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MODERNDEMOCRACY

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EDITORIAL

Developing Modern Democracy

We continue to initiate the discussion on Modern Democracy

Dear reader,

Welcome to the first issue of the Modern Democracy Magazine 2011. It took us some time to get everything ready, but I hope that the current edition, will once again provide you with interesting articles and insights into the world of modern democracy. On behalf of E-Voting.CC, I would like to thank you again for your continuous support and encouragement, we promise you to lead the way and prepare the road for the future of voting.

This issue of the Modern Democracy Magazine provides you with a variety of interesting articles on the latest developments and trends in the voting and democracy sphere. We are grateful for all the contributions from our guest authors. The resonant theme is certification and testing.

Looking at last year's elections in the Philippines Richard Soudriette analyzes the certification and testing efforts of the Optical Scanning Machines and Maria Kellner discusses the achievements and results of the voter education and information campaign. Testing and certification are one of the main tasks of the EAC and they describe and analyze their efforts in the article on page 10-11. One of the most well known e-voting projects in the world is taking place in Brazil. The development and effects of this huge project is discussed by both the President and the Secretary General of the Superior Court of Elections. From Brazil we fly to Australia and have a look at Everyone Counts' remote voting project initiated in New South Wales for the elections in March 2011 (page 12). Finally, the Modern Democracy Magazine will provide you with its market overview of companies and firms involved in the development of tomorrow's Modern Democracy.

We hope you enjoy reading this issue of Modern Democracy Magazine and are looking forward to your feedback and comments.

Thank you very much for continued loyalty

Yours,
Manuel Kripp

Manuel J. Kripp,
Managing Director
E-Voting.CC

Philippines test E-Voting

The Philippine Commission on Elections introduced e-voting for its general elections in 2010.

The first mechanized voting device was patented in the United States in 1892, and for nearly a century the United States was the only country using automated voting equipment. Since the 1980s, Brazil, India, the Netherlands, the Philippines, Russia, and Venezuela have introduced e-voting systems. E-voting is not a panacea, but when properly implemented, it can be a useful tool for democratic elections.

Countries that are considering e-voting should take note of the 2010 elections in the Philippines. Last year more than 38 million Filipinos had their votes counted by optical scanning machines and their experience shows technology's potential for enhancing electoral integrity.

Comelec initiated e-voting. The Philippine Commission on Elections (COMELEC) initiated plans for e-voting after a chaotic 2004 presidential election. In 2009 COMELEC awarded a contract valued at USD 150 million to Smartmatic, a Venezuelan company, for more than 80,000 precinct count optical scan machines and associated counting, election management, and transmission sub-systems to support the 2010 elections.

COMELEC also awarded a competitive bid contract for testing to SysTest Labs of the United States - now known as SLI Global Solutions - an ISO 9001:2008 accredited company that specializes in testing automated election systems. COMELEC used voting system guidelines from the United States as the baseline for testing since none exist elsewhere. This testing proved to be a significant aspect of the success of the 2010 Philippine elections.

Presenting the certification of source codes

Testing. The highly charged political environment in the Philippines made testing essential for the credibility of the Smartmatic system. COMELEC took the leadership to ensure Smartmatic's cooperation with the testing program. This experience underscores the need for voting equipment procurements to include requirements for vendors to cooperate with independent testers.

SysTest Labs kept COMELEC informed of testing and code review progress along with discrepancies identified as the program progressed. Testing also helped to ease the anxiety of election stakeholders regarding the source code for the election system. Ultimately, SysTest Labs recommended certification of the Smartmatic system for the 2010 elections based on the testing and code review results.

After the election, Tim Diaz de Rivera, Director General of the National Computer Center of the Philippines, remarked that independent testing played a key role in the credibility of the elections. Unlike previous elections, the e-voting system helped Filipinos know the winner of the presidential election within 48 hours after the polls closed, which was a victory for the people.

Author: Richard W. Soudriette, 21 February 2011

Richard Soudriette,
President, Center for Diplomacy and Democracy
Colorado Springs, Colorado

Conference schedule for 2011

Conference Title	Details	Date	Location	Web Link @
EVT/WOTE '11	Electronic Voting Technology Workshop/ Workshop on Trustworthy Elections 2001	8.-9.8.2001	San Francisco, California	http://www.usenix.org/events/evtwote11/
REVOTE 2011	International Workshop on Requirements Engineering for Electronic Voting Systems	29.08.2011	Trento, Italy	http://ed.fbk.eu/revote/
ICEGOV	5th International Conference on Theory and Practice of Electronic Governance	26.-28.9.2011	Tallinn, Estonia	http://www.icegov.org/
VOTEID 2011	3rd international conference on e-voting	29.-30.9.2011	Tallinn, Estonia	http://research.cyber.ee/~lipmaa/voteid2011/index.php
EGOV 2011	10th conference on electronic government	28.8.-2.9.2011	Delft, Netherlands	http://www.egov-conference.org/
ECAS 20th anniversary	European Citizenship in Action	1.-2.9.2011	Brussels, Belgium	http://www.ecas-citizens.eu/content/view/397/375/
EGOVIS 2011	2nd International Conference on Electronic Government and the Information Systems Perspective	29.8.-2.9.2011	Toulouse, France	http://www.dexa.org/node/43
ICEG 2011	8th International Conference on e-Governance	9.-10.9.2011	Ahmedabad, India	http://www.iceg.net/2011/
4th Annual International Electoral Affairs Symposium 2011	"Conducting Successful Elections in the Digital Age"	12.-13.10.2011	London, UK	http://electoralforum.org/
5th eGovernment Symposium	5th eGovernment Symposium 2011	15.11.2011	Bern, Switzerland	http://www.egovernment-symposium.ch/default.asp?V_SITE_ID=7

EVOTE2012 – Call for Papers

The EVOTE2012, the 5th International Conference on Electronic Voting will be held 12-14 July 2012 in Castle Hofen, Bregenz, Austria.

