

E-voting in a Small Scale – the Case of Åland

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Abstract. The article describes the process of introducing voting by internet in a small society, the autonomous Åland Islands, which is a part of the Republic of Finland. Åland has a parliament of its own, called Lagtinget, and also 16 municipalities with elected councils. Lagtinget has the legislative authority over the elections for itself and for the councils.

The first discussion on electronic voting started over 15 years ago, but only now is there a realistic plan for an introduction. It starts with a specific part of the electorate in the next elections in 2019 and will be fully developed with general access four years later, 2023. During 2017 it will be decided whether these plans will be realized or not. The main question to be answered is if a good enough system for e-voting can be introduced at an acceptable cost.

Keywords: •Autonomy •Elections •E-voting •Municipalities •Parliament

1 Introduction

The Åland Islands is an archipelago with 6,700 named islands in the Baltic Sea between Finland and Sweden. About 60 of the islands are permanently inhabited. Åland is an autonomous part of Finland, with a parliament of its own, the Lagtinget, which holds legislative authority in a number of areas, but not e.g. when it comes to foreign policy.

The total population is 29,000. The only town, and capital of Åland, is Mariehamn with 11,500 inhabitants. About 15,300 people live in the countryside, within 40 kilometers from Mariehamn, while 2,200 live on islands where you have to travel over the sea to reach the mainland. The most distant inhabited islands are about 2,5 hours distance away from the main island.

Åland is a member of the European Union, but not of the EU tax area. Åland is also demilitarized since the peace agreement in Paris after the Crimean War in the 1850's. Åland has – although its inhabitants speak Swedish – since medieval times been an administrative part of what nowadays is Finland, and was thus a part of Sweden until 1809, a part of Russia until 1917 and since then a part of the independent Finland.

Åland gained its autonomy after a decision by The League of Nations in 1921 as a solution of a conflict between Finland and Sweden on the status of the islands after the Finnish declaration of independence in 1917. Both nations wanted sovereignty over the strategically important islands. The Ålanders themselves wanted to belong to Sweden, where the language and culture were familiar. They

expressed their will by two addresses to the King of Sweden, signed by more than 90 % of the adult population.

As a compensation and in order to guarantee the Swedish language and traditions in the Åland Islands, Finland offered autonomy. The so called Agreement on Åland was then granted internationally by ten nations, among them England, Estonia, Finland, France and Sweden. The conflict was solved peacefully.

The first election for the newly established Parliament was held on the 8th of May, 1922. The suffrage was equal and universal from the beginning, as it had been in Finland since 1906. The voting age was 21. The newly-elected parliament held its first plenary assembly on the 9th of June. The 9th of June is since then celebrated as The Day of Autonomy in the Åland Islands.

Ålanders are also eligible to vote in Finnish state elections for the Finnish Parliament, where Åland has one seat (of 200), for President of the Republic and for the European Parliament. Åland is struggling for the right to elect a MEP of its own, but this has not yet been approved by Finland.

2 Electoral system

The Parliament of Åland, the Lagtinget, has 30 mandates and is elected every fourth year. The election day is always the third Sunday of October. Åland uses open party lists and every candidate has a unique number, which the voter writes down on the ballot paper with a pencil in the booth. The elections are proportional, and the allocation of seats is done by the d'Hondt method. Åland is one single constituency. Around 250 persons use to stand as candidates. In the 2015 election, there were 8 parties competing for the votes. The electorate was about 20,500 persons and the turnout reached 70 % for the first time.

On the same day, also the 16 municipalities elect their councils. The electorate varies from below 100 on the smallest island to nearly 10,000 in Mariehamn, and the number of seats in the municipal councils ranges from 9 to 27.

To be eligible to vote for the parliament you must have The Åland Right of Domicile. This means that you are born by parents (mother) who already has the right, or you must be resident in Åland for five years and then apply for the right. Only Finnish citizens can apply for the right of domicile. The right of domicile also gives you some other rights, e.g. when it comes to possession of land. This is part of the minority protection and stems from the agreement in 1921.

