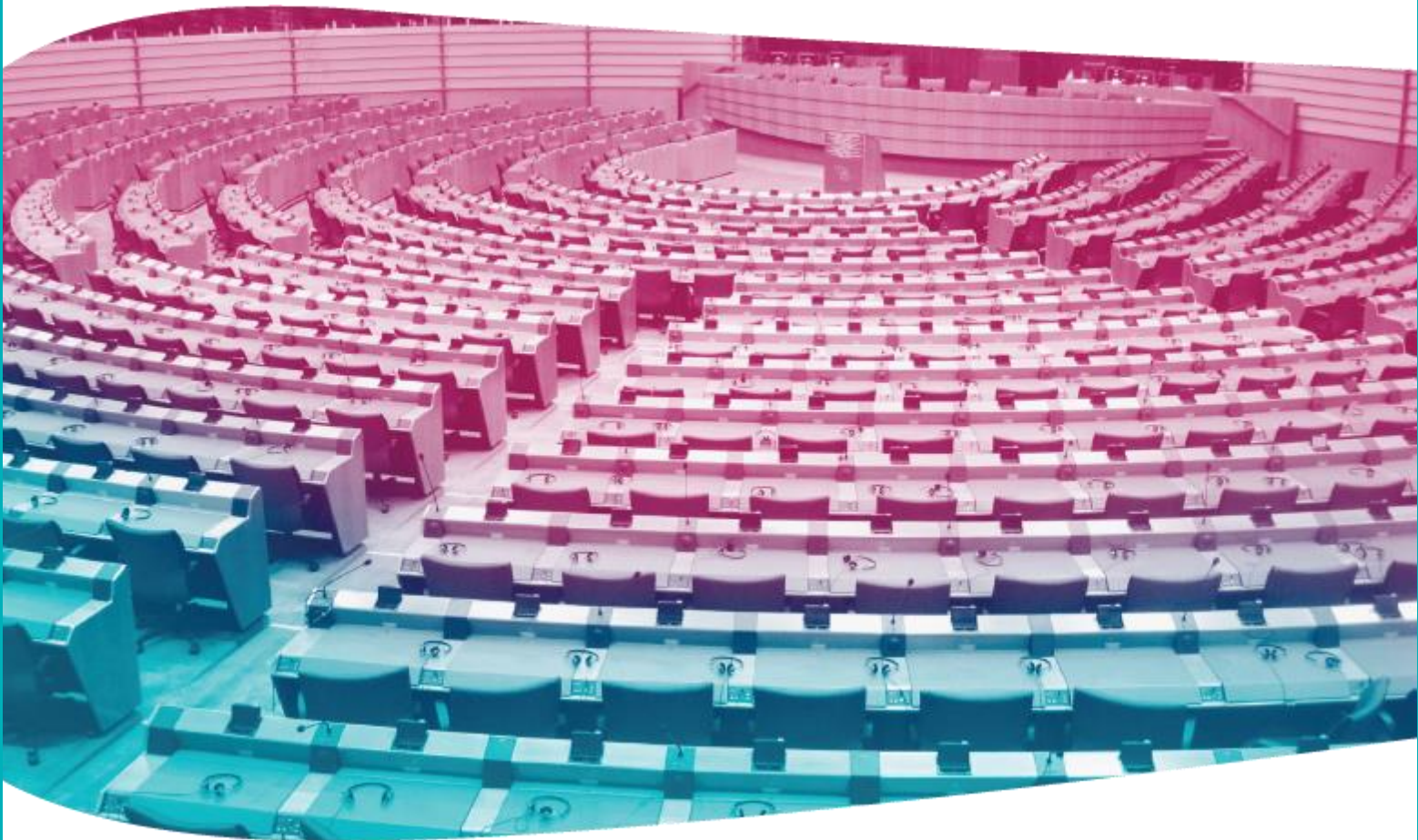


Voter Assistance Guide

2022 Ontario Municipal Elections



ScytI – Election Technologies**STRICTLY CONFIDENTIAL**

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01 INTRODUCTION

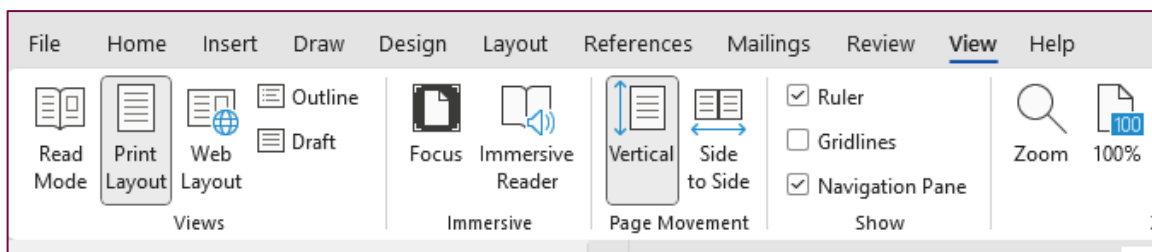
The following document contains the Voter Assistance Guide for the upcoming Municipal Elections, which will take place in October.

As you are aware, your municipality has a responsibility to provide general election assistance to your electorate throughout the election period and this can often be more particular with eVoting. Voter assistance can include but is not limited to;

- Computer access for eVoting
- Replacing lost Voter Instruction Letters (VILs)
- Help with eVoting
- Providing new VILs
- Adding new electors to the list
- General questions

We suggest using this guide on your computer, with the navigation pane always open, in order to move from area to area quickly depending on the voter's issue. To do so:

- 1) Click on the "View" tab
- 2) In the "Show" section, select "Navigation Pane"



02 OPERATING SYSTEMS AND BROWSERS

02.1 Electronic voting configuration

To vote electronically, the following technical requirements are necessary:

1) A compatible operating system:

- Example 1 : Windows 10 (Desktop devices).
- Example 2: iOS 12 and later (Mobile devices).