This conference is organized by E-Voting.CC in cooperation with the Council of Europe and the Gesellschaft für Informatik.

It brings together e-voting specialists working in academia, politics, government and industry from all over the world to hold an interdisciplinary and open discussion on all issues electronic voting involves. Don't miss the chance to be part of this extraordinary international conference.

Deadline of paper submission is 3rd February 2012. The full paper submissions (double-spaced, 3500-4500 words excl. abstract, figures, references) will be subject to a double-blind review. Please submit anonymous submissions (with no reference to the authors).

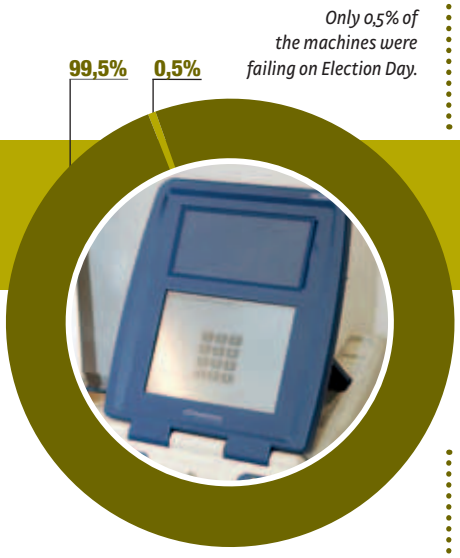
Electronic submissions should be made through the platform provided at www.evoting.cc/2012, which serves as an online system for the review process.

We look forward to welcoming you to the EVOTE2012 at Castle Hofen, Austria.

Presentations and discussions among academic experts, practitioners and government representatives are the central theme of EVOTE.

Making Elections Reliable and Interesting

E-Voting.CC interviewed Ex-Commissioner Gregorio Larrazabal about the elections in 2010, the use of voting technologies, voter education and change management.



Only 0,5% of the machines were failing on Election Day.

In May 2010, the presidential elections of the Republic of the Philippines took place, organized and overseen by the Philippine Commission on Elections (COMELEC). For the first time, optical scanning machines were used to automate the process. We met the former Commissioner Gregorio Larrazabal and talked about his experiences.

E-voting helps stabilize democracy. According to Larrazabal, who was the youngest commissioner in the history of the Philippines, voting technologies were introduced to hinder manipulation. "E-voting helps to stabilize democracy" because the machines are difficult to manipulate. In the past, poll workers and voters were influenced or even killed to manipulate the result of the election. The voting technologies made violence dispensable and ineffective.

The acceptance of the voting technologies was very high among the population due to the COMELEC's change management activities. The perspective of considering the introduction of voting technologies as change management is innovative and remarkable. COMELEC set three goals to be accomplished in order to gain voter acceptance:

1. Educating voters
2. Making the results acceptable
3. Managing the expectations towards the new technologies.

Voter education campaign. To reach those goals, COMELEC informed the media networks about the implementation of e-voting. The media launched an extraordinary voter education campaign focusing on the young population, as a majority of voters are between 18-35 years old. Thus, they aimed to make voter education more "sexy" and interesting. Four million dollars were invested to inform the people about the election and the e-voting system. The campaign included a jingle, which became a YouTube hit. It raised discussions and awareness for the upcoming election.

In addition to the campaign, COMELEC dealt with all critics and problems. They were the first to publish bad news or problems and tried to provide solutions as soon as possible. As a result reliability and credibility of the election commission and the system had been increased.

After the counting of the votes, the results were printed out multiple times before and after the transmission to three servers. The copies ensured the public that the results were not manipulated, and the voters always had access to the results via internet and iTunes. The data remains always accessible for all citizens.

Successful adoption of E-voting system. 2% of votes were randomly chosen to be counted manually to test the accuracy of the results of the optical scanning machines. The random audits showed that 99,6% were right. Only 0,5% of the machines were failing on Election Day. An evaluation among the voters showed that 3 out 4 Filipinos were satisfied with the results. 49% preferred automation and want to have automated elections instead of manual ones in the future. These remarkable results justify the continued use of e-voting.

In our opinion, the COMELEC succeeded in its campaign to make elections more appealing to the youth. This is one step in the right direction for organizing transparent and trustworthy elections. However, information and education is just one tool among many. When it comes to e-voting issues such as testing and certification must still be taken into account.

Author: Maria Kellner

An evaluation among the voters showed that 3 out 4 Filipinos were satisfied with the results.

