



# BIMODAL VOTER ACCREDITATION SYSTEM (BVAS)



...promoting electoral knowledge, accountability and integrity



INEC has come up with a multi-functional system for its field technological operations which should be used before, during, and after elections. The device, which is a tablet computer is used as IVED (INEC Voter Enrolment Device), during Voter Registration. The same device is used on election day for voter accreditation, as BVAS, replacing the Smart Card Reader (SCR). In addition to these, it can also be used as a results upload device.

The BVAS makes use of two biometric features to identify a person during authentication: **FINGERPRINT** and **FACIAL** features.



## Why BVAS?



It strengthens the one-person-one-vote agenda.



It ensures voter authentication is carried out as smoothly and swiftly as possible with the absence of loopholes and concerns.



It will ensure that votes count since it records a 99% success rate.



It will prevent voter fraud and impersonation because voters would be authenticated by either fingerprint recognition, facial recognition, or both. If both fail, the person cannot vote.



It will reduce queues and long wait times, thereby encouraging citizens to vote on election day.

Source: INEC

# BIMODAL VOTERS ACCREDITATION SYSTEM (BVAS)

## DID YOU KNOW?

### That INEC has introduced a new system called BVAS?

BVAS stands for Bimodal Voters Accreditation System. It is a portable device that allows voters to be accredited in two different ways: either by fingerprint recognition or by facial recognition. What is more, this device serves a three-in-one function: it can be used to not only accredit voters, but also register them and display election results.

### That this all-in-one technology comes in the form of a tablet device and bears multiple nomenclatures?

Technology as we know it has evolved, hence the all-in-one technology comes in form of a portable tablet device and has different acronyms for different activities. It will be used as an Enrolment Device called the INEC Voter Enrolment Device (IVED) during voter registration, it will be used as an Accreditation Device called the Bimodal Voter Accreditation System (BVAS) during elections, and it will also be used as a Viewing Device called the INEC Result Viewing Device (IREV Device) during result uploading.

### That since 2011, INEC has deployed the use of technology to support the electoral process?

The first technology used by INEC called the Direct Data Capture Machines (DDCMs) was used only for the fresh enrolment of voters in January 2011. They were then sold off to interested State Governments and the remaining machines, unfortunately, have become obsolete and are rarely available at the LGA offices.

### That this device comes with varying components which enables it to function as a DDCM, SCR and a Zpad?

The Multifunctional Integrated Device comes fully loaded with the following components:- Fingerprint Scanner // Camera – with facial recognition, barcode reading capability // Contact and contactless card reading ability // High processing capability // Large storages– RAM, internal and external // Ruggedized // Multiple connectivity ports.

These components give the user of the tablet device the opportunity to use it as a DDCM, SCR and a Zpad. It also sports an optional 4-4-2 fingerprint scanner, a USB-powered thermal printer and an external backup power (power bank) in the case of electrical uncertainties.

### That the Smart Card Readers (SCRs) were used for Voters Authentication at the Polling Units (PUs) in 2015?

The Smart Card Readers function side by side Smart Cards called the Permanent Voters Cards (PVCs). The PVCs come with a built-in chip used for electronic processes including personal identification and authentication. The SCRs could only capture fingerprints of the voters and were seen as highly flawed as there were issues with the authentication of some voters, hence INEC could not insist that voters should not be allowed to vote if their fingerprints were not authenticated. This made it difficult to ascertain the true identity of voters once they came with a PVC.

### That the facial technology has recorded as much as 99.9% success rate?

Face recognition is a powerful tool that is becoming more and more acceptable globally. The facial technology which was pioneered in the 1960s and efficiently advanced in the last 50 years has recorded as much as 99.9% success rate. Abroad, facial recognition technology is employed in countries such as China, Singapore, the United Arab Emirates, Japan, the United States of America, Pakistan and most recently Nigeria.

### That INEC generated a portal that gave the general public access to the EC8A forms?

The INEC Result Viewing (IREV) portal made available electronic copies of the Form EC8A for the general public to view. A tablet device, called the Zpads were used to upload the forms, which had been compiled and recorded at the PUs upon the completion of voting at an election, to a public domain which can then be accessed by interested individuals of the general public.

### That voters can be found on the Bimodal Accreditation System using more than one means?

The software found in the Bimodal Voter Authentication System makes it possible for the user/officer to find voters using either their last name or their Voters Identification Number (VIN). Voters can also be located by scanning the Barcode on their PVC or by scanning the QR code on the voters register.

### That the DDCMs, SCRs and the Zpads are soon to become obsolete?

The introduction of an all-in-one, multifunctional integrated device makes use of a bimodal authentication system and uses two biometric features to identify a person – the face and fingerprint. This is unlike the other device like the SCR which was mono-modal and limited in its authentication process. The multifunctional integrated device is used to ensure that the one-person-one-vote agenda is achieved.

### That the Bimodal Biometric Authentication System will be beneficial for a credible electoral process?

With the exploitation of the mono-modal systems with the use of the SCRs in the past, loopholes have been found and concerns have been raised with the possibility that not everyone has fingerprints. Unlike the mono-modal systems, the bimodal authentication uses both fingerprint and facial identification systems which limits loopholes and concerns. This authentication process would ensure that all voters are authenticated by either or both of the technologies (fingerprint and/or facial). It will also ensure that no person can vote more than once as everyone has a face, further ensuring one-person-one-vote.