply):

- Enhance the current system
- Develop a new custom solution
- Purchase a Commercial off-the-Shelf (COTS) system
- Purchase or obtain a system from another government agency (Transfer)
- Subscribe to a Software as a Service (Saas) system
- Other, specify:

Identify cloud services to be leveraged (check all that apply):

- Software as a Service (SaaS) provided by OTech
- Software as a Service (SaaS) provided by commercial vendor
- Platform as a Service (PaaS) provided by OTech
- Platform as a Service (PaaS) provided by commercial vendor
- Infrastructure as a Service (IaaS) provided by OTech
- Infrastructure as a Service (IaaS) provided by commercial vendor
- No cloud services will be leveraged by this alternative. Provide a description of why cloud services are not being leveraged:

Identify who will modify the existing system or create the new system (check all that apply)

- Agency/state entity IT staff
- A vendor will be contracted
- Inter-agency agreement will be established with another governmental agency. Specify Agency name(s):

Other, specify:

Identify the implementation strategy:

- All requirements will be addressed in this proposed project in a single implementation.
- Requirements will be addressed in incremental implementations in this proposed project.
- Some requirements will be addressed in this proposed project. The remaining requirements will be addressed at a later date.

Specify the year when remaining requirements will be addressed:

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.

2.10.7 Architecture Information

Business Function/Process(es)

Application, System or Component:

COTS, MOTS or Custom:

Name/Primary Technology:

Runtime Environment

Cloud Computing Used? Yes No

If "Yes", specify: Software as a Service (SaaS)

Server/Device Function:

Hardware:

Operating System:

System Software:

System Interfaces:

Data Center Location:

Security

Access: (check all that apply) Public Internal State Staff External State Staff
 Other, specify:

Type of Information: (check all that apply) Personal Health Tax Financial Legal Confidential
 Other, specify:

Protective Measures: (check all that apply) Technical Security Identity Authorization and Authentication
 Physical Security Backup and Recovery
 Other, specify:

Data Management

Data Owner	Name:	Olivia Morrow
	Title:	Environmental Program Manager
	Business Program:	Oceanic Invasive Species Program
Data Custodian	Name:	Alex Bradley
	Title:	Chief Information Officer
	Business Program:	Information Services Section

2.10.1 Solution Type

Recommended Alternative

2.10.2 Name

Custom development by external vendor to modify existing system to add external, web-based portal.

2.10.3 Description

Engage an external vendor to modify the existing OISP application to add an external, web-based portal to enable external entities to enter data into the OISP application. This alternative would be a custom development and implementation effort and would meet Department requirements. Since this alternative is a modification to an existing application, there is the possibility to obtain the resources that are knowledgeable and have expertise with the existing solution.

(Note: Alternative 2 in FAW)

Approach (check all that apply)

- Increase staff - new or existing capabilities
- Modify the existing business process or create a new business process
- Reduce the services or level of services provided
- Utilize new or increased contracted services
- Enhance the existing IT system
- Create a new IT system
- Perform a business-based procurement to have vendors propose a solution
- Other, specify:

2.10.4 Benefit Analysis

Benefits/Advantages

The existing OISP application will be leveraged.

This alternative would satisfy all business objectives outlined in the Stage 1 Business Analysis.

The application will be extensible to meet changing business needs.

Resources with knowledge and expertise with the existing application can potentially be utilized, therefore this would reduce the development and implementation time.

Since the existing application and resources can be used, the need to perform data migration will be eliminated.

Disadvantages

Time to procure contract services could be longer than developing the solution internally.

Security for an external facing web-based portal will need to be developed, therefore additional development resources may be required.

