

The State of Texas



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Secretary of State

MEMORANDUM

TO: Keith Ingram, Director of Elections, Texas Secretary of State

FROM: Chuck Pinney, Staff Attorney, Elections Division, Texas Secretary of State

DATE: July 29, 2019

RE: Election Systems & Software – EVS 6.0.4.0 Voting System Examination

In accordance with my appointment by the Texas Secretary of State as a voting system examiner under Tex. Elec. Code §122.067, I present my report on the voting system examination which took place on June 26-27, 2019, in the offices of the Texas Secretary of State at the James E. Rudder Building, 1019 Brazos, Austin, Texas 78701.

On June 26-27, 2019, the examiners appointed by the Texas Secretary of State and the Texas Attorney General examined EVS 6.0.4.0, a voting system that was presented by Election Systems & Software (“ES&S”) for certification in Texas. The following hardware and software components were examined at the Office of the Secretary of State:

Component	Version	Previous Texas Certification Date
ExpressTouch	1.0.3.0	3/28/2019
DS200	2.17.4.0	3/28/2019
DS450	3.1.1.0	3/28/2019
DS850	3.1.1.0	3/28/2019
ExpressVote (HW 1.0)	1.5.2.0	3/28/2019
ExpressVote (HW 2.1)	2.4.5.0	3/28/2019
ExpressVote XL (HW 1.0)	1.0.3.0	3/28/2019
ElectionWare	5.0.4.0	3/28/2019
ExpressLink	1.5.1.0	3/28/2019
Event Log Service	1.6.0.0	3/28/2019
ExpressVote Activation Card Printer	N/A	3/28/2019
ExpressVote Previewer	1.5.2.0/2.4.5.0	3/28/2019

PaperBallot	5.0.4.0	3/28/2019
Removable Media Service	1.5.1.0	3/28/2019
Toolbox	3.5.0.0	3/28/2019

For the reasons outlined below, I recommend that this system be certified by the Texas Secretary of State under Tex. Elec. Code §§122.031 and 122.039.

Background

ES&S previously received certification in Texas for the Unity voting system and previous versions of EVS. The most recent version of their software, EVS 6.0.2.0, was presented by ES&S in January 2019, and was certified in March 2019.

The voting system that was the subject of this examination, EVS 6.0.4.0, was certified by the U.S. Election Assistance Commission (“EAC”) on May 3, 2019.

Summary of the Examination

The examination of EVS 6.0.4.0 took place on June 26-27, 2019.

The first day of the exam involved the installation of the software and firmware for EVS 6.0.4.0 off of the trusted build provided to our office by the testing lab.

At the end of the firmware and software installation on the first day of the exam, Macy Cotton (an attorney for the Secretary of State) and I conducted the accessibility testing and tested the visually impaired functions, the sip-and-puff controller, and the paddle controller. The system performed well during the accessibility testing and presented no issues.

At the beginning of the second day of the exam, the vendor provided a presentation of the software and the updates involved in the current version of EVS.

After the vendor presentation, the examiners tested the equipment by voting a series of test ballots and comparing the results of those test ballots. The examiners also conducted additional testing on various components of the system to determine if they could generate any issues or errors.

Analysis

The standards for a voting system in Texas are outlined in Texas Election Code Chapter 122. Specifically, the system may only be certified for use in Texas if it satisfies each of an enumerated list of requirements contained in Texas Election Code §122.001. Because the system satisfies each of those requirements, I would recommend that this system be certified.

EVS 6040 is an excellent voting system that operates efficiently and effectively. The technical examiners have discussed the system’s technical specifications in detail and the observations in

those reports are consistent with my own observations of the system. Therefore, I will refrain from repeating their observations and will instead focus on the system's compliance with the legal standards for certification.

In the course of the examination I observed no significant issues with the operation of the system and did not observe any conditions that would affect the system's ability to comply with the voting system standards under state or federal law. However, I do have a general observation regarding the system and how entities can adopt the system and comply with the ballot numbering requirements of the Election Code.

Ballot Numbering

The Texas Election Code establishes a few different ballot numbering requirements in various sections of the Code. Specifically, any ballots used in a Texas election must be (1) numbered consecutively, beginning with the number "1", (2) numbered so that a specific range can be linked to a specific polling place, and (3) must be distributed to voters non-sequentially in order to preserve ballot secrecy. Texas Election Code §§51.006-51.008, 52.062, 62.009. The Secretary of State's Office has authority under Texas Election Code §52.075 to approve the form of a ballot used in an electronic voting system to ensure that these requirements are addressed by those systems while still conforming to the formatting requirements of that system.

The purpose of these requirements is to allow a jurisdiction to maintain inventory control, to track where ballots have been distributed, to ensure that the correct ballots are used and distributed at the correct location, and to ensure that ballot secrecy is preserved for each voter.

EVS 6040 does not provide a software solution that addresses the strictest interpretation of the ballot numbering statutes of the Election Code. However, I would still recommend certification of the system because there are ways that a jurisdiction could adopt EVS 6040 and still comply with the ballot numbering requirements of the Election Code.

While it does not address the strictest interpretation of these statutory requirements, the ExpressVote Activation Card Printer does address the essential purposes of these statutory ballot numbering requirements. That device is used to generate a specific ballot style for a voter during the check-in process, and also generates a random unique identifying number that includes a two-alpha character identifier for the polling place that it was used at (i.e. precinct 1 would be AA, precinct 2 would be AB, etc.). Ballot numbers generated through the ExpressVote Activation Card Printer are tracked through the system, and a report can be generated that identifies which ballot numbers were assigned at each polling place. The system does not allow duplicate numbers to be generated in an election. This system allows the jurisdiction to maintain inventory control of the ballot stock used, to randomize the ballot number given to a voter to preserve ballot secrecy, to track which polling place each ballot was distributed to, and to ensure that each ballot is used at the correct location.

Alternatively, a jurisdiction adopting EVS 6040 could still meet the ballot numbering requirements of the Election Code by pre-printing and pre-numbering ballot stock according to the requirements outlined in the ballot numbering statutes listed above. This may involve an

additional expense for those jurisdictions, but it would allow them to comply with the strictest interpretation of these statutory requirements.

Because it is possible for a jurisdiction to adopt EVS 6040 and comply with the ballot numbering requirements of the Election Code, I would recommend certification of this system.

Conclusion and Recommendation

Because EVS 6040 is an effective, highly usable voting system that complies with the necessary requirements for a voting system under Texas law, I would recommend certification of this system.