U.S. ELECTION ASSISTANCE COMMISSION
1201 New York Ave. NW – Suite 300
Washington, DC 20005

# Request for substantive comments on the EAC's proposed requirements for Version 1.1 of the Voluntary Voting System Guidelines (VVSG).

AGENCY:              United States Election Assistance Commission

ACTION:              Request for public comment on proposed requirements for
                     Version 1.1 of the Voluntary Voting System Guidelines (VVSG)

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**SUMMARY**:  The Help America Vote Act of 2002 (HAVA) (P.L. 107-252; 42 U.S.C.

§15301 *et seq.* (October 29, 2002)) established the U.S. Election Assistance

Commission (EAC). Section 202 of HAVA directs the EAC to adopt voluntary voting

system guidelines (VVSG) and to provide for the testing, certification, decertification, and

recertification of voting system hardware and software. The VVSG provides

specifications and standards against which voting systems can be tested to determine if

they provide basic functionality, accessibility, and security capabilities.

As required by Section 222 (d) of HAVA, the EAC is publishing a set of proposed

requirements (Voluntary Voting System Guidelines, 1.1) for the testing of voting systems

for a 90 day public comment period.


**SUPPLEMENTARY INFORMATION:**

**Background**:

The EAC made the decision to update and revise the 2005 VVSG (also known as VVSG 1.0) as a result of feedback received through its Voting System Testing and Certification Program. As the EAC has worked to test and certify voting systems it observed and received feedback from various sources that the standards being tested to were at times ambiguous and difficult to apply in testing. This ambiguity led to challenges in making testing consistent both within a test laboratory and across test campaigns at different laboratories. The EAC also received feedback from the National Institute of Standards and Technology (NIST) that the creation of formalized test suites for the 2005 VVSG would be aided by a clarification of certain portions of document. This information, combined with the EAC's issuance of thirty five interpretations of the VVSG to clarify various standards, led the EAC to propose improvements to the 2005 VVSG. In addition, the EAC determined to implement a number of recommendations submitted by the EAC's Technical Guidelines Development Committee (TGDC).

The TGDC held numerous public meetings and subcommittee conference calls to create a set of draft guidelines for recommendation to the EAC (all TGDC meeting materials can be found at http://www.nist.gov/itl/vote/). On August 17, 2007, the TGDC voted to complete final edits of their recommendations and submitted them to the Executive Director of the EAC. The EAC received the draft guidelines from the TGDC on August 31, 2007.

After receipt of the TGDC's recommendations for the next iteration (VVSG 2.0) of the VVSG the EAC opened a one hundred and eighty day public comment period. During this comment period, which ran from September 2007 to May 2008, the EAC received comments praising many of the proposed standards as being more testable and less ambiguous than previous versions of the standard. This public comment period produced over 3000 comments on the recommendations. In addition, during the comment period the EAC conducted a series of seven roundtable discussions regarding

the TGDC's recommendations.  After the close of the public comment period for the TGDC's VVSG 2.0 recommendations and considering a variety of relevant factors, the EAC made the decision to first update and revise the 2005 VVSG with portions of the TGDC's recommendations. This serves as the basis for the creation of VVSG 1.1.

As noted during the previous public comment period for version VVSG 1.1, by revising the guidelines now, the EAC expects to improve the test process over the short term for existing voting systems while allowing additional time to develop more complex revisions for the requirements in VVSG 2.0 written for the next generation of voting systems. Topics currently undergoing continued research at NIST include open ended vulnerability testing/penetration testing, volume testing, further development of the concept of software independence and the development (with IEEE Working Group P1622 of a common data format for voting systems.

## Changes to VVSG 1.1 since the Initial Public Comment Period

The initial proposed revision to VVSG 1.1, was offered during a 120-day public comment period in the summer of 2009. Since that time, the EAC's Testing & Certification Program has discovered additional best practices, experienced anomalies and deficiencies with voting systems entering the Testing and Certification Program, and clarified many ambiguities with the standard. Changes were made after the 120-day public comment period to address these issues.  Since the initial public comment, changes were made to the following areas:

| Heading | Comment |
|---|---|
| Telecommunications | Treated all results as official |
| NSRL | Removed all references |
| Software Validation | Provided a secondary method of software validation not available in the 2005 VVSG |
| Access Control | Enhanced access control requirements based on the two—tier access control model present in today's election equipment |
| Quality Assurance  and | Combined sections 8 and 9 into a single |

| Configuration Management | section |
|---|---|
| Coding Convention | |
| Required Languages | Required all systems to officially support at least one ideographic language |
| Audit and Election Logging | Enhanced and strengthen logging requirements by providing greater clarity and specific, especially for election logs. |

Additionally, the EAC included all relevant Requests for Interpretations (located at the EAC's website) within the latest draft of VVSG 1.1. Please be aware that those sections added since the close of the initial public comment period for VVSG 1,1 are the only sections that the EAC is accepting comments on for this 90-day public comment period.

