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# country report

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## „Swish and Vote“ in Estonia – voting via smartphone soon?

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**After five years, the European Parliament elections will be held again in 2024. From June 6th to June 9th, 2024, over 448 million Europeans will be asked to cast their votes for various parties. People in Estonia are waiting with anticipation for the next European elections. If the current Estonian government of the Kallas III cabinet (centre-left coalition) is successful, Estonians will be able to cast their votes via smartphone for the first time in this election. Is this the next step in the progressive digitalisation of the country, or a neck-breaking move at the expense of democracy?**

Estonia has been a member of the European Union since 2004 and is one of the role models for the successful digitalisation of a state's administration. The country likes to call itself "e-Estonia". Many procedures, such as the issuing of medical prescriptions, tickets for public transport and the digital school system, are carried out digitally as standard in the northernmost of the three Baltic States. E-voting has also been in place since 2005, when Estonia introduced a computerised e-voting system for all levels of government. Estonia is now taking the next step towards digitalisation: voting by smartphone.

Until now, voting in Estonia has traditionally taken place in polling booths or via e-voting. In Estonia, electronic voting via the internet using private devices is referred to as e-voting. E-voting allows voters to cast their votes electronically not only on election day itself, but also several days in advance. In most cases, e-voting is possible for one week before the official election day. A vote can also be changed as often as desired until the polling stations close. 1.2 million Estonian voters can cast their votes for the election from anywhere in the world with internet access. The anonymity of the vote is guaranteed. E-voting in Estonia is carried out using a multi-level security procedure. This is to ensure that the voter is the

person entitled to vote and that the vote is transmitted secretly and encrypted. The Estonian ID card is the basis for this procedure and provides a digital signature.

### **Multi-level security procedure for e-voting**

This digital signature allows the voter to log in with a special card reader and to be identified by a personal identification number (PIN). If the information is the same, the voter can access the list of candidates. A second code is generated for the vote, which acts as a digital signature. The vote is then transmitted in encrypted form. As mentioned above, the vote can be changed several times, and only the last electronic vote submitted is counted in the election. At the end of the election, the electronic data pool is cleansed and decrypted for counting. However, traditional voting is still possible in Estonia. In this case, only the "offline vote" in the polling booth counts for the election result. Only after the end of the election, the votes submitted online are compared with the votes submitted traditionally to avoid double voting. However, individual voters cannot be traced back. The procedure undergoes strict monitoring, which largely rules out election manipulation in Estonia.

### **Parliamentary election 2023: for the first time more votes online than offline**

Voters in Estonia have been able to use e-voting since 2005 (for reference: this was when Angela Merkel took office for her first term as German Chancellor, and it would be another two years before the first iPhone was launched). In that year, only two percent of eligible voters voted online. But over the years, Estonians have become increasingly comfortable with electronic voting. In the 2019 election year, around 28 percent of eligible voters used e-voting. The proportion of e-voting users increased with each election. In the 2023 parliamentary elections, e-voting reached a record high with 51% of all votes cast online, surpassing physical votes for the first time 18 years after its introduction.

### **Estonia - a blueprint for success?**

Why is online voting so successful in e-Estonia? Firstly, it is important to note that Estonia, with a population of 1.3 million, is a small country, even compared to other European Union member states. Only Luxembourg, Malta and Cyprus have smaller populations. This makes it structurally easier to introduce and successfully implement an electronic voting system. E-voting is an attractive option, particularly for Estonians who are abroad or travelling. It allows anyone to cast their vote from anywhere in the world. Estonia only regained its independence and developed democratic structures in 1991, so political electoral structures are still dynamic and changeable. Estonia demonstrated a high degree of networking and internet affinity early on. In 2006 around 52 percent of the population had an internet connection.

Estonia has made e-commerce (all digital processes related to the sale and purchase of physical and electronic products and services) and e-government (digital services provided by the state) the norm for decades. The legal basis for a digitalised vote count was passed back in the early 2000s, and the electronic ID card was introduced in 2002. In contrast, Germany only introduced the ID card with a chip in 2010. Thirteen years later, less than eight percent of the population actively uses it. Estonians' high willingness to transfer sensitive data via the internet also demonstrates their great trust in new technologies: Citizens'

trust in Estonia's digital services is around 82 percent, making it one of the highest values for citizens' trust in national governments within the EU.

