Dominion Voting Briefing for the Special Committee on Electoral Reform

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About Dominion Voting Systems

Dominion Voting Systems is a Canadian company, and is Canada's largest provider of election systems. We have over 1,200 jurisdictions across North American using our voting systems. At the provincial level, we provide solutions to Elections Ontario, Elections New Brunswick, and Elections Alberta. At the municipal level, we provide solutions across the country, serving municipalities in Ontario, Manitoba, Alberta, British Columbia, Newfoundland and Labrador, New Brunswick, and Yukon, including large cities such as Ottawa and Winnipeg. We have provided election systems for the last Liberal Party of Canada leadership election, and the last Conservative Party of Canada leadership election. Dominion also currently services approximately one-third of the jurisdictions of the United States.

How technology can improve the voting process and voter's experience

Dominion Voting has been providing voting technology since 2003. Our company's mission has been to work together with our customers to change elections for the better – making them more efficient, secure and accessible.

- Voting technology makes it possible to offer more options for voters to access the vote, which in turn encourages greater engagement and participation in the democratic process.
- Accessible voting technology makes it possible for all voters, regardless of ability, to vote in a private and independent manner.
- Voting technology can offer greater accuracy and transparency of the vote counting process, which instills trust and confidence in the results.
- Voting technology can create greater cost-savings and efficiencies in the vote counting process, especially for the complex counting processes required by preferential voting and other alternative electoral methods.

About Dominion's Technological Solutions

Paper ballot optical scan tabulation, for in-person voting and for vote-by-mail:

- With our optical scan tabulator solutions, voters mark a paper ballot with a standard marking pen. Ballots are scanned by tabulators, and results tabulated.
- Tabulators can be located in the voting location for in-person voting, or in a central location for high-speed scanning of vote-by-mail ballots.
- Modem technology allows rapid transmission of results files at close of polls from tabulators in voting locations to the central counting location, allowing deployment over large geographic areas (e.g. nationwide).

Internet and Telephone Voting:

- This remote voting solution allows voters to cast their ballot electronically, over the Internet or via Telephone.
- Results are stored and tabulated on secure redundant server platforms.

Accessible voting solutions for voters with disabilities:

- Our systems allow voters with accessibility needs to privately and independently cast a ballot.
- For paper ballot scenarios:
    - Our Ballot Marker Device can be attached to our tabulator. The device uses an audio ballot presentation, along with assistive devices, to allow the voter to select votes. The device then prints those vote marks on their ballot, and the printed marks are indistinguishable from marks made by hand, to protect the privacy of the voter using the accessible device.
- For Internet/Telephone Voting scenarios:
    - Our system has comprehensive built-in accessibility features, to the latest accessibility standards.
    - In addition, voters may use their own accessibility devices on their home computers and telephones when accessing our system.

Touchscreen Voting Terminals, for in-person voting:

- Touchscreen terminals can either store results electronically on the unit, or print a marked paper ballot for subsequent processing by an optical scan tabulator.
- Touchscreen voting is modern technology that is both familiar to voters and offers more options for accessibility, such as different text size options, contrast, and multi-language support.

Vote Anywhere capability:

- Our systems allow electoral authorities to implement Vote Anywhere scenarios, where voters have a choice of where they wish to vote. This makes voting more convenient and accessible.
    - Our on-demand ballot printing system allows election officials to print any ballot style in a voting location as needed, thereby allowing voters from different electoral divisions to visit a single location to vote.
    - Paper ballot tabulators in the voting locations can be programmed to scan and process any number of ballot styles in an election.
    - Internet/Telephone Voting allows voters to vote from remote locations, such as home or work, at any time during the election period.

Our systems have full Ranked Ballot capabilities, to handle preferential voting scenarios:

- We currently deploy paper ballot optical scan tabulation systems using Ranked Ballots in cities in the State of California.
- We deployed our Internet/Telephone Voting Ranked Ballot system in the Liberal Party of Canada 2013 leadership election.
- Voters mark their ranked vote preferences on their ballot, and the system can warn voters of ballot conditions, such as missed rankings or overvoted rankings, to allow the voter an opportunity to address the issue.
- In addition to Ranked Ballot capabilities, our systems can be configured to handle a variety of alternative electoral systems, including Majority systems, Proportional Representative systems, Mixed Electoral systems, etc. The automated counting process can efficiently and correctly handle the complex counting processes required by alternative electoral systems.

Our systems automate the result counting process, with the following benefits:

- The removal of the error-prone human counting method from the process.
- Reduction in the labour required by poll workers on Election Day, since poll workers would not be required to count ballots after close of polls.
- Speed of count: consolidated results are available quickly after close of polls.
- Full audit trail:
    - Election officials and other stakeholders have expressed the necessity for election systems that can be fully audited, to ensure elections are counted correctly and that the integrity of the vote is maintained throughout the voting process.
    - As such, our systems store a full audit trail record of every ballot cast, including the system's interpretation of the votes on each ballot, for review and verification.
    - For our paper ballot optical scan systems, the tabulator stores a digital image of every ballot scanned, including voter's marks. The image is appended with an audit trail, in readable format, showing how the tabulator interpreted the votes on the ballot when it was cast.
        - By viewing this image, election officials and stakeholders can verify the tabulator is correctly interpreting voter marks on the ballot.

Voting System Standards

There are currently no governmental voting system standards in place in Canada. Such standards would outline how a voting system should operate, and government authorities would test and certify systems against the standards. The most stringent standards in the world are the U.S. Federal Election Assistance Commission standards, which test basic functionality, security, accuracy, and accessibility. Dominion's tabulation systems are certified to the latest U.S. Federal standards.

The Committee may wish to consider the implementation of Canadian voting system standards, or consider the use of the U.S. Federal standards, to ensure that election systems deployed in Canada have been properly designed, tested and certified.

Elections Ontario Tabulator Pilot Project

Elections Ontario has used Dominion paper ballot tabulators, including the tabulator's accessible voting Ballot Marker Device, for many years. In 2016, Elections Ontario ran a pilot project, using Dominion tabulators and accessible voting solution to process all ballots cast in a provincial by-election. The Committee may be interested in their post-pilot report, which can be found at the following link (under the Post-Event Reports sub-section):
http://www.elections.on.ca/en/resource-centre/reports-and-publications.html

Summary

Election systems and voting technology are widely used in Canada at the provincial and municipal level. These systems can improve the electoral process in the following ways:

- Providing an error-free, objective, and efficient result counting process, with full audit trail protection. This is especially important for the complex counting processes required by preferential voting and other alternative electoral methods.
- Making voting more accessible for voters with disabilities, by enabling all voters to vote privately and independently.
- Offering convenience and choice to voters, through solutions such as Internet/Telephone Voting, and Vote Anywhere options.
- Reducing the labour requirements and associated cost of poll workers, since they would not be required to perform counting on Election Day.