

The State of Texas



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Gwyn Shea
Secretary of State

REPORT OF EXAMINATION OF DIEBOLD ELECTION SYSTEMS, INC.'S ACCU-VOTE TS R6 v.4.1.11

PRELIMINARY STATEMENT

On May 21, 2002, Diebold Election Systems, Inc. (the "Vendor") presented its Accu-Vote TS R6 system for modification and reexamination in compliance with House Bill 1419, 77th Legislature, which requires reexamination of all voting systems of each county to determine whether the voting system continues to comply with the minimum applicable standards prescribed by law. The system was formerly distributed by Global Election Systems. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Clover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners thoroughly examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF THE ACCU-VOTE TS R6

The Accu-Vote TS R6 is a modification to the previously certified Accu-Vote TS Direct Record Electronic voting machine. The modified system features a larger, color screen, and a thermal printer. The version presented for examination was version 4.1.11.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

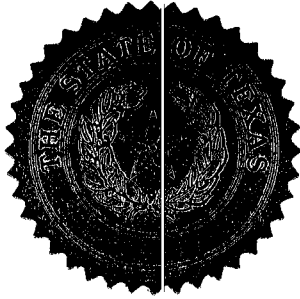
The Accu-Vote TS R6 v. 4.1.11 does not meet the standards for certification as prescribed by Section 122.001 of the Texas Election Code. Specifically, the system:

1. is not suitable for the purpose for which it is intended;
2. does not operate safely, efficiently, and accurately;
3. is not safe from fraudulent or unauthorized manipulation; and
4. is not capable of providing records from which the operation of the voting system may be audited.

CONCLUSION

The voting systems examiners noted that the audit log failed to record all significant events at the point of tabulation and recommended that the system not be re-certified until this was remedied. Accordingly, I hereby deny the Vendor's application for recertification of the Accu-Vote TS R6 system for use after December 31, 2002.

Certified under my hand and seal of office, this 1st day of August, 2001.



Gwyn Shea
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Secretary of State

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Secretary of State

REPORT OF EXAMINATION OF DIEBOLD ELECTION SYSTEMS, INC.'S ACCU-VOTE ES 2000 v.1.9.4w

PRELIMINARY STATEMENT

On May 21, 2002, Diebold Election Systems, Inc. (the "Vendor") presented its Accu-Vote ES 2000 optical scan voting system for reexamination in compliance with House Bill 1419, 77th Legislature, which requires reexamination of all voting systems of each county to determine whether the voting system continues to comply with the minimum applicable standards prescribed by law. The system was formerly distributed by Global Election Systems. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners thoroughly examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF THE ACCU-VOTE ES 2000

The Accu-Vote ES 2000 is a mark sense optical scan ballot reader. The version presented for examination was 1.9.4w

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

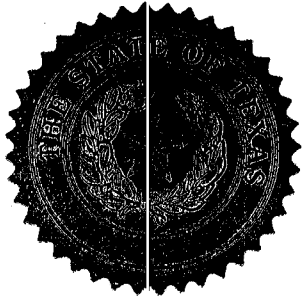
The Accu-Vote ES 2000 v. 1.9.4w does not meet the standards for certification as prescribed by Section 122.001 of the Texas Election Code. Specifically, the system:

1. is not suitable for the purpose for which it is intended;
2. does not operate safely, efficiently, and accurately;
3. is not safe from fraudulent or unauthorized manipulation; and
4. is not capable of providing records from which the operation of the voting system may be audited.

CONCLUSION

The voting systems examiners noted that the audit log failed to record all significant events at the point of tabulation and recommended that the system not be re-certified until this was remedied. Accordingly, I hereby deny the Vendor's application for recertification of the Accu-Vote ES 2000 system for use after December 31, 2002.

Certified under my hand and seal of office, this 1st day of August, 2001.



