

## INTRODUCTION

The use of Information and Communication Technologies (ICTs) in elections is, in many ways a natural progression from simpler, arguably less efficient and more time consuming technology with which we are all familiar and quite comfortable- paper. Traditional observation methods and techniques have evolved in response almost solely to the use of this technology in the context of the electoral process, using equally straightforward methods-talking to people, and watching events unfold.

As electronic technologies have become more and more integrated into the electoral process, observers have found themselves in a tricky position. On one hand, electronic technologies have the potential to make elections more efficient, more transparent and more responsive to the needs of the electorate-things that observers would recommend. For example, technologies can assist election administrators to store and search huge amounts of data; more easily identify duplicate information in voters lists; prevent voters from voting in more than one polling place; prevent multiple voting; facilitate out of country voting; speed up the tabulation of results and facilitate boundary delimitation exercises to name a few.

On the other hand, the use of electronic technologies in the electoral process can remove valuable and important safeguards and can make key elements of the electoral process (such as counting) for all the intents and purposes impossible to verify with the human eye. In addition, new layers of complexity are added to already complicated electoral processes when technologies are introduced. Observers must now consider additional stakeholders in the electoral process, such as technology vendors; parts of the process such as procurement take on new importance; and the details of familiar parts of the process such as the ballot, have a different meaning or relevance.

The use of technologies in the electoral process has been an area of focus for many in the field of international election observation including The Carter Center. This short paper distills some of the most essential lessons learned regarding the observation of ICT in elections and offers suggestions for how observation methods might be reviewed in response to the introduction of electoral technologies.

## KEY DOCUMENTS ON OBSERVATION METHODS

In the last five years, the international election observation community has made a concerted effort to address the challenge to observation posed by the introduction and use of technology in the election process. We see this most immediately in the handbooks that have been released by leading organizations in the field. These include (alphabetically by organization):

- ***Observing Electronic Voting (2<sup>nd</sup> Edition) (the Carter Center)***: The Carter Center recently released the second edition of their handbooks on observing electronic voting technologies. This handbook includes information on the composition of a Carter Center mission, background on assessment criteria for the assessing the use of electronic voting technologies and the 'Baseline Survey for observing Electronic Voting'. This tool is designed to assist observation

missions in their assessment of electronic voting technologies that has been refined and honed based on experiences in multiple electoral contexts.

- ***Monitoring Electronic Voting Technologies in the Electoral Process (National Democratic Institute for International Affairs)***: This 2007 handbook for civil society organizations aims to increase the understanding of civic and political activists regarding the transparency measures necessary for credible electronic electoral technologies; and the skills needed develop to verify the integrity of electronic electoral technologies. It also provides an overview of the type of technologies employed, the potential challenges for electoral integrity brought by such technologies, issues to consider in deciding whether to introduce electronic technologies and transparency that should be employed when electronic technologies are utilized.
- ***Observing the Use of Electoral Technologies: A handbook for OAS Electoral Observation Missions (The Organization of American States)***: This manual covers issues that should generally be considered in the observation of elections in which technology is a factor. It includes details of the mission structure, and roles and responsibilities of members of the OAS mission, how technologies may be used throughout the electoral process, and includes a standardized tool designed to gather information on electoral technologies.
- ***OSCE/ODIHR Discussion Paper in Preparation of Guidelines for the Observation of Electronic Voting (Organization for the security and Co-operation in Europe-Office of Democratic Institutions and Human Rights)***: This discussion paper identifies areas considered by the OSCE/ODIHR developed their observation methodology for electronic voting technologies. It also addresses the minimum requirements for transparency, accountability and public confidence, in the context of new voting technologies is discussed.

These handbooks mark critical steps not only in the development of improved and harmonized methodologies for observing technology throughout the electoral process, but also our attempts as a community to come to terms with developments that fundamentally challenge our work. Exemplary of our collective focuses on electronic voting is a document prepared for the 5<sup>th</sup> meeting on the Implementation of the Declaration of Principles for the International Election Observation which is included as an appendix. This document, entitled *observing Electronic Voting*, reflects the points of agreement and commonalities of approach among endorsers of the Declaration of Principles regarding the observation of electronic voting enough on how best to access technologies in ALL aspects of the adoption, implementation and observation of technologies in the electoral process. The EISA symposium on the use of ICT in the electoral process is particularly timely in this regard.

## OBSERVING IC T BASED ELECTIONS: LESSONS LEARNED

Like many organizations, the Carter Center has observed many elections in which ICT has been incorporated in different aspects of the process.

