

Voting with confidence

Report of the Election Process Advisory Commission

Summary, Conclusions and Recommendations

27 September 2007

Summary

The Commission considers that the election process in the Netherlands should safeguard the following principles:

- **Transparency**
The election process should be organized in such a way that the structure and organization is clear, so that everyone in principle can understand it. There must be no secrets in the election process: questions must be able to be answered, and the answers must be verifiable.
- **Verifiability**
The election process should be objectively verifiable. The verification tools may differ, depending on the method of voting that is decided upon.
- **Fairness**
The election process should operate in a proper manner, and the results must not be capable of being influenced other than by the casting of lawful votes.
- **Eligibility to vote**
Only persons eligible to vote must be allowed to take part in the election.
- **Free suffrage**
Every elector must be able to choose how to vote in complete freedom, free from influence.
- **Secret suffrage**
It must be impossible to connect the identity of a person casting a vote to the vote cast. The process should be organized in such a way that it is impossible to make a voter indicate how he or she voted.
- **Equal suffrage**
Each voter, given the Dutch election system, must be allowed to cast only one vote in each election, which must be counted precisely once.
- **Accessibility**
Voters should be enabled as far as possible to participate directly in the election process. If this is impossible, there must be a way of taking part indirectly, i.e. by proxy.

These principles are to some extent enshrined in the Dutch Constitution and laid down in international and European treaties and recommendations of e.g. the Organization for Security and Co-operation in Europe and the Council of Europe. Dutch law and regulations must provide these safeguards. The Commission has examined the methods of voting used at present in the light of them, namely:

- Voting using paper ballots at polling stations
- Electronic voting at polling stations
- Postal voting
- Internet voting
- Voting by telephone
- Voting by proxy

The report indicates how well the principles are safeguarded with these methods of voting, explicitly discussing the dilemma that there is no method of voting that provides 100% safeguards. In the end it is a question of striking a balance between the principles: feasibility and cost are factors here, as is the point that the election process must be flexible enough to respond to new developments.

Having weighed up the various principles, the Commission concludes that voting at polling stations should be the main method of voting in the Netherlands. Other methods, such as Internet, telephone and postal voting, do not provide the same degree of safeguards as voting at polling stations, so the report does not generally recommend them. The Commission also takes the view that the method of voting at polling stations in the Netherlands should be standardized, i.e. the same in every municipality.

Voting using paper ballots at polling stations is the preferred option on the grounds of transparency and verifiability. Given the problems encountered in practice with the manual counting of these ballots, however, the Commission also investigated whether a method of electronic voting is conceivable that provides equal safeguards. The Commission takes the view that this is feasible, provided it produces a paper ballot that can be checked by the voter. The report describes two methods of voting by electronic means at polling stations and electronic counting of the votes cast:

- A *ballot printer* on which the voter makes his or her choice: this produces a paper ballot that is deposited in a ballot box and is counted electronically, when the ballot closes, by a *vote counter*.
- An electronic voting device with a memory and an additional paper trail for verification purposes.

The two methods differ substantially. The Commission only recommends introducing *ballot printers* with electronic *vote counters*, because of the conceptual clarity of the system and the unambiguous results it produces. Although counting can be carried out more quickly using voting devices with a paper trail, by using the device to do the counting, this advantage is outweighed by the disadvantages, as it still means relying on the software correctly storing the votes cast. In the case of a *ballot printer* choosing how to vote is completely separate from the casting of the vote, so there is no need to rely on the vote being stored correctly. A count by an electronic *vote counter* is estimated to take 15 to 30 minutes at each polling station.

The Commission also noted that there is a method using pre-printed paper ballots upon which voters mark their choice with a pen or pencil, and this is then read by a scanner and counted.

A system of this kind was tried in the United Kingdom just recently. The Electoral Commission produced a report on it in August 2007, which indicated that there were a number of problems. Voting using optical scanning systems takes place on a fairly large scale in the United States of America. Nine states use this method exclusively. Scanning systems where voters insert their ballot papers in a ballot box with a built-in scanner produce 0.7% invalid votes in those states. Nevertheless, as with all 100% electronic systems, optical scanning systems have also demonstrated vulnerabilities that might make it possible to manipulate the results. California has wholly or partly withdrawn approval from all the suppliers of these systems.

