

## **Testimony Regarding Unified Testing Initiative**

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*January 29, 2009*

Good morning. On behalf of Election Systems & Software (ES&S), one of the leading providers of voting solutions in the country, I appreciate the opportunity to talk with you today. As you know, our company currently provides voting systems and support services to more than 4,300 jurisdictions across the country.

We have a long history of delivering to jurisdictions voting systems that meet all established standards for security, accuracy, reliability and durability. Our systems have been rigorously tested and evaluated for many years by independent experts as part of national and state-level certification programs. In fact, our company was the first company ever to receive certification of voting equipment under 1990 VSS and the first company ever to achieve certification of an entire product line under the 2002 VSS. ES&S fully recognizes the importance of the federal certification process and we have been fully committed to work with both NASED and the EAC to better meet the needs of voters and election officials.

We also recognize the important role state level voting system reviews can play. They can provide states additional assurances the equipment deployed in their state meets their individual needs and preferences.

For a variety of reasons, at this point, though we fully support and encourage an initiative to improve the effectiveness of certifications overall, we believe it is premature for the EAC to implement the proposed Cost and Unified Testing Initiative. Frankly, we don't believe the EAC certification process is ready to take on that additional burden. Further, we believe that implementation of that approach under the current circumstances would slow down or prevent voting system enhancements from being made. Adding to the EAC's already full plate by putting additional state level testing under the Commission's authority will likely slow down state and federal certification. Quite frankly, neither states, nor the voting system manufacturers can afford for those processes to become even more delayed and time consuming.

The voting system test laboratories are already challenged to meet their existing workload in a timely manner. Our voting systems have been examined by these testing authorities for many years and we recognize this is an extremely challenging time for the labs. Adding more state level tests to their workload will slow down the process of

certifying new voting systems even more. Those delays do not help jurisdictions or voters.

Since the inauguration of the EAC Testing and Certification Program two years ago this month, the EAC, its Technical Reviewers, the Labs, and the Manufacturers have all endured a very extensive and costly learning curve to get us all to the point we are today. Time frames have been severely elongated resulting in numerous lost opportunities for the Manufacturers and putting a significant financial strain on all of us. The elongated time frames have also delayed the ability for the Manufacturers to get to the next level of standards and systems. The process has also proven to be unfair to the earliest participants in the new Program. It was us early participants that funded the labs while the EAC, the Technical Reviewers, and the Voting System Test Labs worked through the numerous growing pain issues pertaining to the new Program.

Some specific factors we believe have contributed to the escalation of costs and ineffectiveness of the current process are:

1. The EAC's formal ruling in the Voting System Test Laboratory Accreditation Manual ruling precluding voting system manufacturers from having access to monitor the laboratory's performance. This ruling is in direct conflict with NIST Handbook 150:2006 where it is stated "each test laboratory is required to cooperate with the customer's desire to monitor the laboratory's performance". Examples of this willingness include "providing the customer or the customer's representative reasonable access to relevant areas of the laboratory for the witnessing of the tests and/or calibrations performed by the customer."

Labs utilizing testing personnel with virtually no election experience or very limited knowledge of the election process are being allowed to make inaccurate and inappropriate decisions in the testing process. Without the ability to monitor and detect gross negligence in testing, the Manufacturers have been burdened in very costly delays and higher costs for required retesting often times taking weeks and tens of thousands of dollars to resolve. New VSTL staffs were virtually skydiving with no training or instructional readiness---approaching tasks with limited knowledge and receiving virtually "on-the-job-training" at the Manufacturer's expense, lost time and frustration. It is strongly suggested the EAC consider amending the Voting System Test Laboratory Accreditation Manual to accept the NIST Handbook 150:2006 provision allowing manufacturer's to monitor the laboratory's performance to ensure quality testing is being performed at all times.

2. Agreed upon testable requirements and acceptable Test Plans not being completed at the time of inauguration. ES&S submitted application for certification in March 2007. In November 2008, after 21 months and nearly 20,000 hours of testing invested, the testable requirements and an acceptable Test Plan was approved for the system we currently have in certification. Due to

the fact that these testable requirements and acceptable Test Plans were not established and agreed upon by the EAC, the Technical Reviewers, and the accredited Labs in advance, there were many journey changes that caused delays, re-testing, and added work. Had these test requirements and test plans had been established in advance, these delays and excessive costs could have been significantly reduced or possibly avoided.

