****

Department of

Registrar-Recorder/County Clerk

**REQUEST FOR PROPOSALS –**

**J.2 IMPLEMENTATION STATEMENT OF WORK**

**RESPONSE TEMPLATE**

**FOR**

**ELECTION MANAGEMENT SYSTEM IMPLEMENTATION AND SERVICES**

**RFP: #21-006**

**August 16, 2021**

**---------------------------------------------------------------------------------**

**Prepared By**

**County of Los Angeles**

**Registrar-Recorder/County Clerk - Contracts Section Room 7211**

**12400 Imperial Highway Norwalk, CA 90650**

[www.lavote.net](http://www.lavote.net)

Table of Contents

[Introduction 1](#_Toc79862722)

[1.0 Project Initiation and Management 2](#_Toc79862723)

[1.1 Plan for the Project 2](#_Toc79862724)

[1.1.1 Establish Project Information Library 2](#_Toc79862725)

[1.1.2 Develop Project Control Documents 3](#_Toc79862726)

[1.1.3 Initiate Project 4](#_Toc79862727)

[1.1.4 Develop Project Orientation Materials 5](#_Toc79862728)

[1.2 Monitor the Project and Report on Status 6](#_Toc79862729)

[1.3 Closeout the Project 7](#_Toc79862730)

[2.0 Organizational Change Management 9](#_Toc79862731)

[2.1 Plan for Organizational Change Management 9](#_Toc79862732)

[2.1.1 Assess Change Readiness 9](#_Toc79862733)

[2.1.2 Define the Organizational Change Management and Communications Strategy 10](#_Toc79862734)

[2.1.3 Develop the Organizational Change Management and Communications Plan 11](#_Toc79862735)

[2.2 Conduct Organizational Change Management 11](#_Toc79862736)

[2.2.1 Develop Communication Materials 12](#_Toc79862737)

[2.2.2 Provide Communications Updates 12](#_Toc79862738)

[3.0 Requirements Validation 14](#_Toc79862739)

[3.1 Validate the Use Cases 14](#_Toc79862740)

[3.2 Validate the Functional and Non-Functional Requirements 14](#_Toc79862741)

[3.3 Develop the Product Backlog 15](#_Toc79862742)

[4.0 Design 17](#_Toc79862743)

[4.1 Define Solution Architecture 17](#_Toc79862744)

[4.2 Prepare the Security Plan 18](#_Toc79862745)

[5.0 Development and Configuration 20](#_Toc79862746)

[5.1 Develop System Development and Configuration Plan 20](#_Toc79862747)

[5.2 Develop and Configure System 21](#_Toc79862748)

[6.0 Integration 23](#_Toc79862749)

[6.1 Prepare VoteCal Certification Plan 23](#_Toc79862750)

[6.2 Establish VoteCal Integration and Achieve VoteCal Certification 24](#_Toc79862751)

[6.3 Develop Interfaces and Integrations 24](#_Toc79862752)

[7.0 Data Migration 26](#_Toc79862753)

[7.1 Prepare for Data Migration 26](#_Toc79862754)

[7.1.1 Develop the Data Migration Plan 26](#_Toc79862755)

[7.2 Conduct Data Migration 27](#_Toc79862756)

[7.2.1 Prepare Mock Data Migration Reports 27](#_Toc79862757)

[7.2.2 Conduct Data Migration and Prepare Reports 29](#_Toc79862758)

[8.0 Testing 31](#_Toc79862759)

[8.1 Plan for Testing 31](#_Toc79862760)

[8.1.1 Develop Test Plan 31](#_Toc79862761)

[8.1.2 Develop Test Scripts, Test Scenarios, and Test Data 33](#_Toc79862762)

[8.1.3 Establish Testing Environments 35](#_Toc79862763)

[8.2 Perform Testing 36](#_Toc79862764)

[8.2.1 Conduct Testing and Prepare Test Results Report 36](#_Toc79862765)

[8.2.2 Prepare User Acceptance Test Results Report 37](#_Toc79862766)

[9.0 Reporting 40](#_Toc79862767)

[9.1 Conduct Reports Working Sessions and Develop List of Required Reports 40](#_Toc79862768)

[9.2 Develop Reports Specifications 41](#_Toc79862769)

[9.3 Design, Build and Test Reports 42](#_Toc79862770)

[9.4 Provide Self-Service Reporting Capability 42](#_Toc79862771)

[9.5 Provide Dashboards 43](#_Toc79862772)

[10.0 Training and Knowledge Transfer 45](#_Toc79862773)

[10.1 Plan for Training and Knowledge Transfer 45](#_Toc79862774)

[10.1.1 Define the Training and Knowledge Transfer Strategy 45](#_Toc79862775)

[10.1.2 Develop the Training and Knowledge Transfer Plan 46](#_Toc79862776)

[10.2 Conduct Training 47](#_Toc79862777)

[10.2.1 Develop Training and Knowledge Transfer Materials 48](#_Toc79862778)

[10.2.2 Conduct Training and Provide Training Metrics 49](#_Toc79862779)

[10.2.3 Conduct Knowledge Transfer 49](#_Toc79862780)

[10.2.4 Provide User Guide and Help Documentation 50](#_Toc79862781)

[10.2.5 Provide Level 1 Help Desk Scripts 51](#_Toc79862782)

[11.0 Implementation 52](#_Toc79862783)

[11.1 Plan for Production Release 52](#_Toc79862784)

[11.1.1 Develop Deployment Plan 52](#_Toc79862785)

[11.1.2 Prepare Production Readiness Report 53](#_Toc79862786)

[11.2 Develop the Disaster Recovery Plan 54](#_Toc79862787)

[11.3 Go-Live 56](#_Toc79862788)

[11.3.1 Prepare Deployment Report 56](#_Toc79862789)

[11.3.2 Receive Final Acceptance 57](#_Toc79862790)

# Introduction

This Statement of Work (SOW) describes the Services and Deliverables [Contractor] will provide related to Implementation Services for the Election Management System (EMS).

|  |
| --- |
| **Instructions:** The Proposer must complete the blue response blocks included in the text below followed by detailed responses to confirm the approach it will take in executing the EMS Implementation Services. The Proposer’s response must directly pertain to the tasks and deliverables without including extraneous content such as marketing language related to broad or unrelated capabilities.Do not change any of the existing text. Any changes to the existing language may result in disqualification of the Proposer. |

* 1. Deliverable Development and Approval Process

This Section specifies a repeating process for developing Deliverables for this SOW. Each deliverable will be developed in accordance with the following [Contractor] obligations:

1. All Deliverables must be developed in the form and format agreed to by the County and [Contractor] using a Deliverable Expectations Document (DED) approved by the County prior to work commencing on the Deliverable. As each Deliverable is submitted, [Contractor] must include a copy of the approved DED as the cover sheet.
2. Develop agendas, coordinate scheduling with the County, and facilitate all necessary sessions (e.g., workshops, meetings, etc.) to develop the Deliverables.
3. Record and analyze the input received from the sessions and distribute results / minutes for review to participants.
4. Prepare drafts of the Deliverables for the County’s review.
5. Provide a structured process for the County to provide feedback on drafts, including sessions, as appropriate.
6. Compile and incorporate the County’s feedback to the draft Deliverables and prepare revised Deliverables.
7. Distribute the revised Deliverables to the County for review. Obtain and analyze the County’s feedback as above and repeat, if necessary.
8. Prepare final versions of the Deliverables including, prior to distribution for approval by the County, validation by [Contractor] that the Deliverables conform to the DED.

After receipt of a Deliverable from [Contractor], the County Program Manager or designee will distribute to the appropriate Project team to review and provide feedback. The County Program Manager or designee will notify [Contractor] in writing with specific changes requested, including a reasonably detailed explanation of the reason(s) why the Deliverable should be modified, in a mutually agreed upon timeframe based on the nature of the Deliverable and the schedule.

1. Project Initiation and Management

[Contractor] will perform the activities required to plan, manage, monitor, and lead the EMS Project through Project closeout.

* 1. Plan for the Project

At the onset of the Project, [Contractor] will establish the processes and tools required to manage and control the Project, in consultation with the County.

* + 1. Establish Project Information Library

[Contractor] will develop and maintain a Project Information Library in a single online repository used to store, organize, track, control, and disseminate all information and artifacts produced. The Project Information Library will be used by [Contractor], County staff, and other key stakeholders including other vendors contracted by the County.

The Project Information Library will include a file structure with defined access and permissions, including administrator rights for County staff. It will also include a web or portal interface for individuals to remotely view/manage Project information and documentation, and provide comments or capture issues for the Project Team.

[Contractor] will store all work products and Deliverables in the Project Information Library for the duration of the Project. Work products and Deliverables must be uploaded to, and made available through, the Project Information Library after completion of the related Project event or activity. For Deliverables, the delivery timing governs the latest by which the Deliverables must be uploaded to the Project Information Library. For any other items, the materials shall be made available to the County no more than one (1) week after the Project event or activity. At the end of the Project, [Contractor] will archive relevant Project artifacts and turn the Project Information Library over to the County in its entirety.

The County is familiar with Atlassian Confluence® and Microsoft SharePoint® as collaboration software tools and would prefer to use one of these platforms for the Project Information Library. [Contractor] can select any platform for the Project Information Library if it is mutually agreed upon by County and [Contractor].

|  |  |
| --- | --- |
| Deliverable | I1.1.1 Project Information Library |
| Delivery Frequency | Once, and maintained throughout the Project |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I1.1.1 Project Information Library****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Develop Project Control Documents

[Contractor] will prepare and submit a Project Control Document (PCD) that encompasses all activities related to the design, development, integration, testing, data migration, and implementation of the EMS. Activities included in the PCD will reflect the Project through Maintenance and Support (M&S).