Note: The voting platform runs consistently and reliably on the above-mentioned operating systems. However, you may vote electronically by using other operating systems.

2) A compatible web browser:

- Example 1: Microsoft Edge
- Example 2: Mozilla Firefox latest version (only for Windows and Linux desktop environments).

Note: The voter platform runs consistently and reliably on the above-mentioned browsers. However, you may vote electronically by using other common browsers.

02.2 Operating system and browsers

Operating System	DESKTOP				MOBILE/TABLET		
	Edge >43	Firefox > 69	Chrome > 75	Safari >10	Chrome >73	iOS > 10	Safari
Windows 10	✓	✓	✓				
macOS 10.14 and later			✓	✓			
iOS 13 and later					✓		✓
Android 9.x and later					✓		

Table 1 - Browsers and Operating Systems – Whitelist

Operating System	Browser
iPad iOS 7.x	Safari mobile
iPhone iOS 7.x	Safari mobile
Windows	Any < IE 11
Windows 8 RT	IE 11
Windows/Ubuntu	Firefox < 50
Blackberry	Any browser
Any mobile/tablet	Opera (any)
Android 4.3	Android Browser 4
Windows 8 RT (32 bits)	IE 11

Table 2 -Browsers and Operating Systems – Blacklist

Note 1: Any other combination is considered to be “Gray List”, for which ScytI cannot ensure 100% compatibility but they may still allow voters to cast their vote online

Note 2: For a complete and up-to-date list of supported browsers and operating systems, see: <https://caniuse.com/#feat=stricttransportsecurity>

02.2.1 How to update browser

Update your browser with the suggested versions from the official websites.

- For Microsoft Edge (only for Windows environments)
<https://www.microsoft.com/es-es/edge>
- For Mozilla Firefox <http://www.mozilla.org/en-US/firefox/new>
- For Google Chrome <https://www.google.com/intl/en/chrome>
- For Safari <http://www.apple.com/ca/safari/download>

02.2.2 Voter's operating system / browser on the blacklist

If your operating system is not on the list of recommended desktop and mobile compatibility matrix, then use another device to vote.

03 VOTER INFORMATION LETTERS

03.1 Letter not received

Before the election, you should have received a letter with your personal voting credentials and instructions on how to vote.

If you have not received any letter, please go to your nearest Voter Assistance Center with an official form of identification. An election worker will be able to print a Voter Information Letter for you there.




03.2 PIN

03.2.1 What is the PIN

The PIN is a piece of information that each voter receives by letter to access the Voter Portal. It is mandatory to log in and unique for each voter.

03.2.2 Where to find the PIN

The letter contains your PIN. This PIN belongs only to you and must be kept private and safe.

JOHN SAMPLE 123 Main Street Your Town, ON P0G 2V0		Qualifying Address: 123 Main Street
 Voting Period Start: October, 2022 End: October, 2022 <small>The exact dates may be different at each municipality</small>	 Your PIN <div>1111 2222 3333 4444</div>	
 How Can I Vote?		

In case the voter has not received the letter, please refer to section Error! Reference source not found.

03.2.1 Recover PIN

If, for any reason, you lost your PIN, please go to a Voter Assistance Center and ask for a new PIN from the election workers there.

03.2.2 No registration needed

No registration is required to vote online. All you need is the PIN received by mail, and your date of birth. If you are not sure that the date of birth is accurate, go to the nearest Voter Assistance Center to verify the date of birth the municipality has registered.

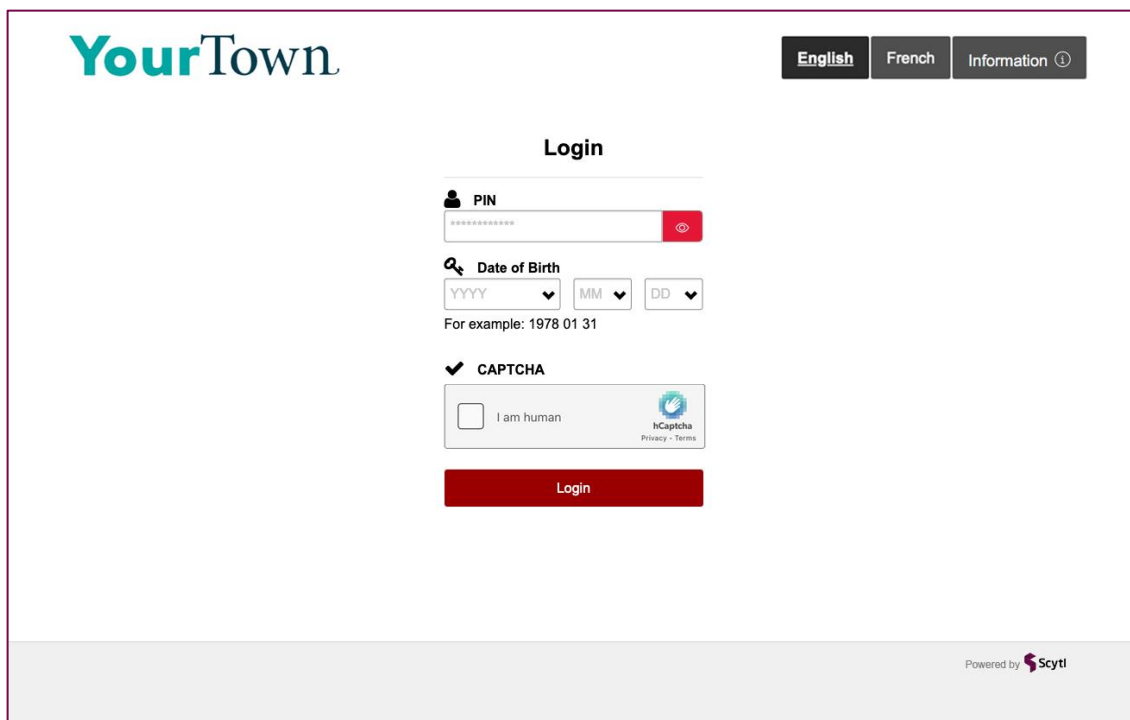
03.2.3 Do not share the PIN

Your voting PIN must be kept secret and confidential, just like your credit card number and PIN. Therefore, do not give this information to anyone!

