The Perils of Online Voting

Internet voting has been viewed as a possible cure for some of the ills that afflict the mechanics of American democracy. Recently, the technology has seemed to move ahead of any serious consideration of whether it is actually a good idea to allow home computer owners to choose a president in the same way they order bath towels online or send e-mail to their relatives. But now there are grave questions about whether even the technology makes sense.

Four computer scientists brought in by the Pentagon to analyze a plan for Internet voting by the military issued a blistering report this week, concluding that the program should be halted. These four are the only members of a 10-member advisory committee to issue a report on the program. Their findings make it clear that the potential for hackers to steal votes or otherwise subvert elections electronically is too high. Congress should suspend the program.

The intentions behind the Pentagon's plan, the Secure Electronic Registration and Voting Experiment, are laudable. Military personnel overseas, and other Americans abroad, face obstacles to registering and voting. The new program would ease the way by allowing them to use any computer hooked up to the Internet. This year, it would be limited to voters abroad who are from one of 50 counties in seven states, but it could eventually be used by all of the estimated six million American voters overseas.

But the advantages of the Pentagon's Internet voting system would be far outweighed by the dangers it would pose. The report makes it clear that the possibilities for compromising the secrecy of the ballot, voting multiple times and carrying out vote theft on a large scale would be limited only by the imagination and skill of would-be saboteurs. Viruses could be written that would lodge on voters' computers and change their votes. Internet service providers, or even foreign governments that control network access, could interfere with votes before they reached their destination.

This week's report — which was written by respected scientists, including Aviel Rubin, an associate professor of computer science at Johns Hopkins University — is not the first to call Internet voting into question. A March 2001 study conducted by the Internet Policy Institute and financed by the National Science Foundation found that Internet systems like the Pentagon's "pose significant risk to the integrity of the voting process."
There is every reason to believe that if federal elections can be tampered with, they will be, particularly when a single hacker, working alone, might be able to use an online voting system to steal a presidential election. The authors of this week’s report concede that there is no way of knowing how likely it is that the Pentagon's voting system would be compromised. What is clear, however, is that until the vulnerabilities they identified are eliminated, the risks are too great.