Dutch Electoral Council

5th Review Meeting of Recommendation CM Rec(2004)11 on legal, operation and technical standards for e-voting to be held in Lochau/Bregenz, Austria, on the

28th of October 2014

Melle Bakker LL.M,

secretary-director

History of e-voting in the Netherlands (1)

- Around 2006 almost 99% of the Dutch local communities used electronic voting machines
- Internet voting for Dutch voters living abroad
- Plans for introducing internet voting for Dutch voters living within the Netherlands

History of e-voting in the Netherlands (2)

- 2006: Action group "We don't trust voting computers"

- 2007: Commission proposed to introduce voteprinter and votescanner

- 2008: Cabinets decission: NO

- 2009: first (EP)elections with pen and paper;

- 2013: New proposals to introduce voteprinter and votescanner (report "Every vote counts")

Principles of the electoral pocess

- **Equal suffrage**
- **Accessibility**
- **Transparency**
- **Verifiability**
- **Free suffrage**
- **Secret suffrage**
- **Fairness**

- **Independancy**

Four voting methods

Model 1: Voting and counting using a voting computer with a verified paper record;

Model 2: Voting using a voting printer with electronic counting;

Model 3: Voting using a ballot paper with electronic counting;

Model 4: Voting using current ballot papers with manual counting;

Paper process the guiding principle

Stemprinter met scanner

2

Kiezer print stembiljet

21:00 uur ▶ 22:00 uur

Scanner telt stembiljetten en print het resultaat

Electronic voting and counting

- **More voters can vote in person**
- **More reliable (feedback 2x)**

Electronic voting & counting

- **Better and faster results**

Requirements (1)

- Common criteria certification by independent body of printer and scanner on the protection levels EAL 6 (printer) and EAL 5 (scanner)

- No standard components and standard products

- Protection Profiles

- Use of open software and publishing of source code

Requirements (2)

- Measures against the tempest problem: restrict the possibility of "reading" radiation within 8 meters (NATO-standard SDIP-27/1 level A.3)

- One central administrative body responsable for procurement, testing, maintenance and distribution of the equipment

- Constant new risk analysis and testing

- Standard recounts of paper ballots

Present situation (1)

Different lines of approach by the Ministry of the Interior:

• Technical University of Delft (industrial design) -> improving accessibility

• University of Leiden -> developing a method of checking the electronic counting outcome

• Fox-IT: demands non-recording of votes by printer

•TÜViT -> Protection Profiles

• Berenschot -> organizational consequences

• ?? -> Activating of printers

Present situation (2)

- New questions for Commision (protection level, costs and number of printers)
- The Ministry is going to experiment with a new type of ballot (smaller, with logo's of parties; split choice)
- The Ministry also has (unclear) thoughts about internet voting

Problems

- **Introducing of central government responsabilities in Dutch highly decentralized electoral system**

- **Costs**

- **Solving tempest problem is complex**

- **NATO norm is classified**

- **Testing of printers and scanners**

KIESRAAD

Dutch Electoral Council

Herengracht 21

The Hague

The Netherlands

www.kiesraad.nl

Tel.: 0031704266266