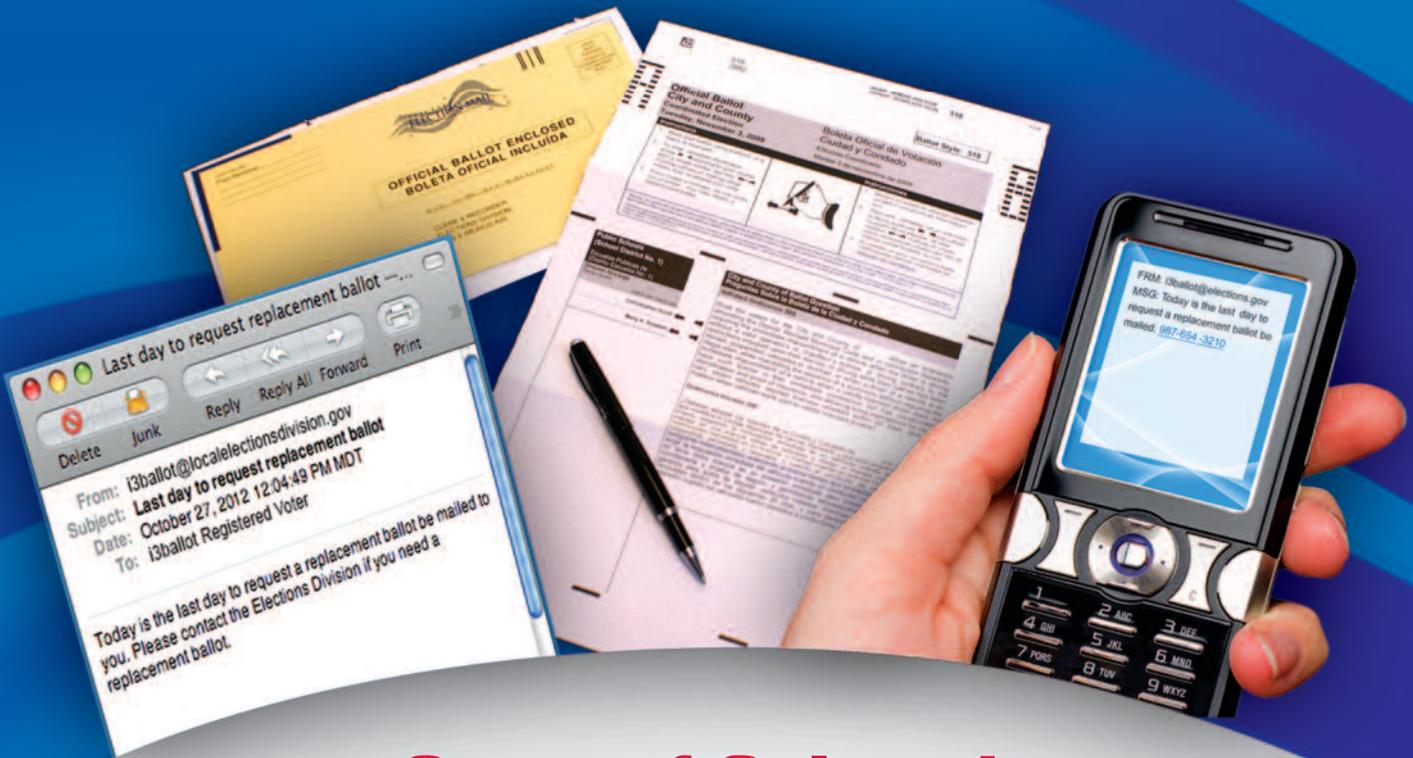




i3ballot™

INNOVATIVE TRACKING | INFORMATIVE ALERTS
INTELLIGENT REPORTING



State of Colorado Department of State

Uniform Voting System Business Proposal

RFP # CDOS-UVS-2013-01
DUE ON DECEMBER 4, 2013 AT 5:00PM MDT
ELECTRONIC COPY

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State of Colorado Uniform Voting System Request for Proposal (RFP) Cover Sheet

SEALED RESPONSES MUST BE MAILED OR DELIVERED TO:

Colorado Department of State

Attn: Al Davidson

1700 Broadway

Suite 200

Denver, CO 80290

| | |
|-------------------------|---|
| SOLICITATION NUMBER: | CDOS-UVS-2013-01 |
| DEADLINE DATE AND TIME: | December 4, 2013 at 5:00 PM MOUNTAIN TIME |
| PURCHASING CONTACT: | Al Davidson |
| PHONE NUMBER: | 303-895-2200, ext. 6361 (for delivery questions only) |

BIDDERS MUST SUBMIT ONE (1) ORIGINAL AND NINETEEN (19) COPIES OF THE PROPOSAL AND ONE ELECTRONIC COPY FOR BOTH THE BUSINESS PROPOSAL AND COST PROPOSAL. BIDDERS MUST COMPLETE THE BELOW INFORMATION.

| | |
|----------------------------|--|
| F.E.I.N. | 20-4551091 |
| DELIVERY DATE | 12/3/13 |
| AUTHORIZED SIGNATURE |  |
| TYPED/PRINTED NAME | Stephen A Olsen |
| TITLE | Executive Vice President |
| COMPANY NAME | i3logix, Inc DBA i3ballot |
| ADDRESS | 9501 Northfield Blvd |
| CITY/STATE/ZIP | Denver, Colorado, 80238 |
| CONTACT FOR CLARIFICATIONS | David Moreno |
| CONTACT TITLE | Director of Product Delivery |
| PHONE NUMBER | 303 757 4546 |
| FAX NUMBER | 877 861 4238 |
| EMAIL ADDRESS | dmoreno@i3logix.com |

IMPORTANT: THE FOLLOWING INFORMATION MUST BE ON THE OUTSIDE OF THE RFP SUBMITTAL ENVELOPE AND/OR PACKAGE. SEE THE RFP FOR MORE DETAILED INSTRUCTIONS.

<VENDOR NAME>

RFP # CDOS-UVS-2013-01 <BUSINESS OR COST> PROPOSAL

DUE ON DECEMBER 2, 2013 AT 5:00PM MDT

PACKAGE # OF #

Please be advised that telegraphic or electronic responses (Fax, Western Union, Telex, etc.) cannot be accepted as a sealed proposal. Bidders are urged to read the RFP documents thoroughly before submitting a response.



i3logix™

innovative
information
intelligence

December 4, 2013

i3logix, Inc. is enthusiastic about the opportunity to submit our proposal for the State of Colorado Uniform Voting System. Our software solution, i3ballot, is the only complete, proven and tested mail ballot tracking system in the market.

We acknowledge all work requirements, general contract requirements, and other terms and conditions specified within this RFP and are willing and able to comply. We are submitting this proposal ONLY for the Mail Ballot Tracking category “F” of the RFP.

All materials and enclosures meet required specifications and we acknowledge all modifications to this RFP.

We currently do not have any pending projects with the State of Colorado and have no current conflicts related to this RFP.

Our software solution utilizes no subcontractors and we have no objections to the items in the Administrative Information section or contract template.

Sincerely,

A handwritten signature in blue ink, appearing to read "Stephen A. Olsen".

Stephen A Olsen
Executive Vice President

1.0 Executive Summary

i3ballot is pleased to propose a unique, patent-pending mail-ballot tracking and alert system providing complete visibility to the state election offices and to the voting public. i3ballot's alert system delivers the information voters want, giving them piece-of-mind that their ballot has been counted. Counties and Election offices benefit from reduced administrative costs, increased vendor accountability, increased voter turn-out and confidence, and increased visibility as to the status of mail-ballots.

We understand that this is a proposal for a Universal Voting System and our business does not provide many of the hardware and services requested in the proposal. But our web-based software solution will integrate with any and all mail-ballot systems that include intelligent barcodes in the printing process. Our software tracks the ballot status through the scanning of these barcodes at various stages in the mail stream and proactively sends reports and alerts to the county officials and voters.

2.0 Company Overview

i3ballot is a division of i3logix, Inc., established in 2005 and based out of Denver, Colorado. We combine intelligent software with innovative products and services to business and industry worldwide, specializing in human capital, healthcare and information services.

i3logix was created through entrepreneurial necessity and continues to experience accelerated growth. In 2005, we were instrumental in restructuring the administrative process for the delivery of flu immunizations, a \$4 billion service industry. Through our efforts to provide a more efficient process, we discovered that there were no effective data management and scheduling systems that fit our needs, so we set out to create and refine our own. We successfully united and integrated the public, with immunizers and providers, into one simple and easy-to-use delivery system—and i3logix was formed.

Since that time, we have been developing more efficient and innovative ways to manage information deploying all the latest communication tactics available in the marketplace. We have created new technology tools in risk management and HR onboarding including a paperless drug screening platform that has become the industry leader. We have also developed and combined proprietary tools and processes in the highly competitive online lead generation space, with multi-channel, multi-touch marketing tactics. Our expertise in healthcare has led us to develop a modular portfolio of business information and support systems to manage scheduling, credentialing, authorizations and electronic filing systems.

Our i3ballot tracking system was also born out of necessity. As cities, counties and municipalities were challenged by the ever increasing cost of running elections and decreasing voter confidence in vote-by-mail, we developed the first complete mail-ballot tracking and alert system in the country.

Our main office is located in Denver near the Northfield Shopping area off I-70 and Quebec. We also have several key employees in other states around the country including Pennsylvania, California, Tennessee, Utah, Vermont and Wisconsin.

We have reviewed the Administrative Information in Section 2 of the RFP and agree to the terms and conditions.

We also understand the size and scope of the project proposed and have been refactoring and upgrading our software to process additional data volume both in Colorado and potentially in other areas across the country.

4.0 Relevant Business Experience

In 2009, we teamed with the Denver Elections Division (DED) to build and implement the initial version of the i3ballot mail tracking and alert system. DED was integral in helping us define the requirements and user stories for the development process and after a series of comprehensive tests, we deployed the software in the November 2009 election. The initial development project was completed on time and within budget as were all subsequent elections.

Since 2009, we have successfully improved performance, upgraded functionality and increased voter usage for all the elections in Denver County. We have been very careful to make sure the software performs as expected and each election we have adjusted various functions to guarantee success. Our goal was to finely-tune the software before we took it to a broader market as we understand the highly scrutinized nature of the election process.

Our primary contacts during the development phase were Jim Williams, former Operations Manager, Michael Scarpello, former Director of Elections and Stephanie O'Malley, former Denver County Clerk and Recorder.

Currently our main point-of-contact is Amber McReynolds, Director of Elections.

Amber McReynolds
Director of Elections
City and County of Denver
200 West 14th Ave., Suite 100, Denver, CO 80204
720-913-VOTE (8683)
amber.mcreynolds@denvergov.org

Michael Scarpello
San Bernardino County Registrar of Voters'
777 East Rialto Avenue, San Bernardino, CA 92415-0770
Tel 1-800-881-VOTE • (909) 387-8300

Stephanie O'Malley
Deputy Chief of Staff - Office of the Mayor
City and County of Denver
stephanie.omalley@denvergov.org
(Former Clerk and Recorder, City and County of Denver)

i3ballot was recognized in 2010 by the National Association of Election Offices with an Eagle Award for use of Technology. In 2013, i3ballot was again recognized with a National Civic Technology Award from the National Association of Counties presented to Denver Elections.

5.0 Prior Proposals

As mentioned in section 4.0, the first live implementation of i3ballot was in November 2009 for the City and County of Denver. The original proposal dated 6/4/09 included:

We are currently in the initial discussion phase for proposals in several other counties in Colorado, California, Ohio and Oregon.

- 1) State or territory- Denver, Colorado
- 2) Contact name, telephone and email address – Amber McReynolds
- 3) Date proposal submitted - May 2009
- 4) Result of your bid – Awarded to project
- 5) Brief description of your proposal – Develop a web-based, intelligent mail-ballot tracking system including:
 - Destination Ballot Tracking
 - Return Ballot Tracking
 - Voter Portal Tracking Website
 - Voter Notification Services
 - Private Label for Denver Elections BallotTRACE™

6.0 Project Approach

6.1 Project Management

The project schedule is the roadmap for how the i3ballot project will be executed. Schedules are an important part of any project as they provide the project team, sponsor, and stakeholders a picture of the project's status at any given time. The purpose of the schedule management plan is to define the approach the project team will use in creating the project schedule. This plan also includes how the team will monitor the project schedule and manage changes after the baseline schedule has been approved. This includes identifying, analyzing, documenting, prioritizing, approving or rejecting, and publishing all schedule-related changes.

Project Scope

This project includes the implementation, configuration, and testing of the i3ballot SaaS (Software as a Service) application for the tracking of mail-in ballots. The deliverables for this project are a completed software application for ballot tracking with the flexibility to identify and modify the notifications sent to the voters. This project will be accepted once the software has been successfully configured and tested in each participating county and has been shown to be compatible with the State's current information technology (IT) infrastructure. This project does not include ongoing operations and maintenance of the software. Only i3logix, CDOS and Counties personnel and resources may be used for this project.

6.1.1 Schedule Management Approach

Project schedules will be created using a MS Project compatible application, starting with the deliverables identified in the project's Work Breakdown Structure (WBS). Activity definition will identify the specific work iterations, which must be performed to complete each deliverable. Activity sequencing will be used to determine the order of work iterations and assign relationships between project activities. Activity duration estimating will be used to calculate the number of work periods required to complete work iterations. Resource estimating will be used to assign resources to work iterations in order to complete schedule development.

Once a preliminary schedule has been developed, it will be reviewed by the project team and any resources tentatively assigned to project tasks. The project team and resources must agree to the proposed work package assignments, durations, and schedule. Once this is achieved, the project sponsor will review and approve the schedule and it will then be base lined.

6.1.2 Milestone List

The following will be designates as milestones for the project schedule:

- Completion of scope statement and WBS
- Base lined project schedule
- Approval of final project budget
- Project kick-off
- Approval of roles and responsibilities
- Requirements definition approval
- Identification of participating counties
- Completion of i3ballot data mapping
- i3ballot implementation and configuration
- Acceptance of final deliverables

6.1.3 Roles and responsibilities for schedule development

The project manager will be responsible for facilitating work iteration definition, sequencing, and estimating duration and resources with the project team. The project manager will also create the project schedule using a MS Project compatible application and validate the schedule with the project team, stakeholders, and the project sponsor. The project manager will obtain schedule approval from the project sponsor and baseline the schedule.

The project team is responsible for participating in work iteration definition, sequencing, and duration and resource estimating. The project team will also review and validate the proposed schedule and perform assigned activities once the schedule is approved.

The project sponsor will participate in reviews of the proposed schedule and approve the final schedule before it is base lined.

The project stakeholders will participate in reviews of the proposed schedule and assist in its validation

6.1.4 Risk Management Plan

The purpose of Risk Management is to protect the project objectives, provide early warnings, and help management mitigate risks associated with the implementation of i3logix products. As such, the scope of this Risk Management plan will be developed to identify, monitor, and, if necessary, mitigate any Risks associated with the implementation of i3logix products.

