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(Un)ready for change? The debate about electronic voting in Portugal and its implementation before and after the pandemic era

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The use of electronic voting has been considered an important tool to improve electoral processes in some circumstances, with potential effects in party-voter linkages and participation. However, many countries are skeptical in adopting this digital tool and there are relevant shortcomings in the implementation of electronic voting. Despite favorable conditions for the innovation in voting mechanisms, Portugal is one of the countries still considering the possibility to introduce e-voting. This study argues that we need to consider not only the context in which e-voting takes place, but also the key role of party agents. Drawing on interviews with party officials and experts, primary data collection and media sources, this paper shows that in Portugal e-voting is not regarded as a potential tool to improve the electoral process due to the high level of trust and quality of traditional voting mechanisms, as well as due to the divergent interest of political parties. In addition, party organizations are not familiar with the use of digital tools in terms of grassroots mobilization. Overall, the findings indicate that party barriers are also key for allowing the (non)adoption of e-voting.

KEYWORDS

electronic voting, online voting, political parties, electioneering, electoral systems, Portugal

Introduction

Electronic voting (e-voting) has been facing uneven support across the time. A few years ago, e-vote would seem the solution for most problems of democracies, even consolidating ones (Alvarez and Hall, 2008; Krimmer, 2012; Trechsel, 2016; Hao and Ryan, 2017, Krimmer et al., 2017). The adoption of electronic vote was seen as making voting easier, reducing errors in the system, bypassing effects of corruption and inaccurate voters roll and even solving political distrust and low voter turnout (Mohen and Glidden, 2001; e.g., Mercurio, 2004). However, in recent times the interest for electronic voting seems to be decreasing (see Darmawan, 2021). International scandals, such as Cambridge Analytica and others, pose fears of foreign interference in critical systems as voting (e.g., Scott, 2019). Technology presents many challenges, thus requiring effective gains that

could support its adoption (see [IDEA, 2011](#)). Furthermore, there is no clear evidence that electronic vote would favor higher participation, especially among the youngsters (e.g., [Vassil and Weber, 2011](#); [Germann and Serdült, 2017](#))¹. The Covid pandemic, starting in 2020, expanded the use of special voting mechanisms ([OSCE/ODIHR, 2020](#)), but the adoption of e-voting was still scarce. Nevertheless, there seems to be an ongoing debate on its use, which is low-key but persistent. As [Vegas and Barrat \(2017, p. 75\)](#) put it, “E-voting is being used, or at least considered, almost worldwide. And right now there are already good and bad experiences.” This means that the context is crucial to shape arguments pro and against the adoption of e-voting. This paper contributes to this debate by investigating the case of Portugal, exploring particularly party agents’ arguments and the role these may play on the implementation (or failure) of this reform.

This paper focuses on electronic voting—defined as “the use of information and communications technologies applied to the casting and counting of the votes” ([OSCE/ODIHR, 2013, p. 4](#))². This broad definition is also in line with the Council of Europe, which in 2017 expanded their concept of e-vote to include counting devices as well. The Council of Europe definition is “the use of electronic means to cast and count the vote” ([Council of Europe, 2017](#)).

We use the Portuguese case to analyze which factors can lead to the adoption (or not) of electronic voting. Our working hypothesis is that there is no deterministic trend in the adoption of e-voting, even if there are favorable conditions for the implementation of this electoral reform. Indeed, in Portugal there has been a growing use of electronic technologies throughout the electoral cycle. One of the main steps in this direction was taken in 2011, when a major reform entered into force regarding voter registration. Several public identification databases became interconnected, and any changes on civil identification, including address, would be automatically reflected on voter registration. Voter id cards and numbers were also suppressed. Electoral modernization through new ICT (information communication technologies) intended not only to improve voting procedures but also to facilitate voter participation, two important aspects linked to the adoption of e-voting systems (see [Dolatabadi, 2016](#)).

In recent years, important mechanisms relying heavily on ICT have been adopted within the electoral process. A simplified modality of early vote was also adopted for the Portuguese 2019 parliamentary elections. Again, registration for this would

take place mostly through a centralized database, within the Ministry of Internal Affairs. Voters would register for this special voting arrangement (SVA) mostly through a website; these data would then be shared with the 308 municipalities for purposes of organization, logistics and others. These changes were possible because of the widespread trust toward the electoral management bodies, namely the National Electoral Commission (*Comissão Nacional de Eleições*, CNE) and the Ministry of Internal Affairs, trust being an important pre-requisite for the introduction of e-voting ([IDEA, 2011](#)). Recently, in 2020–2021, a few more electronic platforms were created to be used within the electoral cycle. These included registration for early vote also by people with Covid or in confinement, gathering support signatures for candidacies from groups of voters in local elections (the only case where groups of voters outside political parties can run for the election), poll workers, among others. At the same time, in 2018 there was a pilot experiment in Portugal for the use of electronic voting for the diaspora. However, the adoption of electronic vote was never debated and the topic was never prominent in Portuguese society. In addition, the use of digital technologies in the electoral process has not been a main concern for the main political parties, demonstrating high levels of trust on this ([OSCE/ODIHR, 2021](#)).

Given this context, the Portuguese case reveals an interesting paradox. On the one hand, the Portuguese electoral system relies more and more on the use of new ICT, with a high level of confidence and success. Technocratic tendencies to simplify the functioning of public administration are also incentives to expand innovation through digital tools in the electoral process. On the other, the use of electronic vote was never in the agenda of the main political parties—except for out of the country vote, where it seems to be quite consensual. In addition, the use of e-voting is prominently absent from any debate on electoral system reform. Therefore, our key question is: why has e-voting displayed a low salience in the rhetoric, strategy and programmatic stances of Portuguese parties? This article investigates in particular the role of party agents on the debate on electronic vote in Portugal. Drawing on interviews with party officials and experts, primary data collection and media sources, we argue that three main factors explain the Portuguese paradox. First, the marginal gains of adopting e-voting are very low because traditional alternatives have performed rather well. Second, consensus regarding electoral reforms is difficult to achieve because of divergent interests among parties and due to the uncertainties that the adoption of e-voting would entail. Last but not least, parties do not consider e-voting as a useful tool for improving democratic representation and they do not make an extensive use of new ICT in their internal functioning (see [González-Cacheda et al., 2022](#)).

This exploratory study aims to shed light on the conditions that facilitate (or constrain) the adoption of e-voting. This case is not only representative of the large group of countries that are considering the adoption of new voting technologies in the

¹ However, a recent study found that e-voting has a significant impact in mobilizing abstentionists and occasional voters ([Petitpas et al., 2021](#)).

