



U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2009-07

Whereas, The Election Assistance Commission is an agency of the United States federal government created by the Help America Vote Act (HAVA); and

Whereas, The Executive Board of the Standards Board requested the assistance of the Voluntary Voting System Guidelines (VVSG) Ad Hoc Committee to review the draft of the VVSG version 1.1; and

Whereas, The VVSG Ad Hoc Committee has spent many hours reviewing the draft of the VVSG version 1.1; and

Whereas, The VVSG Ad Hoc Committee has provided the attached report with suggestions titled “Substantive Change Recommendations”; “Corrections” and; “Comments Or Requests For Clarification – Responses”; and

Whereas, The Standards Board would like to formally acknowledge the efforts of the VVSG Ad Hoc Committee; now, therefore, be it

Resolved, That the Standards Board hereby forwards the attached VVSG Ad Hoc Committee Report to the United States Election Assistance Commission for their consideration during their review of the next iteration of the VVSG.

MOTION CARRIED

A True Record Attest:

A handwritten signature in cursive script that reads "J. Bradley King".

Brad King
Secretary of the Standards Board
Executive Board

Submitted by: U.S. EAC Standards Board, VVSG Ad-Hoc Committee

Approved as to Form by Resolution committee August 5, 2009

Submitted to the Standards Board for Approval/Denial on August 6, 2009

Passed on August 6, 2009

VVSG AD HOC COMMITTEE REPORT

Prepared by The VVSG Ad Hoc Committee for the U.S. Election Assistance Commission's Standards Board, Executive Board

SUBSTANTIVE CHANGE RECOMMENDATIONS

Volume – Section – Title	Recommended Change
1 – 4.1.2.13 – Environmental Control – Operating Environment	Systems should at least meet these levels and if stated by manufacturer that the system can exceed these levels, test to those stated levels.
1 – 4.1.2.13 – Environmental Control – Operating Environment	More EAC research is needed to set minimum low and high humidity levels (such as a survey of jurisdictions with extreme conditions).
1 – 7.9.1 – Display and Print a Paper Record	<p>Since voting machines may be used in multiple locations during the early voting period, the requirements in subsection (c) for the human-readable contents should be changed as follows:</p> <ul style="list-style-type: none">• In (c)(i), change “polling place” to “machine ID.” This will help identify which machine was used to create the paper record.• In (c)(iii), change “ballot configuration” to “ballot style.”• In (c)(iv), change “date of election” to “date of election or date record printed.” Making the date selection a configurable item will accommodate those jurisdictions that have early voting.
1 – 7.9.2 – Approve or Void the Paper Record	Add a discussion section to clarify that the intent of subsection (a) is for voters to be able to compare the paper record with the choices on the screen.
1 – 7.9.2 – Approve or Void the Paper Record	Subsection (f) requires the VVPAT system to remove any indication of the voter's choices from the screen if the system reaches the configurable limit of rejected paper records. This requirement would limit an election official's ability to verify false claims from voters that the selections printed do not match the selections on the electronic record. Theoretically, a voter could shut down a machine if an election official is unable to verify the printed paper record matches the electronic record.

<p>1 – 7.9.3 – Electronic and Paper Record Structure</p>	<ul style="list-style-type: none"> • In subsections (e)(i) and (h)(i), remove “polling place” and replace with “machine ID.” This will allow jurisdictions to identify which machine was used for the paper record. In subsections (e)(iii) and (h)(iii), replace “date of election” with “date of election or date record printed” to accommodate those jurisdictions that have early voting. • In subsections (f) and (h), replace “ballot configuration” with “ballot style.” • In sub-section (f)(v), replace the word “ballot” with “paper record.”
<p>1 – 7.9.3 – Electronic and Paper Record Structure</p>	<p>The language in subsection (e)(iv) needs to be clarified. The requirement to print how many paper rolls were used may cause usability issues if the roll was removed to fix paper jam, but then re-inserted. The printer may not be able to detect that this was not a new roll. For auditing purposes, officials need to know the total paper records and this requirement is already in subsection (e)(v).</p>
<p>2 – 2.6.2 – Equipment and Data Security</p>	<p>Mandatory security procedures required in 2.6.2 should also be required in user documentation. This section addresses security procedures for “purchasing jurisdictions” that are mandatory in order to “prevent disruption of the voting process and corruption of voting data.” Manufacturers should be required to include these mandatory procedures in the user documentation to ensure that purchasing jurisdictions are fully aware of the expectations.</p>
<p>2 – 2.6.4 System Event Logging</p>	<p>Define an “event” that must be logged.</p>

