



# Study on the Benefits and Drawbacks of Remote Voting

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## Executive summary

**Context.** Participation in elections in Europe has decreased, on average, in the past 25 years. While this is the case for national elections on average across Europe, turnout is particularly low for European Parliament elections in some countries, ranging from 89.6% in Belgium to 13.1% in Slovakia in the 2014 vote. Moreover, these elections saw the lowest voter turnout on record at 42.5%, down from 43.0% in 2009 and well below the 62.0% recorded in 1979.<sup>1</sup> The Commission's 2015 report on the 2014 EP elections concluded that 'looking ahead to the 2019 elections, it is important to [...] examine further, and seek to address, the reasons for the persistently low turnout in some Member States'. Electoral processes, technical solutions and attitudes towards voting solutions vary greatly across Member States. Understanding this diversity and how it affects turnout is a first step to take in order to then understand how the provision of alternative means of voting may increase participation.

One of the aspects of voting that presents the greatest diversity across Member States is the extent to which they facilitate 'remote voting solutions'. In July 2018 the Council adopted a decision amending the 1976 Act concerning the election of the members of the European Parliament by direct universal suffrage. The decision indicates that 'Member States may provide for the possibilities of advance voting, postal voting, and electronic and internet voting, in elections to the European Parliament.' It added that, in doing so, 'they shall adopt measures sufficient to ensure in particular the reliability of the result, the secrecy of the vote, and the protection of personal data'. In the preamble of this decision, the Council mentions these possibilities as a way to promote participation.

Remote voting has the potential to foster participation of electors living abroad. In the EU, 3.4% of the EU population aged 15 or older are mobile citizens. These are citizens from an EU country living in another Member State.<sup>2</sup> Moreover, around 35.5 million Europeans have emigrated to another country (either within the EU or outside).<sup>3</sup> Where specific national legislation entitles these individuals to vote in their country of origin, remote voting solutions can help them exercise their voting rights. Furthermore, individuals living in their country of citizenship may also benefit from remote voting if they are unable to reach the polling station on election day for personal or professional reasons.

This study examines the practice of remote voting in EU Member States. We define **remote voting** as:

Those mechanisms that allow electors to vote by means other than by casting their ballot in person at the standard polling station assigned to their district of residence, either if they are abroad or within the country. It comprises both electronic voting and non-electronic voting mechanisms.

**Objectives.** The rationale behind remote voting solutions has traditionally been to remove the obstacles that may make voting more difficult for some citizens than for others. While it is widely accepted that remote voting solutions facilitate voting, there is less consensus about their potential to increase participation. Moreover, there are concerns regarding whether remote voting can offer the same level of security for the secrecy and integrity of the ballot as voting in person in a standard polling station.

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<sup>1</sup> European Parliament (2018c).

<sup>2</sup> Eurostat (2017).

<sup>3</sup> United Nations, Department of Economic and Social Affairs (2015).

The purpose of this study is to contribute to this discussion by examining the landscape of remote voting practice and outcomes in use in Europe. To this end, the study examines the barriers to voting encountered by different groups of citizens and mapped the different types of remote voting solutions available in EU Member States. It also outlines the benefits and drawbacks of these remote voting solutions.

This study is part of a series of projects delivered for a European Parliament pilot project which collectively “look into the potential benefits of alternative arrangements with a view to tele-voting, focusing on the advantages of an e-voting system, and produce a tele-voting good practice guide on the basis of a detailed study.”<sup>4</sup>

**Methods.** Our analysis is based on the principle of mixed-methods and data triangulation, which consists of using different sources of data and collection methods to reinforce the robustness and solidity of the analysis. Firstly, a literature review was conducted to get a detailed understanding of the current evidence base. Following that, a review of national-level laws and documentation was undertaken in order to adequately assess the current landscape of remote voting across Member States, as well as the main policy debates and any future plans related to remote voting. This information was shared for validation with Member State representatives working on electoral matters. Country representatives filled the missing gaps during an in-depth interview or by submitting written comments.

Interviews were also conducted with a wide range of stakeholders (local public authorities, political parties, academia, industry, and non-profit organisations), in order to collect key insights. These were used to inform 15 thematic case studies. These are not case studies in the traditional academic sense, but instead aim to illustrate different aspects of remote voting implementation. The cases are set out in three main groups: case studies which examine aspects of the remote voting process; case studies which detail the experience of remote voting for specific groups; and case studies which provide examples of EU Member State experience of internet voting implementation.

Lastly, an online survey was conducted with an online panel of 700 internet users in three EU countries: Germany, Italy, and Poland. The survey had the objectives of (1) measuring the intention to use internet voting and other remote voting options; (2) testing to what extent internet voting and postal voting can increase turnout rates and (3) identifying drivers and inhibitors that explain which people are most willing to use internet voting.

