

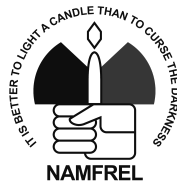


Voters' Digital Rights:

Research on the Internet Voting System
As One of the Modes for Overseas
Voting in the 2025 National Elections



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Voting System As One of the Modes for Overseas
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About the Research

In the past, overseas Filipinos can vote by going to the Philippine Embassy or consulate to cast their votes, or through mail. It was observed however that voter turn-out is way below the number of registered overseas Filipino voters. Overseas Filipinos often face logistical difficulties when voting, arising from the required physical appearance for registration and voting. If the registration site is in another state, it will take them away from their jobs and homes just to vote. In 2022, reports say that of the 1.6 million OFs, only 600,000 were able to vote.

In 2023, the Commission on Elections (Comelec) approved online voting for overseas Filipinos (OF). The said move is to encourage more overseas Filipinos to cast their votes during elections. Internet voting will be the primary mode of casting votes for Filipinos abroad in 2025 except in areas with internet connectivity issues. In the case of seafarers, this is a welcome development since they can now vote even if they are at sea.

The bases of online voting are:

Section 16.11, Republic Act (RA) No. 9189 which allows Comelec to “study the use of electronic mail, internet, or other secured networks in the casting of votes of qualified overseas Filipino voters”

Section 28, RA No. 10590: “explore other more efficient, reliable and secure modes or systems, ensuring the secrecy and sanctity of the entire process, whether paper-based, electronic-based or internet-based technology or such other latest technology available, for onsite and remote registration and elections”; and

Section 23, RA No. 10590: “determine other alternative modes of voting, thereby allowing the Commission to promulgate, without further legislation from Congress, its own rules and regulations for appropriate implementation of such voting system duly determined by the Commission.”

Objective: The Foundation for Media Alternatives (FMA) and the National Citizens' Movement for Free Elections (NAMFREL) aimed to conduct a research study on eVoting for overseas Filipinos. More than just understanding what eVoting is about and how it will be implemented, the study will focus on digital rights issues with the implementation of eVoting. Specifically, it hopes to examine the following: data privacy and data protection such as data handling, data ownership, security of voter's data, and use of AI tools (if applicable); security issues in relation to the use

of device for internet voting, as well as the security of votes and transmission; and, issues related to the right to information (i.e., how information is disseminated to OFs to encourage them to vote).


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I. Executive Summary

It has been 20 years since overseas Filipinos were first given the opportunity to vote in national elections, yet challenges persist with low registration and voter turnout. To address this disenfranchisement, the Commission on Elections (COMELEC) is set to introduce online voting for the 2025 national elections, aiming to improve accessibility and boost participation among overseas voters. However, the implementation of online voting brings several challenges. This study explored key digital rights issues related to Internet voting, including ensuring the security of sensitive voter data against breaches, maintaining the integrity of the voting process, and bridging the digital divide to guarantee that all eligible voters can participate. Additional concerns include the reliability of the voting system, the role of election observers, and the legal framework governing online voting.

To address these concerns, researchers have proposed several recommendations. First, COMELEC should undertake rigorous security testing and collaborate with cybersecurity experts to safeguard the system from potential threats. Additionally, a comprehensive information campaign is necessary to educate voters about the new online voting process. Reducing the voting period could also mitigate risks associated with prolonged exposure to cyber threats. Contingency plans must be developed to ensure that all voters can participate in emergencies or conflicts. It is also essential to resolve legal and transparency issues related to the system's implementation and budget to build public trust. Finally, exploring further enhancements to voter registration and participation processes will be crucial for the system's success. Implementing these measures will help ensure a secure, efficient, and inclusive voting process for overseas Filipinos.

II. Background of the Study

A. Overseas Voters' Rights

Suffrage is the core of every electoral process. Elections provide a platform for individuals to vote for public officials who best represent them and their interests. In a democratic society, the integrity and inclusivity of elections are important. Therefore, every individual has the right to fully engage in this process without barriers.

The right to vote is enshrined in three instruments.¹ First, the *International Covenant on Civil and Political Rights* in Article 25 (a-c), guarantees that every citizen shall have the right and the opportunity, without any of the distinctions mentioned in Article 2 and without unreasonable restrictions: (a) to take part in the conduct of public affairs, directly or through freely chosen representatives; (b) to vote and to be elected at genuine periodic elections which shall be by universal and equal suffrage and shall be held by secret ballot, guaranteeing the free expression of the will of the electors; (c) to have access, on general terms of equality, to public service in their country.² Second, the *Universal Declaration of Human Rights*, in Article 21 (1-3), states that: (1) everyone has the right to take part in the government of their country, directly or through freely chosen representatives; (2) everyone has the right to equal access to public service in their country; (3) the will of the people shall be the basis of the authority of the government; this will shall be expressed in periodic and genuine elections, which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.³

¹ See

<https://www.ombudsman.gov.ph/UNDP4/wp-content/uploads/2013/03/1.1.1.-CVE-Basic-Module-Final-Draft-1st-Ed.pdf>

