

Voting beyond borders: A pilot study investigating preferences and trade-offs in remote voting among the Albanian electorate

Jurlind Budurushi^{1,*}, Montathar Faraon², Samuel Agbesi³, Asmita Dalela⁴ and Oksana Kulyk³

¹Baden-Württemberg Cooperative State University Karlsruhe, Germany

²Kristianstad University, Sweden

³IT University of Copenhagen, Denmark

⁴Independent Researcher, United States

Abstract

This study investigates remote voting preferences, the trade-off between vote secrecy and integrity, and vote verification among the Albanian electorate using an online survey. The results show that remote voting through an internet voting system is the preferred option. The findings also reveal the importance of ensuring vote secrecy while prioritizing vote integrity, supported by participants' preferences for vote verification. This study contributes with insights for the future design of a remote voting system that could foster public trust among the Albanian electorate.

Keywords

remote voting, preferences, secrecy, integrity, verification

1. Introduction

Elections are one of the cornerstones of democracy. Elections uphold the principles of representation, participation, and legitimacy that are vital to a functioning democratic system [1]. In many democracies, voter participation has decreased noticeably in recent years and, among others, changing demographics is a crucial factor contributing to this trend [2]. Therefore, many countries are actively pursuing convenience voting reforms in response to this decline in election participation. These reforms include initiatives such as early voting, same-day registration, and remote voting [3].

Remote voting is used in many countries for people living abroad or who cannot attend a polling station on Election Day. In Estonia, internet voting has been used since 2005 [4].

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*Corresponding author.

✉ jurlind.budurushi@dhbw-karlsruhe.de (J. Budurushi); montathar.faraon@hkr.se (M. Faraon); sagb@itu.dk (S. Agbesi); asmita.dalela@gmail.com (A. Dalela); okku@itu.dk (O. Kulyk)

🌐 <https://jurlindbudurushi.com/> (J. Budurushi)

🆔 0000-0002-6732-4400 (J. Budurushi); 0000-0002-9740-26098 (M. Faraon); 0000-0002-9527-1924 (S. Agbesi); 0000-0003-4218-1658 (O. Kulyk)



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Switzerland also embraces remote voting, offering its citizens both postal [5] and internet voting [6]. Furthermore, both Germany [7] and Australia [8] have implemented comprehensive postal voting. However, there are countries that legally allow remote voting, but have not yet implemented it, such as Albania [9].

Despite strong advocacy from the Albanian diaspora and substantial efforts from the legal [9] and social [10] perspectives, remote voting was not implemented for the parliamentary elections in April 2021. Given the historically low turnout in the last three parliamentary elections¹, the introduction of remote voting addresses a critical concern by providing convenient and accessible means for citizens to engage in the electoral system. The impact of this initiative goes beyond mere convenience, as it addresses a significant part of the Albanian electorate, namely the diaspora population that constitutes 48% of eligible voters [11]. However, before implementing remote voting, it is essential to assess voter preferences and integrate robust security measures. This approach protects both vote secrecy and electoral integrity, while fostering public trust in the electoral process.

Currently, there is a lack of empirical studies on voter preferences for remote voting in the Albanian context. Therefore, this pilot study aims to bridge this gap by investigating the preferences of voters in the Albanian electorate, particularly the diaspora, for different remote voting options. In contrast to previous studies, this study broadens the scope of the investigation by exploring multiple remote voting options to provide a better understanding of voter preferences within the Albanian context. Moreover, since the diaspora operates independently of local societal pressures and ruling parties, our objective is to investigate their preferences regarding electoral processes. We examine whether there is an inclination towards prioritizing more robust integrity, even at the expense of sacrificing some level of vote secrecy. Given the close association between integrity and verification in the context of elections, our investigation includes preferences related to the verification of electoral processes.

Based on the above considerations, this study is guided by the following research questions: (RQ1) *What are voters' preferences regarding different options for remote voting?*; (RQ2) *How do voters weigh the trade-off between vote secrecy and integrity?* and; (RQ3) *What level of vote verification is acceptable for voters when voting remotely?* These questions were addressed using an online survey.

2. Background

Remote voting, particularly internet voting, has been extensively explored in the past decade from different perspectives, for instance user-friendliness [12], identifying factors that influence trust [13] and transparency [14], vote verification [15, 16], and voters' mental models [17].