04 VOTING

04.1 Voting process

04.1.1 Login

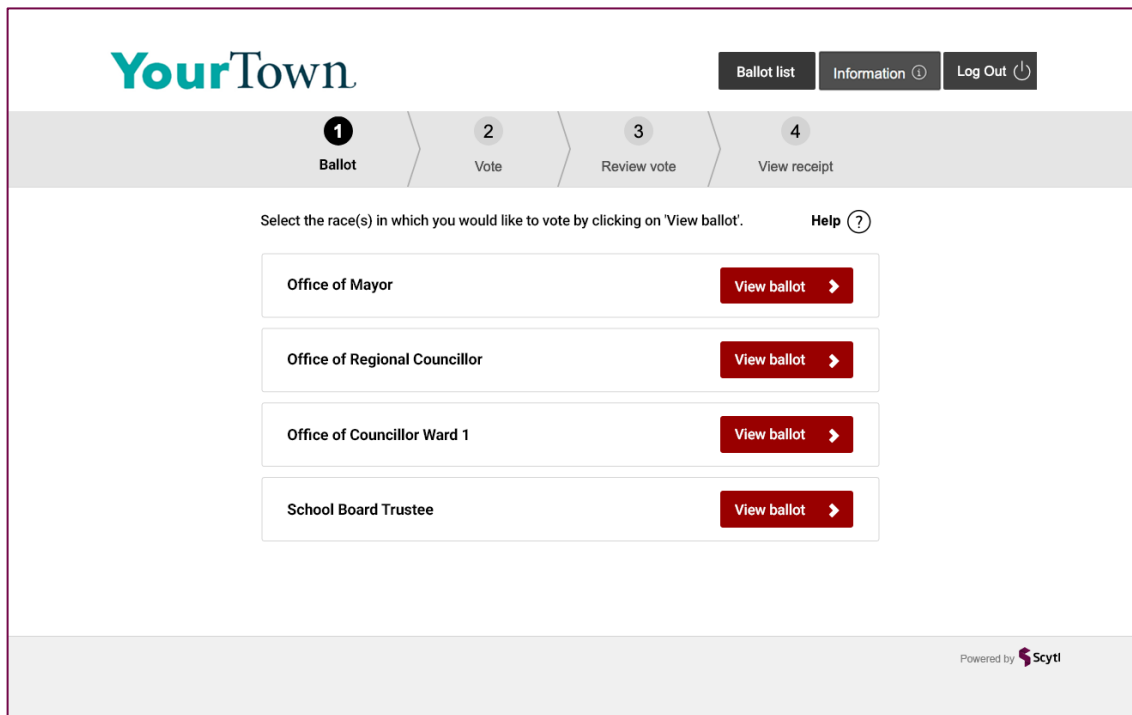


Make sure you have your PIN, which is required to log into the online voting platform. Without it you will not be able to vote.

- 1) Open an Internet browser.
- 2) Use the link you can find in the letter you received and access the Voter Portal.
- 3) Log into the Voter Portal with the PIN and your date of birth.
- 4) Once you are logged in, follow the steps to cast your vote.

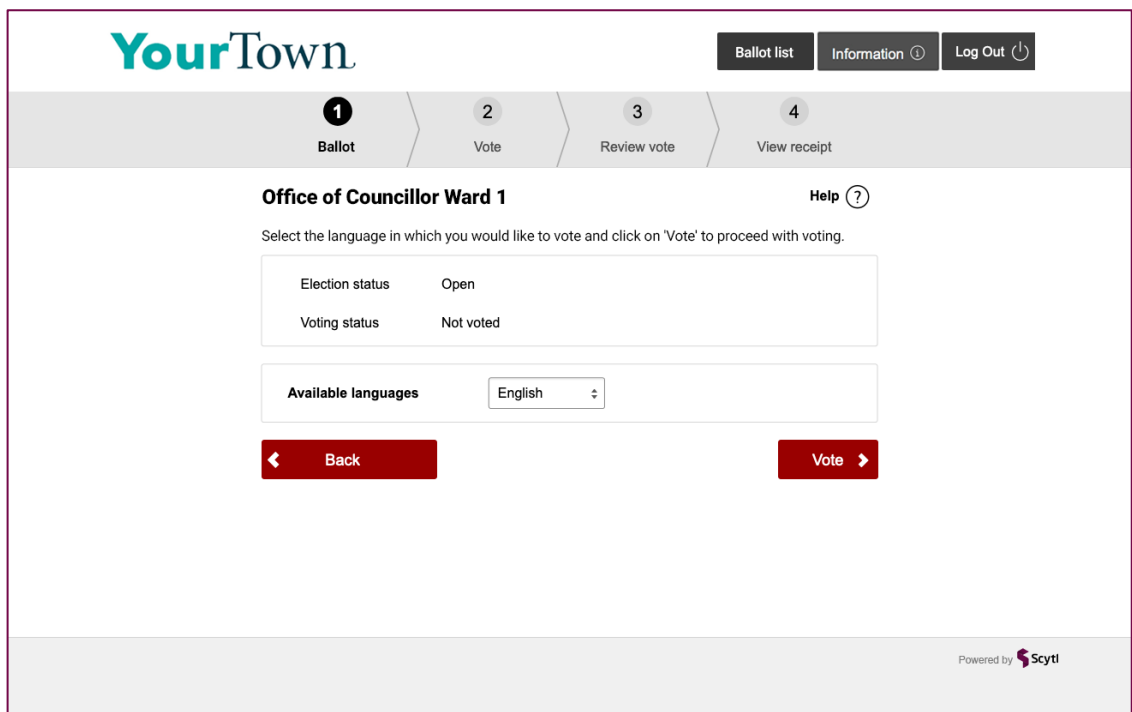
Note: If your connection is interrupted while voting electronically, you can re-access the voting system at any time to go the voting process again.

