The State of Texas

Elections Division P.O. Box 12060 Austin, Texas 78711-2060 www.sos.state.tx.us



Phone: 512-463-5650 Fax: 512-475-2811 Dial 7-1-1 For Relay Services (800) 252-VOTE (8683)

Rolando B. Pablos 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: May 18, 2017

RE: Election System and Software Voting Systems Examination

On April 18-20 2017, Election Systems & Software ("ES&S") presented for examination ES&S EVS 5.2.2.0 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
ES&S Voting System (EVS)	5.2.2.0	NA
ElectionWare (and related components)	4.7.1.1	12/15/2016
Election Reporting Manager (ERM)	8.12.1.0	12/15/2016
ExpressVote	1.4.1.20	12/15/2016
AutoMARK	1.8.6.1	12/15/2016
DS200	2.12.2.0	12/15/2016
DS850	2.10.2.0	12/15/2016
DS450	3.0.0.0	N/A

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 April 18 and 19, 2017.

Examination

On Day 1 of the examination, technical examiners, Stephen Berger, James Sneeringer and I 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 Tim Juro 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 5.2.2.0 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. Voted ballots were tabulated through the DS200 (precinct ballot counter), and DS850 (central tabulator) and the new DS450 (central tabulator). The tabulation reports from the DS200, DS450, and DS850 all matched the hand counted tally from the pre-marked test deck.

On April 20, 2017, 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. The sample ballot was not tied to a particular voter, nor were the voter's on-line selections saved anywhere in the software.

Notable Findings:

1. DS450 Central Scanner:

The DS450 is ES&S new central scanner that is smaller, and provides a more affordable option for entities that don't need the speed in counting ballots that the DS850 offers. The DS450 also has some additional features including LED lights on the outstack bins that can offer a visual cue to central counting station personnel when a certain ballots need to be adjudicated or rescanned for various purposes. The DS450 is capable of scanning both traditional paper ballots and the cast vote records generated by the ExpressVote. This is a good feature as it would allow counties to consolidate their counting equipment since it can serve multiple ballot styles, sizes and formats.

2. <u>ExpressPass software:</u>

ES&S demonstrated their ExpressPass program which allows voters to generate a voter specific sample ballot online, print out a copy of the voter's potential ballot choices, and use the QR code

generated with the online sample ballot to expedite their voting session on an ExpressVote. The ExpressPass does not contain any identifying information related to a voter other printing a map of to the appropriate polling place location for that ballot. The servers do not save any information when generating the ExpressPass nor does using the ExpressPass in the polling place require any connection to the internet. Because this program allows the voters the privacy to make their selections without assistance from an election official and could help to reduce the amount of time voters use each voting station, I believe this feature would be beneficial for use in Texas Elections.

Using the ExpressPass as an online sample ballot generator does not appear to fall under the scope of certification as this is not considered part of the voting system and was not part of the EAC certification. With respect to Texas certification, the only concern with the ExpressPass would be the QR code scanner that the ExpressVote uses to scan the sample ballot and call up the voter's selections. The Secretary of State could place limitations on this part of the product, but any concerns would need to be weighed against the potential benefits to the disability community.

CONCLUSIONS

Over the course of the examination, the subsequent demonstration and he review of the materials that were contained in the vendor's application, there was no evidence that EVS 5.2.2.0 along with the DS200, DS800, DS450, 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 5.2.2.0 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.