Gwyn Shea
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REPORT OF EXAMINATION OF DIEBOLD ELECTION SYSTEMS, INC.'S GLOBAL ELECTION MANAGEMENT SYSTEM, v. 1.17.17

PRELIMINARY STATEMENT

On May 21, 2002, Diebold Election Systems, Inc. (the "Vendor") presented its Global Election Management (GEMS) system for reexamination in compliance with House Bill 1419, 77th Legislature, which requires reexamination of all voting systems of each county to determine whether the voting system continues to comply with the minimum applicable standards prescribed by law. The system was formerly distributed by Global Election Systems. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Clover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners thoroughly examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF GEMS

GEMS is a computer program that prepares ballots and reads and tabulates precinct election results recorded on IMATION 120 megabyte floppy disks or transmitted by modem. The version presented for examination was GEMS, v. 1.17.17

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

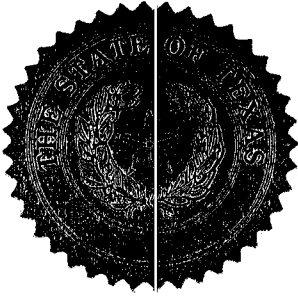
GEMS v. 1.17.17 does not meet the standards for certification as prescribed by Section 122.001 of the Texas Election Code. Specifically, the system:

1. is not suitable for the purpose for which it is intended;
2. does not operate safely, efficiently, and accurately;
3. is not safe from fraudulent or unauthorized manipulation; and
4. is not capable of providing records from which the operation of the voting system may be audited.

CONCLUSION

The voting systems examiners noted that tabulation was able to continue in GEMS even though the audit log printer was off-line and recommended that the system not be re-certified until this was remedied. Accordingly, I hereby deny the Vendor's application for recertification of the GEMS voting system for use after December 31, 2002.

Certified under my hand and seal of office, this 1st day of August, 2002.



Gwyn Shea

Gwyn Shea
Secretary of State

Diebold Election Systems

The Diebold system was examined in Austin on May 21, 2002. The system is made up of three sub-systems. The names and current releases are as follows:

Accuvote-TS - version 4.1.11 - DRE voting machine
Accuvote-ES2000 - version 1.9.4w - optical scan reader
Gems- version 1.17.17 - election preparation, tally and reporting system

The system as demonstrated requires the following corrections in order to satisfy the requirements of the Texas Election Code:

- If a different TS machine is needed during the course of an election, the new machine's protective counter value should be written to the audit log.
- The precinct report must use the "long" format that indicates the under-voting.
- Accumulation on a TS machine did not record all significant events (i. e. a second attempt to load the same PCMCIA card).
- The failure to transfer the precinct results from the TS was not logged on the TS audit log nor the GEMS log.
- Tabulation was able to continue in GEMS even though the audit log printer was off-line.
- The demonstration did not use a laptop to initialize the TS activation cards as would be done for a real election. All equipment and sub-systems used must be demonstrated.

Conclusion

The system does not meet the standards outlined in the Texas Election Code. I do not recommend certification of the system.

Tom Watson
Examiner

**Barney Knight
& Associates**

Attorneys at Law

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May 21, 2002

Ann McGeehan
Deputy Assistant
Secretary of State
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Re: Diebold Election Systems ("Global") AccuVote-TS R6 Version 4.1.11 ("AV-TSR6"), AccuVote-ES 2000 Optical Scan Reader Version 1.9W ("Scan Reader"), and Global Election Management System Version 1.17.17 ("GEMS")

Dear Ms. McGeehan:

Pursuant to my appointment as an examiner under §122.035 of the Texas Election Code, I attended a scheduled examination on Tuesday, May 21, 2002, for the purpose of examining the above referenced AccuVote TS R6, the Scan Reader and Gems. At that time, Diebold made a presentation and the examiners were able to ask questions and examine the use and function of the AV-TSR6, the Scan Reader and GEMS. The efficiency of the examination was limited due to Diebold having to interrupt the examination to prepare an election that would enable the examiners to review and examine the function of required straight party and other abilities.

In that examination, I relied upon representations of Diebold concerning operation of the software and electronic components. Those representations were made during an extended examination and were considered together with those contained in the printed materials for the AV-TSR6, Scan Reader and Gems. Other than examining the materials provided, observing the demonstration, presenting questions and observing the response of Diebold to my questions and those presented by the other examiners, I did not conduct an independent examination of the software or the electronic components.

This report is concerned solely with the ability of the AV-TSR6, Scan Reader and Gems to operate and comply with Texas Election Law. No opinion is expressed regarding the suitability of the system for the purposes of or use by any jurisdiction. The AV-TSR6 is a voting machine and voting system equipment, the Scan Reader is automatic tabulation equipment, and GEMS is the operating system for an electronic voting system as those terms are defined in § 121.003, *Tex. Elec. Code*.

