

# Blockchain-based trusted voting service

A blockchain service to facilitate transparent surveys, corporate votes & referendums, with built-in fraud resistance.

## Confidentiality

The anonymity of voting is enabled by homomorphic encryption. A user's choice is hidden, but it is possible to know that their vote has been counted. The organizer sees only the final results.

## Security

Only identified users who have the correct rights can access the service. All participants' actions are automatically verified by a smart contract and recorded to a trusted registry.

## Verifiability

The service provides a secure contour without a centralized authority required to count votes. It also enables verification of the authenticity of votes by all authorized users.

## Reliability

The voting mechanism rules out tampering or replacement of data at any stage of the process. A smart contract prevents unauthorized users from voting. Results are cryptographically protected.

## Easy deployment

The service is available in the Waves Enterprise Mainnet, but it can also be easily deployed on-premise to comply with the customer's requirements.

## Consistency

All data pertaining to voting results is stored in a decentralized way. The consistency of data is enabled by a consensus algorithm that allows each user to obtain the same version of the truth.

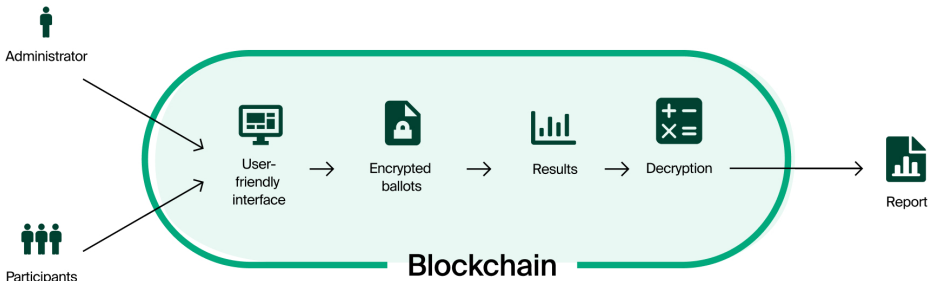
## User-friendliness

The system's interface enables timely receipt of notifications for voting, transparent interaction with the blockchain, and the creation of reports based on voting outcomes.

# Voting process

In simplified form, the process works as follows:

1. An administrator creates a new poll and adds users
2. Users receive email notifications about the new poll, follow a link and find out further details of the poll
3. On the appointed time, users vote
4. Each ballot is encrypted and stored in a smart contract, waiting for further processing
5. Upon completion of voting, the process of vote counting and decryption of final results begins
6. The smart contract publishes unencrypted final results



## Advantages compared to regular voting systems

- ✓ Processes more votes due to high throughput of the decentralized network
- ✓ Creates transparent and trusted voting procedures
- ✓ Reduces overheads by eliminating printing and processing of physical ballots

## The service is relevant for:

- Limited companies
- Public companies
- Credit cooperatives
- Bank organizations
- Condominium partnerships
- Management companies
- Municipal and federal elections