# i-Voting



In 2005, Estonia became the first nation in history to offer internet voting in a nationwide election. The groundbreaking i-vote system allows citizens to vote at their convenience, no matter how far they are from a polling station. i-Vote has been made possible only thanks to the fact that the vast majority of people in Estonia have access to secure digital authentication and signatures.

By 2023, 51% voters have preferred interenet voting in local, parliamental and European parliament elections. A secure QR code based mobile application is used to ensure that each vote is correctly received by the National Electoral Committee server.

# Vote anywhere

Unrelated to the costly electronic voting systems with problematic machinery used in some countries, the Estonian solution is simple and secure. You can cast your ballot from any internet-connected computer anywhere in the world.

During a designated pre-voting period, the voter logs onto the system using an ID-card or Mobile ID, and casts their ballot. The voter's identity is removed from the ballot before it reaches the National Electoral Commission for counting, thereby ensuring anonymity. Since each vote cancels the last, every voter has the option to change his or her vote during the pre-voting period.

## Your vote is yours

The secrecy of the vote is guaranteed as with the early voting procedure by mail — the vote is signed and encrypted with the voter's own certificates and placed within a double e-envelope for protection.

The encrypted votes are collected, but their content will not appear outside the cryptograms. Only after voting has closed will a device be activated by the electoral unit, which can open up the votes. The necessary security is ensured by precise measures. The server software is public; observers are welcome.

#### **Questions & answers**

# What does e-voting look like from a technical point of view?

In order to vote through the internet, voters must connect their ID-card during the early-voting period using a smart card reader or using their mobile ID.

#### How is the security of the voting ensured?

In order to conceal and securely transmit the vote, the voting system uses cryptography, which ensures the same voter identity for the certificates in the document. After the vote, it is possible to use a QR code with a mobile phone and to verify the accuracy of your vote through a different communication channel

### Facts and figures

- → The secrecy of the vote is ensured in the same way as the early-voting procedure by mail the vote is signed and encrypted with the voter's own certificates and placed in a double e-envelope for protection
- → The encrypted votes are collected, but their content will not appear outside of the cryptograms
- → Only after voting closes will a device be activated by the electoral unit, which can open up the votes.
- → i-Voting is the cheapest voting model for the state.
- → i-Vote cost per vote is about 2,3 €. Paper vote on election day costs a bit over 4 €.