



**KEN PAXTON**  
ATTORNEY GENERAL OF TEXAS

October 24, 2017

The Honorable Lyle Larson  
Chair, Committee on Natural Resources  
Texas House of Representatives  
Post Office Box 2910  
Austin, Texas 78768-2910

Opinion No. KP-0170

Re: Whether the term “direct recording electronic voting machine” as used in subsection 121.003(12) of the Election Code includes voting machines that produce paper ballots (RQ-0169-KP)

Dear Representative Larson:

You request an opinion concerning the meaning of the term “direct recording electronic voting machine” as used in subsection 121.003(12) of the Election Code.<sup>1</sup> Subsection 121.003(12) defines “direct recording electronic voting machine” as “a voting machine that is designed to allow a direct vote on the machine by the manual touch of a screen, monitor, or other device and that records the individual votes and vote totals electronically.” TEX. ELEC. CODE § 121.003(12). Specifically, you ask whether the phrase “direct recording electronic voting machine” includes “electronic voting machines that also produce marked paper ballots” as an added security measure. Request Letter at 1.

You explain that certain voting systems allow voters to cast their votes on an electronic screen and also “produce a marked paper ballot that a device will read and record on an electronic storage component.” *Id.* You describe the operation of these machines as “first record[ing] the voter’s choices on a marked paper ballot, which the voter feeds into a device that scans and reads the ballot.” *Id.* at 2. You explain that “[s]ometimes these paper ballots are fed into a physically separate device; other times the same device that marks the paper ballot also collects and reads that ballot.” *Id.* at 1. After the machine records the voter’s choices on the paper ballot, it records the choices “on an electronic data-storage component, whose data will be taken and tabulated at the end of voting.” *Id.* at 2. The paper ballots serve as a paper recording of the electronic votes cast, providing “an additional safeguard against tampering or voting fraud.” *Id.* The paper ballots are available “if needed for a future audit or recount.” *Id.* at 1. You explain, however, that “they do not act as substitutes for the electronic recording of votes.” *Id.* at 2. You question whether the

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<sup>1</sup>See Letter from Honorable Lyle Larson, Chair, House Comm. on Nat. Res., to Honorable Ken Paxton, Tex. Att’y Gen. at 1 (July 6, 2017), <https://www.texasattorneygeneral.gov/opinion/requests-for-opinion-rqs> (“Request Letter”).

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machines as described qualify as direct recording electronic voting machines, as defined in subsection 121.003(12) of the Election Code. *Id.* at 1.

The statutory definition of “direct recording electronic voting machine” contains two requirements. TEX. ELEC. CODE § 121.003(12). First, the machine must be “designed to allow a direct vote on the machine by the manual touch of a screen, monitor, or other device.” *Id.* Second, the machine must “record[] the individual votes and vote totals electronically.” *Id.* The fact that the electronic voting machines you describe provide the added benefit of a marked paper ballot to better protect against voter fraud does not disqualify them as direct recording electronic voting machines. Nothing in the language of subsection 121.003(12) or elsewhere in the Election Code suggests that direct recording electronic voting machines may not also record a voter’s choices on a paper ballot. *See id.* Thus, voting machines that produce marked paper ballots may qualify as direct recording electronic voting machines as long as they meet the additional statutory requirements.<sup>2</sup>

You indicate some of the machines you ask about require a voter to submit the marked paper ballots into a physically separate scanner and tabulator for recording. Request Letter at 2. You raise the concern that an argument could be made that these machines do not satisfy the requirements of subsection 121.003(12) because the statute implies that a direct recording electronic voting machine must constitute a single piece of equipment. *Id.* at 2–3. Thus, you ask whether “direct recording electronic voting machine” could consist of two physically separate devices that together encompass the voting machine. *Id.* at 3.

The definition of direct recording electronic voting machine does not, on its face, specify whether the machine must constitute a single piece of equipment or whether it could encompass a machine with multiple pieces of equipment that together satisfy the statutory requirements. However, the Legislature authorized direct recording electronic voting machines as a type of voting system established under Title 8 of the Election Code. *See* TEX. ELEC. CODE §§ 129.001–.057 (chapter 129, “Direct Recording Electronic Voting Machines,” found in Title 8, “Voting Systems”). The Legislature defined “voting system” as “a method of casting and processing votes that is designed to function wholly or partly by use of mechanical, electromechanical, or electronic apparatus and includes the procedures for casting and processing votes and the programs, operating manuals, tabulating cards, printouts, and other software necessary for the system’s operation.” *Id.*

