

E-voting in the Netherlands

From general acceptance to
general doubt in two years

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Current situation

No more e-voting in the Netherlands; no voting machines and no internet voting!

Situation 2006

- Voting machines introduced in 1965
- 99% of municipalities used voting machines
- Voters from abroad could vote through internet
- Plans to use internet voting also for voters within country

Legislation

- Very little provisions regarding voting machines in Election Act
- Details in ministerial Regulation for the approval on voting machines 1997
- Not updated with regard to security provisions

NGO

- NGO 'we don't trust voting computers' was founded in the summer of 2006
- Two issues: no paper trail and easy to hack

Parliamentary Elections 2006

- November 2006 parliamentary elections
- 6 weeks before elections: NGO proved that they could tamper with Nedap machines
- Also: Sdu machines could be read from a distance because of Tempest

Effects

- Government withdrew Sdu approval
- 22 municipalities voted with paper ballot
- Voters from abroad: internet voting with RIES
- Elections without problems

Aftermath

- Sdu went to court to fight withdrawal of approval
- Had to be tested again by Secret Service
- Failed tests and could not be used by Provincial elections in March 2007

Advisory Committees

- Two committees, one on history of decision making, one on future
- First one: mistakes made in process, not enough knowledge within government
- Second one: 'Voting with Confidence': no more e-voting without paper trail, suggestion for new system

Proposed system

- Voter votes on a touch screen computer with a printer
- Printer prints the vote
- Voter puts print in ballot box
- Prints are counted with a counting device (scanner)

Government decision

- Withdrawal of approval of current voting machines
- Ministerial regulation withdrawn
- Technical committee to investigate proposed new system

Printer and scanner

- Technical committee: System not feasible because of Tempest problems
- Cabinet decision: for now no experiments with new system of e-voting, back to paper ballot (may 2008)

Internet voting

- 2006 elections: internet voting was used successfully
- Plans to implement permanently
- Parliament asked for certifying procedure
- Cabinet decision: no internet voting for EP elections in 2009

Internet voting 2

- Waterboards planned to use internet voting for elections in november 2008
- Includes all voters in the Netherlands, 12 million
- Parliament asked questions about system
- Independant tests: system not secure
- NGO managed hack

Internet voting 3

- Very recent decision by government: no internet voting during waterboard elections
- For now: no e-voting in the Netherlands

Conclusions part 1

- Developments in computer science and security issues have to be linked to e-voting
- Introduction of e-voting not without intensive testing by supporters and critics
- Government has to have enough own knowledge to prevent market to take over

Conclusions part 2

- E-voting is fundamentally different than paper ballot voting
- Therefore new procedures and regulations are necessary
- Once trust in the system declines, it is very hard to win it back
- With binding elections, there is little room for experiments.