New voting technology developed by Clemson University

Commissioned by the Election Assistance Commission (EAC), a new voting technology system was developed by the Clemson's School of Computing (South Carolina) in order to facilitate voting for impaired people. The voting technology Prime III has a universal design. It is applicable for lots of different groups of people, but primarily it should facilitate voting for impaired people. Prime III works with speech or touch system. A paper ballot is printed after the voting for back up and verification means. The system is unique because of its security and validity. A special opportunity to use the software is possible for Anderson city elections in April 2012. Read more about Prime III:

http://bit.ly/ro4DLd

Guide on Electronic Voting and Counting Technologies published

IFES, the International Foundation for Electoral Systems recently presented its newest publication on "Electronic Voting & Counting Technologies", a guide to conducting feasibility studies. This document authored by Ben Goldsmith provides a broad perspective on the important task of conducting feasibility studies to ensure a successful electoral modernization and technology implementation. You can download your personal copy

http://bit.ly/nVFF4l w

The Brazilian Electronic Voting System

A success story using Electronic Ballot Boxes, the development and implementation of the electronic voting system in Brazil.

The Brazilian Law of Elections determines that the election and counting of votes will be made electronically and that Electronic Ballot Boxes will count each vote, "assuring its secrecy and inviolability, ensuring the political parties, coalitions and candidates wide inspection".

Electronic registration. The Superior Electoral Court, initiated the automation process of state-wide elections of 1986 based on a law that also enabled the electoral review of voters. The electors were re-registered by establishing single national registration numbers, which replaced the existing voter's certificate. With 70 million registered voters, it was the largest electronic registry of voters in Latin America. To ensure the privacy of citizens, personal data included in the electoral registry are kept secret and only provided through reasoned judicial decision.

Biometric voter registration for elections in Brasil is gradually implemented.

For the 1994 General Election, the Superior Electoral Court created a data transmission network enabling the electronic communication of information among the agencies of the Electoral Justice in order to verify and release the election results more expeditiously. In practice, votes cast in ballot boxes were verified and transmitted from the electoral board to the 27 Regional Electoral Courts in the country, then retransmitted to the Superior Electoral Court for tabulation and the nationwide release of the results.

The duly revised electronic database which connected Electoral Zones, the Regional Electoral Courts as well as the Superior Electoral Court, served as the basis for implementing electronic voting in the country.

Implementation of e-voting. A technical group consisting of renowned institutions in Brazil was created by the Superior Electoral Court in order to prepare the Electronic Ballot Boxes . Within five months, the project was completed. Electronic Voting was successfully implemented in one third of the Brazilian electorate during the 1996 Municipal Elections, in all state capitals and cities with more

than 200,000 voters. At the end of the electoral process, the invited group of monitors made several observations:

- the number of voters participating in the election was similar to those of previous elections, in other words the introductions of electronic ballot boxes was not an effective obstacle to voters;
- compliance with the rules and procedures of voting with small lines;
- a harmonious relation among voters, inspectors, and elections workers;
- the absence of military force in the street, demonstrating the confidence of voters, candidates and parties in the performance of the Electoral Voting system,
- credibility in the new electronic voting process as a result of the impossibility of frauds.

In the 1998 General Election, two thirds of all Brazilian voters had already voted electronically, because of the establishment of electronic ballot boxes. However, the electronic voting system project reached in its peak in the 2000 Municipal Elections, which covered 100% of Brazilian voters, i.e. 110,000,000 Brazilians.

A Biometric Voting System was introduced in the Municipal Elections of 2008 in order to enhance the security of the voting system. Voters were identified by their fingerprints, which provided a precise identification of the voters. This resulted in an increase of security and a reduction of fraud. 45,000 voters were registered with the Biometric Voting system.

To ensure the transparency and security of the Brazilian electronic voting system, inspectors from the political parties, the Brazilian Bar Association (OAB) and the Office of Public Prosecutors (MP), are provided with advance access to election software developed by the TSE or commissioned by it, for the purpose of conducting inspections and audits before the election. The software is then introduced, compiled and digitally signed by representatives of the political parties, the OAB and the MP. Finally, the software is tested and digitally signed by representatives of the TSE and closed in the Digital Signing and Locked Ceremony. After which, the software is secured in the Superior Electoral Court.

> **"The e-voting system project reached its peak in the 2000 Elections"**

Successful public testing. Due to increased public interest in the verification of the electronic voting system, public security tests of the election were conducted in 2009 with investigators coming from multiple accredited national and international organizations. No team or individual participant was able to deviate from or violate the electronic voting system. This demonstrated the security and inviolability of the Brazilian electronic voting system. That is why, according to a survey in 2008, 97 percent of voters approved of the Electronic Ballot box. According to the same survey, the Electoral Justice system is cited as the most trustworthy institution in the country.

In the 2010 general elections, more than one million Brazilians identified themselves and voted through biometrics in more than 60 municipalities. According to a survey, 88% of the voters rated the system as good or excellent quality of work.

Realizing the "electoral truth" validated in the Electronic Ballot boxes in a way that is secure, expedited and transparent is the greatest and the most important work developed by the Brazilian Electoral Justice system, which has fully and successfully complied with its constitutional mission to assure that the sovereignty of the people is expressed as freely and democratically as possible.