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<sup>2</sup>In addition to the requirements in subsection 121.003(12), a direct recording electronic voting machine “must provide the voter with a screen in summary format of the voter’s choices for the voter to review before the vote is actually cast.” TEX. ELEC. CODE § 129.002(a). Section 122.033 includes additional requirements for the approval of all voting systems and equipment. *Id.* § 122.033. Before any voting equipment may be used in an election, the Secretary of State must approve the equipment. *Id.* § 122.031(a); *see also id.* § 122.001 (establishing the state voting system standards, including a requirement that a voting system comply with the voting system standards adopted by the federal Election Assistance Commission). While this office may opine on the legal requirements for direct recording electronic voting machines, whether a specific machine meets all voting system standards, including federal certification, such that it may be approved for use in an election, is a question for the Secretary of State in the first instance after a full inspection of the machine. *See generally id.* §§ 122.031–.039 (establishing procedures for the Secretary of State to approve voting systems and equipment); *see also id.* § 122.032(b) (authorizing the Secretary of State to prescribe specific requirements and standards for such approval).

§ 121.003(1). The Legislature's definition of "voting system" acknowledges that the system may encompass more than one single piece of equipment.

Furthermore, the Legislature defined "voting machine" as "an apparatus on which voters cast their votes, that records each vote, and that furnishes a total of the number of votes cast for the candidates and for and against the measures." *Id.* § 121.003(3). The Legislature did not define "apparatus," so we construe that term according to its common meaning. TEX. GOV'T CODE § 311.011(a) ("Words and phrases shall be . . . construed according to . . . common usage."). Courts will often look to dictionary definitions to determine a term's common, ordinary meaning. *Jaster v. Comet II Constr., Inc.*, 438 S.W.3d 556, 563 (Tex. 2014). Dictionary definitions of "apparatus" include "a set of materials or equipment designed for a particular use." MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 59 (11th ed. 2004) (emphasis added); *see also* NEW OXFORD AMERICAN DICTIONARY 75 (3d ed. 2010) (defining "apparatus" as "the technical equipment or machinery needed for a particular activity or purpose"). Under these definitions, an apparatus could include more than one piece of equipment. Thus, a court would likely conclude that the Legislature did not intend to limit direct recording electronic voting machines to machines that operate using a single piece of equipment.

You also ask whether direct recording electronic voting machines that produce marked paper ballots may be used in the countywide polling place program. Request Letter at 1. The Election Code requires the Secretary of State to implement a program authorizing some counties "to eliminate county election precinct polling places and establish countywide polling places" for most elections if the county meets certain requirements. TEX. ELEC. CODE § 43.007(a). To participate in the countywide polling place program, a county must, among other requirements, use direct recording electronic voting machines. *Id.* § 43.007(d)(4). You explain that the machines that you ask about accommodate multiple ballot styles on a single device, which allows "a voter to vote in the same elections in which the voter would be entitled to vote in the county election precinct in which the voter resides," as required by law. *Id.* § 43.007(e); *see also* Request Letter at 4. As discussed above, the fact that a voting machine produces a marked paper ballot does not disqualify the machine as a direct recording electronic voting machine. Furthermore, a direct recording electronic voting machine could include multiple pieces of equipment that operate together. Thus, as long as machines meet the other requirements of direct recording electronic voting machines, counties may use them in a countywide polling place program.

### S U M M A R Y

Subsection 121.003(12) of the Election Code defines "direct recording electronic voting machine" as "a voting machine that is designed to allow a direct vote on the machine by the manual touch of a screen, monitor, or other device and that records the individual votes and vote totals electronically." Voting machines that produce marked paper ballots will qualify as direct recording electronic voting machines as long as they meet all statutory requirements.

The Legislature authorized direct recording electronic voting machines as a type of voting system established under Title 8 of the Election Code. It defined "voting system" as "a method of casting and processing votes that is designed to function wholly or partly by use of mechanical, electromechanical, or electronic apparatus," thereby acknowledging that voting systems may encompass more than a single piece of equipment. Furthermore, the Legislature defined "voting machine" in Election Code subsection 121.003(3) as "an apparatus on which voters cast their votes, that records each vote, and that furnishes a total of the number of votes cast for the candidates and for and against the measures." A common meaning of the term apparatus is "a set of materials or equipment designed for a particular use." Thus, a court would likely conclude that the Legislature did not intend to limit direct recording electronic voting machines to only those machines that operate using a single piece of equipment.