The PCD will include:

* Project Schedule — A detailed and resource-loaded view of the tasks, milestones and deliverables within the Project including descriptions, durations, activity dependencies, and resource requirements (e.g., County Project Management Team, Contractor). Working with [Contractor], the County will determine the needed level of detail for tasks and timeframes. The Project Schedule may be created and maintained in MS Project or a similar collaborative project software solution.
* Project Assumptions — Identifies any assumptions about the Project that significantly affect other aspects of the PCD or the Project.
* Scope Management Plan — Outlines the processes required to ensure the EMS and the Project provide all the services set forth in this SOW and in the Hosting SOW, and methods for tracking and managing deviations.
* Schedule Management Plan — Captures the process for monitoring schedule variances, planned corrective actions to address schedule variances and the process, roles and responsibilities involved in making changes to the Project Schedule.
* Project Change Management Plan — Describes the strategy for tracking, reviewing and approving changes to the Project.
* Risk and Issue Management Plan — Describes the approach to identifying, tracking, communicating, and determining mitigation strategies for risks and issues.
* Quality Control Plan — Defines a comprehensive Quality Control Plan to be utilized by [Contractor] as a self-monitoring tool to ensure the required services are provided as agreed to in the Contract. The following elements, at minimum, will be included:
	+ - Activities to be monitored to ensure compliance with all Contract requirements
		- Monitoring methods
		- Frequency of monitoring
		- Sample forms to be used in monitoring
		- Title/level and qualifications of personnel performing monitoring functions
		- Documentation methods of all monitoring results, including any correct action taken
* Resource and Staffing Plan — Captures the projected [Contractor] and County resources required and the processes for identifying, qualifying, onboarding, retaining and, if necessary, replacing [Contractor] team members.
* Deliverables Acceptance Process — Captures the processes, timeframes, templates, roles and responsibilities for completing and approving DEDs, submitting Deliverables for approval, and approving Deliverables using Deliverable Acceptance Documents. All [Contractor] Deliverables are subject to review and comment by the County, and [Contractor] may be required to produce revised Deliverables prior to County approval, acceptance, and payment. [Contractor] will perform a walkthrough of a draft version of the Deliverable with appropriate County staff and solicit feedback prior to submitting the Deliverable for approval.
* Project Communication Plan — Details key Project stakeholders and the methods and timeframes for communicating with stakeholders regarding Project status, accomplishments, stakeholder impact, etc.
* Closure Approach — Captures the activities [Contractor] will perform to formally close the Project.

[Contractor] will review the draft PCD with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I1.1.2 Project Control Document |
| Delivery Frequency | Once, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I1.1.2 Project Control Document****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Initiate Project

[Contractor] will conduct a Project Kickoff meeting within three (3) weeks of the Project Commencement Date to introduce County leadership and County staff to the services covered by this SOW, including the timelines, dependencies, risks, and nature of the work effort that will be required to implement the EMS. Other key stakeholders may participate in the Project Kickoff meeting as determined by the County.

Before the Project Kickoff meeting, [Contractor] will:

* Work with the County to identify all [Contractor] and County resources required to complete the tasks outlined in this SOW
* Develop an agenda, including meeting objectives, for the Project Kickoff meeting

The Project Kickoff meeting will cover, at minimum, the following topics:

* Project background and overview reflecting an understanding of the EMS vision and scope
* High-level Project schedule
* Objectives
* Key processes (including change control and issue/risk management)
* Resources, roles, and responsibilities (County and [Contractor])
* Project tools/systems
* Critical success factors including any possible challenges/risks
* Next steps
* Questions and answers

After the Project Kickoff meeting, [Contractor] will prepare a Project Kickoff Summary Report including attendance sheet/roster, observations, opportunities, challenges, and any new items identified as part of the Kickoff.

|  |  |
| --- | --- |
| Deliverable | I1.1.3 Project Kickoff and Summary Report |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I1.1.3 Project Kickoff and Summary Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Develop Project Orientation Materials

[Contractor] will prepare Project Orientation Materials, which will be used by [Contractor] and the County to orient new project team members to the goals, objectives, and approach of the EMS Project.

The Project Orientation Materials will be used for onboarding and training new project team members (County, [Contractor], etc.) to become familiar with the Project. It will include, at minimum, the following elements:

* Overview and background of the Project
* Information on how to obtain access to the Project Information Library
* Reference documents (with links)
* Overview of the PCD
* Project Team members, roles, and responsibilities

|  |  |
| --- | --- |
| Deliverable | I1.1.4 Project Orientation Materials |
| Delivery Frequency | Once, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I1.1.4 Project Orientation Materials****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Monitor the Project and Report on Status

[Contractor] will execute the processes outlined in the PCD for the duration of the Project to effectively control and manage the Project in coordination with the County.

[Contractor] will track the Project status and update applicable portions of the Project Schedule no less than twice per month to reflect the status of the Project against the baseline Project Schedule. In addition, [Contractor] will update risks and issues logs for the Project a minimum of twice per month, proactively identifying risks and issues to be reviewed with the County Project Management Team.

[Contractor] will provide the County Program Manager with written bi-weekly (every other week) Project Status Reports. The Project Status Report will capture, at minimum, the status of the Project including:

* Simple graphical statuses (i.e., red/yellow/green color codes) of scope, schedule, resources, and budget
* Accomplishments of the last reporting period and objectives for the next reporting period
* [Contractor] and County responsibilities for the next reporting period
* One-page graphical summary of all major tasks and subtasks in the Project Schedule
* Actual/projected Project Schedule dates versus baseline Project Schedule milestone dates
* Recovery plan for all work activities not tracking to the approved schedule
* Action items including respective owner(s) and due dates
* Issues Log including, at minimum:
	+ - Identified issues
		- Issue categorization (impact / severity) and prioritization
		- Issue remediation actions, timeframes, and responsible party(ies)
* Risks Log including, at minimum:
	+ - Risk description and the impact if risk becomes an issue
		- Risk categories (probability and impact)
		- Risk mitigation actions, timeframes, and responsible party(ies)
* Key dependencies including external dependencies and between Tasks and activities
* Important decisions made and/or outstanding decisions to be made, with target dates
* Any team member changes, with prior approval from the County
* Pending scope change requests with appropriate justification
* Status of VoteCal integration certification (e.g., preparation, testing, etc.)

[Contractor] will schedule and facilitate weekly status meetings with the County Project Management Team to discuss Project progress, risks/issues, resolutions, and next steps. [Contractor] will prepare and provide an agenda prior to each status meeting and meeting minutes following each status meeting. In addition, [Contractor] will participate in a monthly status meeting with the Elections Steering Committee and, as requested by the County, assist in the preparation of the agenda and minutes for such meeting.

|  |  |
| --- | --- |
| Deliverable | I1.2 Project Status Reports |
| Delivery Frequency | Bi-weekly (every other week) |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I1.2 Project Status Reports****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Closeout the Project

Upon completion of implementation of the EMS, and no less than sixty (60) days prior to the commencement of the Warranty period, [Contractor] will collaborate with the County to develop the Project Closeout Checklist, which will capture all activities required to consider the Project complete including:

* Confirming all EMS documentation is up to date
* Confirming all Deliverables have been completed, approved, archived, and owned by the County
* Facilitating a lessons learned process
* Completing related tactical activities (e.g., rolling people off the Project, etc.)

[Contractor] will conduct a Project Closeout Session to review the Project Closeout Checklist with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I1.3 Project Closeout Checklist |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I1.3 Project Closeout Checklist****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Organizational Change Management

[Contractor] will provide the approach, guidance, and mentorship to support the County through the successful transition to new operational and technical processes enabled by the EMS. [Contractor] will orchestrate the change activities and guide the County throughout the Project life cycle. [Contractor] will support the change process, where required, providing both subject matter expertise and content development. The County will be responsible for execution of Organizational Change Management (OCM) activities.

* 1. Plan for Organizational Change Management

[Contractor] will perform the activities required to thoughtfully plan for OCM through the entire Project life cycle to ensure successful end user adoption of the EMS. Plans will include mechanisms to measure progress and to gather feedback from impacted stakeholders. [Contractor] will adjust plans, as necessary, based on findings.

* + 1. Assess Change Readiness

[Contractor] will assess the County’s readiness, willingness, and ability to adopt business process and system changes. In collaboration with the County, [Contractor] will define the Change Readiness Assessment objectives, determine key change readiness indicators to be measured, and identify the key impacted stakeholders from the Candidate and Voter Services Bureau, the Election Operations and Logistics Bureau, the Information Technology Bureau, and Executive Leadership. [Contractor] will solicit input from identified stakeholders. [Contractor] may gather input through a variety of methods such as surveys, stakeholder interviews, and/or focus groups. [Contractor] will analyze the results, identify change management gaps, and provide recommendations to improve readiness.

[Contractor] will conduct an initial baseline assessment at the beginning of the Project, followed by subsequent assessments after readiness activities, communications, and/or trainings have occurred to determine progress.

|  |  |
| --- | --- |
| Deliverable | I2.1.1 Change Readiness Assessment |
| Delivery Frequency | Once to establish a baseline, followed by periodic assessments (e.g., every two (2) months, quarterly, etc.) |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I2.1.1 Change Readiness Assessment****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Define the Organizational Change Management and Communications Strategy

In collaboration with the County, [Contractor] will define the OCM and Communications Strategy to establish the direction and purpose for OCM and communications activities. The OCM and Communications Strategy will define the approach the County and [Contractor] will follow to effectively manage change resulting from the new EMS.

