



United States Election Assistance Commission

Technical Guidelines Development Committee Meeting **Certification Updates**

July 20, 2015



This Presentation

Update on EAC certification related activities.

- Current testing
- Certified systems
- New Certification Manual



Current Systems Under Test

Manufacturer	Voting System (Name/Version)	Testing Application	Phase of Testing
ES&S	EVS 5.4.0.0	2/16/15	Test Plan received by EAC 6/30/15
Everyone Counts	eLect Voting Solution 4.0	6/10/2014	EAC/E1C/SLI held TTA Meeting in Denver July 28-29, 2014 . E1C making continuous system improvements & changes. Working towards development of Test Plan.
ES&S	EVS 5.2.0.3	7/01/15	Test Plan approved. Test Report received.



Systems Certified by EAC in Past 12 Months

- 1. Election Systems and Software EVS 5.2.0.0 - Modification**
07/02/14 -- Certificate of Conformance
- 2. Election Systems and Software EVS 5.0.1.0 - Modification**
03/18/14 -- Certificate of Conformance
- 3. Election Systems and Software Unity 3.4.1.0 - Modification**
04/04/14 -- Certificate of Conformance
- 4. Unisyn Voting Solutions OpenElect Ver. 1.3 - Modification**
01/12/15 -- Certificate of Conformance
- 5. Hart InterCivic Verity Voting 1.0 - New**
05/12/15-- Certificate of Conformance
- 6. Dominion Voting Systems Democracy Suite 4.14E - Modification**
07/02/15-- Certificate of Conformance
- 7. MicroVote EMS 4.1 - Modification**
07/16/15-- Certificate of Conformance



Certification Manual 2.0

- Test Readiness Review
 - Used by the EAC to ensure that test and evaluation resources not committed to a voting system that is not ready for testing by a VSTL.
 - TRR consists of VSTL checking:
 - TDP: (All elements present?)
 - System components: (Can system be physically configured per TDP?)
 - Preliminary source code review: (No less than 1% total LOC for each SW package)
 - Mark reading: (Can it reliably read a fully filled mark area if Op Scan system?)
 - Summary of COTS components



Certification Manual 2.0

- 90 days of inactivity = termination of campaign
- Deficiency criteria
 - Metrics to determine if systems under test by a VSTL shall be removed from the program and returned to the manufacturer for further work and/or QA testing.
 - Metrics include:
 - Duration of time a system is in a VSTL for testing
 - Significant delays/inactivity during a test campaign
 - Type or significance of deficiencies found
 - Total number of deficiencies, excluding source code coding convention deficiencies
 - Defect Density Ratio
 - A maximum number of errors in each of four categories



Certification Manual 2.0

- Software de minimis change
 - Under no circumstance shall a change be considered de minimis if it has reasonable and identifiable potential to impact the system's performance and compliance with the VVSG.
 - As with HW de minimis changes, VSTL will review and make an engineering judgment followed by EAC review of change.



Certification Manual 2.0

- Product advisory requirement
 - Manufacturers required to provide any technical bulletins or product advisories issued on EAC certified systems to the EAC within 24 hours of the time they are issued to jurisdictions.
- Technology testing agreement
 - Pen testing
 - Quality Assurance audit of manufacturer



Questions ?

Brian Hancock

Director, Testing and Certification

bhancock@eac.gov