The ballot papers used and scanned in the United States and the United Kingdom are much smaller than those used in the Netherlands. Because of the large number and length of the lists of candidates, Dutch ballot papers need to be of a size that does not fit in standard scanners. Splitting the papers up into separate pages, with voters only using the page on which they cast their votes, would create the risk of the other pages being used to cast fraudulent votes. Scanning ballot papers is therefore not really feasible in the Netherlands, and the Commission does not recommend this method.

In recent years there have been experiments with voting at any polling station within the voter's municipality under the Remote Electronic Voting (Experiments) Act.¹ The evaluations showed that both municipalities and voters were enthusiastic about the possibility of voting at other than a

¹ Act of 11 December 2003

designated polling station. Given the need for the election process to be accessible, the Commission takes the view that voting at any polling station should be introduced in all municipalities. Although the results of the experiments were overwhelmingly positive, some new vulnerabilities came to light as regards protecting voting passes against forgery or counterfeiting and establishing that the person using a voting pass actually is the elector whose name is stated on the pass. Both these vulnerabilities need to be dealt with before it is decided to introduce voting at any polling station. Voting pass security can be improved by incorporating authenticity features. More reliable identification can be achieved by requiring users of voting passes to identify themselves when voting. Since the introduction of the Compulsory Identification Act everyone in the Netherlands over the age of 14 is required to hold a valid identity document and carry it with them at all times.² All electors will therefore have an identity document on their person when they go to vote and will be able to produce it.

The Ministry of the Interior and Kingdom Relations has long had the intention of making it possible not only to vote at any polling station in all municipalities but also to extend the principle so that in any election a voter can vote in the electoral district in which he is eligible to vote at any polling station in the Netherlands. Introducing this would have major consequences. First, every polling station would need to have the complete national register of cancelled voting passes (containing the serial numbers of voting passes that are invalid, for instance because a replacement card has been issued). The register would have to be compiled very quickly (in the space of two days) and distributed to all polling stations before the start of the election. In principle it could be in paper form, but to avoid errors and speed up the process during the election it would be advisable to use an electronic version. It does not need to be on-line, as the voting pass is collected by the polling station committee³ when the vote is cast, so the voter cannot go and vote again at another polling station. When the votes are counted the polling station committee would have to separate the votes cast into the various districts. This would be easy to do if the count is performed electronically, as recommended by the Commission. The counts would then have to be distributed to the principal polling stations where they 'belong'. To achieve this the Minister of the Interior and Kingdom Relations would need to create a central facility (distribution platform) to which the polling station committees would send the counts electronically. The central facility would also publish the counts of votes cast at each polling station on the Internet, thus enabling anyone who is interested to check the count. The distribution platform would pass on the results received directly (electronically) to the principal electoral committee³ concerned. If it is decided to introduce the option of voting at any polling station in the Netherlands in all elections it will not be possible to use pre-printed paper ballots.

The Commission recommends introducing voting at any polling station in all municipalities as the first step. The second step, the national introduction of voting at any polling station, should be taken later on, once all the authorities responsible for organizing elections and the public are accustomed to the new voting method at polling stations.

For certain groups of people, namely Dutch citizens living abroad or away from the Netherlands on account of their work or business or that of their spouse, registered partner, partner or parent, and people unable to vote at a polling station because of a physical impairment, other methods of voting than voting at a polling station need to be provided. This is necessary because they will otherwise be excluded from one of their most basic civil rights or completely reliant on proxy voting. In the case of these groups the Commission considers that access to elections outweighs the principles of transparency and free suffrage.

² This obligation has been in force since 1 January 2005.

³ For the terms 'polling station committee', 'principal electoral (district) committee' and 'Central Electoral Committee' see OSCE/ODIHR Election Assessment Mission Report, 12 March 2007, Chapter V A, pp. 10 and 11.

For Dutch citizens abroad postal voting is currently the regular method of voting. The Ministry of the Interior and Kingdom Relations experimented with Internet voting for this group in 2004 and 2006, and this was found to improve access. A large majority of these voters explicitly wish to vote using the Internet. The Commission therefore recommends making Internet voting the regular voting method for them. Postal voting should however be retained for the time being for those Dutch citizens who do not have Internet access or are unable or unwilling to use it.

Access for this group is substantially affected by the registration procedure, and the one used at present is cumbersome and arouses antagonism. The Commission therefore recommends that it be improved as soon as possible. In the longer term registration for each election could be dropped with the advent of the Register of Non-Residents, provided all non-resident Dutch citizens are registered in it.