The OCM and Communications Strategy will include, at minimum, the following elements:

* Vision, goals, and objectives
* Benefits of the new EMS
* OCM framework and approach
* Guiding principles that will govern OCM and communications activities
* Change Management and Communications team(s) structure, including change sponsors / champions
* Project risk and risk factors specific to organization change
* Stakeholder groups / audiences
* Communication methods including processes to gather feedback
* Key Performance Indicators (KPIs) for the OCM effort

[Contractor] will review the draft OCM and Communications Strategy with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I2.1.2 Organizational Change Management and Communications Strategy |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I2.1.2 Organizational Change Management and Communications Strategy****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Develop the Organizational Change Management and Communications Plan

[Contractor] will develop and deliver an OCM and Communications Plan to execute the OCM and Communications Strategy as defined in Deliverable I2.1.2. The OCM and Communications Plan will articulate the activities and structure that will be used to support stakeholders impacted by the new EMS through the change journey and to enable end user adoption. The OCM and Communications Plan will include, at minimum, the following elements:

* Roles, responsibilities, and assignments of both the County and [Contractor] personnel who will execute the OCM and Communications Plan
* Communications Schedule Matrix to manage ongoing stakeholder communications, including:
	+ - Key messaging by stakeholder group / audience
		- Timeline and frequency of communications
		- Communication delivery mechanisms with recommendations of when to use each
* Stakeholder feedback loops including the process to review feedback and reflect changes to the OCM and Communications Plan, as necessary
* Mechanisms to measure against and report on KPIs for the OCM effort

[Contractor] will adjust the OCM and Communications Plan, as necessary and at any point throughout the Project life cycle.

|  |  |
| --- | --- |
| Deliverable | I2.1.3 Organizational Change Management and Communications Plan |
| Delivery Frequency | Once, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I2.1.3 Organizational Change Management and Communications Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Conduct Organizational Change Management

The County and [Contractor] will perform the activities required and provide guidance to execute against the OCM and Communications Plan as defined in Deliverable I2.1.3.

* + 1. Develop Communication Materials

[Contractor] will develop communication materials in alignment with the OCM and Communications Plan as defined in Deliverable I2.1.3. Materials will be tailored to the delivery mechanism and the stakeholder group / audience. Communications will answer, at minimum, the following questions:

* “What is changing?”
* “Why is it changing?”
* “How will this impact me?”
* “How will this benefit me?”

[Contractor] will review the draft Communication Materials with the County and gather feedback. [Contractor] will incorporate the County’s feedback prior to release.

|  |  |
| --- | --- |
| Deliverable | I2.2.1 Communication Materials |
| Delivery Frequency | Throughout the Project life cycle, in accordance with the OCM and Communications Plan as defined in Deliverable I2.1.3. |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I2.2.1 Communication Materials****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Provide Communications Updates

[Contractor] will support the County in its communications to impacted stakeholders. Communications will occur throughout the Project life cycle to ensure awareness leading up to critical points in the Project and to enable successful adoption of the new EMS. [Contractor] will track and report on communications engagement metrics (e.g., number of stakeholders reached with messaging, participation in events, etc.).

Communications will also provide opportunities to gather stakeholder feedback for continuous improvement of the OCM and Communications Plan as defined in Deliverable I2.1.3 as well as Communication Materials as defined in Deliverable I2.2.1.

|  |  |
| --- | --- |
| Deliverable | I2.2.2 Communications Engagement Report |
| Delivery Frequency | Throughout the Project life cycle, in accordance with the OCM and Communications Plan as defined in Deliverable I2.1.3. |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I2.2.2 Communications Engagement Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Requirements Validation
	1. Validate the Use Cases

The County has developed a set of Use Cases that reflect the desired functionality of the System. The Use Cases are technology agnostic and captured from the business perspective.

[Contractor] will facilitate working sessions with the County subject matter experts to review and validate the County-developed Use Cases (see Procurement Library), making revisions as needed to ensure the Use Cases reflect the optimal target state while adhering to Elections Code and any other applicable law or regulations/official guidance documents. [Contractor] will work with the County to identify who from the County will participate. After each working session, [Contractor] will be responsible for updating the Use Cases to reflect working session input.

[Contractor] will review the updated Use Cases with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I3.1 Final Use Cases |
| Delivery Frequency | Once for each Module/Domain |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I3.1 Final Use Cases****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Validate the Functional and Non-Functional Requirements

[Contractor] will facilitate working sessions to review and validate the County-developed Functional Requirements (Technical Proposal Response Template Section H.1 Functional Requirements Matrix), and Non-Functional Requirements (the collective set of requirements from the Technical Proposal Response Template Section I.1 Technical Requirements Matrix, Section J.1 Implementation Requirements Matrix, Section K.1 Hosting (On-Prem or Cloud) Requirements Matrix, and Section L.1 Maintenance and Support Matrix), making revisions as needed to ensure they reflect the optimal target state while adhering to Elections Code and any other applicable laws or regulations/official guidance documents and documenting business rules. After each working session, [Contractor] will be responsible for updating the Functional and Non-Functional Requirements Traceability Matrices to reflect working session input. This includes specifying how each Functional and Non-Functional Requirement will be met by the System (e.g., out of the box, configuration, new development / customization, etc.). Functional Requirements will be traced to the applicable Use Case(s) as defined in Deliverable I3.1.

[Contractor] will review the updated Functional and Non-Functional Requirements with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval. Any major modifications will follow the County’s governance process for a decision before proceeding.

|  |  |
| --- | --- |
| Deliverables | I3.2.1 Final Functional Requirements Traceability MatrixI3.2.2 Final Non-Functional Requirements Traceability Matrices |
| Delivery Frequency | I3.2.1 Once for each Module/DomainI3.2.2 Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverables I3.2.1 Final Functional Requirements Traceability Matrix and I3.2.2 Final Non-Functional Requirements Traceability Matrices****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Develop the Product Backlog

[Contractor] will develop the Product Backlog, including defining the Epics and developing the respective User Stories, leveraging the Final Functional Requirements Traceability Matrix and Final Non-Functional Requirements Traceability Matrices as defined in Task 3.2 and facilitating working sessions with the County subject matter experts. User Stories will include predefined acceptance criteria.

Epics are groups of functionality that deliver business value. They are likely to contain multiple related Use Cases. User Stories are smaller units of functionality that are delivered within one Sprint. It is the smallest unit of work that is tracked to indicate progress. Unlike the Use Cases, the User Stories are specific to the target implementation and not technology agnostic. [Contractor] will use a strong definition of “done” to determine whether all aspects of the User Story are complete, including testing based on the acceptance criteria.

During the initial backlog development, [Contractor] will develop the first-cut User Stories. User Stories will be refined prior to Sprints as the User Stories are prioritized for development/configuration. As part of the iterative development process, [Contractor] will work with the County to groom the backlog to prioritize and refine the User Stories.

The County is familiar with Atlassian Jira® as an agile project management tool and has an enterprise account that may be used for the EMS Project. [Contractor] can select an alternative application if it is mutually agreed upon by County and [Contractor].

|  |  |
| --- | --- |
| Deliverables | I3.3.1 EpicsI3.3.2 User Stories |
| Delivery Frequency | I3.3.1 OnceI3.3.2 One for each Module/Domain |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverables I3.3.1 Epics and I3.3.2 User Stories****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Design

[Contractor] will develop the Solution Architecture that will be used to guide the development and configuration of the System. [Contractor] will prepare the Security Plan, detailing how security will be controlled during the Implementation of the System.

* 1. Define Solution Architecture

[Contractor] will define the Solution Architecture that will fulfill the County’s requirements and can be technically realized. The Solution Architecture will lay out a conceptual design model that defines the structure and behavior of the EMS. It will capture the technical layers with core components in each, and relationships between them. The Solution Architecture will also capture external interfaces and integrations.

The Solution Architecture will capture the main usage patterns of the System based on the Use Cases and Requirements, and illustrate how the design supports these patterns. The architecture will serve as a validation point to have a reasonable expectation that the System design meets the needs of the County, and will also serve to guide downstream configuration and development work. It is not intended to be exhaustive (i.e., avoiding a traditional “Big Design Up-Front” effort), but focuses on the core design elements.

The Solution Architecture will offer a perspective on the configuration capabilities and driving decisions for limited customization, if needed.

The System will include an integration capability to avoid point-to-point interfaces that become difficult to maintain over time. The Solution Architecture will describe the integration technology, integration patterns, and use of queuing, mediation, transformation, and orchestration capabilities. The Solution Architecture will define the lines of demarcation between the EMS and the integration capability.

[Contractor] will review the draft Solution Architecture with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I4.1 Solution Architecture |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I4.1 Solution Architecture****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Prepare the Security Plan

[Contractor] will develop and deliver a Security Plan that will include, at minimum, the following elements:

* Security policies
* Logical security controls (privacy, user access and authentication, user permissions, etc.)
	+ - Includes an Access Control Matrix, which defines the access profiles and identifies the roles and permissions each user will receive
* Technical security controls and security architecture (communications, hardware, data, physical access, software, operating system, encryption, etc.)
* Security processes (security assessments, risk assessments, incident response, etc.)
* Technical approach to satisfy the following:
	+ - Network segmentation
		- Perimeter security
		- Application security and data sensitivity classification including management of restrictive access to confidential voters
		- Personally Identifiable Information (PII) data elements
		- Intrusion detection and management
		- Monitoring and reporting
		- Host hardening
		- Local vs Remote access
		- At-rest and in transit data encryption
		- Interface security
		- Security test procedures
		- Managing network security devices
		- Security patch management
		- Detailed diagrams depicting all security-related devices and subsystems, and their relationships with other systems for which they provide controls
		- Secure communications over the internet
		- Enhanced user access security including roles and segmented access levels
		- Secure coding/configuration practices
		- Multi Factor Authentication
		- Security required by VoteCal

[Contractor] will be responsible for monitoring ongoing security threat changes and responding to evolving threats, including monitoring common vulnerabilities and exposures and any ability to receive and share real-time threat information.

[Contractor] will review the draft Security Plan with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I4.2 Security Plan |
| Delivery Frequency | Once, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I4.2 Security Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Development and Configuration

System development and configuration efforts will be guided by the outputs of Task 3.0 Requirements Validation and Task 4.0 Design. [Contractor] will follow an agile process that emphasizes short iterations with frequent feedback loops. The County prefers that [Contractor] uses a Sprint-based approach with a set cadence that the extended team can organize around. [Contractor] will lead Sprint planning sessions, lead the Sprints, prepare System demos and continuously manage the Product Backlog to plan subsequent work. The County does not seek to deploy releases at the Sprint level, but favors incremental delivery in a test environment to allow stakeholders to gain insights into the development of the System and facilitate meaningful feedback. [Contractor] will fully document each System module. The document will support knowledge transfer activities as detailed in Task 10.0 Training and Knowledge Transfer.