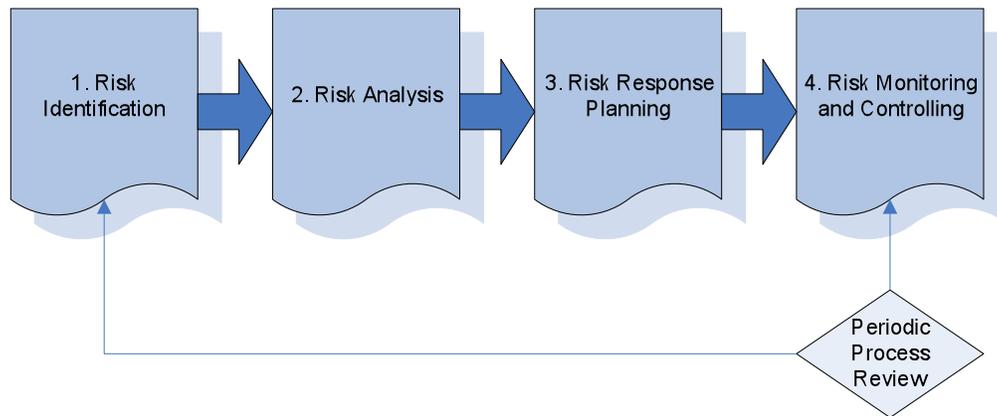
6.1.4.1 Roles and Responsibilities

| | |
|--------------------------------------|--|
| Project Manager(s) | The Project Manager(s) (PM) has the following responsibilities and authority: Coordinate risk identification and analysis activities; Maintain project risk register; Lead bi-weekly review of status on identified project risks; Report risk resolution status to project management. In addition, the Project Manager(s) is responsible for communicating the Top Ten Risk Factors to the Project Steering committee as outlined in the Communication Plan. |
| Project Team | The Project Team shall meet bi-weekly to review the status of all risk mitigation efforts, review the exposure assessments for any new risk items, and redefine the project's Top Ten Risk register. |
| Project Team Member Assigned Risk(s) | The PM will assign each newly identified risk to a project team member, who will assess the exposure and probability for the risk factor and report the results of that analysis back to the PM. Assigned project members are also responsible for performing the steps of the mitigation plan and reporting progress to the Risk Coordinator bi-weekly. |

6.1.4.2 Key Risk Deliverables

| | |
|-----------------------------|---|
| Risk Management Plan | A risk identification and documentation form will be completed for each risk identified through the life of the project. |
| Risk Documentation | A risk identification and documentation form will be completed for each risk identified through the life of the project. |
| Risk Register | The risk factors identified and managed for this project will be accumulated in a risk register, which will be maintained by the PM. The ten risk items that currently have the highest estimated risk exposure are referred to as the project's Top Ten Risks. |
| Risk Status | The Top Ten Risks, along with the status, will be reported weekly with the overall project status. |

6.1.4.3 Risk Management Process



6.1.4.3.1 Risk Identification

| Risk Identification | Task | Participants |
|---------------------|---|--------------|
| | The Project Team will conduct a brainstorming session during the Discover phase of the project to compile the initial list of project risks. During project execution, newly identified risk factors will be documented using the Risk Documentation form. Completed Risk Documentation forms will be routed to the PM for logging and Risk Analysis. | Project Team |

6.1.4.3.2 Risk Analysis

| Risk Analysis | Task | Participants |
|---------------|--|------------------------------|
| | The Risk Coordinator will assign each risk factor to an individual project member, who will estimate the probability of the risk occurring and impact the risk will have if it does occur using a Probability/Impact Matrix. | Assigned Project Team Member |
| | The individual analyzed risk factors are collected, reviewed, and adjusted if necessary. The list of risk factors is sorted by descending risk exposure (probability time's impact). | Project Manager(s) |

| | |
|--|---|
| <p>The Project Manager(s) will communicate any schedule or budget contingencies that arise during the risk analysis process to the Steering Committee for approval. Once approved, the Project Manager(s) will incorporate the schedule or budget contingencies into the appropriate project document (i.e. MS project plan or budget tracking document)</p> | <p>Project Manager(s), Steering Committee</p> |
|--|---|

6.1.4.3.3 Risk Response Planning

Risk Response Planning

| Task | Participants |
|---|-------------------------------------|
| <p>The top ten risks or those risk factors having an estimated risk score greater than .09 are assigned to individual project members for development and execution of a risk mitigation plan.</p> | <p>PM</p> |
| <p>For each assigned risk factor, recommend actions that will reduce either the probability of the risk materializing into a problem, or the severity of the exposure if it does. Return the mitigation plan to the PM.</p> | <p>Project Team Members</p> |
| <p>The mitigation plans for assigned risk items are collated into a single list. The completed list of Top Ten Risks is created and made available to the project participants.</p> | <p>PM</p> |
| <p>Each individual who is responsible for executing a risk mitigation plan carries out the mitigation activities.</p> | <p>Assigned Project Team Member</p> |
| | |

6.1.4.3.4 Risk Monitoring and Controlling

Risk Monitoring and Controlling

| Task | Participants |
|--|-------------------------------------|
| <p>The PM will monitor the triggers for the Top Ten Risks. Conduct risk review meetings bi-weekly with Project Team to discuss changes in risk scores, realized risks, and new risks identified during the course of the project. In addition, the Project Manager will communicate the status of the Top Ten Risks weekly within the Project Status report.</p> | <p>Project Manager(s)</p> |
| <p>The status and effectiveness of each mitigation action is reported to the PM every two weeks.</p> | <p>Assigned Project Team Member</p> |
| <p>The probability and impact for each risk item is reevaluated and modified if appropriate.</p> | <p>PM</p> |
| <p>If any new risk items have been identified, they are analyzed as were the items on the original risk register and added to the risk register.</p> | <p>PM</p> |
| <p>The list of Top Ten Risks is regenerated based on the updated probability and impact for each remaining risk.</p> | <p>PM</p> |
| <p>Any risk factors for which mitigation actions are not being effectively carried out, or whose risk exposure is rising, will be escalated to an appropriate level of management for visibility and action.</p> | <p>PM</p> |

6.1.5 Change/Issue Management Plan

Purpose

The purpose of Change Management is to protect the project objectives and schedule, monitor progress against plan, and provide a process to formally submit, review, and approve change requests associated with the development and implementation of i3logix products. As such, the scope of this Change Management plan will be developed to monitor, control, and, if necessary, approve changes associated with the implementation of i3logix products for CDOS.

Change Control Procedure:

A Project Change Request (PCR) will be the vehicle for requesting a change to the project, including issues and defects. i3logix will track all requested, rejected and accepted change requests.

The PCR must describe the proposed change, the rationale for the change and the effect the change will have on the Project, to the extent known by the party submitting the PCR. If the PCR is submitted by i3Logix, it must indicate estimated cost and schedule impact. The designated Lead of the requesting party will submit PCR's to the other party. Leads for CDOS and i3logix will then mutually review the submitted PCR and will either initially accept or reject such PCR within five (5) business days. Once initially accepted, and signed by authorized representatives from both parties, an investigation of the recommended changes will commence. The investigation will determine the effect that the implementation of the PCR will have on cost, schedule and other terms and conditions of the project.

Following investigation, i3logix will provide a good faith, but otherwise non-binding, estimate of changes to cost, schedule, etc., and CDOS will finally accept or finally reject it in writing within five (5) business days or, within three (3) business days if it was designated as a critical path change. A PCR that is finally accepted shall become a “**Change Order**”. Until a change is agreed in writing as a Change Order, both parties will continue to act in accordance with the project management plan

Roles and Responsibilities

Roles and responsibilities, together with personnel assignment will be decided by both parties on the project kick-off proceedings.

Key Issue Management Deliverables

| | |
|--|--|
| Change Management Plan | A change management plan (based upon this template) will be completed for the implementation of i3logix products for CDOS. |
| Change Request Documentation Form | A change management identification and documentation form will be completed for each change request identified through the life of the project. |
| Change Request Register | The change requests identified and controlled for this project will be accumulated in a change management register, which will be maintained by the Project Manager. |
| Change Request Status | The current status of all change requests will be reported weekly with the overall project status. |

Issue Management Activities

| Issue Identification | Task | Participants |
|----------------------|---|--------------|
| | During project execution, newly identified change requests will be documented using a Change Management Documentation form. Completed Change Request Documentation forms will be routed to the Project Manager(s) for logging and Change Management Analysis. | Project Team |

| Issue Analysis | Task | Participants |
|----------------|--|------------------------------|
| | The Project Manager(s) will assign each change requests to an individual project member, who will review the rationalization and impact the change request will have on the project if approved. | Assigned Project Team Member |

| | |
|--|---|
| The individual analyzed change requests are collected, reviewed, and adjusted if necessary. | Project Manager |
| The Project Manager(s) will communicate any schedule, scope or budget contingencies that arise during the change request analysis process to the Steering Committee for approval. Once approved, the Project Manager(s) will incorporate the scope, schedule or budget contingencies into the appropriate project document (i.e. MS project plan or budget tracking document) and provide input into the initiation of a work order. | Project Manager(s), Steering Committee |

Issue Response Planning

| Task | Participants |
|--|----------------------------|
| All change requests are assigned to individual project members for review and analysis. | Project Manager(s) |
| For each change request, review and analyze the request. Return the completed change request documentation form to the Project Manager(s). | Project Team Members |
| Change requests are collated into a single list. The completed list, the change request register, is created and made available to the project participants. | Change Request Coordinator |

Issue Monitor and Control

| Task | Participants |
|--|--------------------|
| The Project Manager(s) will monitor the status of all change requests. Conduct change request review meetings bi-weekly with Project Team to discuss the status of requested | Project Manager(s) |

| | |
|--|------------------------------|
| and approved change requests, and new change requests identified during the course of the project. The Project Manager will communicate the status of all Change Requests weekly within the Project Status report. | |
| The status of each change request is reported to the Project Manager(s) every two weeks. | Assigned Project Team Member |
| If any new change request items have been identified, they are analyzed as are all change requests on the change request register and added to the register. | Project Manager(s) |
| Any change requests whose exposure is rising will be escalated to an appropriate level of management for visibility and action. | Project Manager(s) |

6.1.6 Budget

i3logix will work with CDOS to maintain a living budget, reflecting all the payables and receivables related to the implementation.

6.1.7 Change Control Plan

Refer to “[6.1.5 Change/Issue Management Plan](#)”

6.1.8 Communications Management Plan (Status Report)

The Communications Management Plan sets the communications framework for this project. It will serve as a guide for communications throughout the life of the project and will be updated as communication needs change. This plan identifies and defines the roles of persons involved in this project. It also includes a communications matrix which maps the communication requirements of this project. An in-depth guide for conducting meetings details the communications rules and how the meetings will be conducted, ensuring successful meetings. A project team directory is included to provide contact information for all stakeholders directly involved in the project.

The Project Manager will take a proactive role in ensuring effective communications on this project. The communications requirements are documented in the Communications Matrix presented in this document. The Communications Matrix will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it and to whom to communicate.

Customer

The customer for this project is CDOS. As the customer who will be accepting the final deliverable of this project, they will be informed of the project status including potential impacts to the schedule for the final deliverable or the product itself.

Project Manager

The Project Manager has overall responsibility for the execution of the project. The Project Manager manages day to day resources, provides project guidance and monitors and reports on the projects metrics as defined in the Project Management Plan. As the person responsible for the execution of the project, the Project Manager is the primary communicator for the project distributing information according to this Communications Management Plan.

Project Team

The Project Team is comprised of all persons who have a role performing work on the project. The project team needs to have a clear understanding of the work to be completed and the framework in which the project is to be executed. Since the Project Team is responsible for completing the work for the project they played a key role in creating the Project Plan including defining its schedule and work iterations. The Project Team requires a detailed level of communications which is achieved through day to day interactions with the Project Manager and other team members along with weekly team meetings.

Steering Committee

The Steering Committee includes management representing the departments which make up the organization. The Steering Committee provides strategic oversight for changes which impact the overall organization. The purpose of the Steering Committee is to ensure that changes within the organization are effected in such a way that it benefits the organization as a whole. The Steering Committee requires communication on matters which will change the scope of the project and its deliverables.

Technical Lead

The Technical Lead is a person on the Project Team who is designated to be responsible for ensuring that all technical aspects of the project are addressed and that the project is implemented in a technically sound manner. The Technical Lead is responsible for all technical designs, overseeing the implementation of the designs and developing as-build documentation. The Technical Lead requires close communications with the Project Manager and the Project Team.

6.1.8.1 Schedule Control

The project schedule will be reviewed and updated as necessary on a bi-weekly basis with actual start, actual finish, and completion percentages which will be provided by task owners.

The project manager is responsible for holding bi-weekly schedule updates/reviews; determining impacts of schedule variances; submitting schedule change requests; and reporting schedule status in accordance with the project's communications plan.

The project team is responsible for participating in bi-weekly schedule updates/reviews; communicating any changes to actual start/finish dates to the project manager; and participating in schedule variance resolution activities as needed.

The project sponsor will maintain awareness of the project schedule status and review/approve any schedule change requests submitted by the project manager.

6.1.8.2 Schedule Changes and Thresholds

If any member of the project team determines that a change to the schedule is necessary, the project manager and team will meet to review and evaluate the change. The project manager and project team must determine which tasks will be impacted, variance as a result of the potential change, and any alternatives or variance resolution activities they may employ to see how they would affect the scope, schedule, and resources. If, after this evaluation is complete, the project manager determines that any change will exceed the established boundary conditions, then a schedule change request must be submitted.

Submittal of a schedule change request to the project sponsor for approval is required if either of the two following conditions is true:

- The proposed change is estimated to reduce the duration of an individual work package by 10% or more, or increase the duration of an individual work package by 10% or more.
- The change is estimated to reduce the duration of the overall baseline schedule by 10% or more, or increase the duration of the overall baseline schedule by 10% or more.

Any change requests that do not meet these thresholds may be submitted to the project manager for approval.

Once the change request has been reviewed and approved the project manager is responsible for adjusting the schedule and communicating all changes and impacts to the project team, project sponsor, and stakeholders. The project manager must also ensure that all change requests are archived in the project records repository.

6.1.8.3 Scope Change

Any changes in the project scope, which have been approved by the project sponsor, will require the project team to evaluate the effect of the scope change on the current schedule. If the project manager determines that the scope change will significantly affect the current project schedule, he/she may request that the schedule be re-base lined in consideration of any changes which need to be made as part of the new project scope. The project sponsor must review and approve this request before the schedule can be re-base lined.

6.1.9 Security Plan

To maintain a secure system we periodically perform vulnerability assessments, web based vector vulnerability assessments and subsequent mitigating actions.

All our production systems are hosted by the company hosting.com, please refer to <http://www.hosting.com/resources/data-centers/denver-colorado/> to find the physical security and description of the facility.

All our servers are connected to highly secured networks, with firewall appliances which security has been implemented with principle of least privileged policy design.

All out application servers enforce high grade 256 bit SSL 3.0 and TLS 1.0 communications.

Our security architecture is maintained and implemented through the use of the OpenVAS application and system security scanner. CFEngine3 is used to maintain systems for deployment and maintenance of i3logix operating environments.

6.2 UVS Software

6.2.1 Software Description

i3ballot is a SaaS (Software as a Service) implementation of a Mail Ballot Tracking System. By processing data provided by the County/State and postal carriers, the system creates tracking records for each ballot mailed.

Voters who are signed up for the service can enable the reception of alerts or notifications about the status of their ballot based on these tracking records. These notifications can be delivered using email, SMS texts or Automated Voice calls.

The County/State also has the capability of accessing these records in real-time, which enable them to make decisions based on the location and status of the ballots.

6.2.2 Requirement gathering

i3logix will work with the different counties to help them reach the level of integration needed to perform all the data migration. i3logix will have multiple meetings and communications (electronic and voice) with each county to guaranty a successful integration.

Any new or different requirement will be analyzed on a case per case basis.

6.2.3 Section III: Programming Language

The system is built using PHP 5.5.x programming language.

6.2.4 Section IV: 3RD Party Software

Zend Framework 2.0 and messaging integration SDKs

6.2.5 Section V: Source Code Access and Escrow

Ballot Tracking is not covered under the current EAC guidelines, for this reason and the fact that our software works in a SaaS (Software as a Service) environment, i3logix will not disclose the source code of i3ballot or submit such to escrow.

6.3 UVS Hardware

i3ballot is a SaaS (Software as a Service) implementation of a Ballot Tracking System. No special hardware is required for this project. An internet connected device with a Web browser (either Chrome, Firefox, Safari, Opera or Internet Explorer 10.0 or later).

6.4 Database

6.4.1 Database System

PostgreSQL 9.3.x

Daily Base Backups / Custom Backups / Disk level snapshots.

Continuous archiving enabled for point in time recovery.

Configured to scale out multiple hot standby servers.

