

FEC's FAQ on U.S. Voting Systems Standards

EQUIPMENT TESTING STANDARDS

Introduction by Thomas R. Wilkey

Contrary to the misinformation surrounding the November 2000 U.S. Presidential Election, Voting System Standards (VSS), as developed by the Federal Election Commission in conjunction with state and local election officials, have been in place since 1990.

The VSS program brings together the FEC, the National Association of State Election Directors (NASED), and the Election Center. These three entities have been encouraging states to adopt the voluntary VSS as the basis for their individual voting systems certification process.

Furthermore, NASED has developed a program to approve Independent Testing Authorities (ITA) to test hardware and software in states that have adopted both the voluntary Federal VSS and the NASED ITA program. Already two ITAs, Wyle and Metamore in Huntsville, Alabama, have been approved and an additional software company is being evaluated for approval. Many other companies have been encouraged to apply.

The FEC is currently revising the VSS with NASED's Voting Systems Board. Volume 1 was released for public comment on June 29, 2001, with Volume 2 expected in late October 2001. I anticipate that following review of public comments, the Commission will approve both volumes in March 2002.

The FEC's Office of Election Administration has prepared a Frequently Asked Questions (FAQ) on the Voting System Standards, of which a few are reprinted here with permission from the FEC. The complete document and more information on voting system standards can be found at www.fec.gov.

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From "Frequently Asked Questions About Voting Systems Standards" on www.fec.gov.

What are voting system standards?

Voting system standards are documented agreements containing technical specifications to be used consistently as guidelines to ensure that punchcard, marksense, and direct recording electronic (DRE) voting systems are accurate and secure.

The standards include functional criteria (things that any voting equipment must do) along with technical requirements for: hardware, software, security, quality assurance, and documentation. The standards also include testing procedures to ensure that voting systems meet these requirements.

Note that the standards address only what a voting system should do, not how the system should do it. The standards are not intended to impede the design

and development of new, innovative voting equipment. Nor are they intended to drive the prices of voting equipment out of the range of local jurisdictions.

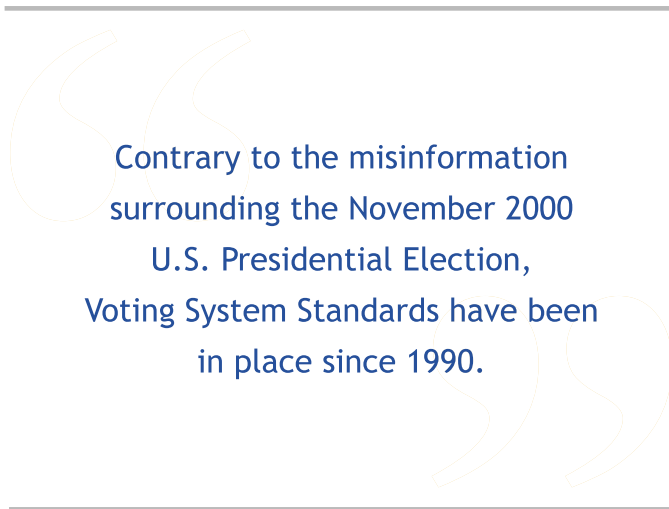
Who decides if voting equipment meets the voting system standards?

The standards call for three levels of tests to be performed on voting systems to ensure that the end product works accurately, reliably, and appropriately:

1. Qualification tests to be performed by independent testing authorities (ITAs) designated by NASED
2. Certification tests to be performed by the State, and
3. Acceptance tests to be performed by the jurisdiction acquiring the system.

Qualification testing should not be confused with the vendor's developmental testing. **Qualification tests**, conducted by an independent testing authority, encompass:

- a selectively in-depth examination of the software
- an inspection and evaluation of system documentation
- tests of hardware under conditions simulating the intended storage, operation, transportation, and maintenance environments, and
- operational tests verifying system performance and function under normal and abnormal conditions.



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Certification tests should be conducted by individual States to ensure that the voting system complies with State laws and election practices and is appropriate to the intended environment.

Acceptance tests should be performed by the jurisdiction (State or local) procuring the voting system. The purpose of acceptance tests is to ensure that the units delivered to the user conform to the system characteristics specified in the procurement documentation as well as those demonstrated in the qualification and acceptance tests. Some of the operational tests conducted during qualification should be repeated on each unit during the acceptance test.

How can I determine if voting equipment has met the voting system standards?

First, it is important to recognize that the ITAs are not in the business of approving whole companies. Instead, they test and qualify only specific voting systems. Any given vendor may offer both systems that have been tested and systems that have not been qualified. It is essential that you get a description of the configuration, the model number, and the software version of any equipment that you want to check up on. There are then three avenues you can take. You can:

- ask the vendor to provide documented evidence that the equipment you are interested in has been successfully tested by an independent testing authority (ITA) designated by the National Association of State Election Directors (NASSED).
- ask your chief State election official if the equipment has been successfully tested by an ITA designated by NASSED and if it has been certified by the State.
- contact the Election Center which, in its capacity as secretariat to NASSED's ITA Committee, maintains records on all systems that have been successfully tested by an ITA. Information on the Center is at www.electioncenter.org



Year	Country	Date	Type
2001	USA	August 20 - September 7, 2001	Parliamentary
2001	East Timor	August 30, 2001	Constitution Assembly
2001	Guatemala	August 20 - September 3, 2001	Presidential
2001	Belarus	September 8, 2001	Presidential
2001	Denmark	September 15, 2001	Parliamentary
2001	Poland	September 22, 2001	Parliamentary

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