



Voting System Certification

August 2007

Management Guide



The *Quick Start Management Guide for Voting System Certification* is part of a series of brochures designed to highlight and summarize the information contained in the chapters of the U.S. Election Assistance Commission's (EAC's) *Election Management Guidelines (EMG)*. This Quick Start is a snapshot of procedures developed to help election officials understand the certification process at the Federal, State, and local levels as it applies to existing voting systems or voting systems under consideration for future acquisition. The goal of the *EMG* is to provide a collection of election management guidelines, consolidated into one document, to assist State and local election officials in effectively managing and administering elections. These guidelines are designed solely to serve as a source of information for election officials, not as requirements by which officials must abide. The EAC expects the *EMG* to be completed in 2008. Due to the urgent need for election management resources, however, *EMG* chapters and *Quick Starts* are released as they are completed.

The content of the *EMG* and the *Quick Start Management Guides* has been developed in collaboration with State and local election officials and other election professionals who have first-hand experience managing elections. The EAC is grateful for their participation and for ensuring the guidelines are practical and applicable for jurisdictions regardless of their size and resources. The *EMG* and *Quick Starts* are available on line at www.eac.gov.

The Help America Vote Act (HAVA) of 2002 tasked the EAC with accrediting voting system test labs and certifying voting equipment, marking the first time the Federal government would provide these services to States. In the past, these functions were performed by the

National Association of State Election Directors (NASSED), a volunteer organization which received no Federal funding. EAC's voting system testing and certification program was implemented in January 2007.

General Information

- A voting system is defined as a *specific* combination of mechanical, electromechanical, and electronic equipment used to define ballots, cast and count votes, report or display election results, connect the voting system to the voter registration system, and maintain and produce any audit trail information.
- Currently, a complete voting system can be certified. A component or a portion of a voting system cannot be certified.
- Any change or modification to a certified voting system may void the system's certification and require that the voting system be resubmitted for testing and certification. Please see the EAC's voting system *Testing and Certification Program Manual 2006* and your State rules and regulations for further information.

Testing Voting Systems at the Federal Level

- The EAC has primary responsibility for assuring that voting system designs meet the applicable EAC Guidelines for voting equipment in the United States.
- Before the 2002 HAVA, NASSED qualified voting systems to Federal standards. NASSED systems were qualified to standards first developed by the Federal

Election Commission (FEC) in 1990 and revised in 2002 (FEC 1990 and FEC 2002 Voting System Standards, respectively). Voting systems that were qualified to one of these standards are listed on the NASED Web site: <http://www.nased.org/certification.htm>.

- In December 2005, the EAC adopted the *2005 Voluntary Voting System Guidelines (VVSG)*. These guidelines will be fully implemented in December 2007. Voting systems that are certified by the EAC will be listed on the EAC Web site: <http://www.eac.gov>.
- EAC certification does not repeal NASED-issued qualifications. All voting systems previously qualified under the NASED program will retain their NASED qualification consistent with State law.
- Until December 2007, a full voting system can be certified to either the FEC 2002 standards or the EAC 2005 VVSG. After that date, voting systems can be certified only to the EAC 2005 VVSG.
- No provision in the EAC VVSG grandfathers systems that were qualified by NASED. Thus, a voting system that is FEC 1990 or FEC 2002 qualified and wishes to become “EAC Certified” must be submitted to the EAC for certification before December 2007 if it wishes to be tested against the 2002 standards.
- A voting system that was “NASED Qualified” under the FEC 2002 standards will remain certified as long as it is not modified in any way. If it is modified, then it loses its NASED qualification and must be submitted to the EAC for certification.

Testing Voting Systems at the State Level

- State officials have responsibility for testing voting systems to ensure that they will support the specific requirements of each State.
- Many States have unique election requirements. Therefore, the Federal-level certification process, of necessity, addresses only those attributes and functions of a voting system that are common to most States. Also, the Federal-level certification does not currently address usability issues, such as the ease of defining an election or formatting a ballot.
- For these reasons, most States require that a federally certified voting system must be certified by the State before it can be marketed in the State or used in an election in the State. State-level certification usually involves testing the system for any unique State requirements and conducting a simulated election to determine the usability of the system.
- As part of the decision to issue State certification, a State may take into consideration such nontechnical issues as the ownership of the manufacturer, the qualifications of the manufacturer's management team, or the financial stability of the voting system manufacturer.
- A list of State-certified systems for your State can be obtained from your State election director.