* 1. Develop System Development and Configuration Plan

[Contractor] will develop and configure the System to reflect and satisfy the County’s requirements. This may also require System customization, however the County desires these be very minimal and only if absolutely necessary. [Contractor] will develop the System Development and Configuration Plan that will include, at minimum, the following elements:

* Resources, roles, and responsibilities (County and [Contractor])
* System configuration and development process
* Mechanisms to iterate the development work based on stakeholder feedback
* Configuration Management Plan to allow simultaneous work on different versions in different environments
* Release plans based on Epics in the Product Backlog
* Guidance to drive decisions between configuration and customization
* Approach to ensure that custom components will be incorporated into the product-based solution and maintained as such by [Contractor]

[Contractor] will review the draft System Development and Configuration Plan with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I5.1 System Development and Configuration Plan |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I5.1 System Development and Configuration Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Develop and Configure System

[Contractor] will follow an agile approach to configuring the System and developing custom components or functionality, where needed. The approach emphasizes frequent feedback loops to ensure that [Contractor] and the County are building the right solution and allowing adjustments as early as possible.

The County prefers to use a set cadence for development and configuration activities that includes:

* Prioritizing and grooming the Product Backlog based on immediacy of need, value, effort, and risk while increasing the level of mutual understanding of Epics and User Stories between [Contractor] and the County; this may result in new User Stories
* Sprint planning to establish the Sprint objective, based on a User Story or set of like User Stories as the unit of work; each Sprint will deliver a well-defined set of User Stories that show incremental progress and contribute to the System
* A strong definition of “done” to guide whether individual User Stories have been completed, including testing to the acceptance criteria
* System demos that incrementally show progress to stakeholders with frequent iterations
* Sprint retrospectives to drive continuous improvement of the joined development process between [Contractor] and the County.

[Contractor] will record issues/bugs identified by the County during the Sprint review meeting in the bug tracking tool. County will accept or reject the User Story based on the User Story’s acceptance criteria.

[Contractor] will be responsible for facilitating Backlog grooming sessions, which will be an ongoing activity during each Sprint to define the scope of the upcoming Sprint.

|  |  |
| --- | --- |
| Deliverables | I5.2.1 Sprint BacklogI5.2.2 Increments |
| Delivery Frequency | Ongoing |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I5.2.1 Sprint Backlog and I5.2.2 Increments****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Integration

[Contractor] will be responsible for seamless integration of the EMS and external systems, including VoteCal. [Contractor] will obtain California Secretary of State (CA SOS) certification of the VoteCal integration; certification must be achieved prior to Go-Live. [Contractor] will be responsible when any functional, security, or technology issues arise related to the integration with VoteCal and will provide immediate resolution and regression testing of all impacted components. Where issues arise with external third-party system vendors, [Contractor] will coordinate with the County for resolution.

* 1. Prepare VoteCal Certification Plan

Pursuant to the proposed California Code of Regulations 19066-19070, any EMS used by county elections officials shall be certified with the CA SOS and shall adhere to all applicable Federal and State laws. [Contractor] will be responsible for completing the application to initiate the certification process, to develop and submit all deliverables required for certification, and to ultimately ensure successful certification between the System and VoteCal prior to System Go-Live.

CA SOS documents are available at: <https://www.sos.ca.gov/administration/regulations/current-regulations>



[Contractor] will establish a VoteCal Certification Plan that includes, at minimum, the key activities, milestones, deliverables, risks, and timeline to achieve certification. This Deliverable should reflect the EMS certification phases and steps outlined by CA SOS in the EMS Certification Plan v1.1 document produced March 2021 (see Procurement Library).

[Contractor] will track progress against the VoteCal Certification Plan and will conduct weekly meetings with the County to review.

|  |  |
| --- | --- |
| Deliverables | I6.1 VoteCal Certification Plan |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I6.1 VoteCal Certification Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Establish VoteCal Integration and Achieve VoteCal Certification

[Contractor] will be responsible for establishing the EMS and VoteCal integration. This includes completing the requisite planning, internal development / testing, system testing, and user acceptance activities as well as associated deliverables required by the CA SOS per the VoteCal Certification Plan (Deliverable I6.1). [Contractor] will provide evidence that the EMS received VoteCal integration certification by the CA SOS.

The VoteCal integration consists of multiple data exchanges for different purposes. There may be an opportunity to reduce the complexity of integration relative to the current implementation.

|  |  |
| --- | --- |
| Deliverables | I6.2 VoteCal Certification |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I6.2 VoteCal Certification****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Develop Interfaces and Integrations

[Contractor] will be responsible to develop all interfaces and integration with internal and external third-party vendor systems, beyond VoteCal. [Contractor] will:

* Develop an Interface Specifications document that describes each interface being developed and implemented
* Develop a release schedule for interfaces
* Iteratively build the interfaces until the full build of the interface content and functionality is complete
* Leverage the integration platform to implement the integration with internal and external systems outside the EMS
* Regularly release new functionality in a structured and scheduled manner to the County and test environment
* On an ongoing basis, provide the County Program Manager with an updated release schedule reflecting the new content and functionality delivered in each recent release of the interface
* Report weekly on progress toward complete build and alert the County of any issues or risks
* Notify the County when each interface has been fully configured to meet the County’s requirements

[Contractor] will develop an Interface Validation Report indicating that the required interfaces have been developed, function as expected, and meet the County’s requirements.

|  |  |
| --- | --- |
| Deliverables | I6.3.1 Interface SpecificationsI6.3.2 Interface Validation Report |
| Delivery Frequency | I6.3.1 OnceI6.3.2 Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverables I6.3.1 Interface Specifications and I6.3.2 Interface Validation Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Data Migration

[Contractor] will be responsible for managing all activities related to migrating legacy data (legacy data includes all live and historical data stored in existing source systems) to the EMS. [Contractor] will complete the data migrations required to support election operations during implementation, consistent with the Go-Live dates as defined in Deliverable I11.1.1 Deployment Plan.

* 1. Prepare for Data Migration

[Contractor] will develop a Data Migration Plan that will include the identification of source systems and data to be migrated, approach to migration, validation and data cleansing processes, roles and responsibilities of the County, [Contractor], and County’s third-party system vendor(s), and policies and procedures to ensure controls are in place in accordance with Federal, State, and local rules and regulations.

[Contractor] will work with the County to define the specifications for migration of data from the County’s legacy systems into [Contractor]’s EMS, including alternatives for archiving and accessing data that will not be migrated but that is necessary for election operations.

* + 1. Develop the Data Migration Plan

In collaboration with the County, [Contractor] will develop a Data Migration Plan that includes, at minimum, the following elements:

* Roles, responsibilities, and assignments of the County, [Contractor], and County’s third-party system vendor(s) personnel
* Inventory of legacy data sources and all data the County expects to be migrated to the EMS
	+ - [Contractor] will provide alternative recommendations to the data types for and/or duration of data to be extracted from each data source if it could offer better outcomes, lower cost, and/or lower risk to the County
* County owner for each data source
* Data migration map to minimally include:
	+ - Data dictionary
		- Detailed data map of all elements of the current database(s)
		- Data transformation rules
		- Code translation rules
		- Relationship rules
		- Validation rules
		- Process of migrating images (e.g., signatures, applications, documents, etc.)
		- Processes and rules of validating and “cleaning” data
		- Process and rules for recovering missing or erroneous data
* Migration type (i.e., automated, semi-automated, manual) and respective processes and tools
* Gap assessment between legacy data and EMS data requirements, and options to address the gaps
* Issues, risks, and/or barriers that may interfere with data migration and recommendations to resolve or mitigate
* Data migration timelines including if or how long the EMS and legacy system(s) will run in parallel
* Testing and quality assurance plans and protocols to ensure the data is migrated accurately
* Contingency plan in the event the County must fallback to legacy system(s)

[Contractor] will review the draft Data Migration Plan with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I7.1.1 Data Migration Plan |
| Delivery Frequency | Once, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I7.1.1 Data Migration Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Conduct Data Migration

For each data source, [Contractor] will conduct a mock data migration following the Data Migration Plan as defined in Deliverable I7.1.1. Based on the Data Migration Plan as defined in Deliverable I7.1.1 as well as the outcomes and lessons learned from the mock data migration, [Contractor] will migrate data into relevant environments (e.g., staging, production, etc.).

If a phased implementation approach is used, [Contractor] is responsible for continued data migration as well as synchronization between the System with legacy system(s) and data exchanges with VoteCal and other external systems until full implementation is achieved.

* + 1. Prepare Mock Data Migration Reports

[Contractor] and the County will conduct mock data migrations progressively using a sample set of data and the entirety of the data prior to deployment into relevant go live environments (e.g., staging, production, etc.) to:

* Verify migration load sequence and dependencies
* Determine approximate timing for every load, validation, and quality assurance review to estimate how long data migration activities will take
* Validate that legacy data is “cleaned” while keeping the intent of the data – e.g., missing data is recovered where possible, duplicate rows are eliminated, data types are accurate, etc.
* Document any remapping, combining, splitting, appending, recovery, and data type conversion of legacy data required for the new EMS
* Refine existing data validation procedures that ensure each migration is loaded properly and that interdependent data migrations reconcile

The County and its third-party system vendor(s) will identify a sample set of data to be used for the mock data migration. [Contractor] will review the sample data with the County, solicit and incorporate input, then finalize the dataset.

The County and its third-party system vendor(s) will be responsible for extracting the data from the source systems. [Contractor] will design and develop the tools necessary to perform the data migration. [Contractor] will be responsible for transforming all the new target databases to the correct format and loading the sample dataset.

