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Internet voting in Norway 2013

The principle of the secret ballot in practice

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Abstract:

The secret ballot is an undisputed democratic principle. What this principle means in practice, however, may be contested when voting takes place in a so-called uncontrolled environment. The issue of the secret ballot as a duty and a right was brought to the fore in the trial with Internet voting in 12 Norwegian municipalities at the 2013 parliamentary election.

The paper aims to shed light on whether Internet voting (and remote voting in general) affects how the principle of ballot secrecy is understood. More specifically, we ask *how citizens understand the principle of the secret ballot in practice*, and whether their understanding is in accordance with the legal understanding of the principle.

Based on a representative population survey in the 12 Norwegian trial municipalities, we explore how voters approach the principle of the secret ballot in the context of Internet voting. We find that a large majority supports the general principle of unobserved voting, but when this principle is put to the test of concrete situations, the picture becomes more nuanced. As long as the situation does not involve coercion and undue influence, many people are willing to accept that voting is observed by others – even if this is a breach of legal regulations. This indicates that the popular understanding of ballot secrecy differs from the legal understanding.

[1] The authors were part of the research team that carried out the evaluation of the 2011 and 2013 trials, and parts of the paper are based on the evaluation report (Segaard et al. 2014). The evaluation was financed by the Ministry of Local Government and Modernization.

Introduction

The secret ballot is largely undisputed as a democratic principle. What this principle means in practice, however, may be contested when voting takes place in a so-called uncontrolled environment. The issue of the secret ballot as a duty and a right was brought to the fore in a trial with Internet voting, which took place in 12 Norwegian municipalities at the 2013 parliamentary election.

The secrecy of the vote has two aspects (see, e.g., Barrat i Esteve & Goldsmith 2012: 28). First, it requires that voters are able to cast their votes in private, unobserved by anyone. Second, it requires that nobody are able to break the anonymity of the vote at a later stage. In this paper, we only examine the former aspect: privacy.

From a legal standpoint, voters have a duty to shield their vote from others. It nevertheless appears to be two conflicting normative positions. Some maintain that both voters and the authorities must ensure that all votes are cast secretly, while others will say that the voters have a right to a secret ballot – but not necessarily a duty to keep their vote secret. This paper aims to shed light on whether Internet voting (and remote voting in general) affects how the principle of ballot secrecy is understood. More specifically, we ask *how citizens understand the principle of the secret ballot in practice*, and whether this understanding is in accordance with the legal understanding of the principle.

Two Internet voting trials have been held in Norway. The first included 10 municipalities at the 2011 local election (see Segaard, Baldersheim & Saglie 2012; 2013). Two years later, a similar trial was held in 12 municipalities at the parliamentary election – the 10 municipalities from the 2011 trials and two new ones. More than 250.000 electors had the opportunity to cast an Internet vote in 2013. In both 2011 and 2013, Internet voting was a supplement to the paper ballot – it was still possible to vote in the traditional way. Internet voting was only permitted during the advance voting period, from 12 August to 6 September. On Election Day, it was only possible to vote at the polling station.

The trials were controversial, and the then opposition parties voted against the Internet voting trial before the 2011 and 2013 elections. As these parties won a parliamentary majority in the 2013 election, the Minister of Local Government and Modernization declared in June 2014 that the Internet voting trials would be discontinued (KMD 2014b). Even though there will not be any Internet voting in Norway in the foreseeable future, the experience from the two trials may give us valuable information about how voters understand the principle of the secret ballot in a context of Internet voting, or remote voting in general.

In the first part of the paper, we review and discuss the literature on Internet voting and the principle of the secret ballot. Second, we turn to the case of Norway to present the debate on Internet voting in this country as well as further details of the trials. Third, we use a representative population survey in the 12 Norwegian trial municipalities to explore how voters view the principle of the secret ballot in the context of Internet voting. We map citizen attitudes to both Internet voting and ballot secrecy. We then explore how citizens apply the principle of ballot secrecy in concrete situations, by means of scenarios: respondents were asked whether different situations were acceptable or not.

Remote voting and the principle of the secret ballot

The principle of the secret ballot is almost universally accepted today – but that has not always been the case. Secret voting has been contested in the past, and there is still a philosophical debate about the value of the secret ballot. Brennan and Pettit (1990), for example, argue that voting should be a public act. They claim that open voting makes citizens publicly answerable for their electoral choices. The voter will, to a greater extent, act in a way that he or she can defend in public. This will encourage voters to vote with the public interest in mind, whereas secret voting makes it easier to vote on the basis of self-interest. However, Brennan and Pettit admit that the possibility of bribery, intimidation and blackmail moderates their argument.

