

**INDEPENDENT ELECTORAL AND BOUNDARIES COMMISSION**



**LEVERAGING TECHNOLOGY FOR TRANSPARENT AND CREDIBLE  
ELECTIONS**

**By**

**Ahmed Issack Hassan, EBS**

**Chairman, Independent Electoral and Boundaries Commission of Kenya**

**(Email: [ahmedissack786@gmail.com](mailto:ahmedissack786@gmail.com))**

**(Website: [www.ahmedissackhassan.com](http://www.ahmedissackhassan.com))**

**Presented during Seminar organized by Election Commission of India**

**New Delhi, India**

**February 23<sup>rd</sup>, 2016**

## **LEVERAGING TECHNOLOGY FOR TRANSPARENT AND CREDIBLE ELECTIONS**

Following the chaos that erupted after the 2007 elections, the Kenyan government used a higher level of technology in the 2010 Constitutional Referendum and various by-elections to enhance the credibility of results. The plan was that the 2013 elections would represent a technological apex for voting. The vision was to use technology for two key aspects of the voting process.

### **Biometric Voter Registration System (BVR)**

The BVR system is used for registering voters. It comprises a laptop, a finger print scanner and a camera. BVR captures a voter's facial image, finger prints and civil data or Personally Identifiable Information (PII)-Name, gender, identity card/passport number, telephone number etc. The registration takes place at the registration centers where an individual is expected to vote. The BVR method of registration was the only system deployed by IEBC to register voters just before the 2013 general elections.

The first application of technology in the 2013 elections aimed to guarantee the integrity of the voter register through the use of a Biometric Voter Registration system that was acquired at a cost of 95 million USD. The voter registration exercise was conducted over 30 days towards the end of 2012 and was lauded as a success with over 14 million voters registered. This voter register was made available at each polling station in two forms, a biometric Electronic Voter Identification device (EVID or Poll Book) and a printed copy.

### **Electronic Voter Identification System (EVID)**

Basically, EVID is an electronic poll book. There are two types of EVID technology, the laptop with attached finger print reader and the handheld device with in-built finger print reader. EVIDs were used for the first time during the March 4th General Elections (29,000 laptops and 4,600 handhelds). These methods served the same purpose, to authenticate the identity of each voter before they vote.

The EVIDs verify and confirm voters electronically as registered by BVR. They are used to “check-in” voters at polling station on polling day and is helpful in streamlining. EVID curbs impersonation and ensures that only those who registered to vote are allowed to vote. However some challenges were experienced in the March 4th polling day when some of the machines failed to work largely due to inadequate training and running out of battery charge. In such cases, the polling officials carried out verification of voters using the voter register print outs.

### **Results Transmission System (RTS)**

RTS is a system for transmitting provisional results electronically to an observation center. At the end of voting and when votes have been counted and tallied, the Presiding Officers (Pos) enter the data on the signed results sheet (Form 35) into a specially configured mobile phones and transmits the results simultaneous to the election results centers at the constituency, county and national level. RTS is used to:

- Enhance transparency through electronic transmission of provisional results from the polling stations
- Display and visualize provisional results at the tally centers
- Provide access to provisional elections data to media and other stakeholders in real time

This was to facilitate rapid announcement of the provisional vote count with results being physically delivered to the National Tallying centre for the official, final tally. The IEBC received technical assistance from the International Foundation for Electoral Systems (IFES) under a USAID-funded program.

Mid-election, technical irregularities began. Nationally, there was widespread failure of the EVID Poll Books due to battery discharge and lack of electricity in polling stations. Many of the cell phones meant to transmit provisional results to the tallying centers also did not work due to forgotten passwords, low battery and data connection problems. Finally, computer servers at the national tallying centre collapsed. The IEBC was forced to suspend the announcement of provisional results and await submission in person of official results using the manual forms (form 36) submitted by constituency returning officers.

Two things stand out here: the IEBC's late procurement of both services and equipment related to the election, and the fact that all technology should have been tested and debugged far in advance of the election. The failures that occurred were both foreseeable and preventable. Of note was the failure to plan for backup power. Electricity fails routinely in Nairobi, and is often absent in rural areas altogether. In addition, the cell phones and biometric scanners were not procured until approximately one month before the election, and were most likely not tested sufficiently for either load or other stresses. If one asks whether the collapse of the computer systems during vote tallying was due to incompetence, technological illiteracy, or lack of adequate preparation. The most likely answer is a lack of adequate preparation, combined with a failure to follow good advice.

## **Conclusion**

Despite the massive technological failures, it can be argued that their main impact was a significant delay in reporting the results, not the integrity of the election itself. Importantly, the physical count of votes was the final and official record of the election. The manual voter register worked well to identify voters at the polling station level. No vote count was finalized at the polling station level without agreement of the presiding officer and political party agents. This process was repeated again as all presiding officers reported their numbers to the returning officer in full view of political party agents and observers at the constituency level. All marked and unused ballots were locked into the transparent tally boxes with final numbers. Those boxes were tracked from polling station level to the constituency level, and eventually flown to Bomas to ensure that the final vote was correct.

The Kenyan election of 2013 can teach scholars, and observers of democratization numerous lessons. First, a completely successful election in Kenya as well as other parts of Africa depends, on large part, on processes with high levels of transparency, consensus, and a careful chain of custody of votes. Second, technology must be carefully tested far in advance of elections, and care should be taken to identify weaknesses. Third, governments and civil society can work together to create independent institutions with clear rules, and well-trained voting

officials. Finally, the 2010 Kenyan Constitution has helped to create institutions and laid out rules to promote democracy, which has already led to improved electoral outcomes.

**THANK YOU. ASANTE SANA**