[Contractor] will support the County to validate the data in the EMS including:

* Verification of conversion load sequence and dependencies (e.g., loading the parent data prior to child data)
* Verification of migration load sequence / timing
* Missing data is recovered / highlighted / created
* “Dirty” data issues are identified, and remediation plans are reviewed and executed
* Data loaded is validated and reconciled against legacy data
* Validation that legacy data is “clean”
* Validation that data is loaded in the correct business context

[Contractor] will log issues discovered during the mock data migration and recommend resolution approaches. [Contractor] will resolve issues and repeat the mock data migration until all critical issues have been resolved and approved by the County.

[Contractor] will monitor the data migration and validation processes. [Contractor] will prepare a Mock Data Migration Report that will include:

* Recommendations for refining the Data Migration Plan
* Estimated duration and schedule to migrate all data based on successful sample dataset
* Recommendations to mitigate impact on System performance / response time while data migration is in progress
* Refinement of validation and quality assurance procedures to ensure that each migration is loaded properly and that interdependent migrations reconcile

[Contractor] will review the Mock Data Migration Report with the County and gather feedback. Upon completion of the final successful mock data migration, [Contractor] and the County will decide when the data migration for each source system is ready for integration testing.

|  |  |
| --- | --- |
| Deliverable | I7.2.1 Mock Data Migration Report |
| Delivery Frequency | Once per mock data migration |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I7.2.1 Mock Data Migration Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Conduct Data Migration and Prepare Reports

[Contractor] will migrate all relevant data from current County system(s) to the relevant environments in accordance with the Data Migration Plan as defined in Deliverable I7.1.1. [Contractor] will monitor the data migration process, report any issues to the County, and complete data migration tests. [Contractor] will also coordinate all data migration activities with other relevant implementation activities set forth in this SOW.

Upon successful completion of data migration tests, [Contractor] will prepare a Data Migration Report that will include, at minimum, the following elements:

* Number of data records used for each input type, number of records migrated, and number of records modified
* Dataset with an itemized field-level validation of data in each row and column between legacy and loaded system
* Exceptions discovered as part of the migration - itemized if not accounted for in the Data Migration Plan and grouped if an expected exception per the Data Migration Plan
* Process of migrating images

[Contractor] will certify, in writing, that it successfully migrated all data.

|  |  |
| --- | --- |
| Deliverable | I7.2.2 Data Migration Report |
| Delivery Frequency | Once per data migration |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I7.2.2 Data Migration Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Testing

[Contractor] will be responsible for leading the planning activities to prepare for testing, for developing all necessary testing artifacts (e.g., test scripts, test scenarios, etc.), establishing testing environments prior to each testing phase, and leading and conducting all testing except for User Acceptance Testing. [Contractor] will assist and support the County with acceptance testing.

* 1. Plan for Testing

[Contractor] will develop a comprehensive Test Plan with input and participation from the County, covering all testing necessary to confirm that the Licensed Software, Third-Party Products (if applicable), Modules and all elements of the EMS, including hardware and interfaces, function in an integrated fashion.

[Contractor] will lead the development of Test Scripts and Test Scenarios with participation by and input from the County. Test Scripts and Test Scenarios will account for County workflows, policies, and procedures.

* + 1. Develop Test Plan

[Contractor] will develop a Test Plan that identifies all major aspects and phases of testing through the Project life cycle. The Test Plan will detail [Contractor]’s approach to performing and/or supporting the various testing phases including:

* Unit Testing — *Validates that modular configuration values and individual development objects operate according to approved design specifications.*
* System Testing — *Validates that business processes and functional requirements within a functional area can be fully executed and produce the predefined and expected results for each test script.*
* Integration Testing — *Validates that dependent business processes across functional areas and System elements interact seamlessly including VoteCal. Validates that customizations, security, workflow, configurations, data migration programs, interfaces, reports, and forms work together.*
* End-to-End Testing — *Validates that the System operates as intended from the beginning to the end of all business processes, including verification that the System’s functionality conforms to the functional and non-functional requirements as defined in Task 3.2. The County expects that End-to-End Testing is conducted in an environment synchronized with the target production environment and is conducted by [Contractor]’s testing team, which is independent of the development team. End-to-End Testing will also ensure that the migration and use of legacy system data does not generate any errors.*
* Negative Testing — *Analytic, ad-hoc or exploratory testing that employs an attitude to try to break the system by using extreme ranges, values, data types or performing actions within a flow that would have been unexpected to the designer but within the range of potential action.*
* Usability Testing — *Validates that the flow of activities through the user interface follows logical, rational, or readily understandable progression in a way that minimizes extraneous mouse or keyboard activity. Icons, shortcut keys, window labeling and screen element tabbing order are consistent. Audio and/or visual cues and warnings are reasonable, obvious and not overly intrusive.*
* Performance (Load/Stress) Testing — *Validates the readiness of the System to support the County’s transaction and user volumes and will include both interface/batch transactions and online/end-user response times. The County’s transaction and user volumes for performance testing will simulate full production scale. Additionally, the state of the System for performance testing will simulate, to the extent possible, the configurations, security, and workflow planned for the production version of the System. In addition to overall volume testing, each tier of the infrastructure will be load tested and stressed – i.e., database, application or middle-tier, web tier, and the integration points.*
* Regression Testing — *Validates that previously developed and tested functionality still perform as expected after a change is introduced.*
* Recovery Testing — *Validates the System and each Module may be recovered and synchronized to a specific point in time.*
* Security Testing — *Validates security by incorporation into each testing phase. The testing will address all Federal, State, and local policies and standards for protecting election data/information from unauthorized access, use, disclosure, disruption, modification, or destruction to provide integrity, confidentiality, availability, accountability, and assurance. Security Test Plan will also address each item included within the VoteCal Draft Regulations document, section “19064. County Security”.*
* User Acceptance Testing (UAT) — *Validates the System is functioning as designed, verifies the data migration process, and confirms that the System is ready to move to the production environment.*
* Smoke Testing — *Validates that a deployment of changes into an environment is successful, prior to making the environment available to users.*

The Test Plan will include a test approach for each testing phase, including:

* Test overview, including objectives and scope
* Testing controls
* Resources, including personnel (i.e., testing user roles), infrastructure, and communication protocols
* Roles and responsibilities of the County and [Contractor] personnel
	+ - Note: County and [Contractor] are mutually responsible for prioritization of defect remediation
* Test schedule with key dates and Deliverables
* Recommended prerequisites to beginning each testing phase
* Testing sequence and interdependencies between testing phases
* Testing metrics (expected outcomes, including reports)
* Mock interfaces and integrations
* Configuration management
* Change control
* Test environments
* Tester training
* Entrance and exit criteria
* Required artifacts including:
	+ - Test Scripts (step-by-step)
		- Test Scenarios (narrative)
		- Test data including synthetic test data to test edge cases
* Requirements for resetting the test environment and test data to a County-defined save point
* Defect severity definitions
* Communication procedures and tracking tool for defect identification, resolution, retesting, and escalation
* Test tools, both [Contractor] provided and County-owned
* Test cycle control sheets
* Assumptions, issues, and risks

[Contractor] will review the draft Test Plan with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I8.1.1 Test Plan |
| Delivery Frequency | Once, updated prior to each testing phase, and as needed to increase testing effectiveness and efficiency and resolve testing problems |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I8.1.1 Test Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Develop Test Scripts, Test Scenarios, and Test Data

[Contractor] will:

* Identify, document, and finalize relevant Test Scripts and Test Scenarios for each testing phase with input from the County
	+ - Test Scripts will trace back to the functional requirements
		- Wherever possible, [Contractor] and the County will build upon Deliverable 3.1 Use Cases
		- [Contractor] will ensure Test Scripts and Test Scenarios are comprehensive and effective to test all functionality
* Work with the County to identify and document relevant elections test data
* Support the County to develop common elections test data and identify the volume of data required to perform thorough testing
* Monitor progress on Test Script, Test Scenario, and common elections test data development
* Notify the County of any risks to the schedule or quality and completion of the Test Scripts, Test Scenarios, and/or common elections test data being developed
* Identify systemic issues related to completion of the Test Scripts, Test Scenarios, or elections test data (e.g., time management, complexity, data quality, etc.) and provide the County with recommendations to address them (e.g., augmenting resources, etc.)
	+ - [Contractor] will provide additional resources to address issues where necessary
* Provide recommendations on grouping Test Scenarios and conditions into test cycles to maximize efficient test execution
* Develop issue tracking form
* Develop a test cycle control sheet, which details when and by whom test cycles will be executed
* Archive Test Scripts and Test Scenarios after all testing phases are complete
* Respond to all County ad hoc communications (e.g., calls, emails, etc.) in a timely manner to address questions as they arise

[Contractor] will review the draft Test Scripts and Test Scenarios with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit final versions for approval.

|  |  |
| --- | --- |
| Deliverables | I8.1.2.1 Test ScriptsI8.1.2.2 Test ScenariosI8.1.2.3 Test Data |
| Delivery Frequency | I8.1.2.1 Once for each testing phaseI8.1.2.2 Once for each testing phaseI8.1.2.3 Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverables I8.1.2.1 Test Scripts, I8.1.2.2 Test Scenarios, and I8.1.2.3 Test Data****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Establish Testing Environments

[Contractor] will establish testing environments prior to each testing phase. This will include:

* Loading of elections test data
* Setting up the database
* Configuring the environment
* Selecting and implementing the necessary hardware and operating system
* Configuring the network
* Configuring the agile project management tool (e.g., Jira) for issue management and defect tracking

[Contractor] will prepare detailed documentation of the testing environments.

|  |  |
| --- | --- |
| Deliverable | I8.1.3 Detailed Testing Environments Documentation |
| Delivery Frequency | Once per testing environment setup |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I8.1.3 Detailed Testing Environments Documentation****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Perform Testing

All elements of the EMS will be subjected to testing performed by a Test Team composed of [Contractor] and County staff. [Contractor] will lead and conduct all test phases except for UAT. These tests must be thorough enough to ensure UAT is not used to uncover errors that should have been found in prior testing phases. [Contractor] will assist and support the County with acceptance testing.