Although remote voting offers advantages, it can lead to perceived legitimacy deficits and reduced trust [18]. Therefore, understanding voter preferences is crucial for designing voting systems that is accepted and trusted by voters [19]. Consequently, a great deal of research has been conducted to investigate voters' preferences and attitudes toward remote voting systems. Carter and Campbell [20] has investigated voters' attitudes towards internet voting in the United

¹46.33% in 2021, 46.77% in 2017, and 49.86% in 2013. Statistics provided by the Central Electoral Commission at <https://kqz.gov.al/parliamentary-elections/>.

States. Kimbi and Zlotnikova [21] explored the readiness of voters for remote electronic voting in Tanzania. They highlighted voters' preference for electronic voting, but expressed concerns related to security, privacy, and reliability. Faraon et al. [22] examined voters' attitudes toward internet voting in Sweden. The study challenged previous research by indicating that age was not a significant factor influencing voter participation when using internet voting. Fragnière et al. [23] aimed to understand bottlenecks and sociological obstacles in the perception of internet voting in Switzerland. Moreover, a few studies have been conducted on German voters. For example, Marky et al. [24] investigated voters' perceptions of individual verification in internet voting and provided recommendations (e.g., verifying cast votes, minimizing human effort) for developers and policymakers based on their findings. Furthermore, Kulyk et al. [25] explored attitudes toward voting online using a verifiable system, highlighting convenience as a primary motivator and emphasizing the importance of verification. Finally, but not least, Marky et al. [26] assessed voters' perceptions of state-of-the-art practices in internet voting, emphasizing the role of expert evaluations and individual verification in building trust while noting the negative impacts of vote updating due to voter unfamiliarity.

Existing studies on voters' perceptions and attitudes offer valuable insights into the various aspects of remote voting. These include demographics, accessibility, trust, security, and verification. However, most investigations have focused on a single remote voting option, which limits a comprehensive understanding across the spectrum. Furthermore, cultural and legal factors may influence the acceptance and implementation of remote voting [19]. These factors can vary between countries and regions and may play a significant role in shaping public opinion. For example, Estonia [4], Switzerland [27], and Germany [28] have implemented different options for remote voting. To our knowledge, no empirical investigation has been conducted on voter preferences for different remote voting options. Our study contributes to a more comprehensive understanding by focusing on Albanian voters and considering a new sociopolitical context.

3. Methodology

3.1. Participants

A total of 55 participants completed an online survey. Two participants were excluded due to missing data. The final sample consisted of 53 participants with an age range of 15 to 54 years ($M = 34.06$; $SD = 9.88$), see Table 1 for an overview. We included participants aged 15 years and older since they would be eligible to vote in the next parliamentary elections scheduled for 2025. We included participants who are currently not eligible to vote in Albania because they do not have Albanian citizenship. Note that many Albanians living in the diaspora had to give up their citizenship because other countries, such as Germany, do not allow double citizenship for non-EU citizens. However, these citizens could become motivated to reacquire their former citizenship once Albania joins the EU.

Finally, we also included individuals currently living in Albania. The reason for this is twofold: (1) Given the constant high number of Albanian citizens emigrating, these participants could become part of the diaspora; (2) Investigate and better understand the differences in voter perceptions between those residing in Albania and those living in the diaspora.

Table 1

An overview of participant demographics.

Measure	Items	Frequency	Percentage
Gender	Male	26	49.1
	Female	27	50.9
Education	Compulsory school	1	1.9
	Professional school	1	1.9
	High school	3	5.7
	Bachelors or equivalent	10	18.9
	Masters or equivalent	31	58.5
	Doctoral or equivalent	5	9.4
	Other	2	3.8
Employment	Student	2	3.8
	Unemployed	4	7.5
	Self-employed	7	13.2
	Employed (private)	29	54.7
	Employed (government)	7	13.2
	Retired	2	3.8
	Other	2	3.8
Citizenship	Albanian only	33	62.3
	Albanian and other country	16	30.2
	Other	4	7.5
Living outside Albania	Yes, only another country	41	77.4
	No, only in Albania	7	13.2
	Both in Albania/another country	5	9.4
Computer skills	Basic	3	5.7
	Intermediate	14	26.4
	Advanced	36	67.9

