

January 12, 2021

Douglas A. Kellner, Co-chair
Peter S. Kosinski, Co-chair
Andrew J. Spano, Commissioner
Anthony J. Casale, Commissioner
New York State Board of Elections
40 North Pearl Street, Suite 5
Albany, NY 12207-2729

Dear Commissioners,

We write today to express our opposition to the certification of Elections Systems & Software (ES&S) EVS 6.0.4.1 voting system, currently under consideration by the New York State Board of Elections, which includes the ExpressVote XL ballot marking device. We are currently representing plaintiffs in litigation in Pennsylvania seeking to decertify the ExpressVote XL on grounds that it does not comply with the Pennsylvania election code. We believe the ExpressVote XL similarly violates key provisions in New York State law.¹

The ExpressVote XL is marred by significant design and development flaws which make its adoption unwise. In addition, the test reports provided to the New York State Board of Elections by SLI Compliance and NYSTEC reveal several discrepancies between EVS 6.0.4.1, ExpressVote XL, and New York's voting system requirements. Three of the discrepancies identified in testing remain unresolved. We believe the ExpressVote XL also violates additional New York state requirements and uses unacceptably outdated software. These discrepancies are significant and should not be dismissed, and EVS 6.0.4.1 and the ExpressVote XL should be disqualified from certification.

¹ Free Speech For People is a non-profit, non-partisan public interest legal organization that works to renew our democracy and our United States Constitution for the people. As part of our mission, we are committed to promoting, through legal actions, secure, transparent, trustworthy and accessible voting systems for all voters.

ES&S’s EVS 6.0.4.1 key components are built on outdated software that is no longer supported for security patches. Moreover, ES&S misrepresented this in its documentation.

This is a critical and consequential failure that should immediately disqualify the certification of EVS 6.0.4.1. Moreover, ES&S efforts to market its systems, built on outdated software to New York State, should raise serious questions regarding its quality, competency, trustworthiness, and commitment to security.

In July of 2019, ES&S came under fire when an Associated Press news report revealed that ES&S was selling voting systems built on the Windows 7 operating system.² For several years Microsoft had warned that Windows 7 would reach end-of-life in January 2020 and no longer receive security updates from Microsoft.³ At that time, ES&S told the AP that it expected to be able to offer customers upgraded systems based on Windows 10 by the fall of 2019. In a press release posted on its website on September 24, 2019, ES&S announced the federal certification of EVS 6.1.0.0. The release stated:

Today the Federal Election Assistance Commission (EAC) certified Election Systems & Software (ES&S) voting systems using Windows 10 operating systems. The newly certified release, ES&S EVS 6.1.0.0, will now be sent to respective states for state testing and approval.⁴

Despite public pronouncements 18 months ago to move state customers to a newer system based on Windows 10, ES&S has engaged in a certification and marketing campaign in New York for its system using outdated software.

ES&S’s decision to continue to push its system that uses Windows 7 in New York State is even more troubling given findings by SLI and NYSTEC in the New York state testing process. In its Technical Data Package submitted to SLI Compliance for testing, ES&S listed its “[Commercial off-the-shelf] software implementation plan” as:

*Windows 10 Enterprise
Windows Server 2016*

² Tami Abdollah, “AP Exclusive: New election systems use vulnerable software,” *Associated Press*, July 13, 2019. Available at: <https://apnews.com/article/e5e070c31f3c497fa9e6875f426ccde1>

³ *Id.*

⁴ See attachment. Also available at: <https://www.essVote.com/blog/our-technology/ess-windows-10-based-operating-systems-certified-by-eac/>

Sumatra PDF

In reviewing the system, SLI examined the system overview directly from the workstation setup and found the devices to be running:

Windows 7 Enterprise
Windows 7 Professional
Windows Server 2008
Adobe Acrobat

In other words, documentation in the form of the Technical Data Package (TDP) distributed by ES&S misrepresented the software running in EVS 6.0.4.1. EVS 6.0.4.1 is running software that is acutely and unacceptably outdated, including: Windows 7 Enterprise, Windows 7 Professional, and Windows Server 2008.

NYSTEC and SLI classified this discrepancy as “resolved” because ES&S corrected the documentation to accurately reflect the software used in 6.0.4.1, but this is hardly an acceptable remedy. It’s unknown how many county election administrators may have reviewed the incorrect TDP and believe, inaccurately, that EVS 6.0.4.1 does not use outdated software.

ES&S’s misrepresentation of EVS 6.0.4.1 is not an isolated incident. Last year ES&S was rebuked by the U.S. Election Assistance Commission (EAC) for marketing its voting systems with wireless modems as federally certified when they were not.⁵ Given this record of misrepresentation, the New York State Board of Elections should maintain healthy skepticism of ES&S’s reliability and candor.

