November 14, 2008

Mr. Randolph C. Hite, Director
Information Technology Architecture and Systems
United States Government Accountability Office

Dear Mr. Hite:

This letter is intended to serve as the required written response to the Government Accountability Office’s (GAO) Report 08-814, Federal Program for Certifying Voting Systems Needs to be Further Defined, Fully Implemented, and Expanded.

As required by 31 U.S.C. 720 I am submitting the attached document, on behalf of the Commission, as a written statement of the actions taken on GAO’s recommendations. The EAC appreciates GAO’s recommendations and takes very seriously its HAVA mandated responsibility for the certification testing of voting systems under the EAC’s Voting System Testing and Certification Program.

If you should have any questions about the steps the EAC is taking to implement GAO’s recommendations or any aspect of the EAC’s Testing and Certification Program, please do not hesitate to contact me at any time. We appreciate the chance to respond and look forward to talking further about the work of the EAC’s Testing and Certification Program. Thank you.

Sincerely,

Thomas R. Wilkey  
Executive Director
Pursuant to 31 U.S.C. §720, the purpose of this response is to provide an update on U.S. Election Assistance Commission (EAC) efforts to implement Government Accountability Office (GAO) recommendations in its report regarding federal certification of voting systems (GAO-08-814).

As the GAO report notes, “EAC has defined an approach to testing and certifying voting systems that follows statutory requirements reflected in HAVA and a range of relevant practices associated with a product certification program, including those published by U.S. and international standards organizations.” (GAO-08-814, pg 2 – 3). In addition, the EAC has generally “provided clear procedures, in the form of its recently published Voting System Test Laboratory Manual (Manual), that outline the certification process and its requirements for participating manufacturers.” (GAO 08-814, pg 19). However, GAO’s report also noted that EAC’s Certification Program would be improved by the development of internal procedures to better implement and document EAC actions.

In order to assist the EAC in building upon and evolving its voting systems testing and certification program, GAO offered specific recommendations in three areas. The recommendations instructed the EAC to prepare, approve and implement plans to:

1. Develop detailed procedures, review criteria, and documentation requirements to ensure that voting system testing and certification review activities are conducted thoroughly, consistently, and verifiably;

2. Develop and implement an accessible and available software repository for testing laboratories to deposit certified versions of voting system software, as well as procedures and review criteria for evaluating related manufacturer-provided tools to support stakeholders in comparing their systems with this repository;

3. Develop detailed procedures, review criteria, and documentation requirements to ensure that problems with certified voting systems are effectively tracked and resolved, and that the lessons learned are effectively used to improve the certification program.

The EAC has already begun efforts to address each of these areas.

Develop detailed procedures, review criteria, and documentation requirements to ensure that voting system testing and certification review activities are conducted thoroughly, consistently, and verifiably.

The EAC has initiated the development of standard operating procedures (SOPs) for each of the major tasks outlined in the Testing and Certification Program Manual (Program
The primary purpose of these SOPs is to provide the EAC the framework and specific procedures to follow in administering the Voting System Testing and Certification Program. The development of these procedures will allow the EAC to better 1) define procedures and establish criteria for performing evaluation activities, 2) document evaluation steps and related decisions, and 3) develop benchmarks and a quality assurance plan for measuring program performance. These procedures will help ensure compliance with the policies and procedures set out in EAC’s Program Manual.

Separate SOP chapters will be dedicated to EAC review of manufacturer registrations; voting system testing applications; and voting system testing. In addition, other chapters will deal with the internal procedures for the grant or denial of system certifications; decertification; quality monitoring; and requests for interpretation of voting system standards. As of this date, two SOP chapters have been drafted. EAC expects adoption of all SOPs in final form by the end of May 2009.

In addition, to further improve EAC’s review of applicant voting systems, the Certification Division has budgeted $120,000 in FY 2009 for the development of a technical reviewer training handbook, and to provide additional training to reviewers. The handbook will formally document the processes, standards, responsibilities, timelines and best practices relating to the technical reviewer’s role and responsibilities under the EAC Voting System Testing and Certification Program. The EAC will also create a training handbook to formalize its process for training technical reviewers. The EAC intends to have the handbooks implemented by the end of calendar year 2009.

**Develop and implement an accessible and available software repository for testing laboratories to deposit certified versions of voting system software, as well as procedures and review criteria for evaluating related manufacturer-provided tools to support stakeholders in comparing their systems with this repository.**

On October 16, 2008, the EAC notified voting system manufacturers that the EAC Testing and Certification Division would temporarily act as the official repository required in Sections 5.6.2.4 and 5.7 of the EAC’s Testing and Certification Program Manual. To meet its responsibilities during this time, the Division has procured secure storage and will implement interim internal procedures to ensure the information held will be properly and safely maintained. The October letter also noted that the EAC would be contracting with an outside party to provide permanent repository services. The contract agreement between the EAC and the repository will explicitly outline the services to be provided. Such services will include procedures for maintaining the integrity of the deposited material, procedures for controlling access to the deposited materials, and chain of custody controls. The EAC anticipates transferring repository responsibilities by the end of the 2009 calendar year.