04.1.2 Ballot list



The screenshot shows the 'YourTown' website interface. At the top, there's a navigation bar with 'Ballot list', 'Information', and 'Log Out' buttons. Below this is a progress bar with four steps: 1. Ballot (active), 2. Vote, 3. Review vote, and 4. View receipt. The main content area has a heading 'Select the race(s) in which you would like to vote by clicking on 'View ballot'.' followed by a 'Help' link. There are four race options, each with a 'View ballot' button: 'Office of Mayor', 'Office of Regional Councillor', 'Office of Councillor Ward 1', and 'School Board Trustee'. The footer indicates 'Powered by ScytI'.

Click on “View ballot” to cast a vote in that race.



The screenshot shows the 'YourTown' website interface for the 'Office of Councillor Ward 1'. The navigation bar and progress bar are the same as in the previous screenshot. The main content area has a heading 'Office of Councillor Ward 1' followed by a 'Help' link. Below this is a heading 'Select the language in which you would like to vote and click on 'Vote' to proceed with voting.' There are two status indicators: 'Election status: Open' and 'Voting status: Not voted'. Below these is a section for 'Available languages' with a dropdown menu currently set to 'English'. At the bottom, there are two red buttons: 'Back' and 'Vote'. The footer indicates 'Powered by ScytI'.

Select the language if more than one is available and click “Vote” to start voting in this race.

04.1.3 Voting

YourTown

Ballot list

Information ⓘ

Log Out ⏻

1
Ballot

2
Vote

3
Review vote

4
View receipt

This is your ballot. Make your selection, and then review your selection with the 'Review' button.


Office of Councillor Ward 1

Please select up to three (3) candidates

Cynthia Pike	<input type="checkbox"/>
Helen Archer	<input type="checkbox"/>
Jackie Laster	<input type="checkbox"/>
Jason Yon	<input type="checkbox"/>
John Smith	<input type="checkbox"/>
Spoil this ballot	<input type="checkbox"/>
Decline to vote	<input type="checkbox"/>

Reset

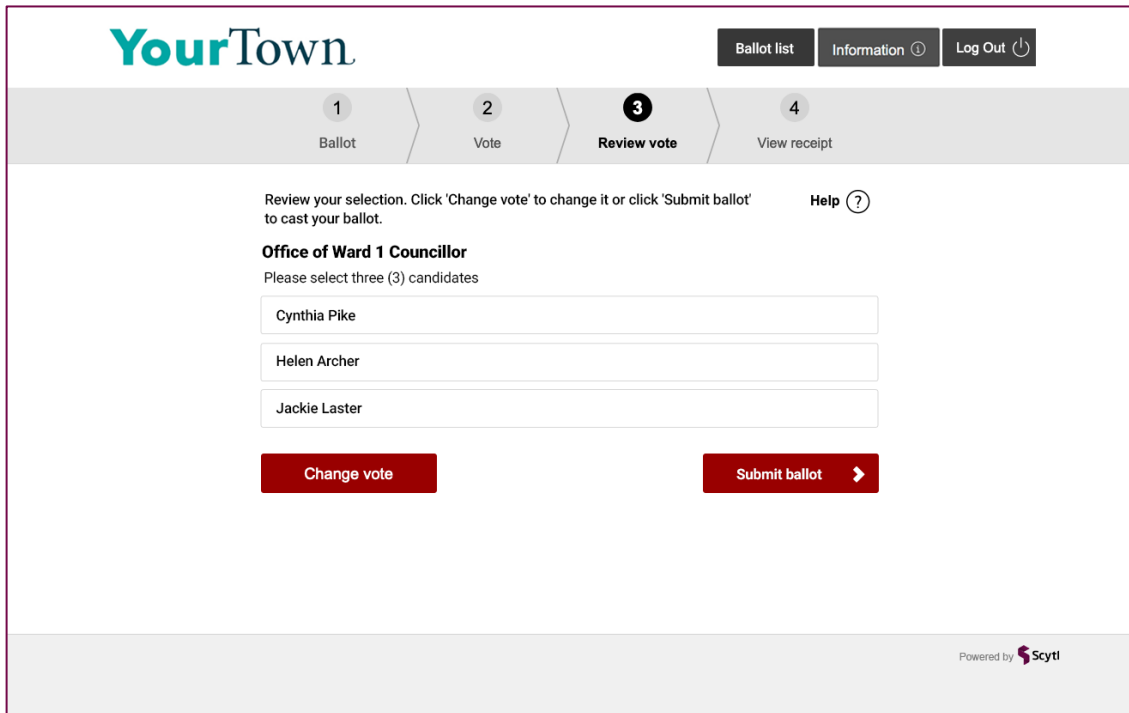
Review ➔

Powered by 

Select your candidate(s) and click “Review”

Note: If you do not select any option for any candidates in any of the races, a blank vote will be recorded for each of the races.

