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ELECTIONS / LICENSING
SECRETARY OF STATE

2007 Colorado Rule 45 Matrix
ES&S Conformance Assessment
April 20, 2007
ES&S Proprietary and Confidential

Legend

[redacted]	Conformance- No Development Work
Yellow	Non-Conformance – Medium Effort
[redacted]	Non-Conformance – Large Effort

Area of Impact	Current Requirements	New Requirements	Changed Requirements	Effective Date		Difficulty	Comments	Requires Development Work	Customer Comments/Procedural Workarounds
				Now	After March 31, 2008				
45.1 Definitions						[redacted]		[redacted]	
Definitions - Audio Ballot	45.1.1						OK		
Definitions - Audit Log			45.1.2	1			OK-Audit Log		
Definitions - Ballot Image	45.1.3								
Definitions - Ballot Style	45.1.4								
Definitions - Closed Network		45.1.5		1			OK-Closed Network		
Definitions - Communication Devices	45.1.6								
Definitions - DRE			45.1.7	1			OK-DRE		
Definitions - EAC	45.1.8						OK		
Definitions - Election media	45.1.9								
Definitions - Equipment	45.1.10								
Definitions - FEC	45.1.11								
Definitions - Remote site	45.1.12								
Definitions - Removable Storage Media		45.1.13		1			OK-Removable Storage Media		
Definitions - Security		45.1.14		1			OK-Security		
Definitions - Split Precinct		45.1.15		1			OK-Split Precinct		
Definitions - Test Log		45.1.16		1			OK-Test Log		
Definitions - Trusted Build		45.1.17		1			OK-Trusted Build		
Definitions - VSTL		45.1.18		1			OK-VSTL		

45.2 Introduction									
45.2.1 Definition of voting system for certification purposes									
Introduction			45.2.1.1	1			The definition of a voting system for the purposes of this rule shall be as the term is defined in **HAVA section 301(b)**. For Colorado purposes, no single component of a voting system, such as a precinct tabulation device, meets the definition of a voting system.		
Introduction			45.2.1.2	1			Sufficient components shall be assembled to create a configuration that shall allow the system as a whole to meet the requirements as described for a voting system in this rule.		
45.2.2 Authority									
Authority			45.2.2.1	1			SOS adopts this rule		
45.3 Certification Process Overview and Timeline									
Certification Overview			45.3.1	1			Certification is done as a whole system		
Certification Overview			45.3.2	1			This rule requires that we pass ALL parts of the certification, i.e., application, documentation, functional testing, but the leave open that the system must "substantially" meet the requirements…		
Certification Overview			45.3.3 (a-e)	1			Timelines for state to manage the process		
45.4 Application Procedure									
Application			45.4.1	1			Any Vendor may apply for cert at any time		
Application			45.4.2	1			Vendor must complete application		

								to cert		
Application	45.4.3							Escrow account for compensation to SOS for costs associated with testing		
Application	45.4.4							Required documentation		
Application			45.4.5	1				Electronic copies are preferred over paper		
Application		45.4.6		1				Trusted "build" should come from EAC and upgrades should come from the EAC. We won't have one for this quick of a certification.		
Application		45.4.7		1				If no EAC trusted build, CO SOS will create one with Vendor. Must use VSTL provided HASH codes for build.		
Application			45.4.8	1				Submission remains with SOS for duration		
Application			45.4.9	1				SOS may request additional info at any time.		
45.5 Voting System Standards										
45.5.1 Federal Standards										
Federal Requirements			45.5.1.1	1				Must meet 2002 VVSG.		
Federal Requirements	45.5.1.2							Must meet accessibility requirements		
Federal Requirements			45.5.1.3	1				SOS will test system to meet CO requirements		
45.5.2 State Standards										
45.5.2.1 Functional Requirements										
Functional Requirements	45.5.2.1.1							Detailed operations of the voting system		
Functional Requirements			45.5.2.1.2 (a-h)	1	Now			**(c.)** Lock and Unlock system to prevent or allow changes to ballot design – This requires changes to admin password control	YES	Counties can control this by verification of the IFC file, physical barriers protecting the Unity System and documentation of needed changes and steps taken should the IFC have to be updated after ballot print.
Functional Requirements			45.5.2.1.3	1				System must integrate ED, EV, ABS, and provisional ballots into		