Authors:

Enrique Ricardo Lewandowski, President of the Brazilian Superior Electoral Court

Manoel Carlos de Almeida Neto, Secretary General of the Superior Electoral Court

Notes

1) In 1978 the Regional Electoral Court of the state of Minas Gerais initiated attempts to automate its election processed and introduced a mechanized prototype of the voting process to the Superior Electoral Court.

2) The first technical term used to refer to an electronic voting ballot as the Electronic Vote Collector (CEV).

History of E-Voting

The Development of remote e-voting around the World. A Review of Roads and Directions.
The e-voting history is available for download at www.e-voting.cc/files/e-voting-history

1849–1949 Electronic and mechanical voting ideas

1849
de Brettes *develops an electronic decision-making telegraph*

1859
Werner von Siemens *develops this idea further with its first application*

1865
the ***first automated decision-making telegraphs*** *use either black or white balls or a paper stripe on which the choice is printed next to the name of the voter. Such decisions were only Yes/No decisions*

1869
An Electro-mechanical recording and counting device is developed and patented by ***Thomas Edison***

1892
The first use of ***Jacob H. Meyr's mechanical voting machine*** *occurs in public in Lockport, New York, US. The goal was to provide a plain, simple and secret voting process.*

1895
Based on Jacob H. Meyr's invention and its public presentation. The ***first electronic voting company*** *is founded.*

1990
Devices with ***touch screen or keyboard interfaces*** *and online technology are developed*

1995
Belgium *introduces e-voting using a magnetic card inserted in a computer*

1996
Brazil *introduces e-voting for its Parliament elections*

1996
First Internet Voting at the ***candidate selection*** *of the Reform Party (US)*

1996
Finland *tests electronic voting in polling stations*

1997
The city of Cologne*, Germany, trials Electronic Voting Machine*

1990–1999 E-voting matures and Internet Voting is born

2000–2011 E-voting hype and failures. Continuous progress and maturation

2000
The ***ICANN*** *elects ist five directors via the Internet*

2000
The ***university of Osnabrück*** *develops and implements an Internet Voting System*

2000
Several states in the ***US*** *(Alaska, Arizona, California, Florida, Utah, South Carolina, Texas and Maryland) test, implement and run Internet Voting*

1999
Seven ***French*** *cities test Internet Voting during the European Parliament Elections*

1998
First Internet Voting trial in ***Germany***

2001
The Dotcom bubble bursts

1950–1989 The first steps into Electronic Voting

1953 IBM produces the first mass produced computer called 650

1955 — **Erich Fromm** presents the idea of communicating and decision-making via interconnected technical devices

1960 — The first computers for **tabulating votes** have been developed

1960 — The first **punch card machines** are developed and implemented.

1969 Founding of ARPANET, the first worlwide netwok

1970 — **Murry Turoff** deveolped a computer supperted Delphi panel, which provided computer supported voting system. This Emergency Management Information and Reference Index (EMISARI) was ready in 1972

1971 — **R. Buckminster Fuller** introduced the concept of electrified voting in a theoretical and ideally democratic world

1973 — The first efforts and developments in the area of **optical scanning** have been introduced

1980 — Punch cards as voting technology **were questioned** regarding the accuracy of the vote casting process

1981 Microsoft introduces MS-DOS 1

1984 — The State Illinois (US) **started testing** vote counting systems

1990 World Wide Web ist presented

TODAY

2002 — The **United Kingdom** launches a vast amount of trials and test projects to discover the opportunities and challenges of Internet Voting

2005 — First legally-binding Internet voting channel available at the local elections in **Estonia**

2007 — **First Parliament elections in Estonia** with an Internet voting channel available for every eligble Estonian voter

2008 — The **German constitutional court** ruling demands transparency and verification mechanisms as an essential requirement for e-voting

2008 — The **Netherlands** ban the use of electronic voting machines in elections

2009 — Internet voting is used as an additional voting channel at the elections for the **Austrian Student Federation in Austria**

In **Estonia**, 25% of the voters cast their vote over the Internet in the Parliament elections

Norway introduces Internet voting at the municipal elections for pre-defined communities

Swiss living abroad have the ability to cast their vote over the Internet

Sources: 1. Ieucybervote wiki (2006), 2. Krimmer, Volkamer, Triessnig (2007): The Development of Remote e-voting around the World. A Review of Roads and Directions

EAC Fosters Election Modernization and Improvement

In 2002, the United States Congress passed the Help America Vote Act (HAVA). With this tool, the EAC supports states in improving their voting system.

In the wake of the presidential recount in Florida after the 2000 General Election, the United States Congress passed the Help America Vote Act of 2002 (HAVA). HAVA created the Election Assistance Commission (EAC) and provided federal funds to assist states in upgrading their voting systems. In addition to managing financial disbursements to each state, HAVA empowers the EAC to accredit independent Voting System Test Laboratories (VSTLs) and requires that the EAC works with VSTLs to certify everything from voting equipment to EAC-issued voting system standards.