This is merely an academic debate today. The secrecy of the ballot has been enshrined in several human rights instruments, such as the European Convention of Human Rights and the International Covenant on Civil and Political Rights (see, e.g., Watt 2003). Therefore, we will not go further into the question of the value of the secret ballot, but instead discuss how this principle may be challenged by Internet voting.

To be precise, it is *remote voting* (by Internet, post or other means) that may challenge the principle of the secret ballot. The dilemma, in short, is that a system that is supposed to increase political equality (by increasing accessibility) also may damage the same equality (by giving one individual influence over more than one vote).

First, remote voting makes it easier to buy and sell votes. As long as the vote buyer is unable to control that the seller voted for the right candidate or party, vote-selling will be relatively limited.[2] But when voting takes place outside of the polling station, the buyer will be able to witness that the seller votes according to their deal.

Second, remote voting makes it more difficult to avoid undue influence – such as pressure from family members and others – when the votes are cast. As Birch and Watt (2004: 66–69) emphasize, the home is a social arena where power relations may be unequal. Social norms within the family may differ considerably from the norms of the civic sphere. However, the distinction between undue influence and acceptable kinds of influence is not necessarily clear. From a democratic perspective, political discussions are beneficial – also within the family. To try to convince others is a natural part of an election campaign. But the mark is overstepped if family members watch how their spouse or adult children vote, to make sure that they vote for the 'correct' party or candidate.

These objections apply to both postal voting and Internet voting. Nevertheless, it has been claimed in the British debate that there is a difference between the two methods. With postal voting, it is possible to retire to a private corner to fill in the ballot paper. In contrast, the family computer is less private within the domestic context (Pratchett & Wingfield 2004:180). Watt (2003:202) argues that a ballot paper sent by post is a 'one-person device', whereas a computer is a family resource. According to Birch and Watt (2004:70), this may make postal voting less susceptible to undue influence from family members (so-called family voting), but more susceptible to other kinds of manipulation such as buying votes. However, this

[2] Mobile phones with cameras may create problems for the secrecy of the ballot, also in the polling station. The seller may take a picture of the ballot paper inside the voting booth. However, the buyer cannot be certain that the seller actually puts the photographed ballot paper – and not a different one – in the ballot box.

distinction seems less relevant today, when the Internet can be accessed via mobile phones. Furthermore, postal voting may also take place in a social context. Gerber et al. (2013: 99) mention an 'increase in "voting parties" and other social gatherings to fill out' the mail-in ballot papers.

There are remedies to these problems related to remote voting, especially in the case of Internet voting. The possibility to cast a new vote, if the first vote was cast under undue influence, is meant to solve the problem. However, this solution does not satisfy everybody. Birch and Watt (2004: 62), for example, argue that

> *adequate levels of secrecy are virtually impossible to guarantee when voting is conducted in unsupervised locations, and that this is one of the most serious impediments to the introduction of* re*voting. Furthermore, the secrecy problem is not likely to be susceptible to a technological 'fix' such as might be used to deal with many of the other security issues surrounding electronic voting.*

The problem might be that the measures implemented to maintain the secret ballot may not work equally well in all social contexts. First, if someone influences a family member's vote through social interaction, it is not certain that the voter being subjected to pressure always has an opportunity to cast his vote again. Second, some level of interest and engagement in the democratic process is required to undertake a new vote. A voter who has sold his vote will probably not bother to vote again, even though the opportunity is there. The same applies to voters who have been pressured to vote for a specific candidate. If the initial political engagement is weak, it is less likely that any special effort will be made to ensure that the vote is secret.

A basic question seems to be whether the secrecy of the ballot shall be regarded as a *right* or a *duty*. There appears to be two conflicting normative positions: some will maintain that both voters and the authorities must ensure that all votes are cast secretly, while others will say that the authorities have the responsibility to ensure a secret ballot, and that the voter naturally has a *right* to a secret ballot – but not necessarily the *duty* to keep his or her vote secret.

Internet voting represents a shift towards the latter position: that the secret ballot becomes a right, rather than a duty. According to Buchstein (2004:52),

> *the universal introduction of voting from home PCs or cellphones puts modern democracy at a crossroad. The mandatory secret vote is slowly turning into an optional secret vote [...].*

It can be argued, however, that the state has to trust that its citizens themselves are able to decide how they will cast their vote, and not interfere in their choices unless it is absolutely necessary. Such arguments were used, for example, when Internet voting was introduced in Estonia (Drechsler & Madise 2004:102).