								single election result		
Functional Requirements	45.5.2.1.4							Counting of elector's votes on a provisional ballot		
Functional Requirements			45.5.2.1.5	1				Split precinct reporting		
Functional Requirements	45.5.2.1.6							Tabulation of votes at combined precincts		
Functional Requirements			45.5.2.1.7 (a-b)	1				ASCII Data output files for reporting		
Functional Requirements			45.5.2.1.8(a-f)	6				General requirements clean up that we do all of. I.e., poll closing with time stamps, provide judges signature spaces, etc..		
Functional Requirements		45.5.2.1.8(g)		1				Two page ballot requirement		
		45.5.2.1.9						Voters voting on DRE devices shall be able to navigate through the screens without the use of page scrolling. Features such as next or previous page options shall be used.		Question regarding applicability of this requirement to AutoMARK system.
Functional Requirements							TBD	Election setup audit log of changes requirements reflecting name of system operator, date and time of change, "old & "new" values	YES, Requires updating the audit manager	While the audit manager is being worked on, Mesa county can ensure two persons program the election together and verify proper set up and date and time stamp of final IFC.
45.5.2.2 Performance Levels										
Performance Levels	45.5.2.2.1							Refers to speed & efficiency of voting system		
Performance Levels			45.5.2.2.2 (a-c)	3				Processing Ballot speeds, no issues		
Performance Levels		45.5.2.2.3		1				Added Doc requirements, no issue		
Performance Levels			45.5.2.2.4 (a, b, d)	3				Time limits on software performance, creation of ballot styles, etc.should be ok		
Performance Levels	45.5.2.2.4 (c)							Election media upload < 20 sec per media		
Performance Levels			45.5.2.2.5	1				3rd party software performance, no issue		

Automark - considered optical scan unit not DRE therefore does not uphold to this rule.

45.5.2.3 Physical Design									
Physical Design			45.5.2.3.1	1			General statement on design, no issue		
Physical Design	45.5.2.3.2 (a-b)						Environmental Controls		
Physical Design			45.5.2.3.3	1			General Database design, no issue		
Physical Design			45.5.2.3.4	1			Ballot definition should be multilingual. Ok		
Physical Design			45.5.2.3.5	1			Basic DB design, no issue		
Physical Design	45.5.2.3.6						Ballot definition		
Physical Design	45.5.2.3.7						Candidate & Contest database		
Physical Design			45.5.2.3.8	1			500 min ballot positions within the Database. Our biggest ballot is 408, but we can layout multiple ballots to meet this requirement. No issue		
Physical Design	45.5.2.3.9						Ballot display		
Physical Design			45.5.2.3.10	1			System ability to perform needed functions for the tabulators to operate, no issues		
Physical Design			45.5.2.3.11	1			Write-once distribution media for initial installations to client, no issue		
Physical Design			45.5.2.3.12	1			Requires the system administrator may verify the trusted build of the system via the system. We don't do this today.	YES	Mesa would need instruction on how to manually do this if it involves more than verifying the version number and date of creation as is done now.
Physical Design			45.5.2.3.13 (a – d)	1			Touch screen characteristics documentation, no issue		
Physical Design			45.5.2.3.14 (a-b)	1		TBD	**45.5.2.3.14 (b)** – Error Detection detailed error list…SB, we include this in the audit detail, but may not print all of it out, and it depends on when the error happens in order to print the error. If it's a printer error, it will log to audit data, but not to printer.	???Possibly???	Mesa will continue to print audit report and audit logs for both voter units and the Unity System for storage as an election record and available for inspection as a part of our canvassing process.
Physical Design	45.5.2.3.15						Ballot layout and tabulation subsystems integration		