6.4.2 Systems to Secure Data

All database servers are behind redundant dedicated firewalls. Only managed database ports are opened to known servers. All industry standard best practices are implemented in securing data files. Most of all data with database is audited and can be tracked. Only authorized personnel can view data internally as well. We have very strict policies on who can login to our database servers and all activity is monitored.

6.4.3 Database Backup and Disaster Recovery

We have multiple levels of backups enabled on our database servers. Our primary disaster recovery is implemented through point in time recovery process enabled via continuous archiving technique. In the event of a disaster we can recover data up-to the last checkpoint that is saved with in the database. For quick data recovery we do full nightly custom backups as well that are securely stored on our dedicated backup server.

6.4.4 Requirements of County computers to store Database

From database stand point nothing is required. We will not be giving database access to any county computers or customers. All data is exposed only via application through proper ACL (Access Control List).

6.4.5 Data ownership

From database side we will not be giving any access to the counties. All data is exposed only via application through proper ACL (Access Control List).

6.5 Data Migration

Our system will accept multiple formats of data for Voter information loading. The County/CDOS will load files with voter information, which will be translated into a voter Database tables. Any adjustment needed on the data transformation will be discussed during the discovery phase. Our system does not manage any data related to votes; we only track the location of the ballot by combining USPS and SCORE data.

6.5.1 Data migration support from CDOS

Our system will be able to accept data straight from CDOS, or from each County, we will need to configure those options when each participating County is created into our system.

6.5.2 Competitor EMS

Our system uses data from the CDOS SCORE DB, we are not aware of any competitor that uses this data for the same purpose.

6.6 Test Strategy

6.6.1 Introduction

This section is designed to outline the testing strategy and approach for implementation of i3Logix applications. Thorough and structured testing should be performed to identify both system and operational problems and to implement resolutions prior to going live, thereby minimizing the risk of serious post live problems.

The testing process has been divided into multiple phases to ensure the most thorough testing can be accomplished in the implementation timeframe. These phases may occur individually or in combination with each other based on need.

- Unit Test
- Smoke Test
- System Integration Test
- End to End Testing
- Regression Testing
- Performance Test
- User Acceptance Test
- Mock Go-Live Test

This section, in combination with the project plan, specific test plans, and other related documents, will be used to drive the testing process towards a successful go live. This section will be used for reference throughout the implementation and will be updated as appropriate.

6.6.2 Organization and Management

This section outlines the responsibilities of each team on the project for their participation in the Testing Initiative. This strategy involves the following roles at varying levels of testing and decision-making. Details of their roles and responsibilities are contained in this section.

- Development Team
- Architectural Team
- QA Team
- Business Process Team
- Defect Triage Team
- Review Team
- Project Management Team

6.6.2.1 Development Team

The Development Team is accountable for designing, building, and implementing the system. The Development team will be responsible for creating the unit test for all functional parts of the software. The configuration team(s) will also create test scenarios and cases to support the testing of the application.

The development team quality process includes peer 2 peer revisions, which allows every piece of the software to be reviewed by multiple developers.

The Development team will also provide support for other phases of testing, such as Integration and User Acceptance phases of testing. The primary focus during these phases will be to research defects, reconfigure the system when needed, and document all changes made to the system.

Role & Responsibilities

- Develop configuration design, approach, plan and schedule
- Gathering clarification and validation of requirements
- Develop test scenarios and test cases with measurable expected results
- Execute test cases for system validation
- Reporting on all testing results
- Test data preparation
- Data mapping on conversion
- Participate in test team meetings
- Identify and record all defects for the Defect Triage Team
- Re-test when appropriate
- Make recommendations for system changes
- Participate in Test Team meetings
- Provide go-live recommendation to Test Team

6.6.2.2 Architectural Team

The Architectural Team is primary accountable for designing and implementing the technical pieces associated with the implementation of the system. In most instances, the technical components required for the implementation are conversion routines, interfaces, extracts, and reports. This team will be responsible for the unit test of all developed components in relation to this implementation.

The Architectural Team will also participate in the Integration and User Acceptance phases of testing. This team will primarily focus on researching defects, coordinating with business owners and vendors, deployments and responding to data request needs.

Role & Responsibilities

- Identify the interfaces and conversions related to the implementation of the system
- Complete unit test on all developed components
- Develop and execute test scenarios and cases for interfaces, extracts and conversions testing
- Test specific Technical related workflows
- Document and report all issues identified during testing
- Work in conjunction with the test team to further develop scenarios to support each additional phases of testing
- Perform environment testing (i.e. verifying access to applications, printing, data integrity, connection to databases)
- Perform database and conversion balancing
- Conducting overlays and deployments
- Provide technical support for interfaces and conversion during all phases of testing
- Participate in Test Team meetings
- Provide go-live recommendation to Test Team

6.6.2.3 QA Team

The primary responsibility of the QA team is to successfully coordinate and complete most aspects of testing, in coordination with several other project teams. The QA Team is to execute test scenarios and test cases, working closely with the other teams to ensure testing integrity. All test activities with the exception of unit test will be planned and reported on by the test team.

This team will also participate in a support role to the Business Model testing. The primary focus of the testing team during Business Model testing will be to track and research defects, report testing progress, and support the execution of Business testing.

Role & Responsibilities

- Develop test guidelines, approach, metrics, standards and schedule for all phases of testing
- Participate in business process sessions to ensure critical processes and requirements are captured and tested
- Develop test scenarios, cases with expected results identified in the test data requirements
- Execute test cases and document all results (pass or fail)
- Identify and record all defects for the Defect Triage Team (Including Product Defect Tracking)
- Manage all deployments to the testing environment
- Update test scenarios and test cases based on change control
- Re-test when appropriate
- Facilitate Test Team meetings
- Make recommendations for system changes when needed
- Provide consolidated go-live recommendation to Project Management.

6.6.2.4 Business Process Team

The identification, design, and implementation of business process changes and workflows are the responsibilities of the Business Process Team. This team will work with the other testing teams to create test scenarios and cases to support the testing of business process affected by the implementation of the system. The Business team will be primarily responsible for the execution of all test scenarios and cases during the UAT phase of testing.

In addition, the Business Process Team will play a support role during System Integration Test. The primary role of the Business Process Team during this phase is to help create and review test scenarios, test execution validation, and prioritization of open defects.

Role & Responsibilities

- Documentation of business processes and workflows
- Test scenario and case development for business processes and workflows.
- Assist in problem analysis and solving for issues found during testing
- Approve testing results for their functional area
- Participate in definition of workarounds, responsible for documentation of workarounds
- Communicate critical information and decisions that may impact future activities to the project management team
- Participate in Test Team meetings
- Provide go-live recommendation to Test Team

6.6.2.5 Defect Triage Team

The Defect Triage Team is a team comprised of all the teams involved in the testing effort. This team also assigns internal priorities to any issue / defect, encounter during testing.

Role & Responsibilities

- Facilitate daily standup meeting(s) to review and assign defects discovered during the testing process
- Ensure defect response / resolution conforms to established Service Level Agreements (SLAs)
- Provide statistical reports regarding the status and resolution of defects.

6.6.2.6 Review Team (Business Sponsors)

The Review Team is a team of business sponsors or owners responsible for defining Production Readiness and Go-Live Criteria along with officially signing-off on all testing activities.

Role & Responsibilities

- Review, at a high-level, test scenarios
- Define Production Readiness and Go-Live Criteria
- Approval of Testing Sign-off
- Provide go-live recommendation to executive management

6.6.2.7 Project Management Team

The Project Management team is responsible for the oversight of all aspects of the implementation project. This team will meet weekly during testing to review the progress and results of the process.

Role & Responsibilities

- Provide next level decision making and approve resources as required
- Understand progress of each test phases and make recommendations
- Make recommendations regarding go-live to review team and executive management

6.6.3 Test Strategy

6.6.3.1 Objectives

Testing activity is conducted to validate the overall configuration is set-up to meet the business requirements. The focus of testing includes specific transactions, functionality, enhancements, interfaces, conversions, and reports/outputs. The objectives of testing are as follows:

- Ensure system configurations, data, messages, etc. are correct and complete per business requirements
- Ensure business processes integrate effectively and efficiently
- Validate integration of the core processing system with those surrounding systems impacted by the implementation through the testing of interfaces (inbound), extracts (outbound), and the usability of shared data.
- Ensure required system processes can complete in the allotted processing windows
- Validate all electronic interfaces function accurately per business requirements
- Verify the volume of voter records loaded are accurate and complete, and working as designed
- Manage and track system issues and changes to minimize configuration and program migration inaccuracies
- Provide testing statistics to support implementation decisions by the project team and process owners
- Ensure technical infrastructure is appropriate and sufficient to support business operations on the system at existing and future volume levels, and within acceptable response times
- Ensure end-user readiness through the testing of business processes and workflows

6.6.3.2 Scope

Types of Testing

- Unit Test
- Smoke Test
- System Integration Test (SIT)
- End to End System Validation
- Regression Test
- Security and Access Control Test
- Data and Database Integrity Test
- Failover and Recovery Test
- User Acceptance Testing (UAT)
- Performance/Load Test
- Security and Access Control Test

- Mock Go-Live/Dry Run Test
- Extracted data from i3logix modules to external systems or databases unless it is done in conjunction with the verification of interfaces and/or converted data
- Field to field converted data validation from source system to i3logix modules
- Application testing of surrounding systems is out of scope; however, some level of testing will occur as it pertains to data exchanges with these external systems.
- Hardware testing as it relates to connectivity, network administration, desktop support, system performance, disaster recovery, etc.

6.6.3.3 Assumptions

- System hardware and operating software have been installed and have met contract specifications for base functionality.
- Initial load of i3ballot application software was successful, and the system accepts and stores manually and electronically entered data.
- All development, including i3ballot configuration, has passed unit testing before being loaded into a test environment.
- Dedicated resources are available and full commitment from all resources designated to test team.
- All resources are properly trained prior to testing of any phase
- All tools are in place prior to testing beginning (i.e. Defect Tracking tools, test scenario/case tool and other business processes are in place)
- All data provided to the testing team is valid
- Where necessary, the tests can be altered or amended to create or verify testing processes not initially considered in the test plan and criteria. This will be documented on the scenarios and processed as a normal test.
- The Test team will keep a record of the results, focusing on both successful and failed tests. There will be regular review and status meetings to discuss the results of testing to determine the implications of the failed tests and the corrective actions to be taken.
- Resources are readily available to perform standard and ad hoc operational activities within the test environment (e.g. batch jobs, database refreshes), as well as handle any emergent issues (e.g. system down time)
- Management responds timely to those issues requiring a business decision to ensure there is no risk to the timeline. Escalation procedures will be in place to facilitate this timely response.
- i3logix / CDOS are responsible for allocating the necessary and appropriate resources to the testing effort for the successful completion of the i3ballot implementation.

- i3logix / CDOS will supply adequate testing facilities (space, furniture, software, etc.)
- i3logix / CDOS will identify, review, and approve all business requirements
- i3logix / CDOS will create, review, prioritize, and approve all test cases and expected results to ensure business requirements are met.
- i3logix / CDOS will review and approve test results based on agreed upon pass/fail acceptance criteria and confirm the decision to go live.
- The i3logix/ CDOS testing team will assist in Integrated Testing through test execution and defect resolution for configuration-related defects.

6.6.3.4 Risks

Resources are dedicated across multiple activities within the implementation project. This presents a high-level of risk as resources struggle to meet the needs of all areas to which they are allocated. If resources are unable to meet their allocation, the timeline for full and complete testing will be compromised.

- Resources are not in place to support testing (e.g. DBAs, trainers, etc.)

6.6.3.5 Critical Success Factors

- A Test Lab is established with all necessary equipment and tools prior to the start of testing
- Requirements & Business Decisions documents are obtained for accountability
- Detailed Test Cases with expected results are created
- Environments for testing are established
- Testing resources receive adequate support from their business areas to ensure they meet their scheduled availability.
- Testing resources have received systems training prior to beginning testing efforts. These systems include i3logix and any relevant surrounding systems and any applications used for tracking and reporting of testing status.
- Tools & Processes in place (i.e. Change Mgmt., Defect Mgmt., Schedule Mgmt., etc.)
- Entrance and Exit criteria are established and met.
- Critical issues are resolved in a timely manner per SLA.
- 80/20 rule for testing (80% of your users are using 20% of the system) is followed
- Measurable results are obtained and reported
- Test Team organization (i.e. location, logistics, training, etc.) is established

6.6.3.6 Dependencies

- System configuration is completed on time and has been validated through unit testing.
- Configurations, data loads, interfaces, and extracts are complete, unit tested and available on time to meet test schedule.
- Stable environment(s) are set up and accessible to team members to meet established test phase timelines.
- All critical or high issues identified during the unit test process have been resolved or a workaround has been developed and approved by the business.
- Team members must have PCs configured to access all required software to support test initiatives.
- Team members have been adequately trained in test methodologies and the operation of the i3logix system.
- All scenarios have been developed to support each phase of testing and have been approved and meet standards and metrics set forth by project leadership
- All testing processes are defined prior to the beginning of testing
- Exit and Entrance criteria are met prior to the next phase of testing

6.6.4 i3logix Releases and Release Acceptance Test

During the course of the implementation, i3logix may deliver numerous change packs and/or releases. These releases could contain required enhancements or system defect fixes needed to support organization business. The i3logixchange pack and release schedule along with the review of the contents included in the planning for all Test activities.

Release acceptance test is designed to ensure the new release will not have a negative impact to the business. The primary goal of this test is to ensure system stability. This phase of testing should include a full regression of the current business on the new release and limited testing of new functionality, if applicable.

6.6.5 Test Processes

6.6.5.1 Test Tools

| | Tool | Vendor/In-house | Use |
|-----------------------------------|----------------------|--------------------------------|---|
| Defect Tracking | JIRA | Atlassian Corporation Pty Ltd. | Tracking |
| Test Case Management and Tracking | JIRA | Atlassian Corporation Pty Ltd. | Creation and management of test cases and business requirements |
| Test Metrics | JIRA | Atlassian Corporation Pty Ltd. | Tracking and Reporting |
| Test Environment | Windows Workstations | | |
| Automated test tools | TBD | TBD | Execution of automated test cases |
| Test Case database | Excel | Microsoft | Store all test cases for reporting and tracking purposes |
| Dashboard Report | Excel | Microsoft | Management reporting |

6.6.5.2 Defect Tracking

Defects will be logged into the defect tracking system as defined in the test tools section above. Once defect are logged, the Defect Triage team will be engaged to begin the research and resolution process. Defect ranking meetings will be held periodically based on the project phase. Attendees for this meeting will include the all test participants. Project Managers and business owners are optional attendees, some of which may be required attendees on occasion based on the content of the defects (e.g. required for discussion and/or decision-making).

6.6.5.3 Defect Categorization

| Classification | Meaning | Priority | SLA Turnaround Time |
|-----------------------|---|--|--|
| Critical | System failure; No workaround available, high/medium volume of business transactions. Testing in a significant functional area is blocked until defect fixed. | Fix prior to Go Live | Defect triaged and responded to within ½ business day |
| High | Major part of the system does not function as specified; No workaround available, low volume of business transactions OR Workaround available, high volume of business transactions. Testing can be done in other parts of the system without significant re-work resulting from this defect. | Fix after all Critical defects and prior to Go-Live | Defect triaged and responded to within 1 business day |
| Medium | Secondary (or minor) part of the system does not function as specified; Workaround available medium volume of business transactions. Testing can be done in other parts of the system. | Fix after all Critical and High defects, May or may not be fixed prior to release to next phase, including Go-Live | Defect triaged and responded to within 2 business days |
| Low | Workaround available, low volume of business transactions OR cosmetic issue only. Testing can still be done in this part of the system. | Not required to be fixed before release to next phase, including Go-Live | Resolved if no other defects are outstanding |

Note: Some defects may be downgraded to a lower priority if there is an acceptable workaround approved by the business owner.