Buchstein (2004:50–53) argues against this view, and considers secrecy a mandatory lawful duty. The argument is the need to protect voters from pressure, and

prevent buying and selling of votes. When everybody votes inside the voting booth, voters cannot prove which candidates they voted for. This should prevent threats and pressure, and destroy a potential market for votes.

It should be noted, however, that some groups might be unable to vote in secret at the polling station. People with disabilities who need assistance to be able to vote, are in practice excluded from the right to ballot secrecy. Birch and Watt (Watt 2003:199–200; Birch & Watt 2004:62–64) discuss this question in the context of a ruling in the Irish Supreme Court. The court (as well as Birch and Watt) found that even though there was reason to depart from the principle of ballot secrecy in order to make it possible for certain groups to be able to vote at all, this is not a reason for departing from the principle in other contexts. There is nevertheless a dilemma that Internet voting may challenge the secrecy of the vote for some individuals, but at the same time give others – people with disabilities – a new possibility to vote in secret (see Fuglerud & Tjøstheim 2012).

Finally, a US study (Gerber, Huber, Doherty & Dowling 2013) reminds us of an important point: It is the voters' *perception* of the secrecy of the ballot, rather than the actual secrecy, that affects their behaviour. The respondents were asked whether they believed that anybody (such as politicians, trade unions or employers) could find out who they voted for. Between 25 and 40 per cent of the respondents (depending on the question wording) thought that somebody were able to find out how they voted. Accordingly, the degree of *confidence* in the electoral process is relevant for public attitudes to the secrecy of the ballot.

The secret ballot and the Norwegian Internet voting trial

The secret ballot was introduced in Norway in 1884. One of the reasons was to prevent people in positions of power from unduly influencing the vote of their subordinates (Danielsen 1964:57). When Internet voting was debated prior to the 2011 Norwegian trial, the Norwegian Parliament's Standing Committee of Scrutiny and Constitutional Affairs was not in doubt about the principle: 'The committee wants to emphasize that free and secret elections are one of the cornerstones of our democracy' (Stortinget 2010, our translation).

Norwegian elections are generally carried out in so-called controlled environments: the authorities control that outsiders cannot get any information about how people vote. Internet voting thus introduces an essentially new element in the Norwegian electoral system: voting in an uncontrolled environment. Admittedly, a limited element of remote voting existed also before the Internet voting trials – but this applies to a very limited group. Expatriates who do not have the possibility to visit a Norwegian polling station abroad (e.g. an embassy), may vote by post.

The question of whether the authorities themselves can find out how individuals have voted is rarely raised in Norway. As the issue has not been on the agenda, there has not been any survey research on voter perceptions of ballot secrecy. However, it should be noted that Norway is characterized by a high level of trust in the political system (Listhaug, Aardal & Ellis 2009), and also high mutual trust among citizens (Newton 2001; Wollebæk 2011). Together with the fact that Norwegians also show a high level of trust in the election administration (Segaard et al. 2014: 84–87), this gives us reason to believe that trust in the secrecy of the vote also may be high in Norway.

The technical solutions of the Internet voting system might challenge the principle of the secret ballot, if the authorities or others are able to find out how somebody voted. Security mechanisms are supposed to prevent this, but most people cannot really comprehend how these mechanisms work. The technological side of ballot secrecy has been discussed also in Norway, but the privacy aspect was more central in the political debate (Connolley 2012; Winsvold & Hanssen 2012). Family voting and other kinds of undue influence, as well as buying and selling votes, were prominent issues.

This was also the case when the 2013 trials were discussed by the Norwegian Parliament. In the spring of 2013, a majority of the members of the Standing Committee on Scrutiny and Constitutional Affairs proposed to stop the trial (Stortinget 2013b). The result of the parliamentary vote was 47 votes for the motion of stopping the trial, while 50 voted against this motion and thereby for conducting the trial with Internet voting (Stortinget 2013c). It was thus a divided Parliament that gave the green light to the trial in 2013. Furthermore, the discussion showed that also representatives from the government parties – who voted for the Internet voting trials – expressed scepticism towards them (Stortinget 2013a).The dispute was primarily about the principle of the secret ballot and to what extent it could be met in practice.