² The terms “electronic voting (e-voting)” or “new voting technologies” are used in this text interchangeably. They include the use of electronic voting systems, ballot scanners and Internet voting (remote electronic voting).

electoral process, but also of advanced democracies that meet most of the pre-requisites for the introduction of electronic voting. Besides this, it presents some peculiarities that make this case study particularly worthy of examination. First, because it is a country with one of the highest emigration rates of the EU and one where non-resident citizens are entitled to vote in most elections (presidential, legislative and European Parliament). Therefore, electronic voting could be a useful instrument to facilitate emigrants to vote and to participate in national political life. Second, Portugal presents one of the lowest turnout rates of Western Europe, with a steady decline since the 1990s. Indeed, over the last decades Portugal has shown a level of participation significantly lower than the average of Western Europe, displaying figures similar to Eastern European countries. Therefore, political observers and politicians have been strongly concerned with the introduction of reforms and innovative tools that can enhance citizens' engagement in politics and that can foster electoral mobilization. Third, the political landscape has seen the rise of new political actors, which have not only endangered the "monopoly" of representation of traditional parties, but they have also benefited from (and are familiar with) the new digital environment. Five parties have gained parliamentary representation during the democratic period: the two moderate parties, PS (Socialist Party) and PSD (Social Democratic Party), which have alternated in power through single-party or coalition governments, the right-wing CDS and two left wing parties, namely the PCP (Portuguese Communist Party) and the BE (Left Bloc). However, new parties have gained representation in recent elections (see [Lisi et al., 2020](#)). In 2015 PAN (People, Animals and Nature) elected one MP, and in the 2019 legislative elections three new parties entered the Parliament: the left-libertarian *Livre* (Free), the Liberal Initiative (IL) and the populist radical right *Chega* (Enough!), increasing their parliamentary representation in the 2022 snap parliamentary elections. It is still unclear whether the success of these new parties can be associated with the mobilization of abstentionists and young voters, and it is difficult to say whether challenger actors may benefit from the introduction of electronic voting, but they have certainly brought new dynamics in the party system and they altered party interactions. Last but not the least, there has been some ongoing debate among political elites regarding the need to reform the electoral system. From this viewpoint, the analysis of the Portuguese case can shed more light on the conditions that facilitate or hinder the adoption of electoral law reforms, particularly regarding the adoption or not of e-voting. This is of the utmost importance if we consider the challenges that the pandemic has brought for the electoral process. While many countries decided to postpone elections in several regions of the world due to health and safety reasons, several electoral contests have been conducted in Portugal between 2020 and 2022. This context obliged legislators and decision-makers to think about potential solutions to allow elections to be administered in a

challenging environment and to find means to ensure that all criteria associated to democratic elections were met. Several important changes were introduced and the use of electronic voting technologies increased, but e-voting remained out of the debate.

The remainder of the article is structured as follows. The next section briefly examines how e-voting has become salient, especially during the pandemic context. The third section reviews the debate on the reforms of electoral laws, which help understand the specific context in which e-voting in Portugal is situated. Sections four and five examine the use of e-voting in Portugal before and during the pandemic period, focusing on party positions and the performance and evaluation of new voting technologies. The following section identifies and discusses the main factors that are associated with the (non) implementation of electronic voting. We conclude by summarizing the findings and analyzing the main implication for the future of new voting modalities.

Elections under the pandemic and the (ir)relevance of electronic voting

The pandemic brought paramount challenges to the electoral processes. In a first stage, elections have been postponed all over the world ([IDEA, 2020a](#)). In a second stage, the question arose on how elections would adapt to the pandemic ([IDEA, 2020a,b](#); [James, 2020](#); [Spinelli, 2020](#)). The golden rule on elections is casting the vote in person in a polling station, a controlled environment able to guarantee the basic international electoral standards. With the pandemic, special voting arrangements (SVA) were devised to bypass the challenges posed by the new situation. The OSCE-ODIHR document "Alternative voting methods and arrangements" ([OSCE/ODIHR, 2020](#)) marked the field, highlighting international standards that elections under the pandemic should meet. In particular, it addressed its applicability to SVA as postal voting, proxy voting, early voting, home and institution-based voting, arrangements in polling stations and the "use of new voting technologies".

One of the main issues regarding e-vote regards the secrecy of the vote, as well as ensuring that there is no impersonation ([OSCE/ODIHR, 2020](#)). Secrecy of the vote, the principle of universal suffrage of all eligible citizens, integrity of results, transparency and verifiability, as well as the possibility of effective electoral observation are among the key issues these SVA modalities give rise. Other concerns add, as the need for testing, verifiability of the system, mitigation of technical failures and proper training, including electoral observation ([OSCE/ODIHR, 2020](#), p. 44). In addition, there are also questions regarding safety and data management at large; in particular data management authorities, information storage, levels of access and, most importantly, how these data flows work

and the safety of their transmission. Although some of these are shared with other SVA, they undoubtedly make the use of e-vote a rather complex process, to which procurement considerations, such as reliability, economic cost and technical assistance must be added.

The use of e-vote had lost momentum all over the world in the past years. The Netherlands was the first country to stop the development of Internet voting projects after pioneering its introduction in 2004 (e.g., Enguehard, 2013; Vegas and Barrat, 2017). The same happened in Germany, Austria and Norway (IDEA, 2011; Trechsel, 2016). In the latter case, after the adoption of electronic voting in the 2011 and 2013 elections, the government decided to end this experimentation given the lack of any positive impact and some doubts concerning the secrecy in the act of voting (Gjøsteen, 2017). Concerns regarding its safety, the possibility of informatic attacks, either at the domestic or international level, raised international concerns; this risk can also undermine public trust in the electoral process (Scott, 2019; see Enguehard, 2021). Adding to this, procurement concerns must be added, with the industry being a key drive for the expansion of e-vote.

The pandemic did not overturn this trend. Indeed, no significant increase of electronic vote emerged in recent years (IDEA, 2022). Online voting is available on 12 countries and in most cases restricted to voting from abroad (IDEA, 2022). The most used SVA to adapt to the pandemic were early voting (IDEA, 2020c), mobile ballot boxes, postal voting and proxy voting (OSCE/ODIHR, 2020; IDEA, 2022). This was in line with international recommendations and trends, of not introducing complex changes to the electoral process in such challenging times, with several risks associated (lack of trust, logistics complexity, among others). Despite the challenges of the pandemic, there was no momentum for e-vote and Portugal was no exception.

Similar developments have also occurred within party organizations. The use of ICT has been a means to overcome the challenges of contemporary political parties, especially in terms of grassroots mobilization and for increasing their legitimacy as actors of intermediation between civil society and representative institutions. From this viewpoint, parties have gradually employed digital technologies to foster participation, to select candidates or leaders, to draft policies and even to obtain financial resources (e.g., Dommett et al., 2021; Barberà et al., 2021). This trend has been fostered by the rise of new actors, namely movement parties that emerged during the Great Recession or digital parties. However, the literature has not examined this new phenomenon in connection with the practices of electronic voting for national elections. Given the key role parties play in the electoral process, it is plausible to have a (strong) association between the two arenas. One of the contributions this paper aims to provide is exactly to elucidate to what extent political parties can facilitate or constraints the use and development of digital voting modalities.