CORRECTIONS

Volume – Section Number – Title	Recommended Correction
1 – Overview of Revisions	#5 (Non-EMC) Environmental Hardware, 2 nd bullet point – no closing parenthesis.
1 – 3.2.2.1 – Editable Interfaces	Discussion box under paragraph (f), second sentence: “...casting of two ballots” (along with more than two) is covered if worded “...casting of more than one ballot.”
1 – 3.2.2.2 – Non-Editable Interfaces	Typo: paragraph (a), (i.e., overvotes), one too many periods.
1 – 3.2.4 – Cognitive Issues	Typo; paragraph (c)(i) in discussion box, ‘No’, extra quotation mark.
1 – 3.3.6 – Hearing	Typo: paragraph (a) formatting of referred section “3.3.3-C” is incorrect in this version.
1 – 5.2.5 – Structured Programming	The first table in 5.2.5 references Visual Basic (VB) rather than .Net. VB is unsupported by Microsoft. Although it can be used for development, it would not be a wise choice.
1 – 5.2.5 – Structured Programming	http://www.eac.gov/voting_systems/voluntaryvoting-guidelines/2002-voting-system-standards . This link referenced in the second footnote is broken and no replacement exists according to the EAC website.
1 – 5.2.5 – Structured Programming	The two paragraphs under 5.2.5 (a) that immediately precede 5.2.5 (b) should either be listed as “Discussion” or formatted properly. The paragraphs are: Wrapping legacy functions avoids the need to check for errors after every invocation, which both obfuscates the application logic and creates a high likelihood that some or many possible errors will not be checked for. In C++, it would be preferable to use one of the newer mechanisms that already throw exceptions on failure and avoid use of legacy functions altogether.
1 – 7.9 – Voter Verifiable Paper Audit Trail Requirements	In third bullet, remove abbreviation of VVPR and replace with “paper record.” VVPR is not in Appendix A.

<p>1 – 7.9.3 – Electronic and Paper Record Structure</p>	<ul style="list-style-type: none"> • In subsection (a)(i), replace “ballot configuration” with “ballot style.” • In subsection (a)(i), the term “counting context.” This term is not in the glossary and if it remains, there needs to be an explanation of what it means.
<p>1 – 7.9.6 – VVPAT Usability</p>	<p>The language in subsection (f) appears to be redundant with 7.9.3(i).</p>
<p>2 - 1.8.2.6 – Certification Test Practices</p>	<p>Numbering convention is off; start with “a.”</p>
<p>2 – 2.6 – System Security Specification</p>	<p>Typo: first entry in table (pg 37), “This document shall identify the threats the voting system protects” should be “...protects against.”</p>
<p>2 – 2.6.6 – Setup Inspection</p>	<p>Typo: in the Discussion box, “needs” should be “need.”</p>
<p>2 – 5.4 – Source Code Review</p>	<p>Display the figures (illustrations) as deleted.</p>