This includes the use of technology in boundary delimitation, voter registration, voting and the counting and tabulation processes. It is from this experience and from the points in common

agreement captured in Observing Electronic Voting, that the following lessons learned are drawn. While some of these lessons may have particular relevance in the context of African elections, they are for the most part applicable to elections in many parts of the world. They are also not particularly technical in nature and do not focus on the nuts and bolts of how to observe technologies- the handbooks outlined above can provide that kind of information.

## 1. INTERNATIONAL OBLIGATION FOR ELECTIONS AND GOOD PRACTICES STILL APPLY TO E-ENABLED ELECTIONS

Electoral technologies must be understood and assessed as part of the larger electoral process in which they are being used. Regardless of technologies used, the electoral process should be conducted in accordance with the obligations to which the state has voluntarily committed through the accession, signature or ratification of treaties and other international commitments. Therefore, the obligations for the genuine democratic elections that apply to traditional paper-based elections also apply to elections in which electronic voting technologies are used. The introduction and use of technologies that undermine these fundamental rights cannot be said to fulfil international obligations for democratic elections.

While the obligations regarding democratic elections remain relevant even to those elections in which electronic technologies are used. There remains a paucity of obligations specific to the introduction and use of e-voting technology. At the regional level, the council of Europe leads the way in identifying emerging norms regarding the introduction and use of electronic voting technologies. The council of Europe's 2004 Recommendations on Legal, Operational and Technical standards for E-voting may be extrapolated and used as examples of international good practice in setting outside of the council of Europe member states. However, it is critical that the body of law regarding the use of electoral technologies continue to grow, and that other regions contribute to the creation of truly international and universal norms on this subject. Moving forward, advancing the establishments and growth of regional obligations and standards for the use of ICT in Africa elections should be a focus for international and domestic observers, as well as the broader democracy promotion community.

## 2. OBSERVERS MUST RECOGNIZE THEIR OWN LIMITATIONS

The introduction of technology into the electoral process requires observers, both domestic and international, to be aware of their own limitations. In traditional, paper-based electoral systems, there are many aspects of the process that are observable by the human eye, making it more transparent, and increasing the confidence with which observers can access the confidence in their conclusions, observers have to have a clear understanding of what they can meaningfully assess, where they can adapt their methods to facilitate observation and where observation is simply not possible. The examples below provide a few concrete illustrations of this:

- ***International observers should not certify technologies:*** Endorsers of the Declaration of Principles for International Election Observation have agreed that it is beyond the mandate of

international observers to certify election technologies. It is the responsibility of the state observed to establish standards and procedures to assess whether the technology to be introduced meets their stated needs while upholding fundamental electoral rights and freedoms. Observers, for their part, can and should assess whether those standards and procedures in fact meet the end.

- **Observers cannot identify every potential vulnerability:** Even with the best team of ICT experts, no observation mission will be able to identify every potential vulnerability in every system in use during the course of the election. The time and resources are simply not available for observers to trawl through every cell of a voter registration database, or review every line of source code of an electronic voting machine. Observers can instead assess whether there is a system of checks and balances in place to minimize the opportunity for such vulnerabilities to be maliciously exploited. For example, in Venezuela in 2006 Domestic observer groups were allowed to audit the source code of the electronic voting machine. However, the circumstances under which this audit could occur-the source code being projected on a screen with domestic observers unable to take it home, or even have a pen and paper in the room-undermined their ability to provide a meaningful check on the system.
- **Observers can assess whether the state has taken all steps necessary to create an overall system conducive to the protection of electoral rights:** While there are limitations to what observers, both international and domestic can assess with regard to the inner workings of a computer systems, there remains huge value added from assessments of whether the systems as a whole, including the non-technical aspects, protects electoral rights.
- **There will be some aspects of the process that happen before international observers arrive:** The introduction and implementation of the electoral technologies often requires that a number of activities such as equipment procurement, certification and testing, happen well in advance of Election Day. Despite our good intentions, and the earlier deployment of long-term observers, it will still be necessary for international observers to learn about those processes, post-hoc, from domestic observers who are able to observe throughout.

### 3. CREDIBLE AND STRONG DOMESTIC OBSERVATION EFFORTS MUST BE SUPPORTED.

Because the use of electoral technologies requires additional focus be placed on pre-election developments, and so many critical aspects of the process take place prior to the arrival of international observers, it is essential that international observers support the work of credible, non-partisan domestic groups active on electoral issues. With adequate resources, domestic observation organizations can be one of the most important checks on the use of technology in the electoral process.

### 4. HARMONIZE OBSERVATION APPROACHES, WHILE ADAPTING ALONG THE WAY

Technologies used in all parts of the electoral process will continue to change and evolve. Ten years ago it was hard to imagine how SMS and crowd-sourcing might advance citizen

participation in countries around the world. Now, the use of platforms like **Ushahidi** is increasingly common in Africa, Asia, the Middle East and the Americas. As observers we must remain cognizant of the fact that technologies will continue to change, and so much too must our methods for assessing them.