> **"The EAC's program is open and transparent."**

State use of the EAC's program. An important aspect of the EAC's program is its voluntary nature. As election laws vary from state to state, a state chooses to participate in the program in a very specific manner. Some states use EAC certification in lieu of state testing, while others may use parts of EAC testing to supplement testing efforts at the state level. There are some states that do not require any type of federal testing and opt not to participate in the EAC program. For example:

- **Indiana** law requires all voting systems used in the state to be tested to federal standards, resulting in Indiana and the EAC working closely on system certification.
- **Florida** independently conducts its own testing and certification program. Florida and the EAC share certification testing information and the state may opt to reuse testing conducted by the EAC.
- **Ohio** law requires all newly purchased voting systems to be EAC certified.
- **New Jersey** law does not require the use of any portion of the EAC's Testing and Certification Program.

Participation in EAC testing and certification by voting system manufacturers is also voluntary. However, if a manufacturer chooses to register with EAC, the company agrees to abide by the program's policies, including strict requirements regarding conflicts of interest and anomaly reporting.

Quality monitoring program. The EAC's Quality Monitoring Program provides an additional layer of quality control by allowing the EAC to perform manufacturing facility audits, carry out fielded system reviews, and gather information on voting system anomalies from election officials. These additional tools help ensure that voting systems continue to meet the requirements of EAC's voting system standards as the systems are manufactured, delivered, and used in Federal elections.

Cuyahoga County in Ohio provided a recent example of the utility of the quality monitoring program when their optical scan voting system experienced a freeze/shutdown anomaly during the county's May 2010 primary election. After the county notified EAC about the anomaly, EAC staff investigated the issue with the county and manufacturer. As a result of the investigation EAC issued a System Advisory Notice informing all jurisdictions and the public about the problem as well as the recommended procedural mitigations for the issue. At the conclusion of its investigation, the EAC will issue a Formal Investigation Report, which will be available for election officials and the public.

Outreach Efforts. The EAC's program is open and transparent; when developing its voting system standards, testing and certification manual and lab accreditation manual, the EAC includes technical experts, election officials, stakeholders, and the public. All programmatic information is posted at http://www.eac.gov: voting system test plans, test reports, correspondence, and anomalies. By posting this information, the EAC informs election jurisdictions on the progress of systems seeking certification as well as issues experienced during testing. Recently released certification engagement timelines are available on EAC's website to inform the public about a system's progress in testing. In addition, EAC created an interactive map of the United States identifying the location of EAC-certified systems.

EAC uses social media to inform stakeholder about the activities of the certification program. A blog and a Twitter feed provide information about voting and elections to election officials and the public from a trusted source. Social media also supports the national discussions held by the EAC, which are focused on topics such as voting system standards, the use of commercial-off-the-shelf (COTS) products, managing voting system life-cycles, and voting system security best practices. These discussions lead to continued improvement of the certification program. The EAC serves as an information clearinghouse for the public and election officials to use as they face technology related challenges at the state and local level.

"The EAC serves as an information clearinghouse."

Conclusion. The EAC's Voting System Testing and Certification Program is a voluntary program that provides value to all election jurisdictions in the United States. The Commission leads a nationwide discussion of issues confronting state and local jurisdictions as they work to manage and maintain their voting systems. In addition to its primary work with domestic U.S. elections, the EAC also continues to reach out to other countries to exchange ideas and best practices with colleagues around the world like the Organization of American States (OAS) the Organization for Security and Co-operation in Europe (OSCE). EAC looks forward to continuing to develop these relationships while at the same time forging new and stronger relationships with emerging democracies throughout the world.

Author: EAC (Voting System Testing & Certification Program)

Report of New South Wales election published

A study about the General Elections of New South Wales in March 2011, which was assisted by voting technology for impaired and remote people, was published. The study was conducted by the Allen Consulting Group for the New South Wales Election Commission. It includes an evaluation of the IVote system, feedback from IVote user and identification areas for improvement. Overall, the introduction of the voting technology system was highly successful and the aim to facilitate secret votes for impaired and remote people was reached. More people than estimated voted online, the satisfaction with the system was very high and the system was very cost effective. The study suggests to enhance the IVote system for a larger group of people in next elections. However, there are many areas for improvement like the broader promotion of the voting system. Read the entire study ***http://bit.ly/oMm5AT***

Electronic devices for Russians living abroad

In December 2011, Parliamentary Elections in Russia will be held. 1,7 million Russians, who are registered to live abroad, can cast their vote with an electronic device provided at the polling stations. This should facilitate the voting and calculating process. This implementation of technology will be monitored by foreign and Russian observers. Get more info ***http://bit.ly/nfF1Fq***

Project: iVote – Internet Voting in New South Wales, Australia

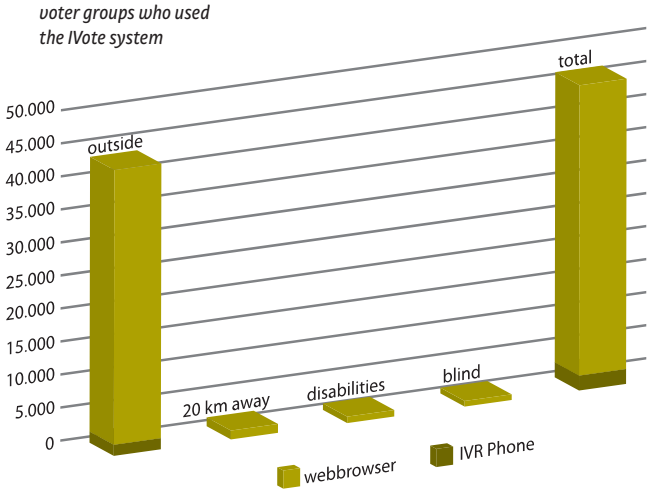
Internet and telephone voting for disabled, illiterate or remote voters in the 2011 New South Wales State General Elections in March 2011