Anticipated Time to Achieve Objectives After Project Go-Live

Objective Number	Within 1 Year	2 Years	3 Years	4 Years	Over 4 Years
1.1	<input type="checkbox"/>				
1.2	<input type="checkbox"/>				
1.3	<input type="checkbox"/>				
2.1	<input type="checkbox"/>				
3.1	<input type="checkbox"/>				
4.1	<input type="checkbox"/>				
5.1	<input type="checkbox"/>				
6.1	<input type="checkbox"/>				

Anticipated Time to Achieve Financial Benefits After Project Go-Live

Financial Benefit	Within 1 Year	2 Years	3 Years	4 Years	Over 4 Years
Increased Revenues	<input type="checkbox"/>				
Cost Savings	<input type="checkbox"/>				
Cost Avoidance	<input type="checkbox"/>				
Cost Recovery	<input type="checkbox"/>				

2.10.5 Assumptions and Constraints

- Existing resources that have knowledge and expertise with the current application can be utilized for this project.
- Leverage the existing infrastructure being used for the current internal solution.
- Leverage existing data and database being used for the current internal solution.
- Project resources will be available and engaged in the project.

2.10.6 Implementation Approach

Identify the type of existing IT system enhancement or new system proposed (check all that apply):

- Enhance the current system
- Develop a new custom solution
- Purchase a Commercial off-the-Shelf (COTS) system
- Purchase or obtain a system from another government agency (Transfer)
- Subscribe to a Software as a Service (SaaS) system
- Other, specify:

Identify cloud services to be leveraged (check all that apply):

- Software as a Service (SaaS) provided by OTech
- Software as a Service (SaaS) provided by commercial vendor

- Platform as a Service (PaaS) provided by OTech
- Platform as a Service (PaaS) provided by commercial vendor
- Infrastructure as a Service (IaaS) provided by OTech
- Infrastructure as a Service (IaaS) provided by commercial vendor
- No cloud services will be leveraged by this alternative. Provide a description of why cloud services are not being leveraged:

California Government Agency owns and maintains its own Cloud Service. Since the existing OISP application is hosted there, this solution will continue to be hosted in the same environment.

Identify who will modify the existing system or create the new system (check all that apply)

- Agency/state entity IT staff
- A vendor will be contracted
- Inter-agency agreement will be established with another governmental agency. Specify Agency name(s):

Other, specify:

Identify the implementation strategy:

- All requirements will be addressed in this proposed project in a single implementation.
- Requirements will be addressed in incremental implementations in this proposed project.
- Some requirements will be addressed in this proposed project. The remaining requirements will be addressed at a later date.

Specify the year when remaining requirements will be addressed:

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.

2.10.7 Architecture Information

Business Function/Process(es)

External facing, web-based portal to enable external entities to enter data into the OISP application.

Application, System or Component:

COTS, MOTS or Custom:

Name/Primary Technology:

Runtime Environment

Cloud Computing Used? Yes No

If "Yes", specify:

Server/Device Function:

Hardware:

Operating System:

System Software:

System Interfaces:

Data Center Location:

Agency/State Data Center Operated by Agency/state entity

Security

Access:

(check all that apply)

Public Internal State Staff External State Staff

Other, specify: Vessel Owner, Vessel Operator, Shipping Agent

Type of Information:

(check all that apply)

Personal Health Tax Financial Legal Confidential

Other, specify: Public

Protective Measures:

(check all that apply)

Technical Security Identity Authorization and Authentication

Physical Security Backup and Recovery

Other, specify:

Data Management

Data Owner

Name:

Olivia Morrow

Title:

Environmental Program Manager

Business Program:

Oceanic Intrusive Species Program

Data Custodian

Name:

Alex Bradley

Title:

Chief Information Officer

Business Program:

Information Services Section (ISS)

2.10.1 Solution Type

Recommended

Alternative

2.10.2 Name

Custom development by internal Department resources to add external facing, web-based portal.

2.10.3 Description

Engage internal Department resources to modify the existing OISP application to add an external web-based portal that would enable external entities to enter data into the OISP application. This alternative would be a custom development and implementation effort that would meet Department requirements.

(Note: Alternative 3 in FAW)

Approach (check all that apply)

Increase staff - new or existing capabilities

Modify the existing business process or create a new business process

Reduce the services or level of services provided

Utilize new or increased contracted services

Enhance the existing IT system

Create a new IT system

Perform a business-based procurement to have vendors propose a solution

Other, specify:

2.10.4 Benefit Analysis

Benefits/Advantages

No procurement of contract staff required to develop and implement solution.

