Minutes of the Meeting of the United States Election Assistance Commission
STANDARDS BOARD
December 12 -14, 2007
The Omni Hotel
700 San Jacinto Blvd.
Austin, TX

Herewith are the Minutes of the Meeting of the United States Election Assistance Commission (EAC) Standards Board, held December 12 - 14, 2008. The meeting convened on Wednesday, December 12, at 8:30 a.m. in Austin, TX at the Omni Hotel, 700 San Jacinto Blvd., and adjourned at 9:52 a.m. on Friday, December 14, 2007.

Wednesday, December 12

Call to Order

Executive Board Chair Sarah Ball Johnson called the meeting to order at 8:30 a.m. and called for any proxies to be delivered to Executive Board Secretary Tonni Bartholomew. There were no proxies.

Roll Call

Executive Board Vice Chair Louie Bernard called the roll and found present: Beth Chapman and George Ingram of Alabama; Whitney Brewster and Shelly Growden of Alaska; Soliai Fuimanono of American Samoa; Kevin Tyne and Reynaldo Valenzuela of Arizona; Janet Harris and Mary Lou Slinkard of Arkansas; Lowell Finley of California; Russ Ragsdale of Colorado; Elaine Manlove and Howard Sholl of Delaware; Alice Miller and Jonda McFarlane of District of Columbia; Dr. Brenda Snipes of Florida; Karen Handel and Lynn Bailey of Georgia; Scott Nago and Glen Takahashi of Hawaii; Tim Hurst and Dan English of Idaho; Brad King and Ann Jochim of Indiana; Sandy Steinbach and Janine Sulzner of Iowa; Sarah Ball Johnson and Don Blevins of Kentucky; Jay Dardenne and Louie Bernard of Louisiana; Julie Flynn of Maine; Nikki Baines Trella and Kim Atkins of Maryland; William Campbell of Massachusetts; Susan McRill and Tonni Bartholomew of Michigan; Gary Poser and Sharon Anderson of Minnesota; Linda Dixon Rigsby of Mississippi; Leslye Winslow and Richard Struckoff of Missouri; Janice Doggett of Montana; John Gale of Nebraska; Mary Herrera of New Mexico; Ross Miller and Larry Lomax of Nevada; Anthony Stevens and Carol Johnson of New Hampshire; John Haggerty and Ed Szczesniak of New York; Deborah Bedford of North Carolina; Jim Silrum and Michael Montplaisir of North Dakota; Dale Fellows of Ohio; John Lindback and Annette Newingham of Oregon; Pedro Cortés and Regis Young of Pennsylvania; Nestor Colón Berlingeri of Puerto Rico; Ann McGeehan and Dana DeBeauvoir of Texas; Michael Cragun and Robert Pero of Utah; Kathleen DeWolfe of Vermont; Corinne Halyard Plaskett of the U.S. Virgin Islands; Shane Hamlin and Pat McCarthy of Washington; Ross Hein and Sandra Wesolowski of Wisconsin; Peggy Nighswonger and Julie Freese of Wyoming. Seventy-one (71) members were present.

Ten (10) of the thirteen (13) new Standards Board members, who had been appointed since the February 2007 meeting, were present.

Chair Johnson declared a quorum present.

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Introduction of Executive Board and VVSG Ad Hoc Committee

The Executive Board members were introduced: Sarah Ball Johnson (KY), Chair; Louie Bernard (LA), Vice Chair; Tonni Bartholomew (MI), Secretary; Dan English (ID); Larry Lomax (NV); Peggy Nighswonger (WY); Russ Ragsdale (CO); and Sandy Steinbach (IA). Secretary Todd Rokita (IN) resigned from the Standards Board; as president of the National Association of Secretaries of State, he is now a member of the Board of Advisors.

The VVSG Ad Hoc Committee was introduced: John Lindback (OR), Committee Chair; Lynn Bailey (GA); Bill Campbell (MA); Nestor Colon Berlingeri (PR); Shelly Growden (AK); Mary Herrera (NM); Ann McGeehan (TX); Don Merriman (KS); Peggy Nighswonger (WY); Gary Poser (MN); Russ Ragsdale (CO); Jim Silrum (ND); Nikkie Trella (MD); and Sandra Wesolowski (WI).

VVSG is the acronym for Voluntary Voting Systems Guidelines.

Appointment of Parliamentarian

Chair Johnson (KY) appointed Tonni Bartholomew (MI) to serve as parliamentarian.

Appointment of Proxy Committee

Chair Johnson appointed Dan English (ID), Committee Chair; Don Blevins (KY); Whitney Brewster (AK); and Gary Poser (MN) to the committee.

Appointment of Resolutions Committee

Chair Johnson appointed Larry Lomax, Committee Chair; Bill Campbell (MA); Tim Hurst (ID); and Kathy DeWolfe (VT).

Adoption of Agenda

Chair Johnson announced a time change for recessing Thursday's session and then called for a motion to adopt the revised agenda. Secretary Mary Herrera (NM) made the motion and Beth Chapman (AL) seconded to adopt the agenda. The motion passed unanimously.

Review of Meeting Materials

Commissioner Hillman discussed the meeting materials found in the meeting binders.

Joint Meeting with the Board of Advisors

Board of Advisors Chair Chris Thomas (MI) explained the process for commenting on the proposed draft Voluntary Voting System Guidelines (VVSG). As an EAC advisory board member, an individual can comment through their respective board or as an individual during the two formal comment periods. The first comment period began November 5, 2007 and will close March 5, 2008. The second comment period will begin in late 2008; the opening and closing dates have not yet been determined and will be announced by EAC later in 2008. All information is posted on EAC's website.

Chair Johnson introduced Standards Board members Alice Miller (DC) and John Gale (NE) and Board of Advisor member Helen Purcell (AZ) as the boards' representatives on the Technical Guidelines Development Committee (TGDC). Sharon Turner Buie had served as the Board of Advisors' other representative but resigned in April 2007.

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Alice Miller, member of the TGDC Human Factor Subcommittee, gave an overview of the TGDC and explained the process the committee utilized to develop the current draft of the VVSG. Subcommittees were formed to address core requirements, security requirements, and human factors and privacy requirements. She found the work challenging due to the technical nature of the VVSG document but relied on the National Institute of Standards and Technology (NIST) staff for advice. Conversely, NIST relied on the expertise of the election officials on the committee. Ms. Miller stated that the collaborative effort did not create a perfect document and encouraged the members of both boards and the public to utilize the two formal comment periods to provide constructive comments that would assist in meeting the goal -- a workable document.

