



ELECTRONIC PRIVACY INFORMATION CENTER

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**EPIC Comments Regarding the  
2009 Voluntary Voting System Guidelines Version 1.1  
Election Assistance Commission  
September 28, 2009**

The Electronic Privacy Information Center (EPIC) appreciates the opportunity to submit comments to the Election Assistance Commission (EAC) on the Voluntary Voting System Guidelines Version 1.1 draft (May 27, 2009). The Help America Vote Act (HAVA) law, among other things, established the EAC and charged the agency with “the adoption of voluntary voting system guidelines.”<sup>1</sup> This section makes it clear that the agency does not have the authority to develop guidelines independent of the advice of the Technical Guidelines Development Committee (TGDC) under the leadership of the National Institute of Standards and Technology (NIST).<sup>2</sup>

The overview of the Voluntary Voting System Guidelines Version 1.1 outlines a number of purposes for the guidelines, which include providing a set of specifications and

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<sup>1</sup> Help America Vote Act of 2002, Section 202, Duties, available at [http://www.fec.gov/hava/law\\_ext.txt](http://www.fec.gov/hava/law_ext.txt)

“(1) carrying out the duties described in part 3 (relating to the adoption of voluntary voting system guidelines), including the maintenance of a clearinghouse of information on the experiences of State and local governments in implementing the guidelines and in operating voting systems in general;”

Section 207, Annual Report

“(3) Information on the voluntary voting system guidelines adopted or modified by the Commission under part 3 and information on the voluntary guidance adopted under subtitle B of title III.”

<sup>2</sup> Part 3 Technical Guidelines Development Committee

“b) Duties.--(1) In general.--The Development Committee shall assist the Executive Director of the Commission in the development of the voluntary voting system guidelines.

(2) Deadline for initial set of recommendations.--The Development Committee shall provide its first set of recommendations under this section to the Executive Director of the Commission not later than 9 months after all of its members have been appointed.”

requirements for voting systems that include “basic functionality, accessibility, and security capabilities...” However, “basic functionality” should not be the goal for voting systems intended for use in public elections. The bar must be set significantly higher to establish a basis upon which public trust in voting system technology can rest.<sup>3</sup> Systems with a federal seal of approval should not continue to fail to protect voter privacy, record votes accurately, support usability, or retain ballot choices for later inspection and election certification.

## Comments on Transparency

EPIC is a public policy research center based in Washington DC, founded in 1994 to focus public attention on matters related to privacy, technology, and constitutional values. The right of self-governance through participation in direct elections is the most fundamental of rights of our democracy. A critical component in a citizen’s right to cast a vote in a public election is to be informed regarding the actions taken by government.

Knowledge will forever govern ignorance, and a people who mean to be their own governors, must arm themselves with the power knowledge gives. A popular government without popular information or the means of acquiring it, is but a prologue to a farce or a tragedy or perhaps both. -- James Madison

The TGDC last met on August 17, 2007, and the recommendations regarding Voluntary Voting System Guidelines were provided to the agency that same month.<sup>4</sup> EPIC strongly commends NIST and the TGDC on the extremely open and transparent way the first and second draft of voluntary voting system standards were developed. Unfortunately, the EAC has not shown the same level of regard for the importance of transparency to the public of its work in promulgating voluntary voting system standards. The lack of attention to transparency by the EAC raises questions regarding the 2005 voluntary voting system standards issued by the agency.<sup>5</sup> All of the public comments submitted to the EAC have yet to be made available to the public.

The following graphic is an image of the results returned for a link on the EAC’s website that is identified as providing access to comments submitted for the 2005 Voluntary Voting Systems Guidelines process. The page returned by the link states that the page for ([http://guidelines.kennesaw.edu/vvsg/view\\_section.asp](http://guidelines.kennesaw.edu/vvsg/view_section.asp)) cannot be found.