The existing OISP application will be leveraged.

This alternative would satisfy all business objectives outlined in the Stage 1 Business Analysis.

Extensible to meet changing business needs.

Disadvantages

Higher risk of delays due to learning curve of modifying an existing application, since Department resources do not have expertise with the current application.

Department does not have available resources to develop and implement the solution.

Security for an external facing web-based portal will need to be developed, therefore additional development resources may be required.

Objective Number	Anticipated Time to Achieve Objectives After Project Go-Live				
	Within 1 Year	2 Years	3 Years	4 Years	Over 4 Years
1.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Financial Benefit	Anticipated Time to Achieve Financial Benefits After Project Go-Live				
	Within 1 Year	2 Years	3 Years	4 Years	Over 4 Years
Increased Revenues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost Savings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost Avoidance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost Recovery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.10.5 Assumptions and Constraints

- Department resources will be available and engaged in the project.
- Department resources do not have technical knowledge of or expertise with the current OISP application.
- Leverage existing infrastructure used for the current internal solution.
- Leverage existing data and database used for the current internal solution.

2.10.6 Implementation Approach

Identify the type of existing IT system enhancement or new system proposed (check all that apply):

- Enhance the current system
- Develop a new custom solution

- Purchase a Commercial off-the-Shelf (COTS) system
- Purchase or obtain a system from another government agency (Transfer)
- Subscribe to a Software as a Service (SaaS) system
- Other, specify:

Identify cloud services to be leveraged (check all that apply):

- Software as a Service (SaaS) provided by OTech
- Software as a Service (SaaS) provided by commercial vendor
- Platform as a Service (PaaS) provided by OTech
- Platform as a Service (PaaS) provided by commercial vendor
- Infrastructure as a Service (IaaS) provided by OTech
- Infrastructure as a Service (IaaS) provided by commercial vendor
- No cloud services will be leveraged by this alternative. Provide a description of why cloud services are not being leveraged:

California Government Agency owns and maintains its own Cloud Service. Since the existing OISP application is hosted at that location, this solution will continue to be hosted in the same environment.

Identify who will modify the existing system or create the new system (check all that apply)

- Agency/state entity IT staff
- A vendor will be contracted
- Inter-agency agreement will be established with another governmental agency. Specify Agency name(s):

- Other, specify:

Identify the implementation strategy:

- All requirements will be addressed in this proposed project in a single implementation.
- Requirements will be addressed in incremental implementations in this proposed project.
- Some requirements will be addressed in this proposed project. The remaining requirements will be addressed at a later date.

Specify the year when remaining requirements will be addressed:

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.

2.10.7 Architecture Information

Business Function/Process(es)

External facing, web-based portal to enable external entities to enter data into the OISP application.

Application, System or Component:

COTS, MOTS or Custom: Custom Application

Name/Primary Technology:

Runtime Environment

Cloud Computing Used? Yes No

If "Yes", specify: Select...

Server/Device Function:	Production and Test - WebApp Server SQL Server
Hardware:	VMWare at CGA
Operating System:	Windows 2008 R2
System Software:	IIS and SQL Server 2008 R2
System Interfaces:	
Data Center Location:	Agency/State Data Center Operated by Agency/state entity

Security

Access: (check all that apply)
 Public Internal State Staff External State Staff
 Other, specify: Vessel Owner, Vessel Operator, Shipping Agent

Type of Information: (check all that apply)
 Personal Health Tax Financial Legal Confidential
 Other, specify: Public

Protective Measures: (check all that apply)
 Technical Security Identity Authorization and Authentication
 Physical Security Backup and Recovery
 Other, specify:

Data Management

Data Owner	Name:	<u>Olivia Morrow</u>
	Title:	<u>Environmental Program Manager</u>
	Business Program:	<u>Oceanic Intrusive Species Program</u>
Data Custodian	Name:	<u>Alex Bradley</u>
	Title:	<u>Chief Information Officer</u>
	Business Program:	<u>Information Services Section</u>

2.11 Recommended Solution

2.11.1 Rationale for Selection

The recommended solution is to have a vendor implement a MOTS in a SaaS environment. This alternative was chosen because it was considered to be the best value to Department and meets the objectives as stated in the Stage 1 Business Analysis. The solution will align with Department strategic direction to use Cloud services whenever possible. It was deemed to be the best fit considering the degree to which the solution satisfied business objectives, leverages existing technology, and will also adhere to CA Dept. of Technology's and the Department's strategic directions. The risk of the solution was weighed against other alternatives and was judged to be lowest risk for meeting scope, schedule, and budget of the project, and was judged to provide a solid foundation for extensibility and a adaptability to meet future changes to the program.