Also serving on the Human Factors Subcommittee, Secretary John Gale confided that he also found the work of the TGDC challenging. He expressed concerns that the committee did not address the cost factors for carrying out the guidelines; the timing for adopting the draft VVSG; and the impact of the latest VVSG iteration on election administrators. Since the TDGC is a multidisciplinary group, Secretary Gale recommended orientation for new TGDC members to establish a fundamental grounding in each member's area of expertise. He also recommended establishing a help desk to assist TGDC members who may have technical questions. Secretary Gale commended the VVSG Ad Hoc Committee on the summary report of their comments on the VVSG.

Helen Purcell served on the Security and Transparency Subcommittee and stated that the new iteration of the VVSG is the result of two years of work. She praised NIST staff for their assistance with educating non-technical committee members and found all committee members to be dedicated to the task. She, too, emphasized that the draft VVSG is not perfect and reminded board members that they have an opportunity to make recommendations to EAC as appropriate.

Standards Board VVSG Ad Hoc Committee – John Lindback, Committee Chair

John Lindback reported that 14 Standards Board members volunteered for the committee and they divided the VVSG document into 14 sections. Each committee member asked other Board members to help them work on their designated section. The various working groups had a total of 37 people.

NIST Presentations – The principal authors of the draft proposed VVSG (standards) explained and discuss the draft requirements with Standards Board and Board of Advisor members. Summaries of their presentations follow below.

Standards 101 – Mark Skall

Mark Skall reported that the Plain Language Companion Guide to the VVSG, which was made available to all members at the beginning of the meeting, was produced by NIST. He urged board members to use it to help them get through the technical jargon of the draft VVSG. Mr. Skall's presentation laid the foundation for understanding the draft VVSG by establishing a common understanding of concepts, terminology and standards.

In his comments, Mr. Skall explained that the VVSG standards must be precise and implemented correctly to have a good voting system. Conformance testing by voting system test laboratories

(VSTLs) determines if the voting system meets the requirements outlined in the VVSG standard. EAC provides the policy and procedures for testing to VSTLs. Based on test results, EAC then certifies the voting system that conforms to the requirements of the standards. The draft VVSG addresses technological advances including VVPAT, wireless, electronic poll book, electronic ballot markers and digital signatures. It also provides for additional security, accessibility and usability requirements.

VVSG Overview – John Wack

John Wack gave an overview of the VVSG document and rationale behind its structure and the conformance clause. The VVSG is a tool written for technical people – vendors, manufacturers, and test labs. The plain language companion document is NIST's effort to provide an initial framework to assist non-technical stakeholders with understanding the VVSG.

The conformance clause lays out the rules for conforming to the VVSG. It addresses device structures, class structures for voting system devices and voting variations. The clause states that voting systems must be software independent to conform to the VVSG. Mr. Wack closed with discussing the issues that need further analysis before going into the VVSG – digital signatures, innovation class and standards maintenance.

Core Requirements Overview – David Flater

David Flater's presentation covered five major topics: Discussion of the System versus Device Distinction; Benchmarks and related test methods; Commercial of the Shelf (COTS); Discussion of Accuracy for Optical Scanners; and Post Election Reporting Requirements.

System Versus Device Distinction: The draft VVSG clarifies which requirements apply to the voting system versus those that should apply to specific types of devices within the voting system, and also clarifies how one would view a particular voting system that is submitted for testing that combines several technologies.

Benchmarks and Related Test Methods: Benchmarks in the old standard were open to discussion, whereas, the new benchmarks are based on estimates provided to the TGDC by NASED representatives and are more defensible. Updating the benchmarks required procedural changes in testing that ensure a more valid system test and make better use of the data collected throughout the testing campaign (the entire process of conformity assessment). As a result, the volume test was developed to evaluate aspects of the system and produce a large quantity of data that is fed into the evaluation of reliability, accuracy and misfeed rate.

COTS: COTS (Commercial Over The Shelf) includes both the shrinkwrap commercial packages and analogous open-source packages that are general purpose, widely used, and unmodified from their standard general purpose versions. These packages are not exempt from the different levels of scrutiny; COTS is always tested.

Accuracy for Optical Scanners: In the old standard, a few categories of marks were identified. The new standard includes the new concept of marginal marks, which does not conform to manufacturer's instructions. The voting system should reject marginal marks. Mechanically speaking, a hesitation mark is not a marginal mark because it is outside of the voting target and should be counted as a non-vote. Absence of mark is also

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a non-vote. Ideally, voting systems count reliable detectable marks and reject marginal marks. Manufacturers are required to disclose the algorithm for determining what a likely detectable mark is.

Post Election Reporting Requirements: The reporting requirements have been clarified, disambiguated, and placed in one place in the draft VVSG. Clarifications were made in the new standard so reports at the end of an election account for all cast ballots and all valid votes.

Integratability and Data Export – John Wack

All voting systems should have the same common fields in order to produce records in a standard way for tabulation, audits and analysis. There is no standard addressing this issue but some standards are under development by Oasis Group called collection Markup Language and Institute of Electrical and Electronics Engineers (IEEE). Further testing and development of their formats may lead to a specific format that can be used in the next iteration of the VVSG.

EAC asked that NIST address the electronic poll book issues. Requirements were changed to make sure that there is appropriate security and a fire wall to protect communications from the electronic poll book to the statewide voter registration database. John Wack stated that allowing the device to be hooked up to an external network would introduce vulnerabilities that organizations face when their networks are hooked up to external networks. More controls would have to go in the voting system standards and they would have to be considered very carefully.

Testimony for Election Technology Council – David Beirne

All members received a copy of David Beirne's testimony, which he reviewed in his presentation. He discussed the elimination of software dependent voting systems as a classification; called for the establishment of open-ended vulnerability testing; congratulated the TGDC on their work on the usability performance benchmarks; questioned the impact of the VVVSG on election administration procedures; and explored the financial impacts of the proposed VVSG. In conclusion, he stated that industry representation is needed to strengthen the development of the VVSG. On behalf of all ETC members, he expressed their desire to participate in the VVSG process and serve as a resource.

NIST Presentations (Continued)

Security Requirements – Barbara Guttman and Nelson Hastings

Barbara Guttman described the difficulty in developing the security requirements in the proposed VVSG. Using the defense in-depth approach, NIST looked at threat categories impacting voting systems (computerized systems) and the election process, including the discrediting of elections. Ms. Guttman continued by defining software independence and describing how the concept has evolved to include Independent Voter-Verifiable Records (IVVR) and Innovation Classes and Cryptography.

Nelson Hastings began the next portion of the presentation with a discussion about the high-level main requirements for cryptography. He continued with explaining communication security, system event logging, and open-ended vulnerability testing (OEVT). Once the OEVT team does its testing, the findings that include security requirements -- security documentation,

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setup inspection, software installation, access control, system integrity management and physical security are documented.