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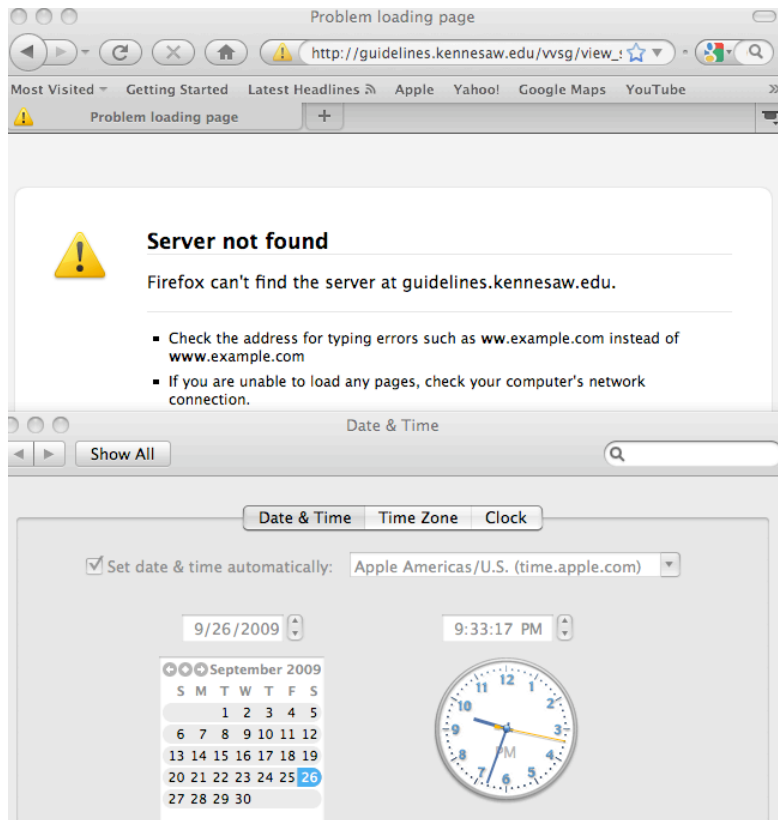
<sup>3</sup> Voters Unite, Daily News Blog, available at <http://www.votersunite.org/news.asp>

<sup>4</sup> Technical Guidelines Development Committee, Meetings and Output, available at <http://vote.nist.gov/PublicHearingsandMeetings.html>

<sup>5</sup> EPIC, FOIA, TGDC Recommendations to the EAC on 2005 Voting Technology Standards, available at [http://epic.org/foia\\_docs/standards/default.html](http://epic.org/foia_docs/standards/default.html)

National Committee for Voting Integrity Letter to the EAC, Regarding an unannounced change of the released standards document with a new version, available at <http://votingintegrity.org/docs/eac-letter042806.html>

EPIC FOIA Notes No. 11, and No. 6, available at [http://epic.org/foia\\_notes/](http://epic.org/foia_notes/)



The first iteration of changes proposed for the 2005 Voluntary Voting System Guidelines were issued in 2007, during a public commenting process. The comments and input to the agency regarding changes are not public. The publication of the Voluntary Voting System Guidelines Version 1.1, made the work of the agency final. There are a number of changes to that version of the draft, made public in 2007, which are not traceable to the work of the TGDC.<sup>6</sup> For example, the comments that should be part of the public record on the standards development process are not available.<sup>7</sup> The page hosts links regarding the 2005 Voluntary Voting System Guidelines, among which is a link to the comments submitted to the agency. That link points to an external web site, which displays the following when selected:

The EAC's Freedom of Information Act policy directs the public to its web site to seek records regarding the agency's activities.<sup>8</sup>

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<sup>6</sup> NIST, TGDC Meetings and Publications, available at <http://vote.nist.gov/PublicHearingsandMeetings.html>

<sup>7</sup> EAC, 2005 VVSG, available at <http://www.eac.gov/program-areas/voting-systems/voluntary-voting-guidelines/2005-vvsg>

<sup>8</sup> EAC, Federal Register Notice, Freedom of Information Act Final Rule, available at <http://frwebgate5.access.gpo.gov/cgi-bin/TEXTgate.cgi?WAISdocID=015660422979+0+1+0&WAIAction=retrieve>