	45.5.2.3.16						Processing accuracy		
Physical Design			45.5.2.3.17	1			Poll printing requirements, no issue		
Physical Design			45.5.2.3.18	1			Applicants are required to meet or exceed MIL-HDBK-454; general requirements for electronic systems., no issue		
Physical Design		45.5.2.3.19(a-e)		5			Battery-operation Requirements (a), (b), and (c) for optical scan, DRE's, and VVPAT printers. Dependent upon the # of ballots scanned and frequency of scanning in required time frame, requiring 3 hours of back up.....Not an issue for 100, iVo RTAL		
Physical Design		45.5.2.3.20		1			Data retention during power failure, may be an issue on Unity today without setting some automated back up, but may be minor	???Possibly???	Mesa has accidentally kicked the power source while programming in EDM. In EDM the data saves after each exit of a screen (to our knowledge). We were able to resume right away. Not sure about other modules in Unity. Voting equipment is A-OK in this area.
Physical Design		45.5.2.3.21 (a-b)		1		**Do Not Comply**	DRE shall provide randomization of all voter choices and stored, electronic ballot information, regardless of format, to prevent disclosure of voters' confidential ballot choices during and after storage of the voters' ballot selections. If they mean paper RTAL too, we don't comply, but if get them to deal only with DRE or OPT, we can comply		
Physical Design			45.5.2.3.22	1			8 useful years of life with documentation, of the voting system/subsystem. Need to		

							document the basis for how we believe this.		
Physical Design	45.5.2.3.23						Documentation of the physical design		
45.5.2.4 Documentation Requirements									
Documentation Requirements	45.5.2.4.1 (a)						Standard Users Operators Manual		
Documentation Requirements			45.5.2.4.1(b)	1	7		System Admin/application admin documentation, new requirement	YES	
Documentation Requirements	45.5.2.4.1 (c, d)						Training & Systems Programming Manual		
Documentation Requirements		45.5.2.4.1(e)		1			List of minimum services to handle the voting system securely. New requirement	YES	State of Colorado has issued rule 43 in conjunction with this rule 45. Mesa County has an approved security plan on file and would share it for purposes of supporting documentation.
Documentation Requirements			45.5.2.4.2	1			Rejects application if no VSTL reports from EAC handed over to State	Needs EAC certification	
Documentation Requirements		45.5.2.4.2(a)		1			Releases EAC to release test information to State of Colorado		
Documentation Requirements		45.5.2.4.3 (a-g)				$$$	Application Penetration Testing requirements. Contracted independent of the SOS office, but not from ESS.	YES	
Documentation Requirements			45.5.2.4.4	1			Doc submission, no issue		
Documentation Requirements Project plan for gaining 2005 EAC certification by Jan 2008.		45.5.2.4.4(a)		1			ES&S plans to certify to systems to the 2005 VVSG. At this time we do not have any formal documentation of our plans.	YES	
Documentation Requirements		45.5.2.4.5		1			Failure to comply will delay current certification events...	YES	
45.5.2.5 Audit Capacity									
Audit Capacity			45.5.2.5.1	1			Capable of producing electronic & printed audit logs which can be audited		
Audit Capacity	45.5.2.5.2 (a - c)						Documentation on Operating System, Software, Tabulation		

							devices,.		
Audit Capacity		45.5.2.5.2 (d)					Documentation		
Audit Capacity	45.5.2.5.3 (a – c, e)						Activity to track & maintain		
Audit Capacity			45.5.2.5.3 (d)	1			Logging hardware plug & play	This is a function of PC OS system	
Audit Capacity			45.5.2.5.4	5			Serial number presentation - OK		
Audit Capacity			45.5.2.5.5	1			Alternate transfer of audit records if a system memory device fails.		
Audit Capacity		45.5.2.5.6		1			Audit record storage, we don't do this exactly how they prescribe		Mesa will continue to print audit report and audit logs for both voter units and the Unity System for storage as an election record and available for inspection as a part of our canvassing process. Printing them and storing them with election records satisfies this requirement.
45.5.2.6 Security Requirements									
Security Requirements		45.5.2.6.1(a)(i-vi)		6			The operating system Administrative Account shall not have access to read or write date to the database and shall not have the ability or knowledge of the database administrator password.	IVIM OS is a customer issue	Mesa would offer its security plan to limit access to the Unity Software to only qualified individuals. Always working in a team. Also may be able to resolve concerns if a sit down meeting could be arranged between county and state. Unity and its voting equipment do not share common passwords and the rights and roles are very different from programming to supervisory rights in the field.
Security Requirements		45.5.2.6.1(b)(i-iii)		3			Customer Issue to Mitigate		Mesa owns its PCs and stores them separately. Mesa will work with their IT