Usability, Accessibility, and Privacy – Sharon Laskowski

Sharon Laskowski's presentation focused on the goals for making voting systems independently accessible to as many voters as possible and the voter's interaction with the voting system. The key concepts of Ms. Laskowski's discussion included Human Factors and Privacy (HFP) requirements, an overview of Part 1, Chapter 3 of the VVSG, explanations of the more complex requirements, design requirements, usability performance requirements and relevant definitions.

The meeting recessed at 6:00 p.m.

<u>Thursday, December 13, 2007</u>

Chair Johnson called the meeting to order at 8:30 a.m.

Adoption of the Minutes of the February 20 - 23, 2007 Meeting

Secretary Tonni Bartholomew (MI) made a motion to adopt the minutes. The motion was seconded and approved unanimously.

Executive Board Report

Chair Sarah Ball Johnson (KY) referred members to the written report in their meeting books and went on to describe the activities of the Executive Board since the February 2007 meeting. The Board focused on the challenges the full Standards Board would face with its review of the proposed next iteration of the VVSG. To meet those challenges, the Board created a VVSG Ad Hoc Committee and requested VVSG training for the Executive Board and ad hoc committee members. The training was held in October 2007, at NIST's facilities in Boulder, CO. The Board also joined the National Association of Secretaries of State in asking for a plain language guide to the VVSG; developed a set of VVSG resolutions to be presented to the Standards Board at this meeting; wrote a letter to Congress offering comments to H.R. 811, a bill introduced by Congressman Rush Holt; elected new officers in June; and considered recommendations from the Bylaws Committee for amendments to the bylaws, which will be discussed at this meeting.

Proxy Committee Report

Dan English (ID) reported there were no proxies. He stated that he would check with other committee members at the end of today's session to see if there was any proxy business.

Nominating Committee Report

Committee Chair Louie Bernard introduced the committee: Lynn Bailey (GA) and Jim Silrum (ND). Mr. Bernard referred members to the written report in their meeting books and went on to report that former committee member, Elaine Gravely, retired from her job and resigned from the Standards Board in Spring 2007 meeting. He noted the highlights of the committee's work since February 2007, focused on reviewing the process and procedures used to elect members of the Executive Board at the February meeting, which was held in Atlanta. After

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the review, issues that needed clarification were referred to the Bylaws Committee. He concluded his report by noting that there are currently two vacancies on the committee.

Bylaws Committee Report

Committee Chair Tonni Bartholomew introduced committee members in attendance: Tim Hurst (ID), and Howard Sholl (DE). Ms. Bartholomew referred members to the written report in their meeting books and went on to report that the committee developed proposed amendments to reflect the Nominating Committee's recommendations. The amendments will be presented to the full Standards Board for a vote. She concluded her report by noting that there is currently one vacancy on the committee.

VVSG Ad Hoc Committee

VVSG Ad Hoc Committee Chair John Lindback (OR) referred members to the written report in their meeting books and went on to report how the committee communicated via conference calls and one in-person meeting to review the draft VVSG and develop resolutions. Mr. Lindback commended the committee members for their hard work. He personally thanked Russ Ragsdale for developing the summary report of the committee's recommendations for this board meeting.

Resolutions Committee

Committee Chair Larry Lomax (NV) reported that 13 resolutions had been received. He encouraged others wanting to propose a resolution to see him.

Bylaws Amendments

The following nine (9) amendments were introduced as motions to amend the bylaws by Tonni Bartholomew.

Article II.V.1.d - to be amended to distinguish whether unaffiliated, independent, undeclared and nonpartisan members should be considered as different parties from each other. After discussion, the membership voted to add the "undeclared category" to the amendment. Howard Sholl (DE) seconded the motion to amend Article II. Chair Johnson (KY) called for a vote and the amended amendment was unanimously passed.

Article V.2.a.iv - to be amended to allow board members who know in advance that they will not be able to attend a Standards Board meeting to vote on a known pool of candidates (absentee voting) and to permit the Nominating Committee to take action if there are an insufficient number of nominees. After discussion, the membership agreed to the proposed amendment as worded. Howard Sholl (DE) seconded the motion. The amendment was voted on and unanimously passed.

Article V.2.b - to be amended to add "nominations for membership on the Executive Board shall not be accepted from the floor of a Standards Board meeting." Tim Hurst (ID) seconded the motion. The amendment was passed unanimously.

Article V.2.c - to be amended to add language to address the possibility that the selected candidate(s) may not meet the requirements of HAVA 213(c). After discussion, Carol Johnson (NH) motioned for the amendment to be sent back to the Bylaws Committee for total rewrite and postpone until the next meeting. Brad King (ID) seconded the motion and it failed. Discussion

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of the main motion resumed. Membership agreed to vote on a proposed amendment to the main motion that added a recount option in the case of a tie and if after the recount, the tie remains, the committee can toss a coin. Dale Fellows (OH) seconded the motion. The proposed amendment passed unanimously. The main motion was then voted on and passed unanimously.

Article V.2.c.iii,iv,v - to be renumbered. Howard Sholl (DE) seconded the motion, which was voted on and passed unanimously.

Article VIII.2 - to be amended to provide a procedure to allow members to vote by absentee ballot and provide a procedure for counting absentee ballots. Tim Hurst (ID) seconded the motion. The motion was voted on and passed unanimously.

Article IX.2.a - to be amended to assign and clarify responsibilities for the Nominating Committee. Tim Hurst (ID) seconded the motion. The motion was voted on and unanimously passed.

Article IX - to be amended to add after Section 3 a provision for creating special committees and identifies specific special committees. Because there was a potential or a proxy to be utilized at the Austin meeting, Tonni Bartholomew made a motion that the main amendment does not go into effect until after the close of the Austin meeting. Howard Sholl seconded the proposed amendment. The motion to amend the amendment was voted on and unanimously passed. The main motion was seconded by Howard Sholl, voted on and unanimously passed.

Amendments From the Floor

Chair Johnson opened the floor for proposed bylaws amendments. Don Blevins (KY) stated that Executive Board members who change party affiliation while on the board should immediately report such changes to the board. After general discussion, Mr. Blevins moved to refer this matter to the Bylaws Committee for further consideration. Brad King (IN) seconded the motion. The motion was voted on and unanimously passed.

VVSG Ad Hoc Committee Summary Report

Russ Ragsdale (CO) reported that as the VVSG Ad Hoc Committee and its working groups went through their assigned sections of the draft document, they posed questions and exchanged comments with NIST staff. They also attended a 3-day training session in October 2007 with NIST staff. In November, the Executive Board met and developed the VVSG Ad Hoc Committee Summary Report and draft VVSG resolutions that are being presented to the Standards Board at this meeting.