“(g) The Commission encourages the public to explore the information available on the Commission's Web site,”

Because the public comments for the development of national standards for voting systems are not available for public review, it is difficult for the media, public, and Congress to assess the reasons for the decisions reached by the agency.<sup>9</sup>

The public has demonstrated a strong interest in matters related to voting and public elections. For this reason, the agency should demonstrate greater attention and commitment to publishing documents regarding all of its work related to standards development as well as certification and testing of voting systems. Unfortunately, the agency is operating under its own FOIA rule, which allows records to be withheld from the public for a wide range of reasons, including requests by communicants that their communications be withheld.

On January 21, 2009, President Obama's first full day in office, he signed an Executive Order specifically related to agency officials who meet with members of the public.<sup>10</sup> On September 4, 2009, the Administration announced a new policy of publicly posting the White House visitor access records.<sup>11</sup> The White House will release on a monthly basis all previously unreleased access records that are 90 to 120 days old.<sup>12</sup> As President Obama explained, “Americans have a right to know whose voices are being heard in the policy making process.”<sup>13</sup> The President stated the central importance of transparency under his Administration: “We will achieve our goal of making this administration the most open and transparent administration in history not only by opening the doors of the White House to more Americans, but by shining a light on the business conducted inside it.”<sup>14</sup> EPIC requests that the EAC follow President Obama's directive to all federal government agencies that they take affirmative steps to make their activities transparent to the public.

Our comments to the agency in this regard are a key component of how the work of the agency will be viewed by the public once it releases a final update to the 2005 Voluntary Voting System Guidelines.

### *Recommendations on Transparency*

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<sup>9</sup> Id.

<sup>10</sup> Memorandum for the Heads of Executive Departments and Agencies, available at [http://www.whitehouse.gov/the\\_press\\_office/FreedomofInformationAct/](http://www.whitehouse.gov/the_press_office/FreedomofInformationAct/) (last visited September 26, 2009).

<sup>11</sup> White House Voluntary Disclosure Policy Visitor Access Records, <http://www.whitehouse.gov/VoluntaryDisclosure> (last visited September 26, 2009).

<sup>12</sup> Id.

<sup>13</sup> Norm Eisen, White House Blog, available at <http://www.whitehouse.gov/blog/Opening-up-the-peoples-house/>, last visited on (September 26, 2009).

<sup>14</sup> Id.

1. Make records regarding meetings, and internal and external communications regarding the drafting of the standards available to the public.
2. Make all public comments to the agency regarding the voluntary voting system guidelines public.
3. Revise the agency's FOIA policy to bring it into compliance with President Obama's directives regarding openness and public access to government information.

## **Comments on Privacy**

The laws establishing the right of citizens to participate in the public discourse associated with the act of voting have been primarily within the jurisdiction of state governments. This has resulted in a system of elections that is as diverse as it is complex, which has under certain conditions or implementation schemes frustrated the privacy of voters. The delicate balance between the state's right to ensure that intimidation and election fraud are not present in public elections and the voter's right to privacy have resulted in the development of the secret ballot and restricted zones around voting compartments.<sup>15</sup> Because of the documented history of voter intimidation, coercion, and fraud associated with third party knowledge of how individual voters cast their ballots, it is important not to underestimate the importance of voter privacy. No community is immune to the effects of voter manipulation, but some communities are more vulnerable than others—for example minorities, new citizens, or the poor.

### The Secret Ballot

Federal and state courts and legislatures have historically taken measures to protect the right of voters to vote their conscience without fear of retaliation. United States law requires that "All votes for Representatives in Congress must be by written or printed ballot, or voting machine, the use of which has been duly authorized by the State law; and all votes received or recorded contrary to this section shall be of no effect."<sup>16</sup> The statute defines "ballot" in election provisions to mean a "method, which will [ensure], so far as possible, secrecy and integrity of popular vote," and interprets the Congressional requirement that elections be conducted by written or printed ballots or by machine to include the notion that ballots must be secret.