04.1.4 Review



YourTown

Ballot list Information ⓘ Log Out ⏻

1 Ballot 2 Vote 3 **Review vote** 4 View receipt

Review your selection. Click 'Change vote' to change it or click 'Submit ballot' to cast your ballot. Help ⓘ


Office of Ward 1 Councillor
Please select three (3) candidates

Cynthia Pike

Helen Archer

Jackie Laster

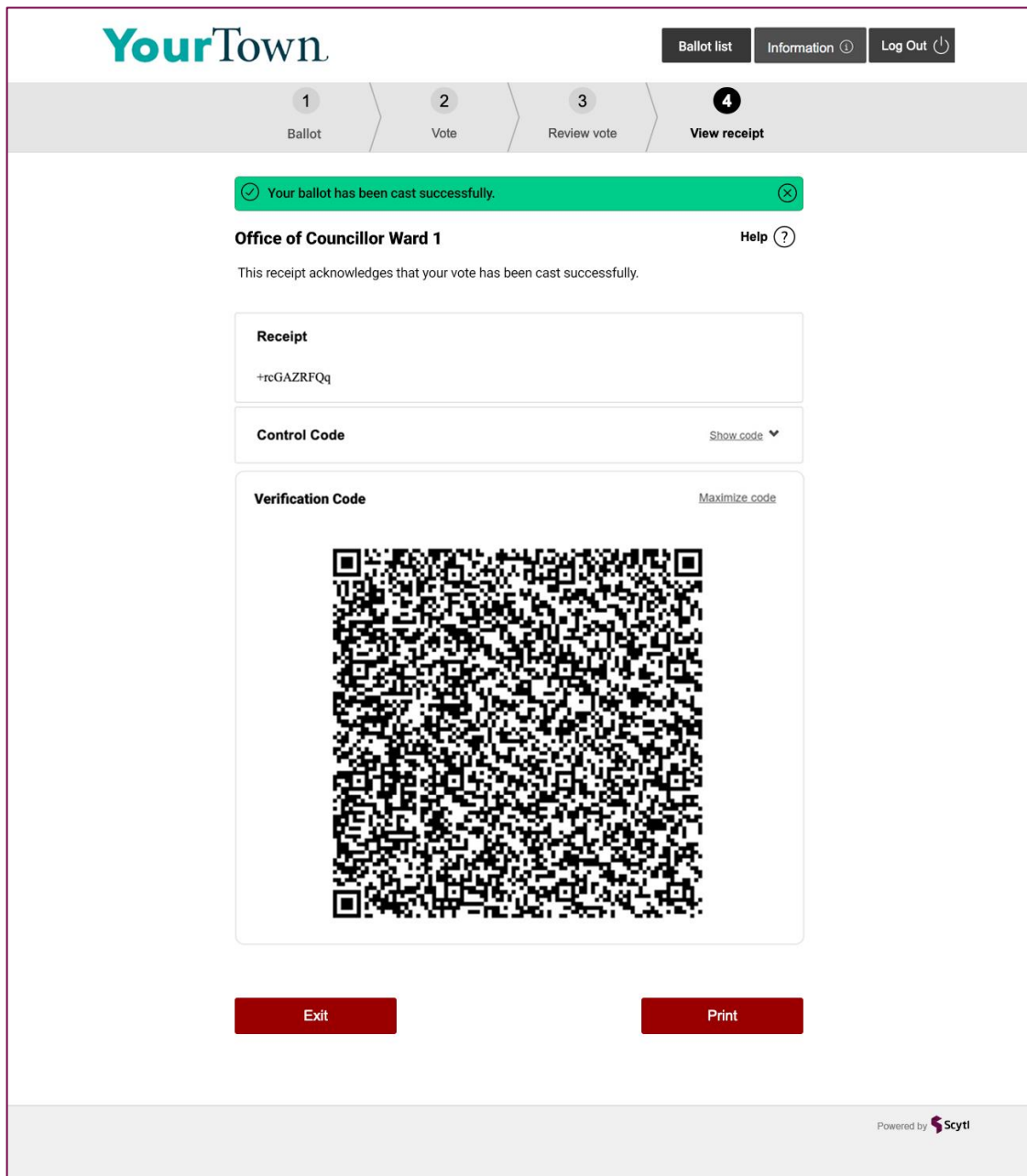
Change vote Submit ballot ➔

Powered by  ScytI

Click “Change vote” to change your selections. This will take you to the last race but does not reset your selections. You must navigate to the race for which you want to change your vote to change it.

Once satisfied, click “Submit ballot” to cast your ballot. You will not be able to change your selections after that point.

04.1.5 Confirmation



YourTown

Ballot list Information Log Out

1 Ballot 2 Vote 3 Review vote 4 View receipt

✓ Your ballot has been cast successfully. ✕

Office of Councillor Ward 1 Help ?

This receipt acknowledges that your vote has been cast successfully.

Receipt

+rcGAZRfQq

Control Code Show code ▼

Verification Code Maximize code

Exit Print

Powered by ScytI

This page provides you with:

- The receipt, which indicates that your vote has correctly entered the ballot box and was tallied. Your Municipality will later post the receipt, where you'll be able to check whether yours is in the list.
- The control code demonstrates the receipt's legitimacy.
- The verification code is needed to use the Verify App
- Print the receipt with the "Print" button

- Click “Exit” to leave the page and return to the ballot list

04.1.6 How to check if vote was cast

If you are not sure of whether your vote was properly cast, try logging in again the system will clearly indicate which ballot was cast, and you will not be able to go through the voting process again for that race. Otherwise, you will be able to proceed and cast your ballot.

