

# By-election Procedure for the Use of Vote Tabulators and Voter Assist Terminals



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## 1. Purpose

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The purpose of this document is to outline Elections Alberta's procedure in relation to the use of vote tabulators to count all votes collected at the advance polls and voter assist terminals to help disabled electors privately and independently cast a vote at a provincial by-election.

Where this procedure does not provide for any matter, a by-election to which this procedure applies must be conducted in accordance with the principles of the *Election Act, RSA 2000, Chapter E-1, as amended, (the Act)*. These principles are that:

- (1) the integrity of the process is maintained throughout the election;
- (2) the secrecy and confidentiality of the individual vote is paramount;
- (3) the election is fair and non-biased;
- (4) the election is accessible to all electors;
- (5) there be certainty that the results of the election reflect the votes cast; and
- (6) the electors and candidates are treated fairly and consistently.

## 2. Application

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This procedure for the Use of Vote Tabulators and Voter Assist Terminals Equipment applies to any by-election advance poll conducted by the Chief Electoral Officer of Alberta (CEO), under the authority of Section 4.1 of the *Act*, and authorizes the use of election procedures and equipment that are different from what the *Act* requires.

## 3. Legislative reference

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The *Act* states the following:

### ***Test of new equipment and procedures***

***4.1(1) Where the Chief Electoral Officer wishes to test at a by-election the use of election procedures and equipment that are different from what this Act requires, the Chief Electoral Officer must submit a written proposal to the Standing Committee describing in detail the election procedures and equipment proposed to be tested.***

**(2)** If the Standing Committee approves the proposal, with or without changes, the Chief Electoral Officer may test the use of the election procedures and equipment in accordance with the approved proposal.

**(3)** As soon as possible after the proposal is approved, the Chief Electoral Officer must publish the approved proposal on the Chief Electoral Officer’s website.

**(4)** A by-election held in accordance with the details provided in the approved proposal is not invalid by reason of any non-compliance with this Act.

**(5)** To the extent of any conflict between the approved proposal and this Act or a regulation under this Act, the approved proposal prevails and has the force of law with respect to the by-election.

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#### **4. Voting hardware and software**

The following tables identify the integrated system of voting hardware and software supplied by the vendor Dominion Voting.

	<b>Hardware</b>	<b>Description</b>
<b>1</b>	ImageCast Precinct Tabulator (with memory card)	The ImageCast Precinct Tabulator is a digital optical scan machine that reads and records how ballots are marked and produces election results by tabulating votes.
<b>2</b>	ImageCast Evolution Ballot Marking Device (with memory card, Accessible Voting Headset and Hand Held Controller)	The ImageCast Evolution Ballot Marking Device uses ballot marking technology to allow electors with disabilities and other special needs the ability to mark a ballot privately and independently when using an optical scan voting system.
<b>3</b>	Paddles Assistive Device, Sip-and-Puff Assistive Device with 10 mouthpiece straws	For accessible voters who cannot use the hand-held controller

	Software	Description
***	Democracy Suite	Democracy Suite is a suite of integrated software modules (listed below) that enable the creation and maintenance of an election management database.
1	Election Management System Licence	Configures the ImageCast tabulator to accept ballots specific to the election.
2	Accessible Voting Audio Ballot Licence	A software license that enables the creation of an optical scan ballot from audio commands provided by the accessible voter using the ImageCast Evolution tabulator

## 5. Definitions

Certain terms and phrases used throughout this procedure are defined in the *Act*. For those terms and phrases not defined in the *Act*, the following definitions must be used throughout this procedure document.

**“assistive device”** means a tool that enables electors with disabilities to independently command the Voter Assist Terminal (VAT) in order to mark a ballot. For the purpose of this procedure, assistive devices are limited to a Accessible Voting Hand-Held Controller, Paddles Assistive Device, Sip-and-Puff Assistive Device, Audio Tactile Interface and headsets.

