Voatz

Ensuring Trustworthy Voting for Military and Overseas Voters

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On September 17, 2008, terrorists attacked the security perimeter around the American embassy in Sana'a, Yemen, killing 18 people and injuring 16. Two days earlier, an American couple working in Yemen for a nonprofit had travelled several hours to that embassy to add pages to their passports. They also wanted to exercise their right to vote in the general elections that year, but after the incident, were concerned for their safety to go back. The embassy was the only known option offered to overseas citizens.

Many active-duty military personnel and overseas Americans continue to face significant challenges and uncertainties regarding voting. The following stories are representative of the various obstacles. [7]

- **A Navy pilot had to fax his ballot from an aircraft, forfeiting ballot secrecy.**
- **A voter in Edmonton, Alberta never received her absentee ballot.**
- **A voter in Lebanon needed to print his ballot on 8.5x11 paper, but only A4 paper wasreadily available.**
- **Since international postal mail is unreliable, one woman spent $60 to mail her ballot via FedEx from Vietnam.**
- **A couple in Kenya sent their ballots through friends who were traveling back to the U.S.**
- **A voter in Hong Kong wasn't confident that his votes were tallied, as he has heard that overseas ballots are not counted unless a race is close.**

A common theme emerges from these stories: voting is unnecessarily difficult and insecure. They respectfully request for innovation to allow electronic means to request, receive, and return a ballot so that voting overseas is easier and consistent state-to-state. [2,4]

Executive Summary

Military and overseas voters should not have to fear personal safety, sacrifice privacy, spend an unreasonable amount of time and money, and face uncertainty on the timely arrival of their ballots to vote. Over the years, UOCAVA and the MOVE Act have helped to increase voting rates of military and overseas voters by expanding their options to vote. Forward-thinking officials who have allowed and enabled online technology to receive and return a ballot were key to this increase. However, overseas voter participation remains substantially lower than that of the general population. This establishes the need to expand internet-based options and opportunities to vote.

Recognizing this, Combat Veteran and Senator Tammy Duckworth and Senator John Cornyn introduced the bipartisan *Reducing Barriers for Military Voters Act* to establish a secure electronic voting system for active-duty military.

This legislation represents the sentiments of citizens overseas.

- **Allow ballots to be returned electronically from a voter's secure mobile device or computer.**
- **While maintaining state and territorial sovereignty over elections, collaborate on developing common regulations for absentee ballot request, delivery, and return, especially for the option to do so securely over the internet.**

Motivations for these policies include the following. [8]

- **Significantly more military and overseas citizens will vote, since there is a strong demand among these voters to vote electronically due to convenience, security, and cost savings.** [2, 4]
- **Restore confidence in absentee voters that their votes were received and recorded as cast.**
- **Current technology, already in widespread use to protect national security interests, minimizes all forms of cybersecurity risks.**
- **Voting via an internet browser or mobile app is more private than email or fax.**
- **We estimate 15% savings in total election expenses.**

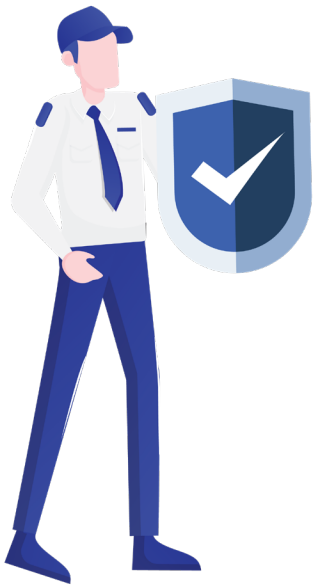
As a result of these changes, voting will be more accessible and secure for military and overseas voters.

State of Military and Overseas Voters

While UOCAVA ensures that military and overseas citizens have the ability to vote, options vary from state to state. Currently, 19 states require absentee ballots to be returned by postal mail, 7 allow fax, 19 allow email or fax, and 5 allow an internet browser or mobile app in some cases. [6]

With the exception of secure internet browsers and mobile apps, these methods compromise accessibility, privacy, convenience, and receipt guarantees. There are also significant financial implications for both election offices and voters. The arduous nature of voting with limited options and restrictions on electronic ballot return help explain low turnout for military and overseas voters.