² International Covenant on Civil and Political Rights

<https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights>

³ <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

Lastly, in the context of the Philippines, the *1987 Philippine Constitution*, in Article V, Sections 1-2, states that: (1) suffrage may be exercised by all citizens of the Philippines not otherwise disqualified by law; (2) the Congress shall provide a system for securing the secrecy and sanctity of the ballot, as well as a system for absentee voting by qualified Filipinos abroad; the Congress shall also design a procedure for the disabled and the illiterates to vote without the assistance of other persons; until then, they shall be allowed to vote under existing laws and such rules as the Commission on Elections may promulgate to protect the secrecy of the ballot.⁴ Following the 1987 Constitution, it was only in 2003 when a law allowing Overseas Filipinos to vote was enacted. The Republic Act 9189 known as the *The Overseas Absentee Voting Act of 2003* mandated the right of Overseas Filipinos to participate in the elections.⁵ In 2013, Republic Act No. 10590 known as *The Overseas Voting Act of 2013*, amended RA 9189 to enhance and improve the system of overseas absentee voting for Filipino citizens abroad.⁶

B. Online Voting

The Philippines is recognized as one of the leading countries of origin for migrants worldwide, with an increasing number of Filipinos seeking better opportunities abroad. In 2023, the Department of Migrant Workers reported that around 2.3 million land- and sea-based migrant workers were deployed.⁷ Overseas Filipinos (OFs) play a crucial role in the Philippine economy, contributing approximately 10% of the GDP only through their remittances.⁸ Despite their significant economic impact, living far from home means that overseas Filipinos could lose the opportunity to exercise their right to suffrage. The right to vote for overseas Filipinos was only established with the passage of Republic Act 9189 or

⁴ 2023 OFW deployment

<https://www.philstar.com/headlines/2024/04/12/2347168/historic-2023-ofw-deployment-moves-philippines-labor-migration-forward-pandemic>

⁵ RA 9189 <https://www.set.gov.ph/resources/election-law/republic-act-no-9189/>

⁶ RA 10590 <https://www.officialgazette.gov.ph/2013/05/27/republic-act-no-10590/>

⁷ Ibid.

⁸ OFW remittances have become a major contributor to the economy

<https://www.pids.gov.ph/details/news/in-the-news/eyes-on-the-ofw-sector>

the "Overseas Absentee Voting Act of 2003." This law was a milestone in recognizing the political rights of overseas Filipinos, allowing them to participate in national elections. However, even after 20 years, the registration and voter turnout for overseas voting remains notably low.

In 2004, the first election was held for overseas Filipino voters. Based on the historical data obtained from the COMELEC, around 359,000 voters registered, but only approximately 233,000 cast their votes.⁹ While the number of registered overseas voters has generally increased with each election, voter turnout has fluctuated and remains relatively low. For instance, in the 2007 National Elections, around 504,000 voters registered, but voter turnout was only about 16.21%. In the 2016 National Elections, the number of registered overseas voters reached approximately 1.3 million, yet only about 430,000 participated in voting. In the 2022 National Elections, although the number of registered voters decreased from around 1.8 million in 2019 to approximately 1.69 million in 2022, the election recorded the highest voter turnout since the implementation of overseas voting with 40.59% voter turnout. Despite this increase, voter turnout remains significantly low. Moreover, this situation has led the Commission on Elections (COMELEC) to introduce the internet voting system or online voting in the 2025 National Elections with the hope that more overseas Filipinos will be encouraged to participate in the electoral process.¹⁰

⁹ COMELEC: Comparative Statistics of Overseas Voters Data from 2004 NLE to 2022 NLE

¹⁰ Online voting to lure more overseas Pinoys to register for 2025 polls
<https://www.pna.gov.ph/articles/1222130>