						[redacted]		[redacted]	Division to ensure this requirement.
Security Requirements (v) & (vi) – All data stored at rest in any voting system database shall be encrypted to FIPS 140-2 and FIPS 180 standards. NOTE: These are same cryptography (NIST) requirements that the next VVSG will require.		45.5.2.6.1(c)(i-vi)			6				Customer could protect through hard drive encryption process outside Unity
Security Requirements		45.5.2.6.1(d)(i-iii)			3				Mesa owns its PCs and stores them separately. Mesa will work with their IT Division to ensure this requirement.
Security Requirements		45.5.2.6.1(d)(iv-vi)		3					
Security Requirements		45.5.2.6.1(e)(i-vii)		7				Customer can procedurally mitigate	Mesa will continue to manage passwords for Unity. Blank passwords are not allowed to remain on the system after set up. Unity and its voting equipment do not share common passwords and the rights and roles are very different from programming to supervisory rights in the field.
Security Requirements		45.5.2.6.1(e)(viii)			1			IVo does not support mixed case	
Security Requirements		45.5.2.6.1(f)(i-ix)			9	[redacted]		[redacted]	
Security Requirements	45.5.2.6.1(f)(xxvi)								
Security Requirements			45.5.2.6.2 (a-j)	1			Not sure how to document this	Can customer mitigate with internal procedures	(a) Mesa will write its procedure for *formatting* ballots – occurs in Unity BIM for paper, occurs in

								based on our current doc?	Unity iVim for DRE. (b) Mesa will continue to print its audit log for DREs that record ballots cast. Mesa has internal controls where each DRE is checked at zero, reconciles number of voters, election judges monitor, seals, balancing procedures, chain of custody and verification of ballots cast upon return. (c) Mesa will continue to perform internal testing, public testing and post audits as required by Mesa County procedure and SOS Rule 11. Mesa also validates results from equipment into the Unity accumulation software (ERM). For example if we have 5 machines that contain 550 votes, we ensure the ballot cast increments by 550. (d) Mesa validates results from equipment into the Unity accumulation software (ERM). For example if we have 5 machines that contain 550 votes, we ensure the ballot cast increments by 550. We ensure that the audit log successfully saved and that ballots cast match prior to reporting results. Mesa canvasses thoroughly prior to releasing final results. (e) Mesa will submit its

									security plan. (f) Prevention, detection and logging of changing or preventing the recording of a vote is handled first by prevention (security), detection is that the ballots cast would not match and the post audit would not match, Mesa is unsure what you want for a log. (g) If a voter were not cast by a registered voter it would be in paper form, provisionally cast. (h) The changing of calculated vote totals would be handled first by prevention, detection is that the ballots cast would not match and the post audit would not match, Mesa is unsure what you want for a log. (i) Mesa will submit its security plan. (j) Identification resides in Voter Registration System and sig cards, not on activation or issuance of a ballot.
Security Requirements	45.5.2.6.3(a-f)						Not sure how to document this	Can customer mitigate with internal rocedures based on our current doc?	Mesa will submit its security plan and address any additional issues required by this section. Supplemental language may be necessary in the next security plan.
Security Requirements		45.5.2.6.3(g-h)		2			Not sure how to document this	Can customer mitigate with internal rocedures based on our current	Mesa will submit its security plan and address any additional issues required by this section. Supplemental language

								doc?	may be necessary in the next security plan.
Security Requirements	45.5.2.6.4								
45.5.2.7 Telecommunications Requirements				**3**			We don't use DAM out there and don't plan to match this spec, don't see a need to respond		Mesa County does not utilize DAM and does not transmit vote totals. All is handled with chain of custody and physical delivery.
Telecommunication Requirements	45.5.2.7.1						Includes all components of the system that transmit data outside of the closed network.		
Telecommunication Requirements		45.5.2.7.2(a-b)		**1**		**TBD**	(b) – All communications of data in transfer shall be encrypted, authenticated, and verified to the FIPS 140-2 standard and verified to the FIPS 180 standard.		
Telecommunication Requirements		45.5.2.7.3		**2**					
Telecommunication Requirements	45.5.2.7.4						All wireless components shall be disabled with the exception of line of sight infrared technology used in a closed environment where the transmission & reception is shielded		
Telecommunication Requirements		45.5.2.7.5		**1**		**TBD**	All systems that transmit date over public telecommunications networks shall maintain a clear audit trail…		
Telecommunication Requiurements	45.5.2.7.6						Transmission of voter information		
Telecommunication Requirements		45.5.2.7.7 (a-b)		**1**					
Telecommunication Requirements		45.5.2.7.8		**4**					
Telecommunication Requirements		45.5.2.7.9							
Telecommunication Requirements	45.5.2.7.10(a-d)						Monitoring threats		
45.5.2.8 Accessibility Requirements									
45.5.2.8.1 Accessibility									