The discussion of whether the secret ballot should be a mandatory duty or a right was also present in the Norwegian debate. For example, the then State Secretary of the Ministry of Local Government, Dag Henrik Sandbakken (2011), wrote (our translation):

> *There are diverging views on how far the responsibility of the authorities extends. Shall the authorities guarantee the secrecy of the ballot? Some people think that that we have a duty to guarantee secrecy, others believe that it is sufficient that we ensure that the voters' right to vote in secret is safeguarded.*

This is, however, a normative statement rather than a legal one. The legal status is clear: the regulations for the Internet voting trials (§ 16 (1)) states that '*Voters shall personally ensure that their Internet vote is cast in private*' (FOR-2013-06-19-669: § 16 (1)). In other words, the voter has a duty to maintain the secrecy of the ballot. Internet voting (and remote voting in general) thus means that the responsibility to keep the ballot secret is, in part, transferred from the state to the individual voter. The question is then how the voters undertake this responsibility.

The security mechanisms of the Norwegian Internet voting trials

The Norwegian Internet voting trials in 2011 and 2013 were largely based on the same principles and security mechanisms. Both years, the trials included security measures that were meant to prevent undue influence through coercion or purchase and sale of votes. As mentioned earlier, Internet voting was only possible in the advance voting period, from 12 August at 9.00am until 6 September at midnight. Voters were able to cast their vote repeatedly in advance, but only the last Internet vote was valid. Voters could also choose whether they would vote via the Internet, cast their votes using the ballot paper, or in both manners. If the paper ballot was used, this could be done in advance or on Election Day. However, where a voter chose to use both methods – the Internet and a paper vote – then only the paper version was valid, irrespective of whether the paper vote was cast before or after the Internet vote.

In short, these measures aimed to secure that nobody but the voter should know which vote was the valid one. If somebody were coerced to vote for a specific party, they could vote again and cancel the first vote.

The regulations relating to trial internet voting describes these central mechanisms in the following way (FOR-2013-06-19-669: § 17):

> *(1) Voters who have previously cast an electronic vote may cast another ballot, either electronically over the Internet or with a ballot paper at a polling station.*
>
> *(2) If a voter has cast multiple electronic votes, the last cast vote shall be approved. A vote cast on paper is final and will annul previous and future electronic votes, if it is approved.*

Regarding (1), 'a ballot paper at a polling station' refers to a paper ballot cast either in the period of advance voting or at a polling station on Election Day.

Moreover, the regulations further specify several principles for the trial which are meant as security mechanisms. The voter's opportunity to verify his/her vote was extended in the 2013 trial as an improvement of the security system. In addition to verify that the vote was registered correctly, it was also possible to verify that the vote was correctly stored in the database of the Internet voting system.[3] The regulations describe the security mechanisms in the following way (FOR-2013-06-19-669: § 5):

> *(1) Internet voting is a supplement to voting with ballot papers.*
>
> *(2) Voters who have cast an electronic vote will be able to vote multiple times, but in such a manner that only one vote will be approved, cf. Section 17.*
>
> *(3) An identification and authentication system for logging on to the Internet voting system shall be used, equivalent to a minimum security level of 3.*
>
> *(4) After casting their votes, voters shall receive a text message on their mobile phones containing a return code and information about the number of changes made on their ballots. This return code can be checked against their polling cards to ensure that their electronic votes have been received correctly and without any changes in the electronic ballot box. Such messages shall be generated automatically by the system without the system knowing the meaning of the codes.*
>
> *(5) Neither third parties, the system nor the election authorities shall be able to obtain knowledge on how individual voters have voted.*
>
> *(6) It shall not be possible for third parties, the system or the election authorities to change the votes cast by a voter without this being detected.*
>
> *(7) The electoral lists shall be presented to voters in an arbitrary order in the Internet voting system.*

[3] Thanks to Christian Bull i KMD for information about the changes in the i-voting system.

(8) Information about how the Internet voting system works shall be made available to the public.

The Council of Europe (2004) has defined a series of standards and recommendations for electronic voting. The 2011 Norwegian Internet election was evaluated by the International Foundation for Electoral Systems (IFES) in the light of these recommendations. Barrat i Esteve and Goldsmith (2012: 32) emphasize that the Norwegian form of Internet voting represents a clear improvement for safeguarding the principle of secret and free voting, compared to postal voting, on account of the opportunity to rescind a vote and the precedence of the paper vote. Further, the authors conclude that the Norwegian Internet voting system complies with the principle of the secret ballot in a manner that satisfies the Council of Europe's recommendations. This applies both to secrecy when the vote is cast, and subsequently (that is, that no one should be able to discover how the individual voter has voted) (Barrat i Esteve & Goldsmith 2012: 28).