AV-TSR6. Use as a voting station. The AV-TSR6 is an upgrade of the previously certified AV-TSR6. The AV-TSR6 is a DRE device that allows a voter to vote by touching the LCD Screen. The AV-TSR6 is programmed for the election by using the Gems, V. 1.17.17, to use a PCMCIA card to load media into the AV-TSR6. The AV-TSR6 stores both ballot images and election results, as votes are cast. The voter accesses the AV-TSR6 by use of a "Smart Card" which results in the proper ballot being presented for the voter and the activation of the machine for voting. The results are recorded in both the internal memory and the external PCMCIA. The AV-TSR6 appears to have and perform all the requirements and functions required for a voting machine.

No computer is required at the precinct level. At the close of election, each AV-TSR6 will print the required election results tape for the machine, and the votes may be tabulated at the precinct level and at election central using the PCMCIA cards. The printer generally functioned adequately for use as a voting machine. However, I recommend the Secretary consider imposing two requirements for certification of the AV-TSR6, V. 4.1.11, as follows: (1) The election judge can enable the machine for voting without producing a zero votes printout. The machine will print a fully adequate zero report tape and should be required to do so before being able to be opened for voting. (2) The AV-TSR6 will print both an abbreviated tape and a full report tape at the close of voting. The abbreviated tape does not include some required information, e.g. undervotes. I recommend the Secretary require a modification so as to enable the machine to produce only the tape that reports all required information. In my opinion, with the two recommended modifications the AV-TSR6 meets the requirements of the Texas Election Code and is appropriate for certification by the Secretary for use as a voting machine.

AV-TSR6. Use as precinct tabulation equipment. The device appeared to accurately tabulate votes when the PCMCIA cards from other voting machines were read into the device. However, the required real time log printer was wholly inadequate. The real time log printer printed on the same tape as the printout for the AV-TSR6 use as a voting machine, and the same tape was used for reporting the tabulation of precinct results. As a result, the real time log printer tape was required to be removed with the voting machine tape, and again with the precinct tabulation tape. Further, the real time log printer did not record numerous events. As examples: it recorded the sending of data, but not that the sending of the data had failed; it did not report error messages; and it did not report all other attempts to interface with or use the machine as tabulation equipment. I recommend the AV-TSR6 not be certified as automatic tabulation equipment for the collection and tabulation of precinct results until such time as the real time log printer functions in a manner to record all events and to preserve an audit trail.

GEMS Software. GEMS provides a single data base for the entire election. The Touchscreen voting station stores ballot images on the PCMCIA card and on the hard drive. The ballot images are randomly distributed in storage. Each of the voting stations has a separate ID# that transmits to GEMS, and there are multiple ID#s applicable to each election, e.g. precinct number, copy number machine number, and election number.

Ann McGeehan
Deputy Assistant Secretary of State
Diebold Election Systems AV-TSR6, etc.

3

May 21, 2002

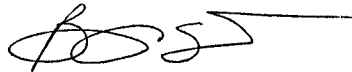
During the examination, the Vendor demonstrated GEMS to function at election central as automatic tabulation equipment and as capable of satisfactorily tabulating votes. However, GEMS again permitted operations and tabulation when the required real-time log printer was not attached, was turned off, etc. This continues to be a problem based on some prior examinations. In addition, as GEMS existed when demonstrated on May 21, 2002, the real time log printer did not fully and adequately log all events, error messages, entries and instructions from the keyboard and other functions. The election central log printer function was not demonstrated to materially comply in any respect with the requirements for an audit trail, or log printers.

I recommend that GEMS not be certified as meeting the requirements of Chapt. 122, Subchapt. A, Texas Election Code, until such time as GEMS is modified to (1) automatically stop the function of election central if the real-time log printer is disconnected or turned off; and (2) require the real time log printer to record all events, failed attempts, error messages, keyboard entries, etc. Based upon my observations and examination, GEMS will not satisfy the requirements of Chapt. 122 until these requirements are satisfied.

AccuVote-ES 2000 Optical Scan Reader Version 1.9W.