Requirements							
Accessibility Requirements	45.5.2.8.1(a)						
Accessibility Requirements		45.5.2.8.1(b)					
Accessibility Requirements	45.5.2.8.1(c)						
Accessibility Requirements		45.5.2.8.1(d)					
Accessibility Requirements		45.5.2.8.1(e)(part1)		1			
Accessibility Requirements		45.5.2.8.1(e)(part2)			1		
Accessibility Requirements			45.5.2.8.1(f)	1			
Accessibility Requirements	45.5.2.8.2 (a-i)						
45.5.2.9 V-VPAT Requirements							
V-VPAT Requirements	45.5.2.9.1						V-VPAT refers to a Voter-verified paper record
V-VPAT Requirements			45.5.2.9.2	1			
V-VPAT Requirements	45.5.2.9.3(a-d)						
V-VPAT Requirements	45.5.2.9.4						Allows for voter review prior to casting ballot
V-VPAT Requirements	45.5.2.9.5						
V-VPAT Requirements	45.5.2.9.6						
V-VPAT Requirements			45.5.2.9.7	1			
V-VPAT Requirements	45.5.2.9.8						
V-VPAT Requirements	45.5.2.9.9						
V-VPAT Requirements	45.5.2.9.10						Allows voter to review paper record in private and independent manner

V-VPAT Requirements	45.5.2.9.11						Allows for secrecy of votes	Printer rolls would have to be secured and procedures designed to mitigate any inspection of them	Mesa will submit its security plan. Draft rule 43.8.10.1(c)(iii) and permanent rule 11.6.2 addresses this issue separately with the county.
V-VPAT Requirements			45.5.2.9.12	1		Do Not Comply	VVPAT font no less than 10 point. iVo currently is just under 9 pt.. OK if use of magnifier approved.		
V-VPAT Requirements			45.5.2.9.13	1		[redacted]			
V-VPAT Requirements	45.5.2.9.14						Prevents tampering with paper record	Mitigate with seals	ES&S booths require key entry into the V-VPAT printer. Mesa will submit its security plan. Draft rule 43.8.2 (b) and permanent rule 11.6 addresses this issue separately with the county.
V-VPAT Requirements			45.5.2.9.15	1			Printing and storing paper record counts requirements	Varies by design of audit trail and ballot size	The requirement to record at least seventy-five ballots without requiring a paper change is not only driven by length of ballot but how often voters change their minds or correct a vote on the system utilizing the Real Time Audit Log.
V-VPAT Requirements			45.5.2.9.16	1		[redacted]			
V-VPAT Requirements		45.5.2.9.17			1				
V-VPAT Requirements	45.5.2.9.18								
V-VPAT Requirements	45.5.2.9.19 (a-d and f)								

V-VPAT Requirements			45.5.2.9.19(e)	1		[redacted]			
V-VPAT Requirements			45.5.2.9.20	1					
V-VPAT Requirements	45.5.2.9.21								
V-VPAT Requirements	45.5.2.9.22								
V-VPAT Requirements	45.5.2.9.23								
V-VPAT Requirements			45.5.2.9.24	1					
V-VPAT Requirements			45.5.2.9.25	1					
V-VPAT Requirements	45.5.2.9.26						SOS shall keep procedures for resolving malfunctions.	Can customer mitigate with internal procedures based on our current doc?	Mesa County has complied with and will continue to comply with this rule, documenting and reporting any anomalies found during internal testing, public testing or post auditing. Technical bulletins issued by ES&S seem to satisfy this rule as well.
45.6 Testing							**Voting System Demonstration**		
Voting System Testing	45.6.1.1					[redacted]			
Voting System Testing	45.6.1.2 (a –p)								
Voting System Testing	45.6.1.3								
Voting System Testing	45.6.1.4								
Voting System Testing	45.6.1.5								
Voting System Testing	45.6.1.6								