Mike Summers, Everyone Counts

Every eligible voter, regardless of disability or geographic location, deserves the opportunity to exercise his or her right to vote. Yet millions of citizens in remote locations as well as those with visual, motor, or cognitive impairments are unable to do so using traditional paper ballots and polling station voting solutions. Therefore, the Australian State of New South Wales (NSW) has provided an example of bringing equality to voting by offering remote electronic voting.

Proven remote electronic election solutions deliver secure ballots, improve privacy and ensure accuracy and are compatible with assistive devices for persons with disabilities, and enable voting from any location. These reasons have been the goal of the NSW-termed 'iVote' project, initially developed to give voters with disabilities or those living far from a polling station the ability to cast a secret ballot, unassisted, from a location of their choosing. Legislation was later implemented to extend iVote to intrastate and overseas voters.

Statistics of different voter groups who used the IVote system



Solutions used in NSW

- eLect Universal: Online ballot marking and submission
- eLect Access: Telephone voting
- Central Print: Ballots were decrypted and printed in a central location on Election Day to be included in the normal count process. The ballot printout was designed to match the postal ballot so there was anonymity among the voting solutions.

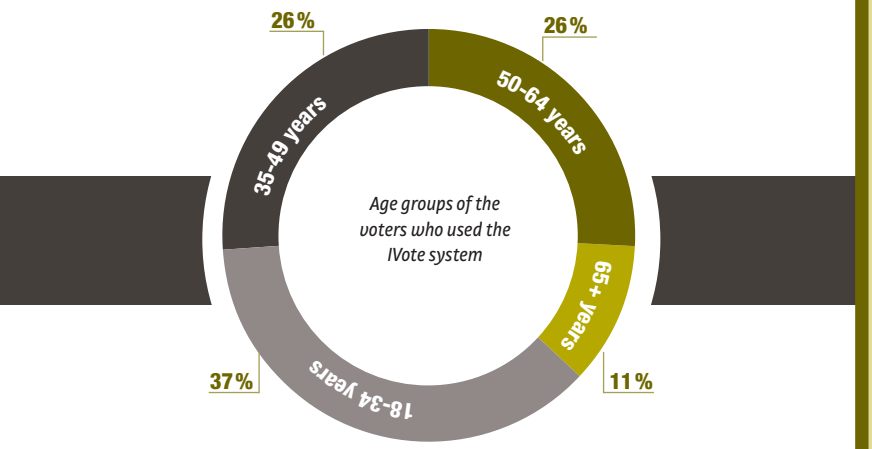
These solutions enabled eligible, disabled (blind, vision impaired, physically incapacitated or illiterate) voters who often require assistance at polling stations creating conditions that could prevent independent voting as well as remote voters to cast their vote.

Improving ballot access and demonstrating scalability. The Everyone Counts eLect Platform™ provided the NSW Electoral Commission (NSWEC) with online and telephone voting for eligible voters in the March 2011 State General Election. The eLect Platform utilized by NSW under the "iVote" brand provided accessibility and functionality to voters who may have otherwise been unable to participate in this election.

The iVote system, created by Everyone Counts in partnership with the NSWEC, was originally designed to enfranchise voters with disabilities and those living 20km or more from a polling station. Upon evaluation of the solution being offered, legislation was subsequently passed to extend the use of iVote to all voters who were out of NSW on Election Day, whether intrastate or overseas.

The NSWEC originally estimated a maximum turnout of between 5,000 and 15,000 votes during the election period; as legislation was altered and eligibility increased, so did the expected voter turnout. Everyone Counts and the NSWEC rose to the challenge and rapidly adjusted systems, processes, and procedures to accommodate the additional voter demand, making possible the total of 46,864 votes cast during the election period. This scalability requirement for increased usage, as done with the eLect Platform, is readily available by way of using flexible election technology.

Presenting Australia's unique above and below-the-line ballot via online and telephone voting demonstrates the flexibility provided by electronic solu-



tions. Design of the applications is limitless and the technology streamlines the transfer of data amongst election processes. For NSW voters, the complex ballot presented in Braille could be as long as 67 pages; presenting the ballot electronically not only allows the voter to vote independently and privately, but it can offer features such as allowing a voter to return to their ballot with marks saved, if so chosen by the election official. Those features improve the voter experience and participation.

Just as important as the provision of remote, electronic voting is the vendor choice. Not only is it critical that a chosen vendor has demonstrated success, providing a spotless record, but they must also have the flexibility to respond to, and even anticipate, the needs of the election jurisdiction. In the case of the NSWEC, having both oversight and direct influence into the building of the election and its processes was important.