6.6.6 Meetings

Stand-ups

Stand-up meetings will be scheduled with the entire testing team with the following goals:

- Communicate daily status, defects, progress, and plans
- Identify obstacles and the action plan to remove them
- Set focus until the next meeting

The initial frequency will be daily and may be increased as testing progresses.

Checkpoint Meetings

Checkpoint meetings will be conducted every two weeks throughout the testing process. The checkpoint meeting will be a review of testing progress to date against the plan, discussion of lessons learned

6.6.7 Test Progress Reporting

The Test Team will report testing progress to the Project Management team on a weekly basis.

6.7 Training

Since i3ballot is a SaaS (Software as a Service) implementation of a ballot tracking system it allows for direct training with the users in a classroom type setting. Each county will have a designated administrator who will be responsible for the set up and configuring of i3ballot for their county. i3logix will set-up each county's administrator account and recommends that each administrator attend i3ballot hands on training.

6.7.1 i3ballot training approach

Prior to agreeing, the training approach we have considered:

- Provide class room hands on training of the i3ballot product
- Recommended class size would be 16 people.
- Training will be set-up to allow user's direct access to their County's account in a sandboxed testing platform.
- Training will be held at i3logix facilities or CDOS Denver facilities.
- Each participant will need an internet connected device that complies with the minimum requirements outlined in [6.3 UVS Hardware section](#).
- County one-on-one training can be provided at a per hour fee.
- Self-paced videos on how to configure and run an election, will be delivered with the product implementation to complement the in person training.

6.7.2 i3ballot training objectives

The key training objectives for i3ballot are to ensure that end users have received training in order that they:

- Configure i3ballot to track election ballots issued by the election office.
- How to configure an election to be tracked.
- How to configure the messages to be issued for each tracking touch point.
- How to configure the messages into the various languages the election office supports.
- How to set-up notifications that can be issued during the election at key points.
- How to configure the tracking touch points for an election.
- How to set-up user accounts with permissions and roles.
- How to enroll a voter into i3ballot and set their notification preferences.
- How to set-up voter information files and how to load them into i3ballot.
- How to set-up voter eligibility files and how to load them into i3ballot.
- How to set-up voter results files and how to load them into i3ballot.
- How to set-up voter tracking files and how to load them into i3ballot.
- How to generate tracking data reports.

- How to lookup a voter ballot status.
- How to send custom notifications.
- Ensure the use of the i3ballot console .
- Maximize the benefits and usage of i3ballot.

6.7.3 Risks and issues

Risks and issues in relation to training will be added to the i3ballot project board risks and issues log. Key risks identified so far can be found in the following table:

| Risk/issue | Impact | Action plan and progress |
|---|---|---|
| Training not being delivered in a timely manner | Training should be delivered within three weeks of the system going live; there is a risk that end users will have forgotten the learning that has taken place if they are not using the software on a daily basis. | i3logix to monitor timescales |
| End users not having the time to commit to the training course | If end users cannot commit to taking part in end user training, implementation will be delayed. End users may try to use the system without training, which could cause mistakes to be made. | i3logix to strongly encourage all staff to undertake training |
| | | |

6.8 Implementation

All items related implementation are laid out in other sections of the proposal.

Please refer to:

- [6.7 Training](#)
- [6.9 Support](#)
- [10.0 Schedule](#)

6.9 Support

Election Setup support

Our system allows the State/County to setup their own election, controlling all the information, messages, languages and configuration for tracking touch points for each election. i3logix systems will monitor all the data loading processes on the first election and let the client know if there is any data inconsistency. After successfully performing a pre-election end to end test, the County/State should be able to run their tracking system without i3logix intervention.

Please see [Appendix A – Sample SLA Contract](#)

7.0 Sample Reports

- File processed report:

| File process id | filename | size | state | created | file type |
|-----------------|-------------------|----------|----------------|-----------------|-----------|
| 1 | 09172013_i3.vr11 | 90777513 | FILE PROCESSED | 9/17/2013 14:05 | vr11 |
| 2 | 09172013_i3.e013 | 90599794 | FILE PROCESSED | 9/17/2013 15:25 | e013 |
| 3 | 09182013_i3.e013 | 98019712 | FILE PROCESSED | 9/18/2013 7:25 | e013 |
| 4 | 09182013_i3.vr11 | 90739658 | FILE PROCESSED | 9/18/2013 7:25 | vr11 |
| 5 | 09182013_i3b.e013 | 72460747 | FILE FAILED | 9/18/2013 15:00 | e013 |
| 6 | 09192013_i3.vr11 | 90702747 | FILE PROCESSED | 9/19/2013 9:35 | vr11 |
| 7 | 09192013_i3.e013 | 90602580 | FILE PROCESSED | 9/19/2013 10:35 | e013 |
| 8 | 09202013_i3.e013 | 90643352 | FILE PROCESSED | 9/20/2013 7:15 | e013 |
| 9 | 09202013_i3.vr11 | 90695311 | FILE PROCESSED | 9/20/2013 7:15 | vr11 |
| 10 | 09232013_i3.vr11 | 90657377 | FILE PROCESSED | 9/23/2013 9:25 | vr11 |
| 11 | 09232013_i3.e013 | 90622318 | FILE PROCESSED | 9/23/2013 10:30 | e013 |
| 12 | 09242013_i3.e013 | 90603517 | FILE PROCESSED | 9/24/2013 7:10 | e013 |
| 13 | 09242013_i3.vr11 | 90627250 | FILE PROCESSED | 9/24/2013 7:10 | vr11 |
| 14 | 09252013_i3.vr11 | 90542563 | FILE PROCESSED | 9/25/2013 7:10 | vr11 |
| 15 | 09252013_i3.e013 | 90576769 | FILE PROCESSED | 9/25/2013 11:00 | e013 |
| 16 | 09262013_i3.vr11 | 90536562 | FILE PROCESSED | 9/26/2013 7:15 | vr11 |
| 17 | 09262013_i3.e013 | 90578103 | FILE PROCESSED | 9/26/2013 8:25 | e013 |
| 22 | 10012013_i3.e013 | 95052406 | FILE PROCESSED | 10/1/2013 7:10 | e013 |
| 23 | 10012013_i3.vr11 | 90398612 | FILE PROCESSED | 10/1/2013 7:10 | vr11 |
| 24 | fsb9nh0104.pkg | 448 | FILE PROCESSED | 10/1/2013 9:55 | pkg |

- Load statistics report

| id | Election id | Processed date | Existing voter records | Voter staging records | Voters inserted |
|----|-------------|-----------------|------------------------|-----------------------|-----------------|
| 1 | 1 | 9/17/2013 15:12 | 455500 | 12/13/3149 0:00 | 5273 |
| 2 | 1 | 9/17/2013 16:24 | 451263 | 11/7/2893 0:00 | 5256 |
| 3 | 1 | 9/18/2013 8:27 | 456536 | 6/6/3149 0:00 | 72 |
| 4 | 1 | 9/18/2013 9:23 | 362930 | 4/12/2896 0:00 | 978 |
| 5 | 1 | 9/18/2013 14:54 | 456470 | 6/6/3149 0:00 | 0 |
| 6 | 1 | 9/19/2013 10:34 | 456346 | 12/5/3148 0:00 | 42 |
| 7 | 1 | 9/19/2013 11:24 | 363682 | 9/24/2893 0:00 | 45 |
| 8 | 1 | 9/20/2013 8:12 | 456163 | 10/21/3148 0:00 | 304 |
| 9 | 1 | 9/20/2013 8:59 | 362792 | 2/21/2894 0:00 | 319 |
| 10 | 1 | 9/23/2013 10:27 | 456118 | 4/15/3148 0:00 | 94 |
| 11 | 1 | 9/23/2013 11:20 | 363013 | 12/1/2893 0:00 | 108 |
| 12 | 1 | 9/24/2013 8:11 | 455929 | 11/15/3147 0:00 | 114 |
| 13 | 1 | 9/24/2013 9:05 | 362838 | 9/20/2893 0:00 | 116 |
| 14 | 1 | 9/25/2013 8:21 | 455777 | 9/20/3146 0:00 | 179 |
| 15 | 1 | 9/25/2013 10:58 | 455356 | 9/20/3146 0:00 | 0 |
| 16 | 1 | 9/25/2013 11:58 | 362658 | 6/1/2893 0:00 | 190 |
| 17 | 1 | 9/26/2013 8:21 | 455356 | 8/19/3146 0:00 | 187 |
| 18 | 1 | 9/26/2013 9:21 | 362644 | 6/2/2893 0:00 | 203 |
| 19 | 1 | 9/27/2013 8:30 | 455324 | 2/17/3146 0:00 | 160 |
| 20 | 1 | 9/27/2013 9:30 | 362583 | 2/25/2893 0:00 | 174 |

- Results file processing report

Processed Date: 2013-11-14 08:02:02

Existing Voter Records: 359969

Voter Staging Records: 359968

Voters Inserted: 0

Voters Updated: 763

Voters Deleted: 1

Ballot Status Summary

None: 11602

Accepted: 14702

Rejected, Empty Envelope: 1

Rejected, House Exception: 28

Rejected, ID Required - Not Provided: 30

Rejected, No signature: 62

Rejected, Other: 1

Rejected, Received After 7pm on Election Day: 80

Rejected, Signature Discrepancy: 52

Undeliverable: 979

- Ballot tracking status report

| date | outbound scan | inbound scan | imb exceptions |
|-------------|----------------------|---------------------|-----------------------|
| 10/12/2013 | | | |
| 10/14/2013 | | | |
| 10/15/2013 | | | |
| 10/16/2013 | 21168 | 0 | 0 |
| 10/17/2013 | 486287 | 86 | 0 |
| 10/18/2013 | 43121 | 1444 | 2013 |
| 10/19/2013 | 6476 | 6502 | 358 |
| 10/20/2013 | 865 | 924 | 37 |
| 10/21/2013 | 2575 | 3582 | 151 |
| 10/22/2013 | 62 | 6913 | 472 |
| 10/23/2013 | 201 | 3118 | 421 |
| 10/24/2013 | 81 | 3281 | 65 |
| 10/25/2013 | 1457 | 3783 | 96 |
| 10/26/2013 | 1285 | 3901 | 132 |
| 10/27/2013 | 160 | 1204 | 87 |
| 10/28/2013 | 181 | 4614 | 245 |
| 10/29/2013 | 412 | 9404 | 184 |
| 10/30/2013 | 119 | 6867 | 135 |
| 10/31/2013 | 34 | 6719 | 235 |
| 11/1/2013 | 221 | 6703 | 121 |
| 11/2/2013 | 147 | 5608 | 79 |
| 11/3/2013 | 232 | 1467 | 0 |
| 11/4/2013 | 163 | 1615 | 158 |
| 11/5/2013 | 156 | 4233 | 228 |
| 11/6/2013 | 122 | 418 | 271 |
| 11/7/2013 | 179 | 31 | 260 |
| 11/8/2013 | 243 | 259 | 259 |

8.0 Sample Project Artifacts

No sample project artifacts will be included in this proposal. Our experience includes tracking mail ballots for Denver County since 2009. No artifacts have been generated during this multiple elections implementation.

9.0 General Questions

- What staff support from CDOS and counties do you envision needing during the implementation of the UVS in a county? Identify each resource by location (CDOS or county), role or responsibility, technical skills needed, suggested expertise in years, and any clarifying comments.

i. County personnel:

i3ballot requires an administrator in each County that participates in the project; their responsibility will be to configure elections, setup messages and assigning touch points. That person will be in charge of creating other system users to have access to reports and voter lookup. This person will need basic internet knowledge and know how to use an internet browser.

ii. County or State personnel:

1. **File Generation:** *i3ballot requires a person to setup the file generation for the County, this resource will be in charge to generate the appropriate files for data migration between the systems. That person could be a County or State employee, depending on how the data upload is decided to be implemented (per County or Statewide). This person will need SCORE knowledge.*
2. **File transmission:** *i3ballot requires a person to setup the file transfer points for the County, this resource will either setup a FTP account on the County/State servers for us to pull those files, or be in charge of securely uploading the files to i3logix servers. That person could be a County or State employee, depending on how the data upload is decided to be implemented (per County or Statewide). This person will need basic internet knowledge and know how to use an internet browser. Also they will need to know how to use a FTP (File transfer Protocol) client.*

- How many county implementations do you feel you could support simultaneously?

All 64

- What is your coverage, terms, and duration for warranties of the hardware, software, and other deliverables provided pursuant to this RFP?

Service provided as SaaS, no specific warranties are offered. Refer to [Appendix A - Sample SLA Contract](#) for uptime and availability.

- What is your coverage, terms, and duration for maintenance of the hardware components of your UVS solution?

No hardware components offered, no warranty is offered.

- What is your coverage, terms, and duration for licensing of the software components of your UVS solution?

We provide a SaaS Annual licensing model that will be described on the cost proposal.

- Are updates and modifications to the UVS because of legislative mandates a part of your support agreement or are they custom enhancements?

Updates and modifications will be considered custom changes that will be evaluated at the request of CDOS and handled through our Change control process, please refer to section [6.1.5 Change/Issue Management Plan](#)

- What is the certification status of each component within your proposed solution? Include a matrix showing the following:

- Component Identification
- Federal certification date
- The federal certification standard currently met (e.g. 2005 VVSG)
- Any state certifications
- Projected certification date and standard if not currently certified
- Projected certification date and standard for a future planned upgraded certification

Our product does not require federal or state certification.

- What features of your proposed solution exist to ensure ballot secrecy? Please describe those features.

Our system doesn't handle ballots or vote data. We only store tracking information from the envelopes, so ballot secrecy cannot be compromise through our system.

- What is your organizational chain-of-command for escalating problems needing resolution?

The county/State will submit an issue to the Project Manager in charge of that account.

Project Manager will discuss the issue with QA, IT and Engineering leads. Once the issue is identified as a system problem, engineering lead will estimate and communicate to Project Manager the time needed to resolve the issue. Project Manager communicates resolution options and times with county/state.

- What purchase options do your company offer (e.g. payment in full upon delivery, financing, leasing)?

Payment in full upon setup and configuration of the County account, and subsequent payments per annual licensing and election event.

- What is the maximum number for each of the following items that your Election Management System allows:
 - Precincts
 - Contests
 - Candidates
 - Political Parties
 - Ballot Styles
 - Precincts per Ballot Style
 - Ballot Styles per Precinct
 - Other limitations?

We don't offer a EMS, so this question doesn't apply.

- What interface capabilities, with the CDOS voter registration system (SCORE), can your Election Management Software provide? Is there a defined extract format for precinct and district definitions, registration statistics, and candidate or contest information that is or may be made compatible with SCORE? What interface data formats are available (e.g. EML, XML, CSV, and ASCII)?

Currently our system is compatible with SCORE Database files for voter registration. Adjustment will be made at the discovery phase.

- What are the security features and capabilities of your proposed system and processes? Include the following areas in your response to this question:
 - How do you protect the audit logs (e.g., encryption, hashing)?

All the audit logs are hosted on the same Database that the voter data is, so the same security applies (See [Database section 6.4](#))

- Does your system documentation contain suggested security auditing procedures? If so, please provide.

We don't offer any voting devices or EMS system. Our system runs as a SaaS (Software as a Service) solution.

All the changes made to the source code that runs on the website, is version controlled and every change is logged.

Any change to the data on the Database is logged, and can be reviewed by our team.

- Do you provide an executable application whitelist with digitally signed programs?

We don't offer any voting devices or EMS system.

- How does your system prevent unauthorized, non-whitelisted applications from running?

We don't offer any voting devices or EMS system.

- What specific hardening procedures and standards are your voting devices held to?

We don't offer any voting devices.

- What database encryption mechanisms are used by your system for data at rest and in transit? Please describe, in detail, all uses of data encryption/decryption in your proposed solution.

See [Database section 6.4](#)

- What password features are included in your proposed solution (e.g., complexity, reuse)?

