



Testimony
Before the U.S. Election Assistance Commission

Certification Program Manual and Laboratory Accreditation
Program Manual Status Update

Public Meeting February 24, 2015

Brian J. Hancock
Director, Voting System Testing and Certification

The initial versions of the EAC Certification Program Manual and Voting System Test Laboratory manuals were adopted by the EAC Commissioners in December of 2006 and July of 2008, respectively. EAC experience in working with both manuals while at the same time working to mature the certification and lab accreditation programs themselves led us to the conclusion that the manuals needed revision. Certification division staff began this revision process for both documents in early 2010.

Today I would like to give you a status update on where we stand with these revised documents.

In the intervening years, both original manuals have gone through several public comment periods. In 2011, both manuals went thru a 60 and 30 day public comment period related to their OMB Paperwork Reduction Act (burden analysis) number renewal. In the Spring of 2014 both manuals once again went through the same public comment process because the OMB numbers expire every 3 years.

A 60 day substantive public comment period for the Version 2.0 of the Lab Manual opened on April 16, 2013 and closed on June 17, 2013. A 60 day substantive public comment period for Version 2.0 of the Certification Program Manual opened on November 30, 2010 and closed on January 31, 2011.

Voting System Test Laboratory Program Manual:
Major changes.

- Whenever possible, the EAC will conduct the required accreditation audit and any follow up on site visits at the same time as NVLAP accreditation audit or follow up on site visits.
- (*Repeated in Certification Manual...*)The Test Readiness Review (TRR) is the mechanism used by the EAC to ensure that test and evaluation resources are not committed to a voting system that is not ready for testing by a VSTL.
 - **System Technical Data Package (TDP):** The voting system technical data package shall be reviewed to ensure all elements required by the VVSG are present.
 - **System Components:** The VSTL shall review the submitted voting system to ensure all components required to configure the voting system as defined in the system TDP are delivered to the VSTL and appear to be operational and in good working order. Any component not available at the time of this review shall be delivered to the VSTL by the voting system manufacturer within 30 days of the initial TRR, or testing of the system will be halted and the EAC notified that the system is not ready for testing.
 - **Preliminary Source Code Review:** The VSTL shall conduct a preliminary review of no less than 1% of the total lines of code (LOC) of every software package, module or product submitted for testing in order to ensure that the code is mature and does not contain any systematic non-conformities.
 - **Mark Reading:** The system shall be able to read a fully filled mark if it is an optical scan system.
 - **Summary of COTS components.** This summary should outline which components of the voting system are COTS products and shall be updated with each test campaign
- VSTL shall participate in all meetings related to development of Technology Testing Agreements.
- VSTLs will be required to use the Virtual Review Tool (VRT) to identify the standards that apply to the system being tested, identify the testing to be performed and provide additional information as required.
- Testing previously performed on a voting system by a VSTL or by a third party test laboratory operating at the direction of a VSTL, may be reused at the discretion of the lead VSTL and the EAC.
- Testing previously performed on a voting system by a VSTL or by a third party test laboratory operating at the direction of a VSTL, may be reused at the discretion of the lead VSTL and the EAC.

During the public comment period, the Laboratory Manual received 22 comments from 2 separate commenter's. All comments were considered during the EAC staff revision of the document.

Testing and Certification Program Manual:
Major changes.

- Modified definition of COTS from discussions at EAC Round Table. "Commercial Off-the-Shelf. Software, firmware, device or component, with no manufacturer modifications, that is currently in use outside the elections industry and that is incorporated into the voting system."
- A more detailed definition of the term "manufacturing and/or assembly facilities"
- A requirement that Manufacturers report to the Program Director the names of each State and/or local jurisdiction using an EAC certified voting system within 5 business days of delivery of the first production unit of the voting system to the jurisdiction.
- Requirements related to the Technology Testing Agreement (TTA) related to new technologies. This new section simply copies the TTA requirements described by the EAC in our Notice of Clarification (NOC) 2014-01.
- Revised definition of Change Order. Change Order. "A change order is a change to a *previously EAC certified* voting system's hardware, documentation, or data that is minor in nature and effect. Such changes, however, require VSTL review and endorsement as well as EAC approval. Any proposed change not accepted as a de minimis change is a modification and shall be submitted for testing and review consistent with the requirements of this Manual."
- Added software to the definition of de minimis change: De Minimis Change – Defined. A de minimis change is a change to a certified voting system's hardware, **software**, TDP, or data, the nature of which will not materially alter the system's reliability, functionality, capability, or operation.
- Revised Section on the Certification application. Previously had 4 categories which we simplified to 2 categories (**New system**. A new system is a voting system not previously certified by the EAC. The application package must contain an application form, Summative Usability Testing Report and the Test Readiness Review. **Modification**. A modification is a change to a system previously certified by the EAC.) Detail of what is to be included in these application packages is also expanded and further defined.
- Addition of "Deficiency Criteria." The EAC has developed a number of metrics to determine if voting systems under test by a VSTL shall be removed from the EAC's Testing and Certification Program and returned to a manufacturer for further readiness review and/or QA testing. These metrics include:

- The duration of time a system is in a VSTL for testing
 - Significant delays/inactivity during a test campaign
 - Type or significance of deficiencies found
 - Total number of deficiencies, excluding source code coding convention deficiencies
 - Defect Density Ratio
- A maximum number of errors in each of four separate categories.
- Added a requirement that all information provided in the Test Report shall be provided in a clear, complete and unambiguous manner, so that a wide range of readers and users of the document will be able to understand the evaluation supporting a system's certification.
 - Revised detailed requirements for items to be deposited in the EAC repository after certification has been granted.
 - Revised requirements for using the EAC Mark of Certification as noted in EAC NOC 2008-02.
 - A new requirement that provide any technical bulletins or product advisories issued on EAC certified voting systems to the EAC at the time they are issued to jurisdictions impacted by the advisory. EAC must receive these via email or postal mail within 24 hours of issuance.

During the public comment period, the Testing and Certification Manual received 43 comments from 3 separate commenter's. All comments were considered during the EAC staff revision of the document.

After final formatting adjustments to the Manuals and internal briefings on the changes, I will recommend that the Commission consider these documents for a final vote on adoption at the next scheduled EAC Public Meeting. In addition, I can go into significantly more detail on any or all of the changes I have mentioned today, and will of course be prepared for a question and answer session on the changes.

Final 30 Day public Comment Period for PRA Purposes:

As part of its continuing effort to reduce paperwork and respondent burden in accordance with the Paperwork Reduction Act of 1995, after the ultimate approval of these documents by the Commission, the EAC will invite the public to take a 30 day opportunity to comment on EAC's request to collect certain information in the revised Manuals. Comments will be invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency; (b) the accuracy of the agency's estimate of the burden of the proposed information collection; (c) ways to enhance the quality, utility, and

clarity of the information to be collected; and (d) ways to minimize the burden of the information collection on respondents. Comments submitted in response to this notice will be summarized and included Notices in the request for approval of this information collection by the Office of Management and Budget. This notice will requests comments ONLY on the four criteria noted above. Upon approval by OMB, the EAC manuals will receive their OMB Control numbers which will be good for a period of 3 years.