The NSWEC worked with Everyone Counts to allow for local hosting of all election data. Third party firms were chosen for penetration testing, process and technology audits, W3C accessibility compliance, and to gain voter feedback on the usability of demonstration systems.

iVote by phone, using Everyone Counts eLect Access, produced the world's first Telephone Voting Standard compliant phone voting system; usability guidelines were outlined in the Australian / New Zealand Telephone Voting Standards, as well as the AS/NZS 4263.

In addition to increased privacy and accessibility, implementation of remote, electronic voting has removed travel burdens for some NSW voters. As voting in Australia is compulsory being able to vote using any Internet or telephone connection was particularly advantageous for NSW voters.

Conclusion. The eLect Platform provided a highly effective and consistent way of voting, regardless of whether the voter was using an assistive device like a screen reader, a traditional computer, or other mobile device. With the addition of a remote electronic voting solution, all citizens regardless of location or ability are equal in their ability to exercise their full voting rights – even if unable to reach a polling station or mark a paper ballot.

Western Australia will implement technology for impaired people

The Western Australia Election Commission (WAEC) plans to implement a voting technology system in the next state elections in order to grant blind, vision impaired or those voters with dyslexia to vote independently and secretly. Over 10 000 registered voters with impairments will benefit from the system. The system is developed at the moment and will include a numeric keypad and earphones, which will guide the people through the voting process. After the developing and testing the system, it has to be fixed in the legislation. Read the entire article ***http://bit.ly/q4bhZa***

New era of voting with EVM's in Namibia

The Electoral Commission of Namibia (ECN) announced that Electronic Voting Machines (EVM's) will be introduced in the next elections. This should hinder fraud and irregularities. Furthermore, it facilitates voting and counting and grants secrecy of the vote. After several incidents of manipulation and irregularities, the EVM's should kick off a new era of voting in Namibia. All parties welcome the technology. However, there are still a lot of challenges to be met, like the education of the voters and election officials and the implementation of the voting technology in the existing legislation. Get more info ***http://bit.ly/qkffRO***

IBM supports Kenya with implementation of E-Voting

The Independent Electoral and Boundaries Commission (IEBC) of Kenya plans to shift from manual voting to electronic voting. To achieve this goal, the IEBC hired the global technology company IBM. A delegation of 12 people provides their know-how and develops a master-plan for the implementation of electronic voting. The duties of IBM include the review of the transition, the set out standards and governance for e-voting and the management of security and protocols during the implementation process. Get more info ***@ http://bit.ly/o5ZUUX***

Market overview on Modern Democracy tools

Company	Country	URL	Email
Australian Election Company	Australia	**www.austelect.com**	rkidd@austelect.com
Avante International Technology Inc.	United States	**www.avantetech.com**	cchu@aitechnology.com
Berninger Software GmbH	Germany	**www.berningersoftware.de**	info@berningersoftware.de
Chancellerie Secrétariat général	Switzerland	**www.ge.ch**	michel.chevallier@etat.ge.ch
Australian Election Company	Australia	**www.austelect.com**	rkidd@austelect.com
Avante International Technology Inc.	United States	**www.avantetech.com**	cchu@avantetech.com
BRZ, Bundesrechenzentrum GmbH	Austria	**www.brz.gv.at**	carl-markus.piswanger@brz.gv.at
21c Consultancy Ltd	United Kingdom	**www.21cconsultancy.com**	info@21cconsultancy.com
Danaher Controls	United States	**guardianvoting.com**	
Cybernetica AS	Estonia	**www.cyber.ee**	info@cyber.ee
Delib Ltd	United Kingdom	**www.delib.co.uk**	info@delib.co.uk
Diebold Incorporated	United States	**www.diebold.com**	webmail only
D-TRUST GmbH	Germany	**www.d-trust.net**	info@d-trust.net
Dutch Disctrict Water Control Boards		**www.terena.org**	
EADS Systems & Defence Electronics	France	**ec.europa.eu**	
Dominion Voting Systems Corporation	Canada	**www.dominionvoting.com**	contact@dominionvoting.com
E-Poll		**www.e-poll-project.net**	
DRS Data Services Limited	United Kingdom	**www.drs.co.uk**	webmail only
Election Trust LLC	United States	**www.electiontrust.com**	Info@electiontrust.com
Electoral Reform Society	United Kingdom	**www.electoral-reform.org.uk**	ers@electoral-reform.org.uk
Fidlar Technologies	United States	**www.fidlartechnologies.com**	support@fidlar.com
ES&S Europe, Middle East and Africa	United Kingdom	**www.essvote.com**	emea@essvote.com
Everyone Counts Inc.	United States	**www.everyonecounts.com**	contact@everyonecounts.com
everyonecounts	*Proven on seven continents, Everyone Counts delivers the most secure and accessible voting system in the world. In partnership with election officials globally our internationally recognized election and computer security experts lead the industry providing flawlessly transparent, accurate elections. Everyone Counts, chosen by the US and Australian Departments of Defense, US States and the UK to provide secure voting systems for domestic and overseas voters, was also chosen by UNESCO as the premiere voting solution for people with disabilities.*		
Experian Information Enterprises	France	**www.experian.com**	office@experian.fr
Geneva Solutions SA	Switzerland	**www.gs-sa.ch**	contact@gs-sa.ch
GS	*Geneva Solution is the only private company that has qualified five times for the "Capture the Flag" white hat competition held annually in Las Vegas. We, being the triple vice-champion, offer you a fresh glance to securing your data and networks. We provide a long and worldwide experience, out-of-the-box thinking and a holistic approach. We are bound neither by legacy theories nor by tradition or commercial ties with any vendors.*		
Gov2u	Greece	**www.gov2u.org**	info@gov2u.com
Herodot Consulting & Software KG	Austria	**www.herodot.at**	office@herodot.at
MicroVote General Corp.	United States	**www.microvote.com**	
Multicert SA	Portugal	**www.multicert.pt**	info@multicert.com
Icele	United Kingdom	**www.icele.org**	dylan.jeffrey@communities.gsi.gov.uk
Oberösterreichische Gemeinde-Datenservice GmbH. & Co. KG	Austria	**www.gemdat.at**	
iMeta Technologies Limited	United Kingdom	**www.mi-voice.com**	enquiries@mi-voice.com
Indra Sistemas S.A.	Spain	**www.indra.es**	indra@indra.es