**“auxiliary compartment”** means the front compartment of the ballot box in the vote tabulator stand where electors’ ballots are temporarily stored in the event that a vote tabulator fails to operate.

**“ballot face”** means the digital image of the ballot that is inserted in the VAT.

**“designated election officer”** means a person designated by the CEO to perform certain election functions.

**“designated voting space”** means the circle to the right of the candidate’s name on the ballot.

**“mark”** means any mark made in the designated voting space.

**“memory card”** means a secure device that is removable and stores data. The memory card for the vote tabulator stores all tabulated vote totals. The memory card for the VAT stores digital images of the ballot faces.

**“secrecy folder”** means the folder in which a ballot can be placed so as to conceal the names of the candidates and the marks made by the voter on the ballot but exposes the polling sub-division number and the initials of the deputy returning officer.

**“touch screen”** means the liquid crystal display of the VAT that is fitted with a transparent resistive touch panel that allows an elector to view instructions, to view the ballot face and to mark the ballot by touching the pressure sensitive screen.

**“VAT”** (voter assist terminal) means the accessible ballot marking machine used by an elector to mark a ballot by filling the circle to the right of the candidate’s name, by:

- (1) pressing buttons on the Audio tactile Interface; and
- (2) using audio only voting; or
- (3) using the touch screen; or
- (4) using pressure sensitive paddles; or
- (5) using a sip/puff tube.

**“vote tabulator”** means a digital optical scan machine that reads and records how ballots are marked and produces election results by tabulating votes.

**“verification steps”** means the verification screen that summarizes the votes for candidates that the elector has selected on the VAT prior to printing their ballot.

**“zero tape”** means a printed report of the totals in the vote tabulator’s memory card, which is printed at the opening of the polling place and confirms zero totals for all candidates.

## **6. Designated election officers**

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Section 4(3)(c) of the *Act* allows the CEO to appoint other persons as election officers for the purpose of implementing this procedure.

## **7. Pre-election procedure**

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### **Preventative maintenance**

(1) Full maintenance must be conducted by the approved vendor on all vote tabulators and voter assist terminals (VAT) during a mutually agreed upon period of time prior to the first advance poll day.

### **Appearance of ballots (Appendix A)**

- (2) (a) There must appear on the ballot to the right of each candidate's name a designated voting space for the marking of the ballot;
- (b) Circles must appear on the ballot to the right of each candidates' name for marking the ballot; and
- (c) The instructions on the ballot must direct the elector to vote by filling in the circle to the right of the candidate's name of his or her choice.

### **Programming of the vote tabulators and the VATs**

- (3) The vote tabulators must be programmed so that:
- (a) a printed record can be produced of the number of votes cast for each candidate;
- (b) the following ballots are returned to the designated election officer:
- (i) a ballot without marks in any of the designated voting spaces, as determined by a vote tabulator;
- (ii) a ballot with more designated voting spaces marked for an office than the elector is entitled to vote for, as determined by a vote tabulator; and
- (iii) a ballot that is damaged or defective or has been marked in such a way that it cannot be properly processed by a vote tabulator.

- (4) The VAT must be programmed so that:
- (a) the VAT memory card contains the ballot face for the electoral division;
  - (b) each paper ballot inserted into the VAT is recognized and a vote can be marked for the selected candidate; and
  - (c) verification steps are available to allow the elector to review and confirm their selection of candidate prior to officially marking the ballot.