- Passwords are case sensitive.
- Passwords must be a minimum of 8 characters.
- Passwords cannot contain the user's ID, first, middle, or last name.
- Passwords must use at least three of the following: An uppercase character (A-Z), A lowercase character (a-z), A numeric character (0 - 9), and/or A special character.

- Is there any remote communication technology associated with your proposed solution? If so, explain.

SFTP communication between the County/CDOS and our servers to transmit the files needed to run the system.

- What processes are you using for source code review and compiler security verification?

PHP is not a compiled language

- What independent security audits has your proposed system received?

None.

- What post-election audit capabilities are provided by your system and what processes or procedures do you offer to support a post-election audit, including a risk limiting audit?

Our system will provide audit capabilities in the areas of file processing, and ballot tracking information. All this information is available to the County/CDOS through the management console.

- To what extent, if any, do the hardware and software products you are proposing to Colorado meet the requirements of Section 508 of the Rehabilitation Act of 1973 and subsequent amendments to that Act?

Our system provides the option of notifications being sent via Automated Voice Calls, which will allow people with no access to the internet or SMS texting service to receive the status of their ballot.

Our system also provides the County/CDOS with an interface to sign up voters that can't access the website.

Also our website will support zooming capabilities in the supported browsers, which will allow the font to be increased.

- What products or services do you provide in the areas of Voter Education and Voter Outreach? This is an informational question only.

Because our interaction with the voter is online only, there will be online instructions of how to sign in and view the ballot tracking information.

10.0 Preliminary Project Schedule and Staffing Plan

Schedule

| Task ID | Task Name | Description | Start Date End Date | Responsible |
|----------------|--|--|--------------------------------|--|
| 1 | USPS Full service tracking setup | <ul style="list-style-type: none"> Contracting and setting up of account and service codes with USPS. Setup File transfer point to receive such file | ED – 120 days ED – 90 days | COUNTY USPS Ballot Printing Company |
| 2 | Initial Setup | <ul style="list-style-type: none"> File transfer points Client creation Compatibility adjustment with voter registration DB | ED – 90 days ED – 70 days | COUNTY i3logix |
| 3 | Printing Vendor coordination (Tracking Barcode file format) | <ul style="list-style-type: none"> Coordinate the format for Barcode/Voter Id file | ED – 90 days ED – 70 days | i3logix Ballot Printing Company |
| 4 | End2End Test | <ul style="list-style-type: none"> Training of COUNTY resources. Test the complete system, including printed and mailed envelopes | ED – 70 days ED – 63 days | COUNTY i3logix Ballot Printing Company USPS |
| 5 | Pilot Primary Election: First Voter file generated | <ul style="list-style-type: none"> Get voter file from COUNTY | ED – 50 days ED – 50 days | i3logix Ballot Printing Company |
| 6 | Pilot Primary Election: Ballots are printed and proofed | <ul style="list-style-type: none"> Get the Barcode/Voter Id file from printer First notifications go out | ED – 45 days ED – 45 days | i3logix Ballot Printing Company |

| | | | | |
|---|---|--|------------------------------|--|
| 7 | Pilot Primary Election: Non UOCAVA Ballots are mailed | <ul style="list-style-type: none"> Start receiving PKG files from USPS | ED – 45 days ED – 45 days | COUNTY i3logix Ballot Printing Company USPS |
| 8 | Pilot Primary Election: During election | <ul style="list-style-type: none"> Carrier outbound and inbound notifications are sent based on pkg files from USPS. Multiple voter files are received from COUNTY, adding, removing and updating voter information. Accepted, rejected and undeliverable notifications are sent to voters. Full tracking data. Statistical reports. Web frontend for voters Web frontend for election department | ED – 30 days ED | COUNTY i3logix USPS |

Staffing plan

At the time of the project implementation, the following roles will be fulfilled by i3logix personnel, and their names will be included in the final staffing plan.

| Activity | Role | Availability | Response time |
|---|--|---|------------------------------------|
| Initial requirement gathering | 1 Senior product/project Manager | Weekdays business hours | 2 business days |
| Integration with State/County data | 1 Senior product/project Manager 1 Senior Developer 1 Senior DBA | Weekdays Business hours Weekdays Business hours Weekdays Business hours | 2 business days |
| Election support (1 week prior / 1 week after Election Day) | 1 Senior product/project Manager | Every day Business hours | 4 hours within business hours |
| Issue/Change Requests | 1 Senior product/project Manager | Weekdays business hours | Depending on severity of the issue |
| Integration with Printing company | 1 Senior product/project Manager | Weekdays business hours | 2 business days |
| Integration with USPS | 1 Senior product/project Manager | Weekdays business hours | 2 business days |
| IT integration between i3logix and State/County | 1 Senior IT administrator | Weekdays business hours | 1 business days |

11.0 Proposed Staffing

This is the team in charge of implementing i3ballot rollouts:

David Stockton, VP of Technology, dstockton@i3logix.com, 3 years managing the development of the i3ballot.

David Moreno, Director of Product Delivery, dmoreno@i3logix.com, 6 years of experience in running elections as part of Sequoia Voting Systems and Dominion Voting Systems, 2 years supporting i3ballot product for Denver County.

Robert Mazurek, Project Manager / Business Analyst, rmazurek@i3logix.com, 4 years managing the i3ballot project. Head of the design team.

Prashanth Goriparthi, Sr. Database Architect / Administrator, pgoriparthi@i3logix.com, 3 years supporting the i3ballot project for Denver County.

Bill Heisler, Sr. Database Architect, wheisler@i3logix.com, 3 years supporting the i3ballot project for Denver County.

Aaron Crossland, Sr. System Administrator, acrossland@i3logix.com, 2 years supporting IT infrastructure for the i3ballot project for Denver County.

Our company will share all required information on background, detailed references and experience with the CDOS outside of this response.

12.0 UVS System Requirements

| SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM | | | | |
|--|---------|--|---------------|-----------------|
| A – ELECTION MANAGEMENT SYSTEM (EMS) | | | | |
| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
| Election Creation | A-1 | Allow county and state election officials the ability to generate and maintain an administrative database containing the definitions and descriptions of political subdivisions and offices within their jurisdiction. | 5 | |
| Election Creation | A-2 | Provide definition for separate ballot styles that reflect different combinations of contests that are included depending on place of residence of the voter or similar administrative criteria. | 5 | |
| Election Creation | A-3 | Provide software capability for the creation of newly defined elections. | 5 | |
| Election Creation | A-4 | Provide software capability for the retention of previously defined election setups. | 5 | |
| Election Creation | A-5 | Provide software capability to copy, edit, and delete previously defined elections. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------|----------------|--|----------------------|------------------------|
| Election Creation | A-6 | Generate all required master and distributed copies of the voting program in conformance with the definition of the ballot for each voting location and voting device, including devices required to facilitate mail-in voting and voters with disabilities. | 5 | |
| Election Creation | A-7 | Provide for all distributed copies of the voting program, resident or installed, in each voting device to include all software modules required to monitor system status and generate machine-level audit reports, to accommodate device control functions performed by voting location officials and maintenance personnel, and to accept and accumulate votes. | 5 | |
| Election Creation | A-8 | Provide for a unified, integrated centralized database that allows global edits by authorized users. Note: Please describe how the system minimizes the need to update a particular data element in multiple locations for a change made to that data element anywhere within the database. For instance, removing a candidate that appears in multiple ballot styles or changing a voting location designation that appears in multiple places in the database. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------|----------------|---|----------------------|------------------------|
| Election Creation | A-9 | Provide a test mode which supports testing to validate the correctness of election programming for each voting device and ballot style and ensure that the ballot display corresponds with the installed election program. | 5 | |
| Election Creation | A-10 | <p>Be able to import electronically from the Secretary of State and counties in an agreed-upon format that contains, at a minimum, the following data:</p> <ul style="list-style-type: none"> a. Full candidate name b. Candidate sequence, title and text of ballot questions, and voting language options c. Office name d. Contest name, including candidate name in case of retention contest e. Maximum number to vote for each office f. Party affiliation g. Number of eligible registered voters at the precinct h. Number of active registered voters at the precinct. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------|----------------|---|----------------------|------------------------|
| Election Creation | A-11 | <p>Be able to export electronically to the Secretary of State and counties in an agreed-upon format that contains, at a minimum, the following information:</p> <ul style="list-style-type: none"> a. Full candidate name b. Office name c. Contest name d. Number of votes for each candidate and ballot question e. Number of votes against each ballot question f. Number of undervotes in each contest g. Number of overvotes in each contest h. Number of people voting by precinct and by party affiliation (if applicable) i. Number of registered voters at the precinct level (by party affiliation, if applicable) | 5 | |
| Election Creation | A-12 | <p>Allow EMS authorized users the ability to create custom voter instructions that may include images.</p> | 5 | |
| Election Creation | A-13 | <p>Provide the flexibility to have an election created by an authorized user (vendor, county, state or other third party) and import or export as necessary.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------|----------------|--|----------------------|------------------------|
| Election Creation | A-14 | Accommodate multiple languages (English and Spanish required). Note: Please explain the capabilities of your system to handle multiple languages. | 5 | |
| Election Creation | A-15 | Allow for a mock election setup and support for public use prior to the initiation of a live election. | 5 | |
| Election Creation | A-16 | Allow for precinct numbers containing at least 10 digits/characters. | 5 | |
| Ballot Creation | A-17 | Provide for standard ballot layout prototypes to be edited for ease of election specification. | 5 | |
| Ballot Creation | A-18 | Provide an authorized user the ability to customize the standard ballot layouts. | 5 | |
| Ballot Creation | A-19 | Provide software capability for authorized users to create newly defined ballot layouts. The system will be designed so as to facilitate error-free definition of ballot layouts for electronic voting equipment and paper ballot optical scanning equipment. For example, the system should have the capability to report discrepancies between ballot layouts. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------|----------------|---|----------------------|------------------------|
| Ballot Creation | A-20 | <p>Allow for creation of two-sided and multi-page ballots.</p> <p>Note 1: Please explain how your system handles the creation of multi-page ballots.</p> <p>Note 2: Please explain any built-in control your system has for preventing bleed-through ink from erroneously marking votes on both sides of a two-sided ballot.</p> | 5 | |
| Ballot Creation | A-21 | <p>Have the capability to reprogram, download, and reinstall a ballot for an electronic voting device or paper ballot optical scanner.</p> <p>Note: Please explain the process and procedure, with time frames, required to reprogram, download, and reinstall a ballot on the voting device in the event that there is a change to a name or contest on the ballot in the final few weeks before an election.</p> | 5 | |
| Ballot Creation | A-22 | <p>For each election, generate and maintain a contest title and candidate name database and provide for the production or definition of properly formatted ballot layouts for use on paper ballots and electronic voting devices. This database will assist the operator to design and edit ballot layouts for paper ballots and electronic voting devices with a minimum amount of repetitive tasks.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------|----------------|--|----------------------|------------------------|
| Ballot Creation | A-23 | <p>Provide a mechanism for the definition of the ballot, including the definition of the number of allowable choices for each office, contest, measure, and for special voting options such as write-in candidates.</p> <p>Note: Please state your solution's maximum number of potentially active voting positions (arranged to identify party affiliations if a primary election), offices and their associated labels and instructions, candidate names and their associated labels and polling instructions, and issues or measures and their associated text and instructions.</p> | 5 | |
| Ballot Creation | A-24 | Provide for the retention of previously defined ballot layouts. | 5 | |
| Ballot Creation | A-25 | Provide for the modification of previously defined ballot layouts, subject to additional security requirements, after an election has been defined. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------|----------------|---|----------------------|------------------------|
| Ballot Creation | A-26 | <p>Provide for all voting options and specifications as provided for in the Colorado Revised Statutes, including the requirements for a recall election and instant runoff voting (IRV) (section 1-7-1003, C.R.S.).</p> <p>Note: Ranked Voting Methods, including IRV, are currently features used in local jurisdiction elections and not at the State or County level. However; since counties often conduct elections for local jurisdictions, please explain the capabilities of your system to create and process a ballot that contains one or more contests requiring a ranked voting and tabulation process.</p> | 5 | |
| Ballot Creation | A-27 | Generate sample ballots for each ballot style that will not be accepted or counted by a scanner. | 5 | |
| Ballot Creation | A-28 | Generate a consolidated sample ballot containing all races, issues and questions. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|-----------------|---------|--|---------------|-----------------|
| Ballot Creation | A-29 | <p>Produce ballot content output for paper ballot printing, with the following capabilities:</p> <ul style="list-style-type: none"> a. Accommodate non-proprietary print-ready format (e.g. PDF). b. Accommodate multiple stub sizes within same election. c. Accommodate multiple stubs on a ballot. d. Accommodate variable paper ballot stub sizes up to three inches. e. Customize paper ballots with sequential numbering and static fields on ballot stubs. f. Handle multiple font features. g. Handle special character sets associated only with non-English languages. <p>Note 1: Please provide your ballot size capabilities and layout options.</p> <p>Note 2: Please provide information about your system’s font capabilities (e.g. typefaces, sizes, kerning and leading, color, bolding, underscoring, and italics).</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|------------------------|----------------|--|----------------------|------------------------|
| Ballot Processing | A-30 | Output ballot content to an election media device for use in equipment (electronic voting devices, scanners, tabulators, etc.). | 5 | |
| Ballot Processing | A-31 | Output ballot content to accommodate accessible voting, including adjustable audio and visual output. Note: Please detail capacity limits of data fields for accessible voting (e.g. font sizes, display options). | 5 | |
| Ballot Processing | A-32 | Allow authorized users to electronically adjudicate ballots to reflect voter intent, while retaining the originally marked ballot image. Note: Please explain the process of ballot adjudication using your system. | 5 | |
| Vote Results Reporting | A-33 | Report vote tally results by individual voting device. Note: For the purposes of this RFP, the Vote Results Reporting requirements are shown as part of the EMS. Some vendors may have a reporting module that is considered separate from their EMS and, if so, can explain that in their response to this requirement. | 5 | |
| Vote Results Reporting | A-34 | Report vote tally results by contest jurisdiction-wide. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|------------------------|----------------|--|----------------------|------------------------|
| Vote Results Reporting | A-35 | Report vote tally results by contest by precinct. | 5 | |
| Vote Results Reporting | A-36 | Report the total votes for each candidate for each contest, as well as by candidate by precinct. | 5 | |
| Vote Results Reporting | A-37 | Report vote tally results by voting location. | 5 | |
| Vote Results Reporting | A-38 | Report vote tally results by ballot source (e.g. Early Vote, Election Day, Mail, and Provisional). | 5 | |
| Vote Results Reporting | A-39 | Report votes by ballot style. | 5 | |
| Vote Results Reporting | A-40 | Report votes by ballot batch. | 5 | |
| Vote Results Reporting | A-41 | Report votes by ballot style within precinct. | 5 | |
| Vote Results Reporting | A-42 | Report undervotes and overvotes in each contest, with the option to exclude from reports. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|------------------------|----------------|--|----------------------|------------------------|
| Vote Results Reporting | A-43 | Provide the capability to report ranked-choice voting results. | 5 | |
| Vote Results Reporting | A-44 | Report a summary of results in addition to the detailed Statement of Votes Cast reports. | 5 | |
| Vote Results Reporting | A-45 | Report certified write-in candidate results in each contest with the ability to exclude from reports. | 5 | |
| Vote Results Reporting | A-46 | Import election night voter registration counts for Active and Total voters and report percent turnout relevant to vote tally for both Active and Total registrations. | 5 | |
| Vote Results Reporting | A-47 | Report and export each report in either PDF, XLS, TXT, EML, or CSV formats. Note: Please identify the formats available in your system. | 5 | |
| Vote Results Reporting | A-48 | Provide for Zero reports to be printed prior to first upload of voting results. | 5 | |
| Vote Results Reporting | A-49 | Allow the capability to select any combination of reports to be run and logged at any time permissible. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|------------------------|----------------|--|----------------------|------------------------|
| Vote Results Reporting | A-50 | Provide customization of report headers (e.g. “Unofficial” or “Final Unofficial”), contest labels and print layout. Note: Please explain any character limitations imposed by your system on labeling, reporting or exporting. | 5 | |
| Vote Results Reporting | A-51 | Include creation date, time, and page numbers on all reports. | 5 | |
| Vote Results Reporting | A-52 | When the total number of votes cast by voters on a specific ballot style/precinct or with a particular voting method or at a particular voting location is less than the currently allowed threshold of ten, the vote tallies for all such subgroups are to be reported in aggregations such that each category always contains at least ten, per section 1-8-308(b), C.R.S. This is also applicable to property owner ballots. Note: Please explain how your system will accommodate this requirement for all reports to maintain voter privacy. | 5 | |
| Vote Results Reporting | A-53 | Allow the minimum threshold number of votes to be changed if the legal requirement changes. This requirement refers to section 1-8-308(b), C.R.S. | 5 | |
| Vote Results Reporting | A-54 | Be able to include or exclude property owner ballot results from reports. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|------------------------|----------------|---|----------------------|------------------------|
| Vote Results Reporting | A-55 | Provide an option to suppress a race or candidate from all reports, when either is withdrawn from the ballot. | 5 | |
| Vote Results Reporting | A-56 | Provide an easily readable method to identify the candidate(s)/measure with the most votes in each contest. If more than one winner is possible, identify all winners. Note: Your system should have this feature as an option, so not used on partial results reports. | 5 | |
| Vote Results Reporting | A-57 | Have the capability to report political party designation for each candidate for partisan elections. | 5 | |
| Import/Export | A-58 | Import/export ballot information and voter registration information files to be exchanged from/to Colorado’s centralized statewide voter registration database (SCORE). | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------|----------------|--|----------------------|------------------------|
| Import/Export | A-59 | <p>Display detailed upload status for each portable vote storage media unit (e.g. memory card) by polling location and counting center.</p> <p>Note: For example, users should be able to visually confirm an exact match between the physical portable vote storage media unit being uploaded and the unit identified by the EMS. (e.g. If an authorized user is uploading "Polling Location A, Memory Card 01", onscreen the user should be able to visually confirm that the system is uploading "Polling Location A, Memory Card 01." Please explain how your solution handles this scenario.</p> | 5 | |
| Import/Export | A-60 | <p>Prevent the upload of wrong or duplicate portable vote storage media units.</p> <p>Note: Please explain your system's safeguards against errant or multiple uploads from portable vote storage media units and how to correct the problem if it should happen.</p> | 5 | |
| Import/Export | A-61 | <p>Produce and print a list, at any time in the process, showing which portable vote storage media units have and which have not been uploaded.</p> | 5 | |
| Import/Export | A-62 | <p>Save a report to a local or portable drive for transfer to a networked computer in a non-proprietary format.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|-----------------------------|----------------|---|----------------------|------------------------|
| Import/Export | A-63 | Display error messages and instructions to recover during importing and exporting operations. | 5 | |
| Data Storage and Processing | A-64 | Maintain election data in a secure environment. Note: Please describe how EMS data is stored and secured from unauthorized access and/or manipulation. | 5 | |
| Data Storage and Processing | A-65 | Provide the capability for counties to upload, from election media, externally created election setup data. | 5 | |
| Data Storage and Processing | A-66 | Provide a means to upload vote count results to the EMS from vote collection/tabulation equipment. | 5 | |
| Data Storage and Processing | A-67 | Provide statistics of batches (e.g. number of ballots in each batch, number of batches pending, number of batches deleted, and number of batches saved). Note: Does your system have a batch size and/or number of batches limitation and, if so, what is it? | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