Overseas Voter Turnout

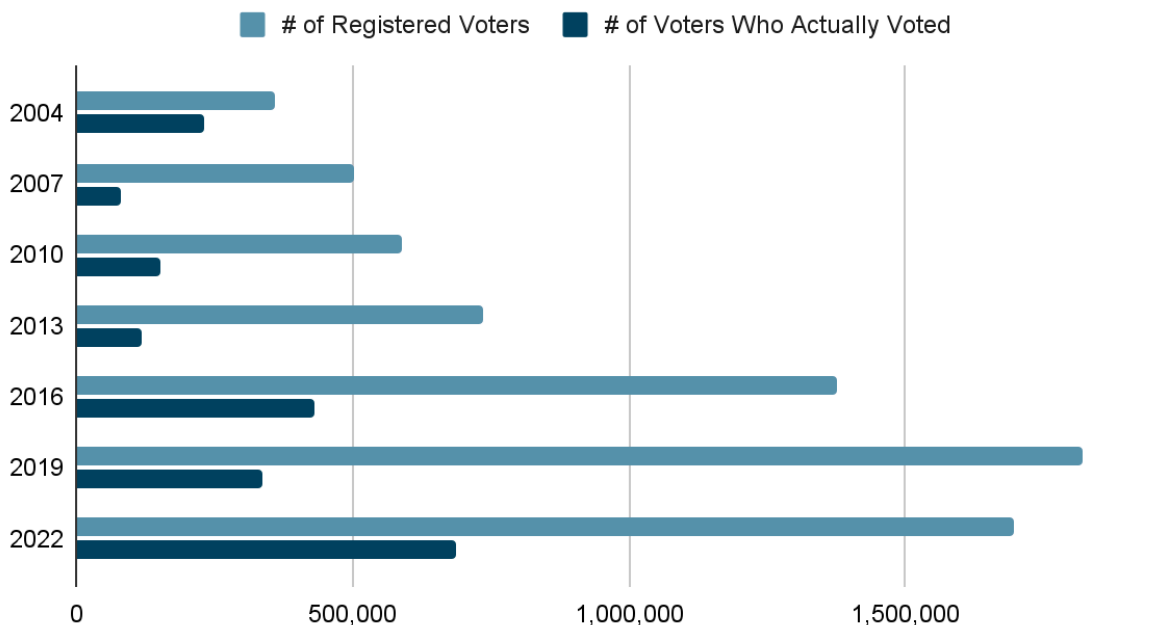


Fig 1. Overseas Voter Turnout Data (2004-2022) Obtained from COMELEC

The Commission on Elections is projected to spend PHP 465 million for the system that will be used for online voting. COMELEC awarded the Online Voting and Counting System project to the Joint Venture of SMS Global Technologies, a Filipino-led company, and Sequent Tech Incorporated, a US-based firm¹¹ US-based firm Sequent Tech claimed to have created the world's first online voting platform.¹² The bid submitted was PHP 112 million, significantly lower than the PHP 465 million allocated budget. Some critics have called the deal a lowball and questioned whether the low price can still guarantee a credible election.¹³ COMELEC, on the other hand, ensured that they had checked the system and that the joint venture complied with their prescribed requirements.

¹¹

<https://www.rappler.com/philippines/comelec-picks-sequent-tech-sms-global-technologies-online-voting-contractor-2025/>

¹² Sequent Tech <https://sequentech.io/>

¹³ Critics of the procurement of OVCS system <https://www.pna.gov.ph/opinion/pieces/886-lowball>

Despite the advancements in technology and the advent of the digital era, only a few countries have implemented online voting, and most have used it only for special purposes.¹⁴ Estonia claims to be the first country to introduce online voting and remains the only nation where all citizens can choose to cast their votes online in national elections. Additionally, other countries like France, Panama, and Pakistan use online voting primarily for citizens living abroad. Some local areas utilize online voting for local elections, while others reserve it for voters with disabilities or those living in remote areas. Other countries exploring the use of Internet voting are still considering the many risks it can bring. These risks include concerns about digital rights issues such as cybersecurity threats, voter privacy, and the integrity of the electoral process. Ensuring the security of online voting systems against hacking and fraud is a significant challenge. Moreover, there are apprehensions about the digital divide, where unequal access to technology could disenfranchise certain voters. The ongoing debates reflect the complex balance between embracing technological innovation and safeguarding democratic principles.

C. Basis of Online Voting

Republic Act 10590, known as the *Overseas Voting Act of 2013*, introduced significant changes to the conduct of overseas voting, particularly in expanding its scope. Key amendments include changing the terminology from "Overseas Absentee Voting" to "Overseas Voting" to emphasize inclusivity and active participation. The Act also includes provisions for seafarers, allowing them to vote wherever their ship is docked, provided they are registered as overseas voters (Section 2-n). Additionally, it grants overseas voters the opportunity to participate in referenda and plebiscites, in addition to national elections (Section 3). The Act authorizes COMELEC to explore new voting methods, such as electronic voting systems including internet voting (Section 28). Furthermore, it establishes the Office for Overseas Voting (OFOV) under the Commission on Elections (Section 29).

¹⁴ Countries Using Online Voting
<https://medium.com/edge-elections/which-countries-use-online-voting-3f7300ce2f0>

The implementation of online voting is being questioned due to the lack of law supporting it. RA 10590, Section 28, states that COMELEC *“may explore other more efficient, reliable and secure modes or systems, ensuring the secrecy and sanctity of the entire process, whether paper-based, electronic-based or internet-based technology or such other latest technology available, for onsite and remote registration and elections and submit reports and/or recommendations to the Joint Congressional Oversight Committee.”* The said law recognized the peculiarities of overseas voting processes thereby giving the Commission authority to *explore other modes or systems using Automated Election System*. Critics argue that this provision in the law only allowed COMELEC to explore, and not implement without the approval of Congress. Despite these reservations, COMELEC insisted on continuing the implementation of online voting.

D. Ensuring Voters’ Digital Rights and the Sanctity and Secrecy of eBallots

The introduction of internet voting for the 2025 National Elections in the Philippines represents a significant step towards utilizing digital technologies in the electoral process. Indeed, this initiative might enhance accessibility, efficiency, and participation of Overseas Filipinos in the elections. Yet, such a transition also raises critical issues concerning digital rights, particularly focusing on the voters’ digital rights and the sanctity and secrecy of their electronic ballots.

Digital rights encompass a broad spectrum of principles and regulations aimed at protecting individuals in the digital age. In the context of online voting, these rights are crucial as they directly impact the integrity and trustworthiness of the electoral system. In other words, the voters have assurances that their personal data is handled securely and that their voting choices remain confidential through these rights.

The Philippines has already made relevant progress in recognizing and protecting individual digital rights in recent years. The passage of the Data Privacy

Act of 2012 (Republic Act No. 10173) is the primary example of this.¹⁵ It has paved the way for digital rights to gain prominence in the country. In the rapidly evolving digital world, this legislation is mandated to protect the personal information of individuals processed electronically by both government and private sectors. Accordingly, it has established principles for data protection, ensuring transparency, legitimacy, and accountability in handling personal data.

On the other hand, security measures to safeguard the secrecy and sanctity of ballots have also been in place since the implementation of overseas voting in 2003.¹⁶ Upholding the principles of sanctity and secrecy of ballots is fundamental in ensuring that each voter can freely express their choice without fear of coercion or reprisal. Likewise, these principles were set to guarantee that votes cast by individuals are kept confidential and protected from disclosure.

