Internet Voting

FAQs

Election for the Delegates for Local 005 for the Nunavut Employees Union Convention and election for the position of Regional Vice President for the Kitikmeot Region

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Union Voting
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1. How can I vote?

Vote electronically

Using the **PSAC ID** and **Password**, vote anytime from **August 11** starting at **0:00am (EDT)** until **August 18** ending at **11:59pm (EDT)**

- Access URL: https://www.securevote.ca/neu/

Be aware that if you should be interrupted while voting electronically, you may re-access the voting system to complete your voting

2. Configuration to vote electronically through the Internet:

To vote through the internet you need a computer configured with:

a. A compatible **operating system**:
   - Windows 7 or Windows 8
   - Mac OS X 10.8

   The correct operation of the voting platform is guaranteed on the above mentioned operating systems. However, you may vote electronically through the Internet using other operating systems.

b. A compatible web browser:
   - Microsoft Internet Explorer 9 or higher (only for Windows environments)
   - Mozilla Firefox latest version (only for Windows environments)
   - Safari 6 or higher (Mac OS X 10.8)
   - Google Chrome latest version (only for Windows environments)

   The correct operation of the voting platform is guaranteed on the above mentioned browsers. However, you may vote electronically through the Internet using other common browsers.

Recommended compatibility matrix:

	WINDOWS	WINDOWS	MACINTOSH
VERSION	Windows 8	Windows 7	Mac OS X 10.8
BROWSER	Internet Explorer 11 Latest version of Mozilla Firefox Latest version of Google Chrome	Internet Explorer 10 Internet Explorer 11 Latest version of Mozilla Firefox Latest version of Google Chrome	Safari 6

3. Typical issues when voting through the Internet:

A - Operating system and browser

A-1. How do I update my browser to be able to vote online?

The compatible Browser versions are:

a. Microsoft Internet Explorer 10 or higher (only for Windows environments).
   Click here to update your version: http://windows.microsoft.com/en-CA/internet-explorer/downloads/ie

b. Mozilla Firefox latest version (only for Windows environments).
   Click here to update your version: http://www.mozilla.org/en-US/firefox/new

c. Google Chrome latest version (only for Windows environments)
   Click here to update your version: https://www.google.com/intl/en/chrome

d. Safari latest version (Mac OS X environment 10.8).
   Click here to update your version: http://www.apple.com/ca/safari/download

A-2. My operating system does not allow me to vote online. What can I do?

If your operating system is not in the list below:

- Microsoft Windows 8 or Windows 7
- Mac OS X 10.8

We recommend that you use another computer to vote.

B – General issues

B-1. I cannot print my receipt

You may have no printer installed. Install a physical or virtual printer and try to print your receipt again.

B-2. I get a time-out error message

If your Internet voting session is inactive for more than 10 minutes, you may get a time-out error. Log into the voting system again and continue your voting process, or press the button Cancel to go to URL and restart your voting process.

B-3. I get a general "Sorry, the site is temporary unavailable. Please try again later".

If you get this message, try to vote later.

B-4. Can I vote with a smart phone?

You may vote using common smart phones, based on the Android and iOS (iPhone) operating systems; with access to the Internet.

B-5. Can I vote with a tablet?

You may vote using common tablets, based on the Android and iOS (iPad) operating systems; with access to the Internet.

4. Other questions:

C-1. When will voting process open?

Using the ID and PIN received, vote anytime from August 11 starting at 0:00am (EDT) until, August 18 ending at 11:59pm (EDT).
You will receive a voting Password before the start of the voting period.

C-2. Once I have my Password, do I have to register in advance to cast my vote?

No, there is no registration required.

C-3. If someone calls me and asks for my ID and/or PIN, what should I do?

You should treat your voter ID and PIN with the same level of secrecy and confidentially you reserve for your bank card and Password. Do not give your combination of ID and PIN to anyone.

C-4. Where can I vote from and how long does it usually take?

Anywhere Internet service is available in the world via dial-up or high-speed service. The internet experience should take about 1 minute.

C-5. When trying to vote I get the message "The election is not open".