As regards the physically impaired, the Commission concurs with the opinion of the Council for the Disabled and Chronically Ill, the Disability in the Community Task Force and Viziris, that greater efforts need to be made to allow this group of citizens to vote independently. This can be achieved at polling stations by improving physical access to them and equipping the electronic voting equipment with audio facilities. Anyone who is demonstrably unable to visit a polling station or to operate the voting equipment there should not be entirely dependent on proxy voting. The Commission agrees with the Council for the Disabled and Chronically Ill, the Disability in the Community Task Force and Viziris that telephone voting should be made available to this group.

The Netherlands has long had proxy voting. From time to time this attracts criticism internationally, e.g. from the observation missions of the Organization for Security and Co-operation in Europe. The criticism is directed in particular at the risks proxy voting entails to the principles of equal and secret suffrage. The Commission takes the view that proxy voting is well established in the Netherlands and should be retained. The risk of proxy votes being misused by intercepting voter registration cards or voting passes needs to be reduced. This can be done by means of regulations requiring anyone appointed to vote on behalf of another person to produce a copy of a valid identity document of that person. This would enable the polling station committee to compare the two signatures if necessary.

The Commission looked in depth at the way in which duties and responsibilities for the election process are allocated. This is generally satisfactory, but there are two areas that have not been adequately provided for, if at all: the laying-down of requirements for equipment used in ballots, the enforcement of these requirements and the security and management of the equipment are not properly regulated. This responsibility should rest overall with central government, specifically the Minister of the Interior and Kingdom Relations, and should be enshrined in the law and regulations. This is also the case with the new duties arising from the Commission's recommendations on voting at any polling station and Internet and telephone voting. In view of the government's standpoint on the report of the Voting Machines Decision-Making Commission, the logical course is for these to be assigned to the Personal Records and Travel Documents Agency.

The transparency and verifiability of the election process also need to be improved. This can be achieved by subjecting the preparations for, and conduct of, every election to an audit, the aim being:

- o to gain an objective idea of any incidents and errors relevant to the results when these are being determined by the Central Electoral Committee,³ and
- o to learn lessons for future elections.

The election data (e.g. the official reports) should also be kept, and released for academic research after a specified period. The Commission takes the view, incidentally, that a new organization is not

needed to carry out the audits: responsibility for auditing municipal council and provincial council elections should be assigned to the Minister of the Interior and Kingdom Relations, and for auditing general elections and European Parliamentary elections to the House of Representatives. The bodies carrying out the audits should be independent and the findings disclosed publicly: this must be enshrined in the law and regulations.

Conclusions and Recommendations

Conclusions

1. The election process should safeguard the following principles: transparency, verifiability, fairness, eligibility to vote, free, secret and equal suffrage, and accessibility. These principles are the criteria by which existing and future methods of voting should be judged.
2. In practice the election process cannot provide 100% safeguards, so it is necessary to strike a balance between them. Feasibility and cost are also factors here, as is the point that the election process must be flexible enough to respond to new developments.
3. The principles can only be safeguarded sufficiently when voting takes place at polling stations.
4. Voting using paper ballots at polling stations is the preferred option on the grounds of transparency and verifiability. In practice, however, there have been problems with the counting of paper ballots.
5. A method of electronic voting at polling stations that provides equal safeguards is feasible, provided it produces paper ballots that can only be checked by the voters themselves.
6. The device on which voters make their choice should be protected against compromising radiation where this is feasible and financially justified.
7. The introduction of voting at any polling station outside the voter's municipality has major consequences for the organization of the election process (the register of cancelled voting passes and the distribution of votes to the various districts).
8. For voters living abroad or away from the Netherlands on account of their work or business or that of their spouse, registered partner, partner or parent, and people unable to vote at a polling station because of a physical impairment, the principle of accessibility can only be safeguarded if other methods of voting than voting at a polling station are provided for these groups.
9. The current election process does not provide sufficient access for voters with impairments. Greater efforts therefore need to be made to allow them to vote independently, so as to make them less dependent on proxy voting.
10. Internet voting for voters living abroad or away from the Netherlands on account of their work or business or that of their spouse, registered partner, partner or parent, and telephone voting for people with impairments that prevent them from voting at a polling station, would improve access to elections for these particular groups of voters.
11. The current registration procedure for voters living abroad needs to be improved as soon as possible, as it is cumbersome and arouses antagonism among those concerned.
12. Proxy voting is well established in the Netherlands and should be retained in the future election process. The risk of proxies being misused by intercepting voter registration cards or voting passes needs to be reduced.
13. If a register of non-residents were to be introduced in due course and all non-resident Dutch

citizens registered in it, re-registration for each election in which they are eligible to vote would no longer be necessary.