**Logic and accuracy testing**

- (5) The CEO, or his designate, must test:
- (a) the vote tabulators prior to the first day of the advance poll to ensure that they will accurately count the votes cast for all candidates; and
  - (b) the VATs prior to the first day of the advance poll to ensure that they will accurately mark the ballots as directed by the electors for all candidates.
- (6) When testing the vote tabulator and the VAT, adequate safeguards must be taken to ensure that the system or any part of it, which is used for tabulating and marking votes, is isolated from all other applications or programs and that no remote devices are capable of gaining access to the vote tabulator or the VAT.
- (7) The CEO, or his designate, must give notice of the date and time of the testing of the vote tabulators and the VATs to the registered political parties.
- (8) The test for the vote tabulator must be conducted by:
- (a) loading the vote tabulator memory card into the vote tabulator designated for that electoral division;
  - (b) producing a zero tape to confirm that no votes are stored in the vote tabulator memory card;
  - (c) tabulating a pre-audited group of ballots including ballots that fall into each of the categories of ballots described in clause 7(3)(b) of this procedure and ballots upon which are recorded a pre-determined number of votes for each candidate; and



- (d) comparing the output of the tabulation against the pre-audited results.
- (9) If the CEO, or his designate, detects any error in the test, the cause of the error must be ascertained, corrected and the test must be repeated until an errorless test is achieved.
- (10) The CEO, or his designate, must, at the completion of the test, clear the vote totals of the test ballots in the vote tabulator memory card and seal the memory card inside the vote tabulator.
- (11) The CEO, or his designate, must retain and have access to the pre-audited group of ballots referred to in clause 7(8)(c) of this procedure, the result tapes that were produced during the test and other materials used in the programming of the vote tabulators.
- (12) The CEO, or his designate, must not alter or make changes to the materials referred to in subsection 7(11) of this procedure.
- (13) The test for the VAT must be conducted by:
  - (a) loading the VAT memory card into the VAT designated for that electoral division;
  - (b) testing each VAT by inserting the ballot type for the electoral division to ensure the VAT contains the required ballot face and can load each ballot successfully onto the VAT touch screen;
  - (c) inserting blank ballots and marking a pre-audited number of votes for each candidate on each of the VATs using each type of assistive device;
  - (d) ensuring that the VAT will permit an elector to make no marks in any of the designated voting spaces, if the elector wishes to cast an unmarked ballot, and will not permit an elector to mark more designated voting spaces for an office than the elector is entitled to vote for;
  - (e) assembling all ballots marked by the VAT, and preparing a vote tabulator by producing a zero tape to confirm that no votes are stored on the memory card;
  - (f) tabulating the ballots marked by the VAT in the vote tabulator; and
  - (g) comparing the output of the tabulation against the pre-audited results.

- (14) If the CEO or his designate detects any error in the test, the cause of the error must be ascertained and corrected, and the test must be repeated until an errorless test is achieved.
- (15) The CEO or his designate must, at the completion of the test, seal the memory card inside the VAT.
- (16) The CEO or his designate must retain and have access to the pre-audited number of votes referred to in clause 7(13)(c) of this procedure, the ballots marked by the VAT, the results tapes that were produced during the test and other materials used in the programming of the vote tabulators and the VATs.
- (17) The CEO or his designate must not alter or make changes to the materials referred to in subsection 7(16) of this procedure.

#### **Retention of test materials from the vote tabulator and the VAT**

- (18) The CEO, or his designate, must at the conclusion of the test, retain any ballots, programs, test materials and documentation in the same manner as is provided in the *Act* for the keeping of election records.

#### **Storage and security**

- (19) The CEO, or his designate, must ensure that all vote tabulators, voter assist terminals and all additional peripherals are securely stored at the Elections Alberta office warehouse or in the Returning Officer office.

## **8. Procedure at the polling place**

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### **Candidates and scrutineers**

- (1) Candidates and scrutineers are:
  - (a) allowed to attend at every polling place where an electors' list and a vote tabulator are available;
  - (b) prohibited from attending and assisting electors at the VAT; and
  - (c) prohibited from examining, or objecting to a ballot, or the counting of votes on a ballot while it is being fed into the vote tabulator by the designated election officer to protect the secrecy of the vote.