The Scan Reader is automatic tabulating equipment and accurately tabulated ballots during the examination. However, the required log printer was not adequate to perform the required tasks to produce an audit trail. The real time log printer printed on the same tape as the printout for reporting the tabulation of precinct results. As a result, the real time log printer tape was required to be removed with the precinct tabulation tape. Further, the printer did not record all events required for an adequate audit log. Based upon my observations and examination, the Scan Reader is accurate in the scanning and recording of votes but will not satisfy the requirements of Chapt. 122 until the requirements for a real time log printer are satisfied.

Very truly yours,



Barney L. Knight

The State of Texas

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Gwyn Shea
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TO: Ann McGeehan
Elections Division Director

FROM: Glenn Glover
Voting System Examiner

DATE: June 3, 2002

A voting systems certification examination was held at the Office of the Secretary of State Elections Division on Tuesday morning, May 21 2002.

Diebold Election Systems Inc. submitted their election system products of the AccuVote-TS R-6 Touch screen DRE, AccuVOTE ES-2000 OPTICAL SCAN READER 1.94W, and the Global Election Management System (GEMS) version 1.17.17.

The AccuVote-TS unit operates on the Windows CE operating system and is controlled exclusively by touching the LCD and entering a smart card into the card reader. The AccuVote-TS unit operates in one of four states: Pre-Download Mode, Pre-Election Testing Mode, Election Mode, and Post-Election Mode. The AccuVote-TS retains the ballot image and corresponding result of every ballot counted in Pre-Election Testing mode as well as in Election Mode in both external media and internal storage.

The AccuVote-TS has an accumulator function that allows election results from all AccuVote-TS units to be accumulated to a single unit at the polling location. Once all results have been accumulated, they are tabulated, printed, and results are transferred to the host computer running the GEMS software.

The examination revealed that as the AccuVote-TS performs its accumulation function, it does no real-time print of audit information to its continuous feed printer which is a requirement of all vote tabulation device used in Texas elections. If the AccuVote-TS only collected the individual election information from each AccuVote-TS units, then transferred the raw election data to GEMS, real-time printing would not be a requirement because it would not tabulate results. The AccuVote-TS unit can print audit information but only through a menu option, not in real-time.

GEMS is Diebold's election management software solution that operates in the Microsoft Windows NT environment. The software is involved in all phases of the election process. GEMS is responsible for the definition of jurisdictional information, the creation of ballot content and ballot artwork. GEMS also manages voting device media programming, election results consolidation and tallying, as well as provides election results reporting tools.

The GEMS demonstration revealed that the tabulation features also did not meet the requirement of printing real-time audit events to a continuous feed printer. Instead GEMS spools the information, then prints audit events at a later point in processing. The AccuVOTE ES-2000 Optical Scan Reader was not presented because of a lack of time during the examination.

Based on these two observations, I recommend the AccuVote-TS and GEMS be not certified at this time for use in Texas elections until the real-time audit requirements are fulfilled for the tabulation function of the system. The presentation of the AccuVOTE ES-2000 Optical Scan Reader should be rescheduled for examination and consideration of certification.

All comments and recommendations are made in my capacity as an examiner of voting systems and are based on documentation and demonstrations provided by Diebold Election Systems Inc.

Voting System Examination Diebold Election Systems

Prepared for the
Secretary of State of Texas

James Sneeringer, Ph.D.
Designee of the Attorney General

This report comprises the findings of the Attorney General's designee from an examination of the equipment listed above, pursuant to Title 9, Chapter 122 of the Texas Election Code, section 122.036(b).

Examination Date	May 21, 2002
Report Date	May 25, 2002

Purpose	Component	Version
Voting	AccuVote-TS R-6	4.1.11
Scanning	AccuVote-ES 2000	1.94w
Election Setup	Global Election Management System	1.17.17
Tabulation	Global Election Management System	1.17.17

Voting

Election Setup	PCMCIA card. Nothing is pre-programmed in the terminals; all the election information is in the PCMCIA card.
Zero-total report	On the thermal printer.
Authorization to vote / Ballot selection	A manager card, when used with the manager password, allows any R6 to generate PCMCIA cards to authorize voting, and to perform other administrative functions. The PCMCIA cards are automatically erased after voting, so they cannot be reused. The manager card and password authorize someone to perform any operation that the R6 is capable of, including clearing elections (although the last copy is never erased). There is no hierarchy of management functions.
View / Vote	LCD display / touch screen
Vote Storage	Internal flash memory and on the PCMCIA card.
Precinct Consolidation	Any R6 can accumulate results from other R6 devices in the same precinct, and forward all the results to election central in a single modem call. The R6 has a real-time audit printer, but it does not record all significant tabulation events.

