

# Advisory Committee on Standards for Voting Technologies

## Committee Meeting

### Meeting Minutes

October 25, 2023, 9:00am – 11:20 am

Microsoft Teams

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#### Committee Attendees:

- Dr. Mkabi Walcott, CEO Appointee, Acting Chair
- Dr. Nicole Goodman, CEO Appointee
- Michael Crase, Political Party Appointee – Progressive Conservative Party of Ontario
- Dan Duncan, Political Party Appointee – Progressive Conservative Party of Ontario
- Donald Eady, Political Party Appointee – New Democratic Party of Ontario
- Karla Webber-Gallagher, Political Party Appointee – New Democratic Party of Ontario
- Christine McMillan, Political Party Appointee – Ontario Liberal Party
- Craig Cantin, Political Party Appointee – Green Party of Ontario
- Fiona Mackintosh, Executive Director of the Advisory Committee
- Stephanie Lowe, Project Manager for the Advisory Committee
- Danjeza Dangli, Policy & Strategic Planning Advisor for the Advisory Committee
  
- **Absent:** Jean-Pierre Kingsley, Committee Chair  
Milton Chan, Political Party Appointee – Ontario Liberal Party
  
- **Guest:** Darryl Kingston, Executive Director, Digital Governance Standards Institute

#### Opening Remarks and CEO Appointee Comments

- The Acting Chair, Dr. Mkabi Walcott, outlined the agenda for the meeting.
- The Committee approved the revised minutes from the July 18<sup>th</sup> meeting with no comments, moved by Donald Eady and seconded by Karla Webber-Gallagher.
- The Committee approved the minutes from the September 20<sup>th</sup> meeting with no comments moved by Craig Cantin and seconded by Karla Webber-Gallagher.

#### Technical Briefing by the DGSi on the Vote Tabulator Product Standards and Electronic Poll Book Product Standards (Overview)

- The DGSi provided a technical briefing on 119-1: Vote Tabulators and 119-2: Electronic Poll Books, and an overall project review from 2022 including:
  - The development of the Technical Committee (TC14) with balanced representation comprised of over 90 stakeholders;
  - The seed document for the draft standard as instructed by the ACSVT;
  - TC14 has reviewed and provided input of close to 900 comments through commenting cycles and public review (including a 60-day public review period);
  - Three TC14 meetings were held to address public review comments for each of 119-1 and 119-2;
  - Approval ballot for DGSi 119-1, Vote Tabulators initiated September 6<sup>th</sup>;
  - Approval ballot for DGSi 119-2, E-Poll Books initiated September 25<sup>th</sup>.

#### The DGSi Provided a Briefing on the Balloting Approval Process for both Product Standards

- DGSi Technical Committee 14 canvassed for its participation of the Balloting Approval Committee (DGSi internal approval process for standards) ensuring equal representation [from different types of stakeholders].

- Final draft of the Vote Tabulator Standard open for review, comment, and voting from September 2<sup>nd</sup> – September 20<sup>th</sup>.
- Final draft of the Electronic Poll Book Standard open for review, comment, and voting from October 2<sup>nd</sup> – October 13<sup>th</sup>.
- Voting Requirements (for approval):
  - Simple majority of votes cast in favour;
  - Minimum 2/3 majority of votes cast in favour;
  - Comments submitted, reviewed, and addressed prior to being considered approved;
  - Vote Tabulators Standard (DGSi 119-1) approved (12 voters in total with 9 positive votes, 1 negative and 2 non-returned);
  - After the disposition of comments, the Vote Tabulators Standard and the E-Poll Book Standard are approved by DGSi for translation and publication; and,
  - For E-Poll Book Standards (DGSi 119-2) approved (12 voters in total with 9 positive votes, 1 negative and 2 non-returned).

### **Next Steps for Both Product Standards**

- Final editing and translation of 119-2.
- Publication of the final approved standards will be coordinated with DGSi and the Executive Director of the ACSVT.
- Committee completion (December 2023).

### **Discussion on the DGSi Presentation**

- A committee member asked about the rationale for the negative vote on both standards.
- DGSi explained that the negative vote submitted during the balloting process for the vote tabulator product standard pertained to the access of a Wi-Fi connection for vote tabulators. The rationale was around the insecurity of the wireless technology.
- The rationale for the negative vote for the electronic poll books was the need to extend the applicability of the requirements outside the Province of Ontario.
- DGSi agreed to provide to ACSVT members a summary of comments submitted with negative votes.
- DGSi indicated that the balloting Committee was different for the vote tabulator and electronic poll book voting.