Company	Country	URL	Email
Ingenieursgesellschaft Entera	Germany	**www.entera.de**	info@entera.de
Issy Media	France	**www.issy.com**	iris@ville-issy.fr
Micromata GmbH	Germany	**www.polyas.de**	info@micromata.com
POLYAS ONLINE VOTING SOLUTIONS	*Micromata is in business since 1996 and is managed and held by Kai Reinhard (graduate in physics) and Thomas Landgraf (graduate in electronic engineering). Our core business has ever since been the development of customized software which optimizes all operational procedures within companies. While engineering high- level applications we emphasize maximum standards of quality and security.*		
Nedap, N.V. Nederlandsche Apparatenfabriek	Netherlands	**www.nedap.nl**	info@election-systems.eu
Openvoting.org	Austria	**www.openevoting.org**	office@openevoting.org
Opt2Vote Ltd.	Northern Ireland	**www.opt2vote.com**	info@opt2vote.com
Pnyka	Greece	**www.pnyka.cti.gr**	stamatiu@ceid.upatras.gr
Public-i Group Ltd	United Kingdom	**www.public-i.info**	info@public-i.info
Research Academic Computer Technonogy Institute	Greece	**www.cti.gr**	info@cti.gr
Safevote Inc.	United Sates	**www.safevote.com**	info@safevote.com
Scytl Secure Electronic Voting	Spain	**www.scytl.com**	scytl@scytl.com
scytl Secure Electronic Voting	*With over 15 years of pioneering R&D, Scytl provides patented solutions in Internet voting, in-chamber voting for Parliaments, poll-site e-voting, phone voting, e-pollbooks, voter registration & results consolidation. Scytl offers the highest security standards, assuring the same levels of trust, security and privacy that exist in conventional elections. Scytl's solutions have been successfully audited or certified by the Governments of Austria, France, Switzerland, Finland, Australia & Florida (USA)*		
Smartmatic	United Sates	**www.smartmatic.com**	webmail only
SLI Global Solutions Inc.	United Sates	**www.sliglobalsolutions.com**	tmapps@sliglobalsolutions.com
SLI GLOBAL SOLUTIONS	*SLI is accredited by the US National Institute of Standards and Technology and the US Election Assistance Commission as a Voting System Test Lab. Our lab is accessible from anywhere around the globe and is capable of supporting the largest and most complex election system testing and certification program. Our test methods are supported by a powerful range of management and reporting tools that deliver transparent and accurate results. SLI has extensive experience in the US and Internationally and is an ISO 9001:2008 certified company.*		
Software Improvements Pty. Ltd.	Australia	**www.softimp.com.au**	support@softimp.com.au
Sztaki Voting and Survey System	Hungary	**www.sztaki.hu**	pr@sztaki.hu
Tata Consultancy Services (TCS) UK			europe.marketing@tcs.com
True Ballot	United States	**www.trueballot.com**	john@trueballot.com
T-Systems Enterprise Services GmbH	Germany	**www.t-systems.com**	info@t-systems.com
TuTech Innovation GmbH	Germany	**www.tutech.de**	info@tutech.de
Unilog Integrata Training AG	Germany	**www.unilog-integrata.de**	training.de@logicacmg.com
Unisys	Germany	**www.unisys.com**	webmail only
Votenet Soultions	United States	**www.votenet.com**	salesconsultant@votenet.com
Zebralog cross media dialogues	Germany	**www.zebralog.com**	info@zebralog.com

**Entries/companies with a star are members of the Pan-European E-Participation network PEP-Net. More information: http://pep-net.eu*

PEP-NET

If you miss your company or want to see your logo in this market overview, do not hesitate to contact us at modern-democracy@e-voting.cc

Author: Manuel Kripp

EVOTE2012
1st Call for Papers:

The 5th International Conference
on Electronic Voting
When: 12 – 14 July
Where: Castle Hofen, Bregenz, Austria

Deadline for Paper Submissions: 3 February 2012

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Outlook for the next issue of Modern Democracy

Cover story:
Benefits and Challenges of Implementing E-Voting

If you are interested in publishing or writing a story for the next issue of Modern Democracy, please contact us at modern-democracy@e-voting.cc

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