14. Deciding what principles the election process should safeguard, organizing and administering elections are a government responsibility. There is only a secondary function for the private sector, as a supplier of aids used in elections.
15. The current election process does not provide adequate checks on compliance with the law and regulations. If the election process is to be transparent and verifiable, the organization and conduct of elections must be audited.

Recommendations

1. The Commission recommends that voting at polling stations should remain the main method of voting in the Netherlands.
2. Voting at polling stations should be standardized throughout the Netherlands.
3. The Commission recommends introducing *ballot printers* and electronic *vote counters* at polling stations, because of the conceptual clarity of the system and the unambiguous results it produces. The paper ballots should be counted electronically. Manual counting should only take place if there are technical faults or there is reason to doubt that the equipment is working properly.
4. Violation of the secrecy of the ballot by picking up compromising radiation should be combated reactively by making this a criminal offence and reaching clearly defined agreements with the Public Prosecution Service on investigation and prosecution; in addition, if the cost is not prohibitive, the preferred option is to take preventive measures in line with the current NATO standard SDIP-27 Level B.
5. Voting passes for voting at any polling station should be provided with authenticity features.
6. Voters voting at a polling station should be required to identify themselves.
7. The introduction of voting at any polling station outside the voter's municipality should be deferred until voters are accustomed to the new method of voting recommended by the Commission.
8. Municipal authorities should actively inform voters about which polling stations provide access for voters with impairments.
9. Telephone voting should be provided for voters who are unable to vote at a polling station because of an impairment. This group should be defined with the aid of the ICF classification.
10. Assistance to voters as provided for in Section J28 of the Elections Act should be extended to voters in need of help on account of their mental condition.
11. A person appointed to vote on behalf of another person should be required to produce a photocopy of that person's identity document as well as his own identity document. The polling station committee should collect the photocopy along with the person's voting pass.
12. The principle of special mobile polling stations should be introduced in the law and regulations so

that voting can take place in penal institutions, hospitals, nursing homes etc.

13. To combat family voting, publicity should be given, in the run-up to elections and in assimilation courses, to the importance of every voter casting his or her own vote in freedom and in secret as far as possible.
16. Internet voting should be the regular method of voting for voters living abroad or away from the Netherlands on account of their work or business or that of their spouse, registered partner, partner or parent. The option of postal voting should be retained for the time being for those who are unable or unwilling to vote using the Internet.
17. The semi-permanent register of non-resident electors kept by the Municipality of The Hague should be made permanent. Anyone registered should only be removed from the register:
 - on their own request,
 - when moving back to the Netherlands or
 - if they are found to have lost their Dutch nationality.An unnotified change of address should be regarded as a request for removal.
18. Anyone applying for a new travel document abroad should be asked whether or not they would like to state their postal address and e-mail address for the register of non-resident electors.
19. The Municipality of The Hague should send out the D3 registration form for voters abroad by e-mail. It should only be sent by post if the person's e-mail address is not known or the e-mail address given is not working.
20. The following text should be deleted from Section M1 of the Elections Act: 'or will be away from the Netherlands on polling day because of their work or business or that of their spouse, registered partner or parent'.
21. The text in Section M1 of the Elections Decree 'by airmail unless the address to which they are to be sent is in Belgium' should be amended to read 'franked at the priority rate'.
22. Responsibility for administering Internet and postal voting should rest with the Minister of the Interior and Kingdom Relations.
23. Responsibility for laying down requirements for and approving aids used in elections, and for the management, maintenance and security of these aids, should rest with the Minister of the Interior and Kingdom Relations.
24. The Minister of the Interior and Kingdom Relations should be given the powers necessary to exercise control over elections.
25. A framework should be devised to provide polling station committees with a clearer guide to drawing up official reports and make them more standardized.
26. Official reports should be kept for a period to be specified in the Elections Act for the purpose of academic research.
27. Every election should be audited by independent experts. Responsibility for auditing municipal council and provincial council elections should rest with the Minister of the Interior and Kingdom

Relations, and for auditing general elections and European Parliamentary elections with the House of Representatives.

28. In the Council of Europe the government should work towards European technical standards for electronic aids used in elections and a European certification and testing system.
29. The law and regulations should be such that violations and breaches of the principles are precluded by preventive measures as far as possible and do not have to be enforced after the event by criminal prosecution.