



## U.S. ELECTION ASSISTANCE COMMISSION

Voting System Testing and Certification Program

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Silver Spring, MD. 20910

## Notice of Clarification

### NOC 14-01: EAC Technology Testing Agreement

Issued by Program Director, 02/07/14

#### Section of Certification Manual to Be Clarified:

##### 3.2.2.4 Emerging Technologies.

If a voting system or component thereof is eligible for a certification under this program (see Section 3.2.1.) and employs technology that is not addressed by a currently accepted version of the VVSG or VSS, the relevant technology shall be subjected to full integration testing and shall be tested to ensure that it operates to the Manufacturer's specifications. The remainder of the system will be tested to the applicable Federal standards. Information on emerging technologies will be forwarded to the EAC's Technical Guidelines Development Committee (TGDC).

#### Purpose:

The Technology Testing Agreement (TTA) process described below is intended to provide additional clarification and guidance to enhance the testing and certification process for voting systems incorporating new or emerging technology.

This NOC provides information on how manufacturers can use the TTA process to seek guidance from the EAC and VSTL during the development process or, less ideally, during the process of application for EAC testing and certification. The EAC has previously had informal discussions with several voting system manufacturers regarding technology under development. The EAC encourages manufacturers to continue to take advantage of these informal communications to help facilitate testing and certification of products while incorporating this new formal meeting process.

#### Clarification:

The Technology Testing Agreement meetings should take place as early as possible in the development of the product so the voting system manufacturer may use the meeting results to plan for an efficient test campaign. Prior experience and practicality suggest that, particularly with novel products/technologies, prior dialogue is critical to the effectiveness of the formal TTA meetings as well as to future certification efforts.

Preliminary discussions can help clarify and focus on the key issues and possible obstacles to be addressed in the pre-meeting material submission and in the TTA meetings. Depending on EAC's familiarity with the product/technology and the degree to which relevant testing precedents exist, one or more informal meetings may be useful before a TTA meeting can be productive.

In recognition that the EAC, VSTL and Manufacturer will not be able to reach useful conclusions unless a fair amount of planning and commitment are undertaken by the manufacturer prior to the meeting, EAC requires that the manufacturer submit a formal package to the EAC and the VSTL at the time of the meeting request. The manufacturer submitted package shall include: (1) a detailed description of the product; (2) a detailed description of the proposed use of the product such as poll worker and voter workflow diagrams; (3) a proposed plan for determining whether there is a reasonable assurance of effectiveness, usability and security; and (4) if available, information regarding the expected performance of the product. With preliminary discussions and good planning, a TTA Meeting should be completed in one session. While it is expected that well-prepared attendees will normally reach consensus on the substantive issues during the course of the meeting or within several days thereafter, there may be occasions when new issues emerge from the discussion. For this reason, it is important that the manufacturer be represented both by a qualified technical representative (or representatives) *and* by someone who has the authority to speak for the manufacturer, so final consensus and a formal agreement can be reached. When unresolved issues remain at the end of the meeting, upon mutual agreement, the meeting may be reconvened at a future time acceptable to all parties to permit additional, relevant information to be considered by EAC or VSTL staff before a final binding agreement is reached. As an alternative to a face-to-face meeting this follow-up meeting may also take place via audio or video communications with the agreement of all parties.

EAC, VSTLs, and manufacturers should be clear that the determinations or agreements resulting from these meetings are to be binding in most cases. The determination and/or agreement is binding on the EAC and VSTL and cannot be changed unless the EAC and the VSTL conclude that adhering to it would likely lead to a violation of any requirements in the VVSG or EAC Program Manuals. Further, the EAC shall consider, in consultation with the VSTL and Manufacturer, the least burdensome way of testing the product that has a reasonable likelihood of success and ability to reach a determination that the product has met the requirements of the VVSG, manufacturer specifications and any other testable requirements mutually agreed upon.

The binding nature of the TTA is predicated on the manufacturer not significantly changing the basis of the agreement related to the product or emerging technology (e.g., intended use, product design, security, usability, etc.). If there are significant changes to the system or the agreed upon implementations, the agreement is abrogated and is no longer in effect. Abrogation will result in the termination of the system application.

## ***TTA Meeting***

1. The manufacturer should contact the Certification Division as early as possible in their design and development process to have a general discussion regarding new or emerging technology in any voting system product.

2. A formal request for a TTA Meeting should be: a) clearly identified as such and b) submitted via email or other secure means to the Director of the EAC Testing and Certification Division. The EAC expects that the submission will be as detailed as design and development allow, but should include the following items:

- Description of the product, highlighting elements involving new technologies testable requirements and other testing protocol issues. This description should include, at a minimum:
  - General product description
  - Engineering drawing(s)
  - Product composition/key components/materials
- Device specifications
- Analysis of potential failure modes and threat model/risk analysis
- Outline of the proposed conditions of use
- Summary of instructions for use of the product (voter and poll worker/election official)
- Relevant performance information on the product, especially if routinely used in other industries. This information may include:
  - Published and/or unpublished data
  - Summary of test data
  - Summary of prior user experience

3. Prior to the formal TTA Meeting, the manufacturer should arrange for a preliminary meeting (videoconference or teleconference) to review the submitted information and discuss any additional questions that may arise prior to the actual formal TTA Meeting. The manufacturer may then submit any additional information as required, and finalize the date and time for formal TTA Meeting with the EAC and VSTL. Because of logistics and budgetary considerations for all parties, the location of the meeting (EAC, VSTL or manufacturer location) will be mutually agreed upon. Meeting plans should generally be finalized within 30 days of the preliminary meeting.

4. TTA Meetings should generally be face-to-face, or by videoconference, and should be scheduled for approximately 2-4 hours or longer depending on the complexity of the issues to be discussed. The EAC and VSTL staff may raise any questions for the manufacturer about the product, but should be focused on the key issues of the products test plan development and testing that will ultimately lead to the Technology Testing Agreement. The Director of the Certification Division will determine which EAC staff should attend the meeting, but will generally include: the EAC Project Manager and any or all Technical Reviewers with interest or expertise in specific areas under discussion.

### ***Post-TTA Meeting Activities***

1. At the end of the meeting, the EAC Project Manager for the voting system will summarize the agreement(s) or explain any reasons for tabling the agreement(s), including the date of any follow-on meeting, if appropriate. A record of attendees and minutes of the meeting shall be kept by both a designated EAC staff member and manufacturer representative. EAC and the manufacturer should exchange their respective meeting minutes for review following the meeting and share the minutes with the VSTL. The minutes shall be in sufficient detail to reflect the substance of the issues discussed at the meeting and the final agreement.
2. The EAC Project Manager will prepare a memorandum outlining the TTA. Within ten (10) business days of the meeting, a draft of the memorandum should be circulated for comment among all TTA Meeting participants. Comments shall be returned to EAC in 5 business days. The final memorandum shall be signed by the Director and conveyed to the applicant and VSTL within 5 business days of the receipt of final comments.

### **Conclusion:**

This NOC outlines the process under which the EAC, VSTL and voting system manufacturer can come to a mutually acceptable agreement regarding the testing of any new technology that is submitted for certification under the extensions clause of the VVSG and Section 3.2.2.4 of the Program Manual.