In the municipal elections anyone can vote who is permanently resident in the municipality. If you do not have The Åland right of Domicile, you must have been resident in an Åland municipality for one year before election day.

In both elections you also have to be 18 years old, at the latest on the day of the election. There is at the moment a government proposal with the aim to lower the age to 16 years in the municipal elections from 2019.

In both elections, there are possibilities for early voting. The early voting is arranged 15 to 5 days before election day. There are three different forms of early voting:

1. Early voting at specific early voting polling stations. There should be one such station in every municipality, unless there are certain circumstances, e.g. another station nearby. Most stations are post offices and municipality centers,

2. Early voting at hospitals, homes for elderly people and similar institutions. Municipalities with such institutions set up specific electoral committees who visit the institution and collect the votes from those who live there (not from the staff),
3. Early voting by post. This is the way to vote if you are disabled or if you live outside Åland. You have to contact your municipality and ask them to send you the ballot paper, envelopes and other necessary material, and then you fill in the ballot papers and the enclosed form with information about your identity and return it all. When the letter arrives the electoral committee in the municipality checks the suffrage and after that separates the form from the ballot paper. The ballot is stamped and put in an inner envelope with the secrecy of the voter guaranteed. The inner envelopes are mixed before they are opened on election day, and the votes are counted.

3. The introduction of the idea of e-voting in the Åland Islands

The first initiative on e-voting in Åland was taken already in the late 1990's. It was a political initiative from a future-oriented government minister, who set up an expert committee to investigate different forms of e-voting, especially voting by the internet.

The committee made a comprehensive study with international views. During the investigation, the famous presidential election in USA in 2000 took place, with the scandal with vague ballot papers e.g. in Florida. This resulted in a massive international interest in different forms of e-voting. At that time, no country had yet introduced e-voting in national elections.

The committee produced a report in 2001. In the report it is argued that there are several advantages with voting on the internet, which is the only interesting form of e-voting for Åland, but also some problems. The report ends with the recommendation not to introduce voting by internet until some crucial questions get satisfying answers, most urgent about voter integrity and identification. [1]

Some years later representatives from Åland were official observers in the municipality of Grankulla (Kauniainen in Finnish) in the outskirts of Helsingfors (Helsinki). In the municipal elections in Finland in 2008, electronic voting machines placed in the voting booths were tested in three municipalities, among them Grankulla. Grankulla is a relatively small suburban town with a population of 9,300 and is the richest area in Finland.

The test was a failure, the election was cancelled in all three municipalities and had to be rearranged. The problems resulted from inadequate testing of the software, as is described in the report from the observers. [2]

In 2014, the Government of Åland set up an internal expert committee with the purpose to present reforms in the electoral system, among them e-voting. The committee started its work in 2015 by participating in a seminar on e-voting held in Tallinn in connection with the Estonian Parliamentary Election on March 1st, and also in the programme arranged for election observers.

During 2015, the committee was in contact with local it-enterprises, including banks, and experts. The issue was also discussed in the political reference group which was set up to support the committee and to ensure political input.

In December, the committee arranged an expert-seminar on e-voting. Professor Robert Krimmer from Tallinn Technical University was engaged as key-speaker and moderator. About 30 persons participated in the seminar, both academic and practical experts from Åland and Finland.

The seminar was arranged in order to present the same information and knowledge to the local scene which the members of the committee had gained in Tallinn. The seminar was successful, and even potentially critical participants have accepted internet voting as the solution to some electoral problems in Åland.

The committee presented its final report late 2015. [3] In the next chapter, the proposals in the report will be thoroughly presented.

4. Current proposal

The committee delivered its report in December 2015. In January 2016, the Government of Åland adopted the proposals presented in the report and took steps to realize the proposals. One of the proposals in the report is that internet voting should be introduced in the Åland elections. The introduction is suggested to be fulfilled in two steps: first, in 2019, only persons who live outside Åland, and who therefore are eligible to vote only for parliament, get the chance to vote by internet. The voting will be a form of early voting, which takes place 15–5 days before election day. No existing forms of early voting will be abolished.