### **Technical Briefing on Electronic Pollbook Product Standard (DGSi 119-2)**

The DGSi provided information on the following:

- Discussion on the hardware producer/software developer vs. commercial-off-the-shelf products for security components of the requirements that DGSi is drafting.
- Comments received referencing the existing standards, such as ISO/IEC 27001 (security standards) and ISO/IEC 27036 in alignment with 119-1.
- Inclusion of requirements on governance and lifecycle security already adopted as part 119-1 for consistency.
- These are all a series of requirements drafted on the vote tabulator standard and the applicability of these requirements for electronic poll books to ensure consistency on both standards.
- DGSi was asked to look at the assessed risk for lost power, power backups, and other issues: and ensure the proper requirements in the draft take these risks into consideration.
- Discussion on two methods for simultaneous data storage in distinct storage components (to prevent the loss of data).
- In requirements, commenters were looking for patching that is required during an event, allowing for the capability to make those changes over the internet vs. on every machine.
- Inclusion of origin requirements around markings/labels and what information has been available for those that are buying commercial-off-the-shelf products.
- The use of Wi-Fi, Bluetooth, or any form of insecure wireless technology.

- The use of multi-factor authentication is at the discretion of the election administrators.
- Review for consistency the terms and definitions used across all three standards.
- Extending the applicability of the requirements outside the Province of Ontario.
- Ensuring that the standard has a jurisdiction disclaimer pertaining to the applicability of the requirements and what might be needed for jurisdictions that want to use this standard in their own jurisdiction.

## **The Executive Director provided additional context on the DGSi Technical Committee**

### **Discussion on Product Standards**

- The discussion around various principles and the balance between these principles, such as security and usability in the direction provided to the committee.
- The Electronic Poll Book Product Standard was more complicated than the Vote Tabulator Product Standard because there is not an e-poll book system, but software that is installed on separate hardware which could be on a phone, laptop, or tablet (purchased commercial hardware).
- Discussion on how to ensure security on commercially purchased hardware and performing security checks to make sure it is secured properly before deploying commercially purchased hardware pieces to returning offices.
- Question from ACSVT member: If the Standards are approved for the Province of Ontario, why would it matter that the requirements don't align with another province's legislation or processes? The Executive Director indicated that the standards have been developed in partnership with stakeholders from across Canada. If other provinces can make the Standards jurisdiction specific, they will implement both standards.
- The draft standards are being used by the Northwest Territories in their upcoming election.
- There is interest from other provinces in implementing the Standards in their jurisdictions.
- DGSi is willing to look at the national adoption of the Standards even if modifications are required following jurisdiction specific assessments.
- Dates to be coordinated between Elections Ontario and DGSi in relation to the publication of the Standard as they are voluntary.

## **Executive Director Provided an Overview of the Final Two ACSVT Meetings and the Process for Approving All ACSVT Documents**

Objectives for the October 25<sup>th</sup> meeting:

- The objective of today's meeting is to review members' feedback on all four ACSVT documents: ACSVT Final Report, Management Standard, Vote Tabulator Product Standard (DGSi 119-1), and the Electronic Poll Book Product Standard (DGSi 119-2).

Objectives for the November 30<sup>th</sup> meeting:

- Meeting to take place in-person at the Sheraton Centre in Toronto. During this final meeting, each member of the Committee will physically sign-off on and approve all four ACSVT documents with the comments and the editorial changes dispositioned. This will be a ceremonial sign-off.

## **Roundtable Discussions on all four ACSVT Documents**

### **Vote Tabulator Product Standard: Member Roundtable**

- Members provided the following comments on the Vote Tabulator Standard:
  - sec. 19-1 "Risk Limiting Audits" capitalization;
  - definition of the EMB;
  - observability of the logic and accuracy testing for the parties;
  - definition for "over vote" to be consistent as the under vote and over vote both will be evaluated for the logic and accuracy testing;
  - suggestion to remove "quantum resistant";

- suggested that “ballot” be defined the same way on both standards; and
- Suggested that observability be added as a requirement for the logic and accuracy testing.
- The Executive Director provided clause Sec. 7.6.5 in the Management Standard as a reference to observability and suggested clarification on Sec. 7.6.5 be more specific around invitations to observe.
- A member suggested adding the term “Bluetooth” back to Sec. 7.4.10 in the Management Standard. The Executive Director explained the removal of the term “Bluetooth” under Sec. 7.4.10. It is a brand name for a form of wireless, and we were specifically refereeing to one vendor product. The actual term is “wireless”.
- The Executive Director further clarified the note under Sec. 7.4.10 as an additional cautionary note for the use of wireless so that electoral management bodies understand the risk profile and agreed that the word “respectively” should be deleted, and the note be clarified.

