



U. S. Election Assistance Commission
VOTING SYSTEM TESTING AND CERTIFICATION PROGRAM
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Notice of Clarification

NOC 09-005: Development and Submission of Test Plans for Modifications to EAC Certified Systems.

Issued by Program Director, December 2, 2009:

Objective of this NOC:

The objective of this document is to supplement NOC 09-001 regarding the content and use of Test Plans for engineering changes and modifications to previously certified voting systems, including system Hardware, Software, Firmware, and COTS. The clarification has been drafted to align with the published 2005 VVSG Volume 1 and Volume 2 requirements, with both EAC manuals and NOC 09-001.

The overall objective of the test plan is to make the evaluation process as quick and efficient as possible and to help ensure that the testing being planned is appropriate and comprehensive. For engineering changes and modifications an additional imperative objective is to enable quick and efficient turnaround and response, so that certification can be extended and the modified product can be provided to the end users in an efficient manner.

Clarification Statement:

Test Plans submitted for modifications to previously EAC certified voting systems should be brief and structured to minimize test plan development and review, while enabling the EAC to maintain solid control of the certification process. The test plan shall *concisely* document the strategy and plan for testing those sections of the VVSG applicable to the modification or modifications submitted. The test plan shall be written with clarity that will allow all constituents to understand what testing will be conducted, to verify compliance to VVSG requirements, and to assure that the test plan will remain a living document throughout the life of the test campaign for the modification.

Test Plan Purpose:

For changes and modifications of previously EAC certified voting systems, the purpose of a test plan is to communicate the extent of testing activities to be undertaken by an EAC accredited VSTL. Care should be taken to clearly communicate the scope and requirements of testing, the test strategies, and the resource needs. In order to accomplish these goals the following general topics shall be included in all modification test plans.

- Complete definition of the baseline certified system.
- Detailed description of all the engineering changes and/or modifications to the certified system and why the modification was implemented.

- An initial assessment of the impact that the changes have on the system and past certification.
- An initial assessment of the impact the changes have on various TDP documents.
- A table or list indicating how each of existing NOC's/RFI's will be addressed and why this plan is valid for this test campaign.
- Description of what will be tested (regression) to establish assurance that the change(s) have no adverse impact on the compliance, integrity or the performance of the equipment
- Description of what will be tested (regression) to establish assurance that the change(s) create no inconsistencies with the TDP and further are correctly documented and reflected in the TDP.
- A summary of the test methods that will be used to validate compliance. This summary may include, existing, modified or new test methods, test cases or test sequences.
- Titles of test lab personnel who will be responsible for each aspect of the test campaign
- Detailed project schedule including what the critical path is for timely project completion

It should be noted that depending on the nature of the change and the extent of testing to be performed, some of the topics in a full certification test plan may be appropriate to enable the modification test plan to be complete. In order to keep the test plan focused on the modification, these should only be included if they add clarity and completeness to the test plan. So items may include;

- Precertification testing and issues
- Materials required for testing
- Test data
- Test procedure and conditions