A – ELECTION MANAGEMENT SYSTEM (EMS)

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|-----------------------------|----------------|--|----------------------|------------------------|
| Data Storage and Processing | A-68 | Have the ability to delete saved ballot batches from the system. Note: Please explain how your system manages batch accountability identification. | 5 | |
| Data Storage and Processing | A-69 | Have data backup capabilities. Note: Please explain any system data backup capabilities and protocols within your system. | 5 | |
| Data Storage and Processing | A-70 | Have redundancy capabilities. Note: Please explain any general and real time redundancy features. | 5 | |

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT**

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Scanning | B-1 | <p>Accurately capture votes from paper ballots.</p> <p>Note 1: Please indicate the speed of your polling location ballot scanner.</p> <p>Note 2: Please describe how acceptance/rejection criteria for ballot marks are established for your polling location scanner.</p> <p>Note 3: Please explain how your polling location scanner is impacted by ballots containing fold creases or other irregularities.</p> | 5 | |
| Scanning | B-2 | Notify the voter or an authorized user of errors before accepting the ballot. | 5 | |
| Scanning | B-3 | Accept overvoted ballots, upon review, in a manner that allows the voter to review each case of an overvote, one case at a time, and to provide clearly understandable options to further review the ballot, or cast the ballot without further review if the voter chooses not to ask for a replacement ballot. | 5 | |

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT**

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Scanning | B-4 | Accept undervoted ballots, upon review, in a manner that allows the voter to review each case of an undervote, one case at a time, and to provide clearly understandable options to further review the ballot, or cast the ballot without further review. | 5 | |
| Scanning | B-5 | Handle, and reliably account for, multi-page ballots, including when the pages become separated from each other. Count votes regardless of the sequence that pages are scanned or if some pages are not scanned. Note: Please explain how your system reliably accounts for multi-page ballots, including when the pages become separated from each other. | 5 | |
| Scanning | B-6 | Display a Public Counter, which shows the number of ballot pages processed. | 5 | |
| Scanning | B-7 | Display a Protective Counter showing the count of all ballot pages processed on the equipment, which is not reset after an election. | 5 | |
| Scanning | B-8 | Accept ballots in any of the four possible orientations. | 5 | |

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT**

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Hardware | B-9 | Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports. | 5 | |
| Tabulation | B-10 | Have the ability to write cast vote records to an election media device during operation that the EMS can disallow from being tabulated prior to the close of polls on Election Day. Note: Please describe the security your equipment provides for ensuring media is not removed until procedurally authorized. | 5 | |
| Tabulation | B-11 | Provide a secure means to upload vote count results to the EMS. | 5 | |
| Error Handling | B-12 | Identify and reject ballots that are not valid. Note: Please explain how your system identifies ballots that have been printed on nonstandard paper or on a home printer. | 5 | |
| Transportability | B-13 | Be easily transported by one person. Note: Describe the transportability characteristics of your equipment (e.g. weight, width, height, wheels). | 5 | |

**SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT**

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|-------------------------------------|--------------------|--|--------------------------|------------------------|
| Supplies | B-14 | Provide dust-and-moisture-proof covers for transportation and storage purposes. Note: Please describe your equipment covers. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Scanning | C-1 | <p>Accurately scan paper ballots into identifiable and locatable batches.</p> <p>Note 1: Please indicate the speed of your central location ballot scanner.</p> <p>Note 2: Please explain how your central location scanner is impacted by ballots containing fold creases or other irregularities.</p> | 5 | |
| Scanning | C-2 | <p>Be capable of establishing single ballot batches.</p> | 5 | |
| Scanning | C-3 | <p>Retain an electronic image of each voted paper ballot in a non-proprietary format.</p> <p>Note 1: Please describe the format(s) you offer for ballot images. Also describe how your system handles adequate resolution of saved images relative to the paper original.</p> <p>Note 2: Please describe how each electronic image will retain its relationship to the voted paper ballot and any reduction in resolution or compression used before retention of the image.</p> | 5 | |
| Scanning | C-4 | <p>Allow the authorized user to verify ballot quantities counted to ballots provided by batch prior to saving to the system.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Scanning | C-5 | Allow the authorized user to verify ballot quantities counted to ballots provided by batch after saving to the system. | 5 | |
| Scanning | C-6 | Allow the authorized user to rerun a batch of ballots, if necessary, without impacting results to date. | 5 | |
| Scanning | C-7 | Have the ability to logically delete (not physically) saved ballot batches from the system. Note: Please explain how your system manages batch accountability identification. | 5 | |
| Scanning | C-8 | Identify and segregate ballots or ballot images with overvotes for adjudication. Note: Please explain how your central count solution allows for physically locating a specific ballot in a batch of ballots. | 5 | |
| Scanning | C-9 | Identify and segregate ballots or ballot images with write-ins for adjudication. | 5 | |
| Scanning | C-10 | Identify and segregate, for adjudication, ballots or ballot images that cannot be read. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Scanning | C-11 | Identify and segregate, for adjudication, ballots or ballot images that are read as blank. | 5 | |
| Scanning | C-12 | Provide information to an authorized user as to why a ballot was segregated. | 5 | |
| Scanning | C-13 | Assign a unique number to the batch of ballots and verify that the count is zero upon beginning a scan and giving a total number of ballot pages processed at the close of the batch scan. | 5 | |
| Scanning | C-14 | Handle scanning of both front and back page of a ballot when data is contained on back of ballot page. | 5 | |
| Scanning | C-15 | Handle and reliably account for multi-page ballots, including when the pages become separated from each other. Count votes regardless of the sequence that pages are scanned or if some pages are not scanned. Note: Please explain how your system reliably accounts for multi-page ballots when pages are out of order or when all ballot pages are not returned, including when the pages become separated from each other. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Scanning | C-16 | Accept ballots in any of the four possible orientations. | 5 | |
| Scanning | C-17 | Display publicly the number of ballot pages processed. | 5 | |
| Scanning | C-18 | Display a Protective counter showing the count of all ballot pages processed on the equipment, which is not reset after an election. | 5 | |
| Scanning | C-19 | Allow the option to disable or enable the review of undervoted ballots. | 5 | |
| Hardware | C-20 | Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports. | 5 | |
| Tabulation | C-21 | <p>Accurately capture votes marked by a voter or a ballot marking device on a paper ballot without adjusting machine thresholds.</p> <p>Note 1: Please characterize the accuracy of your central ballot scanner in capturing voter intent.</p> <p>Note 2: Please describe how acceptance/rejection criteria for ballot marks are established for your central location scanner.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Tabulation | C-22 | Account for overvotes in every contest where overvotes occur. Note: Please explain how overvotes are handled by your system. | 5 | |
| Tabulation | C-23 | Account for undervotes in every contest where undervotes occur. Note: Please explain how undervotes are handled by your system. | 5 | |
| Tabulation | C-24 | Have the ability to write cast vote records to an election media device during operation that the EMS can disallow from being tabulated prior to the close of polls on Election Day. Note: Please describe the security your equipment provides for ensuring media is not removed until procedurally authorized. | 5 | |
| Tabulation | C-25 | Provide a secure means to upload vote count results to the EMS. | 5 | |
| Error Handling | C-26 | Identify and reject ballots that are not valid. Note: Please explain how your system identifies ballots that have been printed on nonstandard paper or on a home printer. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|-----------------------------|------------|---|------------------|-----------------|
| Error Handling | C-27 | <p>Continue ballot scanning while electronically or physically segregating and sorting ballots to user-identified categories that need additional attention.</p> <p>Note 1: Please describe how your system handles these situations:</p> <ul style="list-style-type: none"> a. Ballots are unreadable by the scanner. b. Notifying an authorized user whether a ballot has been scanned successfully or not. c. Notifying an authorized user that a ballot has been previously scanned. d. Identifies where a voter marked the box for a write-in but did not write in a name, and where the voter did not mark the box but did enter a write-in candidate on the line. <p>Note 2: Please describe how the relationship of paper ballot to ballot scan to cast vote record will be maintained when this physical or electronic sorting or segregation is taking place.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Ballot | D-1 | Display choices for the contests, (candidates and measures) of the election for each ballot style. | 5 | |
| Ballot | D-2 | When activated for the voter, display prominent ballot identifiers, including precinct, party, and similar identifiers, in order to give the voter the opportunity to verify that they will be voting on the correct ballot. | 5 | |
| Ballot | D-3 | Record each voter’s candidate and measure selections as the ballot is cast. Note: This requirement is not applicable to certain ballot marking devices that depend on a produced paper ballot being processed and tabulated elsewhere. | 5 | |
| Ballot | D-4 | Have a public counter that displays the number of ballots cast or marked, depending on the functionality of the electronic voting equipment. | 5 | |
| Ballot | D-5 | Make clear to the voter how to cast a ballot or print a marked ballot, such that the voter has minimal risk of doing so accidentally, but when the voter intends to cast the ballot or complete the ballot marking session, the action can be easily performed. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Ballot | D-6 | Assure that the ballot marking device automatically returns to a state such the next voter cannot learn how the previous voter voted, once the paper ballot is printed. | 5 | |
| Ballot | D-7 | Allow voters, including voters with disabilities, to be able to review their write-in input to the ballot interface, edit that input, and confirm that the edits meet their intent. Note: Please describe how voters, including voters with disabilities, will be able to review their write-in input to the ballot interface, edit that input, and confirm that the edits meet their intent. | 5 | |
| Ballot | D-8 | Provide a method by which voters with disabilities can choose the language of the ballot visually and through the audio interface. Note: Please describe how your electronic voting units provide a method by which voters with disabilities can choose the language of the ballot visually and through the audio interface. | 5 | |
| Hardware | D-9 | Display a Protective counter showing the count of all ballots processed on the equipment, which is not reset after an election. | 5 | |
| Hardware | D-10 | Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|---|---------------|-----------------|
| Accessibility | D-11 | <p>Provide electronic voting equipment designed to allow for installation in a voting location accommodating access by voters with disabilities in compliance with the Americans with Disabilities Act (ADA), HAVA and all applicable federal and state laws that address accessibility to voting for persons with disabilities.</p> <p>Note: Please describe how your system’s features comply with HAVA, ADA and other Federal and State laws that require accessibility for voters with a variety of disabilities, including visual or cognitive impairments. Identify the EAC standards your system meets.</p> | 5 | |
| Accessibility | D-12 | <p>Meet the standards for accessible voting systems listed in section 1-5-704, C.R.S. The size of a ballot position and the font size of candidate information must be in accordance with Colorado Election Rules.</p> <p>Note: Please stipulate the maximum available positions on the voting device, based on such size of a ballot position and the font size of candidate information, to be used for an election.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|--|---------------|-----------------|
| Accessibility | D-13 | <p>Include a privacy enclosure or voting booth that contains the electronic voting device(s) designated for voters with disabilities and complies with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) providing sufficient dimensions to allow access to voters who use wheelchairs.</p> <p>Note: Please explain how your voting device complies with all forward and side reach requirements of the ADA and ADAAG.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|---|---------------|-----------------|
| Accessibility | D-14 | <p>Include electronic voting units adaptable for voters with disabilities either through adjustability of the device or the voting booth or inclusion of an auxiliary device. The auxiliary device should also be lightweight and removable making it portable for use on a voter's lap or provide an alternative solution.</p> <p>Note 1: Please describe your accessible alternative input devices. List such devices and explain the operation of each device and how it accommodates voters with disabilities.</p> <p>Note 2: Please explain how your proposed system accommodates voters with visual disabilities. Include with the description how portions of the displayed ballot may be intensified and/or enhanced, in contrast and font size and then restored to the initial size.</p> <p>Note 3: Please explain how your electronic voting device can be repositioned to accommodate a variety of voters with disabilities. Include any information about the ability of the voter to independently adjust the device.</p> <p>Note 4: Is the voting screen glare-free regardless of positioning?</p> <p>Note 5: Please explain any magnifying capacity of the electronic voting device.</p> <p>Note 6: If your electronic voting unit uses an activation card, please explain how it may be used easily by voters, including voters with disabilities.</p> <p>Note 7: Please explain how your electronic voting unit adequately provides privacy for a voter who uses a wheelchair.</p> <p>Note 8: Please explain how a voter can verify the accuracy of the cast votes.</p> <p>Note 9: Please describe additional features of your system that are designed to accommodate voters with disabilities.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Accessibility | D-15 | <p>Allow for importing of audio ballot content from an outside source (e.g. candidates or pre-recorded audio.).</p> <p>Note: Please explain the process and procedure, with time frames, required to re-program the audio read-back on the voting device in the event that there is a change to a name or contest on the ballot in the final few weeks before an election.</p> | 5 | |
| Accessibility | D-16 | <p>Allow for a voter to change volume and/or speed of an audio ballot.</p> <p>Note: Explain how the voter can fast-forward through instructions and measure text.</p> | 5 | |
| Accessibility | D-17 | <p>Provide for audio instructions for the ballot and a mechanism for voters with visual impairments to cast a ballot or print a marked ballot, either on the voting unit itself or on a separate device designed for this purpose. The process shall imitate the process used by sighted voters with the exception of the audio interface.</p> | 5 | |
| Accessibility | D-18 | <p>Support an enlarged-print ballot screen image for voters with visual impairments. Following the casting of a vote or the printing of a marked ballot, the machine must reset to its initial state to accommodate the next voter.</p> | 5 | |
| Accessibility | D-19 | <p>Accommodate voters regardless of their ability to read.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Accessibility | D-20 | <p>Allow for connection of personal auxiliary devices, such as sip/puff or jelly switch devices.</p> <p>Note: Please describe such capabilities provided by your system.</p> | 5 | |
| Ease of Use | D-21 | <p>Be designed so that actions performed by the voter, such as making a vote selection or changing a vote, are easily understood so that errors are prevented to the maximum extent possible, and so that recovery from an erroneous action is facilitated by the features of the system prior to casting the ballot or printing a marked ballot.</p> <p>Note: Please explain how your proposed system facilitates voter actions prior to casting a ballot or printing a marked ballot.</p> | 5 | |
| Ease of Use | D-22 | <p>Accommodate font sizes that are adjustable for ease of sight.</p> | 5 | |
| Ease of Use | D-23 | <p>During the voting process or prior to casting the vote, display (visually or using audio, as applicable) a summary indicating the choices made or skipped.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|---|---------------|-----------------|
| Ease of Use | D-24 | <p>Allow the voter the ability to change a selection until the voter is satisfied with the choice at any time prior to the final casting of a ballot or printing a marked ballot.</p> <p>Note: Please explain here how your proposed voting system allows the voter to review and/or modify his/her selections before final casting of the vote or printing of the marked ballot.</p> | 5 | |
| Ease of Use | D-25 | <p>Provide a method for the voter to confirm the choices before casting the ballot or printing a marked ballot, signifying to the voter that casting or printing the ballot is irrevocable and directing the voter to confirm his/her intention to cast or print the ballot, and shall further signify to the voter that the ballot has been cast or printed after the voting session is complete..</p> | 5 | |
| Ease of Use | D-26 | <p>Provide a means to demonstrate the operation of the electronic voting device to the voters.</p> | 5 | |
| Ease of Use | D-27 | <p>Disallow a voter to overvote a contest and will enable the voter to correct the selections.</p> <p>Note: Please explain how your proposed system shall not allow a voter to overvote a contest and enable the voter to correct his or her selections.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Ease of Use | D-28 | Warn voters that they have undervoted a contest and permit them to correct or accept the undervote. Note: Please explain here how your proposed system shall warn voters that they have undervoted a contest and permit them to correct or accept the undervote. | 5 | |
| Ease of Use | D-29 | Provide a means of recording the votes cast for write-in candidates for any contest that allows write-in candidates. This capability shall allow the entry of as many names of candidates as the voter is entitled to select for each contest in compliance with Colorado's Election Law. Note: Please explain how your proposed system allows for write-in votes for any authorized contest. | 5 | |
| Ease of Use | D-30 | During election setup, provide an option to provide the voter with a list of certified write-in candidates. | 5 | |
| Ease of Use | D-31 | Provide a screen response that will allow a voter to request a list of certified write-ins if the election setup provided that option. | 5 | |
| Ease of Use | D-32 | Allow authorized users the ability to modify the voter instructions for an electronic or audio voting session. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Ease of Use | D-33 | <p>Provide an authorized user an ability to reset screen calibration, including between uses in an election.</p> <p>Note: Please explain if your electronic voting equipment logs such calibration and produces any warnings when calibration needs to be reset.</p> | 5 | |
| Uninterrupted Operation | D-34 | <p>Provide, in case of power interruption, a means for voting operations to continue. This feature shall consist of either an un-interruptible power supply (UPS) or other means to keep electronic voting equipment active.</p> <p>Note: Please specify how your system will provide notice of power loss or low-battery state, so that election judges or election officials can take appropriate steps.</p> | 5 | |
| Uninterrupted Operation | D-35 | <p>Provide for continuous uninterrupted operation for a minimum of two hours in case of power failure.</p> <p>Note: Please specify how long your system will operate without an external power source and under what conditions. If the device does not have a battery backup, what size of UPS will be required to maintain operation for two hours?</p> | 5 | |
| Uninterrupted Operation | D-36 | <p>In the event of the failure of an electronic voting unit, retain a record of all votes cast prior to the failure.</p> <p>Note: Please explain how your system retains and reports votes cast in the event of a loss of power.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Voter Verifiable Paper Trail | D-37 | <p>Include, with each voting device, the functionality of a Voter-Verified Paper Audit Trail (VVPAT) that meets all Federal and State Certification requirements.</p> <p>Note 1: Please explain how your proposed voting device complies with this requirement.</p> <p>Note 2: Explain if your proposed system has an alternate means of counting a non-ballot type of VVPAT for audit purposes. The alternative means can include but is not limited to the availability of bar codes and readers for the VVPAT.</p> | 5 | |
| Voter Verifiable Paper Trail | D-38 | <p>Provide a means for voters with disabilities (visually impaired or unable to read) to review the VVPAT.</p> <p>Note: The review of the VVPAT by voters that cannot see or read the VVPAT requires a feature that enables read-back from the physical VVPAT.</p> | 5 | |
| Voter Verifiable Paper Trail | D-39 | <p>Have the capability, if proposing a VVPAT solution that is not an official marked ballot, for the print on the VVPAT to be large enough and dark enough for voters to verify and for election judges to read easily during a recount.</p> <p>Note: Please explain the type of paper used to record the VVPAT and the characteristics of the paper impression to ensure ease of reading and fade resistance. For instance; 18 point font, bold and double spaced would be preferred.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