You are trying to vote before the start of the voting period. Try again when the election is open.

C-6. When trying to vote I get the message "The election is closed".

You are trying to vote after the end of the voting period.

C-7. If I login to the voting system, but I do not want to cast a ballot at that moment, can I exit the system and access it later?

Yes, you can. If you exit your voting session before you cast your vote, you can login again later and restart your voting process.

C-8. Once a vote has been cast, can it be changed?

No. Once a vote has been cast (i.e. you confirm your vote) it cannot be changed. This process is the same as dropping the ballot into the ballot box in a traditional paper based election, ensuring complete voter anonymity and secrecy of the ballot. The system does not know how the ballot was voted; only that the ID and Password were used in the election to cast a vote, and thus it cannot be removed from the vote count.

C-9. Can anyone tell how I voted if they know my ID and Password?

No. The system does not track how a particular ID and Password has voted, only that the ID and Password has been used to cast a vote.

5. Questions about electronic voting:

D-1. What is electronic voting?

Electronic voting is the casting of votes by electronic means as opposed to traditional media such as voting in person on paper, and voting by mail.

D-2. What are the different types of electronic voting?

There are two types of electronic voting:

1. Remote Electronic Voting: Casting a vote on any device (computer, telephone, smart phone, tablet, etc.) through an Internet connection.
2. Electronic voting in person: Casting a vote through electronic voting terminals (kiosks) located in the polls.

D-3. What are the main advantages of electronic voting?

- Speed and accuracy in counting the votes.
- Accessibility for blind and disabled voters.
- Flexibility in the design and modification of the ballots.
- Prevention of inadvertent errors in the voting process.
- Ease of use for voters.

- Support for multiple languages.
- In the case of internet voting: mobility and convenience for the voters (which generally means higher rates of participation).

D-4. Where do you currently use electronic voting?

Many governments around the world are already using electronic voting in a fully binding form in their electoral processes (Spain, Switzerland, Finland, Brazil, US, Australia, India, UK, Philippines, Argentina, UAE, etc.). Also, many private sector organizations use electronic voting in their internal elections (union elections, general meetings, professional associations, universities, etc.).

D-5. Is electronic voting secure?

Electronic voting can be as safe as, or safer than, traditional paper voting, provided that appropriate security measures are implemented. Conventional security measures, such as firewalls or SSL communication are necessary but not sufficient to guarantee the safety requirements of electronic voting. In addition to these conventional security measures, it is necessary to implement a specific security layer to address the specific risks posed by electronic voting, thus ensuring compliance with the essential requirements in any election, as voter privacy, the integrity of the vote, and the possibility of verification by the voters of the correct handling of the vote.

6. Questions about security:

E-1. How I can verify the digital signature of the voting application?

When accessing the voting portal, your browser will indicate you whether you trust the certificate of the website. The browser indicates whether the certificate has been verified by a trusted certification authority or not. You can view more details by selecting "More information...".

E-2. How can I verify that I am accessing the actual voting portal (no phishing)?

When accessing the voting portal, you use an HTTPS connection, which means in this case that the server will authenticate with a digital certificate to your web browser. If everything is correct, you can access the portal to vote without an error notification, and the browser will usually display a closed padlock or similar icon to indicate so. However, if an alarm window in the browser indicates that the site's digital certificate does not match the address where it connects to (or similar messages), you may be accessing a false site. In this case please contact the support team to report it.

E-3. How is the security of the voting process guaranteed?

The voting platform provides complete security (from individual voters to the polling station), thus avoiding the risk of insider attacks by system administrators. The votes are encrypted and digitally signed by voters when cast. The private key to decrypt the vote is divided into fragments that are distributed among members of the Electoral Board before the start of the election. At the end of the

election, a predefined minimum number of members of the Electoral Board must meet to reconstruct the private key and decrypt the votes.

E-4. How does the voting system ensure the privacy of the voters?

The votes are encrypted when cast. Only the Electoral Board (through the collaboration of its members) can reconstruct the private key and decrypt the votes. This process takes place in an isolated and physically secure server, using a technique of Mixing, which breaks the correlation between the VoterIDentity of voters and votes decrypted to ensure safety.