Testing Voting Systems at the Local Level

- Local officials are responsible for conducting acceptance testing to ensure that the equipment delivered is identical to the equipment certified on the Federal and State levels and that it meets the contractual requirements of the purchase.
- An acceptance test should contain all the following steps:
 - For new voting systems, ensure that all contract requirements have been met.
 - Verify that the system is the correct certified version. This verification involves checking the version numbers of all software components to ensure they are correct (i.e., the component version numbers correspond to the Federal- and State-certified version numbers).
 - Verify that the hardware is functioning correctly. This action includes checking elements such as the date, printer, calibration (on a Direct Recording Electronic [DRE] voting station), ports that support any devices for the handicapped, and card-encoding/reading devices.
 - Conduct a simulated Logic and Accuracy Test to validate the performance of the system. (See EAC *Quick Start Management Guide for Ballot Preparation/Printing and Pre-Election Testing*, September 2006.)
- An important security procedure is to maintain a “chain of custody” of all the various components of a voting system. There are times, however, when it is

necessary to break the chain of custody for a voting system. **Example:** *When a voting system (or a component of a voting system) breaks and must be returned to the manufacturer for repair, it is necessary to reestablish the chain of custody by conducting another acceptance test after the system or component has been returned to the election office.*

Determining the Certification Status of a Voting System

- From time to time you will want to determine the certification status of a specific voting system. This status check may be for either a system that you are currently using or one that you are considering acquiring. Use the following steps as guidelines.
 - Make a list of all the components of the voting system, including the version number of each component.
 - Check the NASED Web site (<http://www.nased.org/certification.htm>) and the EAC Web site (<http://www.eac.gov>) to see if the voting system is listed on either list of certified voting systems.
 - If the voting system is not listed on either Web site, you may contact the EAC Certification Program Director for more information about the status of the certification process.
 - Maintain a complete listing of the components of your voting system and the Federal certification numbers and dates for your records.
 - Contact the person responsible for your State's certification program to confirm that the voting system has

been State certified. **Note:** *It is good practice to request confirmation of this certification in writing for your records.*

- If you determine that your voting system is not certified, you should immediately contact your State election director for advice.
- Some States permit the evaluation of a voting system that is not yet certified but has been submitted during the procurement process with the understanding that the system cannot be purchased until it is certified.
- When considering a voting system that has not yet received Federal certification, keep in mind that it frequently takes 6 months to a year for a voting system to complete the Federal testing and certification process. Remember that submission of a voting system for certification is no guarantee that the system will actually receive a certification, at either the Federal or State level.

How To Read Certification Numbers

NASED: The NASED qualification number has the following form:

N - A - BB - CC - DD - XXX

Where:

N indicates that the number is a NASED certification number,

A indicates the Independent Testing Authority (ITA): 1 = Ciber, 2 = SysTest,

BB is a two-digit number between 01 and 16 that indicates the name of the manufacturer,

CC is a two-digit number that indicates the level to which the software was qualified:
 11 = 1990 Standard, 22 = 2002 Standard,
 12 = a mixed system,

DD is a two-digit number that indicates the level to which the hardware/firmware was qualified: 00 = COTS (not qualified),
 01 = 1990 Standard, 02 = 2002 Standard,
 03 = Firmware not qualified.

XXX is a three-digit number that is the sequential version number for the system ID.

EAC: The EAC certification number has the following format:

NNN - XXX.X - Y.Y.Y.Y

Where:

NNN is a three-letter manufacturer code (for example, DBD = Diebold),

XXX.X indicates the Standard/Guideline version; 021.0 = 2002 Standard, 051.0 = 2005 Guidelines, version 1.0,

Y.Y.Y.Y is a number that indicates the specific system version.

Contacts

For a ready reference, fill in the contact information below.

EAC Director of Voting System Testing and Certification

U.S. Election Assistance Commission
 1225 New York Avenue, NW, Suite 1100
 Washington, DC 20005

Telephone: 202-566-3100

Toll free: 1-866-747-1471

E-mail: HAVAinfo@eac.gov

Web site: www.eac.gov

Your State election director

Name: _____

Telephone: _____

E-mail: _____

Address: _____

Your State voting system certification director

Name: _____

Telephone: _____

E-mail: _____

Address: _____

For information regarding this publication or to request additional copies, please contact the EAC as follows:

Address

U.S. Election Assistance Commission
1225 New York Avenue, NW, Suite 1100
Washington, DC 20005
Attn: Election Management Guidelines

Telephone

202-566-3100
866-747-1471 (toll free)

Fax

202-566-3127

E-mail

HAVAinfo@eac.gov

Web site

www.eac.gov

U.S. ELECTION ASSISTANCE COMMISSION

The United States Election Assistance Commission is an independent bipartisan commission created by the Help America Vote Act (HAVA) of 2002. It is charged with administering payments to States and developing guidance to meet HAVA requirements, implementing election administration improvements, adopting voluntary voting system guidelines, accrediting voting system test laboratories and certifying voting equipment, and serving as a national clearinghouse and resource of information regarding election administration.



U.S. Election Assistance Commission
1225 New York Avenue, NW
Suite 1100
Washington, DC 20005
866-747-1471 (toll free)
HAVAinfo@eac.gov
www.eac.gov