

The State of Texas



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Carlos H. Cascos
Secretary of State

MEMORANDUM

TO: Keith Ingram, Director of Elections, Secretary of State's Office

FROM: Christina Worrell Adkins, Staff Attorney, Elections Division Legal Section

DATE: August 12, 2016

RE: Election System and Software Voting Systems Examination

On June 8-9, 2016, Election Systems & Software ("ES&S") presented for examination ES&S EVS 5.2.1.0 voting system. This system includes both components that were previously certified in Texas and new components that had never been through the Texas certification process.

Component Submitted for Certification	Version	Previous Texas Certification
ElectionWare	4.7.1.0	N/A
Event Log Service	1.5.5.0	N/A
ExpressVote Previewer	1.4.1.0	N/A
Removable Media Service	1.4.5.0	N/A
ExpressVote	1.4.1.0	N/A
VAT Previewer	1.8.6.0	9/2/2014
Election Reporting Manager (ERM)	8.12.1.0	9/2/2014
AutoMARK	1.8.6.0	9/2/2014
DS200	2.12.1.0	9/2/2014
DS850	2.10.1.0	9/2/2014

Pursuant to Texas Administrative Code §81.60, ES&S submitted their application for state certification, Forms 100 and 101, the Technical Data Package, authorization letters, and a copy of all firmware/software and source codes sent directly from NTS, a nationally accredited voting system test laboratory. Examiners were given a copy of the application and testing materials for review prior to the two-day in-person examination that occurred on June 8 and 9, 2016.

Examination

On Day 1 of the examination, the technical examiners, Stephen Berger, Tom Watson and James Sneeringer, were present to observe and verify the installation of the vendor's software. I was present for observation purposes, but did not participate in the installation portion of the exam. In addition to observing the installation of the software, the technical examiners also verified version numbers of the software and component parts.

After the installation was completed, I received assistance from Secretary of State Staff Attorney Andre Montgomery with testing the AutoMARK Voter Assist Terminal ("AutoMARK") and the ExpressVote terminal for compliance with state and federal accessibility guidelines. The AutoMARK was previously certified for use in Texas elections and is designed as a ballot marking device for pre-printed ballots that are read through a scanner. The ExpressVote is also a ballot marking device that produces a ballot card that lists the voter's selections. The ballot card is subsequently read by a scanner. After reviewing and testing both the AutoMARK and the ExpressVote's tactile, audio, and visual input devices and approaches to marking and casting a ballot, we determined that both devices met the accessibility guidelines dictated by both federal and state law.

On Day 2 of the examination, all examiners were present. The vendor presented an overview of EVS 5.2.1.0 and provided an explanation and demonstration of the new and existing equipment. Examiners were then given the opportunity to test each piece of equipment with a pre-marked "test deck" of ballots to ensure that the equipment performed the tasks required under state law and accurately tabulated the ballots cast. The pre-marked test deck was marked and hand tallied by staff from the Secretary of State's office on ballots provided by the vendor. The vendor was not previously made aware of how the ballots would be marked. Some ballots were marked using the AutoMark and ExpressVote before being deposited in the scanners. Voted ballots were tabulated through the DS200 (precinct ballot counter), and DS850 (central tabulator). The tabulation reports from the DS200 and DS850 all matched the hand counted tally from the pre-marked test deck.

On July 19, 2016, ES&S provided an additional demonstration of their online sample ballot program called "ExpressPass." This program gives the voter the opportunity to call up a sample ballot, make their selections online and print out the pre-marked sample ballot. The sample ballot is printed with both the voter's selections and a QR code that can be read on the ExpressVote. After checking in and activating a voting session on the ExpressVote, a voter can then scan the QR code on their sample ballot and their ballot selections will appear on the screen. The voter can make changes to their selections or completely start over before printing their ballot card. After they print their ballot card, they can deposit it directly into the scanner or ballot box. The sample ballot was not tied to a particular voter, nor were their on-line selections saved anywhere in the software.

Notable Findings:

1. ExpressVote Ballot Marking Device:

The ExpressVote Ballot Marking device is a unique ballot marking device in that it does not use pre-printed ballot stock. The voter is given a ballot card that is either blank or has a barcode pre-printed on it that signifies which ballot style the voter receives. The ExpressVote voting

session is initiated when the voter inserts the ballot card into the machine. At this point, the voter makes their ballot selections on the screen and is subsequently given the option to review all selections before printing their ballot card. Once printed, the ballot card contains a listing of only the voter's selections (cast vote record) rather than all options presented on the electronic ballot. There was discussion during the course of the exam as to whether the ballot card as a cast vote record can serve as the ballot of record in Texas elections. We concluded that the ballot card can serve as the ballot of record pursuant to Section 124.062 of the Texas Election Code. This provision provides that electronic system ballots can include two or more separate parts and that a multipart ballot can must comply with the same standards as a voting system using a ballot consisting of only a single part. The ballot that is presented on the screen of the ExpressVote contains all elements and instructions that are required for a ballot under federal voting system guidelines. Additionally, ES&S was able to demonstrate that the ballot card was capable of meeting the requirements under Texas law.

One issue to note with the ExpressVote is that it is capable of allowing the voter to have their ballot deposited into a card bin that is attached to the ExpressVote rather than releasing the ballot back to the voter to deposit into a scanner. At this time, the attached card bin does not meet the definition of a ballot box under Texas law, therefore this option should not be employed by entities wanting to use the ExpressVote for their elections.

2. Online Sample Ballot Marking Software:

When the SOS reviewed the ExpressPass sample ballot marking program, we noted that this program gives voters the ability to make their vote selections in the privacy of their own home and without assistance from election workers. This feature may prove to be very popular with members of the disability community. Additionally, this has the potential to shorten line lengths and wait times in the polling place, as it could shorten the amount of time voters spend in the voting booth. The ExpressPass does have feature that allows voters to send the sample ballot QR code to their phone so they do not need a printed sample ballot to take into the polling place. Under Section 64.014 of the Texas Election Code, wireless communication devices and devices that record images or sound are not permitted within 100 feet of a voting station which renders this option unusable. ES&S demonstrated that this feature can be turned off so that the voter is not given this option when generating their sample ballot. If the system is certified, I believe that the ExpressPass program would be a complementary feature to the ExpressVote provided that the cell phone option is deactivated.

CONCLUSIONS

Over the course of the two-day in-person examination, the subsequent demonstration and the review of the materials that were contained in the vendor's application, there was no evidence that EVS 5.2.1.0 along with the DS200, DS800, AutoMARK, and ExpressVote failed to comply with the Voting System Standards outlined in Sections 122.001, 122.032, 122.033, and 122.0331 of the Texas Election Code or the rules outlined in Chapter 81, Subchapter C of the Texas Administrative Code.

Overall, EVS 5.2.1.0 met the requirements prescribed by the Texas Election Code, and the Texas Administrative Code that pertain to voting system certification. Therefore, I recommend certification of the aforementioned system.