D – ELECTRONIC VOTING EQUIPMENT

| Requirement Sub- Category | Req. ID | UVS Requirement (The System will ...) | Respon se Code | Vendor Response |
|---------------------------------|------------|--|----------------------|-----------------|
| Transportability | D-40 | Be easily transported. Note: Describe the transportability characteristics of your electronic voting equipment (e.g. weight, width, height, wheels). | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------------|--------------------|--|--------------------------|------------------------|
| Mail Ballot Envelope Processing | E-1 | <p>Provide hardware with the capability to scan mail ballot envelopes and perform the following functions:</p> <ul style="list-style-type: none"> a. Scan and capture voter ID barcode b. Scan and capture envelope and signature images c. Log envelope as received d. Endorse (customizable) & date/time stamp envelope e. Separate envelopes that may need manual intervention <p>Note 1: Please provide information about your ballot envelope sorting equipment, including what versions are available for counties with various volumes of envelopes. Can your equipment perform all these above functions in a single pass? If not, please explain the number of passes required and the actions taken on each pass.</p> <p>Note 2: Please indicate if your solution has the capability, assuming envelope and ballot are designed properly, to determine the ballot style of the enclosed ballot.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Mail Ballot Envelope Processing | E-2 | Be capable of generating an output file, with voter ID and voter’s envelope signature, to be matched with SCORE voter registration data and used in the Automated Signature Verification process. | 5 | |
| Mail Ballot Envelope Processing | E-3 | Be capable of updating the mail ballot envelope output file with status values (e.g. received, accepted, rejected) so that the SCORE system can use the output file to update voter registration records. Note: Please provide a list of code values your system assigns for ballot envelope processing status. | 5 | |
| Mail Ballot Envelope Processing | E-4 | Allow an authorized user the ability to update the disposition code for an envelope (e.g. from “challenged” to “good”). | 5 | |
| Mail Ballot Envelope Processing | E-5 | Be configurable for ballot envelope size and design. | 5 | |
| Mail Ballot Envelope Processing | E-6 | Be configurable for thickness detection. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Mail Ballot Envelope Processing | E-7 | Automatically separate envelopes when voter ID required into a separate stack or identify them electronically for easy separation. | 5 | |
| Mail Ballot Envelope Processing | E-8 | Have an option for sort/pass with the ability to customize sorting definition (e.g. style, precinct, district, unaccepted envelope, signature discrepancy and no signature). Note: Please explain the sort options available in your system. | 5 | |
| Mail Ballot Envelope Processing | E-9 | Provide a high-volume solution for counties with a large voter population. Note 1: Please specify the throughput capacity on your high-volume envelope processor. Note 2: County size by registered voter population is as follows: Large = Over 25,000 voters Medium = 10,000 – 25,000 voters Small = Fewer than 10,000 voters | 5 | |
| Mail Ballot Envelope Processing | E-10 | Provide a low-volume solution for counties with a small or medium voter population (see E-9 requirement Note 2). Note: Please specify the throughput capacity on your low-volume envelope processor. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|----------------------------------|------------|---|------------------|-----------------|
| Mail Ballot Envelope Processing | E-11 | Provide configurable reports for tray id, tray count and pieces status. | 5 | |
| Automated Signature Verification | E-12 | Provide tested/proven Automated Signature Verification (ASV) software, which can automatically compare a voter's ballot envelope signature with the SCORE voter registration signature based on a customer selected confidence determination. Note: Please provide any information about your system that might be an alternative to manual removal of the signature security tab on mail ballot envelopes. | 5 | |
| Automated Signature Verification | E-13 | Be configurable to meet or exceed a state established acceptance threshold for signature acceptance. | 5 | |
| Automated Signature Verification | E-14 | Provide user activity log records that include full description of all human intervention during the ASV process. | 5 | |
| Automated Signature Verification | E-15 | Provide an audit function to verify the accuracy of machine accepted signatures. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM
E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|----------------------------------|----------------|--|----------------------|------------------------|
| Automated Signature Verification | E-16 | Extract returned ballot envelopes for manual review when the signature does not meet the acceptance threshold level, is unreadable, or is missing. | 5 | |
| Automated Signature Verification | E-17 | Create a record when the signature does not meet the acceptance threshold level. This record will be used to generate a letter when the signature cannot be manually verified. Note: Please explain your process for creating and using these records. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

F – MAIL BALLOT TRACKING

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|----------------------|----------------|---|----------------------|--|
| Mail Ballot Tracking | F-1 | Track a mail ballot envelope from the time it is prepared for the voter in an elections office or by a vendor, through every stage of the U.S. Postal Service mail delivery system. | 1 | <p>I3ballot will track ballots for the following touch points:</p> <ul style="list-style-type: none"> • Ballot printed and the IMB sprayed • Ballot received by the USPS and on its way to the voter • Ballot received by the USPS and on its way back to the election office • Ballot received by the election office - ballot accepted • Ballot received by the election office - ballot rejected • Ballot received by the election office - ballot undeliverable • Ballot received by the election office - ballot accepted in person <p>Each participating county can establish a unique message to be sent to the voter for each of the tracking touch points.</p> |
| Mail Ballot Tracking | F-2 | <p>Track a mail ballot through stages of the ballot acceptance process after return to the County by the voter.</p> <p>Note: Explain which processes within the Elections Office can be tracked by your system after the ballot envelope is received in that office.</p> | 1 | <p>I3ballot will accept input from SCORE that contains the final status of the ballot. This status is communicated to the voter in a message.</p> <ul style="list-style-type: none"> • Accepted • Rejected • Undeliverable • Accepted - Received In person |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

F – MAIL BALLOT TRACKING

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|----------------------|----------------|---|----------------------|---|
| Mail Ballot Tracking | F-3 | Provide sufficient report capability for the election officials to ascertain the status of any and all mail ballots in each stage of the mail ballot process tracked by the system. | 1 | Each ballot is tracked accounted for in each step of the process of delivering the ballot to the voter and the return of the ballot to the Election Office. Both detailed and statistical reporting is available outlining the progress and state of the ballots. |
| Mail Ballot Tracking | F-4 | Provide a system whereby voters can “opt in” to receive messages about their ballot’s status in the process. | 1 | All voters participating in the election can “opt in” to receive message about the status of their ballot via the i3ballot website. |
| Mail Ballot Tracking | F-5 | Provide a system whereby voters who have chosen to “opt in” to receive messages about their ballot’s status in the process can choose to “opt out”. | 1 | All voters participating in the election, which “opted in” to receive messages about the status of their ballot can “opt out” and discontinue the receipt of messages. The voter can go to the i3ballot website, login, and select the option to “opt out” or they can call their county election office that can “opt out” the voter using the i3ballot election management console. |
| Mail Ballot Tracking | F-6 | Provide a messaging system that delivers messages via a website to voters who have requested notification about their ballot’s status. | 1 | I3ballot provides the voters the options to receive messages about the status of their ballot via the web, email or SMS (text messages). |
| Mail Ballot Tracking | F-7 | Provide a messaging system that delivers messages via email to voters who have requested notification about their ballot’s status. | 1 | I3ballot provides the voters the options to receive messages about the status of their ballot via the web, email, or SMS (text messages). |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

F – MAIL BALLOT TRACKING

| Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|----------------------|----------------|--|----------------------|---|
| Mail Ballot Tracking | F-8 | Provide a messaging system that delivers messages via text messaging to voters who have requested notification about their ballot's status. | 1 | I3ballot provides the voters the options to receive messages about the status of their ballot via the web, email, or SMS (text messages). |
| Mail Ballot Tracking | F-9 | Have sufficient capacity to provide the same level of service to as few as one or as many as 64 counties at the same time. (Estimate up to 4 million records if all counties are participating.) | 1 | I3ballot has the capacity to handle all voters within the State of Colorado and to identify each voter within their respective county. |
| Mail Ballot Tracking | F-10 | Be able to utilize all email and text messaging vendor systems in use in Colorado. | 1 | I3ballot is able to connect to all global text message providers. |
| Mail Ballot Tracking | F-11 | Provide each individual county the ability to personalize messages to its voters based on its elections setup, processes, etc. | 1 | I3ballot provides an account for each county, which provides the election office access to the i3ballot console. At the console they can manage their election, enable the ballot tracking touch points desired to be tracked and configure different languages message texts that will be issued to the voter. |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

G – VENDOR TRAINING & SUPPORT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|--|
| Hardware & Software Support | G-1 | Include availability of vendor support personnel to assist in hardware and software installation and setup onsite. | 5 | No installation needed |
| Hardware & Software Support | G-2 | Include availability of vendor support personnel to assist in hardware and software installation and setup from a remote help desk. | 5 | No installation needed |
| Training | G-3 | Include availability of vendor supported onsite training personnel to train CDOS and County users. | 1 | i3logix will provide onsite training to CDOS and county users as needed. |
| Training | G-4 | Include availability of self-study user training via the Internet or electronic media. | 1 | i3logix will provide self-guided videos to train County/State administrator on how to setup and run an election. |
| Voting Period Support | G-5 | Provide 24-hour available technical support for all system components beginning sixty days prior to an election and continuing until the completion of the official canvass (generally twenty days after an election). Note: Please describe your capability to provide extended support, beyond twenty days after and election, for circumstances such as a recount. | 3 | i3logix will provide technical support during business hours and on-call support for off hours. Please refer to Appendix A - Sample SLA Contract |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