The GAO report also recommended that EAC make the repository accessible to state and local election officials, so that they may compare the software received from a manufacturer with that held by the EAC. While EAC’s Program Manual neither requires nor prohibits such access, it provides state election officials an alternative means to check
the validity of purchased software through the use of system identifications tools. In fact, the Manual requires manufacturers to create such tools, which enable election officials to ensure that fielded software is unmodified from that Certified by the EAC. This is usually accomplished by providing a self-booting disk or device that verifies file signatures in a system’s software.

Notwithstanding the Manual’s system identification requirement, the EAC intends to make its repository accessible to state officials per GAO recommendation. The Testing and Certification Division will meet with stakeholders to determine how and if changes should be made to the existing framework. The agency will consider the needs, capabilities and resources of the states in making its determination. Additionally, the agency will need to consider a number of practical barriers, from controlling access and facilitating various state processes to statutory prohibitions. For example, federal law (Trade Secrets Act) prohibits the release of certain commercial information. Because the information to be stored in EAC’s repository will likely be protected by this statute, releasing it without permission would be a crime.

Finally, GAO has recommended that the EAC create procedures and criteria for the review of System Identification Tools. As noted above, the EAC will provide internal procedures for this program requirement in its SOPs. EAC plans on implementing these requirements in May of 2009.

**Develop detailed procedures, review criteria, and documentation requirements to ensure that problems with certified voting systems are effectively tracked and resolved, and that the lessons learned are effectively used to improve the certification program.**

This recommendation provides guidance in two parts. It advises the EAC to create internal procedures regarding how the agency will (1) deal with problems found in certified voting systems and (2) use lessons learned in dealing with such problems to improve the Certification Program. As noted in the response to the first recommendation above, the EAC is in the process of drafting SOPs to document the agency’s internal procedures for administering the requirements of our Program Manual. These SOP will include detailed procedures, criteria, and documentation requirements regarding the above.

With respect to EAC’s efforts to track and resolve problems in systems it has certified, there are a number of program elements in our Program Manual which touch on these issues, including EAC’s informal inquiry and formal investigation processes in Chapter 7 of the Program Manual. These investigations and their resolution are the primary tools EAC uses to determine system noncompliance and require the appropriate remedy. Additional program elements that deal with voting system problems may be found in the Quality Monitoring Program found in Chapter 8 of the Program Manual. These elements include manufacturing site reviews, fielded system review and testing, and field anomaly reporting. These programs provide additional means for the EAC to identify problems so that it may initiate an investigation and resolve problems.
The SOPs in all the areas identified above will formalize the internal procedures, review criteria and documentation requirements necessary to effectively resolve problems consistent with the Program Manual. In addition, the EAC will coordinate the various procedures noted above to ensure that the all program elements work together to comprehensively meet agency goals. As noted above, the SOPs are expected to be adopted by the end of May, 2009.

Regarding the development of internal procedures for the utilization of lessons learned, the EAC has, from the very beginning, been committed to creating a program which identifies problems and solutions, and shares this information with interested parties. The EAC believes that the information it collects and the lessons it learns should not only be used to improve its certification program, but shared with other organizations to improve voting system design and election administration nationwide. The EAC recognizes the importance of documenting anomalies so that design engineers, election officials and other stakeholders may take advantage of lessons learned.

This concept is reflected in EAC’s Program Manual, which notes that information it gathers pursuant to its Quality Monitoring Program will be used to “[i]dentify areas of improvement in the EAC Testing and Certification Program,” “[i]mprove manufacturing quality,” “[i]nform manufacturers, election officials, and the EAC of issues associated with voting systems,” “[s]hare information among jurisdictions that use similar voting systems,” “[p]rovide feedback to the EAC and the Technical Guidelines Development Committee (TGDC) regarding issues that may need to be addressed through a revision to the Voluntary Voting System Guidelines,” and “[i]nitiate an investigation when information suggests that Decertification is warranted.” (Certification Manual Section 8.8). The EAC will create SOPs documenting procedures that are necessary to achieve these requirements. As noted above, these SOPs are expected to be implemented by May 2009. In developing these procedures, the Program Director is considering new initiatives, including building stronger partnerships with election officials through groups like the National Association of State Election Directors (NASED), the National Association of Secretaries of State (NASS) and the International Association of Clerks, Recorders, Election Officials and Treasurers (IACREOT) and The Election Center. In addition, the Program Director will create an anomaly database and is considering the publication of a “Lessons Learned” bulletin which would be available to all interested stakeholders.

The EAC is committed to developing a world class testing and certification program. The only way this can be achieved is through continuous improvement. In implementing the changes discussed in this response, the EAC continues towards its goal. The EAC appreciates the work of GAO and looks forward to its ongoing collaboration with its stakeholders in the area of voting system certification.