 File Attachment

2.11.2 Technical/Initial CA-PMM Complexity Assessment

Complexity	Complexity Zone
Technical Complexity Score: <u>1.4</u>	<input type="checkbox"/> Zone I Low Criticality/Risk
	<input type="checkbox"/> Zone II/III Medium Criticality/Risk
	<input type="checkbox"/> Zone IV High Criticality/Risk

2.11.3 Procurement and Staffing Strategy

Activity

Solicitation Development

Responsible
(check all that apply)

<input type="checkbox"/> Agency/State Entity Staff	<input type="checkbox"/> ITPOD Staff
<input type="checkbox"/> DGS Staff	<input type="checkbox"/> CA-PMO Staff
<input type="checkbox"/> STPD Staff	<input type="checkbox"/> Contractor
<input type="checkbox"/> Other, specify: <input type="text"/>	

When Needed
(check all that apply)

<input type="checkbox"/> Stage 3 Solution Development
<input type="checkbox"/> Stage 4 Project Readiness and Approval
<input type="checkbox"/> After project is approved (after Stage 4 Project Readiness and Approval)

Cost Estimate Verification
(check all that apply)

<input type="checkbox"/> Market research conducted (MR)
<input type="checkbox"/> Cost estimate provided (CE)
<input type="checkbox"/> Department of Technology CE
<input type="checkbox"/> DGS CE
<input type="checkbox"/> Request For Information conducted (RFI)
<input type="checkbox"/> Comparable vendor services have been used on previous contracts (CV)
<input type="checkbox"/> Leveraged Procurement Agreement (LPA)

Complete Only if Contractor Responsible for Activity

Procurement Vehicle Select... If "Other," specify: <input type="text"/>	Contract Type Select... If "Other," specify: <input type="text"/>
---	---

Activity

Conduct Procurement

Responsible
(check all that apply)

<input type="checkbox"/> Agency/State Entity Staff	<input type="checkbox"/> ITPOD Staff
<input type="checkbox"/> DGS Staff	<input type="checkbox"/> CA-PMO Staff
<input type="checkbox"/> STPD Staff	<input type="checkbox"/> Contractor
<input type="checkbox"/> Other, specify: <input type="text"/>	

When Needed
(check all that apply)

<input type="checkbox"/> Stage 3 Solution Development
<input type="checkbox"/> Stage 4 Project Readiness and Approval
<input type="checkbox"/> After project is approved (after Stage 4 Project Readiness and Approval)

Cost Estimate Verification
(check all that apply)

<input type="checkbox"/> Market research conducted (MR)
<input type="checkbox"/> Cost estimate provided (CE)
<input type="checkbox"/> Department of Technology CE
<input type="checkbox"/> DGS CE
<input type="checkbox"/> Request For Information conducted (RFI)
<input type="checkbox"/> Comparable vendor services have been used on previous contracts (CV)
<input type="checkbox"/> Leveraged Procurement Agreement (LPA)

Complete Only if Contractor Responsible for Activity

Procurement Vehicle	Contract Type
----------------------------	----------------------

Select...

If "Other," specify:

Select...

If "Other," specify:

Activity

Project Management

Responsible

(check all that apply)

Agency/State Entity Staff

ITPOD Staff

DGS Staff

CA-PMO Staff

STPD Staff

Contractor

Other, specify:

When Needed

(check all that apply)

Stage 3 Solution Development

Stage 4 Project Readiness and Approval

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

Cost Estimate Verification

(check all that apply)

Market research conducted (MR)

Cost estimate provided (CE)

Department of Technology CE

DGS CE

Request For Information conducted (RFI)

Comparable vendor services have been used on previous contracts (CV)

Leveraged Procurement Agreement (LPA)

Complete Only if Contractor Responsible for Activity

Procurement Vehicle

Select...