The County expects much of the testing to be automated and repeatable, based on a managed and comprehensive set of Test Cases that trace back to the requirements.

* + 1. Conduct Testing and Prepare Test Results Report

[Contractor] will conduct testing for each testing phase in accordance with the approved Test Plan as detailed in Deliverable I8.1.1. [Contractor] will document all test results, analyze exceptions, and correct any software defects. Test Results Reports will include:

* Test coverage / scope
* Test configuration parameters
* Test methodology
* Test tools
* Outcomes of all test levels and Test Cases
* Test trends and “hot spots” of the software that are more prone to defects than others

In addition to the formal test results report, [Contractor] will provide real-time (or close to real-time) test dashboards to provide the County with visibility to understand trends for the various test types.

[Contractor] will perform security tests in accordance with the Security Plan as detailed in Deliverable I4.2. [Contractor] will record and report the results for review and approval by the County. [Contractor] will fix any errors or issues encountered, conduct root cause analyses as required, and document outcomes of any re-testing activities.

In addition to [Contractor]’s security tests, the County may, at its discretion, conduct its own tests such as: penetration and vulnerability tests to validate all or portions of the security requirements. The County will record and report the results and [Contractor] will fix any errors, omissions, or issues identified in the tests report. [Contractor] will conduct root cause analyses, as required, and document outcomes of any remediation activities.

|  |  |
| --- | --- |
| Deliverables | I8.2.1.1 Unit Testing Results ReportI8.2.1.2 System Testing Results ReportI8.2.1.3 Integration Testing Results ReportI8.2.1.4 End-to-End Testing Results ReportI8.2.1.5 Negative Testing Results ReportI8.2.1.6 Usability Testing Results ReportI8.2.1.7 Performance (Load/Stress) Testing Results ReportI8.2.1.8 Regression Testing Results ReportI8.2.1.9 Recovery Testing Results ReportI8.2.1.10 Security Testing Results ReportI8.2.1.11 Smoke Testing Results Report |
| Delivery Frequency | I8.2.1.1 Once per releaseI8.2.1.2 Once per releaseI8.2.1.3 Once per releaseI8.2.1.4 Once per releaseI8.2.1.5 Once per releaseI8.2.1.6 Once per releaseI8.2.1.7 Once per releaseI8.2.1.8 Once per releaseI8.2.1.9 Once per releaseI8.2.1.10 Once per releaseI8.2.1.11 Once per release |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverables I8.2.1.1 Unit Testing Results Report, I8.2.1.2 System Testing Results Report, I8.2.1.3 Integration Testing Results Report, I8.2.1.4 End-to-End Testing Results Report, I8.2.1.5 Negative Testing Results Report, I8.2.1.6 Usability Testing Results Report, I8.2.1.7 Performance (Load/Stress) Testing Results Report, I8.2.1.8 Regression Testing Results Report, I8.2.1.9 Recovery Testing Results Report, I8.2.1.10 Security Testing Results Report, and I8.2.1.11 Smoke Testing Results Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Prepare User Acceptance Test Results Report

[Contractor] will assist the County in performing UAT activities including:

* Creating the acceptance testing environments on the production sized hardware
* Loading configuration values, migrating data, and establishing user security in accordance with the Deployment Plan
* Developing the acceptance Test Scripts and UAT tester training materials
	+ - Test Scripts will thoroughly test each functional requirement
* Ensuring that all integrations to other systems, including VoteCal, are connected to the testing environment for valid acceptance testing
* Submitting offline jobs. The setup, configuration, and run of batch jobs will be included and complete with upstream/downstream dependencies implemented and in/out conditions defined
* Performing backups. Backups will include data, application, configuration, and interface files
* Restoring databases as required, including the setup parameters and non-baseline configurations to the point agreed upon by the County
* Providing System training for the UAT testers
* Providing on-site support during UAT in accordance with the Test Plan detailed in Deliverable 8.1.1
* Providing an application for the capturing, reporting, and tracking of errors identified during UAT
* Reviewing the County’s log of errors and defects
* Resolving all errors and defects
* Answering questions from UAT testers as they arise
* Documenting, analyzing, explaining test results
* Communicating regularly with the County regarding status and schedule of UAT
* Assisting the County with re-testing defect fixes

During UAT, [Contractor] will conduct daily wrap up sessions that will cover:

* UAT progress update
* Review of open issues
* Strategy and schedule for defect resolution

[Contractor] will prepare a UAT Results Report that documents all the test results, including any errors and resolutions identified as part of the UAT. The UAT Results Report will include, at minimum, the following elements:

* Achievement of UAT objectives
* Test execution results by test cycle
* Test execution statistics and trends
* Plan to address any UAT issues still unresolved

|  |  |
| --- | --- |
| Deliverable | I8.2.2 User Acceptance Testing Results Report |
| Delivery Frequency | Once per user acceptance test |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I8.2.2 User Acceptance Testing Results Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Reporting

Reporting is a multi-faceted aspect of the overall System. It will consist of:

* Predefined operational reports to support election operations
* Self-service ad-hoc reports to support election operations
* Self-service reporting and analytics to support data requests
* Dashboards to support executive, management, and operational users

The County expects the different aspects will be supported through different tooling, and different ways of providing reporting capabilities.

[Contractor] will facilitate working sessions with the County to assess and identify reports requirements. [Contractor] will develop report specifications, design and build reports in accordance with the specifications, and maintain the reports including modifying as needed.

* 1. Conduct Reports Working Sessions and Develop List of Required Reports

Throughout the Project, [Contractor] will ensure that the System gathers the data required to produce reports needed by the County. This includes areas such as, but not limited to:

* Election Operations
* Quality Assurance
* System Administration and Security

Reports may take different formats such as:

* Data extracts into CSV, PDF, JSON, or other file formats
* Summaries
* Dashboards

[Contractor] will work with the County to identify report areas and stakeholders who should participate in [Contractor]-facilitated report working sessions. At a minimum of one (1) month prior to reporting working sessions, [Contractor] and the County will confirm sessions, including area(s) to be covered by session, schedule, and County attendees.

[Contractor] will facilitate working sessions for each area and a follow-up session, as required, to determine the list of reports required for Go-Live. [Contractor] will prepare a final, prioritized (e.g., critical for Go-Live, etc.) list of all required reports. [Contractor] will identify opportunities to consolidate reports (i.e., into ad-hoc, parameter driven reports).

[Contractor] will review the draft List of Required Reports with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

After the working sessions are completed and the List of Required Reports approved by the County, [Contractor] will update the Project Schedule (Deliverable 1.1.2), as needed, to reflect the schedule and resource requirements to complete the activities associated with developing the specifications, designing, building, validating, and testing all reports on the List of Required Reports.

|  |  |
| --- | --- |
| Deliverable | I9.1 List of Required Reports |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I9.1 List of Required Reports****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Develop Reports Specifications

[Contractor] will document and develop Report Specifications for each report identified in the List of Required Reports (Deliverable I9.1). This includes:

* Providing an inventory of all available, prebuilt reports
* Providing a future state plan for the County’s production system reporting
* Mapping available reports to required reports in the future state plan
* Identifying gaps and required modifications to existing production reports or rules to address County’s report requirements

|  |  |
| --- | --- |
| Deliverable | I9.2 Reports Specifications |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I9.2 Reports Specifications****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Design, Build and Test Reports

[Contractor] will provide all reports identified in the List of Required Reports (Deliverable I9.1) either through an available production report, by modifying an existing production report, or by developing a new custom report.

[Contractor] will:

* Manage all report requests using a tracking tool and provide reports according to the Project Schedule
* Work with the County to prioritize custom report requests and provide the County with an estimated effort for implementation
* Facilitate weekly reporting meetings with the County to report status of custom report requests and raise issues affecting report creation or maintenance
* Maintain the reports tracker for use on the weekly reporting meetings
* Advise and assist the County reporting team, as needed
* Assist in troubleshooting issues with custom reports in production
* Modify and test reports

[Contractor] will define test scripts and data for the County to validate that designed reports meet the requested intent. [Contractor] will review the reports with the County and gather feedback. [Contractor] will incorporate the County’s feedback, modifying the reports as needed.

|  |  |
| --- | --- |
| Deliverable | I9.3 Reports |
| Delivery Frequency | Ongoing until all reports identified in the List of Required Reports (Deliverable I9.1) are complete |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I9.3 Reports****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Provide Self-Service Reporting Capability

[Contractor] will provide self-service report capabilities that allow election operations to:

* Create their own reports for ad-hoc needs
* Respond to data requests by creating data extracts

Election operations staff must be able to use the self-service capability without assistance from programming staff and require limited training.

[Contractor] will provide the self-service capability by:

* Implementing tooling that is either part of the System or delivered in addition to the System
* Providing an easy to consume information model that helps users navigate the System data model
* Segmenting self-service reporting data access from access to the System, such that reporting does not impact performance of the operational system
* Providing a means to publish reports and make them discoverable for other users

[Contractor] will support the County in the development of self-service reports, including review of and feedback on County-created reports.

|  |  |
| --- | --- |
| Deliverable | I9.4 Self-Service Reporting Capability |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I9.4 Self-Service Reporting Capability****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Provide Dashboards

In addition to predefined and self-service reporting capabilities, [Contractor] will provide dashboards to support data-driven decision making for executive, management, and operational users.

The dashboards will be organized around KPIs to help staff better plan and manage all functions covered by the System. They must be easy to access, easy to consume, and provide drill-down capability to show the underlying data.

[Contractor] will work with the County to identify stakeholders who should participate in [Contractor]-facilitated dashboard working sessions. At a minimum of one (1) month prior to reporting working sessions, [Contractor] and the County will confirm sessions, including area(s) to be covered by the session, schedule, and County attendees.

[Contractor] will provide the dashboard capability by:

* Implementing tooling that is either part of the System or delivered in addition to the EMS (e.g., third-party analytics tool, interfaces)
* Develop an initial set of KPIs and sample dashboards to facilitate working sessions
* Providing a means to add additional dashboard elements over time

After each session, [Contractor] will hold follow-up sessions, as required, to validate the dashboards and their use to manage election operations.