Nevertheless, the sufficiency of these mechanisms has been questioned in the Norwegian debate. Some scholars (e.g. Smith 2010) and politicians argue that Internet voting inherently conflicts with the secret ballot – in line with some of the contributions to the international literature, as discussed above.

The outcome of the Norwegian trial

As shown in Table 1, 250.159 electors were included in the 2013 Internet voting trial. The expansion from 10 municipalities in 2011 to 12 in 2013 meant that almost 80.000 more electors had the opportunity to cast their vote via the Internet.

Due to the different context (a local election in 2011 and a parliamentary election in 2013), it is no surprise that the election turnout in all municipalities was higher in 2013 than in 2011. However, what is more interesting is that a larger share of those who voted cast their vote via the Internet in 2013. This is the case when looking at the share of the votes in general as well as the share of the advance votes. In total, 36.4 per cent of valid votes in the 12 municipalities were cast via the Internet. This is more than 77 per cent of all valid advance votes in the trial municipalities. These shares are 10.0 and 4.8 percentage points higher than in 2011, respectively.

Table 1. Pilot municipalities in the 2011 and 2013 Internet voting trials

Name of the municipality	Entitled to vote (electors)[1]		Election turnout[2] *Per cent*		Per cent Internet voters among those who voted[3]		Per cent Internet voters among those who cast their vote in advance[3]	
	2011	*2013*	*2011*[4]	*2013*	*2011*	*2013*	*2011*	*2013*
Sandnes	48 689	46 925	62,7	78,1	27,0	36,8	79,7	83,0
Bodø	36 635	36 310	65,9	78,7	29,1	42,7	70,2	76,9
Ålesund*	34 535	32 320	60,0	76,7	26,4	40,1	70,3	76,7
Mandal*	11 764	10 978	63,0	77,3	19,8	29,1	65,0	69,9
Vefsn	10 456	10 210	59,2	73,6	21,5	33,8	64,2	66,5
Hammerfest*	7 752	7 031	56,4	70,9	25,9	34,8	62,5	67,9
Re*	6 870	6 495	64,0	79,8	22,5	32,1	75,9	79,1
Tynset	4 163	4 031	68,9	79,8	31,6	45,2	79,3	84,3
Radøy	3 687	3 553	67,1	81,6	31,2	40,9	80,8	81,5
Bremanger	2 955	2 767	65,9	76,9	21,0	37,2	67,9	75,0
Larvik	-	32 405	-	78,0	-	29,8	-	73,0
Fredrikstad	-	57 134	-	75,7	-	34,9	-	79,1
Total	*167 506*	*250 159*	*62,7*	*77,1*	*26,4*	*36,4*	*72,5*	*77,3*

[1]Includes the 16 and 17 years old electors in Re, Hammerfest, Mandal, and Ålesund who were entitled to vote in the municipal council elections only in 2011.
[2]Calculated on the basis of voters crossed off in the electronic electoral roll.
[3]These figures are calculated after the cleansing process (i.e. the process to make sure voters get only one approved internet vote and whether the voters have voted on paper). If a voter used a paper ballot, either in the advance voting period or on Election Day, this paper vote would annul the internet vote. These voters are not included here.
[4]Common turnout rate for both the municipal council election and county council election.
*Participated in a trial in connection with the municipal elections in 2011, in which the voting age was lowered from 18 to 16 years.
Source: KMD 2014a.

Nevertheless, the fact that Internet voting was used by many voters did not lead to an increase in overall turnout. Just as in 2011 (Segaard et al. 2013: 10–13), the change in voter turnout in the trial municipalities was in line with the changes seen for the country as a whole (Segaard et al. 2014: 45–46).

Survey data and methodological design

The evaluation of the 2013 trial is based on a representative telephone survey among the electors in all the pilot municipalities. The survey was conducted in the weeks after Election Day, based on a random sample of electors (5.006). 2.003 persons were interviewed. Some of the reasons for non-response are of such a nature that they may be excluded before calculating the response rate, e.g. 'wrong telephone number' and 'not in the target group/illness and such'. Consequently, the gross sample consists of 4.417 and the response rate is 45.3 per cent.

The questionnaire was similar to the one that was used in the 2011 evaluation. Some of the 2011 questions were replaced with new questions while others were taken out

of the questionnaire, but the main structure of the questionnaire as well as the majority of the questions have thus been tested and shown to be reliable.[4]

Internet voting and the secrecy of the ballot: the voters' view

As mentioned above, Norway is in general and compared to other parts of the world characterized by a high degree of confidence in the political institutions and mutual trust among the citizens. Moreover, the two Internet voting trials have escaped any major scandals. It is against this context that voter attitudes to Internet voting and their understanding of the principle of the secret ballot are analysed.