Despite legislative efforts, however, the nation still faces persistent challenges in cybersecurity. Incidents of personal data leaks have raised concerns about the vulnerability of digital infrastructure and the protection of citizens' privacy. A recent example of these high-profile leakages of sensitive information include the data leak from agencies such as the Philippine National Police (PNP), National Bureau of Investigation (NBI), Bureau of Internal Revenue (BIR), and Special Action Force (SAF) last year, 2023.¹⁷ This incident has compromised over one million records including “fingerprint scans, birth certificates, tax identification numbers (TIN), tax filing records, academic transcripts, and even passport copies.” Thereby, exposing these individuals to other potential cyber hazards. Even more recent is the reported arrest of five alleged hackers who attempted to sell the information of a cable company’s subscribers by the National Bureau of Information (NBI) this July

¹⁵ See <https://privacy.gov.ph/data-privacy-act/> to read the Data Privacy Act of 2012 and its provisions.

¹⁶ See Section 36 of REPUBLIC ACT No. 10590, an Act amending RA No. 9189, https://lawphil.net/statutes/repacts/ra2013/ra_10590_2013.html for the full provision.

¹⁷ Read more:

<https://newsinfo.inquirer.net/1758456/over-1-million-records-from-nbi-pnp-other-agencies-leaked-in-huge-data-breach#ixzz8fjBLyJou>;

<https://www.pna.gov.ph/articles/1199846>;

<https://news.abs-cbn.com/business/04/25/23/no-hacking-dict-says-data-leak-was-from-pnp-portal>

2024. Two of the suspected hackers were also said to have admitted to having breached the websites of the Commission on Elections (COMELEC), Philippine National Police (PNP), Philippine Navy, Civil Service Commission (CSC), and other bank accounts.¹⁸ Another significant example is the 2016 voter registration system breach. Marked by the unprecedented scale of compromised information, it stands as one of the largest government-held personal data breaches globally. The breach severely undermined the digital security of over 55 million registered voters, jeopardizing crucial details such as their names, birthdates, addresses, email addresses, their parents' full names, etc. Thus, underscoring the profound vulnerability of personal data within government databases, heightening the potential for malicious exploitation by unauthorized parties.¹⁹

Statistics also reveal a concerning trend: since the dawn of the COVID-19 pandemic, the Philippines has experienced an increase in cyber threats, including phishing attacks, data breaches, and ransomware incidents.²⁰ While Filipinos have been subscribing to various online modes of transactions for convenience, it was revealed that the majority still lacked sufficient understanding of how to ensure their cybersecurity. These breaches involving leakage of sensitive personal information and other cybersecurity challenges further highlight the need for robust cybersecurity measures and stringent enforcement of data protection laws. The Philippines also seems to be significantly lacking in terms of cybersecurity experts. The Department of Information and Communications Technology (DICT) has revealed that the Philippines has only 200 cybersecurity experts, with 80% of them currently working abroad or employed by foreign entities.²¹ This report underscores findings from the House Committee on Information and Communications Technology, which identified a substantial talent gap of 3.4 million cybersecurity

¹⁸ See

<https://news.abs-cbn.com/news/2024/7/12/lawmakers-slam-vp-duterte-s-designated-survivor-quip-1616> to learn more about this report.

¹⁹ To read more on this, see (1)

<https://newsinfo.inquirer.net/1539249/in-the-know-the-2016-comeleak#ixzz8fiz1p5sM>; (2)

<https://privacy.gov.ph/privacy-commission-finds-bautista-criminally-liable-for-comeleak-data-breach/>

²⁰ See <https://www.statista.com/topics/11332/cybersecurity-and-crime-in-the-philippines/>

²¹ Cybersecurity in the Philippines

<https://www.yondu.com/articles/a-quick-look-into-the-cybersecurity-issues-in-the-philippines>

professionals in the country. This translates to just 1.8 certified cybersecurity experts for every 1 million Filipinos, highlighting significant challenges in addressing cybersecurity needs.

As such, looking ahead to the 2025 elections, ensuring the integrity of an internet-based voting system is contingent upon protecting voters' digital rights and maintaining the sanctity and secrecy of their electronic ballots. Aside from the Data Privacy Act and other provisions on the safeguarding of the sanctity and secrecy of ballots, robust cybersecurity protocols must also be in place to prevent cyberattacks that could compromise the electoral process. Encryption technologies, secure authentication processes, and regular security audits are some of the most essential components in safeguarding online voting systems against potential threats.²²

E. Objectives of the Study

The study seeks to investigate the digital rights issues associated with the implementation of internet voting or online voting. Specifically, the study will explore issues related to data privacy and protection, including data handling, ownership, and voter data security; security concerns related to the devices used for internet voting, as well as security of votes and transmission; and issues concerning the right to accurate and timely information, such as how information is communicated to overseas Filipinos to encourage voter participation.

III. Methodology

This research employed a multi-faceted approach to examine the digital rights issues involved in the implementation of online voting for the 2025 National Elections in the Philippines.

²²

<https://researchnow.flinders.edu.au/en/publications/security-principles-and-challenges-in-electronic-voting>

F. Historical Data Collection

The study also involved the systematic collection and analysis of relevant historical data on the entire electoral process of Overseas Voting since its implementation in the Philippines. This historical data encompassed voter registration turnout trends over previous election cycles for Overseas voters; overall actual voter turnout rates among Overseas voters, and the budgeting and expenses allocated to various modes of voting available for Overseas Voting over the years. By examining these data points, the research seeks to provide a comprehensive review of past electoral practices by the Commission, identify patterns in voter participation, and assess the financial implications associated with different voting methods utilized in Overseas Voting. This historical analysis served as a foundational basis for evaluating the feasibility, challenges, and potential impact of introducing online voting for the 2025 National Elections in the Philippines.