#### **Vote Tabulator Product Standard Next Steps**

- ACSVT feedback provided will be included in the ACSVT Final Report.
- The Vote Tabulator Product Standard will be included as part of the package all ACSVT members will formally approve during our last meeting on November 30<sup>th</sup>.
- Following the November 30<sup>th</sup> ACSVT approval, the Vote Tabulator Product Standard will be submitted as part of the final ACSVT package to the Chief Electoral Officer in mid-December.

#### **Electronic Poll Book Product Standard: Member Roundtable**

- Similar process with the Electronic Poll Book Standard. The word “jurisdiction” will be changed to “Ontario” throughout the document prior to being included in the Report.

#### **Executive Director Provided an Overview of the Changes Made to the Electronic Poll Book Product Standard During the Final Technical Committee Meeting October 24<sup>th</sup>**

- After the Electronic Poll Book Product Standard passed the balloting process, a final Technical Committee meeting was held on October 24<sup>th</sup>.
- The purpose of that Technical Committee meeting was to disposition two comments submitted by the balloting committee.
- Two new sections were suggested for the Electronic Poll Book Product Standard:
  - Governance/Lifecycle Security Engineering
    - Clauses 7.8.3 and 7.8.4 will be integrated into the Management Standard as part of Section 7.8, as it will be the responsibility of the electoral management body.
  - Security Controls
- These new sections are integrated into the E-Poll Book Standard and Management Standards for members' review.
- Technical Committee members requested adding a clause: “secure by design and secure by default engineering principles”, so the design of a software will be following these principles as per the reference document that sets out those principles.
- Technical Committee members requested that commercially purchased hardware (laptop or tablet) have some tamper evident controls in its chain-of-custody.
  - This process could include affixing asset tags on the hardware, sealing the asset into a case using tamper-evident indicators/seals, and testing that software loaded onto each electronic poll book is working as intended.
  - In addition, requiring an asset control process such as a checklist for the returning officer. The asset checklist may include matching asset numbers to ensure all appropriate equipment was received and ensure that the proper software has been installed.

### **Electronic Poll Book Product Standard Next Steps**

- Following the November 30<sup>th</sup> ACSVT approval, the Electronic Poll Book Product Standard will be submitted as part of the final ACSVT package to the Chief Electoral Officer in mid-December.

### **Management Standard: Member Roundtable**

- The Executive Director provided an explanation for why a phone number would not be added to the plate. Elections Ontario has an internal process for triaging/escalating technology-related issues. Contact information for technology vendors is included in manuals/other guides for poll workers rather than on the equipment itself. This is to ensure that poll workers follow a coordinated process and technicians are deployed efficiently.
- Discussed and finalized the Management Standard.
- All editorial changes requested during the September 20<sup>th</sup> meeting are completed.
- Direct references to “Elections Ontario” have been changed to “Ontario” where appropriate to align with the changes to the product standards where jurisdiction is to be changed to Ontario.
- The word “jurisdiction” is currently used throughout both Product Standards. This is changed to “Ontario” to align with the Management Standard.
- Elections Ontario is working toward uploading the relevant past directives to their website. Once we have the links to those directives, we will include them in our Final Report in the bibliography for easy access.
- The “Conformance Language” chart will remain in the appendix to not impact the flow for the reader.
- The terminology of the “vote tabulator system” and not using “electronic poll book system” will not be incorporated as vote tabulators are one unit while e-poll books are separated into hardware and software.
- Re-including “risk limiting audits” language into the Management Standards.
- Formatting edits and consistency will be performed for bulleted lists.
- Language will remain as it is under clauses 7.4.6 and 7.4.12.
- CCCS provided a clarified definition of the “Engineering Lifecycle”.
- Discussion on the “Risk Limiting Audits” to be included as a requirement of the Management Standard and as a part of the recommendation requirement as well.

### **ACSVT Final Report: Member Roundtable**

- Bulleted lists will be reviewed to align with the proper style-guide and will be updated as part of the final editing process prior to the November 30<sup>th</sup> meeting.
- Recommendation #4 was added back into the ACSVT Final Report.
- An Advisory Committee member requested that recommendation #1 be amended so that the oversight body is for Ontario, not for Canada.
- Recommendation #6 recommending “risk limiting audits” at the CEO’s discretion and a member suggested it be changed to be more direct.
- An Advisory Committee member suggested changes to recommendation #6 to amend the *Election Act* to provide “risk limiting audits”.

### **Closing Remarks**

- Final opportunity for ACSVT members to provide comments on all four documents is November 6<sup>th</sup>.
- Integrate the final feedback in the documents prior to the sign-off of the documents on November 30<sup>th</sup>.
- Official sign-off by ACSVT members on the ACSVT Final Report will take place on November 30<sup>th</sup> with all other documents.

**[The meeting of the Advisory Committee adjourned at 11:20 a.m.]**