To participate in the countywide polling place program, a county must, among other requirements, use direct recording electronic voting machines. That a voting machine produces a marked paper ballot or includes multiple pieces of equipment that operate together to effectuate direct voting does not disqualify the machine from use in a countywide polling place program as long as the voting machines meet the other requirements of a direct recording electronic voting machine.

Very truly yours,

A handwritten signature in black ink that reads "Ken Paxton". The signature is fluid and cursive, with the first letters of "Ken" and "Paxton" being capitalized and prominent.

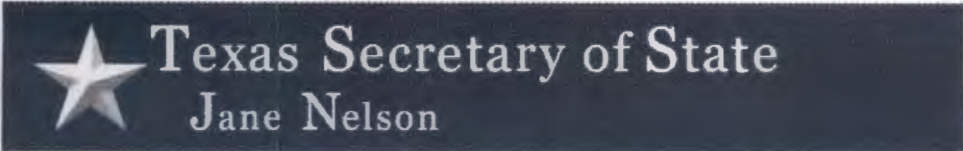
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# Election Advisory No. 2017-21

To: Election Officials

From: Keith Ingram, Director of Elections 

Date: November 16, 2017

RE: Expansion of definition of DRE (OAG Opinion - KP-0170)

On October 24, 2017, the Office of the Attorney General issued Opinion No. [KP-0170 \(PDF\)](#) ("opinion") which opined on the definition of "direct recording electronic voting machine" ("DRE") as it is defined in Subsection 121.003(12) of the Texas Election Code, and whether this definition could include "electronic voting machines that also produce marked paper ballots." This opinion concluded that voting machines that produce marked paper ballots may qualify as DREs as long as they meet the statutory requirements of a DRE. Additionally, the opinion provided that under Texas law, the definition of a DRE does not specify that a DRE must only constitute a single piece of equipment.

In light of this recent OAG opinion, this Election Advisory address several items relating to the affected voting systems.

## EAC Certification Requirements

Under Section 122.001 (a)(3) of the Texas Election Code, a voting system may not be used in an election unless the system "complies with the voting system standards adopted by the Election Assistance Commission." **All components certified for use in Texas elections must be certified by the Election Assistance Commission ("EAC").** However, the definition of DRE under the Texas Election Code, as interpreted by KP-0170, **may include more than a single piece of equipment** and may include a marked paper ballot. Therefore, under Texas law, a combination of EAC-certified components, when presented together, may constitute a DRE system. If the component parts of the DRE system have been certified by the EAC, they would meet the requirement under Section 122.001(a)(3) for EAC certification. The Secretary of State has determined that a DRE system is EAC-certified when it consists of (1) a ballot marking device,

and (2) a precinct ballot counter, both pieces of equipment are used together in one polling place, and both pieces of equipment have been certified by the EAC.

Currently, there are two vendors in Texas that have systems that may constitute a DRE voting system based on their component parts.

1. Hart Intercivic Verity Voting 1.0 and 2.0: These systems, as certified on December 15, 2016 (as updated on October 26, 2017), include, among other components, the Verity Touch Writer with Access (EAC-certified ballot marking device) and Verity Scan (EAC-certified precinct scanner).
2. ES&S EVS 5.2.1.0, 5.2.2.0, and 5.4.0.0: These systems, as certified on December 15, 2016 (as updated on October 26, 2017) (EVS 5.2.1.0), and July 28, 2017 (as updated on October 26, 2017) (EVS 5.4.0.0 and EVS 5.2.2.0) include, among other components, the ExpressVote (EAC-certified ballot marking device) and the DS200 (EAC-certified precinct scanner).

## Modifications to Existing Certifications

If a vendor has a system that has been previously certified by the Secretary of State for use in Texas elections and would like the certification modified to include the use of the system as a DRE system under the expanded, Texas-specific definition of a DRE system, when that system was not examined as DRE system during the certification process, the vendor must seek a modification to the certification under Chapter 122, Subchapter C, Texas Election Code. An application must be submitted for review in accordance with Section 122.063 of the Texas Election Code. The Secretary of State will review the application and determine whether the modified design satisfies applicable requirements, in accordance with Section 122.064 of the Texas Election Code.

## Future Certification Procedures

If a vendor seeking certification of a system which has not been previously certified, would like the equipment considered as a DRE system under the expanded, Texas-specific definition of a DRE system, they must indicate this on their application for certification and complete the relevant portions of Form 101 that apply to DRE systems.

