

# International Relations and Security Network



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# **Voting in the Information Age**

With broadband and internet access for mobile devices becoming increasingly common and online banking part of daily routines for many people – why do we hear so little about using the information highway to exert our political rights?

Why does e-voting deserve our attention? A general hope associated with e-voting is that as a consequence election participation will increase and accessibility will be improved. Both would strengthen the legitimacy of democratic elections and referenda and thus foster democratization - but can e-voting fulfil these high expectations?

The term e-voting is often used for electronic voting machines that have been introduced in countries such as the US and India. This Special Issue focuses on remote voting by electronic means since this includes the additional novelty of people voting at a time that is convenient to them and without having to physically go to a polling station.

Of the many countries that have initiated remote online voting projects on a national level, currently only Switzerland and Estonia are actively pursuing them as an additional channel for voting. Other countries have – at least temporarily – suspended their projects because of either technical (e.g. lack of voter registrations) or political (lack of trust in the security of the system) difficulties. In the UK, for instance, regulations concerning ballot papers would prompt major legal changes to allow evoting. Even postal voting tends to come under scrutiny there, while in Switzerland it is used by the vast majority.

## 1.1 Improved accessibility can foster democratic legitimacy

There are other significant political issues associated with e-voting. Apart from the manifest question of how tamper proof such a system is, some issues are discussed to a lesser extent but are just as important when it comes to the usefulness of e-voting for democratic elections.

One of those is accessibility, which should be a concern for all states concerned about low voter turnout since improved accessibility may eventually lead to increased voter participation and legitimacy. Also, for democratic states it should be an end in itself to enable as many citizens as possible to exert their political rights.

By means of e-voting, accessibility could be improved significantly, especially for expatriates, the visually impaired and – in the case of democratizing countries – people living in remote areas who do not have easy access to polling stations. Stating that the system "makes it easier and faster to cast votes in elections," the UN awarded Zurich's pilot project the UN Public Service Award in 2007 in

the category "Fostering participation in policy-making decisions through innovative mechanisms." But in practice, two years after the end of Zurich's pilot project there is still no functionality that provides ease of access for the blind. In addition, users could not vote with Firefox, the second most-used browser, proving that full accessibility remains a major challenge in e-voting.

Zurich, however, allowed text message voting, an option which seems particularly suited for developing countries given the widespread use of mobile phones around the world and their cheap price relative to internet infrastructure and computers. This has already led to the creation of very popular banking services for mobile phones.

## 1.2 E-voting for the promotion of democracy

In the broader international context the opportunity to vote via text message in countries like Afghanistan, could aid the democratic process immensely by removing some of the immediate physical barriers to its proper functioning. Moreover, a measure of additional legitimacy, primarily through higher voter turn-outs, could help to stabilize countries in their often troublesome postelection period.

However, it would entail new risks and could intensify debates about legitimacy in deeply contested elections. People aiming to manipulate elections can exert their influence on citizens wherever they are, which may be harder to achieve at a polling station with election observers. Estonia, for example, recognized this as a potential flaw in their internet voting system and reacted by implementing the possibility to change the vote an unlimited number of times before the closure of the virtual ballot.

In view of these unresolved questions that established democracies still encounter, it would be too hasty to apply an e-voting system in democratizing countries at present. But the benefits it could yield in the future make it worth considering, particularly if the technology and best practice processes improve in more established democracies.

In any case, it is an even bigger challenge to ensure the security of e-voting via mobile phones than online. As a consequence, and due to its very limited use, Zurich has abandoned the possibility of voting by text message.

Another accessibility problem could manifest itself in terms of the limited bandwidth available to internet or mobile phone users. The associated problem will probably not be caused by e-voting traffic. But under certain circumstances – including viruses and activities specifically aimed at slowing down a network – voters could be prevented from casting their ballot. Such a large-scale obstruction of the Web could strike suddenly and be devastating for the delicate process of an election. This is especially relevant for democratizing or unstable states where slow or vulnerable internet connections are still the norm. Indeed ballot boxes should always remain available as a backup and an alternative for those who do not want to vote electronically.