G. Key Informant Interviews

The primary methodological approach involved conducting key informant interviews with pertinent agencies in the Philippines involved in, and responsible for Overseas Filipinos' right to vote. These include representatives from the Commission on Elections (COMELEC) Office for Overseas Voting (OFOV) and its finance department; a representative of the Center for Migrant Advocacy, and some Registered Overseas Voters. Engaging with these stakeholders allowed us to gather in-depth insights into the regulatory framework, logistical considerations, and potential benefits or concerns associated with adopting eVoting for overseas voters. The procedure involved identifying and selecting informants based on their expertise in electoral processes and overseas voting, followed by semi-structured interviews conducted in person or virtually. These interviews employed a set of open-ended questions to examine perspectives on the feasibility, challenges, benefits, and implications of online voting. Consent was obtained to record the interviews, which were subsequently transcribed for analysis.

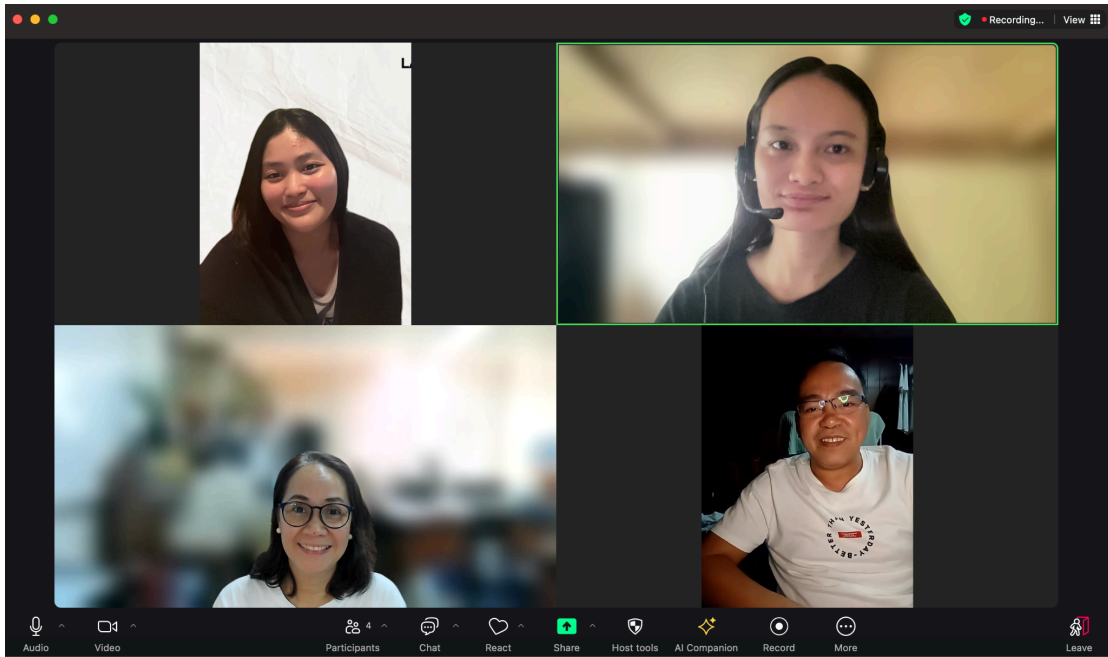


Image: NAMFREL Researchers interview an overseas voter from Dammam, Saudi Arabia



Image: NAMFREL Researchers interview with the COMELEC Office of Overseas Voting

H. Focus Group Discussion

A focus group discussion (FGD) was also conducted to gather more insights regarding online voting. This FGD includes representatives from both government and non-government bodies who are also involved with the electoral process of the Philippines such as legislators, civil service organizations, suffrage and Migrant Advocates, and others. Additional insights gathered from this FGD enabled the study to further develop the initial findings and recommendations of this research.









I. Application of the Chatham House Rule

To uphold confidentiality and respect the privacy of the participants in the interview and focus group discussion, the Chatham House Rule was applied throughout the research process. This rule dictated that any information or quotations obtained from interviews were anonymized in the research findings. Participants' identities, including their names, titles, or affiliations, were not disclosed without explicit permission.²³ This approach ensured the integrity of the research while allowing for candid discussions on crucial topics and themes involved in the implementation of eVoting for the 2025 National Elections.

IV. Results and Discussions

J. Overview of the Internet Voting System

During the conduct of the study, particularly the data gathering and key informant interviews, the Commission on Elections was still under the customization process with the joint venture, SMS Global and Sequent, who won the bid. In this section, the researchers will highlight important features of the system to be used for Internet voting and the processes that overseas voters will undergo when they use online voting.

Overseas voters who will use internet voting will have to undergo a pre-registration process before they can proceed to voting. From what has been discussed with the COMELEC, during pre-registration, voters will have to verify their identity. Similar to the online bank registration process, they will be asked to create an account, input personal information, and provide an ID, together with a facial verification. Those who will pre-register during the pre-registration period will be verified and compared to the existing database of OFOV's Final List of Overseas Voters. In the voting period, before a voter can proceed with voting, they will have to

²³ Chatham House Rule <https://www.chathamhouse.org/about-us/chatham-house-rule>.

log in with their credentials and undergo a multi-factor authentication to verify their identity. Once verified, the voter will then be allowed to cast their votes. Once the votes are submitted, the voter will receive a receipt in the form of a hash or unique code which they can verify online to ensure that their votes were cast and stored in the server or the digital ballot box. The voters can only view and get the hash or unique code, but will not be able to see their voting choices. The COMELEC said this is to prevent potential misuse and selling of votes. According to OFOV, the website could be accessed 24/7, but based on reports prior to the interview with COMELEC, it was reported that voters can only be allowed to vote from 7 AM-7 PM. The voting will run for 30 days with the last day being on May 12, 2025, as mandated by the law.

