Remarks by Paul DeGregorio,
Former Chairman, U.S. Election Assistance Commission
2007 Global Election Organization Conference
March 27, 2007 Washington, DC

The Use of Electronic Election Technology in the USA

I would like to thank Dr. Zoltan Toth of ACEEEO, Richard Soudriette of IFES and the other organizers of this important conference that has brought together election officials from all over the globe to discuss significant. I want to extend my particular congratulations to Richard Soudriette on the 20th anniversary of the founding of IFES. As many of you know, I have been associated with IFES for 14 of those years and I know that IFES would not be the great organization it is today had it not been for the tremendous leadership of Richard Soudriette.

History will record that Richard Soudriette has made a positive difference in the lives of millions throughout the world through his work. I know that he has had a significant impact on the lives of everyone at this conference, including mine, and I am very grateful for his leadership. I congratulate Jean-Pierre Kingsley on his appointment as the new IFES President. Jean-Pierre is very much respected around the world and I've enjoyed working with him for many years.

My remarks today will focus on the use of technology in election administration in America.

In order to understand why the United States has transitioned to a system where nearly 90% of our ballots were cast or counted on electronic voting devices in the 2006 congressional elections and why there is widespread use of technology in the way we conduct our elections, I will begin today with a brief overview of the American Election System.

It is, in one word, complex. While the federal government has set some minimum requirements regarding the conduct of elections, most rules are made at the state level.

Elections in the USA are overseen by state election authorities and administered by 6800 local jurisdictions. It has only been in the last 3 years that the federal government has played a significant role in the way elections are administered in the United States.

The diversity of the American system does not end with its administrators; it extends all the way down to the ballot box. American voters are asked to elect candidates at all 3 levels of government and some; in addition they often vote on popular referenda that might be on the ballot. It is not uncommon for voters in some jurisdictions to make 30-50 choices on their ballot, which include dozens of candidates and referendums.

Local election officials are responsible for all federal, state and local elections, and, depending upon the jurisdiction, any popular referenda as well. In quantifiable terms, this usually means conducting multiple elections in the same year with very complex ballots.

I mention all of these statistics so you can gauge the challenging environment in which American election officials operate. Election officials also work in an environment where the media and candidates expect millions of ballots to be counted quickly, so that winners and losers can be determined within hours of the poll closing. If there is one thing that will bring close scrutiny of an election official, it is a delay in announcing results.

From paper to electronic
Throughout the first one hundred years of our history, Americans cast their ballots on pieces of paper that were counted by hand. However in the early 1900s, a new mechanical device was introduced to voters, particularly those living in the northeast United States. These devices, called lever machines, allowed voters to pull a lever to cast their ballot. These mechanical machines counted the votes automatically.

In the 1960s, electronic voting was introduced into the United States in the form of ballots made of paper cards that could have holes punched out to correspond with a voters' choice. These so-called punch cards were read electronically by machines that captured the vote by shining a light through the punched hole. Up to 600 ballots per minute were able to be counted on these devices, significantly reducing the time for results to be announced.

Starting in the mid-1980s, some states began to introduce a new electronic device that allowed the voter to touch a screen or push an electronic button to capture the voters' choice. These Direct Record Electronic, or DRE, devices grew in popularity. During the same period, optically scanned ballots were introduced whereby voters were able to fill in an oval or an arrow next to their ballot choice made on a piece of paper. This mark was then read by a special high-speed electronic scanner.

All of these devices provided a faster method to count ballots and give voters an ease of casting ballots, particularly when presented with many candidates and issues.

Of course, the 6-week delay in determining a winner in the 2000 U.S. presidential election exposed flaws in some of these voting systems, particularly the punch card system.

After the turmoil surrounding that election, The U.S. Congress, with bipartisan support, passed the Help America Vote Act – or HAVA – in 2002. HAVA represents the first major piece of federal legislation on national election reforms. In addition to federal legislation on election reform, every state has passed some form of election reform legislation or regulations.

Among other provisions, HAVA appropriated $3.1 billion in funding to the states to update their voting equipment and replace out-dated mechanical and punch card systems. It also mandated that states create voter registration databases, established minimum voting system standards and procedures, and set voter information guidelines for all polling places in America.

