

Don't let cyberattack threat deter Canada from online voting, says former head of NSA

Canada should have 'offensive cyber capability,' says retired U.S. general Keith Alexander

By Murray Brewster, [CBC News](#) Posted: Jun 01, 2017 4:45 PM ET Last Updated: Jun 02, 2017 10:36 AM ET



Former National Security Agency director Keith Alexander, seen here testifying before the U.S. Senate intelligence committee in March, says Canada may need to develop an offensive cyber security posture or the ability to shut down cyberattacks. (Susan Walsh/Associated Press)

foreign interference that may have influenced the U.S. election should not deter Canada and other countries from embracing online voting, says the former head of the U.S. National Security Agency.

Retired U.S. general Keith Alexander, speaking at a defence industry trade show in Ottawa, also said it is important the Canadian military have some kind of offensive cyber capacity, even if that ability is limited.

His remarks came on the same day Elections Canada began asking for high-tech industry feedback on the introduction of sophisticated digital voting systems.

There is no going back to a manual voting system, Alexander said in an interview with CBC News following his remarks to defence contractors, in which he warned that both government and private sector networks are vulnerable to a rising tide of "destructive" cyberattacks.

"We are not protecting to the level we should be. We've got to do better," said Alexander, who is now CEO and president of IronNet Cybersecurity. "We've got to create a defensive framework that is more comprehensive than what we have today and I think you do too."

Hacking related to elections has been a growing global threat since 2008, but the use of leaked data to affect the outcome of those elections — as has been alleged in last fall's U.S. presidential election — is new.

Alexander wouldn't comment on the political storm in Washington over allegations that U.S. President Donald Trump's campaign was given a boost by Russian hacking and interference.

It is something the special investigator, retired FBI director Bob Mueller, will examine, Alexander said.

The U.S. experience is something to learn from, he said, but it should not make countries like Canada leery of e-voting.

"You can create a system where people can authenticate and vote online," said Alexander, who in addition to running the NSA during the Edward Snowden leaks, was also head of the U.S. military's cyber command.

"I think that's where we're going to go. People say there are so many issues with that. No. We should do this."

Not ready for online voting

As part of the new mandate of the minister of democratic reform, the Liberal government is exploring how to make the country's electoral system cyber safe for the upcoming 2019 election.

Separately, Elections Canada is exploring the possibility of replacing its entire internally built e-registration system, or acquiring an alternative system with "one or more solutions" that can be married with the current system, said the request for information notice, posted Thursday on the government's procurement site.

"This project's goal is to provide a system that will enhance electors' ability to register to vote, confirm their registration online or update their registered information in a way that will meet performance and monitoring objectives."

Elections Canada has said in the past that online voting would not be available in the next federal election.

Offensive cyber capability

Separately, Alexander spoke to the audience on Thursday about the evolving cyber threat posed by nations and so-called non-state actors whose attacks have escalated from merely disruptive a few years ago to destructive in terms of data loss.

NATO recently put the finishing touches on its cyber defence strategy and there was vigorous debate through the process about whether the alliance and individual countries should have the capacity to conduct offensive operations in the online world. It is an issue that was debated as the Liberal government drew up its yet-to-be-released defence policy review.

"Should Canada have offensive cyber capability? I believe so," said Alexander. "The question is: under what rules should it be employed?"

He said the military might not have to go as far as to develop cyber weapons. It may choose to simply have the capability of "turning off an attack" — the response does not have to "be destructive in nature," he said.