VVSG Resolutions

Russ Ragsdale, on behalf of the Executive Board, presented twelve (12) proposed resolutions to the draft VVSG. Additional resolutions were offered by other Standards Board members. All proposed resolutions were reviewed by the Resolutions Committee and approved as to form. The resolutions that were adopted are incorporated into these minutes as attachments.

Resolution 2007-06: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY). After discussion, the amended amendment was voted and approved.

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Resolution 2007-07: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-08: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-09: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-10: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-11: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-12: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-13: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-14: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-15: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-16: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-17: Russ Ragsdale (CO) moved for adoption, which was seconded by Peggy Nighswonger (WY); voted and approved.

Resolution 2007-18: Carol Johnson (NH) moved for adoption, which was seconded by Julie Flynn (ME); voted and approved.

Resolution 2007-19: Shelly Growden (AK)) moved for adoption, which was seconded by Lynn Bailey (GA); voted and approved.

Resolution 2007-20: Gary Poser (MN) moved for adoption, which was seconded by Sandra Wesolowski (WI); voted and approved.

The meeting recessed at 4:50 p.m.

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Friday, December 14, 2007

Chair Johnson called the meeting to order at 9:00 a.m.

Discussion and Consideration of Standards Board Business

Chair Sarah Ball Johnson (KY) asked Committee Chair Dan English (ID) for the Proxy Committee Report. Mr. English reported there were two proxies – Karen Handel (GA) assigned her proxy to Lynn Bailey (GA) and Jim Silrum (ND) assigned his proxy to Mike Montplaisir.

EAC Commissioner Gracia Hillman gave a brief report of EAC activities, as follows: Commissioner Rosemary Rodriguez will serve as 2008 Chair of the Commission and Commissioner Carolyn Hunter will serve as Vice Chair. Commissioner Hillman let board members know that the President had sent her name for reappointment to the Senate in June 2007, but the Senate had not yet taken action so she is in holdover status.

Commissioner Hillman continued the discussion with the big issues facing EAC in the coming months – transferring the NVRA regulations from the Federal Election Commission (FEC) to EAC (a joint rule making activity); developing and implementing EAC policies and procedures that govern EAC decisions; completing a number of research projects and determining the issues that would be researched and studied next; and improving the survey instrument for the Election Day Survey. EAC likely will increase the use of the virtual meeting room that allows Standards Board members to conduct business between meetings. Members can review documents, post comments, and vote. However, a quorum would have to be present and there would be a short timeframe within which Standards Board members could vote.

She thanked the Standards Board, and the Executive Board in particular, for a very productive year. She also thanked the EAC staff who helped organize and support this meeting – Sheila Banks, the "team captain," Bert Benavides, Matthew Masterson, Tamar Nedzar, DeAnna Smith and Bryan Whitener.

Adjournment

With there being no other business, Chair Johnson indicated that a motion to adjourn was in order. Gary Poser (MN) moved to adjourn. The motion was seconded by Nestor Colon Berlingeri (PR), voted and approved. The meeting adjourned at 9:52 a.m.

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-06

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

Whereas, **There is uncertainty about the development of future voting technology; and**

Whereas, **Any accessibility requirements in the next iteration of the Voluntary Voting System Guidelines (VVSG) must meet all accessibility requirements under federal law; and**

Whereas**, The innovation class as proposed in the next iteration of the VVSG contains no certification standards or certification process, it is premature to require software independence; now, therefore, be it**

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that the next iteration of the VVSG provide that software independence not be a requirement.

A True Record Attest: Tonni L. Bartholomew

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-07

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

Whereas, **Open ended vulnerability testing is by nature an open test without restrictions; and**

Whereas, Open ended vulnerability testing is not conducive to a conformance assessment; now, therefore, be it

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that it should remove the requirement for open ended vulnerability testing until such time as standards can be created to allow vulnerability testing to be a uniform and defined process for each voting system.

A True Record Attest:

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-08

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

Whereas, **The next iteration of the Voluntary Voting System Guidelines (VVSG) is intended as a standards document for voting equipment; and**

Whereas, Individual election jurisdictions create their own election administration practices; and

Whereas, **The United States Election Assistance Commission's Election Management Guidelines are intended as recommendations to election officials regarding election management practices; now, therefore, be it**

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that it should remove all requirements that mandate election procedures instead of equipment standards.

A True Record Attest: Tonni G. Bartholomew

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-09

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 next iteration of the Voluntary Voting System Guidelines (VVSG) is a total rewrite of the previous version of the VVSG; and

Whereas, **The next iteration of the VVSG creates expanded requirements for security, accessibility, usability, and testing; and**

Whereas**, The need for these requirements must be balanced against the cost of implementing these requirements; and**

Whereas**, No cost analysis was used in the creation of the next iteration of the VVSG; and**

Whereas**, The federal government has already appropriated 3.1 billion dollars for the purchase of voting equipment by the states; and**

Whereas, **Most of the money appropriated has been spent or committed by the states in order to meet the requirements of HAVA; and**

Whereas**, Total funding of HAVA has not yet taken place; and**

Whereas, **The potential cost of the next generation of voting machines must be known by election officials prior to the adoption of the next iteration of the VVSG; now, therefore, be it**

Resolved, **That the Standards Board recommends to the United States Election Assistance Commission that it conduct research into and consider the financial impact of the next iteration of the VVSG in the areas of cost to develop, acquire, test, and administer the next generation of voting systems.**

A True Record Attest:

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-10

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 next iteration of the Voluntary Voting System Guidelines (VVSG) is a total rewrite of the previous versions of the VVSG; and

Whereas, **The next iteration of the VVSG creates expanded requirements for security, accessibility, usability, and testing; and**

Whereas, Many of the requirements in the next iteration of the VVSG could have an unintended impact on voter convenience and voter turnout; and

Whereas, **The expanded requirements of the VVSG could have a chilling effect on the availability of the type of voting systems available; and**

Whereas**, The number of voters choosing to use early voting is increasing; and**

Whereas, **There is an increasing number of jurisdictions choosing to use vote centers; now, therefore, be it**

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that it consider the impact on the election administrator's ability to provide early voting and vote centers before adopting a standard.

A True Record Attest:

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-11

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 next iteration of the Voluntary Voting System Guidelines (VVSG) is a standards document intended to be tested against; now, therefore, be it**

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that it should request the Technical Guidelines Development Committee (TGDC) to clearly identify all "goal level" or non-testable requirements contained in the next iteration of the VVSG.