The funding also allowed states to make other election reforms tailored to their needs. Finally, to administer many of these initiatives a new federal agency, the 4-member bipartisan U.S. Election Assistance Commission, was created. I had the honor of serving on the EAC for over 3 years, including serving a term as Chairman. My term on the EAC just ended on March 3.

We have several different types of voting devices that are used in the United States. As you see on the screen, we have electronic touch-screen devices where a voter can touch a screen, push a button, or turn a wheel to vote. These voting devices are used by about 40% of voters in the United States. Almost 50% of American voters now cast their ballots on an optical scan system, which I described earlier are paper ballots counted electronically.

New York State is the one of the only places left in the United States that is not compliant with HAVA. In the 2006 election, most New York voters cast their ballots on mechanical machines built in the 1930s. The state is now under federal court order to change that by 2008.

To meet the requirements of HAVA, all electronic touch screen systems must notify a voter in the event of an error, overvote, and allow for convenient ballot review as per HAVA guidelines. Furthermore, to address security and recount concerns, a majority of US states have passed legislation requiring all electronic machines to produce a voter verifiable paper audit trail, or VVPAT; and, the US Congress is currently considering such national legislation as well.

Enhanced accessibility is another prime advantage of the new voting devices. Many machines can be programmed to produce ballots in several different languages, and disabled voters now have a multitude of assistance options available to them. Under the Voting Rights Act of 1965, if more than 5% of a subset of the population within a county speaks a language other than English, ballots and instruction materials must be in that language. Los Angeles County produces ballots, instructions and voter information pamphlets in 7 languages.

New Access for Disabled Voters

A significant component of HAVA's voting machine funding was allocated for the purchase of handicap accessible devices. Every polling place in the U.S. is now required to have at least one such machine. The underlying goal is to ensure that as many individuals as possible are able to vote independently and privately. So far as I know, the United States is the only country in the world with this requirement.

From features like Braille and audio recordings for the blind to paddles and sip-and-puff technology for those with muscular control issues, disabled voters are being given the tools to vote without assistance at an unprecedented level. While touring the nation in 2006 observing the primaries and the general election, I witnessed many of these technologies in use and it is a truly remarkable sight when someone with a disability in their 70s or 80s can finally cast their first ballot independently.

Here is a small clip showing a voter demonstrating an electronic voting device used by the disabled community.

Election administrators were not forgotten during the usability upgrades. The counting and tabulating of ballots has never been more efficient or reliable. Touch screen machines keep several internal tallies, notifying poll workers immediately when there is an error.

Opponents of electronic voting systems in the U.S. cite many instances and occasions when they say the machines exhibited their untrustworthiness. However, upon closer examination, I believe that the vast majority of these cases are not the fault of the machines or the technology, but rather result from the lack of training provided to poll workers and the implementation of sound management procedures.

The machines are dependent upon their operators to properly load and maintain memory and access cards, and paper audit trails. The machine element is almost entirely dependent upon the human element for the entire equation to work as it should.

Managing New Technology

Technology has not been the sole component of reform in the American elections community. We have placed an equally strong emphasis on the improvement of management practices.

The only way to ensure this is by encouraging localities to offer more training to their election administrators, precinct supervisors, and poll workers to handle this new technology.

As a response to problems found in early 2006 as several states introduced new voting electronic voting devices in their primary elections, the EAC introduced a series of Quick Start management guides to help state and local officials deal with the transition to new voting devices. These guides and other important documents can be found on the EAC website: www.eac.gov.

Voting System Standards & Guidelines

With the widespread use of these electronic devices, it is incumbent on election officials to set the highest standards and test and certify this equipment to verify their accuracy.

As mandated by HAVA, the EAC took on its responsibility to develop Voluntary Voting System Guidelines for these electronic systems. Working with the National Institute of Standards and Technology, known as NIST, the EAC spent considerable time and millions of dollars to issue the first set of Guidelines in December 2005. The EAC had some of our top scientists, academics, and election officials advise us on the first draft of these Guidelines. We also conducted 3 public hearings around the country and received over 6000 comments from the public before making them final.