Almost one million active duty military and 2.9 million overseas (non-military) citizens are eligible to vote absentee. However, only about 26% of military and 4.7% of overseas citizens voted in 2018, compared with 64.9% among the domestic voting population. In 2018, 17% of military voters and 26% of overseas voters did not vote because their ballot either did not arrive or it arrived too late. Out of all military personnel, 48% stated that they would like the option to vote via the internet and expressed more confidence in voting over the internet than other ballot delivery and return methods. [1, 2] Last year, several overseas voters expressed their frustrations by filing a class action lawsuit against several states for the option to vote electronically to underscore this demand. [4]

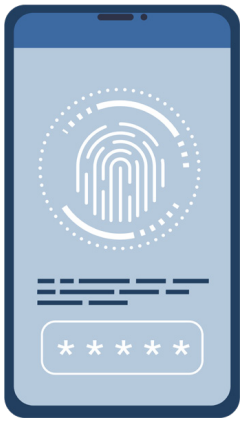


People often feel discouraged from voting if they cannot be certain their vote will matter. If we consider Rhode Island as an example, the legality of returning marked ballots via email in particular was the subject of confusion. The Secretary of State Nellie Gorbea and others raised concerns over voter privacy and ballot security with marked ballots transmitted over unsecure email. The state law implied that the only legal way to send and receive ballots electronically was by fax, but an unknown number of ballots were returned via email in 2020. Rhode Island recognizes that their law needs to be updated and clarified. [3] However, many proposals to update legislation to allow secure internet voting have been opposed by claims that this is unsecure. The consensus, though, is that laws that govern our use of technology needs to be regularly updated to keep pace with advancements in technology.

Analysis of Security Concerns

The threat of DDoS and malware attacks are the two most significant concerns cited by opponents of internet voting, as recorded in a 2018 report by the National Academy of Sciences, Engineering, and Medicine.[5] **An honest investigation should assuage these and other security concerns.** Internet voting services have the ability to utilize layers of military-grade technology, in combination with industry best practices, to protect criticalelection infrastructure and ballot integrity against distributed denial-of-service (DDoS) attacks, malware, and hacking attempts. Current network security services have the capacity to protect against DDoS attacks that are about 30 times greater than the largestknown DDoS attack. Anti-malware products in current use by the Department of Defense and many high-profile corporations use artificial intelligence to detect and deflect known and novel malware. This approach is the only known way to detect previously unknown malware, since they analyze data patterns rather than searching for known malware. [8]

Other significant security concerns of remote voting include voter privacy and chain of custody guarantees. Privacy is not guaranteed when voting by email or fax because these transmissions are not encrypted and they have no digital equivalent of a double envelope. Vote by mail faces chain of custody gaps; ballots are handled in transit by individuals without public oversight. By contrast, voting over the internet can guarantee privacy, with a digital double envelope, and a proper chain of custody of a ballot.



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Identity verification (KYC – Know Your Citizen) is used regularly for everyday applications such as banking and applies naturally to voting. Identity, liveness, and authorization to vote can be established with photo and biometric identification using the same robust techniques currently required by financial institutions. This obviates the need for cumbersome signature matching on an affidavit.

Conclusions

UOCAVA and the MOVE Act were intended to make voting easier for military and overseas citizens. Forward-looking officials understand that providing additional voting options fulfills this goal and that innovation is necessary to provide those options. A key innovation is secure internet voting; overseas voters with the option to request, receive, and return their ballot using their own secure mobile device or computer not only allows greater access, it makes voting secure, private, convenient, and guaranteed for nearly all such citizens. It will also save time and money for local election offices and voters. Military-grade security solutions and practices can secure the entire voting process. We therefore call on legislators to boldly propose legislation that drives the development of additional options to vote and paves the way for the development secure internet voting.

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