This need for the continued evolution and development of new observation methodologies requires that we as observers continue to work together and harmonize our approaches. Since the endorsement of the Declaration of Principles for International Election Observation in 2005 there has been an increase in the coordination and cooperation between international election observation organizations from around the world with regard to the harmonization of observation methods and techniques. This is due in part to the regular meetings that are held among endorsing organizations and their initiatives, like the EISA symposium, which create opportunities for observation groups to discuss common challenges and devise common solutions to them. It is critical that these for a continue so that we can grow and develop as a community.

To date, many of the efforts of international election observation organizations have focused on techniques and methods for observation methods for technologies used in other parts of the election process (some of which were outlined above.) this may be in part due to the lack of interest of voters, candidates and the general public in technology with which they themselves do not directly interact. However, looking forward, it will be critical that observation groups combine efforts to develop newer, faster, smarter ways of observing and assessing these technologies, even if they don't seem particularly sexy or engaging.

To do this, observers need to reach out to groups with whom we may have had little contact with in the past. For the example, The Carter Center has an ongoing partnership with the Georgia Institute for Technologies Compute for Good program in which computer scientists work closely with us to develop tools that we can use in our election observation work as well as in our work to promote access to information, the treatment of mental illness and access to legal aid. This model has several benefits; not least among them is the potential it has to increase regional expertise in a field that is relatively new and unexamined from the academic perspective.

## 5. TECHNOLOGIES REQUIRE OBSERVERS TO TAKE THE LONG VIEW AND THINK CREATIVELY.

The introduction and implementation of electoral technologies directly impact the timeline of election observation. In order to observe important pre-election developments like the development of voter databases, or the testing of voting hardware and software, long-term observation is essential. This requires deployment months, not weeks ahead of the election so that international election observation missions can directly observe those parts of the process.

Here domestic observers have a clear advantage and given adequate resources, can contribute greatly to the overall transparency and credibility of the electoral process.

Observers should also consider new approaches and models of observation. For example it may be necessary to conduct several pre-election assessments prior to the deployment of the full mission in order to observe important pre-election tests and processes. Alternatively, more concrete partnerships between international and non-partisan, impartial domestic observation organizations might provide mutual benefits.

## 6. TEAM COMPOSITION, SKILLS AND RESOURCES WILL CHANGE

As outlined above, the introduction and implementation of ICT elections greatly impacts the timeline for observation, and requires that greater emphasis be placed on long-term observation. While long-term observers don't necessarily need to be technology savvy and understand how technology can impact on aspects of the process that are directly observable. For example, while observers do not necessarily have to be familiar with the inner workings of the optical scanner device, it is useful for them to understand the potential vulnerability posed by the accessible data ports.

Additionally, election observation missions (both domestic and international) should include specialized ICT experts. Election observation ICT experts must have fairly unique skill sets- they should have both the technical skills necessary to anticipate vulnerabilities in the system, and the political skills to understand the impact of these vulnerabilities on the electoral process. Other members of the team may also need to recast their vies of the election process- for example, the legal analyst may need to focus more on what is missing from the legal framework with regard to regulation of the technology rather than what is included. The increased mission duration and the need for additional team members directly impacts on the financial resources required by the election observation mission.

Training for observer missions must include components that focus on the technology in use. The training provided to the core-team, and the long and short-term observers will differ based on their responsibilities. It is important to remember that even the ICT expert is going to need time to learn the intricacies of an unfamiliar electoral technology. Again, this requires that there be adequate time in advance of election day for the learning process to take place so that the mission can make informed judgments about how the use of the technology affects the fulfilments of electoral rights.

## 7. ASK DIFFERENT QUESTIONS, SOMETIMES OF DIFFERENT PEOPLE.

Not only does the introduction and implementation of ICT in the electoral process require that observation missions consider new models and methods for their missions, and think about the electoral process from a different perspective, it also requires that observers ask different questions. Having an observation team with a diverse skill set that includes technology specialist is particularly helpful in this regard- it is important to have members of the team who

know the right questions to ask and can probe issues that, to the untrained observer, seem inconsequential.

In addition, observers need to speak with stakeholders to the process that they might not consider as relevant when observing more traditional elections. For example, observers may find beneficial to speak with the technology vendor, certification teams and the IT department of the EMB.