If "Other," specify:

Contract Type

Select...

If "Other," specify:

Activity

Organizational Change Management

Responsible

(check all that apply)

Agency/State Entity Staff

ITPOD Staff

DGS Staff

CA-PMO Staff

STPD Staff

Contractor

Other, specify:

When Needed

(check all that apply)

Stage 3 Solution Development

Stage 4 Project Readiness and Approval

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

Cost Estimate Verification

(check all that apply)

Market research conducted (MR)

Cost estimate provided (CE)

Department of Technology CE

DGS CE

Request For Information conducted (RFI)

- Comparable vendor services have been used on previous contracts (CV)
- Leveraged Procurement Agreement (LPA)

Complete Only if Contractor Responsible for Activity

Procurement Vehicle

Select...

If "Other," specify:

Contract Type

Select...

If "Other," specify:

Activity

Responsible

(check all that apply)

- Agency/State Entity Staff
- DGS Staff
- STPD Staff
- ITPOD Staff
- CA-PMO Staff
- Contractor

Other, specify:

When Needed

(check all that apply)

- Stage 3 Solution Development
- Stage 4 Project Readiness and Approval
- After project is approved (after Stage 4 Project Readiness and Approval)

Cost Estimate Verification

(check all that apply)

- Market research conducted (MR)
- Cost estimate provided (CE)
- Department of Technology CE
- DGS CE
- Request For Information conducted (RFI)
- Comparable vendor services have been used on previous contracts (CV)
- Leveraged Procurement Agreement (LPA)

Complete Only if Contractor Responsible for Activity

Procurement Vehicle

Select...

If "Other," specify:

Contract Type

Select...

If "Other," specify:

Activity

Responsible

(check all that apply)

- Agency/State Entity Staff
- DGS Staff
- STPD Staff
- ITPOD Staff
- CA-PMO Staff
- Contractor

Other, specify:

When Needed

(check all that apply)

- Stage 3 Solution Development
- Stage 4 Project Readiness and Approval
- After project is approved (after Stage 4 Project Readiness and Approval)

Cost Estimate Verification

(check all that apply)

- Market research conducted (MR)

- Cost estimate provided (CE)
- Department of Technology CE
- DGS CE
- Request For Information conducted (RFI)
- Comparable vendor services have been used on previous contracts (CV)
- Leveraged Procurement Agreement (LPA)

Complete Only if Contractor Responsible for Activity

Procurement Vehicle

Select...

If "Other," specify:

Contract Type

Select...

If "Other," specify:

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 No

2.11.4 Enterprise Architecture Alignment

Department's architectural principles include: resource optimization, total cost of ownership reduction, reusable service components, security and integrated workflow. The Department is in the process of implementing the Office 365 suite to every end user. It contains a comprehensive set of tools that can be used to solve a wide variety of IT problems. The Department ISS Enterprise Architecture goal is to move from the current model of supporting many specialized solutions to leveraging a few comprehensive platforms.

For each new project, proper consideration of Office 365 platform is given, to ensure alignment with CLSC's strategy. The Office 365 suite contains a SharePoint Online component which has the ability to implement and manage public facing forms for government-to-business transactions and this aligns with a core OISP requirement.

