



**COMMONWEALTH OF PENNSYLVANIA
Department of State**

U.S. Election Assistance Commission

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Public Discussion of Voluntary Voting System Guidelines

Chairwoman Rodriguez, Commissioners of the U.S. Election Assistance Commission (EAC), and distinguished members of the discussion panel:

On behalf of Pedro A. Cortés, Secretary of the Commonwealth of Pennsylvania, thank you for the invitation to participate in the roundtable discussion of the proposed next iteration of the Voluntary Voting System Guidelines (VVSG). We welcome this opportunity to provide written comments in response to the discussion questions.

The Pennsylvania Department of State (Department) is committed to holding fair, accurate and accessible elections. Election administration in Pennsylvania occurs at three levels – at the state level by the Secretary of the Commonwealth who serves as the Commonwealth’s Chief Election Officer, at the county level by the elected county commissioners or other legally established body, and at the precinct level by the elected and appointed district election officials.

Pennsylvania has sixty-seven counties that range in size from small rural areas to very large urban areas such as the county of Philadelphia. There are over nine thousand two hundred precincts in Pennsylvania.

In Pennsylvania, electronic voting systems must undergo a statutorily required testing process. The system must be tested by a federally recognized independent testing authority. Then, unlike some states that only require the federal testing, Pennsylvania law requires a second tier of testing. The state testing is conducted by an independent testing examiner. After successful results of both testing processes in Pennsylvania, the Secretary of the Commonwealth certifies the system for use in Pennsylvania. Counties then select the system that they will use from the list of certified systems.

Currently, there are twelve types of electronic voting systems certified for use in Pennsylvania. In Tuesday's general primary election, ten of those electronic voting systems were used throughout the state, including six direct recording electronic (DRE) systems and three optical scan systems. DRE systems are the most prevalent electronic voting system in Pennsylvania, with fifty-five counties using such a system. Optical scan voting systems are used in sixteen counties.

It has been suggested that DRE voting systems in Pennsylvania should include a voter-verifiable paper record (VVPR). Indeed, this next iteration of the VVSG seems to require such a feature to meet the definition of software independence, unless the voting system falls under the innovation class. The Department has certified four optical scan systems which provide a VVPR. It is important to understand that the Department is not opposed to a DRE voting system with a paper record capability. The issue to date, however, is that the Department has yet to examine a DRE voting system with such a

feature that meets state constitutional and statutory requirements. Both the Pennsylvania Constitution and the Election Code provide that a voting system must preserve the fundamental premise of secrecy in voting. A mechanism like a continuous roll VVPAT as it exists in the marketplace today violates this secrecy requirement. The ballot images are recorded on paper in the order in which they are voted. As such, a person only has to compare each ballot image with the numbered list of voters maintained by district election officials to reveal each voter's selection. The numbered list of voters is public information that is available to the public for inspection upon request.

Moreover, the other question that arises in Pennsylvania with this type of voting system is which vote should be counted in the event of a recount, the one recorded or the one printed.

These are issues that must be taken into consideration in Pennsylvania. The purpose of this background is to provide the framework and the perspective from which state election officials in Pennsylvania are analyzing and assessing the next iteration of the VVSG.

Voting system integrity and security is critical. In addition to the certification process, specific procedures are in place in Pennsylvania to ensure election system security. The systems are well secured and the counties have a specific chain of custody that designates authorized individuals to handle the machines before, during and after the election. Holding successful elections in Pennsylvania is a result of many factors.

With that background as a foundation, the written comments for the discussion questions are provided below.

1. *The VVSG has more than one audience, including vendors and VSTLs. Do you consider county and state election officials as one of the stakeholders in the VVSG and therefore one of the intended audiences? If yes, is the document intelligible to you? If not, how could it be improved?*

County and state election officials are certainly stakeholders in the VVSG and should be considered intended audiences. Overall, the document is intelligible but it is somewhat difficult to navigate. For example, acronyms are used repeatedly throughout the document, which causes a reader to constantly refer to the glossary. Within the glossary, the definitions build upon one another and that means there are definitions within definitions. The need to constantly refer to the glossary section can easily distract the reader's review of the underlying requirement.

The document is extremely lengthy. The concern with a document of this length is that a reader may not be inclined to read the entire document. The length also makes it cumbersome when the reader needs to find a particular section quickly. Moreover, the document's language is geared towards its primary technical audience. All of these aspects together could potentially limit the amount of feedback that the EAC will receive from the various stakeholders at large.