3.2. Materials and measures

A survey composed of five sections was used.² The first section introduced the participants to the study (e.g., purpose of the study, estimated completion time, ethical considerations, and author information). The second section collected demographic data such as age, gender, education, employment, citizenship, living place, and computer skills. Furthermore, participants reported voting eligibility, voting in previous elections, voting in future elections, the number of times voting in parliamentary, local and other elections, and voting methods used in the past. Questions to capture voter behavior and experience were developed based on guidelines from previous research [29]. The third section focused on questions related to remote voting preferences (e.g., If remote voting was available, which option would you prefer most?). For these questions, we derived insights from a list compiled by the European Commission [30] and confirmed our list using real-world deployments [4]. Assuming that the participants had no experience with the options presented, no related challenges were introduced to avoid potential bias. The fourth section relates to vote secrecy and integrity (e.g., if remote voting is available,

²The survey can be found at <https://bit.ly/remote-voting-albania>

what would you prefer to be ensured?). These questions were based on the definitions of existing research [31, 32]. The fifth section featured questions about election verification (e.g., if remote voting was available, which verification steps should the voting system support?). These questions were derived using definitions from a systematization knowledge paper [33], which divides verification into (1) individual verification, consisting of cast-as-intended and recorded-as-cast; and (2) universal verification, also known as tallied-as-recorded. To enable participants in making informed decisions, section four and five introduced participants to the corresponding definitions.

3.3. Procedure

The survey was created using Qualtrics Core XM and designed in both Albanian and English. To address potential sources of sample bias [34], in particular, by including the hard-to-reach population, participants were acquired through snowball sampling in two different channels. The first channel included social networks, namely a private WhatsApp group managed by the *Diaspora për Shqipërinë e Lirë (DPSHL)* movement, LinkedIn, and Facebook. The second channel was the official website of the DPSHL movement (votaediaspores.com). Following the completion of the survey, all data was exported to SPSS for statistical analysis.

3.4. Ethical considerations

This study adhered to the ethical guidelines of the Swedish Research Council for data collection [35]. All participants received an introduction to the purpose of the study upon opening the online survey. They were informed that all data collected were processed and protected according to ethical requirements. Participants were informed that participation was voluntary and confidential and that all responses were anonymized. Furthermore, they were provided with the information that the collected data would only be used for research purposes and would not be shared with third parties. Finally, the participants were made aware that they could end their participation at any time during the survey.

4. Results and analysis

4.1. Voting behavior and experience

Participants were asked to report their eligibility to vote; their participation in past and future elections; the number of times they voted in parliamentary, local, and other elections; and the voting method used in the past. The responses of the participants are summarized in Table 2. The results reveal a contrast between eligibility to vote and low turnout in the most recent election. This could suggest a disconnect between being able to vote and voting, but may also indicate underlying barriers to voting participation. Looking into the future, while the data showed that the majority of participants reported that they intended to vote in the next election, a significant number were uncertain or did not plan to vote. This highlights the need for more research to better understand the types of interventions, including the use of technological advances, that should be considered to increase voter turnout and engagement.

Table 2
Participants' voting behavior and experience.

Measure	Items	Frequency	Percentage
Eligible to vote	Yes	49	92.5
	No	4	7.5
Voted in last election*	Yes	20	37.7
	No	33	62.3
Voting in future election**	Yes	30	56.6
	No	23	43.4
Number of times voted Parliamentary, local, others	0	10, 15, 49	18.9, 28.3, 92.5
	1	14, 10, 2	26.4, 18.9, 3.8
	2	10, 10, 2	18.9, 18.9, 3.8
	3	7, 9, 0	13.2, 17.0, 0
	4	6, 3, 0	11.3, 5.7, 0
	5	4, 4, 0	7.5, 7.5, 0
	7	1, 1, 0	1.9, 1.9, 0
	9	1, 1, 0	1.9, 1.9, 0
	Past voting method used	Polling station (paper)	48
Polling station (electronic)		1	1.9
Not used any method		4	7.5

Notes. * Parliamentary election in 2021. ** Expected parliamentary election in 2025.