The debate on e-voting in the context of electoral system reform in Portugal

In order to evaluate the potential benefits and expected consequences of the electronic voting it is important to take into account the political and institutional context. Moreover, as the introduction of this tool implies a reform of the electoral system, we need to examine the mechanisms and the actors involved in this process. In addition to a review of the scholarly literature, the information presented in this study draws upon interviews, primary data collection and media assessments. Six semi-structured interviews were carried out with two experts and party officials from four different political parties, including both mainstream (PS and PSD) and minor ones (BE and *Livre*)³. Party leaders were selected according to the “information” criterion (see Weiss, 1994), which means that we contacted people who are expert in the area of digital technologies and were privileged witnesses to the organization of e-voting processes or were key participants in the debate on the topic (for example, by publicly discussing official reports or participating in parliamentary activities). Although it was not possible to receive information from all parties, our interviewees form a wide-ranging panel of knowledgeable informants, which allow us to view the issue of e-voting from different perspectives and through distinct experiences⁴. In addition, as we included both old and new parties, as well as forces that use to be in government or opposition, it is also possible to receive different viewpoints on this electoral reform and to discuss distinct arguments. The respondents played a key role in the organization of recent party congresses or the management of digital tools for intra-party

³ Invitations were sent out to all parties that traditionally elect representatives to the Parliament. This means that we excluded new parties, namely Liberal Initiative (IL) and Enough (*Chega*). The exception was *Livre*, which introduced e-voting since its origins, as explained in the paper. Therefore, we contacted seven parties: BE, CDS, *Livre*, PAN, PCP, PS and PSD. However, CDS, PAN and PCP never replied to our invitation. Interviews were conducted through zoom and lasted, on average, about 20 minutes. Questions focused on the use parties make of e-voting, the deployment processes they are employing, benefits and barriers they encountered, the role of technology with regard to party functioning and their evaluation and position regarding the use of this voting modality at the national level. All interviews were carried out with the understanding that interviewees would not directly be attributed.

⁴ Although the interviews were granted under the principle of anonymity, it is important to give more information regarding the profile of party officials. In the case of the PSD, our interviewee was member of the national congress board organized in 2021. *Livre* and PS officials were responsible for the party communication department, while the BE interviewee was a candidate in the European constituency and party delegate to the XII national convention (2021).

elections. Therefore, we consider their arguments not only the best informed on the topic, but also the “official” view of their respective parties. Given that the study of e-voting implies to adopt a multidisciplinary approach that connects computer and social sciences and that party officials may “hide” important aspects or may offer a biased interpretation of e-voting, it was also important to have the opinion of informants from outside the party arena. The criteria to select the two experts were twofold. First, we interviewed an expert on technical issues with a background on computer science and a scholar with a political science background. Second, we invited experts with publication records on e-voting and with fieldwork in this area, which make them particularly suited for interpreting and evaluating the experience of e-voting in Portugal.

One of the main characteristics of Portuguese electoral laws is its constitutionalization. The Portuguese constitution is very detailed in defining the main features of the electoral system. It does not only establish the adoption of the electoral formula (PR system through the D’Hondt method), but it also defines the type of electoral districts (uninominal or plurinominal) and eligibility criteria (e.g., Braga da Cruz, 2018). In addition, any changes to the electoral law need to be approved by the Parliament and require a qualified majority, i.e., the approval from two thirds of the parliament.

During the Portuguese democracy there have been minor reforms of electoral laws, as a result of this need for broad consensus. Despite some debate regarding the necessity to implement electoral reforms—namely concerning district magnitude and the reduction of the number of elected MPs—, the two main parties were only able to agree on small reforms, with only minor consequences in terms of electoral outcomes (see Freire et al., 2008). Nevertheless, legal amendments to several electoral aspects have been prolific.

The debate regarding electoral system reform elucidates the main weaknesses of the performance of electoral institutions. The first of these weaknesses is the lack of government stability, given the brief duration of Portuguese governments and the high degree of experimentation registered in the first decade of the new democratic regime. The second problem is related to the increasing levels of abstention. While in the first elections approximately 80% of the electorate went to the polls, this proportion decreased by more than 20 percentage points in the last decades. The trend toward declining levels of participation is detectable for all kinds of elections, although for local contests turnout rates display a more substantial stability⁵. The record was achieved in the 2019 legislative elections, when only 48.6% of the electorate went to the polls.

⁵ The estimates of turnout differ according to the operationalization of the electorate, that is, whether we consider the citizens with the right to vote (according to the official census statistics) or the citizens enrolled in the voter register. Be as it may, empirical studies show that there has been

However, in the 2022 parliamentary elections turnout rate has increased in the national territory, and despite the pandemic context, with approximately 51.4% of these voters went to the polls.

Proposals of electoral system reform presented by political parties are vast in number, though not so much in its nature. Suffice to say that the major controversies are based on the size and type of the electoral districts and the degree of vote personalization. During the democratic period there have been at least five cycles of electoral system reforms, in which the government and the main opposition parties presented and debated different proposals (see, for an overview, Martins, 2004; Sampaio, 2009). All these reforms failed approval, not only because of the uncertainty of their effects, but especially because of the political conflicts between parliamentary parties. First, the agreement between PS and PSD is needed to change the law regarding the electoral system, and the two parties have conflicting electoral interests that have led to express mutual vetoes. As mentioned before, only minor changes have been introduced, without significantly affecting the overall performance of the electoral system adopted in the Constitution. Second, there has also been a politicization of the debate on electoral system reform, opposing mainstream parties (PS and PSD) against smaller forces (BE, CDS and PCP). The conflict was not only around the overall proportionality of the electoral system, but also regarding other minor issues, for example the voting from abroad and the personalization of the vote.

This review highlights the main factors behind the inertia of electoral laws. Besides legal constraints—i.e., the “constitutionalization” of electoral rules—, strategic and political conflicts were major obstacles for achieving a consensus to implement reforms. There has been a strong divergence among political actors along partisan lines, while electoral calculus has always prevented to achieve a proposal shared by the main parties. Despite the complexity of some aspects of electoral administration and legal mechanisms, there is an overall high level of trust and familiarity with the electoral system in Portugal (Luís, 2021). This eases the pressure on introducing changes. As mentioned, amendment proposals are seen as a way of obtaining political gains rather than to improve some malfunctioning of the electoral system. Nevertheless, in recent years many changes have been introduced, especially concerning special voting mechanisms (in particular early vote). This shows the robustness and stability of the Portuguese electoral system, which has been able to incorporate minor changes to resolve specific problems, rather than embracing major reforms coming from a political drive.

a marked decline of electoral participation during the democratic period (Cancela and Vicente, 2019).

The introduction of electronic voting in Portugal: The first steps

This section briefly depicts the evolution of electronic voting in Portugal and its relation with electoral system reform. In line with trends on electronic governance taking place in Portugal, several experiences on electronic vote, remotely and in presence, took place (Comissão Nacional de Eleições, 2022). These were carried out within the Ministry of Internal Affairs, who is in charge of implementing the electoral process, supervised by the CNE. These experiences started in 1997, in the broader attempt to enhance e-government procedures in the country, thus paralleling the trends registered in other European democracies. In other words, electronic voting was seen as a means to ensure a better management of the electoral process, a fast count of the vote, seeking to guarantee at the same time high levels of safety and trust of the procedures.