As further support for the requirement of secret ballots, the statute cites *Johnson v. Clark*, 25 F. Supp. 285 (D. Tex. 1938). In *Johnson*, the District Court for the Northern District of Texas emphasized the "secrecy and integrity" of votes. "The word 'ballot,' in an election provision, means a method which will insure, so far as is possible, the secrecy and integrity of the popular vote." *Id.* at 286. Other courts have also found that the concept of secrecy and privacy is inherent in the meaning of ballots. Other courts have ruled that this case clearly refers to ballot secrecy. In *Brisbin v. Cleary*, the Supreme Court of Minnesota interpreted voting by ballot to mean:

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<sup>15</sup> *Burson v. Freeman*, 504 U.S. 191, 207-208 (1992).

<sup>16</sup> 2 USCS § 9 (2003); *McIntyre v. Ohio*, U.S. Supreme Court, 514 U.S. 334, 343 (1995)

a mode of designating an elector's choice of a person for an office by the deposit of a ticket, bearing the name of such person, in a receptacle provided for the purpose, in such a way as to secure to the elector the privilege of complete and inviolable secrecy in regard to the person voted for. This privilege of secrecy may properly be regarded as the distinguishing feature of ballot voting, as compared with open voting, as, for instance, voting viva voce. The object of the privilege is the independence of the voter.

### *Recommendations on Voting and Privacy*

1. Ballot secrecy and voter privacy should be the terms used to describe privacy within the context of voting technology standards as well guidelines related to certification and testing.
2. Ballot secrecy and voter privacy must be core values within the context of voting technology standards and testing and certification of voting systems.
3. Full sections on voter privacy should be included in each of the standards sections that address system operation.
4. Implement fail-safe approaches to ensure that when voting systems fail or malfunction they do so in a way that protects ballot secrecy, accuracy of the votes recorded, retained, and reported in final election results.

## **Section-by-Section Comments on the Proposed Voluntary Voting System Guidelines Version 1.1**

### Voluntary Voting System Guidelines – Referred to as Guidance

#### **VVSG v.1.1 Review**

#### *1.1 Purpose and Scope of the Voluntary Voting System Guidelines*

##### *Recommendation:*

The list of objectives of the Guidance should include voter privacy, ballot collection and tabulation accuracy. Results on site should be considered to be unofficial totals.

#### *1.2 Use of Voluntary Voting System Guidelines*

##### *Comments:*

EPIC appreciates the agency's recognition of the broad community of users for the document under consideration.

##### *Recommendation:*

EPIC recommends that the audience also include COTS developers.

### 1.4.2.3 *Public Network Direct-Recording Electronic Voting System*

*Comments:*

The definition of public network direct-recording electronic voting system is problematic for voter privacy. The draft Guidance states that “A public network DRE voting system is an election system that uses electronic ballots and transmits vote data from the polling place to another location over a public network. Vote data may be transmitted as individual ballots as they are cast, periodically as batches of ballots throughout the election day, or as one batch at the close of voting...”

*Recommendation:*

To protect voter privacy, ballot security, and election integrity ballot transmissions as individual ballots should be prohibited.. Further, clarification is needed on what is meant by “public network.” For example; does this include “Internet voting.”

### 1.5.1.2 *Applicability*

*Comments:*

Key issues regarding the authenticity of software used in public elections also present opportunities for greater transparency. However, many of the challenges can be mediated by implementing proposals recommended by the TGDC regarding software independence.

*Recommendation:*

NIST’s Software Reference Library should be the sole repository for the purposes outlined in the draft. Issues regarding reliability, accuracy, and accessibility of the data can be addressed with this approach.

## 2 *Functional Requirements*

*Comments:*

This section of the draft changes proposed by the agency to update the 2005 Voluntary Voting Systems Guidelines moves away from more detailed guidance to manufacturers of voting systems regarding the performance requirements for voting systems. This draft also introduces ambiguity regarding the priority of voter privacy and ballot secrecy in the voting process. The Functional Requirements of Overall System Capabilities should incorporate privacy.