4.2. Remote voting preferences

Participants were asked about their preferred remote voting option. The data show that voting remotely on an electronic device through an internet voting system was the most preferred option, followed by voting on an electronic voting machine at a remote polling station and voting remotely on a paper ballot by postal mail. Few participants chose voting on a paper ballot at a remote polling station and voting remotely by phone call, SMS, or e-mail; see Table 3.

Table 3
Participants' preferred voting method.

Voting method	Frequency	Percentage
Voting on paper ballot in remote polling station (e.g. embassy)	2	3.8
Voting on electronic voting machine in remote polling station (e.g. embassy)	9	17.0
Voting remotely on paper ballot via postal mail	8	15.1
Voting remotely on electronic device via Internet voting system (e.g. desktop, laptop, tablet and smartphone)	24	45.3
Voting remotely via phone call	3	5.7
Voting remotely via SMS	3	5.7
Voting remotely via e-mail	4	7.5

The data show a trend that favors online voting methods over traditional ones (e.g., voting in person). This reflects participants' desire for digital methods of participation in elections and a willingness to adopt new voting technologies.

Furthermore, participants were asked to indicate a maximum of three reasons for using remote voting if it was available; see Table 4.

Table 4
Participants' reasons for using remote voting.

Reasons for using remote voting	Frequency	Percentage
I like to vote without having to leave work (e.g., saving money)	30	56.6
I want to avoid polling stations (e.g., not standing in long queues)	19	35.8
I want to save time (e.g., long travel distance to polling stations)	44	83.0
I have dependents at home (e.g., taking care of children)	7	13.2
I have mobility limitations (e.g., being disabled)	5	9.4
I feel it is convenient (e.g., easy participation)	26	49.1
I feel it is a modern approach (e.g., using digital technology)	26	49.1
Other	2	3.8

The data suggest that saving time due to the distance to a polling station was the most common reason. This was followed by saving money by not leaving work. Furthermore, perceiving remote voting as convenient and modern was seen as a strong driver. Reasons related to personal circumstances, such as taking care of children or mobility limitations, seem less common. In general, practical and efficient factors seem to have a greater impact than personal or situational considerations.

4.3. Vote secrecy and vote integrity

Participants were asked about their preferences regarding the ensurance of vote secrecy and vote integrity. When asked about these requirements in general, the results showed that, while many participants preferred vote integrity over vote secrecy, the majority considered both equally important. However, when asked about these requirements in the context of remote voting, the preference for both increased slightly. Participants expect a remote voting system to provide means to ensure both the secrecy and the integrity of their vote against unauthorized attempts to access or change votes; see Table 5.

In addition, participants were asked what they preferred to ensure: vote secrecy, vote integrity, or both; see Table 6. It is clear that a majority would prioritize vote integrity even if vote secrecy could be at risk. Only a few participants considered the reverse to be true. Interestingly, a sizable minority would not consider using a remote voting system if both vote secrecy and vote integrity were not guaranteed. Although vote integrity is considered more important by participants, failing to ensure vote secrecy could lead to a decrease in voter turnout when remote voting systems are used.

Table 5

Preferences toward vote secrecy and vote integrity in general and for remote voting.

Measure	Items	Frequency	Percentage
In general	Vote secrecy	2	3.8
	Vote integrity	16	30.2
	Both equal	34	64.2
	Other	1	1.9
Remote voting	Vote secrecy	1	1.9
	Vote integrity	14	26.4
	Both equal	36	67.9
	Other	2	3.8

Notes. Vote secrecy refers to voters' choice being confidential and only known to them, while vote integrity means voters' choice not being modified by unauthorized parties.

Table 6

Trade-offs between vote secrecy and vote integrity.

Measure	Frequency	Percentage
I prefer vote secrecy to be ensured, even if vote integrity can be at risk	3	5.7
I prefer vote integrity to be ensured, even if vote secrecy can be at risk	35	66.0
None of the above. I would not use a remote voting system that does not ensure both vote secrecy and vote integrity	15	28.3

4.4. Vote verification

Participants were asked which of the following three verification steps they consider that a remote voting system should support: cast-as-intended, stored-as-cast, and tallied-as-stored. The results are presented in Table 7. Notably, most of the participants expressed that they would not use a remote voting system if not all verification steps were supported. The preferences for the different verification steps are evenly distributed and less important than the ensurance of all the verification steps.

Table 7

Preferences for vote verification steps.

