



FACT SHEET: The U.S. Election Assistance Commission's Voting System Testing and Certification Program

For more than a decade, the EAC's Testing and Certification Program has assisted state and local election officials by providing timely and accurate voting machine testing. This program is a requirement of the Help America Vote Act (HAVA) of 2002, legislation that created the EAC and mandated that the Commission provide certification, decertification, and recertification of voting systems, as well as the accreditation of voting system testing laboratories. This legislation marked the first time the federal government provided oversight for these activities, a step that allowed states to procure new certified voting systems without the added expense of independent testing and certification.

What standards are used to test and certify election systems?

Election systems are tested for compliance to the Voluntary Voting System Guidelines (VVSG), which are a set of requirements that voting system hardware and software must meet to receive a certification. Some areas examined during testing include functionality, accessibility, accuracy, auditability and security capabilities. HAVA mandates that the EAC develop and maintain these requirements, as well as test and certify voting systems. On December 13, 2005, the EAC unanimously adopted the 2005 VVSG that significantly increased security requirements for voting systems and expanded access to voting, including opportunities for individuals with disabilities to vote privately and independently. The 2005 guidelines updated and augmented the 2002 Voting System Standards, as required by HAVA, to address advancements in election practices and computer technologies. These guidelines were again updated by the EAC and NIST and approved by EAC's Commissioners on March 31, 2015. The guidelines are voluntary, but it is of note that 47 states use EAC requirements, testing or voting system test laboratories to supplement or fulfill certification requirements in their state.

How does the voting system certification process work?

The EAC accredits independent voting system test laboratories (VSTLs) that evaluate voting systems against the Voluntary Voting System Guidelines (VVSG) to determine conformance to the standard and test the basic functionality, accessibility, and security capabilities required of these systems. The test laboratory provides a recommendation to the EAC via a test report, the Testing and Certification Program Director accepts the test report and issues a recommendation to the EAC's Decision Authority (e.g. Executive Director), who makes the determination whether to issue a certification. After a decision is made on certification, the EAC posts the information on the Voting System Certification section of its website.

How are the laboratories that test voting systems accredited?

HAVA requires that the National Institute of Standards and Technology (NIST) assist the EAC through its National Voluntary Laboratory Accreditation Program (NVLAP), which provides recommendations to the EAC regarding laboratory accreditation. After the EAC receives NVLAP's recommendations, the program conducts further review to address additional issues such as conflict of interest policies, organizational structure and recordkeeping protocols. After the EAC's final review is complete, the Commissioners vote regarding full accreditation.

How many election systems has the EAC tested and certified?

The EAC has successfully completed 60 certification campaigns in coordination with 5 voting system vendors. Of the 60 voting systems submitted for certification, to date the EAC certified 38 voting systems or modifications to a voting system.

How does this program help state and local election officials?

At least 47 states use the EAC's Testing and Certification program in some way when deciding which voting system to purchase, a decision which may save taxpayer dollars and can eliminate time lost to duplicative testing. In addition, State and local officials often request that the EAC provide assistance with editing and reviewing requests for proposals (RFPs) and other documents used in the election technology procurement process. These activities save jurisdictions time and money.

When will the next set of testing and certification guidelines be released?

The EAC is working with the Technical Guidelines Development Committee (TGDC) – a diverse EAC advisory board comprised of representatives from the election community, public sector, private sector and interest groups – to develop the next iteration of the election system testing and certification guidelines, VVSG 2.0. A set of 17 core voting system functions that will guide the VVSG 2.0 were adopted by the TGDC. The VVSG 2.0 is a nimble high level set of principles and guidelines that will be supplemented by accompanying documents that detail specific requirements for how systems can be tested to meet the new guidelines. The supplemental documents will also detail assertions for how the accredited test laboratories will validate that the system complies with those requirements. The new system testing guidelines are expected to be released in 2018 and will become the most technically up-to-date standard against which voting systems can be tested in the United States.