For some dashboards, [Contractor] may be required to combine EMS data with other data in the County’s data warehouse or [Contractor] may be required to share EMS data to County’s data warehouse.

Depending on the defined purpose, dashboards may be one of the following types:

* Near real-time
* Delayed refresh
* Historical

|  |  |
| --- | --- |
| Deliverable | I9.5 Dashboards |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I9.5 Dashboards****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Training and Knowledge Transfer

Effective training must provide users with the required skills to use the EMS, including any operational process changes. [Contractor] will be responsible for conducting comprehensive training of all end users as well as for providing Train-the-Trainer trainings.

[Contractor] will ensure knowledge transfer occurs to key County staff. This includes identifying key roles (e.g., County operational staff, County technical staff, County training staff, etc.) early in the Project and actively engaging them throughout to ensure they receive the knowledge required to fill their role. [Contractor] will provide checkpoints to ensure the required knowledge is being transferred and will establish corrective action plans, where required.

* 1. Plan for Training and Knowledge Transfer

[Contractor] will be responsible for leading the planning activities to prepare for trainings and knowledge transfer. [Contractor] will coordinate training efforts with election subject matter experts who will provide policy and practice support to [Contractor] and be present at trainings to provide input, as necessary, regarding practice and policy questions or implications. [Contractor] will develop a Training and Knowledge Transfer Strategy and the Training and Knowledge Transfer Plan to execute the agreed upon Strategy.

* + 1. Define the Training and Knowledge Transfer Strategy

In collaboration with the County, [Contractor] will define a learner-centric Training and Knowledge Transfer Strategy to establish the direction and purpose for training and knowledge transfer activities. The Training and Knowledge Transfer Strategy will define the approach the County and [Contractor] will follow to effectively train end users, including how trainings and each trainee’s competence will be evaluated.

The Training and Knowledge Transfer Strategy will include, at minimum, the following elements:

* Vision, goals, and objectives
* Training methodology
* Approach to develop training curriculum and training materials
* Approach to access training tools and materials
* Approach to provide knowledge transfer
* Guiding principles that will govern training and knowledge transfer activities
* Training and Knowledge Transfer team(s) structure
* Project risk and risk factors specific to training
* Logical groupings of end users to be trained
* Training metrics and a description of the methodology to evaluate effectiveness of the trainings

[Contractor] will review the draft Training and Knowledge Transfer Strategy with the County and gather feedback. [Contractor] will incorporate the County’s feedback and submit a final version for approval.

|  |  |
| --- | --- |
| Deliverable | I10.1.1 Training and Knowledge Transfer Strategy |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I10.1.1 Training and Knowledge Transfer Strategy****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Develop the Training and Knowledge Transfer Plan

[Contractor] will develop and deliver a Training and Knowledge Transfer Plan to execute the Training and Knowledge Transfer Strategy as defined in Deliverable I10.1.1. The Training and Knowledge Transfer Plan will include, at minimum, the following elements:

* Roles, responsibilities, and assignments of both the County and [Contractor] personnel involved in training and knowledge transfer
	+ - Includes the different type of trainers required and respective quantities
		- Includes the minimum competencies for the County trainers, including approach for remediation of gaps related to County personnel skills
* Types of training (e.g., troubleshooting, technical training, scenario and role-based end user, train-the-trainer, etc.) and the audience for each
	+ - Audiences will include, at minimum, “Train-the-Trainer” trainers, County end users (including County Level 1 Help Desk staff), and the Executive Team
* Details for recommended courses for each type of training and knowledge transfer activities, including:
	+ - Course name
		- Objective
		- Description and course outline (e.g., specific topics to be covered, etc.)
		- Delivery method and activities (e.g., classroom, video, other media, etc.)
		- Duration
		- Intended audience
		- Maximum number of participants in each course
		- Corequisites and prerequisites
		- Evaluation methodology to test participant competency and provide opportunities for course improvement
* Overview of the tools and training materials to be employed including workbooks, handouts, evaluation material, computer-based training, and training database to store completed training materials
* High-level projections for the physical space required to conduct trainings, including any hardware or infrastructure requirements
* Training schedule including:
	+ - Logical sequence of how content will be delivered
		- Number of days
		- Preliminary agendas
* Training maintenance and support plans including how trainings will be updated to account for any regulatory or procedure changes

[Contractor] will adjust the Training and Knowledge Transfer Plan, as necessary and at any point throughout the Project life cycle.

|  |  |
| --- | --- |
| Deliverable | I10.1.2 Training and Knowledge Transfer Plan |
| Delivery Frequency | Once, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I10.1.2 Training and Knowledge Transfer Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Conduct Training

[Contractor] will be responsible for the development of training curricula, schedules, training materials, participant testing methods, and training evaluation materials.

[Contractor] will be responsible for the setup and maintenance of the online training environment that allows trainees to access the EMS. [Contractor] will install and test the training environment and enter all testing data including, at minimum:

* Hardware and operating software
* Networking and communications infrastructure
* Training version of the EMS
* Other hardware and software required to conduct training
* Loading of test data
* Nightly refreshes of the training environment

[Contractor] will be responsible for conducting comprehensive in-person, hands-on trainings for all end users (in logical groups) and for managing all training planning and logistics. [Contractor] will also be responsible for providing Train-the-Trainer trainings to enable County trainers to train future staff. Trainings may occur virtually if previously approved by the County.

* + 1. Develop Training and Knowledge Transfer Materials

[Contractor] will be responsible for developing all Training Materials with input from the County. The Training Materials will include items to be used to conduct the training sessions to ensure training objectives are met. Materials can include presentations, demonstrations, activities, handouts, computer-based training, and other required documentation and media. It will also include participant testing vehicles and training evaluation materials. [Contractor] will provide an electronic copy of all Training Materials to the County.

Training Materials will be required for each of the training types described in Deliverable I10.1.2 Training and Knowledge Transfer Plan. Each individual trainee will receive a copy of the training materials.

[Contractor] will update Training Materials with the implementation of any significant changes or upgrades to the System. Additional training platforms / methods may be required, depending on the County’s needs and the specific changes that occur.

[Contractor] will be responsible for developing all Knowledge Transfer Materials with input from the County. The Knowledge Transfer Materials will include items to be used to conduct the knowledge transfer sessions with key County staff. Knowledge transfer sessions are small group sessions where County staff have an opportunity to learn directly from [Contractor] subject matter experts in a hands-on environment. Materials can include presentations, demonstrations, activities, handouts, and other required documentation and media. [Contractor] will provide an electronic copy of all Knowledge Transfer Materials to the County.

|  |  |
| --- | --- |
| Deliverable | I10.2.1 Training and Knowledge Transfer Materials |
| Delivery Frequency | Once per training type, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I10.2.1 Training and Knowledge Transfer Materials****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Conduct Training and Provide Training Metrics

[Contractor] will be responsible for providing comprehensive training to all end users and conducting “Train-the-Trainer” trainings. Trainings will be of sufficient length to ensure adequate comprehension. [Contractor] will provide training “just in time” prior to Go-Live. The County expects a total of two hundred (200) staff will be trained, including one hundred fifty (150) operational end users and fifty (50) IT end users.

End users will include County Level 1 Help Desk staff that will be tasked with handling EMS-related issues. Training will focus on the process County Help Desk staff will use to support end users in resolving EMS issues that are referred to the Help Desk. For issues that are best addressed by specialists employed by [Contractor], [Contractor] will train the County staff in the manner and means by which such issues to Help Desk Level 2 are to be escalated and the resolution communicated back to the Help Desk Level 1.

After each training, [Contractor] will provide the County with documented evidence of each trainee’s competence to use the EMS to conduct their duties. The Reporting of Training Metrics will include training metrics and progress towards achieving training objectives. Metrics may include the number of participants registered to be trained, number of participants trained, and number of participants receiving training certification.

|  |  |
| --- | --- |
| Deliverable | I10.2.2 Report of Training Metrics |
| Delivery Frequency | Once after each training and final aggregated metrics once all training is complete |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I10.2.2 Reporting of Training Metrics****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Conduct Knowledge Transfer

[Contractor] will be responsible for conducting knowledge transfer sessions with key County staff. The County expects up to fifty (50) staff will participate in knowledge transfer sessions. Knowledge transfer sessions will be of sufficient length and interactivity to ensure sufficient knowledge comprehension and skill competency. Sessions will include no more than five (5) County staff per session.

Upon completion of all knowledge transfer sessions, [Contractor] will prepare a Knowledge Transfer Report documenting the sessions conducted, County participants in each session, and the topic(s) covered in each session.

|  |  |
| --- | --- |
| Deliverable | I10.2.3 Knowledge Transfer Report |
| Delivery Frequency | Once upon completion of all knowledge transfer sessions |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I10.2.3 Knowledge Transfer Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Provide User Guide and Help Documentation

[Contractor] will be responsible for providing User Guide and Help Documentation for the System to cover all aspects of the EMS functions. The User Guide will be available electronically (e.g., through the System, online) with the ability to print if necessary.

The User Guide and Help Documentation should follow principals of good information design and will explain to the user what the functions are and how the System is intended to be operated. The User Guide and Help Document will include:

* Searchable content
* Step-by-step sequences
* Simple, plain language
* Logical hierarchy and flow
* Visual content including screen shots and graphics
* Context sensitive help
* Keyword Index and Table of Contents
* Accessibility

[Contractor] will update the User Guide and Help Documentation throughout the Project life cycle to reflect applicable changes based on new Releases, system enhancements, and system updates.

|  |  |
| --- | --- |
| Deliverable | I10.2.4 User Guide and Help Documentation |
| Delivery Frequency | As needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I10.2.4 User Guide and Help Documentation****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Provide Level 1 Help Desk Scripts

In collaboration with the County, [Contractor] will be responsible for developing Level 1 Help Desk Scripts for use by the County. Scripts should cover all common end user questions and triaging to Level 2, which is the responsibility of [Contractor].

