

## **Association of Assistive Technology Act Programs**

## Comparison of FEC 2002 Access Standards to Proposed VVSG Access Standards Diane Cordry Golden, Ph.D. August 16, 2005

In any access standards development process, a central goal is to ensure that the level of accessibility required is reasonably achievable while at the same time providing an adequate level of accessibility for individuals with a wide variety of disabilities. It is acknowledged that full accessibility cannot be delivered to all individuals with all types and combinations of disabilities. At the same time, it is also commonly understood that accessibility standards should not provide an extensive level of accessibility to one disability group while disregarding the access needs of others. And most importantly, access standards should always maintain or move the level of accessibility forward. A new set of access standards should never reduce the level of accessibility that was delivered by a previous set of standards.

Attached is a table that compares the current Federal Election Commission (FEC) 2002 accessibility standards with the proposed successor set of standards, the Election Assistance Commission (EAC) Voluntary Voting System Guidelines (VVSG) of 2005. All of the FEC 2002 access standards are required (use the word "shall") and they apply only to direct recording electronic (DRE) voting systems that do not have a voter verified paper audit trail VVPAT. An FEC 2002 DRE without a VVPAT is the current level of accessibility available to individuals with disabilities. That is also the current level of accessibility judged to deliver an independent and secret ballot as required by the Help America Vote Act.

As a result, an FEC 2002 compliant DRE is the current level of accessibility upon which the VVSG should build. However as the attached table illustrates, the VVSG does not maintain and expand this level of accessibility. Instead it actually reduces the level of accessibility for some disability groups, specifically those with partial vision and those with dexterity disabilities.

To maintain the level of accessibility for individuals with disabilities to cast an independent and secret ballot as is delivered by the FEC 2002 standards, the VVSG should require --

- 1) Accessible output (audio and large print display) for reviewing paper ballots for individuals with all types of vision disabilities when paper ballots are used as an official vote record.
- 2) A mechanism by which voters with partial vision and motor disabilities can independently and secretly submit a paper ballot when the normal voting process includes such submission.
- 3) Switch input for individuals with motor disabilities.

Making the above changes to VVSG ensures at least an equal level of access to the FEC 2002 standards and would be an increase in accessibility for individuals with dexterity disabilities. None of these requirements are unreasonable or technologically infeasible. In fact, switch input is currently available on many products on the market. At this late date, the VVSG requirements will impact the next generation of voting systems, rather than those purchased by January 1, 2006 – making such requirements even more critical.



## Comparison of FEC 2002 Access Standards to Proposed VVSG Access Standards

	FEC 2002 compliant DRE	VVSG compliant DRE with VVPAT or Ballot Marking Device change from FEC 2002  (+) increased access (-) decreased access	Resulting Access Level Change
Blind	Provides independent, secret voting	<ul> <li>(+) Adds requirements that refine audio output (2.2.2.3-5 &amp; 2.2.3.5-7)</li> <li>(+) Adds requirement for blind to be able to initialize system (2.2.4)</li> <li>(+) Adds requirement for blind to be able to submit paper ballots (2.2.5)</li> <li>(=) Requirement for visually impaired to review VVPAT (2.2.6)</li> <li>(=) Digitized speech remains optional (2.2.3.8)</li> <li>(=) Rate of speech control remains optional (2.2.3.9)</li> </ul>	Equal or better level of access
Partial Vision	Provides independent, secret voting	(+) Adds requirement for simultaneous audio/visual display (2.1.9) (=) Controls distinguishable by shape/color still optional (2.1.8) (-) No clear requirement for large print display of VVPAT (2.2.6) (-) No requirement to be able to submit paper ballot (2.2.5)	Lesser level of access
Dexterity	Provides less than adequate access  – no switch input.	<ul><li>(=) Switch input remains optional (3.4)</li><li>(-) No requirement (option) to be able to submit paper ballot (3.5)</li></ul>	Lesser level of access
Mobility	Provides independent, secret voting	(+) Adds requirements that refine reach ranges etc. (4.2.2.1-4)	Equal or better level of access
Hearing	Provides independent, secret voting	(=) References audio output requirements (5.1)	Equal level of access
Speech	Not specifically addressed	(=) Prohibits requiring speech input -no system uses (6.1)	Equal level of access
Cognitive	Not specifically addressed	(=) No specific requirements (7).	Equal level of access

Analysis of the "should" options versus "shall" requirements in the VVSG reveals:

- 3 "shoulds" and 2 "shalls" are provided by a number of products currently on the market it is unclear why some are options (digitized speech, speech rate control, switch input) but others are required (simultaneous audio/visual, initialize system)?
- 1 standard (submission of paper ballot) is an option for one disability group but required for another) what is the justification?
- 1 requirement is unclear what output for review of VVPAT is required? Are both audio and large print visual display required?