

**BILL ANALYSIS**

Senate Research Center  
80R1822 JRH-D

S.B. 540  
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As Filed

**AUTHOR'S / SPONSOR'S STATEMENT OF INTENT**

Current law provides set protocols to address the security concerns of most voting machine systems, such as optical scan systems, but there is no formal protocol for direct recording electronic (DRE) voting systems.

As proposed, S.B. 540 provides specific protocol for the testing of DRE system software and for the conduction of accuracy tests on the machines, and outlines security measures for the transport of and external access to DRE systems.

**RULEMAKING AUTHORITY**

This bill does not expressly grant any additional rulemaking authority to a state officer, institution, or agency.

**SECTION BY SECTION ANALYSIS**

SECTION 1. Amends Section 61.012(a), Election Code, to delete an obsolete date requirement by which each polling place must follow provisions set forth in this subsection. Requires a voting station to provide a provisional vote under Section 63.011 as an additional means for a disabled voter to cast a secret ballot.

SECTION 2. Amends Chapter 129, Election Code, as follows:

CHAPTER 129. DIRECT RECORDING ELECTRONIC VOTING MACHINES

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 129.001. New heading: APPLICABILITY. Applies this chapter to voting systems that use direct recording electronic voting machines (voting machines). Applies the applicable procedures of Chapter 127 (Processing Electronic Voting System Results) to a voting system under this chapter to the extent possible.

Sec. 129.002. GENERAL PROCEDURES. (a) Creates this subsection from existing text of Section 129.001(b). Deletes a requirement that the general custodian of election records (custodian) include specific testing of each voting machine's logic and accuracy functions.

(b) Redesignated from existing Section 125.001(c).

(c) Redesignated from existing Section 125.001(e). Deletes existing Section 125.001(d), providing that the custodian conduct a recount to confirm vote total accuracy in an election in which voting machines are first used. Makes a conforming change.

Sec. 129.003. PROVISIONAL VOTING. Sets forth the conditions under which provisional votes may be cast on a voting machine.

Sec. 129.004. DEFINITION. Defines "electronic information storage medium."

[Reserves Sections 129.005-129.020 for expansion.]

## SUBCHAPTER B. PRE-ELECTION ACCEPTANCE AND TESTING OF VOTING SYSTEM

Sec. 129.021. ACCEPTANCE TESTING. Sets forth the required actions of a custodian after the custodian has received a voting machine from a vendor.

Sec. 129.022. HARDWARE DIAGNOSTIC TEST. Requires the custodian to perform a successful hardware diagnostic test before using a voting system in an election. Sets forth the requirements of the test.

Sec. 129.023. LOGIC AND ACCURACY TEST. (a) Requires the custodian to create a testing board with at least two persons and to make every reasonable effort to ensure that the board consists of at least one person from each political party that holds a primary election.

(b) Requires the custodian to perform a logic and accuracy test on the voting system no later than 48 hours before voting begins on the system. Requires public notice of the test to be published at least 48 hours before the test begins and to be open to the public.

(c) Sets forth the requirements of the procedures for testing that the custodian must adopt.

(d) Requires the testing board and custodian to sign a written statement attesting to the qualification of each successfully tested voting machine and any discovered problems with the machines, and to provide any other necessary documentation.

(e) Requires the testing board, on testing completion, to witness and document all steps taken to reset, seal, and secure any equipment or test materials, as appropriate.

Sec. 129.024. SECURITY OF TEST MATERIALS. (a) Requires the custodian to place the test materials in a container provided for that purpose and seal it. Requires the custodian and at least two members of the testing board to sign the seal.

(b) Requires the testing materials to remain sealed indefinitely for preserving the precinct election records.

(c) Prohibits the unsealing of the container unless the contents are necessary to conduct a test under this subchapter, a criminal investigation, election contest, or other official proceeding under this code. Requires the authority in charge of a proceeding in which the container was unsealed to reseal the contents when not in use.

[Reserves Sections 129.025-129.050 for expansion.]

## SUBCHAPTER C. VOTING SYSTEM SECURITY

Sec. 129.051. PRE-ELECTION SECURITY PROCEDURE. (a) Requires the custodian to create and maintain an inventory of all electronic information storage media (storage media).

(b) Requires the custodian to develop a procedure for tracking the custody of each storage medium from its storage location through election coding and the election process, and to its final post-election disposition and return to storage. Requires the chain of custody to have two or more individuals perform a check and verification during every transfer of custody.

(c) Requires the custodian to establish a secure location for actions related to the storage and usage of storage media.

(d) Requires a storage medium to be kept in the presence of an election official or in a secured location once coded for an election.

(e) Requires the custodian to create a procedure for tracking the custody of the voting system equipment once election parameters are loaded.

(f) Requires the custodian to create a recovery plan to be followed in case of a breach in security procedures. Requires the plan to include an immediate notification of the secretary of state.

Sec. 129.052. TRANSPORT OF VOTING SYSTEM EQUIPMENT. (a) Requires the custodian to adopt procedures for securely storing and transporting voting system equipment. Requires the procedures to include provisions for locations outside the custodian's direct control, including overnight storage at a polling location. Requires procedures relating to the chain of custody to require two or more individuals to perform a check and verification check during every transfer of custody.

(b) Requires the custodian to create a recovery plan to be followed in case of a breach in security procedures. Requires the plan to include an immediate notification of the secretary of state.

(c) Requires the custodian to develop a training plan for certain election personnel that addresses the procedures authorized under this section.

Sec. 129.053. ACCESS TO VOTING SYSTEM EQUIPMENT. Requires the custodian to secure access control keys or passwords to voting system equipment. Requires the use of such keys or passwords to be witnessed by one or more individuals authorized to use such information. Requires the use of such keys or passwords to be documented and witnessed in a log dedicated to that purpose.

Sec. 129.054. NETWORK CONNECTIONS AND WIRELESS TECHNOLOGY. Prohibits connecting a voting system to any external communications network, including the Internet. Prohibits a voting system from having wireless communication capability.

Sec. 129.055. SOFTWARE. Provides that the sole purpose of voting system equipment is the conduct of an election and authorizes only necessary software certified by the secretary of state to be loaded on the equipment.

Sec. 129.056. PLAN FOR MACHINE FAILURE. Requires the custodian to create a contingency plan to be followed in case of a voting machine failure. Requires the plan to include an immediate notification of the secretary of state.

Sec. 129.057. USE OF MACHINE IN EARLY VOTING. Prohibits a voting machine deployed for early voting from being deployed again on election day.

SECTION 3. (a) Effective date: September 1, 2007, except as provided by Subsection (b) of this section.

(b) Effective date of Section 1 of this Act: January 1, 2008.