### **Findings: types of remote voting**

The study categorised remote voting methods available in Member States into **seven main types of remote voting**: voting by post, voting by proxy, voting in person from abroad (e.g. in a consulate), voting at a special polling station inside the country (e.g. in a hospital or prison), voting at a mobile polling station, voting at any polling station in the country (implying that people can vote outside their district of residence), and internet voting.<sup>5</sup> When voting from abroad, the most common voting options are voting in person and voting by post (both are available in 19 Member States and 11 offer both options). For those voting from within their country of residence, the most common procedures by which voters can cast ballots remotely in EU countries are by voting in a mobile polling station or in another district (these are available in 17 Member States).

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<sup>4</sup> European Commission (2016c).

<sup>5</sup> The literature sometimes uses the term ‘e-voting’ to describe ballots cast online. We use ‘internet voting’ here to distinguish this method from voting at electronic voting machines (EVM) at polling stations, which is also referred to as ‘e-voting’ in some quarters.

**Voters in EU elections have different voting experiences across EU countries**, as the voting options available to citizens depend on their Member State of residence and origin. In order to ensure equality of access to the vote among EU citizens it could be argued that the voting options for the European Parliament should be the same in all Member States. Nonetheless, harmonising the options across Member States may face some barriers, including that (1) it may conflict with the voting traditions in each particular Member State, and (2) some options may not be acceptable for some Member States, as each remote voting option presents some vulnerabilities or additional administrative costs.

### **Findings: Impact of remote voting options**

**Remote voting options offer increased accessibility**, as they benefit some specific citizens who, due to their personal circumstances, are otherwise not able to vote or have more difficulties doing so. These include, among others, voters who live in remote areas, those who live abroad, those who may find voting difficult for health reasons, and those who cannot leave the place in which they are residing at the time of the election (e.g. for example, because they are hospitalised or in prison).

However, there are also **several drawbacks relating to each remote voting option**. In this regard there is no 'golden solution' to facilitating access to the ballot as each option has its own advantages and shortcomings. Some of the vulnerabilities of remote voting include: the difficulties of accurate voter identification, of ensuring the secrecy of the vote and that people vote without being subject to coercion; the risks that results could be manipulated; and dependency on the performance of the postal services or technology (e.g. internet connection, devices used for voting). Moreover, countries may face additional costs or administrative difficulties in implementing particular remote voting solutions, depending for example on the size and distribution of their diasporas and the nature of their electoral system.

It is important to stress that the outcomes of a remote voting option (e.g. the impact on turnout, its costs, and the level of acceptance among the population) may also depend on **how the solutions are designed and implemented**. There are several features that need to be determined within each voting option, which provide different degrees of convenience and guarantees relating to ballot secrecy, security and integrity. For instance, in some countries, citizens residing abroad automatically receive the ballots to vote by post, while others need to submit a specific application to use this option. The latter places an extra burden on voters. When voting using a mobile ballot box, some countries apply additional provisions to reduce the risk of coercion, such as having members of the electoral or police authorities visiting the voter's location to supervise proceedings. The option of voting in another district may increase the risk of double voting, although some countries have a system in place to check whether a person has already cast a ballot. Lastly, some internet voting systems allow citizens to cast multiple votes, as a mechanism to counter coercion, while others admit only one vote per person.

**Evidence for the effect of postal voting on turnout is mixed**. The literature review found some studies which report that postal voting has positive impacts on turnout, but others that report no effect or a negative effect. Our online survey showed that postal voting had little impact on likelihood and intention to vote in Italy and Poland (the impact in Germany was not examined, as postal voting is already available). Therefore, it is not possible to state with any certainty that postal voting would increase turnout. In practice, the impact of postal voting may also depend on the other remote voting options available. Moreover, other dynamics, such as political engagement and whether voting is mandatory, may also be important factors.

**The impact of internet voting on turnout is unclear.** Several studies in jurisdictions that have tried internet voting report high levels of satisfaction from voters and/or willingness to use the option again. However, the literature examining the impact on voter turnout presents mixed results. Some studies have observed an increase in turnout, while others found no such effect. Moreover, due to the nature of elections, experimental research comparing the impact of a remote voting option with a control condition is difficult to conduct. Our online experimental task showed that the existence of internet voting sometimes had a positive effect on likelihood to vote, but not in all situations. In Poland this effect was found when the variable of having voted in the previous European election was taken into account. In Germany, when this variable was considered, internet voting did not have a significant impact under 'normal circumstances' (i.e. when the voter does not face any special barrier to go to the polling station to vote). In Italy, internet voting similarly did not have a significant impact on likelihood to vote under 'normal circumstances'. In the other situations (being abroad and having a temporary disability), internet voting showed a significant impact except when the variable of having voted in the previous European election was introduced in the situation in which the voter is abroad. It is also important to note that participants preferred internet voting over voting by post. Nonetheless, it is not possible to state with any certainty that implementing internet voting will increase turnout. In practice, any impact on turnout may depend also on other features of the electoral system, such as the existing remote voting options available to the voter.