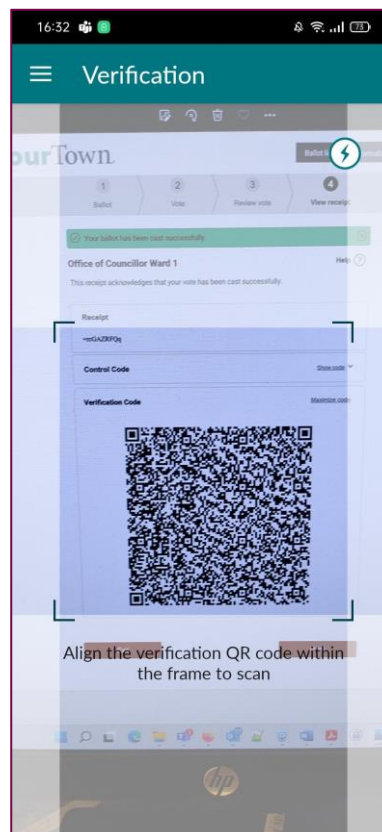
04.1.7 Changing a cast ballot

Once a ballot has been cast it cannot be changed. This process is the same as introducing the ballot into the ballot box in a traditional paper-based election, ensuring complete voter anonymity and secrecy of the ballot. The system only registers that your PIN were used in the election to cast a vote. Therefore, this vote cannot be removed when counting the votes.

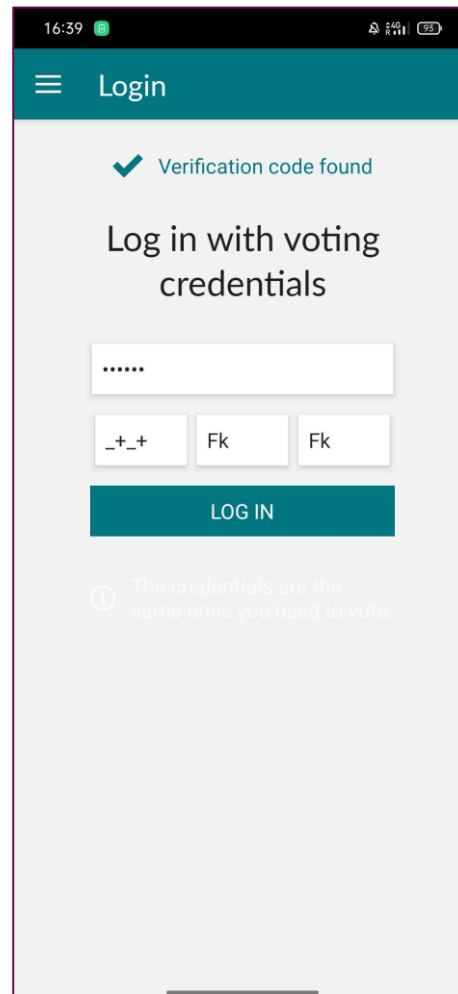
04.2 Verify App

You have 30 minutes after having cast your ballot to verify that the ballot contains your selections.