## 8. BE CAUTIOUS IN RECOMMENDATIONS

The introduction of technology to the electoral process often elicits one of two reactions. On one hand, it is viewed as a panacea that will make the entire process more efficient. On the other hand, it can inspire dread in that the transparency of the process is often reduced. Observers must remain objective, balancing an understanding of the potential benefits of technology, while also drawing attention to the possible deficiencies in the system. This is particularly relevant when issuing recommendations regarding the use of technology. Given the limitations that the use of electoral technologies imposes on the ability of observers to meaningfully assess every part of the following election process; observers are well served by being cautious when issuing recommendations on the technology.

While the recommendations that observers make will, of course reflect their observations and the specific context in which their assessment takes place, our experiences indicate that the following issues should always be considered by observers:

- ***Sustainability of the technology in the electoral process:*** the introduction and implementation of ICT in the election process is costly. Before recommending the use of any technology in the electoral process, observers should consider the cost, both human and financial, of sustaining that technology in the longer-term. Contrary to common assumption, the cost of using electoral technologies does not necessarily decrease over time.
- ***Public discourse and discussion about the technology and its impact on the process:*** public acceptance of the use of electoral technologies correlates closely to the degree of public confidence in the election management body. Public confidence tends to be bolstered when the decision to introduce and implement electronic voting has been the subject of public discussion and debate, and when there is a publicly recognized need for the use of the technology, and where appropriate, encourage that greater emphasis be placed on ensuring that the voter and candidate comfort with the technology (both comfort with using the equipment and comfort that it will function correctly and accurately).
- ***Transparency in all aspects of the process:*** the inherent opaqueness of some electoral technologies places an additional burden on election management bodies to be transparent. For example, the need for transparency and adherence to international best practices in procurement takes on new relevance when technologies are introduced to the election process.

- ***Accessible means of verifying the accuracy of the system:*** it is widely recognized international good practice that data from an election be verifiable. In the case of voter registration, voters should be able to verify the data on the voters roll. In the context of vote counting, recounts should be a real option should the results be too close to call, or some irregularity arise. This does not cease to be the case when technologies are introduced. In fact, it is arguably more important given the common need to bolster public confidence in new technologies. Observers should consider this in their recommendations.

## 9. TALK TO DONORS ABOUT THE IMPACT OF TECHNOLOGY ON ELECTIONS AND ELECTION OBSERVATION

As international elections observers we bear a unique responsibility in that, along with technical assistance providers, we bring valuable comparative experience that we can share not only with the citizens of the observed country, but also other members of the international e process community such as donors. As part of this experience sharing, it is important that we have frank discussions with the donors about the role they play in e-enabled elections. In particular, it will be critical that observers discuss the impact of electoral technologies on three distinct aspects of the process with donors.

First, observers should promote greater awareness among donors of the impacts of ICT on the cost and sustainability of elections. Electoral technologies are often heralded as the solution to troubling problems within the electoral process because of their ability to increase efficiency and reduce human error and contact with sensitive materials and information. However, as we all know electoral technologies are expensive. They require large investment at their introduction, on-going maintenance and a pool of skilled labour to use them. With good intentions, the international community is often quick to suggest the use of technology to minimize irregularities. Observers, technical assistance providers and those in the field of democracy promotion must play the devil's advocate and the force consideration of the sustainability of the electoral technologies, being honest when it seems that technology might not be the best solution.

Second, international observers must support the work of domestic observers by reiterating to the international community the value of domestic observers generally, but also specifically in electoral contexts in which technologies are to be used. As outlined above, the implementation of electoral technologies places greater emphasis on aspects of the electoral process that occur for before the election day. This increases the need for credible, well resourced domestic observers groups who are able to effectively monitor the use of technologies from their procurement through their use in voter registration, boundary delimitation and other pre-election activities, as well as the preparations for any technology used to cast and count ballots. This requires that donors support election focused groups throughout the electoral cycle and not just in the year immediately around election day.

Third, international observers need to work with their donors to explain the impact of the introduction and implementation of their own missions. Because the effective observation of

electoral technologies requires longer time horizons for observation, and a different skill set among the team, there are resource considerations. These missions can be more expensive and can require donors to think about impending elections not six months or a year in advance of election day, but 18 months to two years in advance of the election. As with support to domestic groups, this requires that the donor community think of the election as a cycle rather than focusing on the election day event.

## CONCLUSIONS

Observation of the use of ICT in elections is still a new and growing focus for the international and domestic observers. It does require observers to rethink their methods and techniques for observation. It does require that observers make a longer commitment to their observation efforts, and in all likelihood observation will cost more. Because this is still in many ways, an emerging focus for observers, it is likely to be the subject of debate and discussion for years to come. It is critical that African organizations join a conversation now largely dominated by experiences in the Americas and Europe. In particular, the opportunity is ripe for Africa to advance the global discourse on electoral technologies forward, by establishing regional standards for the introduction missions, serve to protect the electoral rights of citizen electors.