Transfer Results	PCMCIA cards or a modem.
Print precinct results	On the thermal printer
Straight party / crossover	Yes. Canceling a straight-party vote cancels all previously selected crossover votes without warning.
ADA	Yes, but ADA capability is verified separately by the Secretary of State's office, so it was not demonstrated to the examiners.
Notes	<ul style="list-style-type: none"> • Each R6 is an independent stand-alone system, which can communicate with other stations or election central only when the polls are closed. • In the event of an attempt to repeat the upload of a precinct's results, the event is logged on the printer at the R6. (However, at election central, the only thing that is logged is the fact that a session was opened and closed without uploading any results.)

Voting: Questions, Risks and Problems

1. If a voter cancels a straight-party vote after having voted individual races, his crossover votes in the individual races are cancelled without a warning. This could cause him to cast votes different from what he intended. The Diebold representatives pointed out that this is plainly visible on the screen, and that he must step through every page, and can see all the votes that were changed. This is true, but since the voter may assume his previous results are unchanged, he has no reason to inspect each page closely for possible changes.
2. The R6 cannot enforce requirements to print pre- or post-election reports, such as a zero-total report. Poll workers must be trained to request the reports that are needed. These things should be determined during election setup, and produced automatically, so that training requirements and mistakes are minimized.
3. The R6 has only one level of security. The election judge can do anything that anyone can do. The more sensitive operations (such as clearing an election or deleting an election archive) should only be permitted with an additional security code, which is not given to the election judge unless an unusual situation arises.
4. When precinct results are tabulated, attempts to tabulate results from the same station twice are not recorded on the real-time audit log printer unless the operator says to overwrite the previous results. Also, the operator messages and responses are not recorded. For example, if an attempt is made to load a voting stations results twice, the operator will be told that it is a duplicate, and asked whether to overwrite or cancel. If he replies "cancel," nothing at all will be recorded on the real-time audit-log printer. It should record the failed attempt to load precinct data, the operator message, and the operator response. *The R6 should not be certified until this is fixed.*
5. When a modem upload fails, the printed audit log on the voting station still reports success. The screen correctly reports failure, even though the log is wrong. *The R6 should not be certified until this is fixed.*
6. If a voting station should fail, you can substitute a different one in the middle of the election. However, the representatives could not say whether the protective counter values are recorded in the log when the swap is made.

June 13, 2002

Page 2

Ms. Ann McGeehan

The demonstration did not include the correct test ballots for Texas, nor was the correct equipment demonstrated. It is suggested that at the next demonstration all equipment that may be needed to completely demonstrate the system be brought to the exam site.

Recommendations

The Department of Information Resources (DIR) recommends that the system, as demonstrated, not be certified until deficiencies with the log printer and zero tape have been remedied.

Respectfully,

A handwritten signature in cursive script, appearing to read "Nick Osborn", followed by a horizontal line extending to the right.

Nick Osborn
Systems Analyst

CP:MM:NO:sk

Election Setup / Tabulation

Results Storage	Encrypted, proprietary database on the hard drive.
Tamper Resistance	The OS is locked down during tabulation and the data is encrypted.
OS access	None during tabulation.
Real-Time Audit Log	There is a log printer, but the system continues to function when the printer is offline. Messages are queued and printed when the printer comes back online.
Data Integrity	The Diebold representatives did not know what measures are taken to be sure that the data remains consistent after a failure. See below.

Election Setup / Tabulation: Questions, Risks and Problems

7. GEMS did not log an attempt to repeat the upload of the results from a precinct, although it did log the fact that a connection was made without transmitting anything.
8. GEMS continued to operate after the real-time audit log printer was disabled. The system should be disabled whenever that printer is not operating, whatever the reason. *The system does not comply with the Secretary of State's rules, and should not be certified until this is fixed.*
9. The Diebold representatives did not know what measures are taken to be sure that the data remains consistent after a failure. For example, if precinct results are being loaded when the power fails on the tally system, either all totals should be updated and the precinct marked "tabulated," or no totals should be updated and the precinct not marked "tabulated." The database should never be left in an inconsistent state. *The system should not be certified until this question has been satisfactorily answered.*



