

Voting System Certification Testing –Florida Perspective

FLORIDA
★ DIVISION OF ★
ELECTIONS



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IN-HOUSE CERTIFICATION PROCESS

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- Statutorily created Bureau of Voting Systems Certification within the Division of Elections of the Florida Department of State (Section 101.017, Florida Statutes)
- Establishes and implements Florida's voting systems certification standards
- Conducts testing of voting systems
- Reviews and approves some election system related systems components (e.g., online ballot delivery systems, independent post-election voting system audit)
- Provides voting systems' technical assistance to the county Supervisors of Elections

STAFFING

Current staff

- Bureau chief
- Sr. management analyst
- Systems project analyst
- Systems program analyst (2)
- Regulatory specialist (x2)
- Computer audit analyst (x2)
- Administrative assistant

Challenges

- Attracting and retaining qualified staff
- Competitive salary with private sector
- Maintenance of institutional knowledge through documentation

GENERAL PROCESS

Initial Steps

- Submission of initial package (*Vendor or county board of commissioners*)
- Execution of non-pecuniary statement by the Florida Department of State
 - *Examiners*
 - *Bureau Chief*
 - *Division Director*
 - *Secretary of State*

Challenges

- Initial application submission is not complete or sufficient at time of submission
- Balancing interest in proprietary interest and operating in Florida under the Sunshine law

SCOPE OF TESTING

Certification Testing

- Functional testing
- Source code review
- All components of the system necessary to cast, process, and tabulate votes.
 - ✓ Florida does not certify an individual element or device class in a voting system.
 - ✓ Uses established state rules on standards

Challenges

- Need to update established state standards in law and rule
- Evolving technology (hardware and software) outpaces laws, rules and expertise
- Security testing
- Lack of facility or in-house expertise (requires in some instances reliance on national testing lab results for components)
- Incorporating usability issues into testing including enlisting volunteers including persons with disabilities

SCOPE OF TESTING (CONT'D)

Testing

- Test plan
- Physical audit
- Functional audit
- Sensitivity testing (marked ballots)
- Simulated elections
- Electronic transmission of results
- Mass ballot count (precinct count and central count)
- Completion within 90 days of “initial submission”

Challenges

- Established statutory deadlines (90-day for test/30 days for report) submissions occur year round including election year)
- Undeveloped vendor product (default beta testing when submitted)
- Issues discovered prolong or protract certification testing
- Testing the universe of possibilities – all that could go wrong or all the potential integrated peripherals
- Testing and ensuring security of systems

REPORT

Report

- Recommendation for certification or not
- Within 30 days of completion.
- Prescribes period of certification and other limitations

Challenges

- Technical writing and plain meaning or understandability
- Public records law: Testing, Results and Reports open to the public but for some exceptions

MANAGEMENT REVIEW

Review Process

- Division and Assistant Director, Deputy Secretary of State,
- Assistant Secretary of State/Chief of Staff, Secretary of State
- Must be completed within 30 days .
- Includes recommendation for certification or not

Challenges

- Multiple levels of review with differing perspectives
- Ability to answer questions post-testing and process is all wrapped up or it is too late to do anything
- Responding to non-standards/requirements related questions (e.g., safety, usability, and public perception)

CERTIFICATE

Issuance

- Division director signs on behalf of Secretary.
- Cover Letter and Certification Disk to Vendor [vendor makes county voting system copies & returns them to us. We verify and forward to counties.]
- Memorandum to County Supervisors

Challenges

- How long should a certificate be issued given the limited life of system
 - Provisional
 - Permanent

POST-CERTIFICATION

Challenges

- Security of voting systems against new and sophisticated security
 - ✓ Potential breaches (e.g., Heartbleed- we determined no certified system in Florida currently has open-source code and sought vendor confirmation
 - ✓ Cost of updates/upgrades wrapped in with patches

Efforts

- Minimum security procedures requirements-most recent version must be filed with State before an election
- Bi-ennial review by county security procedures (odd-numbered years) by BVSC staff
- Follow-up with supervisors who are reluctant to install latest versions of upgrades to systems that may include patches and enhancements to protect against such potential weaknesses

POST-CERTIFICATION

Challenges

- End-of-life voting systems
 - ✓ Funding
 - ✓ Replacing Parts
 - ✓ Planning to Replace System
- Local election officials over-reliance on vendors

Efforts

- Outreach to local election officials and governmental funding entity to plan for, reserve in escrow or otherwise to replace aging system
- Encourage Supervisors of Elections to recognize the need to have well-drafted contracts to require replacement, maintenance and training as valuable investment
- Encourage Supervisors of Elections to develop level of independence and knowledge of their systems

POST-CERTIFICATION

Challenges

- Continued compliance of certified systems in use
- Latent manifestation of defects (e.g., unexpected expiration of SSL certificate)

Efforts

- State may re-examine at any time any system or part thereof to update certification
 - Full or modification
- L&A Testing site visits
- Review of Conduct of Election and Undervotes/Overvotes Reports
- As 2013, vendors required to:
 - ✓ Designate registered agent before sale or lease
 - ✓ Report known defects to State every other year 2013 and upon discovery.

Defects defined in law –remediate or risk decertification [section 101.56065, F.S.](#)

- Post-election certification voting system audits

FUTURE

Challenges

Revision to Existing Standards and Requirements (in progress)

- ✓ Re-envisioning the way certification should be done versus the way it is done
- ✓ Whether to establish review and approval standards for voluntarily submitted previously untested election (non-voting system) components or peripherals (e.g., pollbooks)
- ✓ Establish reasonable testing and approval timelines

Efforts

- Make highly technical processes simpler and flexible enough to accommodate innovation and enhancements
- Provide better guidance to vendors what to expect in Florida in testing and approval processes
- Transparency through public input in rulemaking process and testing

FUTURE (CONT'D)

Challenges

Evolving technology (hardware and software)

- How to stay ahead or even in step with the technology curve and innovations for testing and acquiring expertise and resources

Efforts

- Promotion of training for staff
- Participation in industry related conferences
- Outreach with other state colleagues and vendors
- Examination of best practices and trends in other states
- Exploration of provisional certification for innovation voting systems

Florida's Interest

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- Recognizing the value of a federal entity as a clearinghouse and potential source of guidance whether it is the EAC or some other federal entity
- Use of certain test lab results to supplement testing in Florida in which we lack in-house facilities and/or expertise
- Potential springboard for new testing framework by starting with a common base/denominator of standards and requirements
- Florida Secretary of State is an active participant in ongoing dialogue (co-chair for the NASS Task Force on Disposition of EAC duties)
- Shared States' interest to:
 - Ensure systems operate as represented, tested, certified or approved, and used
 - Encourage innovation
 - Determine the will of the public as voting habits and technology change
 - Provide transparency
 - Maintain public trust and confidence in voting systems and peripherals, and electoral process
 - Confirm that election results are accurate

THE END --

ANY QUESTIONS

