HART INTERCIVIC

SYSTEM 6.2.1

Ballot Now, version 3.3.11
BOSS, version 4.3.13
Rally, version 2.3.7
Tally, version 4.3.10
SERVO, version 4.2.10
eScan, version 1.3.14
JBC, version 4.3.1
eSlate/DAU, version 4.2.13
VBO, version 1.8.3
eCM Manager, version 1.1.7

Staff Review and Analysis

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Voting Systems Technology Assessment

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I.   Reason for Addendum

During the State examination and testing of the Hart System 6.2, June 26 – June 30, 2006, it was discovered that there was a defect in the results tape printed from the Judge's Booth Controller (JBC) at the close of the polls. The defect only occurred during a primary election with split precincts where the JBC had been configured to consolidate the vote results across that split. In these instances, the JBC would only print the vote results from the first part of the split and would ignore all other vote results from the other part of the split.

Hart Intercivic corrected this defect by modifying the JBC firmware, which resulted in a change to the version number of that JBC from 4.2.13 to 4.3.1.   Consequently, the version number of the entire system was updated from 6.2 to 6.2.1. The system modifications were submitted back to the federal Independent Testing Authority (ITA) for review and evaluation with respect to continued compliance with the federal Voting System Standards. Other than the modifications to the JBC firmware, there were no changes to any other components of the System 6.2 voting system for which approval had been previously requested.

This report is presented as a supplement to the Hart System 6.2 Staff Report (August 4, 2006). The report reviews additional testing conducted to verify the modifications resolved the defect as intended and had no adverse affects on the rest of the voting system.

II.   Testing Information and Results

Federal qualification of the system by the Election Assistance Commission (EAC) is still pending and must be issued before the Secretary of State can approve this system for use in California.

Testing Overview

State examination and functional testing of this updated system was conducted by Secretary of State staff in conjunction with the State's technical consultant Mr. Paul Craft at the Hart Intercivic office in Lafayette, Colorado on August 22, 2006.

Testing Process

The testing of the software upgrade was conducted by voting two test primary and two test general elections on two different JBC's. In one of the test primary and general elections, the JBC was programmed to consolidate vote results. In the second test primary and test general elections, the JBC was programmed to separately report vote results for each part of the split. The same number of ballots was voted in each

instance. All voting functions of the JBC were exercised during the test voting on the eSlate, including printing authorization codes, voting provisional ballots, canceling ballots, curbside voting and checking the status of a previously issued authorization code.

Prior to testing, the installation of trusted software and firmware on all components of the system was verified and documented. At the conclusion of each test election, the vote results printed from the JBC were verified. Additionally, the vote results were uploaded to Tally, tabulated according to proposed use procedures, and then verified for accuracy.

Testing Results and Recommendation

All four test elections were successfully completed. Staff was able to verify that updated JBC firmware resolved the previously noted error as intended. Further, no adverse effects were noted with the remainder of the system as a result of this modification.

The Secretary of State's Office of Voting System recommends approval of the amended Hart System 6.2.1 voting system as presented by the vendor for use in California.