The pioneering experiences took place through on-site electronic voting in two civil parishes for the 1997 and 2001 local elections. This was then repeated for the 2004 European elections, again targeting different civil parishes with distinct profiles of voters (Comissão Nacional de Eleições, 2022). The process of experimentation went on, and in 2005 the government decided to test both on-site and online electronic voting, this time for the parliamentary elections. On-site electronic voting was considered a positive experience especially for blind people, who could vote alone, without the need to be accompanied by another person.

Despite these early tests, online electronic voting was associated mostly with out-of-country voting. This is an important dimension related to the debate of electronic voting since Portugal is one of the first European countries to extend voting rights to emigrants (Lisi et al., 2015). In addition, the Portuguese diaspora is significant in proportion to the electorate residing in the country, with approximately 2.6 million Portuguese citizens living abroad in 2020 (before the pandemic), while there were around 10 million registered voters in Portugal itself. External voting became important especially after the introduction of the automatic voter registration for citizens living abroad, which led to the expansion of the enfranchisement of Portuguese emigrants, from 300,000 citizens registered before 2018 to more than 1.5 million voters included after this recent electoral reform. Although this had a minor impact on the results (external constituencies only elect four MPs out of 230), this issue became politically important and spurred the debate on electronic voting.

One of the problems regarding voting from abroad was the inconsistency of voting methods. While the Constitution required explicitly that vote for Presidential elections had to be in person, the law established the option of postal vote for legislative elections (though on-site vote is also possible).

This problem became more challenging with the gradual reduction of the embassies and consular network, which made all issues regarding voter registration and on-site voting even more difficult.

It was within this framework that online electronic voting occurred, through a pilot test for citizens living abroad in the 2005 parliamentary elections. This was mainly an initiative led by Diogo Vasconcelos, one of the key supporters of e-government and at that time director of UMIC (Knowledge Society Agency, *Agência para a Sociedade do Conhecimento*)⁶. The possibility of testing online e-voting in a non-binding way was conceded for the first time as an attempt to find an alternative way of voting which allowed a participation increase in electoral acts, given the geographic scattering. This pilot intended to study the process viability gathering information on use promptness and voters' trust on this kind of system.

The online e-voting test was intended not only to simplify the electoral process for Portuguese voters registered abroad, but also to enhance the links between the Portuguese diaspora and national representative institutions and to ease and encourage the exercise of the right to vote by Portuguese citizens registered abroad and their participation in national democracy. This was also a way to test the adhesion of citizens to this new voting modality and to develop e-democracy platforms for a future generalization. Despite this early attempt, parties' divergent perspectives on new voting modalities put a halt to this kind of pilots. Indeed, while the PSD (and the CDS) defended the development of these tests, the PS only accepted on-site electronic voting. Consequently, when the socialists returned to power in 2005, they decided not to develop this project and proposed in 2007 the adoption of on-site vote for all types of elections, thus avoiding the inconsistency of voting methods for citizens living abroad. The President vetoed the reform and the main parties were unable to find a consensus on voting modalities. The issue of whether or not to adopt electronic vote was one of the controversies in the electoral reform debate. While right-wing parties (PSD and CDS-PP) were in favor of this innovation, the socialists criticized this method not only because they were skeptical regarding the safety and transparency of the procedures⁷, but also because it would have increased inequality among citizens, since the Internet was not widespread among the Portuguese emigrant communities.

6 https://www.rtp.pt/noticias/pais/voto-electronico-na-internet-para-os-emigrantes-apresentado-em-paris_n5652 (9 February 2005, accessed on 11 October 2022).

7 During the parliamentary debate, the PS mentioned the cases of the United Kingdom, France and Ireland, which encountered problems with electronic voting and decided to abandon the experimentation. See the speech made by the socialist MP Sónia Sanfona (*Diário da Assembleia da República*, 1ª série, nº 13, 19 October 2006, p. 24). The PCP also was against this proposal.

The issue of the introduction of electronic voting also received attention by civil society, with the proposals of several petitions to the Parliament between 2015 and 2016⁸. The proposals aimed to implement e-voting for citizens living abroad, as well as a digital voter registration system and to facilitate mobile voting through on-site electronic voting—i.e., to allow voters to vote in a district different from where s/he was born—, especially for national and regional elections. These petitions were not discussed in the plenary, but the report of the parliamentary committee stated that this was a matter on which the Parliament should legislate.

Even before the outbreak of the pandemic, the organic law 3/2018, approved by the Parliament, established that the government could test the implementation of electronic voting on site through a pilot in at least 10 municipalities (see organic law 3/2018, art. 8). In addition, the law states that the government should legislate on this matter, as well as regarding online electronic voting for citizens living abroad. However, given that the Constitution requires all electoral matters to be regulated by law, approved by the Parliament, this legal provision might prove challenging. Despite these obstacles, there has been work being done on how to better implement it.

Elections under the pandemic in Portugal and the debate on e-voting

This section focuses on the practices of electronic voting during the pandemic period. After the beginning of the coronavirus, four electoral contests took place in Portugal, three of them of national dimension. The first were the elections for the Autonomous Region of Azores, and took place in September 2020. The second was the presidential election, in January 2021, the first national election to be held during the pandemic—and where everything seemed to happen, including an unexpected general lockdown a few days before the vote (Luís, 2021). Local elections in October 2021 ensued, and finally unexpected legislative snap elections were held in January 2022. In addition to these, a local referendum and by-elections in local constituencies also took place. Political and party events occurred, challenging the adoption of new solutions for ensuring the right to vote and the safety of all citizens.

The Portuguese strategy to address elections under the pandemic adopted a smooth approach, relying on already existing mechanisms, particularly on early vote (Luís, 2021). According to the Portuguese Constitution, all amendments to the electoral law need to be approved by the parliament, so all parties represented in the parliament were called to intervene.

The pandemic started in March 2020 and Portugal would only have general elections in January 2021, for the President

of the Republic. Nevertheless, legal reforms to accommodate the effect of the pandemic were only approved in November 2020, with the electoral process already being felt on the ground (Luís, 2021). In particular, candidates had to secure 7,500 signatures of registered voters to run for the elections; while this could have been made through an electronic platform, no legal reform was approved in time, and candidates felt the weight of lockdown and the pandemic on the process of gathering signatures (Luís, 2021). The presidential election took place during an unexpected lockdown. Despite this fact, the electoral process went fairly well, with high levels of trust from the public and electoral stakeholders. It was not a very contested election, as the result was foreseeable and the incumbent secured high levels of approval.

The legal reforms to accommodate the pandemic made small changes to the electoral law, relying on already existing mechanisms, in line with international recommendations. Early vote was expanded, to provide for an extra day to vote in every municipality (308) and abroad. The number of voters per polling station was reduced and mitigation measures were put in place. There was a legal framework to collect the votes from those in isolation or with Covid-19; this would be done by each municipality, though the legal deadlines fell short to accommodate voters falling in this situation in the last days before the election. In addition, there could be no restriction to civil and political rights related to the election (freedom of movement, political rallies, and others) as the Constitution did not allow for this; the Electoral Commission stressed this in several decisions, strictly respected by all interveners and the public in general (Luís, 2021).