**Project Summary**:

Although both Volume 1 and Volume 2 of the VVSG 1.1 draft have undergone revisions, and should be commented on, we believe most commenter's should focus on the significant changes to Volume 1 of the draft document. Major sections of VVSG 1.1 Volume 1 revised for this comment period include but are not limited to:

**Volume 1**
| | |
|---|---|
| 2.12 | Accuracy |
| 2.1.4 | Integrity |
| 2.1.5.1 | Operational Requirements |
| 2.3.1 | Opening the Polls |
| 2.3.3.3 | DRE and EBM System requirements |
| 2.4.1 | Closing the Polls |
| 2.4.4.2 | Tabulator electronic reports |
| 3.2.2.1 | Editable electronic ballot interfaces |
| 3.2.5 | Visual display characteristics |
| 3.3.2 | Enhanced visual interfaces |
| 3.3.4 | Enhanced input and control characteristics |
| 4.1.1 | Accuracy requirements |
| 4.1.2 | Environmental requirements |
| 4.1.2.4 | Electrical supply |
| 4.1.5.2 | Ballot reading accuracy |
| 4.3.3 | Reliability |
| 5.2.1 | Scope (Software requirements) |
| 5.2.2 | Selection of programming languages |
| 5.2.4 | Software modularity and programming |
| 5.2.5 | Structured programming |

| | | |
|---|---|---|
| 5.2.8 | Error checking |
| 5.5 | Vote secrecy on DRE and EBM systems |
| 6.2.2 | Durability (Telecommunications) |
| 6.2.3 | Reliability |
| 7.1 | Scope (Security requirements) |
| 7.2 | Access control |
| 7.3 | Physical security measures |
| 7.4.4 | Software distribution |
| 7.4.5 | Software reference information |
| 7.4.6 | Software setup validation |
| 7.5.1 | Maintaining data integrity |
| 7.5.5 | Election returns |
| 7.7.3 | Protecting transmitted data |
| 7.8.2 | Approve or void the paper record |
| 7.8.3 | Electronic and paper record structure |
| 8 | Quality Assurance and Configuration Management (all) |

All changes made since the last public comment period are highlighted in yellow in the version published on the EAC's website and in the Federal Register.

The U.S. Election Assistance Commission (EAC) lacks a quorum of commissioners since the resignation of Commissioner Gracia Hillman on December 10, 2010.  The EAC lost its two remaining commissioners in December 2011, with the resignations of Commissioners Gineen Bresso and Donetta Davidson.  Because HAVA requires an affirmative vote of the Commission (Section 222(d)), all comments received will be reviewed and published as noted below. The finalVVSG 1.1 draft document will be prepared for a Commission vote at such time as the EAC once again has a quorum of Commissioners.

**DATES**:  Comments must be received on or before 4 p.m. EST on December 5, 2012.

**SUBMISSION OF COMMENTS**:  The public may submit comments through one of the two different methods provided by the EAC: 1) email submissions to votingsystemguidelines@eac.gov; 2) by mail to Voluntary Voting System Guidelines

Comments, U.S. Election Assistance Commission, 1201 New York Ave, NW., Suite 300, Washington, DC 20005.

In order to allow efficient and effective review of comments the EAC requests that:

      (1) Comments refer to the specific section that is the subject of the comment.

      (2) General comments regarding the entire document or comments that refer to more than one section be made as specifically as possible so that EAC can clearly understand to which portion(s) of the documents the comment refers.

      (3) To the extent that a comment suggests a change in the wording of a requirement or section of the guidelines, please provide proposed language for the suggested change.

All comments submitted will be published at the end of the comment period on the EAC's web site at [www.eac.gov](http://www.eac.gov). This publication and request for comment is not required under the rulemaking, adjudicative, or licensing provisions of the Administrative Procedures Act (APA). It is a voluntary effort by the EAC to gather input from the public on the EAC's administrative procedures for certifying voting systems to be used in pilot projects. Furthermore, this request by the EAC for public comment is not intended to make any of the APA's rulemaking provisions applicable to development of this or future EAC procedural programs.

An electronic copy of the proposed guidance may be found on the EAC's web site at [http://www.eac.gov/open/comment.aspx.](http://www.eac.gov/open/comment.aspx)

**FOR FURTHER INFORMATION CONTACT**: Brian Hancock, Phone (202) 566-3100, e-mail votingsystemguidelines@eac.gov.

**Signed:** _____

**Alice P. Miller**, Chief Operating Officer and Acting Executive Director,
U.S. Election Assistance Commission

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