Attitudes to Internet voting

The 2011 survey showed that a large majority of the population in the trial municipalities had positive attitudes towards Internet voting, and thought that it should be possible to vote via the Internet in Norway (Segaard et al. 2013: 13–14). These questions were also included in the 2013 survey, and the respondents' attitudes to these statements are presented in Table 2.

Basically, the 2013 results were similar to those from 2011. A large majority of the electors in the trial municipalities – 94 per cent – agreed that it should be possible to vote via the Internet. More than 8 of 10 respondents had faith in the technology, and thought that Internet voting can be trusted. Even when the counter-argument – the principle of the secret ballot – was explicitly introduced, more than 80 per cent disagreed that Internet voting should yield to this principle. About as many disagreed that Internet voting is a threat to the right of personal privacy.

Table 2. Attitudes to Internet voting in the pilot municipalities. Per cent

	Agree completely	Agree partly	Disagree partly	Disagree completely	N
It should be possible to vote via the Internet in Norway	84	10	2	4	1968
Today's technology is sufficiently secure to rely on internet voting	50	33	9	8	1849
The principle of the secret ballot is so important that Internet voting ought not be implemented	9	10	20	61	1893
Internet voting is a threat to the right of personal privacy	7	11	20	62	1883
Casting a vote at a polling station has a value in itself	40	23	14	22	1954

Question (question order was rotated in the survey): 'I will now read some statements about elections, and especially Internet voting. For each statement, please state whether you agree completely, agree partly, disagree partly or disagree completely.'
'Don't know/no answer' are excluded from the analyses.

[4] For more details about the survey design, see Segaard, Christensen, Folkestad & Saglie (2014).

In short, there was not much reluctance to Internet voting among the citizens in the trial municipalities. However, almost two thirds of the respondents agreed that 'casting a vote at a polling station has a value in itself'. It is apparently possible to appreciate the solemn and ceremonial aspect of voting without rejecting Internet voting, as Ødegård's (2012) qualitative study of the youngest voters in 2011 also showed.

One may object that most people lack the knowledge necessary to judge the security aspects of Internet voting, and that they might not have thought through how Internet voting affects the secret ballot or the right to privacy. And – as we shall see below – people's understanding of the principle of the secret ballot does not necessarily correspond to the legal understanding. It is nevertheless interesting to map what people think about these matters, also because their views might indicate their extent of trust in the electoral process. The legitimacy of Internet voting depends on such trust.

Another objection is that some of the statements may be subject to yea-saying. Only two of the five statements in Table 2, however, are formulated in a way that might increase support for Internet voting. This objection cannot alter the main conclusion: there was broad support for Internet voting in the trial municipalities, irrespective of the question wording.

Attitudes to the secret ballot

The normative question of whether the voter has a *duty* – in addition to a *right* – to vote in secret, is disputed. As mentioned above, the situation is clear according to Norwegian law: the voter has such a duty. But what do the citizens think about this issue? Do they agree with the law, or do they think that there should be no such duty – and ask why a family cannot sit together in their living room and vote, as long as there is no coercion or vote-buying?

In our opinion, this can be described as a grey zone between what constitutes a secret ballot and what is clearly a criminal offence. In this grey zone, we find situations such as a family sitting together on the sofa at home and voting in a manner that makes it possible for everyone to see how the others are voting, but without any pressure on anyone to vote in a specific manner. This is hardly covered by the prohibitions in the penal code against undue influence and the sale and purchase of votes, but it does breach the principle of secret ballot. It might not be a grey zone in legal terms, but in normative terms. Here, we aim at exploring this grey zone.

When votes are cast at the polling station, or in advance at a municipal office, this problem does not arise. The voter has to choose parties or candidates inside a voting booth for parties and candidates. The vote is cast in secret, regardless of whether the voter wants to vote in secret or not. The responsibility to ensure that the voting booth is designed in a way that prevents snooping, and to ensure that nobody follows the voter into the booth, lies with the election authorities. If a disabled person needs help to vote, this must be done by the polling officer – not by family members. Internet voting (and remote voting in general) changes this situation. The state cannot control that votes are cast in secret, when the voting takes place in the living room or by the kitchen table. The responsibility to safeguard the secret ballot thus lies with the voter. The legal regulation that specifies that the voter must 'personally ensure that their

Internet vote is cast in private' may neither be respected nor enforced, unless the voters actually support this norm.