Voter-verifiable ballot

A voter-verified paper ballot is the key component to a resilient, transparent, auditable and reliable election system. A voting system should provide a voter-verified paper ballot that is easily and consistently verified by the voter to ensure that the ballot can be relied on to provide accurate ground truth of the voter’s intent. In addition to the disqualifying failures identified in the test reports, there are several serious deficiencies with the paper ballot provided by the ExpressVote XL that diminish its effectiveness to provide a reliable record of voter intent,

⁵ Kim Zetter, “Election commission orders top voting machine vendor to correct misleading claims,” *Politico*, August 13, 2020. Available at: <https://www.politico.com/news/2020/08/13/election-voting-machine-misleading-claims-394891>

necessary to ensure accurate, trustworthy elections. We will not discuss all of these deficiencies to avoid repetition from other concerned citizens and public interest organizations.

ES&S classifies the ExpressVote XL as ballot marking device that produces a voter-verified paper ballot. SLI classifies the ExpressVote XL as direct record electronic (DRE) that provides a voter-verified paper audit trail (VVPAT), but ES&S disagrees with classification. Under either classification the paper record produced by the ExpressVote XL fails to meet provisions in New York election code.

1. Votes recorded by the ExpressVote XL are not verifiable.

New York Election Law § 7-202(1)(e) requires that the voting system:

provide the voter an opportunity to privately and independently verify votes selected

After the voter has made selections on the ExpressVote XL, the device prints out a ballot card with the vote choices recorded in barcode, and a summary of the voters' selections in human readable text. When the voter casts the ballot, the ballot is fed through a scanner and the votes are read from the barcode. The ballot then drops into a sealed ballot box.

There is much discussion about the pros and cons of using barcodes in vote recording. The simple fact is by recording and scanning the vote selections in and from an indecipherable barcode, the ExpressVote XL does not provide voters an opportunity to privately and independently verify votes selected and recorded, and does not comply with New York State election law.

Though the vote choices are also recorded in human readable text, this amounts to little more than smoke and mirrors as the text is not used to count votes. Supporters of barcodes often dismiss concerns by arguing that in the post-election audit process, the vote selections will be reviewed by the human-readable text but this argument is deeply flawed. Post-election audits conducted in New York State do not ensure that an audit which reveals significant discrepancies in an election result will force a full hand count from the human readable text, or that the full-hand count would supersede a potentially wrong election result tallied from improperly

recorded barcodes.⁶ In other words, the human-readable text will not regularly or reliably be used to count votes, and will have no regular or expected impact on the election outcome. The votes are recorded in an unreadable barcode and tallied from the unreadable barcode, which violates New York election law § 7–202(1)(e) because a voter is unable to verify the votes selected.

2. Ballot summary card fails to comply with New York State requirements

If the ExpressVote XL is classified as a DRE voting device, as SLI classifies it (and ES&S disputes), the ballot summary card produced is considered a VVPAT and does not have to meet the requirements for a ballot. However, even under this classification, the ExpressVote XL still fails to meet a critical New York state requirement for a VVPAT (SLI finding *ESS6041-12*).

New York wisely required that once the VVPAT is printed, the full electronic ballot must also be visible to the voter to facilitate a thorough review of the paper record by allowing the voter to review the ballot in its entirety, with every candidate and ballot question displayed on the electronic interface. The ExpressVote XL fails this important requirement because, as the paper ballot card is presented to the voter, a message pops up on the electronic ballot interface obstructing the voter's view of the electronic ballot.

If the ExpressVote XL is classified as a ballot marking device as ES&S represents, it still fails to satisfy New York requirements. As a ballot marking device, the summary ballot card produced must conform to New York State Election Law § 7–104 requirements for ballot design. New York state election code requires ballots to contain *all* candidates and parties, and includes other particular ballot design specifications. The ballot summary card produced by the ExpressVote XL only lists the candidates the voter selected and fails to meet other design specifications, which is violative of the statute.

⁶ New York State audit rules requires both county election commissioners, each appointed by their political parties, to agree to escalate an audit to a full hand-recount. In today's highly charged partisan environment it is difficult to envision any election commissioner of the same party as a putative winning candidate agreeing to a full hand recount which may overturn a reported win for that party and candidate. The rules as written essentially guarantee that irregularities or miscounts uncovered through an audit will never result in a full hand recount.

3. The ExpressVote XL is unable to print the activation card in in the language chosen by the voter.

Failure to print the activation card in the language chosen by the voter violates New York Code of Rules and Regulations § 6209.2(f)(3) (SLI discrepancy ESS6041-18). ES&S's response, that the U.S. Election Assistance Commission and other states have certified the ExpressVote XL, is wholly irrelevant and inapplicable. New York requirements are developed to meet the needs of New York voters, and the State Board of Elections is responsible for upholding these requirements.

ES&S's EVS 6.0.4.1 fails to meet multiple New York state voting system requirements and should not be certified. Please feel free to contact us if you have any questions or concerns. We stand ready to help any way we can.

Sincerely,

Susan Greenhalgh
Senior Advisor on Election Security
Free Speech For People