COMMENTS OR REQUESTS FOR CLARIFICATION – RESPONSES

Volume – Section – Title	Comment or Request for Clarification	Response/Clarification
2 – 2.6 – System Security Specification	The requirement for manufacturers to include in TDPs “All attacks the system is designed to resist or detect” and “Any security vulnerabilities known to the manufacturer” make the TDP a sensitive document. For the edification of election officials, what are the disposition and handling requirements of TDPs by the VSTL? Suggestion: include discussion section that directs reader to where this information may be found.	Manufacturers may indicate that specific information contained in the TDP is confidential. It would be recommended that manufactures indicate the responses to these two requirements as such.
2 – 5.4 – Source Code Review	Explain why the phrase “conformity may be subject to interpretation” is necessary within the paragraph just below bullet “b” on page 73. Is it possible to make the standard definitive?	This revision offers manufacturers the desired flexibility to choose a coding standard. When that coding standard is identified by the manufacturer, it will be used to test adherence.
2 – Appendix A.3.5 – Hardware Environmental Test Case Design	Page A-9: Make sure lab tests on various aspects are conducted in excess of 12 hours (normal election day conditions). All environmental tests should be conducted with no exclusions to simulate “real election day” conditions.	Generally, manufacturers will submit a limited number of devices for testing thereby making the simulation of certain “real election day” conditions problematic.



U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2009-08

Whereas, The Election Assistance Commission is an agency of the United States federal government created by the Help America Vote Act (HAVA); and

Whereas, voting systems are currently being certified to 2002 Voting System Standards (VSS) and Voluntary Voting System Guidelines (VVSG) version 1.0; and

Whereas, voting systems will soon be submitted for certification according to VVSG version 1.1; and

Whereas, these voting system standards and guidelines are applicable to voting systems currently used across the country; and

Whereas, the first voting systems to achieve EAC certification testing to the 2002 VSS and VVSG Version 1.0 were in the process for more than two years; and

Whereas, due to the lengthy certification process the certified voting systems may already and certainly will eventually need to be modified as a result of state law changes occurring prior to the purchase of a new voting system; therefore, be it

Resolved, the Commissioners of the Election Assistance Commission are asked to vote in favor of allowing EAC certified voting systems to be modified by the manufacturer and tested by the voting system test laboratory (VSTL) according to the standards or guidelines by which they were first certified, by a subsequent version of guidelines, or by a combination of guidelines from various versions of the VVSG as long as the guidelines are not in conflict; and be it further

Resolved, the modified voting system shall maintain the original VSS or VVSG version certification upon approval by the (VSTL) and the EAC; and be it further

Resolved, the first paragraph under Effective Date on page vi of the Voluntary Voting System Guidelines Overview section of the proposed volume 1 of the VVSG Version 1.1 be rewritten as follows: “The ~~2005~~ *Voluntary Voting System Guidelines Version 1.1* will take effect ~~24 months~~ after their final adoption ~~in December 2005~~ by the EAC. At that time, all new systems submitted for national certification will be tested for conformance with these guidelines. ~~In addition, if~~ If a modification to a system qualified or certified to a previous standard is submitted for national certification ~~after this date~~, every component of the modified system will be tested against the ~~2005~~ standards or guidelines under which it was certified, the VVSG Version 1.1, or a combination of the guidelines from VVSG Versions

~~1.0 and 1.1 to the extent that the guidelines are not in conflict. All previous versions of national standards will become obsolete at this time. This effective date provision does not have any impact on the mandatory January 1, 2006, deadline for states to comply with the HAVA Section 301 requirements. And be it further~~

Resolved, section 4.4.2.3 of the EAC's Voting System Testing and Certification Program Manual be rewritten as follows: *Modification*. A modification to a previously EAC-certified voting system shall be tested in a manner necessary to ensure that all changes meet applicable voting system standards and that the modified system (as a whole) will properly and reliably function. Any system submitted for modification shall be subject to full testing of the modifications (delta testing) and those systems or subsystems altered or impacted by the modification (regression testing). The system will also be subject to system integration testing to ensure overall functionality. The modification will be tested to the version or versions of the VVSG/VSS currently accepted for modification testing and certification by the EAC. This requirement, however, does not mean that the full system must be tested to such standards. If the system has been previously certified to a VVSG/VSS version deemed acceptable by the EAC (see Section 3.2.2.2), it may retain that level of certification with only the modification being tested to the present version(s); and be it finally resolved;

Resolved, these revisions will supersede any other previous rulings of the EAC that are inconsistent with these revisions.