It is our observation that the first Manufacturers to engage in VSTL certification are bearing all of the first time learning process, requisite mistakes and do-over's that are needed on anything performed for the first time. These lessons learned are then of benefit (reduced time and costs) to all follow-on submission companies. For this reason many of us in the Manufacturer community would ask that for first pass certification, the EAC consider placing caps on the cost to the early first time submitting companies as the EAC, EAC Technical Reviewers, and VSTLs are experiencing for first time lessons learned experiences, mistakes, and adjustments, all at the expense of the Manufacturers that were here first. --- We believe this to be an unfair component that has put the early companies at a fiscal cost disadvantage.

3. Performance metrics for the EAC, Technical Reviewers, and VSTLs. It is our belief the Program needs to establish turnaround time commitments on the part of the EAC, the Technical Reviewers, and labs with metrics established and enforced by EAC project management personnel. It has been our experience in the past 22 months that critical deliverable commitments were not consistently being met by the EAC and its Technical Reviewers that were essential for us to maintain a reasonable schedule for certification and avoid the extensive delays we incurred over the past 22 months. This may require added project management discipline by EAC staff, lifting the limits on the amount of time a Technical Reviewer can work in a given time period or adding staff to accommodate the work load.

We understand the need to "go slow" and "assuring we do this right--get it perfect". But the desire to "get it perfect" has resulted in what represents an unfair cost to the early participants of the EAC Program. In case of ES&S, we have over 1,700 customer jurisdictions that want and require product enhancements and improvements from lessons learned in 2006 in time for use in 2008. Due to the delays in the Program, ES&S was unable to offer the improvements that would have allowed our state and county level election administration customers to run even better elections. In fact, various states, on their own, either pulled the "Voluntary" trigger in VSS and VVSG and modified their legislation to not require a federal level certification and allowed installation of the improvements after testing on their own or accepting VSTL test reports prior to EAC approval.

There are improvements to the current federal and state certification process that we do support and recommend. For example:

- We believe that states should come to better understand and accept the value of the testing already being done at the federal level. A number of states actually require federal approval and then duplicate many of the same tests that were performed as a part of that federal level testing. They may re-review source code or software configuration audits or perform other extensive volume and accuracy tests that are already core components of the current Program. If those states accepted the federal level testing demands they already require as part of their certification process, enhancements to voting technology could occur far more timely. It would be our goal to see more states to use the issuance of an EAC approval as the basis to grant certification for use without further testing.
- We believe that certain state-initiated tests that are not currently a part of the federal process should be incorporated into EAC testing. For example, California and other states require volume testing that is not currently part of the federal testing process. If the federal process incorporated that element of testing and the states would accept the results of that federal review, the process would move in a much more timely manner.
- We also encourage voting system consultants who work for states to support the current federal testing process. States rely on the insight offered by these consultants and a deep understanding of everything that is a part of the EAC's process.
- We would like to see more states accepting the testing results from other states when considering authorizing a system for use in their respective cases. This type of "reciprocal acceptance" permits the states to utilize and rely on testing done by the chief election official of another state. To date, we are not aware of any states that do so. Many states are duplicating the efforts of others further adding to the time and cost for the Manufacturers to get systems in the hands of the voters. In ES&S' case under the current state certification procedures, it is not uncommon for it to take upwards of 18-24 months for us to complete individual certifications in all of our customer states once we have completed the required federal level testing. Factoring in all aspects of getting product to the field considering 24 months for federal testing, 18-24 months for state certification completion, and another 6-9 months for product rollout, it is not unrealistic for some states to not receive new voting systems for over 4 years from the time the enhancements were completed.
- We respectfully ask that you allow states to maintain control over their own state level certification and testing systems. It is the right thing to do for state and local election officials, and most importantly, it will allow us to continue to ensure that

voters are able to use the most updated, secure and reliable election technology available.

Thank you for the opportunity to offer our input and participate in this initiative.