A True Record Attest:

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-12

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

Whereas, **Many states require their voting systems to be tested to the 2002 Voting Systems Standards (VSS) or 2005 Voluntary Voting System Guidelines (VVSG); and**

Whereas, The 2005 VVSG becomes effective on December 13th, 2007; now, therefore, be it

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that it should remove any editorializing concerning the 2002 VSS or 2005 VVSG from the next iteration of the VVSG because it could undermine confidence in the voting process.

A True Record Attest: Tonni L. Bartholomew

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-13

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 Standards Board has identified several areas of concern and has put those concerns forward in resolutions; now, therefore, be it**

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that it seek to fully understand the consequences of the next iteration of the Voluntary Voting System Guidelines (VVSG) before establishing an effective date for the new set of standards.

A True Record Attest:

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-14

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

Whereas, For two full years after the adoption of the 2005 Voluntary Voting System Guidelines (VVSG) no system has been certified to the 2005 VVSG; now, therefore, be it

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that it create a period of time where it would allow already 2005 certified voting systems to be upgraded or modified under the 2005 VVSG while all uncertified voting systems must be tested under the next iteration of the VVSG.

A True Record Attest: Tonni G. Bartholomew

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-15

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 next iteration of the VVSG; and**

Whereas, **The VVSG Ad Hoc Committee has spent many hours reviewing the next iteration of the VVSG; and**

Whereas, **The VVSG Ad Hoc Committee has provided an extensive report with suggestions titled "Additional Resolution Issues"; 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 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.

A True Record Attest:

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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Passed on <u>December 13, 2007</u>

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COMMITTEE MEMBER	SECTION NUMBER	ISSUE OR SECTION SUMMARY	SUGGESTION
Lynn Bailey	**General**	**Plain language**	**The only concern that I have that was not formally addressed in a Resolution is the fact that parts of the document are highly technical – to the point of being difficult, if not impossible, for the layman to understand. I realize that the EAC and others have attempted (apparently to no avail) to get the plain language companion document from NIST, and I would encourage us to continue our pursuit of this goal as well.**
Shelly Growden	**1 - 4.4.1-A.9 IVVR vote-capture device, IVVR unambiguous interpretation of cast vote**	**Each IVVR shall contain human-readable summary of the votes cast to ensure that hand audits and recounts can be done using only human-readable parts of the paper record.**	**This section lists the human-readable content that must be contained on the IVVR. Since machines are used for early voting and some jurisdictions use the same machine at multiple sites, the requirement to list the polling place should be removed and replaced with machine ID to identify which machine was used for the IVVR. Also, may be necessary to add the date to know when the IVVR was voted for those jurisdictions that have early voting. Replace terminology "ballot configuration" with ballot style.**
Shelly Growden	**1 - 4.4.2.3-A VVPAT, prints and displays a paper record, and 4.4.2.3-B VVPAT, ease of record comparison**	**The VVPAT prints and displays the VVPR for voter to compare with a summary of the voter's electronic ballot selections and shall be designed to facilitate the voter's rapid and accurate comparison.**	**Add a discussion section to clarify that the intent of these sections is for voters to be able to compare the paper record with the screen.**
Shelly Growden	**1 - 4.4.2.3-D VVPAT, vote rejection process requirements**	**If the VVPR is rejected, the VVPAT shall immediately print an indication that the vote is rejected (in view of voter),**	**Add to the discussion section that if a VVPR is rejected, the VVPAT would deposit the rejected VVPR into the ballot box or**

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		electronically store a record that the VVPR was rejected and the summary of choices, and deposit the rejected VVPR into the ballot box or other receptacle.	**receptacle at the end of the voting process. It should not have to be deposited immediately, otherwise that will waste paper. Why keep electronic rejected records – wouldn't a jurisdiction only need the accepted records?**
Shelly Growden	**1 - 4.4.2.3-D.3 VVPAT, rejected vote election official intervention**	**When a VVPAT reaches the configurable limit of rejected VVPRs per voter or per machine it shall remove the voter's choices from the screen; place the rejected VVPR into the ballot box/receptacle; clearly display that a VVPR has been rejected and indicate the need for election official intervention; and suspend normal operations until re-enabled by authorized official.**	**If any indication of the voter's choices must be removed from the screen if the VVPAT reaches a configured limit of rejected VVPRs per voter or per machine, there would be no way for election officials to counter argue if a voter says that the VVPAT is not printing the correct selections. Theoretically, a voter could shut down a machine if an election official cannot verify the unit is not printing the voter's choices correctly.**
Shelly Growden	**1 - 4.4.2.4-B VVPAT, paper roll, required human-readable content per roll**	**For paper-roll VVPATs, the paper roll shall be marked with:** **1. Polling place** **2. Reporting context** **3. Date of Election** **4. If multiple rolls were produced, the number of the paper roll** **5. Final summary line listing how many VVPRs appear on roll and how many accepted VVPRs are on roll.**	**As with 4.4.1-A.9, the human-readable content of the paper roll needs to include the machine # and not the polling place. Should also include the date the tape is printed.**
Shelly Growden	**1 - 4.4.2.4-C VVPAT, paper roll, information per VVPR**	**Each VVPR produced by a paper-roll VVPAT shall include:** **a. Ballot configuration** **b. Type of voting (provisional, early, etc.)** **c. Complete summary of voter's choices**	**For each VVPR, add the date it is printed. In item (e), remove the word ballot and replace with VVPR.**

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		d. For each ballot contest **1) Contest name (Governor)** **2) Any additional information needed for unambiguous interpretation of VVPR** **3) Clear indication if the contest was undervoted** **4) Clear indication if the choice is a write-in vote** **e. Indication if the ballot has been accepted or rejected by the voter.**	
Shelly Growden	**1 - 4.4.2.4-E VVPAT, cut-sheet, content requirements per electronic CVR**	**Each VVPR produced by a cut-sheet VVPAT shall include:** **a. Polling place** **b. Reporting context** **c. Date of election** **d. Ballot configuration** **e. Type of voting (provisional, early, etc.)** **f. Complete summary of voter's choices** **g. For each ballot contest** **1) Contest name (Governor)** **2) Any additional information needed for unambiguous interpretation of VVPR** **3) Clear indication if the contest was undervoted** **4) Clear indication if the choice is a write-in vote** **h. Indication of whether each sheet has been accepted or rejected by the voter.**	**In the title of this requirement, remove the word CVR and replace with VVPR. In section (h), after the word sheet, add "of the VVPR" for better clarification.**
Shelly Growden	**1 - 4.4.2.4-F.2**	**For VVPRs split across multiple cut-**	**This section needs clarified to clearly indicate**