During the canvassing period, only the designated posts will have the key to canvass the digital ballot box. The Special Board of Canvassers (SBOC), are the ones only allowed to decrypt and canvas the digital ballots. Moreover, SBOCs can only access the digital ballot box belonging to their jurisdiction and will not be able to access other posts. The digital ballot box can only be accessed during the canvassing period. Once the canvassing ends, the results will then be transmitted to the COMELEC in the Philippines. Another notable feature of the system that was mentioned by the OFOV is the ability of the voters to submit their feedback and recommendations. Before, only personnel from the posts, as well as other agencies involved in the electoral process could give their recommendations to the COMELEC, but with online voting, voters can give their feedback and recommendations after casting their vote through a feedback or evaluation form.

OFOV has also acknowledged the need for several changes to the system, which will be included in the customization process. Some of the features that the COMELEC aims to work on include: in terms of access, many features are primarily online, meaning that all data is stored in the cloud. The COMELEC prefers that the system be online only on election day itself. However, the configuration, preparation, and other pre-election activities should be conducted offline. Another feature that

will need to be customized concerns access control. Although the system already has restricted access to voter profiles, IT personnel desire further restrictions. They propose limiting the capacities of authorized users to only monitoring functions during the election. This would prevent any configuration changes or voter registrations once the election has started. Such measures would ensure public confidence that, even with close scrutiny of the source code, no system modifications are possible after finalization, in doing so they can ensure the system's integrity and security against potential hacking concerns.

Information dissemination is one key important aspect of increasing voter participation. Moreover, the main objective of the Commission for implementing online voting is to encourage more Filipinos overseas to vote and to ease the burden of casting their votes. The COMELEC has allotted P600 million to online overseas voting in 2024 and P297 million is allocated for 2025 for internet voting. For 2024, as previously mentioned, P467 million is allocated for the system to be used and the remaining amount will be used for training and information dissemination. OFOV is simultaneously conducting an information drive for Filipino community leaders and online voting and counting system training in different parts of the world. The training and information drive kicked off in Busan, South Korea, and plans to conduct more training and information drives around the four regions of the world.

K. Concerns on the Implementation of Internet Voting

Indeed, the implementation of online voting for the 2025 elections holds promise for improving electoral participation among overseas Filipino voters. However, it also brings to the forefront critical digital rights issues and concerns about the secrecy and sanctity of the ballot. This section highlights the most

pressing concerns that Interviewed Key Informants and Focus Group Discussion (FGD) participants raised pertaining to the cybersecurity, privacy, accessibility, and other implications of the online voting system.

Initially, all Key Informants and FGD participants interviewed expressed unanimous support for the introduction of internet voting citing similar reasons for welcoming the introduction of the new voting system. Their primary goal is to enhance the inclusivity and accessibility of the voting process, thereby increasing voter registration and actual turnout among overseas voters. They further explained that many overseas Filipinos face voting challenges due to the conditions and nature of their work, and their geographical locations making internet voting a potentially viable solution. In particular, Migrant Advocate cited the case of the seafarers who now experience shorter docking periods; it is more favorable for them to have access to the Internet mode of voting. In fact, the seafarers have been demanding this mode of voting for a long time. Similarly, the overseas voters said that through this system, the voting process might be easier and more convenient. That being said, following OFOV's statements, since the online voting website is available anytime for the duration of the 30-day overseas voting period, more overseas voters are expected to have the capability to participate so long as they have stable internet connections and a working gadget. Nonetheless, the migrants and voters' reactions to eVoting are not without reservations and concerns. While there is a consciousness that technology is indeed a significant help in enfranchising overseas Filipino voters, it is still a double-edged sword, especially when not handled properly. Similarly, participants from the FGD also raised their respective concerns regarding the implementation of eVoting.

One of the foremost concerns is the protection of voter data. Online voting requires the collection and transmission of sensitive personal information over digital networks. Migrant Advocate, voters, and FGD participants alike fear that inadequate cybersecurity measures could lead to data breaches or unauthorized access, compromising voter privacy. Additionally, since overseas voting for the 2025 national elections abroad will adhere to a 30-day voting period as mandated

by law even with the new voting system, participants in the focus group expressed concerns about potential cyber threats. They believe that extending the voting period increases the risk of their votes being vulnerable to tampering or manipulation. Hence, they were adamant about pushing for robust security measures. In the words of the Migrant Advocate: "... nowadays, data is a commodity and someone can invade our privacy through surveillance, etc." which is why security is so important.

Moreover, there was also skepticism about the possibility of hacking or manipulation— the overall robustness of the online voting system against cyber threats. The Migrant Advocate and FGD participants strongly believe that there must be basic assurances to the voters that the system is secured and not prone to hacking. This means that the COMELEC should be able to guarantee the safety of the system and the sanctity and secrecy of eBallots; that no irregularities will occur in any form. Otherwise, whatever the results may be, according to Migrant Advocate, COMELEC risks being questioned on the integrity and trustworthiness of the election results. An FGD participant, on the other hand, offered a different view; that is the issue of trust not with the system but with the people handling it. Therefore, the assurances must not solely be focused on the validity of the system's safety but also on the integrity, transparency, and accountability of the people involved in the implementation of the online voting system. Moreover, assurances from COMELEC must also be backed by other experts in the field to be more convincing on the end of the general public.

