

HART SYSTEM 6

HART INTERCIVIC

SYSTEM 6.1:
Ballot Now, version 3.2.4
BOSS, version 4.2.13
Rally, version 2.2.4
Tally, version 4.2.8
SERVO, version 4.1.6
eScan, version 1.2.0
JBC, version 4.1.3
eSlate/DAU, version 4.1.3
VBO, version 1.7.5
eCM Manager, version 1.1.7

Staff Review and Analysis

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The test plans for those examinations is included as an appendix to this document.

On February 21st and 22nd, 2006, a volume test of both the eScan and the eSlate was conducted by the State's technical consultants and Secretary of State staff at the Orange County Registrar of Voters' Office in Santa Ana, California.

General Testing Results

Testing of the Hart Intercivic System 6.1 was generally completed successfully. During that testing, installation of the trusted software build was verified. Sufficient ballots were processed for the standard state primary and general test elections to verify features of the system, as well as to test the system's capability to conduct elections in accordance with California law.

However, during testing the following issues were noted:

1. Hart literature refers to three vendor-developed utilities that were not included in the application for State certification and not included in the federal ITA testing and review: Fusion, Trans and Bravo. Because the Secretary of State has determined that they fall under the definition of voting systems under California law, these utilities cannot be used without examination and State certification.
2. Ballot Now has the capability to print a unique ballot ID number in plain text and in barcode on each ballot. The vendor explained this feature was included to prevent a ballot from being counted multiple times. California law requires that ballots with unique markings that can be individually identified cannot be counted and must be voided. During testing, we were able to verify that Ballot Now has an option to disable printing of the unique Ballot ID. Although the barcode remains on the ballot, it is no longer unique to any particular ballot. Use Procedures for this system must require that this unique ballot ID assignment tool be disabled when the system is used in California.
3. Similarly, during the initial testing of the system in December, it was determined that the VBO AVVPAT for the eSlate also printed a unique ballot ID number for each ballot in plain text and barcode on the paper audit trail. The vendor explained this could not be disabled on the VBO. During the week of December 26, 2005, the vendor submitted modifications to this system to the federal ITAs for review. These modifications included the capability to disable printing of the unique ballot ID on the VBO paper audit trail. This new functionality was confirmed and tested during the second phase of testing in February.
4. It was discovered during testing that an election must be finalized in BOSS before the election information can be exported to Ballot Now and the other applications. If a jurisdiction subsequently determines there is an error in election definition and logic, those errors cannot be corrected *without defining a new election and thereby voiding any ballots that have already been printed*. Further, *additional MBBs cannot be created once the election is finalized*. While this rigidity was designed into the system as a security feature of the Hart System 6, users of the system should exercise extreme care in proofing their election definition prior to finalizing the election. They should also create sufficient extra MBBs to serve