### **Zero tape**

- (2) When a vote tabulator is used in a polling place:
- (a) the designated election officer must on the first day of the advance poll, in the presence of all scrutineers present at the time, cause the vote tabulator to print a zero tape of all totals in its memory card before the opening of the polling place, confirming zero totals. No subsequent zero tapes must be produced on any subsequent day in the advance poll period;
  - (b) if the totals are zero for all candidates, the designated election officer must ensure that the zero tape remains affixed to the vote tabulator until the results are printed by the vote tabulator after the close of the polling places on polling day; and
  - (c) the designated election officer must immediately notify the Returning Officer if the totals are not zero for all candidates and, if necessary, must conduct the vote using the auxiliary compartment until the vote tabulator is made operational or the Returning Officer provides another vote tabulator to the polling place.

### **VAT placement**

- (3) When a VAT is used in the polling place, the designated election officer must place the VAT in an area where the elector's secrecy can be ensured.

### **Issuing ballots**

- (4) (a) The Deputy Returning Officer (DRO) must initial a ballot before the ballot is provided to an elector;
- (b) Every elector who is entitled to receive a ballot must be given a ballot in a secrecy folder by the DRO;
  - (c) The process described in subsection 8(5) of this procedure must be followed if the elector wishes to mark their ballot manually; and
  - (d) The process described in subsection 8(6) of this procedure must be followed if the elector wishes to mark their ballot using the VAT.

**Where the ballot is marked manually**

- (5) (a) Upon receiving the ballot, the elector must:
  - (i) proceed to the polling booth; and
  - (ii) vote by filling in the circle to the right of the candidate's name of their choice.
- (b) After marking the ballot, the elector must:
  - (i) insert the ballot into the secrecy folder with the DRO's initials showing;
  - (ii) leave the polling booth without delay; and
  - (iii) deliver the secrecy folder containing the ballot to the designated election officer.

**Where the ballot is marked using the VAT**

- (6) (a) If a VAT is available in the polling place, the designated election official must:
  - (i) insert the ballot into the VAT;
  - (ii) in consultation with the elector, determine the type of assistance required by the elector to mark the ballot;
  - (iii) provide and attach the appropriate assistive device(s) to the VAT; and
  - (iv) instruct the elector on how to use the VAT using the requested assistive device(s).
- (b) After listening to or viewing the instructions, the elector must mark the ballot using the appropriate assistive device(s) attached to the VAT.
- (c) Once the VAT has marked the elector's ballot, the ballot must be placed into the secrecy folder and delivered to the designated election officer.

### **Marked ballots**

- (7) The designated election officer must, in the presence of the elector and without removing the ballot from the secrecy folder, verify the initials of the DRO, and:
- (a) insert the secrecy folder containing the ballot, with the initials of the DRO face down, into the feed area of the vote tabulator and slide the ballot from the secrecy folder until the ballot is drawn into the vote tabulator; or
  - (b) if a vote tabulator is inoperable, insert the ballot from the secrecy folder, with the initials of the DRO face down, directly into the auxiliary compartment in full view of the elector.

### **Malfunctioning vote tabulator**

- (8) If a vote tabulator is available in the polling place but fails to operate:
- (a) the designated election officer must insert the ballot from the secrecy folder, with the initials of the DRO face down, directly into the auxiliary compartment in full view of the elector; and
  - (b) the designated election officer must insert the ballots into the vote tabulator from the auxiliary compartment once the vote tabulator becomes operational.

### **Unmarked and over-voted ballots**

- (9) (a) If a ballot described in 7(3)(b)(i) of this procedure is returned by the vote tabulator and the elector who delivered the ballot is still present, the designated election officer must:
- (i) advise the elector that the vote tabulator does not detect any votes in any of the designated voting spaces;
  - (ii) return the ballot to the elector; and
  - (iii) instruct the elector to mark the ballot in accordance with the instructions on the ballot.
- (b) If a ballot described in 7(3)(b)(i) of this procedure is returned by the vote tabulator and the elector who delivered the ballot is not present, the designated election officer must use the vote tabulator accept button and insert the ballot into the feed area of the vote tabulator until the ballot is drawn into the vote tabulator.