## DRE Requirements

Under Section 129.002(a) of the Texas Election Code, DRE systems must "provide the voter with a screen in summary format of the voter's choice for the voter to review before the vote is actually cast." To meet this requirement, all systems certified as a DRE system under the expanded, Texas-specific definition, must allow for voting on the component that contains the full presentation of the voter's ballot and summary screen. The tabulation portion of the voting process may occur on a component that is separate from the component the voter uses to make their selections and mark their ballot.

Section 123.005 of the Texas Election Code provides that only one kind of voting system may be used at a polling place

in an election. In order to comply with this section, all voting (ballot marking) must occur on the DRE device that records the voter's choices even if the tabulation occurs on a separate device. Voters may not separately mark by hand a pre-printed ballot, but instead, must utilize the DRE device when marking their ballot in the polling place. Additionally, DRE systems are precinct-based systems. Even when a central accumulation station is established for the accumulation of vote totals, the counting/tabulation of ballots occurs at the election day precinct or polling place. Therefore, the counting/tabulation component of the DRE system must also be utilized at the polling place. Accordingly, voters cannot utilize the DRE device to mark their ballot, then deposit their marked ballot or cast vote record into a pre-locked, pre-sealed ballot box for transfer to a central counting station for counting/tabulation.

**NOTE:** If equipment malfunctions or there are irregularly marked ballots, there are circumstances where the ballots **MUST** be transferred to the central counting station for counting/tabulation. These are exceptions to the requirement that DRE voting/ballot marking and counting/tabulation must occur at the precinct polling place. Please see [Advisory 2017-17](#) for more details.

## Requirements for systems with paper components

DRE systems that have a paper-based component will be expected to meet requirements associated with paper-based systems to the extent they can be feasibly and consistently applied to a DRE system. Various sections of the Texas Election Code provide that if (and only if) a paper-based Texas Election Code requirement can feasibly be applied to a DRE system, and is not inconsistent with provision(s) applicable to voting systems and/or DRE systems, it should be applied to a DRE system. See, e.g., TEX. ELEC. CODE § 121.001; TEX. ELEC. CODE § 129.001(b). The following paper-based system requirements can feasibly and consistently be applied to a DRE system under the expanded, Texas-specific definition of a DRE system, which have a paper-based component.

1. **Partial Manual Count:** Section 127.201(g) of the Texas Election Code exempts DREs from having to complete the partial manual count. DRE systems under the expanded, Texas-specific definition of a DRE system, which have a paper-based component, are **required** to complete the partial manual count unless it has been waived by the Secretary of State pursuant to Section 127.201(f) of the Texas Election Code.
2. **Recounts:** Section 214.042 of the Texas Election Code provides that a recount must be conducted electronically or manually. For a DRE system under the expanded, Texas-specific definition of a DRE system, this means that the paper component that contains the voter's selections (full ballot or cast vote record) is the ballot of record for the purposes of a recount. If an electronic recount is requested, the paper ballot or cast vote record **must** be rescanned. An electronic recount cannot simply consist of rereading the electronic media containing device totals. If a manual recount is requested, the paper ballot or cast vote record will be hand tallied.
3. **Preservation of Voted Ballots:** The paper ballots or cast vote records are required to be preserved for a period of at least 60 days after the date of the election in a locked ballot box in accordance with Section 66.058(b) of the Texas Election Code. On the 61st day, the general custodian of election records may transfer them to another secure container for the remainder of the preservation period in accordance with Section 66.058(b) of the Texas

Election Code. Additionally, the electronic media that contains the vote totals must also be preserved for the duration of the preservation period.

## Countywide Polling Place Program

Section 43.007(d)(4) of the Texas Election Code provides that the Secretary of State shall only select counties to participate in the countywide polling place program that use DRE systems. Section 43.007(d)(5) of the Texas Election Code further provides that the Secretary of State can only select counties to participate in the program that "have the appropriate technological capabilities." As a result of KP-0170, DRE systems under the expanded, Texas-specific definition of a DRE system, which have a paper-based component, are now available for use in the countywide polling place program.

**For new applicants to the countywide polling place program:** The Secretary of State will review new applications to determine whether a county is using traditional DREs or a DRE system under the expanded, Texas-specific definition of a DRE system, and whether the setup described in the application demonstrates that the county has the "appropriate technological capabilities" to successfully participate in the program.