This legal framework was adopted for the presidential election (January 2021), but had already been adopted for the regional elections of Azores (October 2020). It was also broadly adopted for local elections (September 2021) and for the unexpected parliamentary elections held in January 2022. Portugal had almost every possible election during the pandemic and the legal framework was broadly the same, with minor details coming from different electoral laws.

In this context, several projects of law presented by political parties at the Parliament proposed mechanisms to bypass the effects of the pandemic. The PSD proposed expanding postal vote for voters from abroad in presidential and European elections (Project of Law 505/XIV/1). The BE proposed the reduction of signatures for candidacies proposed by groups of citizens for local elections, a proposal also presented by other political parties. Projects of law presented by PAN and Liberal Initiative followed along the same lines and mechanisms. The PS presented the project of law that was approved and enacted into a law, with the previously mentioned changes to overcome the pandemic. Within this context, electoral reforms were only brought to public debate a few days before the election and there was no public discussion on e-vote.

⁸ See petitions n° 313/X, n° 470/XII/4^a and n° 124/XIII/1^a.

However, shortly before the local elections taking place in September 2021 there were legal reforms to almost all electoral laws. These were minor in its impact, but had in common the use of electronic platforms for several aspects of the electoral process. The law foresaw a series of online platforms to be inserted in the electoral process: to support candidacies, to register as early voter and to have the ballot collected by the municipality in special circumstances (isolation, Covid, and care homes). All these platforms were to be developed by the Ministry of Internal Affairs (MAI), cross checking with other authorities (health, social security, etc.) and access being granted to the judiciary (to verify requirements of candidacies). For presidential and local elections, with candidacies coming from outside of political parties, a platform would allow voters to register as proponents of candidacies and cross check with the voter registration database, to prove the eligibility of the voter. For early voting the application process is made through an online platform; for voters in isolation or with Covid-19, registration to have the ballot collected at home is also made through a platform, cross checking with health authorities; the same is broadly applicable for people in care homes to have the ballot collected under the same procedure. Finally, to overcome the difficulty in recruiting poll workers, a platform is envisaged for municipalities, to ensure a recruitment database for these purposes.

It is interesting to note the nature of the recent legal reforms. There was a broad convergence from political parties on the mechanisms to use to soften the effects of the pandemic on the electoral process. Proposals from political parties included allowing extra days to vote, early vote and postal vote in some cases. There was a working group within the Parliament aiming at consolidating electoral laws. However, the use of electronic vote was not brought to the debate. Facing the new challenge to organize snap elections in January 2022 during a pandemic peak, the socialist government asked the Advisory Committee of the General Attorney (*Conselho Consultivo da Procuradoria-Geral da República*) for an opinion regarding the measures to adopt for allowing people to vote safely. The report stated that the government should facilitate electronic or postal voting to ensure the respect of universal suffrage. Despite this, no discussion or appeal for electronic vote followed after the publication of the report. At the same time, there has been a growing informatization of the electoral process and a growing use of technology for different aspects. This may point toward an overall trust on the use of digital tools and a broad familiarity with it—for instance, early voting is a success case in Portugal.

The potentialities of electronic voting: Recent developments

The most relevant experience of e-voting in Portugal took place in the 2019 election for the European parliament.

The initiative stemmed directly from the Minister of Administrative Modernization (Maria Manuel Leitão Marques), who supported the implementation of another test of on-site e-voting. As a consequence, digital ballot boxes were made available in the district of Évora, where voters could choose whether to vote through digital technologies or through traditional methods. This experience was far greater in extension and in the number of voters than previous pilots, resulting in a final report submitted before the Parliament⁹.

According to the Minister of Internal Affairs, this experience should be used in the future for national elections, with the aim to facilitate citizens' participation. Indeed, most parties have gradually converged toward supporting the adoption of online voting for citizens living abroad, due to the difficulties in mobilizing the Portuguese diaspora for voting in presidential and legislative elections and the inefficiency of both postal vote and on-site voting. In the 2019 election campaign, for example, the socialists defended the introduction of electronic voting, a solution also supported by right-wing parties. Many civic organizations of Portuguese emigrants have also supported this solution, trying to lobby MPs and government officials for the enactment of this change in order to make external voting easier and more efficient¹⁰. A legal framework for the voting from abroad was also to be presented to the Parliament, in line with the pilot experiment. However, no legislative proposal ensued, nor the report was discussed in the parliament. This was probably due to the criticisms raised by the National Data Protection Commission [*Comissão Nacional de Protecção de Dados*, CNPD], whose report on the pilot test showed several problems, such as the transportation and storage of the electronic ballot boxes, the sealing of the machines and even the secrecy of the vote¹¹.

One of the goals of the socialist government formed after the 2019 elections was to enact this reform by implementing remote electronic voting for citizens living abroad. This innovation depended on a pilot test based on online voting for the election of the Council of Portuguese Communities. The secretary of state for the Portuguese diaspora stated that after this election (scheduled for the first semester 2022), all technical conditions would have been set up for allowing electronic voting for the next legislative election. However, the premature dissolution of the parliament and the schedule of snap elections (held on 30 January 2022) led to halt this process.

9 The report is available at: https://www.sg.mai.gov.pt/AdministracaoEleitoral/Publicacoes/RelatoriosAtosEleitorais/Documents/PVEE_DocApoio_07.001%20-%20Relatorio%20AR_Versao%20Final.pdf (accessed 25 October 2022).

10 See, for example, the movement "Também Somos Portugueses (TSP)" [We are also Portuguese].

11 See Report n° 30/2021, approved on 16 March 2021.

During the 2022 election campaign, socialist candidates that run for abroad constituencies confirmed their commitments with regard to the implementation of the electronic voting, considering the traditionally high levels of abstention associated with emigrant voting. Yet this position was not consensual among the main political parties. While right-wing parties were generally favorable to this reform, the PCP still showed significant criticism, claiming that the country was not prepared due to the lack of digital awareness of citizens and the lack of security of digital technologies¹².

Although the pandemic situation has spurred the debate on electronic voting, this innovation was not a key concern in the electoral manifestos presented for the 2022 legislative elections. The governing party (PS) mentioned the “generalization of the experiment of on-site electronic voting” as tested in the 2019 European elections ((PS, 2022), p. 26), as well as the dematerialization of the electoral register. However, the proposal was very generic and did not specify the timing and how it will be implemented. On the other hand, the PSD electoral manifesto was completely omitted regarding the issue of electronic voting. According to our interviews, in both parties there is no consensus—especially within their respective parliamentary groups—regarding the adoption of new voting modalities and they argue that the debate on e-voting is still incipient, while practical experiences do not provide clear evidence of the advantages and benefits associated with the use of new ICT in the electoral process (interviews with PS and PSD party officials).

Smaller parties also spend just a few words on this topic. *Livre*—which pioneered the adoption of electronic voting for intra-party dynamics, see below—defended the development and experimentation of online electronic voting, especially for citizens living abroad. The BE also refers to the need to test electronic voting, but for out of the country districts only. The other smaller parties were silent regarding the adoption of electronic voting. Indeed, these forces have displayed a more negative evaluation regarding this voting modality, arguing that e-voting still presents several problems, not only in terms of security matters (e.g., cyber-attacks), but also in terms of frauds, coercion, accessibility and data protection (Marcelino, 2021).

