Andrea Gyger

From:	Jim Soper ▓▓▓▓▓▓▓▓▓▓
Sent:	Tuesday, July 14, 2015 4:59 PM
To:	SoS Rulemaking
Subject:	Email Voting in Colorado

Dear Sirs:

I am writing to comment on the proposal to expand email voting for overseas Colorado voters. I am well versed in technology, having been both a systems consultant, and programmer. I lived 17 years overseas. I know from personal experience what a struggled it is to try to vote when you do not live in the US. This issue hits home for me. That said, allowing large numbers of American citizens to vote by email when there are better options is grossly irresponsible.

Rather than repeat what has already been well said, I shall urge you to reread the information provided by Dr. Davd Jefferson and others, available here: http://www.scribd.com/doc/260280988/Experts-Letters-on-Internet-Voting . I will add the following points:

o A new, authoritative report came out last week on Internet voting (IV). There is an "expert comments" section. That written by an IV optimist, Dr. Benaloh, finishes with: "... we are agreed upon the conclusions that "naked" Internet voting is dangerous and irresponsible." (https://www.usvotefoundation.org/sites/default/files/E2EVIV_expert_statements.pdf)

o Voting by email is very "naked" Internet voting.

o Federal Office of Personnel Management (https://www.opm.gov/) has announced that the personnel records of 25 MILLION federal employees have been stolen (https://www.opm.gov/cybersecurity), including 19.7 million individuals that applied for a background investigation.. Very many of these records will belong to the overseas citizens that you are trying to serve. This information will include email addresses and social security numbers.

o What do you do with that kind of information? A simple search for "hack email" will take you to sites like these: "How to Hack an Email Password: Email Hacking Secrets" (http://www.gohacking.com/hack-email-account-password/), and "How email hacking works? – how Hackers hack email accounts?" (http://www.hacker9.com/how-email-hacking-works-how-to-hack-email-account-password.html)

o Aside from the clear possibility of hacking the voters' computers, there is a clear risk of emails being "photoshopped", or otherwise manipulated while in transit. Part of the nature of the Internet is that it is not controlled. Communications are passed from router to router, on its way to the destinations. Routers are computers, very capable of changing the emails that pass through them. A significant percentage of the emails coming from voters in the Mideast, and especially Afghanistan, will pass through Iran, Iraq, Russia and China on their way to known election department addresses in Colorado. As some consider Colorado to be a swing state, this makes it a target for election manipulation, especially Denver.

o There is no reliable way of even knowing if an attack has occured. With no paper trail, there is no way to recover from a serious problem. Also, there are also little to no provisions for checking that the ballots are received and counted correctly. Chinese or Russian hackers should not be allowed to vote in Colorado elections at all.

o Expediting of ballots has improved greatly through the military post office in the past few years. Most ballots will return home in several days. Please do not rely on outdated information.

o I wrote on this issue in 2011 with respect to a similar email voting bill in California, SB 908 (http://countedascast.org/internet-voting-risks/sb908/) . The bill failed. There is a section on that page title, "Why Email Voting Is Dangerous". It remains very relevant.

I shall finish with quotes from two experts concerned with voting, and overseas voting:

The Overseas Vote Foundation is the major group representing the interests of voters overseas:
"*Private email over the Internet is not a secure method of transfer for documents containing your confidential identity information. This is why Overseas Vote Foundation recommends that voters return their ballots by regular mail and fax." (not email!)*"
"Emailed Ballots: A Security Assessment", https://www.overseasvotefoundation.org/Email-Ballot-Security

"*I believe we must continue to remove as many barriers as possible to ensure California's military voters and their dependents are able to fully participate in their democracy. However, the return of voted ballots by email is too risky given current technology and security standards.*"
Former California Secretary of State, Debra Bowen, April 27, 2011

Thank you for your attention to this important issue. Please don't allow foreign governments to vote in Colorado elections.

Jim Soper