

SOLICITATION 2700000136 ATTACHMENT A – Technical Specifications

C.5 Technical Specifications

The following is a listing of the detailed functional specifications for the State of Oklahoma UOCAVA Project. A section is included in the Technical Proposal Template (Section G) for Vendors to provide coded responses to indicate how their proposed solution meets these specifications.

C.5.1. Administrative and Documentation

C.5.1.1. The vendor shall provide a project schedule for a period from Oct. 1, 2013, through Dec. 31, 2016.

C.5.1.2. The vendor shall provide a guarantee that the system has no Intellectual Property conflicts with third parties.

C.5.1.3. The vendor shall perform, if requested by the SEB, an in person demonstration, at the time of the bid review, of the proposed online voting solutions and ballot duplication solution in Oklahoma.

C.5.1.4. The vendor shall provide written documentation of the functionality of the system and training materials.

C.5.1.5. The vendor shall provide functional and technical system specifications.

C.5.1.6. The system shall support proofreading and testing.

C.5.1.7. The vendor should show the successful installation of their system in at least three jurisdictions and provide a letter of reference for each jurisdiction.

C.5.1.8. The vendor should provide resumes of the team members who will be working the project.

C.5.1.9. The vendor should provide a list of all jurisdictions where the vendor has implemented a like system for the past six years.

C.5.2. Voter Registration

C.5.2.1. The system shall be able to automate the import of necessary data from the SEB voter registration system (MESA).

C.5.2.2. The system shall be able to identify the eligible voters, and the specific ballots they are eligible to receive from the voter registration system imported data.

C.5.2.3. The system should automatically email the on-line voting link to the voter when the voter flag in MESA is set to Email/Online based on the FPCA application request.

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C.5.2.4. The system shall be able to provide data on the ballot status to enable tracking of ballots from the voter registration system imported data.

C.5.3. Election Functionality Requirements

C.5.3.1. The system shall be designed to support UOCAVA voters for all 77 Oklahoma counties.

C.5.3.2. The system shall allow the implementation of all election processes according to Oklahoma's election laws and regulations.

C.5.3.3. The system shall include a tool that allows the SEB to automate the importing of election information extracted from each county's BOSS election database (sample extract available upon request).

C.5.4. Pre-election Testing & Logging

C.5.4.1. The system shall allow the SEB to perform LAT's on every ballot style and return materials prior to each election.

C.5.4.2. The system shall be hosted on a secured environment and accessible to auditors upon request to do on-site verification of the applications running on the servers and the data stored in the database.

C.5.4.3. The system should provide a means for SEB to validate that critical applications have not been modified after pre-election testing and verification is completed.

C.5.4.4. The system should log all events. These events include but are not limited to the following:

- C.5.4.4.1.** Log-in and Log-out (should be tracked by class of user (e.g. voter, system administrator, etc.))
- C.5.4.4.2.** Failed log-in attempts
- C.5.4.4.3.** Blank ballots downloaded
- C.5.4.4.4.** Completed ballots printed
- C.5.4.4.5.** Page loading failures

C.5.5. Voting Process Requirements

C.5.5.1. The system shall allow voters to access the voting process on a personal computer without the installation of any specific election software or hardware (with the exception of Adobe Acrobat Reader).

C.5.5.2. The system shall allow users access through Windows Explorer or other ordinary web browsers that are standard on most computers and available for free download.

C.5.5.3. The system shall allow voters the option to download and print both blank and voted ballots and all required return materials.

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C.5.5.4. The system shall allow voters the option to mark a ballot on-line and return the voted ballot(s) by FAX or by mail.

C.5.5.5. The on-line system shall provide a straight-party selection for General Elections and assign votes to candidates in accordance with Title 26 O.S. 2011, Section 7-127(5).

C.5.5.6. The system shall provide the voter with the option of modifying straight-party selected candidates within an office without affecting other straight-party office selections.

C.5.5.7. The system shall support candidate rotation where required by Oklahoma law.

C.5.5.8. Voting options shall support the use of multiple languages as required under federal election law.

C.5.5.9. The system shall clearly distinguish between selected voting options and non-selected ones.

C.5.5.10. The system shall allow voters to verify their ballot selections before downloading and printing their ballot.

C.5.5.11. The system shall generate for the voter all the return materials pre-filled with the required information about the voter, and the county office. Return materials include the completed ballot, ballot security envelope, voter affidavit including the voter's signature, date, and any other information required by Oklahoma law, the return mailing envelope, and instructions for returning the ballot by mail or FAX addressed to the appropriate County Election Board.