Information Technology Capability Table

Information Technology Capability	Existing Enterprise Capability to be Leveraged	New Enterprise Capability Needed
Public or Internal Portal/Website	<input type="checkbox"/>	<input type="checkbox"/>
Public or Internal Mobile Application	<input type="checkbox"/>	<input type="checkbox"/>
Enterprise Service Bus	<input type="checkbox"/>	<input type="checkbox"/>
Identity and Access Management	<input type="checkbox"/>	<input type="checkbox"/>
Enterprise Content Management (including document scanning and eForms capabilities)	<input type="checkbox"/>	<input type="checkbox"/>
Business Intelligence and Data Warehousing	<input type="checkbox"/>	<input type="checkbox"/>
Master Data Management	<input type="checkbox"/>	<input type="checkbox"/>
Big Data Analytics	<input type="checkbox"/>	<input type="checkbox"/>

2.11.5 Project Phases

Phase

Description

Phase Deliverable

--

2.11.6 High Level Proposed Project Schedule

Project Planning Start Date:	10/5/2015	Project Start Date:	7/1/2016
Project Planning End Date:	6/30/2016	Project End Date:	6/30/2017

Activity Name	Start Date	End Date
<u>Stage 3 Solution Development</u>	1/4/2016	4/1/2016
<u>Stage 4 Project Readiness and Approval</u>	4/4/2016	6/30/2016
<u>Solicitation Award</u>	7/1/2016	7/1/2016
<u>Requirements</u>	7/5/2016	7/29/2016
<u>Design</u>	8/1/2016	9/16/2016
<u>Development</u>	9/1/2016	4/28/2017
<u>Testing</u>	4/3/2017	5/31/2017
<u>Training</u>	6/1/2017	6/14/2017
<u>Deployment</u>	6/15/2017	6/29/2017
<u>Go Live</u>	6/30/2017	6/30/2017
<u>Maintenance and Operations</u>	6/26/2017	7/31/2017

2.11.7 Cost Summary

Total Proposed Planning Cost:	\$211,253
Total Proposed Project Cost:	\$604,041
Average Proposed Operations Cost:	\$247,614

2.12 Staffing Plan

2.12.1 Administrative

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2.12.2 Business Program

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2.12.3 Information Technology (IT)

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2.12.4 Testing

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2.12.5 Data Conversion/Migration

2.12.6 Training and Organizational Change Management

2.12.7 Resource Capacity/Skills/Knowledge for Stage 3 Solution Development

2.12.8 Project Management

2.12.8.1 Project Management Risk Assessment

Project Management Risk Score:

1.7

Attach file:



Any Dept 7502-999 PM
Maturity 20151201.xlsx
Microsoft Excel Worksheet
27.0 KB

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?

Project Charter	<u>Yes</u>	
Scope Management Plan	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.
Risk Management Plan	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.
Issue and Action Item Management Plan	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.
Communication Management Plan	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.
Schedule Management Plan	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.
Human Resource Management Plan	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.
Staff Management Plan	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.
Stakeholder Management Plan		

	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.
Governance Plan	<u>No</u>	Once Stage 2 Alternative Analysis is approved, this artifact will be developed.

2.12.9 Organization Charts

 File Attachment

2.13 Data Conversion/Migration

Identify the status of each of the following data conversion/migration activities:

Data Conversion/Migration Planning	<u>Not Applicable</u>
Data Conversion/Migration Requirements	<u>Not Applicable</u>
Current Environment Analysis	<u>Completed</u>
Data Profiling	<u>Not Applicable</u>
Data Quality Assessment	<u>Not Applicable</u>
Data Quality Business Rules	<u>Not Applicable</u>
Data Dictionaries	<u>Not Applicable</u>
Data Cleansing and Correction	<u>Not Applicable</u>

For this solution, the current data and infrastructure will be used, so no data conversion or migration is required.

 File Attachment

2.14 Financial Analysis Worksheets


 Any Dept 7502-999 OISP-
 Financial-Analysis-Worksheets
 Final 20151201.xlsx
 Microsoft Excel Worksheet
 556 KB

Department of Technology Use Only

Preliminary Assessment – Department of Technology Use Only

Original "New Submission" Date	10/30/2015
Form Received Date	11/3/2015
Form Accepted Date	11/3/2015
Form Status	<u>Completed</u>
Form Status Date	11/6/2015

Main Form - Department of Technology Use Only

Original "New Submission" Date	11/20/2015
Form Received Date	12/10/2015
Form Accepted Date	

Form Status	12/10/2015
Form Status Date	<u>Completed</u>
Form Disposition	12/10/2015
Form Disposition Date	<u>Approved with Conditions</u>
	12/17/2015