

Digital Voter Registration System



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Abstract

Registration of voters at a Danish election is normally done by pen and paper. A voter is registered when the ballot is handed out so a voter cannot vote twice. A digital voter registration system enables an election to be executed with more efficiency than with the original procedure.

Originally each polling table has a list of voters permitted to get a ballot from that table. By digitization of the lists a voter can attend any polling table and the look-up is performed instantly. Increased registration efficiency will require less staff and less waiting time for each citizen.

Our solution is separated into two main parts. The first part being the centrally managed generation of polling cards and voter registration lists both in digital and printable format. The second part being the digital registration of voter attendance at each electoral venue.

Mandatory Requirements

- Generate voter cards in printable format
- Generate registration lists for specific venues and polling tables in printable format
- Locally validate and register voter attendance digitally without Internet connectivity
- Validate a citizen by voting card and/or by social security number (CPR-no)
- Guarantee that exactly those in the data set provided can vote and no one can vote twice
- Include a graphical user interface for both the central management and local clients
- Server and multiple clients on different computers at the same venue

Optional Requirements

- Generate barcodes on voter cards for more efficient look-ups
- Facilitate local server redundancy