E-5. How does the voting system protect the integrity of the vote?

The votes stored in the voting servers are cryptographically protected (encrypted and digitally signed) at all times, and therefore no one can manipulate them, including system administrators with privileges.

E-6. How does the voting system prevent the incorporation of false votes?

Once encrypted, the votes are digitally signed by the voters. The digital certificates used by the voters to digitally sign their encrypted votes can be pre-existing digital certificates or digital certificates generated ad hoc for this particular election. Before decrypting the votes, it is verified that the digital signatures of the voters belong to the validated voters. The votes with an invalid digital signature are removed for the subsequent audit.

E-7. Can the voters verify that their votes have been included in the final tally?

Voters can print a voting receipt that contains a unique Identifier made of alphanumeric code randomly generated in the voter's voting machine, and therefore only known by the voter. This unique Identifier is encrypted with the vote in a digital envelope in the voting device before the ballot is issued. Electoral officers can only open the digital envelope (once they have rebuilt the private key) and recover the vote as well as the unique Identifier. At the end of the election, the list of retrieved unique Identifiers is published, and voters can verify that their votes have come to the polling station and have been recorded.

E-8. Does the voting receipt facilitate coercion or vote selling?

The voting receipt is an alphanumeric code that does not reveal the voting options selected by the voter and therefore does not permit vote selling nor voter coercion.

E-9. Is the voting solution auditable?

Transparency is an integral part of security. Therefore, access to the source code of the solution is provided to the electoral authorities and third parties designated by the electoral authorities. Once audited, election officials can digitally sign it to ensure that the audited solution is the same that is deployed during the election.

E-10. May the electoral authorities audit the election results?

The voting solution generates records for each action taken during the election. These records are cryptographically chained (each time you generate a new record) to prevent any manipulation. These immutable logs allow for an accurate audit of the election results by the electoral authorities (and third party) at the end of the election.

7. Questions about Union Voting:

F-1. Who is the provider of the system?

Union Voting is a joint initiative by Union Calling, Canada's leading provider of voice communication services to unions, and Scytl, the worldwide leader in secure electronic voting and electoral modernization. It is a software company specialized in the development of secure electronic voting solutions. Scytl has developed cryptographic protocols to provide electronic voting for higher levels of security, privacy, and trust.

F-2. What are the antecedents of Scytl?

Scytl was founded in 2001 as a spin-off from a leading research group at the Universitat Autònoma de Barcelona. In 1994 it was a pioneer in the search of security solutions for electronic voting. This scientific group produced the first two European PhD theses on electronic voting security, and international publications in the field of application-level cryptography and electronic voting. Scytl's innovative cryptographic protocols originate in these years of research in the field of electronic voting.

F-3. Where is Scytl based?

Scytl is a Spanish corporation, based in Barcelona and with offices in Singapore, USA, Canada, India, Greece and Ukraine.

F-4. Who are the Scytl's shareholders?

Scytl is a private corporation. Scytl shareholders are 2 Spanish capital venture funds: Grupo Riva y Garcia and Nauta Capital, an international fund: Balderton Capital, and a group of people that includes the founders of Scytl and members of its management team. In compliance with the strict political neutrality of Scytl, none of its shareholders or directors are affiliated with any political party.

F-5. What are Scytl's products?

Scytl has developed a complete family of electronic voting solutions around a common core of security. Scytl provides products for electronic voting in all forms of public sector elections, They also design products for the specific needs of the private sector.

F-6. Is Scytl technology protected by patents?

Scytl has filed multiple international PCT patents to protect unique features of its security technology for electronic voting. Scytl has protected its technology and software through copyright.

F-7. Has Scytl received any awards?

Scytl has received numerous international awards for its innovative electronic voting technology, as the ICT Prize awarded by the European Commission, the price RedHerring 100 and the price Global Innovator granted by the Guidewire Group.

F-8. Where I can find more information about Union Voting, Scytl and its technology?

You can find more information by visiting the Union Voting website at http://unioncalling.ca/voting and Scytl website at www.scytl.com.