Measure	Frequency	Percentage
Cast-as-intended	5	9.4
Stored-as-cast	6	11.3
Tallied-as-stored	7	13.2
All steps. I would not use a system that does not support all steps of verification.	35	66.0

5. Discussion

This pilot study provides information on the preferences of the Albanian electorate, mainly its diaspora, regarding remote voting options, vote secrecy, vote integrity, and vote verification. It should be emphasized that, given the lack of exploration in previous studies, a comparative analysis cannot be conducted regarding voters' preferences for various remote voting options.

Most of the participants expressed a preference to adopt new remote voting technologies if accessible. The preferred options included: (1) remote voting on an electronic device via an internet voting system, and (2) voting on an electronic voting machine in a remote polling station. Furthermore, participants attributed their preferences to perceived convenience and modernity. In summary, practical and efficient factors seem to have a greater impact than personal or situational considerations. Our results on remote voting preferences align with those of previous studies [36, 25], which emphasize convenience as a significant factor. In contrast, they diverge from Yao and Murphy's [37] emphasis on mobility and Powell et al.'s [38] identification of performance expectancy, social influence, and computer anxiety as crucial factors. Most importantly, our results contrast the option of remote voting through postal mail proposed by *Diaspora për Shqipërinë e Lirë* [39], a prominent non-governmental organization that advocates remote voting. This underscores the significance of our study in preventing potential errors, as those observed when implementing electronic voting in the Albanian 2021 parliamentary elections [40].

Regarding the trade-offs between vote secrecy and integrity, our findings indicate that a majority of participants view both aspects as equally important, although some prioritize vote integrity. These results align with those of previous research [22, 21, 25, 13], highlighting the importance of security, which encompasses both vote secrecy and integrity, in voters' perceptions of internet voting systems.

Finally, our findings show that the majority of participants would abstain from using a remote voting system unless all verification steps were supported, which confirms previous research. For example, Kulyk et al. [25] revealed the consensus of the participants on the importance of verification. Moreover, Marky et al. [26] proposed that practices such as verification play a crucial role in fostering voters' trust.

5.1. Limitations

A few limitations come to the fore when considering the methodology of our study. First, the small sample size impedes the generalizability of the findings. Second, given that the study focused on remote voting options that are not yet accessible to participants, their responses could have been skewed by unfamiliarity with such options. Another limitation is participants' insufficient background knowledge regarding the challenges and issues related to remote voting in general and those corresponding to each remote voting option. However, the survey did not introduce participants to these challenges and issues to avoid social desirability bias. Instead, the survey incorporated explanations and definitions of concepts relevant to remote voting, such as vote verification, with the aim of assisting participants in making informed decisions. These limitations underscore the importance of interpreting the results as indicative of perceived preferences toward remote voting, rather than definitive evidence of actual preferences.

5.2. Future directions

The results of this pilot study provide essential groundwork for future studies to further explore and understand the dynamics of remote voting preferences among the Albanian electorate. Future research could expand this study by including a larger group of participants across different segments of the Albanian electorate. Furthermore, it could be relevant to examine how attitudes towards vote buying/selling, voter coercion, and external influences affect remote voting preferences.

