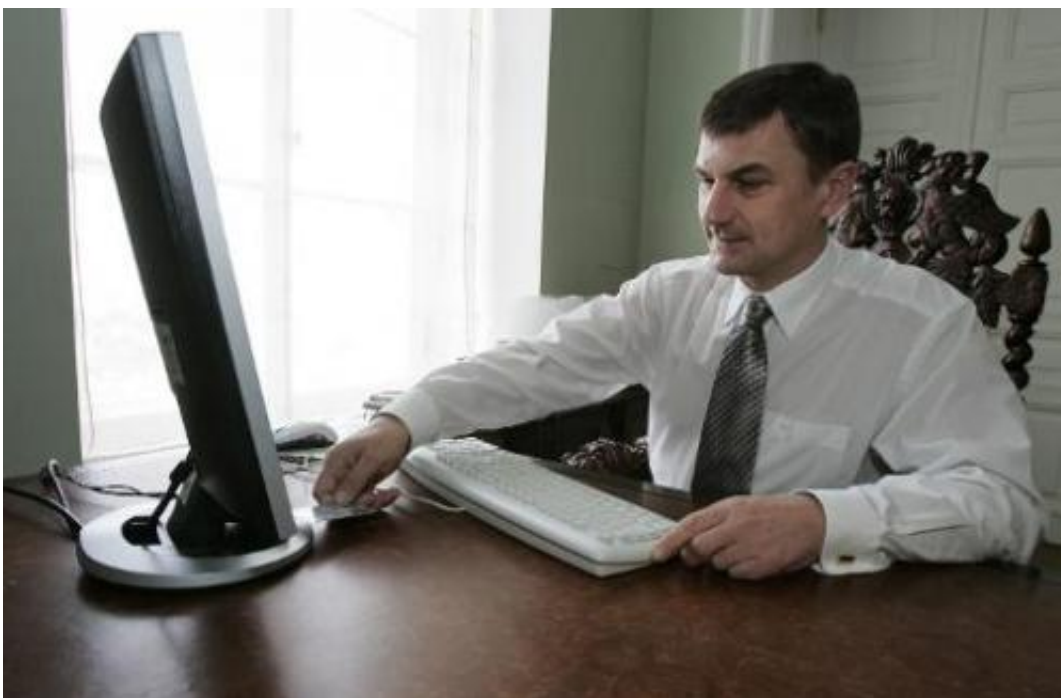# Online voting not ready for worldwide roll-out, study says

October 8 2014, by Rob Lever

Estonian Prime Minister Andrus Ansip inserts a card to validate his electronic ballot through the web on February 26, 2007 from his office in Tallinn

Online voting has the potential to boost election participation around the world, but is not yet ready to be widely rolled out due to security risks, a study released Wednesday said.

The research, produced by the Atlantic Council think tank and the online protection firm McAfee, concluded that "security will need to be vastly

improved" before it becomes feasible to adopt Internet voting on a large scale.

According to the study, online voting faces more complex obstacles than electronic commerce, where a customer can be reimbursed in the case of fraud or theft.

"Online voting poses a much tougher problem" than e-commerce, the report said.

"Lost votes are unacceptable... and unlike paper ballots, electronic votes cannot be 'rolled back' or easily recounted."

The report said hackers could paralyze an online voting system or, even worse, change the results without being detected.

A major problem of online voting is that any system must verify the identity of the voter, and at the same time guarantee anonymity in the process.

Some experts believe it could be decades before online voting becomes mainstream.

Joseph Hall of the Center for Democracy and Technology said that many security experts believe "the timeline will be 30 to 40 years" before the technological hurdles to online voting are overcome.

One of the problems is the "uncontrolled platform," in which voting software or computers can be infected, Hall said at a discussion hosted by the Atlantic Council.

Jordi Puiggali of the online voting technology firm Scytl said that while Internet balloting has not been perfect, "we have to consider the risks of

voting channels that already exist," citing practices such as stuffed ballot boxes.

The researchers cited a study released earlier this year by University of Michigan scientists on online voting in Estonia, the first country to hold national elections on the Internet.

That study, which is to be published in a scientific journal next month, revealed vulnerabilities in Estonia's online voting system.

"Attackers could target the election servers or voters' clients to alter election results or undermine the legitimacy of the system," the study said.

Estonian officials have maintained that the system is secure.

Wednesday's report said that online voting has enormous potential if security can be improved.

"For the digital generation, unsupervised polling via mobile devices may be the 'killer app' of e-voting," the report said, adding that biometric and other security features may need to be perfected.

"Broad adoption of most new technologies generally takes longer than technology optimists hope, but it will happen," the report added.

"Online voting's potential benefits in terms of reach, access and participation have the potential to revolutionize the democratic process around the world."