**For counties that have already achieved "successful" status in the countywide polling place:** If a county wishes to purchase new equipment that falls under the expanded, Texas-specific definition of a DRE system (and use that system as a DRE system), the purchase contract will be reviewed by the Secretary of State in the ordinary course in accordance with Section 123.035 of the Texas Election Code. If the purchase contract for the system which meets the expanded, Texas-specific definition of a DRE system is approved (which presumes the system has been certified as a DRE system through the modification procedure referenced in Subchapter C of Chapter 122 of the Texas Election Code), then the county's successful designation will not be affected and no further action is needed to use the DRE system in the countywide polling place program.

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UNITED STATES

ELECTION ASSISTANCE

COMMISSION



# Certified Voting Systems

## About the Testing & Certification Program

[HAVA](#) mandates that EAC accredit voting system test laboratories and certify voting equipment, marking the first time the federal government has offered these services to the states. Participation by states in EAC's certification program is voluntary. The EAC's full accreditation and certification program became effective in January 2007. For more information, view the [Voting System Testing and Certification Program Manual](#).

Voting systems will be tested against the [2005 voluntary voting system guidelines \(VVSG\)](#), which are a set of specifications and requirements to determine if the systems provide all of the basic functionality, accessibility and security capabilities required.

View system information for each manufacturer below.

Voting System Name

Manufacturer

Hart InterCivic, Inc.

Testing Standard

- Any -

Certification Date From

01/01/2000

Certification Date To

08/22/2023

Apply

Reset

| Voting System (Name/Version)      | Manufacturer                          | Testing standard | Date Certified |
|-----------------------------------|---------------------------------------|------------------|----------------|
| <a href="#">Verity Voting 1.0</a> | <a href="#">Hart InterCivic, Inc.</a> | VVSG 1.0 (2005)  | 2015-05-12     |
| <a href="#">Verity Voting 2.4</a> | <a href="#">Hart InterCivic, Inc.</a> | VVSG 1.0 (2005)  | 2020-02-21     |
| <a href="#">Verity Voting 2.5</a> | <a href="#">Hart InterCivic, Inc.</a> | VVSG 1.0 (2005)  | 2020-09-09     |
| <a href="#">Verity Voting 2.6</a> | <a href="#">Hart InterCivic, Inc.</a> | VVSG 1.0 (2005)  | 2021-04-20     |
| <a href="#">Verity Voting 2.7</a> | <a href="#">Hart InterCivic, Inc.</a> | VVSG 1.0 (2005)  | 2022-06-07     |



U.S. Election Assistance Commission

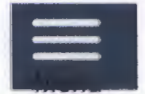
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Contact the EAC



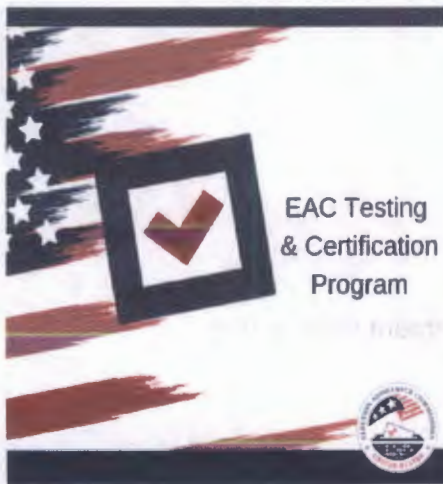
UNITED STATES  
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# Testing and Certification Program

Friday, March 11, 2022

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The U.S. Election Assistance Commission's (EAC) Testing and Certification Program assists state and local election officials by providing voting machine testing and certification. This program is a requirement of the Help America Vote Act (HAVA) of 2002, legislation that created the EAC and mandated that the Commission provide certification, decertification, and recertification of voting systems, as well as the accreditation of voting system testing laboratories. This legislation marked the first time the federal government provided oversight for these activities, a step that allowed states to procure new certified voting systems without the added expense of independent testing and certification. While states are not required to

participate in the program, some have enacted laws or have regulations that require a level of participation.

Prior to the passage of HAVA, voting systems were assessed and qualified by the National Association of State Election Directors (NASED), a nonpartisan association consisting of state level election directors nationwide. These voting systems were tested against the 1990 and 2002 voting system standards developed by the Federal Election Commission (FEC). With HAVA's enactment, the responsibility for developing voting system standards was transferred from the FEC to the EAC and their new iterations are now the EAC Voluntary Voting System Guidelines.

[EAC Testing & Certification Program \(Full PDF Version\)](#)



**U.S. Election Assistance Commission**

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