### **Swipe to vote soon?**

In November 2023, the Estonian government announced the next step in e-voting: mobile voting via smartphone, or 'm-voting' for short. The new voting method is planned to be ready for use by the next European Parliament elections in June 2024. The Estonian Minister of Economic Affairs and Information Technology, Tiit Riisalo, declared that voting apps would be developed for all major smartphone operating systems, with a focus on technology neutrality. Only secure technologies that are used by the population will be employed. The national electoral commission is responsible for ensuring this. The new m-voting should be just as secure as the previous e-voting via computer. Riisalo confirmed the intention to implement the new way of voting as early as the European elections. Voting via smartphone should be possible by the next local elections in 2025 at the latest.

In September, the Estonian Ministry of Justice submitted a draft law to the government that would establish basic requirements and a standardised framework for all forms of electronic voting. This would include voting by smartphone. But the government's draft amendment to the Electoral Code was heavily criticised. The National Election Committee considered it impossible to implement smartphone voting so quickly. In particular, the verification of the app in the app stores, the authenticity of the voter application and the verification of the votes cast would be not guaranteed.

### **National Election Committee: Rushed introduction**

The chairman of the National Election Committee, Oliver Kask, expressed concern that the secrecy of the ballot, transparency and the fundamental credibility of the elections would be jeopardised by a hasty introduction. In addition, a statement from the National Election Committee to the Estonian Ministry of Justice highlighted the uncertain compatibility of smartphone voting with the European Union's General Data Protection

Regulation. The companies managing the app stores would have access to information about which users had downloaded an election app onto their smartphones. Nevertheless, Kask sees potential in the introduction of smartphone voting. But it needs to be accompanied by risk reduction and social and political consensus as a result of debate.

In November, the Ministry of Justice submitted a draft law to the government for identification via smart devices, laying the groundwork for voting via smartphones. In addition, this draft law corrects some deficiencies in e-voting identified by the Supreme Court and further defines the procedure for voter identification in e-voting. However, the November draft does not appear to be significantly different from the draft criticised by the Election Committee in September. The draft was presented to the public on the 9th of November 2023. The Constitutional Committee of the Estonian Parliament supported the government-initiated draft and submitted it to the Estonian Parliament (Riigikogu) for its first reading on 21st of November 2023. Once again, the National Election Committee criticised the government's draft. The deputy chairman of the committee explained that serious difficulties with m-voting had not been considered in the draft. Procedures and results were neither transparent nor verifiable. The draft only focused on cosmetic problems. In addition, the planned introduction of m-voting has been criticised by national politicians.

In a statement in Postimees, Estonia's largest daily newspaper, former Estonian Environment Minister Erki Savisaar of the Centre Party (centre-left) pointed out the lack of concrete technical solution strategies for m-voting and is sceptical about the necessary security for this type of voting. Electronic voting would require additional

controls compared to traditional polling stations. The use of facial recognition, the expansion of vote counting centres and the involvement of universities in the vote counting process should also be considered.

### Conclusion

As one can see, the small country has big plans: Estonia wants to become a pioneer for voting via app in Europe. But these plans are not without their problems. A number of issues stand in the way of the introduction of m-voting. They are more diverse than the government's current draft suggests. In many areas of e-governance, Estonia, or e-Estonia, is a model from which other countries, such as Germany, can learn and adapt. Many processes in everyday life function without any problems, and Estonians have a high level of trust in their country's digital infrastructure. Trust in e-voting via computer and digital identification is equally high. This should not be gambled with recklessly. If an immature bill to introduce e-voting in Estonia is passed by parliament and used as early as the 2024 European elections, this trust could be lost. If m-voting is used hastily, manipulation cannot be ruled out and compliance with the standards of democratic elections cannot be guaranteed. The Estonian government should thoroughly prepare such a far-reaching step in the electoral system and solve technical problems in cooperation with the National Election Committee. M-voting offers a step into the new everyday world of smartphones. However, this step must be carefully considered, otherwise there is a risk of losing democratic principles.

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