It is important that the guidelines provide standards that are able to be met by the vendors and that are capable of being implemented at the state level. In Pennsylvania, our state certification process builds upon the testing that occurs at the federal level. As such, it is critical that we are able to understand the requirements of the document. The requirement for software independence is an example of such a concern. It would be useful if software independence was defined even further in the VVSG. For example,

there should be some indication as to what the critical steps are that a vendor must prove for a voting system to be deemed software independent. There is a concern that if the standards are unreasonable, the vendor community will be deterred from incurring the cost to move forward with an innovation.

2. *What are the essential elements of a risk assessment? How can the EAC best create a risk assessment that recognizes all possible risks and assesses the plausibility and nature of such risks in an election environment? How do you evaluate what is an allowable level of risk?*

A risk assessment must be properly grounded in theory and based on practical threats to voting systems. A risk assessment is probably better performed at the implementation level for the voting system, not necessarily at the federal level. In order to properly evaluate an acceptable level of risk, the process and procedure at the implementation level that surround a voting system must be taken into account. In Pennsylvania, we do not believe that potential risks to a voting system should be viewed in a vacuum. Rather, the entire security process that occurs at the county level must be considered. For this reason, we believe that risk assessments are more appropriate at the implementation level.

3. *Could you comment on the value of stability in the standard to your jurisdiction? Which is preferred, a standard with a short-shelf life that accommodates innovation and change or a stable standard that may discourage innovation, but creates longer certification lives of voting systems?*

Stability is important in Pennsylvania, but so is innovation to an extent so long as it is not cost prohibitive to the counties. The best solution is probably a combination of both standards. There should be general standards that are stable and do not change over time, but then there should be other innovation pieces with a shorter shelf life that are incorporated into the overall general standards.

4. *What is the value of the open-ended vulnerability testing (OEVT) model? Would the current OEVT requirement in the standard reduce or decrease voter confidence in your system? If the EAC were to require OEVT how could it best be included into the EAC's Testing and Certification Program?*

OEVT could be useful to test for some perceived vulnerable aspects to voting systems. However, this requirement should definitely be expounded upon in the VVSG. For example, the range of testing should be further explained. Depending on the type of testing, there is the potential to actually decrease voter confidence. A broad requirement of this nature could translate into the belief among voters that the testing is necessary because the systems are inherently untrustworthy. If OEVT is included into the testing program, there needs to be an assessment as to what length of time this testing will extend the federal testing process. This is already a somewhat lengthy process from start to finish and this type of testing has the potential to extend that time even more.

The results of testing and threat vulnerability should be disseminated to county and state election officials. Access to this information is important to Pennsylvania's certification process. The VVSG should clearly outline how and when the results of OEVT testing will be made available. Moreover, county and state election officials should have access to the actual OEVT report, not just a condensed report.

5. *Would component testing (the ability to test and certify components as they are modified or added to an existing system) be beneficial to your jurisdiction?*

Component testing would be beneficial to Pennsylvania. The fact that a vendor must submit the entire voting system to testing once a modification is made tends to increase the amount of time for testing. Component testing would seem to streamline the process. However, this should be limited to some extent. There should be a benchmark

that if a certain number of components are changed, then the entire voting system must be submitted for testing.

6. *Are there any changes to the VVSG, in either scope or depth, which would significantly reduce the cost (time and/or expense) of compliance without adversely affecting the integrity of the VVSG or the systems that are derived from its implementation? What needs to be added or removed from this document in order for it to meet what is needed from future voting systems? How could the process of developing and vetting the VVSG be improved to ensure higher volume and higher quality input from election officials?*

As mentioned, this is a rather lengthy document. In comparison, the companion guide is relatively short. A guide that is somewhere in between these two documents may prove useful. The target audience for the guide should primarily be county and state election officials. A less intimidating document would most likely result in more feedback to the EAC from the stakeholders at the county and state levels. Feedback from a larger sample of stakeholders will result in more complete standards.

The EAC should consider streamlined presentations at various meetings of the National Association of Secretaries of State (NASS), national organizations for state election directors, and at various county level conferences. This broad range of feedback will be beneficial and contribute to the overall practicality of the standards.