*Recommendation:*

Maintain or exceed the level of specificity with which these topics were addressed in the TGDC VVSG draft recommendations dated August 31, 2009.

Disclose all records and associate changes to the draft version of the document for each iteration of the Guidance.

#### 2.1.5.2 [Use of Multitasking Operating Systems](#)

*Comment and Recommendation:*

Multitasking Operating Systems are not primarily designed for voting systems. For this reason these manufacturers should be required to provide a statement that their products can be used to support the objectives of accurately recording, counting, storing, and sharing ballot totals in the configurations and designs that may be encountered.

#### 2.1.6 [Election Management System](#)

*Recommendation:*

This section should include the following requirement:

- Secure the secrecy of the ballot and maintain voter privacy

#### 2.1.7.1 [Functions](#)

*Recommendation:*

The list of requirements for the vote tabulating software should include:

- Maintenance of voter privacy and ballot secrecy

#### Section 2.1.9 [Telecommunications](#)

This section outlines the following troubling objectives:

**“Voter Authentication: Coded** information that confirms the identity of a voter for security purposes for a system that transmits votes individually over a public network”

**“Vote Transmission to Central Site:** For voting systems that transmit votes individually over a public network, the transmission of a single vote to the county (or contractor) for consolidation with other country vote data.”



**“List of Voters:** A listing of the individual voters who have cast ballots in a specific election.”

*Comments:*

Ballot Secrecy and Voter Privacy should be included as a distinct topic under this section. A core function of voting systems is to maintain the integrity of elections. The identity of the voter should not be associated with their voted ballot cast in a polling location environment it is necessary to approach the development and promulgation of standards as a layered process with each component designed to overlap multiple objectives of voting in public elections, which should include assure accuracy, privacy, and integrity of public elections.

*Recommendations on Privacy and Functionality*

1. Add a new section on Privacy
  - a. Voting Systems shall prevent others from determining the contents of a ballot<sup>17</sup>
  - b. Prohibit the sending of individual votes to physically remote locations from the polling site
  - c. Prohibit the use of wireless technology in voting systems unless a an opaque aperture is used to shield the device during ballot submission or casting processes.
  - d. Institute software independence to reduce the reliance on the voting technology for the accuracy of the information captured during the balloting process.
2. Counters on voting devices should provide as much transparency to voters as possible during the vote casting and counting process (precinct tabulation systems) to understand that their ballot or votes have been registered.
3. Design systems around how voters use voting systems to relieve them of reliance upon assistance to successfully complete the balloting process.
4. Use secret ballot throughout the standards and testing and certification documents to describe this particular aspect of voting.

#### 2.3.2.1 Common Requirements

This section does outline that all systems shall, among other things, protect the secrecy of the vote such that the system cannot reveal any information about how a particular voter voted, except as otherwise required by individual state law.

*Recommendation:*

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<sup>17</sup> TGDC Recommendations to the EAC, Voluntary Voting System Guidelines, available at [http://epic.org/privacy/voting/final\\_tgdc2007.pdf](http://epic.org/privacy/voting/final_tgdc2007.pdf)

Provide example of state laws that would allow disclosure of how a particular voter voted.

### 2.3.3.3 DRE System Requirements

EPIC appreciates the inclusion within the list of DRE System Requirements that these systems should “Protect the secrecy of the vote throughout the voting process”

#### *Recommendation:*

The list should include language that is specific to the voter’s right to cast a secret ballot.

## 3 Usability, Accessibility, and Privacy Requirements

The focus on voter privacy is appreciated.

#### *Recommendation:*

Include a definition for both voter privacy and ballot secrecy in the definitions section of the standards document.

Voters should be encouraged to keep votes confidential.

