Voting System Examination Election Systems & Software (ES&S)

Prepared for the Secretary of State of Texas

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This report conveys the opinions of the Attorney General's designee from an examination of the equipment listed, pursuant to Title 9, Chapter 122 of the Texas Election Code, section 122.036(b).

Examination Date January 22, 2019 **Report Date** February 21, 2019

Examination of ES&S Voting System (EVS) 6.0.2.0

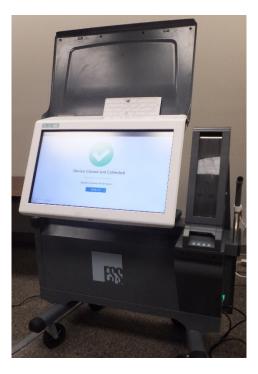
EAC Certification Number: ESSEVS6020

| Components Examined | Version |
|-------------------------------------|----------|
| DS200 Precinct Ballot Counter | 2.17.0.0 |
| DS450 Central Scanner and Tabulator | 3.1.0.0 |
| DS850 Central Scanner and Tabulator | 3.1.0.0 |
| Electionware | 5.0.1.0 |
| Event Log Service | 1.6.0.0 |
| ExpressLink | 1.5.0.0 |
| ExpressTouch | 1.0.0.0 |
| ExpressVote & Previewer, HW v. 1.0 | 1.5.0.0 |
| ExpressVote & Previewer, HW v. 2.1 | 2.4.0.0 |
| ExpressVote Activation Card Printer | NA |
| ExpressVote XL | 1.0.0.0 |
| PaperBallot | 5.0.0.0 |
| Removable Media Service | 1.5.0.0 |
| Toolbox | 3.3.0.0 |

Changes from Last Version Examined

This exam was focused on new versions of software from ESS. The hardware is identical to what we examined in September of 2018, with the exception that the ExpressVote XL has been added to the lineup. The ExpressVote XL has a full-face ballot display on a 32-inch touch screen. (See the photo at right.)

The new software in EVS 6.0.2.0 (which includes Electionware version 5.0.1.0) allows support of the ExpressVote line (which was previously only certified in Texas as a ballot-marking device) as a Direct-Recording Electronic (DRE) voting station, meaning that there is no paper record of each person's vote. Instead, the voting records are stored electronically in a highly reliable, redundant electronic memory. *Redundant* means that each vote is stored in two separate memories, providing a backup record in case one should fail.



This ExpressVote is a DRE option from ESS in addition to the ExpressTouch voting station, a DRE which was certified in Texas in September 2018. Therefore, certification of The ExpressVote as a DRE will give ESS two lines of Texas-certified DREs.

New Concerns

My new concerns pertain to the new ExpressVote XL.

First, the XL introduces a new style of ballot to Texas, where the choices are presented as a table, with the races as the rows and the candidates as the columns. (See the photo below, a closeup of the XL screen.)

Although this is new to Texas, it could work well when there are only partisan contests. (In the photo, imagine that the four columns labeled non-partisan were gone.) However, the layout shown in the photo, with four columns labeled non-partisan and the others labeled with party names, is very confusing. It is made worse by the partisan races being listed on the right, so that the voter must scan across all the empty columns to see which party a candidate belongs to.

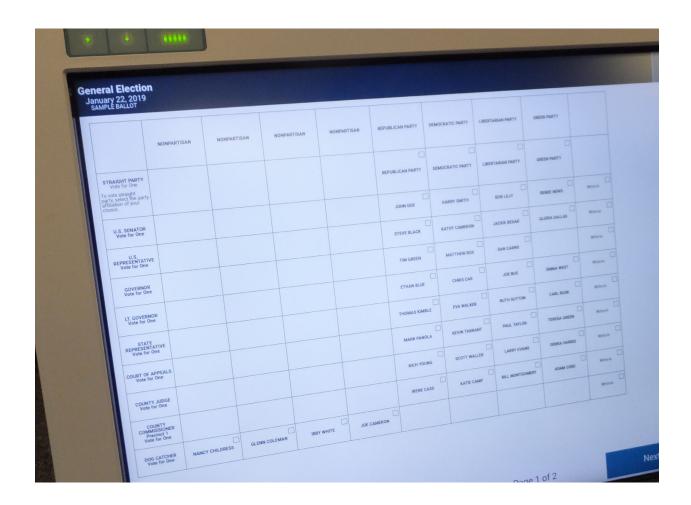
Also, it's possible to configure some pages with the parties displayed horizontally, as in the photo, and some pages with the parties displayed vertically, as is the custom in Texas. This would be disorienting for the voters, who must reorient their thinking for each page.

This style of ballot presentation may be useful in other states, but I am very skeptical about its usefulness in Texas, where there is virtually always a mixture of partisan and non-partisan

contests. The ballot as configured below is not user-friendly. The voter will perceive this ballot as unnecessarily complex to navigate.

Certification could have the condition that the parties always be displayed vertically, but then there is little justification for the cost of this very large display. Perhaps the risk is small, since the XL would be attractive only to very large counties, which would theoretically have the training and experience to avoid the pitfalls of the XL. Still, the configuration seen in the photo did occur in the setup for this exam, so it can happen.

I cannot think of a circumstance where I would advise a Texas jurisdiction to buy ExpressVote XLs, yet I am loath to deny certification or to try to write a complex condition to attach to certification.



Summary

I recommend certification of EVS 6.0.2.0, with the possible exception of the ExpressVote XL.