Voting System Testing		45.6.1.7		1					
45.6.2 Functional Testing									
Functional Testing	**45.6.2.1**								
Functional Testing	45.6.2.1.1								
Functional Testing	45.6.1.1.2								
Functional Testing		45.6.2.1.3		1					
Functional Testing	45.6.1.1.4								
Functional Testing			45.6.2.1.5	1					
Functional Testing	**45.6.2.2**						**Secretary of State requirements for testing**		
Functional Testing	45.6.2.2.1								
Functional Testing			45.6.2.2.2	1					
Functional Testing	45.6.2.2.3								
Functional Testing			45.6.2.2.4	1					
Functional Testing	45.6.2.2.5								
45.6.2.3 General Testing							**General Testing Procedures and Instructions**		
General Testing Procedures	45.6.2.3.1 (a-e)								
General Testing Procedures	45.6.2.3.2								
General Testing Procedures			45.6.2.3.3	1					
General Testing Procedures	45.6.2.3.4								
General Testing Procedures	45.6.2.3.5								
General Testing Procedures			45.6.2.3.6 (a-d)	1					
General Testing Procedures		45.6.2.3.7 (a-f)		1					
General Testing Procedures	45.6.2.3.8								
General Testing Procedures		45.6.2.3.9		1					

General Testing Procedures	45.6.2.3.10 (a-h)								
General Testing Procedures			45.6.2.3.11	1					
General Testing Procedures	45.6.2.3.12								
General Testing Procedures	45.6.2.3.13								
General Testing Procedures	45.6.2.3.14 (a-d)								
General Testing Procedures		45.6.2.3.14(e)		1					
General Testing Procedures	45.6.2.3.14 (f-g)								
General Testing Procedures	45.6.2.3.15								
45.6.3 Certification									
Certification	45.6.3.1								
Certification	45.6.3.2								
45.7 Temporary Use									
Temporary Use	45.7.1								
Temporary Use	45.7.2								
Temporary Use	45.7.3								
Temporary Use	45.7.4								
45.8 Periodic Review									
Periodic Review	45.8.1 (a-b)								
Periodic Review	45.8.2								
Periodic Review	45.8.3								
Periodic Review	45.8.4								
Periodic Review	45.8.5								
45.9 Decertification									
Decertification	45.9.1								
Decertification	45.9.2 (a-h)								
Decertification	45.9.3								
Decertification	45.9.4								
45.10 Modifications & Re-exam									
Modifications & Re-exam	45.10.1								
Modifications & Re-exam	45.10.2								
45.11 Acceptance Testing by Jurisdictions									
Acceptance Testing	45.11.1								
Acceptance Testing	45.11.2								
Acceptance Testing	45.11.3								
Acceptance Testing	45.11.4								
45.12 Purchases & Contracts									
Purchases & Contracts	45.12.1 (a-c)								
Purchases & Contracts	45.12.2								

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Re-Created and Commented by Election Systems & Software, Inc. 3/27/2007
Re-Created Entire Matrix to include all requirements for Rule 45 and Added Column for Customer Input 4/10/2007

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April 24, 2007

The Honorable Mike Coffman
Colorado Secretary of State
1700 Broadway, Suite 270
Denver, CO 80290

Re: ES&S Rule 45 Assessment and Re-Certification Status

Dear Mr. Secretary,

ES&S has completed our evaluation of the impact of the recently adopted amendments to voting system certification regulations for the State of Colorado. As we discussed in our March 29, 2007 phone conversation, we would like to address our assessment of conformance with our current systems certified in Colorado, in advance of the certification event.

In the attached Rule 45 requirements matrix, ES&S has highlighted a number of areas where, based on our understanding, without sufficient time for proper design, development, and testing, our Unity 3.0.1.0 and 3.0.1.1 releases do not fully conform to the State's new regulations. Unity 3.0.1.0 was NASED qualified on April 14, 2006 and Colorado State certified on March 29, 2006, as well as successfully and reliably used in each of the major 2006 elections. Unity 3.0.1.1, which we recently submitted to the State for this certification, was NASED qualified on August 31, 2006 and also successfully used in the November 2006 General Election in a number of other states.