Continuing on the topic of assurances, each election, the presence of poll watchers and election observers also serves as a form of assurance. In their role to monitor the election process, they also ensure that its integrity remains intact; and that the sanctity and secrecy of ballots are upheld. From here arises the question of the role of poll watchers and observers in the Internet voting process. The Migrant Advocate asks: *Will they still be given the avenue to properly monitor the election process? If so, how?*

On another note, key informants and FGD participants were also unanimous in saying that voters are ready for such a transition to online voting because the majority of overseas Filipinos already have access to the internet. However, concerns remain about the digital divide. This means that not all overseas Filipinos have equal access to reliable internet connections or digital literacy skills, which could exclude marginalized groups from participating in the electoral process. Voters, Migrant Advocate, and FGD participants stated that this new mode of voting may be challenging, especially for the elderly who are not as familiar with handling the necessary technology. There were also queries regarding the entire process of the internet voting itself, particularly on how to navigate through the voting site. From these, there were also recommendations to include tutorials, mock voting, or trials of the internet voting system before the 2025 National Elections. On top of this, information dissemination will also undoubtedly play a crucial role in educating the public, particularly overseas voters on the processes involved with the implementation of the internet voting system. As such, it was also emphasized by the voters and FGD participants that news or updates about this should be well-marketed to overseas voters to maximize its potential.

Important questions relating to the awarding of the bid also need to be considered. The Commission on Elections's Office for Overseas Voting (OFOV) stated that the joint venture was chosen because their system was the cheapest and they have complied with and passed the requirements indicated in the Terms of Reference (TOR). According to COMELEC, they have indicated in the TOR that the system to be used should be *"suited to Philippine situational requirements, with emphasis on cybersecurity, accuracy, efficiency, cost-effectiveness, convenience, sustainability, transparency, integrity, inclusivity, and most especially, auditability."*²⁴ As previously mentioned, the bid for the system cost P112 million, much lower than the allocated P465 million budget. The low price puts into question the potential trade-offs in system performance, security features, and overall reliability.

²⁴ <https://www.pasei.com/comelec-holds-online-voting-demo-for-overseas-voters/>

Additionally, the disparity between the budget and the bid may lead to questions about the thoroughness of the process and whether the winning bid meets all requirements and standards for a secure and effective Internet voting system.

Sequent Tech, one of the companies who bagged the award for the internet voting system, is an online voting platform that claims to have been successfully implemented in over 180 elections, with 2.7 million votes counted.²⁵ They boast of having advanced technology that is secure, safe, reliable, and user-friendly. The company was established only in 2021 and admitted that they have never handled a national election. This poses a question of whether their technology can handle hundreds of thousands or even millions of voter information and votes. The challenge of scaling up from local or organizational elections to a national level is significant. It involves not only managing a vastly larger volume of data but also ensuring the system's integrity and security against potential cyber threats. The stakes are higher, and the impact of any technical failure or security breach could be much more profound.

Finally, there is also the recurring issue on the legal basis of the implementation of internet voting by the COMELEC. The Migrant Advocate, in recalling the issues surrounding its legality, said that the main question was whether the Commission truly has the authority to implement internet voting or not banking on the existing legislation; that is the RA 10590 or the Overseas Voting Act of 2013. In essence, there is the belief that the COMELEC is only mandated to explore, research, and recommend, but it is not mandated by law to implement. Nevertheless, although this issue exists, the Migrant Advocate admits that there is also the realization that given the mobile nature of overseas voters, its implementation should be studied thoroughly for it can enfranchise more of our voters.

²⁵ <https://sequentech.io/about-us/>

L. COMELEC's Response to the Concerns

This section will discuss the Office for Overseas Voting's (OFOV) responses in addressing the concerns stated in the previous section towards ensuring a fair and transparent electoral process.

For security and transparency measures, the COMELEC ensures that in terms of data privacy of the voters, they are compliant with the Data Privacy Act of 2012. From the words of the COMELEC the Personally Identifiable Information (PII) [sic]²⁶ will be encrypted through Advanced Encryption Standard (AES) 256, which was recommended by the National Telecommunications Commission (NTC). They also added that the company that developed the system will only have limited access to the information of the voters. Instead of providing all information about the voter, the COMELEC will only give them important information such as name, birthday, and polling place to verify voter information. They also guarantee that the data will be removed one month after the election period. Moving on to the concerns of possible hacking or manipulation of the ballots or electoral results, the COMELEC elaborated that they will be using encryption. This means that all of the data or information that will be fed to the system will be converted to a code to fend off any unauthorized access. Moreover, as previously stated, only the Special Board of Canvassers (SBOCs) are authorized to hold the key to their designated digital ballot boxes, even the COMELEC and Sequent Tech do not have access to these. They are only allowed to open the said box during the canvassing period and they also cannot access the digital ballot boxes of other posts. The COMELEC further assured that they will thoroughly secure the system so that even when the source code of the system is put under close scrutiny, others would not be able to find any irregularities.

On the other hand, regarding the concern of Migrant Advocate on the role of election observers and poll watchers, OFOV said they cannot deny the candidates

²⁶ Personally Identifiable Information does not have a definition in the context of Philippine law, specifically in RA 10173 known as Data Privacy Act

to have poll watchers. Therefore, they will take into consideration how poll watchers could still observe the process even with the online voting system through the customization process. They will study the possibility of having another system for viewing similar to that of the COMELEC's means of monitoring the online voting process.