MOTION CARRIED

A True Record Attest:



**Brad King
Secretary of the Standards Board
Executive Board**

Submitted by: U.S. EAC Standards Board, Executive Board

Approved as to Form by Resolution committee August 5, 2009

Submitted to the Standards Board for Approval/Denial on August 6, 2009

Passed on August 6, 2009



U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2009-09

Whereas, the Election Assistance Commission (EAC) is an agency of the United States federal government created by the Help America Vote Act (HAVA); and

Whereas, the Voluntary Voting Systems Guidelines (VVSG) do not provide any analysis of the fiscal impact such guidelines will have on the conduct of federal, state, and local elections; and

Whereas, the cost of running elections has dramatically increased since implementation of the HAVA and impacted State and local government's ability to purchase new voting systems; and

Whereas, local jurisdictions are bearing more and more of the financial load for voting systems, upgrades, and maintenance costs; and

Whereas, the Congress, state policymakers, and the general public do not understand the cost of purchasing voting systems and would benefit greatly from a fiscal impact analysis of the costs associated with new voting system standards; and

Whereas, the EAC Standards Board members stand committed to working with the EAC, National Institute of Standards and Technology (NIST), organizations representing state and local election officials, voting system manufacturers, and other stakeholders to provide input in determining the fiscal impact of future iterations of the VVSG; now therefore, be it

Resolved, that the EAC Standards Board recommends that EAC and NIST work in consultation with organizations representing state and local election officials, voting system manufacturers, and other stakeholders to provide a fiscal analysis on the national, state, and local costs associated with future iterations of the VVSG beyond VVSG Version 1.1; and be it further

Resolved, that any such fiscal analysis should be completed prior to the public comment period and prior to the consideration and adoption of the next iteration of the VVSG by the EAC.

MOTION CARRIED

A True Record Attest:



Brad King
Secretary of the Standards Board
Executive Board

Submitted by: U.S. EAC Standards Board, Executive Board

Approved as to Form by Resolution committee August 5, 2009

Submitted to the Standards Board for Approval/Denial on August 6, 2009

Passed on August 6, 2009



U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2009-10

Whereas, The Election Assistance Commission, the Election Assistance Commission Standards Board, and the Election Assistance Commission Board of Advisors were established by Public Law 107-252 (HAVA); and

Whereas, Section 215(b) of HAVA provides that “The Standards Board and the Board of Advisors may each secure directly from any Federal department or agency such information as the Board considers necessary to carry out this Act. Upon request of the Executive Board (in the case of the Standards Board) or the Chair (in case of the Board of Advisors), the head of such department or agency shall furnish such information to the Board”; and

Whereas, The Board of Advisors, on June 4, 2009, adopted the following motion by unanimous vote: “the Board of Advisors recommends that the EAC, upon the request of the Board of Advisors or the Standards Board, prepare a report for presentation at the meeting of both Boards regarding the status of all Resolutions that have been presented to the EAC for consideration by either Board. The report should indicate the Resolution number; a short description of the Resolution; the status of the Resolution including whether the Resolution was implemented at all; and the reason for the status of each Resolution. The presentation should include adequate time for discussion of the report”; and

Whereas, The Standards Board, on February 27, 2009, adopted Resolution 2009-06, which states in part “it is vitally important for the Standards Board members to keep current with actions and decisions of the EAC...”; and

Whereas, The Standards Board expresses its appreciation to the EAC and its staff for their diligence and ongoing efforts to keep Standards Board members informed regarding the actions and decisions of the EAC; and

Whereas, The Standards Board finds that the presentation of more detailed information on a regular basis by the EAC regarding the Resolutions adopted by the Standards Board, both at meetings of the Board, and on the EAC’s website, will enhance the ability of the EAC and the Standards Board to perform their duties under HAVA;