The use of electronic voting in party organizations

The difficulties for implementing electronic voting parallel the sparse use of digital technologies Portuguese parties have

12 In the case of the 2019 pilot test, the PCP also criticized the lack of training of the electoral staff regarding the use of e-voting and this made it more difficult the recruitment of competent staff that could ensure a smooth management of the electoral process (see *Diário de Notícias*, 14 March 2019 [retrieved on 27 October 2022]).

made for their internal functioning¹³. Before examining these processes in more detail, it is worth noting that political parties in Portugal present generally a hierarchical structure, with very low levels of both assembly-based and plebiscitary intra-party democracy (van Biezen, 2003; Bolin et al., 2017). They have few resources available, as the number of party members is low compared to other Western European democracies and they are significantly dependent on state funding. The main governing parties (PS and PSD) adopt a direct leadership selection (on-site voting only), while for the remaining parties the leader is chosen by the congress or a representative party body.

The two main centrist parties pioneered the adoption of e-voting in the context of party meetings. In the late 1990s, both parties experimented the use of paper ballots through electronic ballot boxes (Montargil, 1999). Indeed, in April 1998 the PSD introduced this voting modality for choosing party delegates and voting the several strategic motions presented to party representatives. However, this experiment gave rise to several claims, namely because the system was not monitored by an independent authority and because ballot boxes were not sealed. In addition, suspects emerged regarding the counting of the vote and the presentation of the lists, and the party national council of jurisdiction determined that the vote should be repeated due to the problems associated with the first poll. The experiment of electronic voting was also introduced in the PS in the 1999 congress (May) but this was considered a positive experience, with no major problems. Yet, leadership change and the passage to opposition led to abandoning the implementation of this voting modality¹⁴.

Despite these initial attempts to introduce electronic voting within party organizations, political elites have not supported the development of this innovation, and advances in the use of communication technologies have been very limited. For example, parties are not very familiar with new and innovative digital technology to wage effective election campaigns, and the two main parties prefer to rely on outsource services to monitor or communicate with voters (e.g., Lisi, 2013). This is also true for middle-level elites, as candidates (or public office holders) do not have incentives or skills to use sophisticated digital campaign techniques. However, and especially during the pandemic, there has been a growing digitalization of political campaigning, in many cases being an option for political parties, as this would

13 This section is based on information retrieved by secondary literature, party documents and newspapers, as well as interviews to party officials.

14 At that time the socialist leader was already elected directly by party members. However, the new leadership defended the reintroduction of indirect elections (election through delegates) and a substantial revision of party statutes. This debate was a major constraint for the development of e-voting in intra-party elections.

help mitigate pandemic risks and show adherence to public health recommendations (Luís, 2021).

Despite this context, *Livre*, a new political party founded in 2014 that was able to elect one MP for the first time in the 2019 legislative elections, is worth examining. *Livre* can be considered a left-libertarian party, which adopted an organizational structure close to movement-parties. This means a rejection of a strong party leadership and the emphasis on participation and deliberation, with the aim to promote inclusiveness and openness of the party functioning. The main innovation introduced by the party was the adoption of primaries for candidate selection, which is still a radical change with respect to the main parties (see Cancela et al., 2017).

The experience of this party is germane for the study of electronic voting because the process of selecting candidates was devised to take place exclusively through digital technologies. This was a means to circumvent the lack of resources and the need to expand rapidly in order to compete in the 2015 elections. It was also a way to obtain media visibility and to signal a radical change with regard to established parties. Furthermore, the new party clearly targeted voters from younger groups, which display more familiarity and are keener to the use of digital technologies.

The use of electronic voting was very limited in the remaining parties. Most parties that organized party meetings during the pandemic period preferred to allow members to use mobile voting (on-site), early voting or the decentralization of party meetings in order to respect safety rules. In the case of the PSD, the use of electronic voting was limited to the vote of the motion presented during the congress (2021). Consequently, party delegates were able to vote remotely (through a phone app) the programmatic motions discussed during the party meeting. According to our interview, the idea of using e-voting for the direct election of the party leader was not considered for two main reasons. The first is that it requires a change in the party statutes, and the second is that party leadership does not have enough confidence in the adoption of this voting modality (interview with PSD official). However, the evaluation of this test is positive, as it provided a fast count of the votes without any complaints regarding the voting process.

The case of the PS is different because it made use of electronic voting for the party congress organized in 2021 (originally scheduled for 2020 but postponed due to the pandemic situation). In June 2021 the PS gave the possibility to party members to vote remotely for the election of the party leader (secretary-general) and delegates. The party created a monitoring committee for electronic voting, which was to be used as a complementary tool to on-site vote (to be held 1 week later). The system of e-voting was developed by a private company, in collaboration with party headquarters, namely the department of organization, which is responsible for managing contacts with grassroots. Party officials claimed that the platform ensured “a high level of security, providing confidentiality and

anonymity”, as well as increasing turnout levels¹⁵. According to our interview, the fact of having available a digital database of party members with their contacts was key for ensuring the smoothness of the process (interview with PS official). Moreover, the PS is one of the most advanced parties in Portugal using new ICT for election campaigns, and these tools have also been used for organizing direct leadership selection. Overall, the experience was considered very positive and the party claimed this was a solution to be developed further in the future.

Discussion

One of the arguments put forth for explaining the non-adoption of electronic voting is based on the issue of security and the availability of technical requirements that ensure that the digital vote is as safe as on-site voting (e.g., Blaze, 2020). This argument, however, is not particularly appropriate for explaining why Portugal has not introduced this voting modality hitherto. Indeed, Portugal has shown a gradual and significant progress in terms of e-government and the digitalization of the services made available to voters. Even before the pandemic, several Portuguese governments have implemented important changes in the digitalization of the public administration, especially since the introduction, in 2014, of the *Chave Móvel Digital* (strong authentication). Key to the electoral process is the dematerialization of voter registers, which is a prerequisite for implementing e-voting. As aforementioned, this was a reality for early voting during the pandemic period. In addition, electronic voting has been used for participatory budgets, a democratic practice that has been increasingly adopted by many Portuguese municipalities since the beginning of the twenty-first century (e.g., Allegretti et al., 2013). Portugal has been at worldwide forefront in using this tool to foster citizens’ engagement in budget decisions, as the socialist government has also attempted to replicate this model at a national scale.

As a result of these developments, Portugal became in 2018 one of the D9 members—currently denominated Digital Nations—, which gathered the most advanced states in terms of digital policies. Looking at international rankings, Portugal displays a relatively high position in terms of e-government¹⁶. This situation clearly improved—as everywhere—during the pandemic period, since the government prioritized the enactment of digital services and provided significant resources for enhancing digital skills and access to online platforms.

15 The participation through electronic voting was 25%, corresponding to 15,000 party members. See *Acção Socialista*, June 2021.

16 According to E-Government Index developed by the United Nations, Portugal ranked 35th in the world in 2020, with a positive trend in the last decade. See <https://www.publicadministration.un.org/egovkb/Data-center>.

This could prove to be a fertile ground for the adoption of electronic voting.