References

- [1] D. Acemoglu, J. A. Robinson, *Economic origins of dictatorship and democracy*, Cambridge University Press, 2006.
- [2] B. Forest, The changing demographic, legal, and technological contexts of political representation, *Proceedings of the National Academy of Sciences* 102 (2005) 15331–15336.
- [3] P. Gronke, E. Galanes-Rosenbaum, P. A. Miller, D. Toffey, Convenience voting, *Annual Review of Political Science* 11 (2008) 437–455.
- [4] P. Ehin, M. Solvak, J. Willemson, P. Vinkel, Internet voting in Estonia 2005–2019: Evidence from eleven elections, *Government Information Quarterly* 39 (2022) 101718.
- [5] C. Killer, B. Stiller, The Swiss postal voting process and its system and security analysis, in: *Electronic Voting: 4th International Joint Conference, E-Vote-ID 2019, Bregenz, Austria, October 1–4, 2019*, Springer, 2019, pp. 134–149.
- [6] U. Serdult, M. Germann, F. Mendez, A. Portenier, C. Wellig, Fifteen years of internet voting in Switzerland [history, governance and use], in: *2015 Second International Conference on eDemocracy & eGovernment (ICEDEG), IEEE, 2015*, pp. 126–132.
- [7] A. Wagner, J. Lichteblau, Germany going postal? Comparing postal and election day voters in the 2017 German federal election, *German Politics* 31 (2022) 602–625.
- [8] J. Y. Zvulun, Postal voting and voter turnout in local elections: Lessons from New Zealand and Australia, *Lex Localis-Journal of Local Self-Government* 8 (2010) 115–131.
- [9] The electoral code of the Republic of Albania, https://kqz.gov.al/wp-content/uploads/2023/02/elctoral_code.pdf, 2023.
- [10] Diaspora për Shqipëri e Lirë - Diasporas' voting right, <https://votaediaspores.com>, 2024. Albanian only.
- [11] Diaspora e Shqipërisë në Shifra, <https://instat.gov.al/media/7848/diaspora-ne-shifra-2020.pdf>, 2020. Albanian only.
- [12] K. Marky, O. Kulyk, K. Renaud, M. Volkamer, What did I really vote for? On the usability of verifiable e-voting schemes, in: *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018*, pp. 1–13.
- [13] S. Agbesi, A. Dalela, J. Budurushi, O. Kulyk, "What will make me trust or not trust will depend upon how secure the technology is": Factors influencing trust perceptions of the use of election technologies, in: *Proceedings of Seventh International Joint Conference on Electronic Voting (E-Vote-ID 2022), University of Tartu, 2022*.

- [14] S. Agbesi, J. Budurushi, A. Dalela, O. Kulyk, Investigating transparency dimensions for Internet voting, in: International Joint Conference on Electronic Voting, Springer Nature Switzerland Cham, 2023, pp. 1–17.
- [15] J. Puiggali, J. Cucurull, S. Guasch, R. Krimmer, Verifiability experiences in government online voting systems, in: Electronic Voting: Second International Joint Conference, E-Vote-ID 2017, Bregenz, Austria, October 24-27, 2017, Springer, 2017, pp. 248–263.
- [16] O. Kulyk, J. Henzel, K. Renaud, M. Volkamer, Comparing "challenge-based" and "code-based" internet voting verification implementations, in: Human-Computer Interaction–INTERACT 2019: 17th IFIP TC 13 International Conference, Paphos, Cyprus, September 2–6, 2019, Springer, 2019, pp. 519–538.
- [17] M.-L. Zollinger, E. Estaji, P. Y. Ryan, K. Marky, "Just for the sake of transparency": Exploring voter mental models of verifiability, in: Electronic Voting: 6th International Joint Conference, E-Vote-ID 2021, Virtual Event, October 5–8, 2021, Springer, 2021, pp. 155–170.
- [18] N. K. Blanchard, T. Selker, Improving voting technology is hard: The trust-legitimacy-participation loop and related problems, in: Proceedings of the 8th Workshop on Socio-Technical Aspects in Security and Trust, 2018, pp. 1–8.
- [19] N. Licht, D. Duenas-Cid, I. Krivososova, R. Krimmer, To i-vote or not to i-vote: Drivers and barriers to the implementation of internet voting, in: R. Krimmer, M. Volkamer, D. Duenas-Cid, O. Kulyk, P. Rønne, M. Solvak, M. Germann (Eds.), Electronic Voting, Springer, Cham, 2021, pp. 91–105.
- [20] L. Carter, R. Campbell, The impact of trust and relative advantage on internet voting diffusion, *Journal of Theoretical and Applied Electronic Commerce Research* 6 (2011) 28–42.
- [21] S. Kimbi, I. Zlotnikova, Citizens' readiness for remote electronic voting in Tanzania, *Advances in Computer Science: an International Journal* 3 (2014) 150–159.
- [22] M. Faraon, G. Stenberg, J. Budurushi, M. Kaipainen, Positive but skeptical: A study of attitudes towards Internet voting in Sweden, Edition Donau-Universität Krems, Münster, 2015, pp. 191–205.
- [23] E. Fragnière, S. Grèzes, R. Ramseyer, How do the Swiss perceive electronic voting? Social insights from an exploratory qualitative research, in: Electronic Voting: 4th International Joint Conference, E-Vote-ID 2019, Bregenz, Austria, October 1–4, 2019, Springer, 2019, pp. 100–115.
- [24] K. Marky, M.-L. Zollinger, P. Roenne, P. Y. Ryan, T. Grube, K. Kunze, Investigating usability and user experience of individually verifiable internet voting schemes, *ACM Transactions on Computer-Human Interaction* 28 (2021) 1–36.
- [25] O. Kulyk, M. Volkamer, N. Fuhrberg, B. Berens, R. Krimmer, German voters' attitudes towards voting online with a verifiable system, in: Workshop on Advances in Secure Electronic Voting, Grenada, February 18, 2022, 2022.
- [26] K. Marky, P. Gerber, S. Günther, M. Khamis, M. Fries, M. Mühlhäuser, Investigating state-of-the-art practices for fostering subjective trust in online voting through interviews, in: 31st USENIX Security Symposium (USENIX Security 22), 2022, pp. 4059–4076.