In the second step, from 2023, early voting on the internet should be available for all voters, in both elections. Some existing forms of early voting will be abolished.

Today, Ålanders living outside Åland can only vote by post as described above, if they do not want to travel to Åland during the period of early voting or on election day. Åland has no embassies or other official representatives which could arrange elections abroad.

As a result, very few of them actually vote. In the 2015 election the turnout for the group was 20 %. And of all votes sent by post, 10 % arrived too late to be counted.

This group of voters will now grow as a consequence of new legislation on the Åland Right of Domicile. So far, a person keeps full rights up to five years from the date of moving from Åland. Starting from this year 2016, years spent studying will not count, but the five years will start counting after you have finished your studies. As a result, Ålanders will still be eligible to vote after living up to ten years outside Åland.

In the 2015 election, there were 1,205 Ålanders living outside Åland who were eligible to vote. How large the group will be in 2019 is difficult to say, but the number is estimated to reach 2,000. As mentioned above, very few of them usually vote. But the system of voting by post is tricky and slow and does not encourage participation. In fact, voting by internet is the perfect solution to this problem.

In the 2015 election, the election authorities made a little survey to investigate the views of the potential users of internet voting. All who voted by post were asked to answer “yes” or “no” to the question: “would you vote by internet if it were possible?”

Of 115 respondents, most answered “yes”. But 9 said “no”. Here are some of the reactions:

- “But it must be 100 % safe!”
- “With internet any 15 year old can hack the system in a couple of hours and reveal id, choice made and so on”
- “The system should be built with an open source so that I can control its reliability myself”.

During spring 2016 the proposal has also been remitted to all the 16 municipalities and to some other organizations. Most of them are in favour of e-voting, although there are of course some critical remarks.

As no existing means of voting will be abolished in the first step, a person who lives abroad, and who does not want to use e-voting, can still vote by post or chose to come to Åland during the period of early voting or on election day. We will need regulations about which vote will count in case there are two (or more) votes given by one person. The natural solution is to give priority to the manual vote before the electronic.

In the second step, in 2023, the plan is to offer voting by internet to all, and in both elections. This will bring some new problems. As mentioned above, the Åland municipalities are very small. Consequently, the number of e-votes will also be small. The e-votes can always be identified – they differ decisively from the manual votes. And those who have voted electronically can also be identified easily – in fact, they must be noted separately in the register. As a result, we receive information on how a quite small group of people have cast their votes, and this jeopardizes the voter secrecy and integrity. We do have regulations to handle this in our election law, which means that too small amounts of votes from a specific group of voters must be mixed and counted together with other votes.

This leads to the conclusion that as many voters as possible should use e-voting. Other means of early voting must be reduced and more people must be convinced to use electronic voting. We may even have to abolish the main way to vote early, i.e. the voting at post offices, commune centers and the like. This will not be easy, because a large proportion of the electorate use these channels to cast their votes. In 2015, about one third of all voters did so. It takes a highly legitimate and qualitative internet e-voting system to replace such a popular system. The test in 2019 will therefore be crucial.

It is of course also crucial to ensure that the reform will not cause new obstacles for voting; no voter or group of voters should lose their possibilities to participate in the elections. Still, there are many households who do not own a computer, although the information society is quite well developed in the Åland Islands. The amount of computers and smartphones per capita on Åland can be assumed to be on the same level as in Finland or Sweden. [4]

5. Challenges

The plan for introducing e-voting in the form of voting by the internet is not a small challenge to our electoral system, or to the Åland government and society. Our electoral administration is usually not even a permanent institution, but is being set up for the election year, i.e. every fourth year. This leads to a lack in continuity.

The laws and regulations concerning the elections in the Åland Islands are very much built on the electoral system in Finland; we share a common history and also Ålanders can take part in the Finnish state elections. Therefore, it has always been regarded as important that the electoral systems should not differ too much from one another. Unfortunately, Finland is not for the moment planning to adopt electronic voting in general elections in the near future. There is, though, a fresh initiative to develop an internet voting system for local referendums, which are quite regular in Finland.