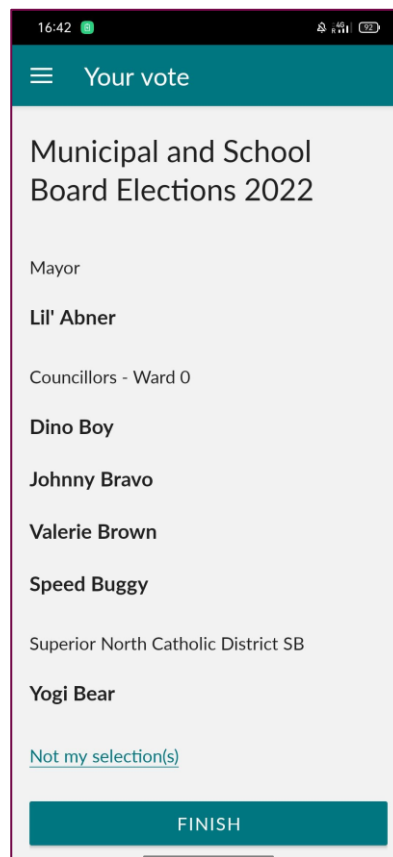
- 1) Open the app



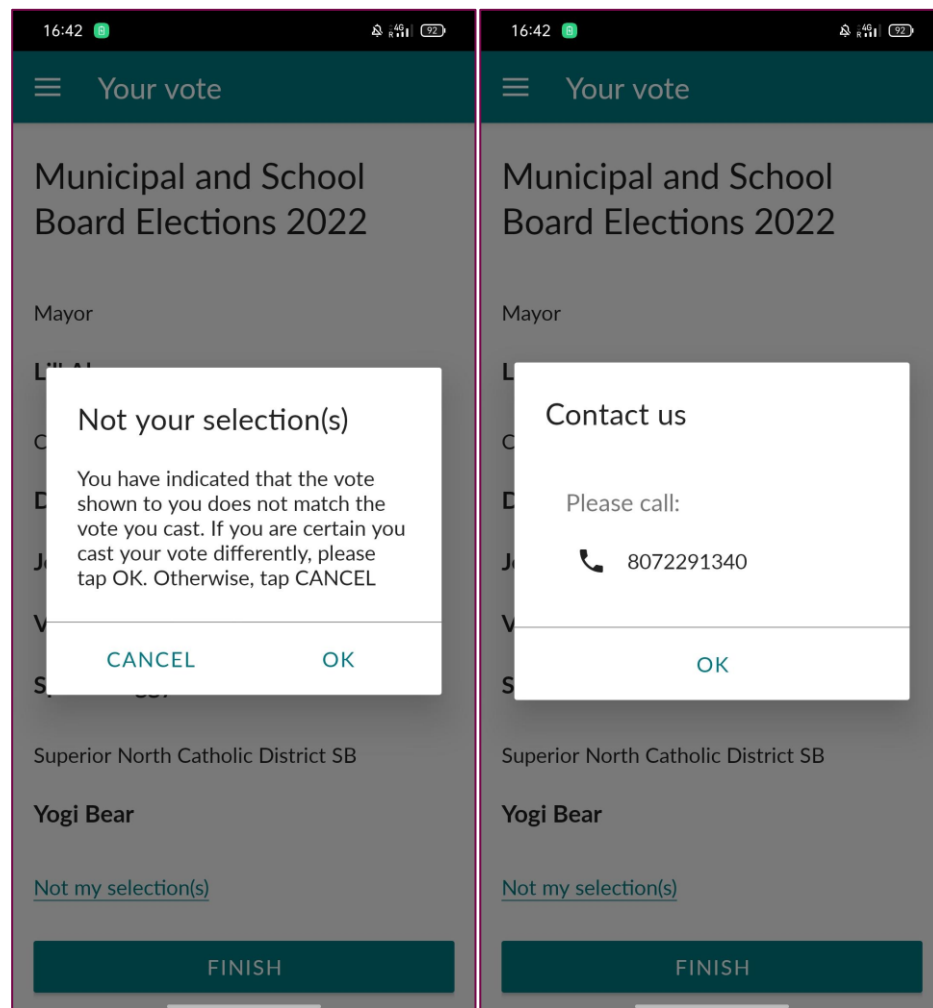
2) Scan the QR code



3) Log in with the same credentials used to log into the voting portal



- 4) Review the voting credentials
- 5) Click FINISH to scan a new QR code
- 6) Click "Not my selection(s)" if you see an error



04.3 System errors

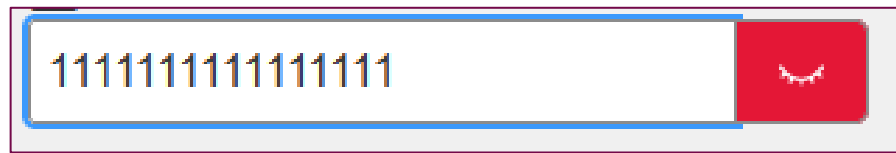
04.3.1 Invalid credentials error



Your voting credentials are not valid. Please refer to your voting instructions for the correct voter credentials and try again

If you get an error message stating the credentials are not valid, make sure:

- You have correctly entered your PIN. Use the eye icon to view the PIN you entered:



- You have correctly entered your date of birth in the following format: 4 digits for the year, then 2 digits for the month, then 2 digits for the month

Go to your nearest Voter Assistance Center where an election worker will be able to verify the correctness of your date of birth.

If DoB is in the correct format and matches the one in Datafix + if PIN is correct, but still no access: Election worker to open an incident with the Service Management software.

04.3.2 Voter deactivated

“Your voting credentials have been deactivated. Please refer to your voting instructions and contact the Voter Assistance Line if you need assistance”

This message indicates you have either voted using another medium, or were deactivated for another reason (e.g., you have moved and are no longer eligible to vote in this election).

If you are eligible to vote and have not voted yet, go to your nearest Voter Assistance Center where an election worker will verify the reason for deactivation. They’ll be able to reassign you a new credential from VoterView.

04.3.3 Time-out error message

When you have been logged in for more than 20 minutes, a warning will inform you that your session has expired when you try moving forward in the voting process. You will have to log in the voting system again and continue your voting process. Note any selection for a vote not yet cast will not have been saved, and you will have to select the candidates again.

04.3.4 Site temporarily unavailable

If you get this message, wait a while, and try to access again.

If issue persists: Election worker to open an incident with the Service Management software.

04.3.5 Election is not open

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

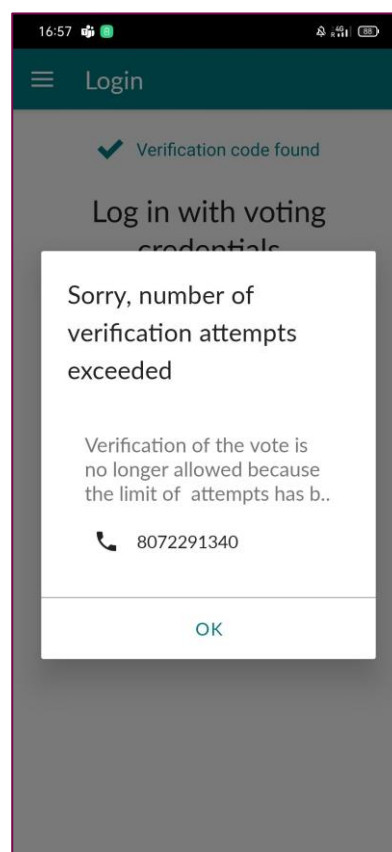
04.3.6 Election is closed

You are trying to vote after the end of the voting period. You are therefore no longer able to cast a vote.

04.3.7 Already voted

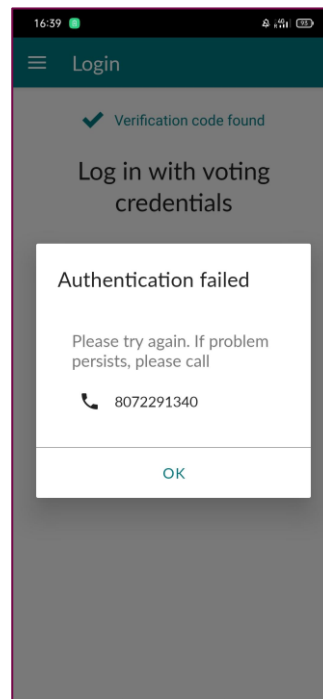
If you try to vote online for the first time and the system indicates that you have already voted, you must go to your nearest Voter Assistance Center to report the issue. The election worker will report the issue and provide you with new credentials to vote from.

04.3.8 Verify App: Verification number exceeded



You are only able to verify your vote twice, after which the system will no longer display your selections.

04.3.9 Verify App: Authentication failed



Verify that you have correctly entered the PIN and DOB entered to log into the Voter Portal.

Invalid token

If you are displayed a message stating the token you are using is invalid, this means you have voted whilst this page was open, hence the error message preventing you from moving forward.