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	VVPAT, cut-sheet, VVPR sheets verified individually	**sheets, the ballot choices on each sheet shall be submitted to the voter for verification separately.** **a. A verification screen shall be presented to the voter for each sheet separately.** **b. When a voter accepts or rejects the contents of a sheet, the votes contained on that sheet and verification screen shall be committed to memory.** **c. Configurable limits on rejected VVPRs per voter shall count each rejected sheet as a rejected VVPR.** **d. Configurable limits on rejected VVPRs per machine shall not count more than one rejected VVPR per voter.** **e. When a rejected VVPR requires election official intervention, the VVPAT shall indicate which sheets have been accepted and which have been rejected.**	**that if the VVPR is split across multiple sheets, and if VVPR sheets can be individually accepted or rejected, that there must be a complete set of accepted ballots for each voter. For instance, if the ballot choices are going to be split across 3 sheets for each voter, we would want a complete set of accepted sheets, not 2 accepts and 1 reject.**
Shelly Growden	**1 - 4.4.2.6-C VVPAT, paper-roll, support tamper-seals and locks**	**Paper-roll VVPATs shall be designed so that when rolls are removed from the voting device:** **a. All paper containing the VVPRs is contained inside the secure, opaque container.** **b. The container supports being tamper-sealed and locked.** **c. The container supports being labeled with the device serial number,**	**Clarify in the discussion section to state when poll workers remove the paper containing the VVPRs, the paper is in a container. Once removed, a separate container is not necessary.**

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		precinct, and other identifying information to support audits and recounts.	
Shelly Growden	**1 - 4.4.2.6-D VVPAT, paper-roll, mechanism to view spooled records**	**Paper-roll VVPATs shall have a mechanism for an auditor to unspool the paper, view each VVPR in its entirety, and then respool the paper without modifying the paper in any way or causing the paper to become electrically charged.**	**Add to the discussion that the intent is to allow ease of handling of the paper rolls. An election official should be able to remove the paper from the spool with having to "un-spool" the paper so that VVPRs can be secured separately from the container.**
Nikki Trella	**1 – 5.2.1 Software identification verification**	**Refers to: (1) ways of locating & identifying software using directory paths and filenames or memory addresses & byte strings; and (2) ability to determine if software has been modified. (p. 120)**	**Request that language be added to clarify that it includes both election and non-election specific software.**
Nikki Trella	**1 -5.3-A Software installation state restriction**	**Vote-capture devices must allow software to be loaded only when it is in pre-voting state. (p. 127)**	**Suggest a corresponding requirement (about when software can be loaded) for optical scan tabulators.**
Nikki Trella	**1 - 5.3-E Software digital signature verification**	**Digital signature associated with software and created by designated entities must be validated before loading software on programmed devices. (p. 128)**	**Requirement needs to be re-written. As currently written, it seems to require a test lab, NSRL or notary repository – instead of the digital signature created by the entity – to be validated. Suggested re-write: A digital signature associated with the software and created by a test lab, National Software Reference Library (NSRL), or notary**

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			repository SHALL be successfully validated before placing the software on programmed devices of voting systems.
Nikki Trella	**1 - 5.3-E.1**	**Software installation programs must validate the digital signature created by designated entities. (p. 129)**	**Requirement needs to be re-written. As currently written, it seems to require a test lab, NSRL or notary repository – instead of the digital signature created by the entity – to be validated. Suggested re-write: Software installation programs SHALL validate a digital signature of the software created by a test lab, National Software Reference Library (NSRL), or notary repository before installing software on programmed devices of voting systems.**
Jim Silrum	**1 – 6.5.3 Period of retention (informative)**	**Period of retention**	**There should be a separate retention period for optical scan jurisdictions that does not include the retention of electronic records. The ballots retained for 22 months is enough. This may be covered if all election procedures are removed from the VVSG.**
Jim Silrum	**General**	**Electronic transfer of election materials**	**The elimination of electronic transfer of election materials should be relaxed. Eliminating electronic transfers puts a serious time burden on rural jurisdictions. In North Dakota for example we receive our ballot proofs and return our edits of the ballots by electronic transfer. If we had to do all of this by mail, we'd never meet our ballot preparation deadlines. We also transmit unofficial election results in the same way and in the future we could transfer programming securely. The safety net in all of these is that nothing is used in or after an election without**

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			being tested to make sure it is working correctly.
Jim Silrum	**General**	**Requirements for election procedures**	**In working on the assignment you have given, I have discovered that some of our working group's recommendations may already be covered by existing resolutions. However, I emphasize the word "may" because whether or not they are covered depends on the full meaning of the phrases "election procedures" and "election management practices," and election administration practices" used in the third resolution (according to the order they were sent to us).** **Perhaps the Executive Committee should think about clarifying the scope of what is meant by this resolution by adding something like the following:** Be It Further Resolved **that the Standards Board recommends to the United States Election Assistance Commission that it define "equipment standards" as those elements for which a voting system can be quantifiably and qualitatively tested.** **A case in point from part 1 chapter 6.3 section 4.2, "The use of a "cheater" adapter for older type receptacles with only two-blade capacity and no dependable grounding conductor should be prohibited." This is beyond the scope of what can be tested because it is completely in the control of the election**

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			official. **I suggest this addition because I think the EAC will need some guidelines as to what would qualify to be removed in the VVSG if they accept the validity of the resolution. The case in point that I brought up above is also revealing to the difficulty of the task that is being asked of the EAC because it is embedded within a section that is for the most part about equipment standards and the election procedure could easily be missed.**
John Lindback	**2 - 3.1.1.2-A TDP, change notes**		**Discussion section states manufacturers may submit failure analysis and corrective actions. Such important information should be required - not optional.**
John Lindback	**2 – 3.1.2-A Other uses for documentation**		**The section recommends that the documentation be placed in escrow but does not recommend who should do it. Precise responsibility should be assigned.**
John Lindback	**2 – 3.1.3-A TDP, identify proprietary data**		**Standard suggests that the manufacturer decides what is proprietary and what is not. Standard should reference that manufacturers must comply with EAC requirements.**
John Lindback	**2 - 3.3.2-B TDP, list of materials**		**Does this include all peripherals and all possible configurations? If so, the standard should be specific.**
John Lindback	**2 - 3.5.5-A TDP, Unauthorized physical access documentation requirement**		**Recommend that the list "shall" be included in the TDP AND the user documentation. This is important information for users.**