Table 3 shows that a substantial majority of the respondents agreed that Internet votes should be cast unobserved. Yet, 18 per cent disagreed (completely or partly) with the statement that 'When one votes via the Internet, it should be done unobserved by others'. In spite of widespread support for the norm of ballot secrecy, there is also a group of voters who cares less about this principle.

Table 3. Attitudes to the secret ballot in the pilot municipalities. Per cent

	Agree completely	Agree partly	Disagree partly	Disagree completely	N
When one votes via the Internet, it should be done unobserved by others	63	19	10	8	1912
It is not the individual voter, but the state, which should ensure the secrecy of the ballot	58	22	9	11	1864

'Don't know/no answer' are excluded from the analyses.

The statement 'It is not the individual voter, but the state, which should ensure the secrecy of the ballot' gives a somewhat different perspective on ballot secrecy. A large majority – 80 per cent – agreed. On the one hand, that might not be surprising. The electoral process is usually seen as the responsibility of the state. On the other hand, the distribution of answers suggests that most people have not really considered the fact that Internet voting (at least partly) shifts this responsibility on to the voters.

How is the secret ballot understood in practice?

The general questions in Table 3 give valuable, but limited information about voter attitudes towards the secret ballot. Most people think that voting should be unobserved, whereas some voters believe that secrecy does not matter. But in which situations is it acceptable that someone sees that a vote is cast?

To explore how people view the 'grey zone' between the secret ballot and a criminal offence, we developed a survey battery with seven different scenarios. All these scenarios describe situations that may arise when a vote is cast via the Internet. The respondents were asked whether each of these seven situations were acceptable or not. One of these situations is clearly covered by the prohibition against the sale and purchase of votes in the Norwegian penal code. Two situations are completely legitimate: they are not in conflict with the Norwegian Internet voting regulations. The five remaining scenarios lie within what we have called the grey zone: it is a a breach of legal regulations, but not a punishable offence.

Two of the scenarios do not explicitly refer to Internet voting. They may arise also when a paper ballot is cast. The question was nevertheless asked in the context of Internet voting, and there is reason to believe that those who answered had Internet voting in mind. Table 4 presents the distributions of answers. The table is sorted by the share of respondents who found the situation 'completely acceptable'.

Table 4. Perceptions of whether different situations are acceptable. Per cent.

	Completely acceptable	Partly acceptable	Partly un-acceptable	Completely un-acceptable	N
A husband helps his weak-sighted wife to vote via the Internet, and thereby he sees how his wife votes	61	24	6	9	1949
Two friends sit together and vote via the Internet. Both of them see how the other votes	40	22	11	27	1961
A mother helps her son to vote via the Internet, and thereby she sees how her son votes	36	27	14	23	1945
A daughter shows her old father how to vote for a specific party via the Internet*	35	22	15	28	1929
A daughter asks her mother which party she should vote for, and the mother recommends a party*	28	31	17	25	1946
A husband asks his wife to log on to the Internet and vote on his behalf. His wife does this	26	16	13	45	1963
A voter receives NOK 1000 to vote for the party of his colleague	1	1	2	97	1990

Question: 'Now I am going to read some situations that may occur in connection with elections and Internet voting. Please state, for each situation, whether you find the situation completely acceptable, partly acceptable, partly unacceptable, or completely unacceptable.'

'Don't know/no answer' are excluded from the analyses.

* Legal, according to the Norwegian Internet voting regulations.

One of the scenarios in the table was perceived as completely unacceptable by nearly everybody: that a voter sells his vote for NOK 1000. This is not only a punishable offence, but also seen as illegitimate by the citizens. But when we turn to the six other scenarios, public opinion is divided – and not necessarily in line with legal regulations.

A considerable majority – 85 per cent – found it acceptable that a husband helps his weak-sighted wife to vote via the Internet, and thereby sees how she votes. More than 60 per cent found it completely acceptable. It is easy to understand why people accept this situation. This scenario describes a person with is a disability, and she needs help to be able to vote. Many people apparently think that it is better for her to be helped by her husband than by a polling officer. However, this is not permitted according to the present Norwegian regulations.

Neither are the two next situations – which were perceived as the second most and the third most acceptable – permitted. A majority nevertheless found it acceptable that two friends sit together and vote, and that a mother helps her son to vote and sees how he votes. These judgements appear to be inconsistent with the strong support for the principle of the secret ballot, as seen in Table 3. The explanation is probably that we described these two scenarios as quite unproblematic, without any pressure or influence.