G – VENDOR TRAINING & SUPPORT

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Hardware Parts and Supplies | G-6 | <p>Include hardware solutions for the UVS that are supported by a supply chain contingency plan.</p> <p>Note: Please provide an explanation of your supply chain contingency planning. The intent of this requirement is to assess the risk to Colorado of one or more of your suppliers not being able to provide needed components. Identify the depth of your supply chain (e.g. one, two, or more suppliers deep).</p> | 5 | |
| Hardware Parts and Supplies | G-7 | Make equipment parts and supplies available through December 31, 2020. | 5 | |
| Hardware Parts and Supplies | G-8 | Not require royalty fees, user fees, or other charges or limitations on the printing of ballots designed or printed on vendor devices. Similarly, no fee or limitation shall be placed on any electronic file, report or representation of the vote produced by vendor devices or software. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Respo nse Code | Vendor Response |
|-------------------------------------|--------------------|--|-------------------------------|------------------------|
|-------------------------------------|--------------------|--|-------------------------------|------------------------|

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|---|---------------|-----------------|
| Auditing | H-1 | <p>Store sufficient data in an unalterable system audit log file to allow the auditing of all operations related to election setup, ballot creation, ballot tabulation, results consolidation and report generation. The audit log file shall contain:</p> <ul style="list-style-type: none"> a. An identification of the program and version being run. b. An identification of the election file being used. c. A record of all options entered by the operator, including operator ID. d. A record of all actions performed by a subsystem of the system. e. A record of all tabulation and consolidation input. f. Audit log records that are created and maintained in the sequence in which operations were performed, with date/time stamps. <p>Note 1: Please explain what audit trail techniques and audit reports are incorporated in your proposed system.</p> <p>Note 2: Please provide a list of all audit log files, the file location within the voting system, and the procedures to navigate to and retrieve them from the voting system.</p> <p>Note 3: Please describe steps needed to protect the audit logs from possible unintentional or intentional erasure or alteration.</p> <p>Note 4: Please provide a sample set of audit reports (system logs, etc.) from an election in a county with 200,000 or more registered voters (not necessarily in Colorado).</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Auditing | H-2 | Accommodate random audits on electronic voting and tabulation devices. | 5 | |
| Auditing | H-3 | Accommodate random audits on paper vote capture and tabulation devices. | 5 | |
| Auditing | H-4 | Log all activity on voting equipment including: when turned on/off, any errors, power failure, power restoration, when an error occurred and when an error was resolved. | 5 | |
| Auditing | H-5 | Run real time reports, when needed. | 5 | |
| Auditing | H-6 | Run post-election diagnostics on all auditable equipment in a manner that does not endanger the integrity of the election record. Note: Please explain your system's post-election diagnostic capabilities. | 5 | |
| Auditing | H-7 | Provide for adequate information to facilitate a recount under Colorado law. | 5 | |
| Auditing | H-8 | Have a permanent paper record of each vote for audit purposes. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|--|---------------|-----------------|
| Auditing | H-9 | <p>Support a Risk Limiting Audit, as defined in section 1-7-515(5)(b), C.R.S. sufficient to audit the functionality of electronic and paper vote capture as well as vote tabulation devices.</p> <p>Note 1: Please describe how your proposed system supports the execution of a Risk Limiting Audit.</p> <p>Note 2: Does your solution place unique identifying numbers on ballots as they are scanned?</p> <p>Note 3: Section 1-7-515, C.R.S. stated that Colorado must begin risk-limiting audits in 2014, but was revised in the 2013 session to extend the start of the requirement to 2017.</p> | 5 | |
| Auditing | H-10 | <p>Incorporate a real time clock as part of the system hardware and all audit log record entries shall include a date/time stamp.</p> | 5 | |
| Auditing | H-11 | <p>Use a real time clock that will continue to run during a power loss.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|--|---------------|-----------------|
| Auditing | H-12 | <p>Print audit reports on the standard system hardcopy output device when the following conditions are met:</p> <ul style="list-style-type: none"> a. The generation of an audit trail report does not interfere with the production of other output reports. b. The entries can be identified so as to facilitate their recognition, segregation and retention. c. The physical security of the audit record entries can be ensured. | 5 | |
| Auditing | H-13 | <p>Create audit records during the election definition and ballot preparation phases showing completion of the baseline ballot layouts and any modifications to them, a description of the modifications and a date/time stamp.</p> | 5 | |
| Auditing | H-14 | <p>Create audit records during the pre-election phase that include electronic and manual data entered and maintained by election personnel, election definitions, instances of all final ballot layouts and the ballot preparation edit event log.</p> | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Auditing | H-15 | Create audit records prior to the initiation of ballot counting to verify hardware and software status. These particular audit records shall include the identification of the software release, the identification of the election to be processed and the results of hardware and software diagnostic tests. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|---|---------------|-----------------|
| Auditing | H-16 | <p>Create in-process audit records containing data documenting system operation during diagnostic routines and any machine generated error and exception messages. Examples of these audit records include:</p> <ul style="list-style-type: none"> a. System startup diagnostic and status messages. b. Checks that pre-count reports show zeroes. c. The source and disposition of system interrupts resulting in entry into exception handling routines. d. All messages generated by exception handlers. e. The identification code and number of occurrences for each hardware and software error or failure. f. All operator actions. g. Notification of system login or access errors, file access errors and physical violations of security. h. Other exception events such as power failures, failure of critical hardware components, data transmission errors, and other types of operating anomalies. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Auditing | H-17 | Provide an in-process audit report, for post-election use, consisting of data containing a record when each vote is initiated and each ballot is cast. | 5 | |
| Auditing | H-18 | Print reports necessary to assist election officials in performing a manual count as required by Colorado election law and rules. Note 1: Please explain how your proposed system can create the reports necessary to allow election officials to perform and validate a manual count. Note 2: Please explain how, in the case of a recount, the election can be reconstructed ballot by ballot, while still maintaining voter privacy. | 5 | |
| Auditing | H-19 | Record audit log entries onto durable non-volatile storage. | 5 | |
| Auditing | H-20 | Export audit logs in formats suitable for use by elections officials and the public including common electronic formats (PDF, Excel, CSV, TXT, EML). | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|--------------------------|---------|--|---------------|-----------------|
| Certification | H-21 | <p>Be certified or certifiable by the EAC, another state, or Colorado.</p> <p>Note 1: If not certified, please explain.</p> <p>Note 2: See section 1-5-601.5, C.R.S. for Colorado voting system certification compliance with federal regulations. RFP section 5.3.11 has a question on certification status of vendor proposed solutions.</p> | 5 | |
| Testing | H-22 | <p>Be configurable so as to be capable of performing the following functions on all system hardware/software, in compliance with current Colorado statutes and rules:</p> <ul style="list-style-type: none"> a. Hardware test b. Logic and Accuracy Test c. Post-Election Audit d. Pre-Recount Logic and Accuracy Test e. And capable of performing the Colorado Risk Limiting Audit commencing no later than 2017. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Testing | H-23 | Allow authorized user creation of scripted simulation Logic and Accuracy tests with various patterns (e.g. 1,2,3 or 1,1,1 or 1,2,3,4,5...). Note: Please explain how your system allows for pre-determined simulation for creating test ballots and electronic voting equipment test input. | 5 | |
| Testing | H-24 | Have the capability to test ballot layouts to verify the allowable number of votes for a contest or question and the combinations of voting patterns permitted or required by the using jurisdiction. | 5 | |
| Testing | H-25 | Provide capability to permit diagnostic testing of all the major components within each electronic vote capture device. | 5 | |
| Testing | H-26 | Ensure non-contamination of voting data through tests of all data paths and memory locations to be used in actual vote recording. | 5 | |
| Testing | H-27 | Provide evidence in an audit record that test data has been expunged. | 5 | |
| Testing | H-28 | Allow the ability to load and test audio ballots in electronic vote capture equipment. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|--|----------------------|------------------------|
| Testing | H-29 | Provide the ability to print all necessary reports for proofing the results of logic and accuracy testing. | 5 | |
| Security | H-30 | Provide an environment whereby all databases and data are maintained with provisions for operational security, access control and auditability. Note 1: Please describe the authentication protocols for access to the EMS database and your system’s processes for providing operational security and auditability. Note 2: System security must not obstruct authorized access to event or audit logs, and printing or exporting of reports. | 5 | |
| Security | H-31 | Require two factor authentication for access to the EMS and all tabulation equipment. This means an authorized user will need a physical device (e.g. token, card) and something memorized (e.g. password) to access the software or equipment. | 5 | |
| Security | H-32 | Allow tamper evident seals to be placed on all equipment doors, openings, and data access points such that unauthorized access is either prevented or clearly indicated by the damage to or destruction of a seal. Note: Please describe the security offered by your proposed system relating to tamper evident seal placements. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Security | H-33 | Allow all access points to equipment to be visible and subject to oversight of seals, unless the access point is behind doors or a cover. Access points that are not visible should also accommodate tamper evident seals. | 5 | |
| Security | H-34 | Report unauthorized modifications to audit data or audit logs. Note: Please explain your system’s capabilities to restrict user authorizations and access rights for creating, reading, modifying, and deleting audit data or logs. | 5 | |
| Security | H-35 | Allow for installation and auditing of a Trusted Build per Colorado Election Rules. | 5 | |
| Documentation | H-36 | Include a clear set of documented instructions for election judges to set up voting equipment. These instructions should be modifiable by county personnel. | 5 | |
| Documentation | H-37 | Include documented instructions for troubleshooting any voting equipment issues that may arise. | 5 | |
| Documentation | H-38 | Include a complete set of User and Technical documentation. | 5 | |

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM

H – MISCELLANEOUS REQUIREMENTS

| Requirement Sub-Category | Req. ID | UVS Requirement (The System will ...) | Response Code | Vendor Response |
|---------------------------------|----------------|---|----------------------|------------------------|
| Documentation | H-39 | Include current certification documentation and VSTL and/or state test reports. | 5 | |

Appendix A - Sample SLA Contract

Service Level Agreement (SLA)

Effective Date:

Document Owner:

i3logix

Approval

(By signing below, all Approvers agree to all terms and conditions outlined in this Agreement.)

| Approvers | Role | Signed | Approval Date |
|-----------|---------------|--------|---------------|
| i3logix | SaaS Provider | | |
| | SaaS Customer | | |

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1. Agreement Overview

This Agreement represents a Service Level Agreement (“SLA” or “Agreement”) between *the SaaS Provider* and the **SaaS Customer** for the provisioning of SaaS services required to support and sustain _____.

This Agreement remains valid until superseded by a revised agreement mutually endorsed by the stakeholders.

This Agreement outlines the parameters of all SaaS services covered as they are mutually understood by the primary stakeholders. This Agreement does not supersede current processes and procedures unless explicitly stated herein.

2. Goals & Objectives

The **purpose** of this Agreement is to ensure that the proper elements and commitments are in place to provide consistent SaaS support and delivery to the Customer(s) by the Service Provider(s).

The **goal** of this Agreement is to obtain mutual agreement for SaaS provision between the Service Provider(s) and Customer(s).

The **objectives** of this Agreement are to:

- Provide clear reference to service ownership, accountability, roles and/or responsibilities.
- Present a clear, concise and measurable description of service provision to the customer.
- Match perceptions of expected service provision with actual service support & delivery.

3. Stakeholders

The following Service Provider(s) and Customer(s) will be used as the basis of the Agreement and represent the **primary stakeholders** associated with this SLA:

SaaS Provider(s): i3logix. (“Provider”)

SaaS Customer(s): _____ (“Customer”)

4. Periodic Review

This Agreement is valid from the **Effective Date** outlined herein and is valid until further notice. This Agreement should be reviewed at a minimum once per fiscal year; however, in lieu of a review during any period specified, the current Agreement will remain in effect.

The **Business Relationship Manager** (“Document Owner”) is responsible for facilitating regular reviews of this document. Contents of this document may be amended as required, provided mutual agreement is obtained from the primary stakeholders and communicated to all affected parties. The Document Owner will incorporate all subsequent revisions and obtain mutual agreements / approvals as required.

Business Relationship Manager: _____

Review Period: _____

Previous Review Date: _____

Next Review Date: _____

5. Service Agreement

The following detailed service parameters are the responsibility of the Service Provider in the ongoing support of this Agreement.

5.1. Service Scope

The following Services are covered by this Agreement:

- 99.5% uptime of all the modules of _____.
- 7x24 monitoring.
- 7x24 Severity 1 failure support.

5.2. Customer Requirements

Customer responsibilities and/or requirements in support of this Agreement include:

- Payment for all support costs at the agreed interval.
- Reasonable availability of customer representative(s) when resolving a service related incident or request.

5.3. SaaS Provider Requirements

SaaS Provider responsibilities and/or requirements in support of this Agreement include:

- Meeting response times associated with service related incidents.
- Notifying *standard maintenances procedures* with at least 3 business days in advance of the maintenance window.
- Notifying *emergency maintenance procedures* as far in advance as possible.
- Keeping the SaaS client informed about *standard deployments procedures*, upgrades and enhancements to production servers.

5.4. Service Assumptions

Assumptions related to in-scope services and/or components include:

- Changes to services will be communicated and documented to all stakeholders.

6. Service Management

Effective support of in-scope services is a result of maintaining consistent service levels. The following sections provide relevant details on service availability, monitoring of in-scope services and related components.

6.1. Service Availability

Coverage parameters specific to the service(s) covered in this Agreement are as follows:

- Business hours telephone support (_____):
9:00 A.M. to 5:00 P.M. Monday – Friday
 - Calls received out of Business hours will be forwarded to a mobile phone and best efforts will be made to answer / action the call, however there will be a backup answer phone service
- Email support (_____): Monitored 9:00 A.M. to 5:00 P.M. Monday – Friday
 - Emails received outside of office hours will be collected, however no action can be guaranteed until the next working day

Note: The guarantees provided in this SLA exclude acts of nature, criminal acts, other extenuating circumstances outside our control, equipment outside our control, scheduled maintenance with at least 3 business days' notice, terms of service violations, and any period of time when advance payment has not been received for services.

6.2. Service Requests

It is expected that Customer will provide an i3logix Support Liaison who is an internal resource that will be the point of contact for i3logix issues and act as the first line of internal support for the Customer. It is critical that this resource be available when necessary to promptly resolve any and all support issues. Only this individual and their designated alternate will be responsible for contacting the i3logix Support Liaison and providing the information necessary for i3logix, Inc. to begin working on a Support Request.

When Customer end-users encounter a problem or identify the need for I3logix support, they are to submit a support request to the designated i3logix Support Liaison.

In the event that the Customer Support Liaison cannot resolve the issue, the Customer Support Liaison should notify i3logix
Support via email, describe the issues and attach all pertinent information as described above.

In support of services outlined in this Agreement, the Service Provider will respond to service related incidents and/or requests submitted by the Customer within the following time frames:

Severity 1

Production use of i3logix is stopped or so severely impacted that Customer cannot reasonably continue work. Customer experiences a complete loss of service. The operation is mission critical to the business and the situation is an emergency. A **Severity 1** service request has one or more of the following characteristics:

- Data corrupted
- A critical documented function is not available
- System hangs indefinitely, causing unacceptable or indefinite delays for resources or response
- System crashes, and crashes repeatedly after restart attempts

Reasonable efforts will be made to respond to Severity 1 service requests within one (1) hour.

Twenty-four (24) Hour Commitment to Severity 1 Service Requests: i3logix will work 24x7 until the issue is resolved or as long as useful progress can be made. Customer must provide i3logix with a contact during this 24x7 period, either on site or by pager, to assist with data gathering, testing, and applying fixes. Customer is requested to propose this severity classification with great care, so that valid **Severity 1** situations obtain the necessary resource allocation from i3logix.

Severity 2

Customer experiences a severe loss of service. Important features are unavailable with no acceptable workaround; however, operations can continue in a restricted fashion. **Severity 2** support requests submitted by Customer will be responded to within two (2) business hours.

Severity 3

Customer experiences a minor loss of service. The impact is an inconvenience, which may require a workaround to restore functionality. **Severity 3** support requests submitted by Customer will be responded to within the next business day.

Severity 4

Customer requests information, an enhancement, or documentation clarification regarding i3logix but there is no impact on the operation of the software. You experience no loss of service. The result does not impede the operation of the system. **Severity 4** support requests submitted by Customer will be responded to within the next business day, and may incur into additional costs.