As part of our assessment, ES&S engaged our customers in Colorado to assist us in understanding each area of concern and establishing procedures to mitigate the new requirements until they can be made available in a future release. Overall I believe we have been able to determine procedural workarounds for many of the new items, but there remain numerous requirements, particularly regarding newly introduced VVPAT and accessibility functional requirements, where the ES&S iVotronic VVPAT solution will not support in this election cycle. Other areas of concern include new security protections, cryptography, and various other functional requirements.

* Knowing the ES&S Unity 3.0.1.0 or 3.0.1.1 releases do not fully comply with the State's new certification requirements, and along with the absence of adequate time for enhancements to be completed, for ES&S to move forward with the certification, we will need some assurances from your office that under the provisions set forth in Rule 45, ES&S would be granted minimally, a temporary certification for substantial compliance assuming the unchanged functions of the systems test to the same level as it has previously in the 2006 certification and in Jefferson and Mesa Counties' 2006 elections. ES&S' Unity 3.0.1.0 and 3.0.1.1 releases have proven to be secure, accurate, and

· SEND to CO, COMMISSIONERS.
· WHY IS THE PROCESS THE WAY IT IS - SECURE/ACCURATE.
· ANY VENDOR W/ ISSUES
· NOTIFICATION = COURTESY TO COUNTY
· SHORT
· FAIR.

Rule 45 STANDS ALONE.

NO - CONSISTENT.
BASED ON CERTIFICATION PROCESS

reliable. Until such time that the State of Colorado's newest election system requirements can be designed in to our future product offerings, we are committed to working with the State and our county customers to take whatever procedural steps necessary to further protect the integrity of the elections in Colorado while the development and federal testing efforts can be completed incorporating the changes.

Please be assured we remain committed to the State of Colorado and the tremendous staffs in Jefferson and Mesa Counties. Thank you for this consideration and we anxiously await your reply.

Sincerely,

Aldo Tesi

Aldo Tesi
President and CEO

Attachment: 2007 Colorado Rule 45 Matrix, ES&S Conformance Assessment, April 20, 2007

Cc: Pamela Anderson, Jefferson County Clerk and Recorder
Janice Rich, Mesa County Clerk and Recorder
Steven M. Pearson, Vice President, Certification, ES&S
Craig Seibert, State of Colorado Sales Manager, ES&S

Election Systems & Software
MAINTAINING VOTER CONFIDENCE. ENHANCING THE VOTING EXPERIENCE.

11208 John Galt Boulevard · Omaha, NE 68137 USA
Phone: 402.970.1196 · Toll-Free: 1.800.247.8683 · Fax: 402.970.1291
aldo@essvote.com

Aldo J. Tesi
President and CEO

April 24, 2007

The Honorable Mike Coffman
Colorado Secretary of State
1700 Broadway, Suite 270
Denver, CO 80290

Re: ES&S Rule 45 Assessment and Re-Certification Status

Dear Mr. Secretary,

ES&S has completed our evaluation of the impact of the recently adopted amendments to voting system certification regulations for the State of Colorado. As we discussed in our March 29, 2007 phone conversation, we would like to address our assessment of conformance with our current systems certified in Colorado, in advance of the certification event.

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Knowing the ES&S Unity 3.0.1.0 or 3.0.1.1 releases do not fully comply with the State's new certification requirements, and along with the absence of adequate time for enhancements to be completed, for ES&S to move forward with the certification, we will need some assurances from your office that under the provisions set forth in Rule 45, ES&S would be granted minimally, a temporary certification for substantial compliance, assuming the unchanged functions of the systems test to the same level as it has previously in the 2006 certification and in Jefferson and Mesa Counties' 2006 elections. ES&S' Unity 3.0.1.0 and 3.0.1.1 releases have proven to be secure, accurate, and

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STATE OF COLORADO
Department of State
1700 Broadway
Suite 250
Denver, CO 80290

Mike Coffman
Secretary of State

William A. Hobbs
Deputy Secretary of State

COPY

March 16, 2007

Representative Bernie Buescher
Colorado House of Representatives
Denver, Colorado 80203

Dear Representative Buescher:

Thank you for your letter regarding the use of ES&S voting equipment in Mesa County. The public hearing conducted on February 15, concerning the efficacy of electronic voting machines, was very helpful to me. I received many favorable written comments concerning the voting system in use in Mesa County.

