May 10, 2007

TO: TGDC
FROM: Diane Golden, Ph.D., Missouri Assistive Technology

The following summarizes a number of concerns related to accessibility discussions of the TGDC and specifically the current language of draft VVSG standard 12.3.1-D.

1) Section 301 of HAVA requires that voters with disabilities be able to vote privately and independently. To meet this requirement, voters with disabilities must be able to verify the vote selections on a voter verified paper audit trail (VVPAT) that is or can be used as an official ballot or determinative vote record. In the final 2005 VVSG, the EAC revised requirement 7.9.7.b so that an accessible voting system must provide features that enable visually impaired voters to review the paper record when the VVPAT is an official ballot or determinative vote record. This VVSG standard does not restrict accessibility to audio output, as that would limit access to a small minority of voters with visual impairments. Many individuals with visual impairment who use large print visual display will be unable to use audio output to verify their VVPAT.

2) Accepted public policy dictates that accessibility levels not be rolled back or decreased with updated versions of accessibility standards. It is unacceptable for a VVPAT (that is or can be a determinative vote record) to be required to meet new software independence (SI) standards that cause a decrease in accessibility for voters with disabilities. Individuals with disabilities who have used paperless systems to vote should not be expected to give up a private, independent vote due to a new SI requirement. The VVSG should require the same level of accessibility (type and range of input and output options) for a paper ballot (that is or can be a determinative vote record) as is currently required for an electronic vote record.

3) The NIST paper entitled Four Approaches to SI and Accessibility dated March 12, 2007 was quite distressing to read. Of the four approaches described in the paper for delivering SI and accessibility, only one (with sufficient clarification) might conform to the existing VVSG requirement for VVPAT verification described above. Unfortunately, the resolution adopted at the last TGDC meeting and the current draft VVSG revision, "suggests" (using the word "should") audio output for a VVPAT. If a VVPAT is or can be a determinative vote record, the adopted language decreases the level of accessibility currently required by the VVSG. Requiring a lesser set of access features for verification of an official ballot (as compared to features required to generate an official ballot) will disenfranchise particular disability groups based on functional limitations. Denying access to a large group of individuals with disabilities by requiring only audio output will not meet HAVA Section 301(a)(1)(A)(i) requirements for voters to privately and independently verify their ballots before they are cast and counted.

This language should be revised to ensure access to verification of an official paper ballot in the same manner as the ballot was generated. The mechanism that reads the paper record must provide both audio and large visual display output and all required alternative input mechanisms must be available to generate, verify and cast the official ballot.

Suggested revised language is as follows --

If the Acc-VS generates a paper record (or some other durable, human-readable determinative vote record) for the purpose of allowing voters to verify their ballot choices, then the system shall provide a mechanism that can read that record and allow a voter with a disability to interact with the record using the same access features utilized when generating the paper ballot. A mechanism shall be available to allow for hands-free verification and casting of the paper record.

4) Voters with disabilities should be able to use the same hardware output device (headset and/or visual display screen) to receive information from two distinct software sources without violating SI requirements. In a system that produces a VVPAT or in a ballot-marking device the software that generates the print on the ballot and the software that scans the content of the print vote selections can be kept separate without requiring physically separate output hardware. Software independence standards should not be so restrictive as to require duplicative output devices for either DREs with a VVPAT or ballot marking devices when such requirements make delivery of accessibility almost impossible.

In summary, as the TGDC proceeds with revisions to the VVSG, it would be most helpful for the Committee to proactively and publicly identify the impact of any standard revision on the level of accessibility delivered before a decision is made. If an access barrier is being created for a particular disability group through a decision of the TGDC, this would ensure the action is taken with full appreciation of the impact on accessibility.

Hopefully the new VVSG will not impose requirements that reduce the level of access currently enjoyed by individuals with disabilities voting on existing paperless systems. Accessibility is a legal mandate of HAVA and while it may not simple, inexpensive or quick to maintain an equal level of accessibility with paper ballots and software independence- it can be done provided the standards are clear and security requirements do not erect insurmountable barriers to accessibility.