

The Public Administration:

That is where the voters' register is, and this register is the only record of personal data.

It is also here that are driven (administratively) the Authorization (Habilitation) and the electronic ballots box (Urn).

The master key is kept by the ballot's political leader. It certifies the various polling services and players.

Authorization (Habilitation):

Here are processed the personal (named) authorizations to the ballot. This is possible only in tight conjunction with the voters' register because no named data are kept here.

The ballots box (Urn):

Anonymous ballots are indirectly received (by the Mailman) and collected here.

At the close, they will be deciphered, verified and counted.

The political monitoring (Scrutation):

Allows and guarantees the anonymous and valid construction of the right to vote.

Stores anonymously the intermediate data of the ballot.

Validates and transfers (by hiding the synchronicity) the anonymous ballot to the ballots box.

Filters, records and answers by hiding the internal controls to the blind requests of the public administration.

Trusted third parties:

A first built and manages digital identity and authenticates its holder on behalf of xVote.

A second provides anonymous tokens for access rights.

Others give the exact time, the secure timestamp for documents, P2P delivery of the software or are involved in the provision of quality entropy. Etc.

Voting card :

The first voting card contains codes for authentication of the voter (alternatively the registration of the identity is made by a recognized authority).

Thereafter, the voting bundle may (optionally) be sent electronically. This bundle is then even no more a prerequisite to do the vote.

Voter's computer :

It is the keystone of the system: the guarantee of a fair and comprehensive transaction.

The operation is done at the pace of the voter, who may stop and go elsewhere to continue.

The process is enclosed in a virtual machine, which insulates the process from the system of the voter's post itself, and leaves no trace.

Transfer:

All traffic is encrypted and signed, on several levels: one for the front-end server (transport) and one for the processing server (destination). It guarantees the confidentiality, authenticity and integrity.

Transactions with the political monitoring (Scrutation) are anonymous, for the management and delivery of the voter's ballot, and are through a series of relay hiding the address of the sender.

Digital identity :

The voter receives a digital identity globally usable elsewhere.

During the vote, an anonymous voting identity of is also created.