- [27] A. Driza Maurer, The Swiss Post/Scytl transparency exercise and its possible impact on internet voting regulation, in: R. Krimmer, M. Volkamer, V. Cortier, B. Beckert, R. Küsters, U. Serdült, D. Duenas-Cid (Eds.), *Electronic Voting*, Springer, Cham, 2019, pp. 83–99.
- [28] M. P. Heintl, S. Gözl, C. Bösch, A comparative security analysis of the German federal postal voting process, in: *DG.O2021: The 22nd Annual International Conference on Digital Government Research*, DG.O'21, Association for Computing Machinery, New York, NY, USA, 2021, pp. 198–207.
- [29] B. Laugwitz, T. Held, M. Schrepp, Construction and evaluation of a user experience questionnaire, in: *HCI and Usability for Education and Work: 4th Symposium of the Workgroup Human-Computer Interaction and Usability Engineering of the Austrian Computer Society, USAB 2008*, Graz, Austria, November 20-21, 2008., Springer, 2008, pp. 63–76.
- [30] F. Lupiáñez-Villanueva, A. Devaux, C. Faulí, K. Stewart, F. Porcu, J. Taylor, A. Theben, B. Baruch, F. Folkvord, F. Nederveen, Study on the benefits and drawbacks of remote voting, Technical Report, European Commission, 2018.
- [31] A. Rodríguez-Pérez, Secret suffrage in remote electronic voting systems, in: *2017 Fourth International Conference on eDemocracy & eGovernment (ICEDEG)*, IEEE, 2017, pp. 277–278.
- [32] C. van Ham, Electoral integrity, in: *The Oxford handbook of political representation in liberal democracies*, Oxford University Press, 2020.
- [33] V. Cortier, D. Galindo, R. Küsters, J. Müller, T. Truderung, Sok: Verifiability notions for e-voting protocols, in: *2016 IEEE Symposium on Security and Privacy (SP)*, IEEE, 2016, pp. 779–798.
- [34] E. M. Redmiles, Z. Zhu, S. Kross, D. Kuchhal, T. Dumitras, M. L. Mazurek, Asking for a friend: Evaluating response biases in security user studies, in: *Proceedings of the 2018 ACM SIGSAC Conference on Computer and Communications Security*, 2018, pp. 1238–1255.
- [35] S. Stafström, Good research practice, Swedish Research Council, Stockholm, 2017.
- [36] L. Carter, R. Campbell, Internet voting usefulness: An empirical analysis of trust, convenience and accessibility, *Journal of Organizational and End User Computing* 24 (2012) 1–17.
- [37] Y. Yao, L. Murphy, Remote electronic voting systems: An exploration of voters' perceptions and intention to use, *European Journal of Information Systems* 16 (2007) 106–120.
- [38] A. Powell, C. K. Williams, D. B. Bock, T. Doellman, J. Allen, e-Voting intent: A comparison of young and elderly voters, *Government Information Quarterly* 29 (2012) 361–372.
- [39] Diaspora për Shqipëri e Lirë - Projektligj, https://votaediaspores.com/dpshl_projektligj.pdf, 2023. Albanian only.
- [40] J. Budurushi, Use of electronic voting in the Albanian parliamentary elections in 2021, in: *Sixth International Joint Conference on Electronic Voting E-Vote-ID 2021*. 5-8 October 2021, 2021, pp. 304–319.