C.5.5.12. Unique information of the type generated and used by MESA shall be printed in the form of a barcode on the voter's mailing envelope and FAX cover sheet to allow for automated check-in of returned ballots at the CEB.

C.5.5.13. The system shall track any status updates in the VR system relevant to the tracking information expected by the voter.

C.5.5.14. The system shall enable automated ballot transcription for the county election offices. This automated transcription (ballot duplication) will be accomplished by scanning a 2D bar code and importing the information into the Hart Ballot Now or Ballot On Demand systems.

C.5.5.15. The voter's privacy should be protected throughout the ballot transcription (duplication) process.

C.5.5.16. The system should provide the voter with the option of modifying their selections by navigating directly to the appropriate race from their review screen. After the voter has reviewed the race, regardless whether a revision was made, the system shall permit the voter to return to the review screen without requiring the voter to re-navigate through other races.

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C.5.5.17. Voters should not have to scroll to read a contest unless the SEB approves the format with scrolling.

C.5.6. Data Collection & Reports

C.5.6.1. The offeror shall provide a description of all data/statistics the system is capable of collecting.

C.5.6.2. The offeror shall indicate if the data/statistics can be reported statewide, by county or both.

C.5.7. Security Requirements & Auditability

C.5.7.1. The system shall provide auditability to ensure that no unauthorized or unapproved voter can access the system.

C.5.7.2. The system shall require a level of authentication to verify the voter is eligible to use the online system by matching the information provided by the voter against the official voter record. The voter would be required to provide a combination of the following information: Voter identification number, last name, first name, address, last four digits of Social Security Number and date of birth.

C.5.7.3. The voter's privacy shall be protected throughout the voting process.

C.5.7.4. The system shall use strong password requirements for all system user log-ins with the exception of any voter log-in requirements.

C.5.7.5. The system shall allow voters to access only the ballot style they are eligible to receive.

C.5.7.6. The system shall be available 24/7, handle traffic spikes with ease, and provide industry standard counter measures against attacks on availability (e.g., Denial of Service).

C.5.7.7. The SEB shall be the only entity with the ability to authorize individuals to use the system.

C.5.7.8. The system shall have an intrusion detection system that alerts the system administrator to presence of a person or entity that is not approved for access to the system.

C.5.7.9. The system shall not store any data on how the ballot was marked by the voter.

C.5.7.10. The system shall prevent or detect a man-in-the-middle attack.

C.5.7.11. The servers hosting the system shall be protected by common industry practices that include firewalls, 24/7 monitoring, and limited access protected by proper access control.

C.5.7.12. All personal identifying information shall be protected via encryption or a substantially similar method.

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C.5.7.13. All system logs for auditability shall be protected from manipulation in such a way that any manipulation of the logs can be detected.

C.5.7.14. The system shall be fault tolerant.

C.5.8. Usability and Accessibility

C.5.8.1. The system shall meet the following accessibility standards:

C.5.8.1.1. Section 301(a) HAVA-compliant to meet the needs of disabled voters and use of personal assistive devices.

C.5.8.1.2. Web Content Accessibility Guidelines (WCAG) 2.0

C.5.8.1.3. User Agent Accessibility Guidelines UAAG 1.0

C.5.8.1.4. Section 508 of the U.S Rehabilitation Act, Web-based Intranet and Internet Information and Applications (1194.22)

C.5.8.2. The system shall provide a user-friendly voter interface so that the voting process is intuitive and no previous training for using the voting system is necessary.

C.5.8.3. The system shall be compatible with commercially available off-the-shelf (COTS) screen readers.

C.5.8.4. The system shall prevent an on-line voter from overvoting a contest.

C.5.8.5. The system summary screen shall provide a clear warning if a voter is choosing to undervote a contest.

C.5.8.6. Voters shall select their voting options by directly selecting the candidate instead of using a code or indirect selection method.

C.5.8.7. The system shall provide clear plain language instructions and warning messages.

C.5.8.8. The system should require a voter to deselect a choice prior to changing their selection in a given race.

C.5.9. Scalability and Flexibility

C.5.9.1. The system shall be able to function in an easy and cost-efficient way.

C.5.9.2. The system shall allow for the implementation of changes based on legislation, policy and regulations.

C.5.9.3. The system should have a customizable user interface.

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C.5.10. Absentee Ballot Delivery, Ballot Marking and Ballot Return

C.5.10.1. The SEB will export election data for each county from the BOSS election management system in a .txt format that will define each ballot style. The system shall provide for a method to create and prepare each ballot style generated by Oklahoma as online electronic ballots using either .pdf, .ps, .eps, .pcl, .prn, .xps, or .ps files to be made available to voters.