While the argument of the universality of the vote is a relevant one for all parties and it touches a weakness of the Portuguese situation—namely the low levels of digital literacy—, it does not explain why this voting modality cannot be used as complementary to other voting modalities. Indeed, according to government officials and electoral authorities, the adoption of electronic voting was intended not to substitute traditional on-site voting, but as an additional tool to be provided to voters, especially for those voting abroad. This was clear in the statements made by the minister of Internal Affairs, claiming that electronic voting “will not dismiss none of the other forms to vote”¹⁷. As the BE candidate stated “all parties during the last campaign agreed with the benefits of adopting e-voting for out-of-country constituencies”. This view was also confirmed in the case of *Livre*, claiming that “the benefits clearly overcome the risks (of adopting remote e-voting)” (interview with *Livre* official).

Another argument that attempts to explain the difficulties for enacting electronic voting relies on public opinion, namely the fact that most people do not trust this voting modality (e.g., *Ehin and Solvak, 2021*). This is connected more broadly to the idea that mistrust toward the main representative institutions makes citizens disbelieve in the advantages and safety of this solution. To this respect, while it is true that Portuguese citizens display low levels of trust in political parties and the parliament, attitudes toward electronic voting seem significantly more positive. A survey conducted in May 2021 reported that 77.2% would choose to vote through Internet rather than on-site (either electronically or through paper)¹⁸. The average trust in this tool was quite high (2.3 on a scale from 0 to 3), as well as the score attributed to the safety of the system. These results should be interpreted with caution not only because this was not a survey conducted to a representative sample of the Portuguese population, but also because it was conducted during the pandemic period. Still, the results suggest widespread support and confidence in the

potentiality of electronic voting. Furthermore, available data indicate that digital literacy and skills are quite widespread in the Portuguese population, a point confirmed by the fact that 25% of citizens are considered “digital natives” in 2021.

But there are other relevant arguments that explain why the main political parties are skeptical with regard to the implementation of electronic voting. One reason relies on the performance of electoral procedures. There is a general perception among citizens that the electoral system performs rather well, at least in organizational or technical terms. Not only is there widespread trust in the electoral process, but there have also been few cases of electoral complaints (not to mention frauds or malpractices). According to available data, the number of complaints has decreased over the democratic period, and they have centered mainly on political disputes (see *Martins and Mendes, 2005*). It is also worth reminding that the beginning of the debate on electronic voting began with the 2005 local elections when a blackout of almost two hours questioned the quality of electoral procedures. Nonetheless, the overall trust of citizens toward the formal aspect of elections is very high, which makes it more difficult to advance and defend alternatives and innovative voting modalities compared to more familiar procedures. This is also confirmed by one of our interviewees (*Livre*), who claimed that “all parties are familiar with the traditional method, and it works well; one of the problems of e-voting is the fear of the unknown” (interview with *Livre* official). The problems experienced with electronic ballot boxes in the 2019 European elections have also appeased the initial enthusiasm for the introduction of e-voting.

Besides this, we argue that political parties are key strategic actors that hinder or facilitate the adoption of new voting technologies. Looking at the party arena, there are at least two reasons that motivate the slow progress of e-voting in Portugal. The first is related to party divergences and conflicting interests between the main parties. Both PS and PSD have played a veto role in the implementation of electronic voting, leading to policy inertia. As one expert put it, “the change in voting modalities always imply some uncertainties in the distribution of power, and this refrains the main parties to enact key electoral reforms” (interview with expert 2). In other words, it is not clear who will benefit at the end from this change. This argument is not only true for external voting, but especially for the national territory. As many studies on electoral system reforms have shown (e.g., *Braga da Cruz, 2000; Freire, 2015; Costa Lobo, 2018*), the main governing parties have not devised effective policies, nor a clear strategy to improve the quality of the electoral process and to provide more incentives for a broader and more effective participation. Rather, they have preferred to maintain the status quo, decreasing the salience of this problem and adopting a “wait and see” strategy. As in the case of major electoral reforms, mainstream parties look at

17 Statement made by minister Eduardo Cabrita, 10 May 2019 (<https://www.publico.pt/2019/05/10/politica/noticia/deputados-testaram-maquina-voto-eletronico-parlamento-1872213>).

18 The survey was conducted by the Piaget Institute and APDSI and is available at : <https://apdsi.pt/2021/conclusoes-meeton-o-voto-eletronico-desafios-e-oportunidades/>. The findings are also confirmed by another opinion polls on the same topic. When asked whether “Portugal should have the option of electronic voting”, 87% of respondents (sample 4,596) agree with the question, which corresponds to an increase of 5 percentage points when compared to the responses obtained in 2017 (<https://pplware.sapo.pt/internet/87-consideram-que-portugal-deveria-ter-a-opcao-de-voto-eletronico/>).

the adoption of e-voting as a risky operation as they do not have information regarding the consequences of this innovation, especially in terms of seat allocation¹⁹. Some minor parties have also strategic interests against the adoption of e-voting, either because their constituencies are not familiar with new voting technologies (the case, for example, of CDS and PCP) or because they do not trust remote internet voting. However, this argument does not apply to all challenger parties. Party officials from both BE and *Livre* claim their openness to the adoption of e-voting, especially for citizens living abroad. They also refer that lack of consensus between the two main parties is key to explaining why pilots have not paved the way for larger experiments and further developments (interviews with BE and *Livre* representatives).

The second reason that can explain the lack of trust politicians show regarding e-voting is directly related to the use each party makes of digital tools in everyday activities. In other words, the more familiar the party is with electronic voting in its internal functioning, the higher the likelihood to support the implementation of voting modalities that entail digital tools. One of the questions asked to party officials was whether the use political parties make of new ICT could increase their trust in remote online voting and facilitate the adoption of e-voting. With the exception of *Livre*, interviewees claim that most party members and leaders are skeptical of digital tools when it comes to electing representatives. According to PSD representative, “there is a lack of trust in e-voting and there is no guarantee of reliability for the election of [congress] delegates, and even more for national elections”. As this contribution has shown, most political parties in Portugal not only present very low levels of inclusiveness in decision-making processes, but they have made a marginal use of digital tools for intra-party elections. This situation is in stark contrast with other European countries, where parties have introduced primaries and many new actors have relied on digital tools for involving members in decision-making processes (e.g., Gerbaudo, 2018; Barberà et al., 2021). In Spain, for example, several parties from distinct ideologies and organizational models have resorted to electronic voting since 2004 (Barrat and Pérez-Moneo, 2019). The problem in Portugal is that political parties have displayed a significant inertia in their intra-party functioning and they consider themselves as private organizations, thus rejecting regular, open and transparent forms of accountability and deliberation. As such, while specific and targeted electoral reforms gather approval in the Parliament, no major change on the electoral system is being envisaged. It is also worth emphasizing that e-vote over the internet is necessarily a remote form of voting, not requiring the physical

presence of the voter on site. In other remote forms of voting, as postal vote, there have been frequent allegations of fraud between the two biggest parties, PS and PSD, and this might spread to the use of e-vote.