DEPARTMENT OF INFORMATION RESOURCES

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June 13, 2002

CAROLYN PURCELL
Chief Information Officer
State of Texas

— ♦ —
DIR. BOARD OF
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JAMES NELSON
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Ms. Ann McGeehan
Deputy Assistant
Office of the Secretary of State
1019 Brazos Street
Austin, TX 78701

RE: Examination of Accu-Vote TS R6 Voting Hardware from Global Election Systems (GES)

Dear Ms. McGeehan:

I attended a scheduled examination May 21, 2002, at 9:30 am, for the purpose of examining the Global Election Management Systems (GEMS) hardware. The report below summarizes my findings.

Voting Systems Versions

Hardware/Software Version	Date Previously Certified
AccuVote-TS R-6 Touchscreen (DRE) 4.1.11	May 2001
AccuVote-ES-2000 Optical Scan Reader 1.94W	January 2000
Global Election Management System (GEMS) 1.17.17	May 2001

Results of the examination

The Accu-Vote TS R6 has not changed significantly since the previous certification exam. However, some certification concerns emerged that were not addressed in the previous exam.

It appears that the zero tape required at initialization of the polls on Election Day is not required. This should not be optional. The system as demonstrated cannot be certified in this condition.

The PCMCIA card captures each voting unit's internal serial number. This is one of the security features that may help prevent vote fraud. It is suggested that a post-election audit module include a tally and report on all voting units to determine that the serial number of all units sent out matches the serial number of all units that were counted by the tally software.

The audit log did not print an entry when a data transmission failed. Interrupting the audit log printer itself did not generate a system error or halt processing. This is an unacceptable condition that must be addressed before the equipment can be certified for sale in the state.

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Geoffrey S. Connor
Secretary of State

REPORT OF EXAMINATION OF DIEBOLD ELECTION SYSTEMS, INC.'S ACCU-VOTE TS BALLOT STATION v. 4.1.15

PRELIMINARY STATEMENT

On September 10, 2002, Diebold Election Systems, Inc. (the "Vendor") presented its Accu-Vote TS Ballot Station system for modification and reexamination in compliance with House Bill 1419, 77th Legislature, 2001, which requires reexamination of all voting systems of each county to determine whether the voting system continues to comply with the minimum applicable standards prescribed by law. The system had been previously examined in May 2002. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners thoroughly examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference. After the September 10th examination, the vendor made changes based on the initial examiner reports. The re-examination was conducted on January 3, 2003 at the Secretary of State's office in Austin. Mr. Osborn and Mr. Glover attended this examination and their reports are attached. The version numbers reflect those presented at the January 3rd examination. A copy of a letter from the vendor explaining the modification is also attached to the certification.

BRIEF DESCRIPTION OF THE ACCU-VOTE TS BALLOT STATION

The Accu-Vote TS Ballot Station is a modification to the previously certified Accu-Vote TS Direct Record Electronic voting machine. The modified system features a larger, color screen, and a thermal printer. The version presented for examination was version 4.1.15.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

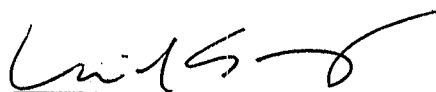
The Accu-Vote TS Ballot Station v. 4.1.15:

1. Preserves the secrecy of the ballot;
2. Is suitable for the purpose for which it is intended;
3. Operates safely, efficiently, and accurately;
4. Is safe from fraudulent or unauthorized manipulation;
5. Permits voting on all offices and measures to be voted on at the election;
6. Prevents counting votes on offices and measures on which the voter is not entitled to vote;
7. Prevents counting votes by the same voter for more than one candidate for the same office or, in elections in which a voter is entitled to vote for more than one candidate for the same office, prevents counting votes for more than the number of candidates for whom the voter is entitled to vote;
8. Prevents counting a vote on the same office or measure more than once;
9. Permits write-in voting;
10. Is capable of permitting straight-party voting; and

CONCLUSION

The examiners determined that the Vendor had resolved the problems they identified in the earlier September 2002 examination of the system. Accordingly, I hereby grant the Vendor's application for re-certification of the Accu-Vote TS Ballot Station voting system.

Signed under my hand and seal of office, this 7th day of October, 2003.



Luis Saenz
Assistant Secretary of State