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John Lindback	**2 - 3.5.5-D Physical Security, power usage requirement**		**Add at end of sentence "and any limitations, if any."**
Russ Ragsdale	**3 – 2.6.2 Software distribution requirements for repositories, test labs, and manufacturers**	**Describes how certified voting system software is to be distributed. Requires digital signatures for software distribution packages and allows distribution by email, FTP, and websites.**	**Applies to manufacturers, labs, and repositories. Repositories may be jurisdictions such as a secretary of state's office. Maintaining a trusted build may be a good thing, but these requirements extend beyond product to process and may govern end-user procedures.**
Gary Poser	**1 - 7.6-B.5 Closing Polls, Programmed vote-capture devices, report on poll closing procedures**	**Test Method question relating to Part 3 Chapter 3, 5, 5.2.3-A was 'After polls are closed in part 3.F disabling the acceptance of ballots, is there a test of any re-opening of the polls to add additional ballots (missed absentees, etc) and showing proper audit trails, correct totals with additional ballots?' NIST Answer: Reopening of polls is prohibited by Part 1 Req. 7.6-B.5. The change history of this requirement follows. 1990 VSS 2.2.3.1. System shall prevent reopening of polls. 2002 VSS I.2.5.1.e. Prevent unauthorized* reopening of polls. VVSG'05 I.2.4.1.e. (same as 2002) VVSG'05 Public Review Issue #1817, 20050930, Sequoia says polls should never be reopened. Subcommittee e-mail, 200602 Brit Williams, Sharon Turner Buie, and**	**Prohibiting reopening of the polls may be a desired requirement for DRE voting systems, especially for early voting. An additional unit may be opened if one is prematurely closed, etc. For precinct optical scan systems, states can have procedures for absentee ballots to be fed into the tabulator after the last physical voter has been processed in the polling location. If the poll worker prematurely closes the poll prior to the absentee ballots being counted, the prohibition provides no recourse for the additional ballots to be counted and reported as one total for the precinct. Rather than a prohibition, we believe it is more appropriate to allow the reopening the polls but adding appropriate security to the process through audit tracking which documents what occurred, time; warnings provided when accumulating results that a reopen occurred, etc.**

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		Alice Miller agree that polls should never be reopened. (Discussion was about early voting.) **Working draft, 20070831. Given unanimous input that polls should never be reopened, changed the requirement back to its original form.** **My assumption is that the "found ballots" scenario described above would be responded to through a process that does not involve the formal reopening of polls. However, there is no requirement in the VVSG for the system to expedite the processing of "found ballots." Rather, it is assumed that procedures will be in place to prevent ballots from becoming misplaced.**	
Gary Poser	**3 – 5.2 Functional Testing**	**Test methods question was 'Are there standards for the number of modems which can transmit results to central accumulation at one time, or requirement for a number of receiving accumulation available modems to precincts ratio?** **5.2.3-F.3 only seems to reflect detection and recovery from problems with the communication link, not the system's ability to meet communications volume testing.'** **NIST Answer: There is no design requirement that the system contain a modem at all.**	**Ballot on Demand features have been discussed as optional features being included in the VVSG. Modems are more essential to the operation of voting systems and we believe that there should be some minimum standards for a system to meet that are included in the VVSG.** **Users do not have the resources to self-test modem capabilities. They cannot replicate large numbers of incoming calls to the accumulation server at the same time - i.e. Primary results being modemed at the same time because there are no lines when polls**

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		If it does use modems, there is no specified time limit on how long it takes to transmit unofficial results to a central location. Since we do not know at certification time how many precincts there will be in a given deployment, the most that could be required is for the manufacturer to recommend a modems-to-precincts ratio in the voting equipment user documentation.	**close. A test lab is the logical place for this testing to occur.**

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-16

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 Standards Board has suggestions about general references and definitions of words in the Voluntary Voting System Guidelines (VVSG); and**

Whereas**, The draft recommendations from the Technical Guidelines Development Committee (TGDC) are in need of typographical and formatting corrections; now, therefore, be it**

Resolved, **That the Standards Board recommends to the United States Election Assistance Commission that when temperature is referred to in the document, it should be in both Fahrenheit and Celsius; and, be it further**

Resolved, **That the Standards Board recommends to the United States Election Assistance Commission that it would be helpful to have an appendix listing all tables and figures contained within the document, including a brief description of the table/figure and where it can be found within the document; and, be it further**

Resolved, **That the Standards Board recommends to the United States Election Assistance Commission that the following typographical and formatting errors should be edited to reflect the suggested changes:**

- **The definition for the word "tabulator" should include examples.**
- **The definition for "voting device" should include examples.**
- **The definition for "voting system" uses the statement "reconcile ballots needing special treatment." This seems a bit unclear.**
- **There is no definition for "pollbooks" in Appendix A. The term "pollbooks" is used frequently within the document and should be defined**
- **Define and include "firmware" in the definition of software.**
- **The term "communications capability" needs to be defined.**
- **Suggest providing examples in the glossary of the term "programmed device".**
- **Under the definition of the term "precinct", it should also be noted that "vote centers" give voters the choice from a number of polling locations in which they can cast their ballot in an election.**
- **The term "vote center" should be defined.**

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- **The term “Poisson cumulative distribution function” should be defined.**
- **The term “test scaffolding” should be defined.**
- **The definitions for “black box” and “white-box” appear to be identical and need to be corrected.**
- **The term “Ballot tabulation rate” needs to be defined.**
- **The term “Compiler” needs to be defined.**
- **The term “Counting Context” needs to be defined.**
- **The term “scalar type parameter” should be defined.**
- **The term “enumerated type parameter” should be defined.**
- **Part 1- Chapter 1 Equipment Requirements – Opening statement lists the various Chapters contained in Part 1, but does not list Chapter 1.**
- **Part 1 – Chapter 1.1.2 Usability Performance Benchmarks - Line 4 - change the word "addresses" to address.**
- **Part 1 – Chapter 2.7.2 Innovation Class Submissions - Line 5 is not clear. It should either read "must be sufficiently different" or "must sufficiently differ".**
- **Part 1 – Chapter 3.2.1.1. Overall Performance Metrics - Eliminate one of the periods at the end of the last sentence in bullet three.**
- **Part 1 – Chapter 3.2.2.1-F Notification of ballot casting failure (DRE) – in the first paragraph, remove the first comma.**
- **Part 1 – Chapter 3.2.2.2-F - Notification of ballot casting failure (PCOS) - in the first paragraph, remove the first comma.**
- **Part 1 – Chapter 3.2.2.2-A – Notification of overvoting – remove the period inserted before the word “overvotes” at the end of the sentence.**
- **Part 1 – Chapter 3.2.5-G.1 - Legibility via font size - for consistency purposes, spacing on the font sizes should be as shown earlier in §3.2.5-E. (i.e., 3.0-4.0 mm and 6.3-9.0 mm.).**
- **Part 1 – Chapter 3.2.8 – Usability for poll workers - In the last sentence of the opening text, the “m” of “Maintainability” should be in lower case.**
- **Part 1 – Chapter 4.2 Requirements for Supporting Auditing - The third sentence in the "notes" Chapter seems to be incomplete.**
- **Part 1 – Chapter 4.2 Requirements for Supporting Auditing - Under letter "A", the last word reads "ballots", but should read "ballot"**
- **Part 1 – Chapter 4.2.2 Hand audit of IVVR record - The first sentence reads "The hand audit of verifies.. .". Sentence needs to be tweaked**
- **Part 1 – Chapter 4.3.3-C EMS, precinct adjustment record - In the Discussion section - second sentence - a word seems to be missing. Insert the word "the" between the words "that" and "number" in line 3.**
- **Appendix A – Straight party voting - There is a typo in the definition that uses the word "contents" when the proper world should be "contests".**
- **Part 1 – Chapter 4.4.1-A.13 - There is a typo after the word media. Delete the word "or".**
- **Part 1 – Chapter 5.2.1.2 – B - Capitalize & italicize "shall."**
- **Part 1 – Chapter 5.2.1.2-B - Should be renumbered 5.2.2-B.**
- **Part 1 – Chapter 5.2.1.2-B.1 - Should be renumbered 5.2.2-B-1.**
- **Part 1 – Chapter 5.2.3-G - Add "to" between "able" and "adjust."**