- (10) (a) If a ballot described in 7(3)(b)(ii) of this procedure is returned by the vote tabulator and the elector who delivered the ballot is still present, the designated election officer must:
- (i) advise the elector that the vote tabulator detects more votes for an office than the elector is entitled to vote for;
  - (ii) ask the elector if he or she wishes another ballot and, if so, mark the ballot “spoiled”; and
  - (iii) instruct the elector to return to the DRO to obtain a replacement ballot in accordance with the provisions of Section 102 of the *Act* dealing with spoiled ballots and then place the marked replacement ballot in the secrecy folder and return it to the designated election officer for processing by the vote tabulator.
- (b) If a ballot described in 7(3)(b)(ii) of this procedure is returned by the vote tabulator and the elector who delivered the ballot is not present, the designated election officer must use the vote tabulator accept button and insert the ballot into the feed area of the vote tabulator until the ballot is drawn into the vote tabulator.
- (11) If a ballot described in 7(3)(b)(i) and 7(3)(b)(ii) is returned by the vote tabulator and the elector who delivered the ballot is still present and declines to accept another ballot, the designated election officer must use the vote tabulator accept button to slide the ballot from the secrecy folder into the feed area of the vote tabulator until the ballot is drawn into the vote tabulator.

### **Damaged or defective ballots**

- (12) (a) If a ballot described in 7(3)(b)(iii) of this procedure is returned by the vote tabulator and the elector who delivered the ballot is still present, the designated election officer must re-insert the ballot into the feed area of the vote tabulator. If the vote tabulator again rejects the ballot, the appropriate designated election officer must:
- (i) advise the elector that the ballot cannot be processed by the vote tabulator;
  - (ii) ask the elector if he or she wishes another ballot and, if so, mark the rejected ballot “spoiled” and have the elector return it to the DRO who will place it in the spoiled envelope; and
  - (iii) advise the elector to obtain a replacement ballot in accordance with the provisions of Section 102 of the *Act* dealing with spoiled ballots and then place the replacement marked ballot in the secrecy folder and return it to the designated election officer for

processing by the vote tabulator.

- (b) If a ballot described in 7(3)(b)(iii) of this procedure is returned by the vote tabulator and the elector who delivered the ballot is still present and declines to accept another ballot, the designated election officer must mark the ballot “declined” and have the DRO place it in the declined envelope.
- (c) If a ballot described in 7(3)(b)(iii) of this procedure is returned by the vote tabulator and the elector is not present, the designated election officer must:
  - (i) mark the ballot "spoiled";
  - (ii) have the DRO prepare a replacement ballot in full view of any candidates or scrutineers present by marking a new ballot with the same marks contained in the designated voting space(s) on the spoiled ballot, and mark the poll book accordingly; and
  - (iii) the designated election officer must feed the replacement ballot into the vote tabulator.

## **9. Closing the polling place during advance voting**

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- (1) The designated election officer must, after the close of each day of advance poll:
  - (a) check the auxiliary compartment for ballots to ensure all ballots have been processed;
  - (b) unplug the vote tabulator and the VAT;
  - (c) remove the ballots from the ballot box and place in the transfer container and seal it; have the seal initialed by the DRO, the designated election officer and any scrutineer present who wishes to do so;
  - (d) place the vote tabulator and the VAT in the appropriate carrying cases provided; and
  - (e) personally deliver the vote tabulator, the VAT, ballots and other election supplies to the location and person designated by the Returning Officer.

## **10. Advance voting results**

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- (1) The total of the votes from an advance polling location must not be made available until after 8 p.m. on polling day.
- (2) For this purpose, the Returning Officer must attend at the location designated to complete the polling place final statement and provide the results to any candidates or scrutineers present.
- (3) The Returning Officer must give candidates notice of the location designated by the RO for this purpose.