The results of the experiment we conducted, as well as data from the 2016 Eurobarometer survey focusing on electoral rights, suggest that **citizens generally view internet voting as convenient, but they also have some concerns** related to it (e.g. regarding usability, fraud, secrecy and other security issues). However, the extent to which these were highlighted as concerns by the majority of the population differed across Member States.

**The impact of internet voting on costs is unclear.** It is often argued that an internet voting system would be cheaper than other voting options. Indeed, some interviewees from Member States' bodies responsible for electoral matters did consider that it could reduce the costs of elections. However, there is no clear consensus in the literature as to the relative cost-effectiveness of remote voting systems. In fact, few authors have focused in detail on the comparative costs of internet voting relative to other systems. Internet voting implies some costs related to software development, testing and implementation. However, it is important to consider any costs and savings in the context of multiple elections over a longer period. Costs may also depend on the design of the voting system and the overall combination of voting solutions offered.

The results of the online survey of German, Italian and Polish respondents showed that respondents generally preferred to **vote from their PC** compared to voting from a smartphone; **to use their existing browser** compared to using a specific app or programme; and that they preferred to **receive their identification codes once by post** compared to a two-step identification process (by post and by SMS) Although the latter seems to indicate that voters value ease of use, it should be noted that the option of receiving only a set of codes by post, compared to multi-step identification, may entail higher risks (as somebody could steal these codes and access the system on behalf of the eligible voter). Therefore, public institutions should ensure that, apart from being user-friendly, the mechanism chosen for identification also considers security factors.

While lots of early trials or pilot projects with internet voting took place in early 2000s and 2010s, fewer have taken place in recent years. Estonia is the only Member State that has fully implemented internet voting. In France, it was used for overseas voters in the 2012 legislative elections, but it was not used in 2017. However, there has seemingly been **renewed interest**

**in a few countries in exploring internet voting solutions** in the coming years. At the time of writing, plans to trial internet voting have been announced in Bulgaria, Sweden (at local and regional level) and in Wales (UK), and a consultation on electoral reform is being undertaken by the Scottish government, including on issues of internet voting. Nonetheless, concerns over the potential cybersecurity risks of electronic voting systems – and the potential consequences for the legitimacy of election results and ballot integrity – remain.

Apart from being used for casting a ballot, **digital tools can also be employed in other parts of the voting process** to increase accessibility and reach. For example, several countries allow voters to submit online applications to use a specific voting option, and have implemented IT systems for voter registration, for counting the votes and for transmitting the results. Moreover, some countries (for example, Lithuania and Romania) use an IT system to check on election day whether a person willing to cast the vote is registered in the electoral roll and whether this person has already voted at another polling station elsewhere in the country. The Netherlands delivers voter passes by email to those living abroad, while the UK uses scanning machines to validate signatures in postal voting. In Croatia voters can use an online application form to change their polling station (with the option to select any location within the country or abroad) until a few days before an election.

## **Conclusions**

The **options for remote voting vary greatly from one country to another**. The way these options operate in practice also differs across countries. This may depend for example, on the electoral system, the method by which voters are registered, the design of the solution, demographic factors, and the aspects of the voting process (such as ballot secrecy) most valued by the population.

This implies that in European elections, **citizens vote under different systems**. While proposing a common approach to the availability of remote voting for European Parliament elections would reduce the complexity of the current status quo, it would also affect the prerogatives of Member States. It should also be stressed if such an approach implied a reduction of the remote voting options in any particular country this might not facilitate participation and might be undesirable.

Each remote voting option has its **benefits and drawbacks**. Remote voting can help **facilitate the act of voting** for several groups of voters such as those who live abroad or in remote areas, people in poor health, and those who cannot leave the place in which they are residing at the time of the election. The extent to which remote voting solutions can help citizen of no fixed abode is less clear, since the issue linked to their participation has more to do with whether and how they can register and receive their voting material, rather than how they can cast their vote.

While remote voting options can increase accessibility for voters, they may also present **issues relating to electoral legitimacy and additional administrative burdens** for the state. For example, verifying the identity of the voter and observing the election may be more difficult than in the traditional polling station settings.

There is currently **little evidence about the impact of remote voting solutions**, including the consequences for turnout and costs. Moreover, the outcomes may depend on the context and on how the voting options are designed and implemented. Therefore, expectations for what remote voting solutions can achieve should be managed with caution and backed up with evidence that takes into account the context in which it was generated.



It is also relevant to stress that there is a wide range of factors which may affect turnout. Therefore, Member States seeking to increase turnout may instead need to apply a **package of measures** including, for example, new or improved remote voting options, awareness-raising campaigns, and strategies to increase the trust in EU institutions and political actors in general.

Lastly, it is important to be aware that the outcomes of remote voting options may also depend on the **specific design of the remote voting system** and on whether this design adequately balances convenience for the voter with strong protections for the security of the ballot.