There is still a huge debate in the literature regarding the potentialities of electronic voting as a tool to improve the quality of the electoral process and, more generally, the process of democratic representation. Optimists argue that new voting modalities can bring many benefits to rejuvenate contemporary political systems, such as an increase in participation, easier channels of communication and choice mechanisms, as well as higher levels of transparency (e.g., Trechsel et al., 2003). On the other hand, critics argue that e-voting presents many problems, especially in terms of security and transparency (e.g., Enguehard, 2021). Although a multi-dimensional approach is needed if we want to fully understand the (non)adoption of e-voting, our argument is that political parties are key players for the implementation of this electoral reform. The reason is threefold: (1) party agents need to trust potential alternatives to traditional voting methods; (2) parties have distinct self-interests and are uncertain regarding the consequences of the adoption of remote electronic voting; (3) party organizations are not themselves familiar with the use of digital technologies for internal elections. In the following, we explore this argument more in detail.

Portugal presents a paradigmatic case on the non-use of electronic voting. When addressing the electoral system, and particularly the recent legal reforms, two aspects stand out: the constant and smooth reforms of the electoral system and the growing digitalization of some of its aspects. In fact, legal amendments were based on small changes aiming at improving the electoral system's performance, while maintaining the continuity of its main aspects. Innovations relied mostly on the growing use of digital technologies, with a strong support from electronic databases managed by national (MAI) or local authorities. These changes have been consensual among the main political parties and have obtained steady approval in the parliament.

Despite the trend toward the digitalization of the electoral process, the adoption of electronic vote has never been at the core of the political agenda. This can partly have the same explanation, namely the smooth functioning of the electoral system and the great familiarity with it all stakeholders have constantly shown (Luís, 2021). Portugal is among the countries considering e-voting through some pilot tests, but there seems to be no drive toward the adoption of e-vote. This should be particularly highlighted, as it is a system where all stakeholders seem to be greatly familiarized with digitalization, and still see no great incentive to adopt electronic voting. As the act of casting the ballot is paramount in an election, public perceptions of trust in this aspect are extremely important. At the same time, the use of electronic voting in out of the country voting seems to be quite consensual. This would be used to solve a concrete problem and

19 A number of studies on electoral system reforms show that governing parties are significantly more risk-averse than challenger parties, especially in a situation of political stability (e.g., Shugart, 2008; Pilet and Bol, 2011).

circumscribe to this purpose only. These conclusions suggest the adoption of e-vote is not inevitable. This goes in line with recent trends on the non-adoption of electronic vote. At the same time, a fair use of digitalization in the electoral process is made, and even more to enhance its performance in very concrete aspects. This emerges from a context of great trust and familiarity with the electoral system.

A review of the debates and practices regarding electronic voting in Portugal shows that this voting method has not been regarded as a potentially positive mechanism to address neither long-term problems, nor short-term weaknesses of the electoral process. Pilot tests have been implemented without a strategic vision behind it, and the debates on the usefulness of this voting modality were sporadic and superficial. Moreover, this discussion was spurred by external events, such as voting irregularities (in the case of external voting) or the pandemic. But even in this case, external factors had a limited impact on this debate and parties have adopted a very cautious position. The main political parties have not achieved a consensus regarding the development of e-voting elections. Their risk-adverse profile and the attempt not to alter the distribution of power is a key factor for explaining the low salience of this debate and the slow progress of this experimentation. On the other hand, political parties have virtually neglected this matter, as shown by parliamentary debates and party programs. The fact that party organizations present low levels of intra-party democracy and are not concerned with a larger involvement of citizens in their activities is another important constraint for the introduction of electronic voting. From this viewpoint, the Portuguese case demonstrates and confirms that most of the barriers to adoption of e-voting come from political parties and their agents (e.g., Trechsel, 2016, p. 14–15; Adeshina and Ojo, 2017).

Conclusions

Despite some attempts to introduce e-voting, there is still a long way to go for the adoption of this voting modality in Portugal, both within parties and for national elections. One of the main reasons for this is based on the high level of fairness and legitimacy of on-site elections, which has guaranteed a smooth electoral process during the democratic period. However, this is not the case for external voting, which has shown more problems in all the phases of the electoral cycle²⁰. From this viewpoint, electronic voting could be a potential solution for overcoming some of the weaknesses of the electoral process for non-resident voters. But even in this case there is another important factor that explains the slow progress of electronic

voting: the lack of confidence (and practice) parties have toward electronic voting and the different views they display on the matter.

The future of electronic voting is uncertain. While technological advances can ease doubts that political parties (and voters) have regarding this voting modality, trust is certainly a matter of subjective public perception. On the other hand, some of the problems will certainly remain, as digital inequalities and safety. According to party officials' interviews, the implementation of this tool should be in any case complementary to traditional voting procedures. Moreover, it is particularly desirable to rely on new ICT in the electoral process in order to target specific groups, in particular Portuguese citizens living abroad, young or disabled people.

This point is relevant also for another aspect, namely the possibility of having a top-down or bottom-up contagion of e-voting. In case this voting modality becomes more accepted and widespread, different scenarios can be prospected for the future. One is the top-down model based on the Estonian case, in which the development of e-voting technology at the national level spurred similar developments within civil society and was then replicated (to a limited extent) to other public spheres, such as parties or NGOs. The second trajectory stems from the use of e-voting within civil society or at a decentralized level, which can be translated at the state level.

Neither of the two scenarios is likely to happen in Portugal in the foreseeable future. Despite the growing digitalization of public administration, there is no clear strategy of the main political actors to use e-vote to reform the political system. Indeed, the issue of political reforms (in particular regarding the electoral system) seems to have lost salience after the PS achieved an absolute majority in the 2022 elections. In addition, electoral administration—namely SG.MAI, which has the responsibility to implement the electoral processes—has shown limited capacity to take new initiatives for examining the potentialities of the electronic voting, as it lacks key resources, especially in terms of expertise and policy research. The second trajectory seems even more difficult given not only the high level of digital inequalities, but also the general apathy of citizens for what concerns institutionalized patterns of political engagement, combined with the high levels of trust on the electoral administration of elections. Be as it may, more research is needed to elucidate the mechanisms behind contagion effects. Comparative studies may shed more light on the best way to overcome these barriers and to spur new solutions for voting modalities.

While this work presents a first take at electronic voting in Portugal, in particular its debate and how parties view this democratic innovation, future research should investigate more

²⁰ This was the case also of the 2022 parliamentary elections, which registered the invalidation of 80% of the vote casted in one of the extra-territorial districts (Europe) because the ballots were not accompanied by a copy of a personal identification.

in detail whether e-voting affects participation patterns in the context of party elections and votes. More time and data are needed to examine the extent to which particular groups of voters are engaged, whether some voters are being left out, and the effects this might have on who is voting and the outcomes of the votes. Finally, scholars should investigate the symbolic aspects associated with e-voting, not only related to the quantity of participation, but also in terms of quality, i.e., whether this voting modality is compatible with high-quality debates and high levels of deliberation. It is only through the combination of these dimensions that e-voting can contribute toward improving the quality of elections and democratic representation.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

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Author contributions

All authors contributed to manuscript revision, read, and approved the submitted version.

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Conflict of interest

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