## **11. Closing the advance poll on polling day**

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- (1) The Returning Officer must, after the close of polls on polling day, immediately:
  - (a) print two copies of the result tape from the vote tabulator indicating the votes cast for each candidate;
  - (b) remove the two copies of the result tape from the vote tabulator and sign the certificate portion of the two copies along with any scrutineers who are present and wish to sign;
  - (c) attach the first copy of the result tape that includes the zero tape printout to the final statement; and
  - (d) post the second copy of the result tape in the Returning Officer office for any scrutineers and candidates to view.
- (2) If the tabulation of the votes cannot be completed because the vote tabulator is not operating or cannot be made to operate within a reasonable time following the close of poll, the Returning Officer, after determining tabulation cannot be completed must:
  - (a) in the presence of all scrutineers present, remove the memory card from the inoperable vote tabulator and insert the vote tabulator memory card into a back-up vote tabulator; and
  - (b) follow the procedure listed in subsection 11(1) of this procedure.



- (3) If the Returning Officer is unable to complete the tabulation of the votes as set out in clauses 11(2)(a) and 11(2)(b) because the vote tabulator memory card has malfunctioned, the Returning Officer must:
- (a) obtain a replacement vote tabulator memory card and insert the memory card into a back-up vote tabulator;
  - (b) follow the procedure set out in subsection 8(2) to ensure that the totals of the replacement memory card are zero for all candidates;
  - (c) insert all the ballots from the ballot transfer container into the back-up vote tabulator; and
  - (d) follow the procedure in subsection 11(1).

## **12. Post-election procedure**


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- (1) The official count of ballots must be conducted in the same manner as the votes were counted at the advance polls.
- (2) A post election test will be conducted by:
- (a) loading new memory cards into the vote tabulators;
  - (b) tabulating a pre-audited group of ballots including ballots that fall into each of the categories of ballots described in clause 7(3)(b) of this procedure and ballots on which are recorded a predetermined number of votes for each candidate; and
  - (c) comparing the output of the tabulation against the results.
- (3) The Returning Officer must retain and have access to the pre-audited group of ballots referred to in clause 12(2)(b) of this procedure and other materials used in the post-election testing of the vote tabulators.
- (4) The Returning Officer must not alter or make changes to the materials referred to in subsection 12(3) of this procedure.

### **Judicial Recount**

- (5) (a) If a recount of an advance poll in which a vote tabulator was used is held, the votes must be counted in the same manner as the votes were counted on polling day;
- (b) a vote tabulator must be tested before the recount in the manner described in subsection 7(8);

- (c) the recount is limited to the ballots tabulated by a vote tabulator during the advance vote period and no person is permitted to examine the ballots or to dispute the validity of a ballot or the counting of votes in a ballot; and
- (d) if the vote totals in a recount differ from the official results then a manual review of the ballots may be considered following the procedures in Section 146 of the *Act*.

		<b>PROVINCIAL DEMONSTRATION BALLOT</b>		<b>PSD</b>	<b>DRO</b>
		<b>09 CALGARY-ELBOW</b>		<input type="checkbox"/>	<input type="checkbox"/>
TO VOTE, FILL IN <input type="radio"/> OR MAKE AN 'X' <input type="checkbox"/> IN THE CIRCLE NEXT TO YOUR CHOICE.					
<b>PETE BEST</b> <input type="radio"/>					
INDEPENDENT					
<b>GEORGE HARRISON</b> <input type="radio"/>					
ALBERTA NEW DEMOCRATS					
<b>JOHN LENNON</b> <input type="radio"/>					
PROGRESSIVE CONSERVATIVE PARTY					
<b>GEORGE MARTIN</b> <input type="radio"/>					
ALBERTA PARTY					
<b>PAUL McCARTNEY</b> <input type="radio"/>					
ALBERTA LIBERAL PARTY					
<b>YOKO ONO</b> <input type="radio"/>					
GREEN PARTY OF ALBERTA					
<b>RINGO STARR</b> <input type="radio"/>					
WILDROSE					