04.3.10 Interrupted session

In the event you are interrupted or cannot finish voting during a session, you will have to access the system again and start the voting process from the beginning. Any data you had already entered will not be saved.

04.3.11 Cannot print receipt

You may have no printer installed. Install a physical or virtual printer and try to print your receipt again. Otherwise, save the receipt as a PDF.

05 FAQ

05.1 Security

Security Risks	Protection provided by Basic Voting Solutions <i>(https and database encryption only)</i>	Protection provided by ScytI <i>invite</i> gov <i>(end-to-end security and verifiability)</i>
Malware attacks	✓	✓
Virus attacks	✓	✓
Man-in-the-middle attacks	✓	✓
SQL Injection attacks	✗	✓
Internal attacks by system administrators	✗	✓
DoSS (Denial-of-Service-Attacks)	✗	✓
Ransomware attacks	✗	✓
Internal server attacks which breaks voter privacy	✗	✓
Malware attacks on the voters computer which could change the digital ballots and the options selected	✗	✓
System administrator's accessing the ballot box and viewing results before the end of the election	✗	✓
System administrators modifying the election configuration	✗	✓
System Administrators or attackers being able to link ballots to voters (breaking voter privacy)	✗	✓
Ballot stuffing attacks	✗	✓
Ballot deleted from digital ballot box without detection	✗	✓
Ballot Tampering without detection	✗	✓
Internal and external attackers eavesdropping on ballots and breaking voter privacy	✗	✓

05.1.1 How to verify the legitimacy of the website

Only click on the link provided directly by your municipality or type in the exact link shown on your VIL.

When accessing the Voter Portal, your browser will indicate whether the certificate has been verified by a trusted certification authority or not.

05.1.2 How can I verify that I am accessing the right Voter Portal?

When accessing the Voter Portal, you use an HTTPS connection, which means 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 a warning is displayed in the browser, it indicates that the site's digital certificate does not match the address where it connects to (or similar messages), in which case you may be accessing a false site.

Election worker: Ask for the exact URL entered, verify that is accurate. If not, provide the correct URL.

05.1.3 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.

05.1.4 How does the voting system ensure the privacy of the voters?

The votes are encrypted when cast. Only the private key can decrypt the votes. This process is done using a technique of mixing, which breaks the correlation between the voter identity of voters and votes decrypted to ensure anonymity.

05.1.5 How does the voting system protect the integrity of the vote?

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

05.1.6 How does the voting system prevent false votes?

Once encrypted, the encrypted votes are digitally signed by the voters' digital certificates. Before decrypting the votes, the system verifies that the voters' digital signatures belong to the votes cast. Votes with an invalid digital signature are removed for subsequent audit.

05.1.7 Can the voters verify that their votes have been included in the final tally?

You can print your receipt, which is a unique alphanumeric code randomly generated when you cast your vote and therefore only known by you. This unique code 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 election's private key, and recover the then anonymized votes as well as anonymous receipts.

05.1.8 Does the printed receipt indicate who the voter voted for?

The voting receipt displayed on the voting interface at the end of the voting process allows you to verify that your vote has been included in the final count and does not show any data that allows inferring the voting selections.

05.1.9 Does the voting receipt facilitate coercion or vote selling?

The voting receipt is an alphanumeric code that hides the voting options selected and therefore prevents vote selling and voter coercion.

05.1.10 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 as the one deployed during the election.

05.1.11 May the Electoral Authorities audit the election results?

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

05.2 About the Electronic Voting solutions

05.2.1 What is electronic voting?

Electronic voting consists in casting a vote by electronic means, as opposed to traditional voting methods, such as in-person paper voting or vote by mail.

05.2.2 Where can you cast an electronic vote from?

Electronic votes can be cast through the following channels:

- On any device with an Internet connection (computer, smartphone, tablet, etc.).
- From a phone, by listening to the instructions and using the touchpad.
- In-person, by casting a vote through electronic voting terminals (kiosks) located at polling stations or other voting venues (libraries, etc.).

Note:

- Neither type of electronic voting stores your vote in the device you are voting from. All votes are sent remotely to a central counting server.
- You might not be able to use every channel in every election. This depends on your electoral authority.

05.2.3 What are the main advantages of electronic voting?

The main advantages of electronic voting are:

- Speed and accuracy when counting the votes.
- Accessibility and convenience 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).

05.2.4 Where is electronic voting already used?

Many governments around the world are already using electronic voting in a fully binding form in their electoral processes (e.g. Spain, Switzerland, Finland, Brazil, USA, Australia, India, UK, Philippines, Argentina, UAE, etc.).

Also, many organizations within the private sector use electronic voting in their internal elections (union elections, general assemblies, professional associations, universities, etc.).

05.2.5 Is electronic voting secure?

Electronic voting can be as safe as, or safer than, traditional paper voting, since appropriate security measures are implemented.

Conventional security measures, such as firewalls or SSL communication are necessary but not enough to guarantee the safety requirements of electronic voting.

In addition to these conventional security measures, a superior security layer has been implemented to address specific risks that electronic voting may have, thus ensuring compliance with the essential requirements in any election; voter privacy, vote integrity, and possibility for the voter to check the correct handling of the voting process.

05.3 About ScytI

05.3.1 Who is the provider of the system?

ScytI Election Technologies (ScytI) is the system provider. ScytI is a software company specialized in the development of secure electronic voting solutions, who has developed cryptographic protocols to provide electronic voting for higher levels of security, privacy, and trust.

05.3.2 ScytI background

ScytI 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. ScytI's innovative cryptographic protocols originate in these years of research in the field of electronic voting.

05.3.3 Where ScytI is based

ScytI is based in Barcelona and has offices in USA and Canada.

05.3.4 Patents

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

05.3.5 Awards

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

05.3.6 More information about ScytI

You can find more information by visiting ScytI's website at www.scytI.com