Now, therefore, be it Resolved, by the Election Assistance Commission Standards Board, that

The Board recommends that the Election Assistance Commission (EAC) prepare a

report for presentation at each meeting of the Board regarding the status of all Resolutions that have been presented to the EAC for consideration by either the Standards Board or the Board of Advisors; and

Be it further resolved that the report presented by the EAC should indicate the Resolution number; a short description of the Resolution; the status of the Resolution, including whether the Resolution was implemented at all; and the reason for the status of each Resolution. ;and

Be it further resolved that the report presented by the EAC should include adequate time for discussion of the Report; and

Be it finally resolved that the information set forth in the report presented by the EAC should be incorporated into the EAC Web page currently providing copies of the Resolutions adopted by the Standards Board, and that the information on this Web page be updated regularly by the EAC to indicate the current status of each Resolution and the reason for the status of each Resolution so that members of the Standards Board and the public may keep current with the actions and decisions of the EAC taken since the last report given at a meeting of the Standards Board.

MOTION CARRIED

A True Record Attest:



Brad King
Secretary of the Standards Board
Executive Board

Submitted by: U.S. EAC Standards Board, Executive Board

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Submitted to the Standards Board for Approval/Denial on August 6, 2009

Passed on August 6, 2009



U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2009-11

Whereas, The Election Assistance Commission (EAC) is an agency of the United States federal government created by the Help America Vote Act (HAVA); and

Whereas, Vote-by-phone is used in jurisdictions as an accessible voting station (Acc-VS), one per polling place, in the states of Connecticut, Maine, New Hampshire, Oklahoma, and Vermont; and the commonwealth of Puerto Rico; and

Whereas, The vote-by-phone system is a voter interface for marking the paper ballot that is available to all voters in these jurisdictions; and

Whereas, The 2009 National Institute of Standards and Technology (NIST) response to Resolution 2007-18 references no scientific study that synchronizing audio and video presented through an electronic display screen, creates a significant advantage for voters over alternative methods of providing a visual presentation of the ballot; therefore, be it

Resolved, The requirement for an electronic display screen as the only method of providing synchronized audio/visual presentation of the ballot be removed from VVSG Version 1.1 in all areas including: 3.2.5(b); 3.3.7(a); and 3.3.2(d).

MOTION CARRIED

A True Record Attest:

A handwritten signature in cursive script that reads "J. Bradley King".

Brad King
Secretary of the Standards Board
Executive Board

Submitted by: Julie Flynn and Lucette S. Pellerin of Maine, Anthony Stevens and Robert Dezmelyk of New Hampshire, Kathy DeWolfe of Vermont, Néstor J. Colón-Berlingeri and María D. Santiago-Rodríguez of Puerto Rico, and Nick Handy of Washington

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2009-12

Whereas, The Election Assistance Commission (EAC) is an agency of the United States federal government created by the Help America Vote Act (HAVA); and

Whereas, The EAC presented a draft of the Voluntary Voting System Guidelines (VVSG), Version 1.1 to the members of the EAC Standards Board for its review, comments, and suggestions; and

Whereas, There are sections of the VVSG 1.1 that are in need of clarification; Therefore, be it

Resolved, Section 7.9.1(c)(v) of the VVSG Version 1.1, Display and Print Paper Record, the word “final” should be added between the words “voter’s” and “choices” to clarify that the paper record contains a complete record of the voter’s final choices; and, be it further

Resolved, Sections 7.9.2(b) and (c) of the VVSG 1.1, approve or void the paper record, should be rewritten so that it reflects that any references to a “paper record” reads “paper record or vote” and that any reference to a “vote” reads “paper record or vote.”

MOTION CARRIED

A True Record Attest:

A handwritten signature in cursive script that reads "J. Bradley King".

Brad King
Secretary of the Standards Board
Executive Board

Submitted by: Dale Fellows of Ohio

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