These Guidelines particularly focused on security, human factors and HAVA accessibility requirements. While these Guidelines are voluntary, more than 35 states have adopted most if not all for use in their state. With the development of new technology and the 2006 election experience, the EAC and NIST are currently working on an enhanced version of the 2005 Voting System Guidelines.

One important element of having confidence in electronic voting systems is to have the system tested by competent laboratories. Thus the EAC and NIST instituted a comprehensive program to accredit independent testing authorities. Using the highest technical and ethical criteria, NIST and the EAC had specialists thoroughly examine laboratories that applied for the program. The end result that America now has two laboratories who have received such accreditation, with 4 more in the application process.

The next step by the EAC will be to certify election equipment. This crucial certification process will test the voting systems against the standards and guidelines set by the EAC. Under the new program, the EAC will make spot visits to the manufacturing sites to ensure quality control.

All of the steps I just mentioned represent the first time in American history that the federal government has been so deeply involved in this process.

I should add that a significant amount of time and effort went into developing the guidelines, accreditation and certification programs. Some of the best professionals and experts in America were involved in the process. From the very beginning, the EAC was committed to developing a process that was transparent and of the highest standards. I believe we succeeded in that effort and are a model for other nations.

Other uses of Technology

The past few years have also seen a tremendous focus on each state's electronic voter registration database, as required by HAVA. The benefits of such a database are significant: the limitation of fraud through cleaner voter rolls, and the ability of administrators to work with a greater level of efficiency and accuracy. Some local jurisdictions have taken this a step further and now have hand-held electronic poll books at each polling station that contain not just voter registration information but answers to frequently asked questions and maps to polling stations that can be printed out for those voters who show up at the wrong one.

Over the past several years, election officials from all over the world have been quick to embrace the informational potential of the internet for both voters and poll workers.

In the USA, many states and localities have what are known as Voter Information Portals as a central component of their websites. Quite simply, these portals contain everything a voter might need to know- from registration and absentee ballot information and sample ballots to individual voter verification data and introductory materials for new voting machines.

The Internet is also used to inform voters on how to use the new voting system technology. Many state and local election jurisdictions feature interactive videos on how to use the new voting system technology

The state of Indiana recently piloted a project whereby poll workers can now be trained over the internet and can read manuals, view videos and even take proficiency tests from their home. This has allowed for greater flexibility and improved recruitment efforts.

These are but a few examples of the increasing use of the Internet by US election officials to better inform voters of the voting process. Election officials report that more and more of their voters are turning to the Internet for voting information, which has helped to improve their voter education efforts. And I should add that most of these new efforts have been developed using federal dollars.

A particularly troublesome issue that we face in America is that of overseas voting. How do we ensure the millions of Americans living abroad or serving in the military have the opportunity to vote? The oldest – and still prevalent – method of accommodating these voters is through a long and tedious exchange of registration materials, blank ballots, and completed ballots through the mail. Clearly, the chances of a lost piece of mail or a clerical mistake are great considering the time and distance involved. I believe that the United States has to look to Internet to solve this problem. I recently observed successful Internet voting procedures in the Netherlands and Estonia, and believe the Internet holds great promise in the future of voting.

From 1993 to 2003, thanks to IFES, I had the opportunity to work all over the world to help election officials in emerging democracies develop best practices and sound voting systems.

During the past three years, I have traveled throughout the United States to see how election officials are introducing innovative practices and new technology to serve the voters of America. In the United States and abroad I have seen firsthand how election officials welcome the challenge and the responsibility for innovation and ensuring the integrity of the democratic process. They, like you, are committed to serving their constituents, and it is primarily because of this dedication that I am optimistic for the future of election administration in America and the world.

Now that my term on the EAC has ended, you can be sure that I'll continue to use my experience and skills to serve election officials and nations. In fact, my first assignment after leaving the EAC two weeks ago was to help officials in Thailand draft a new constitution and new election laws. I returned just this past Sunday.

Let me close by saying that it has been a pleasure to address you today on this important subject and to be among so many friends from around the globe. I know that the ideas shared at conferences such as these can go a long way towards strengthening democracy world-wide. Thank you.