The COMELEC also acknowledges the concerns with the accessibility of reliable internet connection, gadgets, and the voter's technological literacy. As such, in the voting period for the posts implementing online voting, they plan to station a kiosk or mobile booth situated in Philippine embassies abroad to assist the voters who are truly unsure of the voting process. They are also considering the dispatch of field kiosks in an attempt to reach out to the more remote areas in order to aid more voters who are unable to go to the embassy for help. That being said, the COMELEC's primary desire to make the system as simple as possible remains unchanged. This is so that anyone can use it easily; it is accessible to all people with diverse needs. Also, the Commission aims to allocate a tutorial period for the internet system for the voters to have ample time to familiarize themselves with the system and the entire voting process: from the verification stage to the submission of their votes. COMELEC also said that they are scheduled to hold face-to-face training in the four regions for the information campaign regarding eVoting. They target to conduct these trainings for overseas voters and leaders of Filipino communities, and other election partners in two selected places per region this year. The information on these initiatives for the 2025 election can be found on the COMELEC's website, and various social media platforms of OFOV and other partner organizations as well.

Concerning information dissemination, OFOV said that they are confident in their information dissemination campaign for eVoting, saying that the posts are actively doing their jobs to share information especially online. They further added that even locally, voter education and information dissemination are also available. Even so, they are open to new strategies to improve their services such as

coordinating with other Civil Service Organizations (CSOs) to reach more overseas Filipino voters.

Lastly, in response to the legality concerns, OFOV, in their interview said that they were aware of such issues. In their defense, the Commission is mandated to address the disenfranchisement that happened during the previous elections. They emphasized that they have released several resolutions exploring the use of internet voting and another resolution for conducting an internet voting demonstration for the 2025 National Elections, none of which were previously questioned. Their main concern is the limited time before the election, as they are now close to the implementation process and are only now facing scrutiny. COMELEC added that they are prepared to face legal disputes if someone files a prohibition case against the Commission. Moving forward, they are committed to proceeding with internet voting and stand firm in their interpretation and understanding of the law despite opposition.

M. Summary of Findings

Internet voting holds promise for increasing accessibility and increasing voter turnout among overseas Filipinos, but significant concerns persist. These include issues related to data security, the potential hacking and breach, and ensuring the overall integrity of the voting system. Stakeholders stress the critical need for robust cybersecurity measures and assurances of privacy protection to safeguard voter information and ensure the sanctity and secrecy of votes. Access to reliable internet infrastructure and comprehensive voter education on the new voting system poses significant challenges, particularly for those with limited digital literacy and access to information. The legality and readiness of the system, including its scalability and technical reliability, are also subjects of scrutiny. Despite these challenges, COMELEC asserts its commitment to implementing internet voting, aiming to mitigate risks and ensure a fair electoral process.

V. Recommendations

It will be the first time that the Philippines will have an online voting system. This is a significant step despite recent website hacking and data breaches in government agencies. While yet to be fully implemented, COMELEC must proactively ensure the system's security, safeguarding voters' information and votes throughout the election period. As one voter emphasized, they are willing to adopt new voting methods so long as the election results genuinely reflect the people's will. Thus, the following recommendations have been made by the researchers with the support of the participants of the study:

1. **Establish Security Measures and Conduct Rigorous Testing.** Before the actual use of the system, it is recommended that the COMELEC engage in extensive security testing, including vulnerability assessments and testing to identify and address potential weaknesses of the system to be used. Moreover, it is also recommended that they employ and collaborate with cybersecurity experts to ensure that the system will not be vulnerable to security attacks. Likewise, implementing redundant security measures such as multi-factor authentication for voters and election officials, real-time monitoring of system activities, and regular audits to detect and respond to any suspicious activities promptly are also important.
2. **Continuous Information Dissemination.** Since the goal of the COMELEC is to increase voter turnout and encourage more overseas voters to register, it is recommended that the Commission continuously work on information campaigns on social media or collaborate with non-governmental organizations and Filipino communities abroad to inform overseas Filipinos about online voting and other modes of voting. There should be clear guidelines on the Internet voting process as early as this year to ensure that the voters will not be confused come election period. Additionally, voter and

stakeholder concerns must be promptly addressed to build trust in the country's electoral system and online security.

3. **Assessing the Feasibility of Reducing the 30-day Voting Period.** To help mitigate the risks associated with prolonged exposure to potential cyberattacks and threats, it is recommended that reducing the timeframe for online voting be considered by COMELEC and legislators. This is necessary for enhancing the security and integrity of the voting process.
4. **Implementing Contingency Measures During Conflict or Emergencies.** In the event of conflicts, such as war, or situations where overseas voters are unable to cast their votes, it is recommended that the COMELEC develop contingency plans to ensure that voters are not disenfranchised during the election period.
5. **Ensuring Legal Preparedness and Transparency.** COMELEC has stated that they are prepared to address any legal challenges regarding the implementation of online voting. To prevent potential legal conflicts during or after the election, it is recommended that they establish the legality of online voting well in advance. Ensuring legal clarity early on is crucial to avoid the risk of an election being declared a failure. Lastly, it is also recommended that the Commission ensure transparency regarding budgetary concerns and procurements related to online voting to foster public trust and demonstrate accountability in the online voting process.
6. **Explore More Ways to Improve Overseas Voter Participation.** Aside from the additional mode of voting, It is recommended that the COMELEC also explore more ways to increase voter participation by improving voter registration processes and other voting procedures. It is essential to maintain effective practices while also identifying and improving areas in need of improvement.

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