You noted in your letter that the Secretary of State is compelled, by last year's court order, to recertify the voting systems used in Colorado elections, and you expressed your belief that national certification of a voting system should merit significant consideration in Colorado's recertification process. Specifically, you indicated, a vendor such as ES&S, that has passed national certification, should be able to pass Colorado's certification standard.

I wanted you to be aware; the Colorado General Assembly has enacted additional certification standards that are not considered in the national certification process. In May 2005, the General Assembly passed SB 05-198, Senator Ken Gordon's bill regarding the Conduct of Elections for Colorado. This bill established specific, additional requirements for Colorad requirements.

The national certification process dc or does it include any election process functional tests unique to Cc / required a Voter-Verified Paper Record suitable for a manual a ɔment must be capable of precinct reporting, accepting and pro ɛctly functioning for primary races as prescribed by statute. Becat y the General Assembly, it is possible that a vendor, such as ES&S but not Colorado certification.

ESS Binder
1.1

As the State's chief election official, i oth federal and state law. In adopting new certification standards a ge is to establish firm but fair standards. In conducting the upcomin sonable effort to verify that the federal and Colorado requirements

Again, thank you for your input. Plea or questions.

Sincerely,

Mike Coffman
Secretary of State

Main Number (303) 894-2200
Administration (303) 860-6900
Fax (303) 869-4860
TDD (303) 869-4867
Web Site www.sos.state.co.us
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FEB 2 2007

CO SECRETARY OF STATE

State Representative
BERNIE BUESCHER
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Grand Junction, CO 81502
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COLORADO

HOUSE OF REPRESENTATIVES

STATE CAPITOL

DENVER

80203

Chairman:
Appropriations Committee

Vice-Chairman:
Joint Budget Committee

Secretary of State Mike Coffman

Dear Secretary Coffman:

It has been brought to my attention that you held a meeting on February 15, 2007, asking for public comment on voting systems in Colorado, and I wish to offer my comments as well.

I have had the opportunity to sit down with the Mesa County Clerk & Recorder, along with members of her Elections staff. I have also reviewed the testing procedures, public logic and accuracy, post-audit, and security procedures in place. I have been present during a public demonstration of the election equipment. It has been my experience that when questions are asked, the Mesa County Elections staff is quick to respond.

In February 2005, I attended the Election Vendors' presentation held at the State Capitol (hosted by the Secretary of State's office). During this event, the ADA Community evaluated several different voting systems. *Elections Systems and Software (ES&S)* faired well with the ADA Community and many commented favorably about the Audio Ballot's simplicity.

Mesa County has spent close to $2 million dollars in its purchase of election equipment. Besides the monetary investment, Mesa County has an Election staff that is well trained and experienced in the use of its voting equipment (software, firmware, hardware). With this experience, no third party (the vendor) is required or allowed to program Mesa County elections.

In November 2006, *then* Mesa County Commissioner, Tillie Bishop, and I held a Press Conference expressing our confidence in the Mesa County Elections staff and the voting equipment [*ES&S*] used in Mesa County. I personally used the DREs (*ES&S iVotronics*) in the 2006 Primary and General Elections, and have complete confidence that my vote(s) counted.

I am aware of last year's court case that is requiring the Secretary of State to re-certify the voting equipment used in the State of Colorado. As I understand the process, the equipment must have first passed a national certification prior to applying for certification in Colorado. I feel that national certification should merit significant consideration in the re-certification process now being contemplated. A vendor that is able to obtain an Election Assistance Commission (EAC) certification, as *Election Systems & Software* has, should be able to withstand the rigors of Colorado's certification standard.

I strongly urge the Secretary of State to re-certify the voting equipment in Mesa County.

Sincerely,

Bernie Buescher

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FEB 2 2007

CO SECRETARY OF STATE

State Representative
BERNIE BUESCHER
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Grand Junction, CO 81502
Home: 970-245-2431
Business: 970-245-4150
Fax: 970-245-4158
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COLORADO

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