C.5.10.2. The system shall allow for a scrolling ballot or a single race at a time allowing the user to select “back” or “next” to move through the contests.

C.5.10.3. The system shall indicate the number of races to be voted e.g., 1 of 20, 2 of 20, 3 of 20, etc., if the races are displayed one at a time.

C.5.10.4. The system shall support the use of the English language and have the ability to add additional languages as required by law.

C.5.10.5. The system shall ensure ballots are available for UOCAVA voters beginning no later than 45 days before Federal and/or State elections and at the time specified by the State Election Board for all other elections as determined by the SEB.

C.5.10.6. The system shall provide for a secure method to provide the voter access his/her unique ballot style based upon his/her voter registration as required by Oklahoma law.

C.5.10.7. The system shall guarantee only eligible UOCAVA voters who have made timely application for absentee ballots and who have requested online ballot delivery can access the voting platform. The authentication for accessing the voting platform will require the voter to provide a combination of the following voter information: Voter identification number, last name, first name, Oklahoma residence address, last four digits of Social Security Number and date of birth.

C.5.10.8. The system shall guarantee the monitoring tools cannot compromise the voter's privacy.

C.5.10.9. The system shall protect the privacy and integrity of the ballot, along with the voter's identity.

C.5.10.10. The system shall ensure that the voter's selections are not stored or saved on the server.

C.5.10.11. The system shall allow voters to select their voting options by directly selecting the candidate or choice instead of using a code or indirect selection method.

C.5.10.12. The system shall provide voters with instructions/help to vote his/her ballot.

C.5.10.13. The system shall provide a HAVA-compliant online onscreen marking interface for voters to mark their ballot including logic to prevent overvoting and a warning to easily determine races that are undervoted.

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C.5.10.14. The system shall clearly distinguish the selected voting option from the non-selected options.

C.5.10.15. The system shall provide the voter with the opportunity to confirm, change and/or correct their ballot by navigating directly to the appropriate race from a review screen prior to printing if contests are presented one at a time.

C.5.10.16. The system shall provide for creation of a 2D barcode to be printed on a system-voted ballot that contains the voter's choices but that does not contain any information that identifies the individual voter.

C.5.10.17. The system shall create materials defined by the SEB, which will include: Voted ballot, instructions, oath and affidavit certificate, secrecy sleeve template and return mailing envelope template (for ballots being returned by mail) and electronic transmittal instructions (for ballots being returned by FAX).

C.5.10.18. The voter information to be prepopulated shall include: voter name, mailing address, precinct number, MESA voter identification number, and any other unique information used by MESA to identify a returned absentee ballot and record it's receipt.

C.5.10.19. The system shall support printing ballots on both standard U.S. and European paper and allow printing to be completed on a local printer available to the voter.

C.5.10.20. The system shall allow voters to track on-line the status of their ballot; including the date it was received by County Election Board and whether it was counted.

C.5.10.21. The online ballot should have a clear target area to the left of each of the ballot choices.

C.5.10.22. The system should track and collect statistics by county for the number of ballots that are:

C.5.10.22.1. Successfully returned by domestic active military, spouses and dependents.

C.5.10.22.2. Successfully returned by overseas active military, spouses and dependents.

C.5.10.22.3. Printed but not returned by domestic active military, spouses and dependents.

C.5.10.22.4. Printed but not returned by overseas active military, spouses and dependents.

C.5.10.22.5. Printed but not returned by overseas civilians.

C.5.11. Messaging and Availability

C.5.11.1. The system shall be available 24/7 within a Service Level Agreement of 99%.

C.5.11.2. The system shall provide for a method to allow the users to obtain assistance and help.

C.5.11.3. The system should allow for messaging capability initiated by the voter to the SEB or CEB.

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C.5.11.4. The system should allow the SEB or CEB to send messages to groups of voters.

C.5.11.5. The system should allow the SEB or CEB to send and to respond to messages for individual voters.

C.5.12. Training

C.5.12.1. The vendor shall provide in person comprehensive training in all areas of the online system.

C.5.12.2. The vendor shall provide in person training prior to the system going live for the SEB in Oklahoma City, Oklahoma.

C.5.12.3. The vendor should provide all documentation and training materials needed to perform a comprehensive train-the-trainer program.

C.5.13. Service Agreement and Product Support:

C.5.13.1. The vendor shall provide for a customer based service level agreement.

C.5.13.2. The vendor shall continue to provide high availability and a high performance system.

C.5.13.3. The vendor shall continue to provide enhancements to the functionality of the application.

C.5.13.4. The vendor shall describe their Help Desk services that will provide the SEB and CEB's with timely resolutions of error conditions or deficiencies.