### 3.2.2.2 Non-Editable Interface

#### *Comments:*

Allowing deactivation of key functions that allow voters to confirm that ballot selections are being read by precinct verification systems as they intended is important to election transparency. As written, malfunctions and voter’s selections on ballots that could be addressed during the election process may be ignored because the checks provided by Precinct Count Optical Scans were disabled. The standards should not ascribe a cause for potential failure in the context of standards development. If voters or poll workers make errors that result in lost votes then they are not the source of the problem but the design of the technology. Human centric approaches to designing voting systems and polling locations should maximize effective participation in the election process. NIST is responsible for guiding the development of standards for most devices and technologies commonly used. They are the very best minds in the federal government for developing standards that work and can guide the development of better voting systems.

#### *Recommendation:*

Standards should push the bar on system performance, load, and processing speeds. The allowance of disabling of features does not serve one of the key objectives of

standards well, which is to improve on the overall quality of systems and functions governed by standards.

Define: “gray zone”

Require rigorous testing of systems based on the broad population of potential users with a goal of reducing design flaws that can create errors that reduce accuracy of voting systems.

### 3.2.3.2 No Recording of Alternative Format Usage

*Comments:*

This is a very good privacy protective measure and EPIC strongly supports its inclusion in the final standards.

### 4.1.2.15 Data Network Requirements

*Comments:*

None.

*Recommendation:*

The use of data networks intended to authenticate voters prior to issuing them a ballot should do so in a manner that protects voter privacy. Personally identifiable information that is associated with voters should be guarded against unauthorized collection, sharing, use, reuse, or abuse.

### 4.1.3.1 Recording Requirements

*Comments:*

Voting requires the collection, retention, sharing, and processing of information throughout the vote casting and tabulation process. However, voter information should not be used for other purposes not directly related to participation in public elections. Voter data is not for general identification purposes, nor should voter files be used for profiling.

*Recommendation:*

The process of recording information should take care to maintain voter privacy and ballot secrecy in a seamless manner in the end-to-end voting process.

## 5 Software Requirement

*Comments:*

Software Independence as outlined in the TGDC Voluntary Voting System Guidelines Recommendations sent to the EAC in August 2007 and the Section 2.7 Software Independence should be included in the final standards issued by the EAC.

*Recommendation:*

Include the TGDC Recommendations for the Voluntary Voting System Guidelines 2.7 Software Independence and 2.7.2 Innovation Class Submissions found in the August 31, 2007, sent to the EAC.

“This section contains requirement related to software independence. Software independence means that an undetected error or fault in the voting system’s software is not capable of causing an undetectable change in election results. All voting systems must be software independent in order to conform to the VVSG. There are currently two methods specified in the VVSG for achieving software independence 1) through the use of independent voter-verified records (IVVR) and 2) through the innovation class.”

“The innovation class is for the purpose of ensuring a path to conformance for new and innovative voting systems that meet the requirement of software independence but for which there may not be requirements in the VVSG.”

**Observations Regarding Congressional Intent for the TGDC and NIST**

The process of developing voting technology standards were intended to be iterative and perpetual. HAVA outlined in Part 3 the following:

Deadline for initial set of recommendations.--The Development Committee shall provide its first set recommendations under this section to the Executive Director of the Commission not later than 9 months after all of its members have been appointed.

The clear Congressional intent was that the process would continue with the full involvement of the TGDC and consequently NIST in the drafting of future standards documents. The agency sought and received the resignations of several members of the TGDC who worked on the 2007 draft of the standards. Further, the TGDC has not held a public meeting since August 2007, and there are no records of any other activity on the part of the committee. It is hard to imagine with the fast pace of technology innovation that this vital resource for the development of standards is idle. It is worth noting that the first two paragraphs of the document make clear that NIST had absolutely no involvement in its development. This does not speak well regarding the soundness of the technical decisions reached by the agency in this version of the draft guidance.

**Conclusion**

EPIC appreciates the opportunity to continue its contributions to the development of more reliable, robust, secure, and privacy enhancing voting systems intended for us in public elections. Our comments include a number of measures, which have reason to support because they will maintain the principles of free and fair elections long accepted in the United States and promoted around the world.

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