



Online Voting Standards

Legal, technical, and procedural approaches

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A political scientist and a computer scientist walk into a polling place...



a.

THE NEW FRONTIER OF ONLINE VOTING
E-voting Evolution

tvo

“ Even as the public expects electoral management bodies to find **efficiencies** through technology, they are also increasingly aware of the possible **failures** of technology.

- Elections Ontario

“ For the public to trust the integrity of the electoral process they must be assured that:

- Technology used to cast a vote will:
 - Accurately count the vote as intended.
 - Uphold the secrecy of the vote.
 - Be verifiable and protected from tampering.
- Technology used to transmit results will:
 - Be verifiable and protected from tampering.
- Technology will not result in:
 - The breach of their confidential and personal information.

“

The Chief Electoral Officer recommends Ontario establish **common evaluative standards** and a certification process for technology used in the electoral process.

Evolution of Understanding

Unknown
unknowns



“I don’t have a
disaster plan”

Known
unknowns



Technical
standards and
guidance

Known
knowns



Years of
experience, and
a few game
changers



Evolution of Understanding



Why develop standards?

Benefits of Standards

- Clerks and staff
 - Benefit from broadest possible expertise and experience
 - Less guesswork (risk) in procurement
 - Less direct exposure to things going wrong
- Vendors
 - Business case to develop more secure, transparent systems
- Candidates
 - Greater certainty and closure around their campaign outcome
- Voters
 - Greater certainty their vote counted, and their personal information is protected

Who should develop these standards?

- **Federal government**
 - Ministry of Democratic Institutions
 - Elections Canada
 - A new agency (like the US Election Assistance Commission)
- **Provincial government**
 - Municipal Affairs
 - Elections Ontario
 - A new agency (like US state boards of elections)
- **Hybrid approach**
 - Provincial standards coordinated federally e.g., Secretariat for Electoral Collaboration, or Canadian Council of Election Officials
- **Municipalities**
 - With AMO/AMCTO coordinating
- **Others**
 - Vendors
 - Aleks and Nicole

Municipal elections: Not a charter right

Nothing in the charter provides constitutional status to municipalities. Sec 3. is **limited** to the elections of **provincial** and **federal** representatives:

“Every citizen of Canada has the right to vote in an election of members of the House of Commons or a legislative assembly...”

What approach should we take?

We consulted...

- Ontario clerks, deputy clerks, managers
 - Ajax, Greater Napanee, Markham, Sarnia, Toronto, Whitby
- Elections Ontario CEO
- Vendors
 - Neuvote, Simply Voting, ScytI
- AMCTO
- Legal
- US election tech policy/standards people
 - NIST/EAC experience

Table 2: An E-voting Regulation Approach for Canada

	Prescriptive approach	Top-down, shared approach	Top-down, locally administered	Broad-based approach
Country/ organization	United States	Switzerland	Canada	Council of Europe
Mandatory or voluntary	Voluntary standards	Mandatory based on different levels of use	Mandatory technical standards, voluntary procurement and operational guidelines, a renewed legal framework	Voluntary standards
Primary focus	Certification, voting standards	Certification, voting standards	Standards and a legal framework	Recommendations of standards
Characterized by	Very specific and prescriptive	Specific technical standards to ensure the reliability and safety of online voting	Broad focus on electronic voting with specific technical standards and latitude on operational items	A broad to approach for wide applicability to member and non-member nations

Recommendation 1:

Legislative renewal

aka update the MEA

- Technology and law should inhabit same universe
 - MEA language assumes paper ballot and in-person polling place
- MEA principles should be in the MEA!
- Principles should be refined, e.g., *Transparency*

Recommendation 2:

Guidance document for Procurement

Standard voluntary RFP. Level the playing field, boost local knowledge, leverage other experiences.

Recommendation 3:

Guidance document for Operations

Discretionary. Suggestions for how to deal with issues, build off of over 15 years of development of good practices.

Recommendation 4:

Mandatory minimum cybersecurity requirements

- Must be able to be evolved with technology
- Must include transparency, accountability and certainty of results as core principles

Thank you

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