Concerning participation, there is no indication yet of a substantial increase due to e-voting. Data from the Swiss pilot projects indicates that so far, after an initial big share of e-voting, it stabilized

around 20 percent. According to opinion polls, most of these voters would have cast their ballot anyway. On the other hand, some of the non-voters claim they would probably or definitely vote more often if e-voting was available. Such evidence, although indicative of the potential of novel voting systems, remains anecdotal.

## 1.3 An aid, not a panacea

E-voting has untapped potential to significantly improve citizens' access to the voting process. This increases the legitimacy of the vote and may in the long term lead to greater participation. Although not a panacea for the ills of unstable or weak states with weak democratic legitimacy, e-voting is a potentially interesting component of a healthy and dynamic democratization process.

Whereas e-voting currently seems to work best on stable institutional grounds, there is no reason to believe that traditional ballot voting performs better than e-voting under adverse conditions. The September 2009 election in Afghanistan is a case in point. However, to start developing e-voting mechanisms under unquestionably difficult circumstances, foreign observers would have to provide even stronger support for the voting process – most likely also on a technical level – than has so far been the case. Democratizing countries would also have to be willing to receive such help.

In the short term only a few modern democracies are capable of implementing a functional and effective e-voting system. But the regular use of it especially in Switzerland with its many referendums will eventually lead to technological and procedural maturity. At a later stage geographically large but institutionally stable countries, such as Brazil and India, could profit in particular. Predictions for the poorest and weakest nations are difficult to make, since the ultimate success of e-voting mechanisms is dependent both on internal stability and willingness to engage more people in the democratic process, and on robust external support.

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#### 1.4 Resources

## 1.4.1 International and Governmental Organizations

Geneva e-voting project

Geneva is another Swiss canton which runs a pilot project in e-voting. The official English site of the project features project-specific and general information about e-voting. Among these there are an introductory video and a trial version of Geneva's system.

United Nations Public Administration Network (UNPAN)

The UNPAN provides a variety of information about e-government-related topics. This includes an events calendar, extensive library and directory sections, as well as e-learning content. It annually

grants the UN Public Service Award, the aim of which is to facilitate the search for innovations in governance and public administration.

Parliamentary Office for Science and Technology (POST)

The POST is the UK Parliament's in-house source of independent, balanced and accessible analysis of public policy issues related to science and technology. It has published a number of briefing papers about online voting, e-democracy and related topics.

#### 1.4.2 Research and Academia

Internet and Democracy Blog

The Internet & Democracy blog is the team blog for the Internet & Democracy Project, a research initiative at the Berkman Center for Internet & Society at Harvard University. It links to a number of case studies published by the project and has an extensive blogroll.

## E-Democracy Center (e-DC)

E-DC is based at the Centre for Democracy at Aarau, University of Zurich. It is an interdisciplinary research centre dedicated to the study of e-democracy. Its main goal is to conduct research on how new information and communication technologies are interacting with democratic institutions. Its database captures freely available news articles covering e-voting topics around the world.

Competence Center for Electronic Voting and Participation (e-voting.cc)

Evoting.cc is a charitable association that promotes knowledge about e-voting. It manages an online database about the use of e-voting, organizes a biennial conference on electronic voting and publishes the journal *Modern Democracy - The Electronic Voting and Participation Magazine*.

## 1.4.3 Non-Governmental Organizations and Media

ACE - the Electoral Knowledge Network

ACE is an online knowledge facility that provides comprehensive and authoritative information on elections and promotes credible and effective electoral processes. The aim of the project is to provide stakeholders of elections with the necessary information to increase the transparency and credibility of electoral processes. A part of the site covers e-voting with a focus on the security aspect.

## Swissinfo

Swissinfo belongs to the Swiss Broadcasting Corporation and features many articles about the Swiss e-voting projects.

#### openDemocracy

OpenDemocracy is an independent website on global current affairs which publishes high quality news analysis, debates and blogs. It contains many articles that discuss the pros and cons of evoting, often with specific information about the situation in the UK.