A local referendum has not yet been arranged in the Åland municipalities, but the possibility is there. It is a part of the plan to make it possible to vote by internet even in local referendums, if the council in the municipality in question decides to arrange it. If so, they can use the Finnish system, which by then hopefully will be in use. Some local referendums can be anticipated in the forthcoming years, resulting from ongoing discussions on reforming the local administrative structure.

The introduction of voting by internet also puts Åland in front of some challenges of a more direct, “local” kind:

- The small scale, which means that the number of electronic votes will be relatively small; it is a great risk that the cost per vote will be high,
- How can we reach Ålanders living outside of Åland with information and – perhaps – with login codes or similar?

It is a part of the current electoral procedure to send information cards by post to every voter with a known address. But those who have unknown addresses? Many of those who live abroad will have unknown addresses.

Registration of citizens is carried out by the Finnish Population Register Centre even in the Åland Islands. But registers are not automatically updated regarding citizens who live abroad on a permanent basis. Often, the first foreign address is registered, but after a few years people tend to fall out of sight. It is easier of course with young people studying abroad: they still have parents and family in Åland, and they get loans and grants for their studies from Åland and their addresses are therefore known to the authorities.

But now it also becomes more in everyone’s own interest to inform the Åland authorities on his or her whereabouts. This is due to the above mentioned new regulations concerning the right of domicile. The authorities now have to send you a hint when you are about to lose your right of domicile. People will therefore also have a strong incentive to keep their address up to date.

How effectively these new procedures will work remains to be seen, but it will certainly help.

The introduction of internet voting also demands changes in the electoral legislation. This process is planned to start in 2017, and the required detailed paragraphs should be presented to the Parliament late 2017 or early 2018. In fact, the whole election act is to be renewed as suggested in the 2015 report. The renewed act should be in force at least one year before the election in October 2019.

It will be a great challenge for the law-making system to produce the regulations needed, as there are very few examples and experiences to draw from in the neighborhood: neither Finland or Sweden are at the moment planning any introduction of e-voting, and it is there we usually find models for our legislation in new and complex fields.

6. What happens now?

During spring 2016 the committee’s report has been remitted to municipalities, political organizations and other stakeholders. But the process to adopt internet voting has already started. The Åland Government decided in January to start preparing the necessary documentation in order to present the project in detail and start looking for possible vendors, hopefully by the end of 2016.

Only after that it will be decided whether to go on and really prepare an internet voting system for 2019. If the costs are too high, there will be no system. The quality of the system has nevertheless to be high. The report states that “The system must meet internationally adopted standards with regard to function and security”. This means that we for example with deep interest follow the work of the E-Voting Committee in the Council of Europe, which is currently updating their e-voting recommendations. The cost limit is not yet decided, but there will be some resources reserved in the government budget for 2017.

In 2018 the system will be tested, and well in time before election day in October 2019 everything should be working perfectly. This first step does not necessarily involve many persons on the administrative side, which means that we do not have to educate a lot of local officials in handling the system. The second step in 2023 will include some more persons.

Along with the testing it will also be necessary to start working with with information and education of the voters. There will be a need for some special efforts during the election year 2019 to reach the target group, i.e. Ålanders living outside Åland.

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Legislation

Självstyrelselag för Åland (The Åland Act of Autonomy).

Landskapslag om lagtingsval och kommunalval (The Åland Election Act).

Landskapslag om rådgivande kommunala folkomröstningar (The Åland Act on Local Referendums)

General online information about Åland

www.aland.ax (the official Åland website. Some information in English)

www.asub.ax (website for ÅSUB, Statistics and Research Åland. Some information in English)

www.regeringen.ax (official government web site, only in Swedish)

www.val.ax (official election website. In Swedish, but with information leaflets available also in English, Estonian, Latvian, Romanian, Russian and Thai)

www.visitaland.com (general information for visitors, some parts available in other languages).