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- **Part 1 – Chapter 5.2.1.2-H - Should be renumbered 5.2.3-H and capitalize & italicize "shall."**
- **Part 1 – Chapter 5.2.1.2-H-1 - Should be renumbered 5.2.3-H.1**
- **Part 1 – Chapter 5.3-C - Remove 1st reference to "software" in section title.**
- **Part 1 – Chapter 5.3-C.1 - Remove 1st reference to "software" in section title.**
- **Part 1 – Chapter 5.2.1.2-G.1 - Should be renumbered 5.3-G.1. Other similar requirements use "EMS and programmed device" but this requirement uses "or." Should it be "and" or "or"?**
- **Part 1 – Chapter 5.3-I - Suggest rephrasing requirement: Programmed devices shall allow only authenticated central election officials . . . (Add "s" to device and move "only" before "authenticated.")**
- **Part 1 – Chapter 5.2.1.2-J - Should be renumbered 5.3-J.**
- **Part 1 – Chapter 5.2.1.2-J.1 - Should be renumbered 5.3-5.1.**
- **Part 1 - Chapter 5.2.1.2-G - Should be renumbered 5.3-G.**
- **Part 1 – Chapter 6.1-E – "MMPB" is missing a hyperlink to Appendix A.**
- **Part 1 – Chapter 6.4.1.5 – in Table 6-4, "Visual Basic 8" should be changed to its more common name of ".NET."**
- **Part 1- Chapter 8.2 – Vote Capture Device State Model contains the following paragraph: In conformance with Requirement Part 1:7.6-B.5, there is no transition from** Postvoting **back to** Open **except by beginning an entirely new election cycle, which is not modeled here. – The phrase "election cycle" needs to be changed to whatever it is supposed to mean because it can't be the correct phrase for this context. Perhaps the sentence could be rephrased: "…except by opening the election through a process that clears any previously tabulated results, which is not modeled here."**
- **In Part 2, Chapter 4, Chapter 4.3.3-H it appears that there is a missing word. The last clause states "… and a unique identifier (such as a serial number) of the vote-capture device or EMS which the software is installed." It seems that there is a word missing from the clause, perhaps "in which" or "on which".**
- **In Appendix A, Page 1 in the fourth paragraph it refers to "dictionary" meaning a citation to a single published dictionary should be provided for continuity.**
- **Part 3- Chapter 5.2.3-C TYPO: Definition of responding "gracefully" is undefined.**
- **Part 3 - 5.4 TYPO: Should be consistency in using "open-ended" with a hyphen vs. "open ended" throughout this entire section. i.e. "open ended" is used in 5.4.1-A, 5.4.3-A, 5.4.4-A, 5.4.4-B, 5.4.4-C, 5.4.5-A. Similar consistency should be applied to use of hyphen in "close ended" in 5.4.2-F.**
- **Part 3 –Chapter 5.4.6-A TYPO: Under Discussion refers to "VVSG 2007" instead of next iteration.**

A True Record Attest: Tonni L. Bartholomew

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-17

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 National Institute of Standards and Technology (NIST) conducted usability testing for the purpose of creating usability benchmarks for the next iteration of the Voluntary Voting System Guidelines (VVSG); and**

Whereas, **The usability testing conducted by NIST did not include a representative sample of the voting population; now, therefore, be it**

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that the Technical Guidelines Development Committee direct NIST to use a demographic sample that is more closely reflective of the voting population when developing usability test methods.

A True Record Attest: Tonni G. Bartholomew

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-18

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

Whereas, **Electronic ballot markers (EBMs) and electronic ballot printers (EBPs) mark ballots but do not count ballots; now, therefore, be it**

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that in Part 1, Parts 5.6.1-B, 5.6.1-C, 5.6.2-B and 5.6.2-C the phrase "except electronic ballot markers (EBMs) and electronic ballot printers (EBPs) that rely on hardwired telephone lines" should be inserted following the term "electronic devices".

A True Record Attest: Tonni G. Bartholomew

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-19

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

Whereas, Previous versions of the 2002 Voting System Standards (VSS) and the 2005 Voluntary Voting System Guidelines (VVSG) prevented unauthorized re-opening of the polls; and

Whereas, Changes made after an authorized reopening of a poll can be documented and audited; and

Whereas, **Each state can institute its own procedures if it should decide to allow polls to be re-opened; now, therefore, be it**

*Resolved***, That the Standards Board recommends to the United States Election Assistance Commission that it continue to allow authorized re-opening of the polls in the next iteration of the VVSG.**

A True Record Attest: Tonni G. Bartholomew

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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U.S. ELECTION ASSISTANCE COMMISSION
STANDARDS BOARD

RESOLUTION 2007-20

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 Help America Vote Act (HAVA) requires accessible voting equipment to comply with Sec. 203 of the Voting Rights Act for minority languages; and

Whereas, The next iteration of the Voluntary Voting System Guidelines (VVSG) includes a requirement for complete information to be presented to the voter in alternative languages; and

Whereas, **There are jurisdictions that are required to provide alternative languages to voters that are unwritten based on Sec. 203 of the Voting Rights Act; now, therefore, be it**

Resolved, That the Standards Board recommends to the United States Election Assistance Commission that it change Part 1- Chapter 3.2.7-A.2 to remove the text "whether the language is written or spoken" at the end of the sentence and replace it with, "for those languages that are written".

A True Record Attest:

Tonni Bartholomew,
Secretary of the Standards Board
Executive Board

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