[Contractor] will update the Level 1 Help Desk Scripts throughout the Project life cycle to reflect applicable changes based on new Releases, system enhancements, and system updates.

|  |  |
| --- | --- |
| Deliverable | I10.2.5 Level 1 Help Desk Scripts |
| Delivery Frequency | Once, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I10.2.5 Level 1 Help Desk Scripts****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

1. Implementation

[Contractor] will implement the System for the County’s use by the 2024 Presidential Primaries. [Contractor] and the County will deploy the EMS and included Third-Party Products in accordance with the Deployment Plan. Deployment will include cutover to the EMS and Third-Party Products, data conversion, activation of interfaces, providing Go-Live support, resolving issues, and conducting post Go-Live assessment.

* 1. Plan for Production Release

[Contractor] will develop an extensive and carefully structured plan to provide services for the implementation of the System. These services will include organization and execution of cutover activities necessary to transition the County to the new System.

* + 1. Develop Deployment Plan

[Contractor] will develop a detailed Deployment Plan to reflect all activities that affect deployment of the System into the production environment. The Deployment Plan will document, at minimum, the following elements:

* All tasks required to make a successful cutover to the production environment including, but not limited to:
	+ - Data conversion activities
		- Training activities
		- Help Desk preparation activities
		- Activation of integration interfaces
		- Activation of batch cycle processes
		- Activation of hosting services
		- Resolution of all identified security issues
* Cutover activities checklist
* Scope of deployment (if phased implementation)
* Roles and responsibilities during each deployment
* Resource (e.g., staff, tools, infrastructure, etc.) requirements
* Deployment schedule including start and end dates, key milestones, and dependencies by phase (if applicable)
* Go/No-Go decision model
	+ - The County expects zero outstanding Severity 1, 2 or 3 issues prior to cutover
* Post Go-Live conditions for transition to Warranty
* Deployment closeout checklist
* Risks that may affect deployment with respective contingency plans to mitigate
	+ - Contingency plans will include one or more alternate solutions for the County’s consideration
		- Upon approval by the County, [Contractor] will be responsible for executing any contingency plans should issues arise during deployment
* Strategies for business and System continuity planning and backing out resulting from deployment issues

[Contractor] will review the draft Deployment Plan with the County and gather feedback. [Contractor] will incorporate the County’s feedback prior to release.

[Contractor] will provide in-person support throughout the entire deployment and stabilization period.

|  |  |
| --- | --- |
| Deliverable | I11.1.1 Deployment Plan |
| Delivery Frequency | Once per deployment (if phased implementation) |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I11.1.1 Deployment Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Prepare Production Readiness Report

[Contractor] will develop, review, and finalize a production readiness framework that will allow [Contractor] and the County to assess Go-Live readiness from operational, functional, and technical perspectives including:

* Functional readiness assessment framework including status of the System, plan for resolution of remaining issues, production support and scheduled downtime plans, and Help Desk status
* Technical readiness framework including guidelines to assess the County infrastructure, hosting infrastructure, plans and procedures for System backup/restore, security, and performance monitoring

[Contractor] will assess production readiness against the approved framework and prepare a Production Readiness Report that documents any risks or issues that may affect successful deployment. [Contractor] will recommend mitigation or resolution plans to address identified risks or issues, respectively, and execute against the plans upon approval from the County.

|  |  |
| --- | --- |
| Deliverable | I11.1.2 Production Readiness Report |
| Delivery Frequency | Once per deployment (if phased implementation) |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I11.1.2 Production Readiness Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Develop the Disaster Recovery Plan

[Contractor] will develop and provide a Disaster Recovery Plan and related services, including System and software backups as well as backups of County data for the System.

[Contractor] will provide all services related to issues pertaining to disaster recovery. The range of services covers the spectrum from partial loss of function or data for a brief amount of time to a “worst-case” scenario in which a man-made or natural disaster or IT failure may result in the loss of the entire System.

In collaboration with the County, [Contractor] will categorize System disruptions by the severity of the event. The Hosting (On-Prem or Cloud) Statement of Work (Section K.2 of the Technical Response) captures the severity levels with expected incident response and resolution times. These expectations are meant to drive the System architecture, resiliency, and disaster recovery capabilities to meet the desired System availability levels.

[Contractor] will develop the Disaster Recovery Plan, which will serve as the master plan when responding to System outages, ensuring continuity of business operations, and recovering from a disaster.

[Contractor] will ensure key Project resources, both of from [Contractor] and the County, are trained in recovery procedures.

The Disaster Recovery Plan will include, at minimum, the following elements:

* Overview of the technical infrastructure to achieve the expected levels of availability. The County anticipates a combination of a High Availability (HA) configuration on the primary site, with failover capabilities to a secondary site, within the Recovery Time Objective (RTO) and Recovery Point Objectives documented in the Hosting (On-Prem or Cloud) Requirements Matrix (Section K.1 of the Technical Response).
* Business impact analysis of the System functionality and the County data for the System that identifies and prioritizes the critical systems and components
* Data replication procedures from the primary site to a failover site to replace the primary site in case of a catastrophic failure
* Data backup/recovery procedures for backing up, retrieving, and restoring exact copies of the most current County data, including non-baseline configurations for all components of the System and integration components
	+ - Includes procedures to ensure the physical safety of media upon which the System and County data for the System is backed up
		- Includes approach to secure storage of all backup media, both on-site and off-site, and proposed response time for recovery of the media from off-site storage
* System backup/recovery procedures for backing up, retrieving, and restoring the System
	+ - Includes approach for the backup and recovery of the System, both on-site and off-site, including the proposed response time for recovery
* Emergency mode of operations that provides the procedures to enable business continuity, protect the security of electronic information during and immediately after an emergency, and recover from the emergency mode of operation with minimal impact on end users
* Command and control processes and procedures that delineate specific roles and responsibilities, communication, and actions that [Contractor]’s staff will follow in an emergency
	+ - Includes escalation plans that specify the necessary points of contact and decision-making authority at the County
* Procedures for performing disaster recovery testing during Implementation and post-implementation when implementing major changes, and at least every six (6) months
	+ - Each test will continue until all test results are approved by the County
		- In addition to the testing during Implementation, the disaster recovery / business continuity testing will be conducted annually. Each test will include:
			* + Automated switch-over to the backup site to meet performance requirements under full load in the hosted environment for Production Use
				+ Interfaces or integrations to all external systems
				+ Test results reports
				+ Updates to the Disaster Recovery / Business Continuity Plan
* Procedures for replacing data center facilities, if required by the nature of the disaster or emergency
* Exercise logs that document the calendar day(s) when the Disaster Recovery Plan is tested, the nature of the test(s), problems identified during each test, and corrective actions to be taken
* Revision history that documents any changes made to the Disaster Recovery Plan, including the date and details of the changes as well as the persons responsible for initiating and approving the changes

[Contractor] will verify that all data replications and backups are complete, accurate, and functional.

|  |  |
| --- | --- |
| Deliverable | I11.2 Disaster Recovery Plan |
| Delivery Frequency | I11.2 Once, and updated as needed |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I11.2 Disaster Recovery Plan****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* 1. Go-Live

For Go-Live, [Contractor] will deploy the EMS and Third-Party Products. [Contractor] will:

* Implement the Deployment Plan (Deliverable I11.1.1)
* Ensure that all data migration activities per Task 7.0 Data Migration are successfully completed
* Facilitate Go/No-Go decisions per the agreed upon criteria
* Track and monitor progress
* Identify, escalate, and help resolve issues

[Contractor] will be required to provide on-site support with personnel who are technically competent to fully support the EMS, including VoteCal integration and data synchronization, to resolve issues during deployment.

[Contractor] will be responsible for:

* Working with the County to track deployment status, identify and escalate issues, and identify resolution plans
* Communicating issue resolution
* Assigning [Contractor] resources to resolve issues and providing additional resources, if necessary, to address issues and execute resolution plans
	+ 1. Prepare Deployment Report

Post Go-Live, [Contractor] will prepare a Deployment Report that captures the execution of the Deployment Plan including:

* Summary of deployment activities and results/outcomes
* Summary of errors and issues identified by [Contractor] or the County
* Summary of lessons learned and action items for [Contractor] and/or the County to consider and complete prior to subsequent deployment(s) of the EMS, if applicable
* Recommendations for process changes to improve the effectiveness of the System
* Recommendations for any improvements to the EMS and/or Third-Party Products
* Summary of items not addressed in the deployment with timeline of completion (if phased deployment)

|  |  |
| --- | --- |
| Deliverable | I11.3.1 Deployment Report |
| Delivery Frequency | Once per deployment (if phased implementation) |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I11.3.1 Deployment Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>

* + 1. Receive Final Acceptance

The System will achieve Final Acceptance when all the following conditions are met:

1. Achievement of California Secretary State certification of VoteCal integration
2. Successful completion of the Tasks and Deliverables in this Implementation SOW and the Hosting SOW
3. Successful completion of all work necessary for the System to be available for Production Use by the County end users
4. Deficiencies identified by [Contractor] or the County have been corrected by [Contractor] in accordance with the Contract
5. Corrections of such Deficiencies have been approved by the County Program Manager
6. Following the County Program Manager’s approval of all such corrections, the System has performed for ninety (90) consecutive days in compliance with the Contract, including all performance requirements with any Deficiencies of Error Severity 1 or Error Severity 2 as defined in the Hosting SOW

[Contractor] will provide the Final Acceptance Report, documenting the achievement of Final Acceptance.

|  |  |
| --- | --- |
| Deliverable | I11.3.2 Final Acceptance Report |
| Delivery Frequency | Once |

|  |
| --- |
| **PROPOSER RESPONSE TO: Deliverable I11.3.2 Final Acceptance Report****Will the Proposer complete the deliverable(s) and related task(s) as described above?**[ ]  **Yes**[ ]  **Yes, with modifications**[ ]  **No****Explain your approach to completing the deliverable(s) and related task(s) as described above:** |

<Response>