When we proceed to the fourth and fifth scenario in the table, we find the only two situations that actually are permitted. These two were, however, accepted by fewer people than the three first ones – but they were still accepted by a majority. In this group we find the scenario where the daughter shows her old father how to vote for a

specific party via the Internet. This is permitted, because the daughter does not necessarily observe that the vote actually is cast. Furthermore, only 59 per cent thought that it was acceptable that a daughter asks her mother which party she should vote for, and the mother gives a recommendation. In principle, this ought to be unproblematic, since it is the daughter who takes the initiative in asking, and the mother does not know whether her daughter follows her advice. It is therefore a surprise that as many as 25 per cent found this completely unacceptable. A possible explanation is that some respondents intuitively perceive this as some kind of undue influence.

The sixth scenario, in which the husband asks his wife to log on to the Internet and vote on his behalf (and she does it) was perceived as unacceptable by a majority. Public opinion appears to be more sceptical to a situation where someone completely leaves the act of voting to others. Still, 42 per cent found this acceptable – perhaps because the situation was described without any coercion or pressure.

There may be objections to this kind of survey questions. In the telephone interview, the respondents were faced with several situations without much time to think about them. The scenarios involve issues that many respondents presumably never had considered before. The respondents simply have not had any occasion to think these matters through. The answers probably express gut feelings, rather than carefully reasoned positions. The unanimous rejection of vote-buying nevertheless shows that the answers are far from random

In any case, we believe that the results from this survey battery indicate something essential: Even though a substantial majority supports the general principle of unobserved voting, this principle is challenged when it is put to the test of concrete situations. Citizens are sceptical to attempts to influence or pressure others, or letting others vote on one's behalf. But as long as the situation does not involve such elements, many are willing to accept that voting is observed by others. This does not necessarily mean that they *themselves* would let anybody see how they voted, but it indicates that a breach of the norm of ballot secrecy will not be met with social sanctions. And the fact that it is not permitted to help a disabled spouse to vote, is simply not accepted by most people.

Conclusions: the secret ballot as a legal principle and a social norm

Even though the Norwegian Internet voting trials will not be continued, our survey has provided information – and raised some questions – about a central democratic principle: How does Internet voting (and remote voting in general) affect how the principle of the secret ballot is understood in practice? Remote voting raises some dilemmas, which are not limited to the Norwegian context.

In the Norwegian case, public opinion is strongly in favour of Internet voting. At the same time, there is solid support for the principle of the secret ballot. To combine these two positions might become tricky, for citizens as well as policy-makers. The basic problem is that Internet voting – at least partly – transfers the responsibility to safeguard the secret ballot from the state to the individual voter. The question is whether the voter is ready to accept this responsibility. The state may provide an elaborate set of security mechanisms, in order to help the voter to keep his or her vote secret. The Norwegian authorities have provided security mechanisms for Internet voting that represents considerable progress, compared to postal voting.

There is still a question of whether the voters actually use these mechanisms when it is needed.

Our survey data suggest that Internet voting (and remote voting in general) may affect the political culture, in a way that makes the secret ballot less of an absolute requirement. The legal framework may not change, but social norms and practices may do so. Regardless of legal regulations, people may ask why they should not be able to decide for themselves whether they want to cast their votes unobserved, as long as they retain freedom of choice.

This freedom of choice will not present a problem for most voters, but groups of vulnerable voters may be more exposed to undue influence than others, or consciously sell their vote. This dilemma has been discussed in previous studies. Watt (2003: 205), for example, describes it as 'a balancing test between the convenience of the many and the possibility that some may be manipulated in the home'.

In this paper, our focus has not been on these vulnerable voters, but rather on the 'convenience of the many'. Our aim was to explore the 'grey zone' between voting in secret and punishable offences such as coercion and vote-buying. We have explored how the voters understand the principle of the secret ballot in practice, and whether this understanding is in accordance with the legal understanding of the principle. A large majority supports the general principle of unobserved voting, but when this principle is put to the test of concrete situations, the picture becomes more nuanced. As long as the situation does not involve coercion and undue influence, many people are willing to accept that voting is observed by others – even if this is a breach of legal regulations. This indicates that the popular understanding of ballot secrecy differs from the legal understanding. Internet voting (and other kinds of remote voting) may thus lead to different social practices and a different political culture, with regard to the principle of the secret ballot.

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