

IT & TELECOM Digest

SHAPING THE FUTURE

WWW.ITTELECOMDIGEST.COM

Winner of



Economic Commission for Africa



African Information Society Initiative



International Development Research Centre

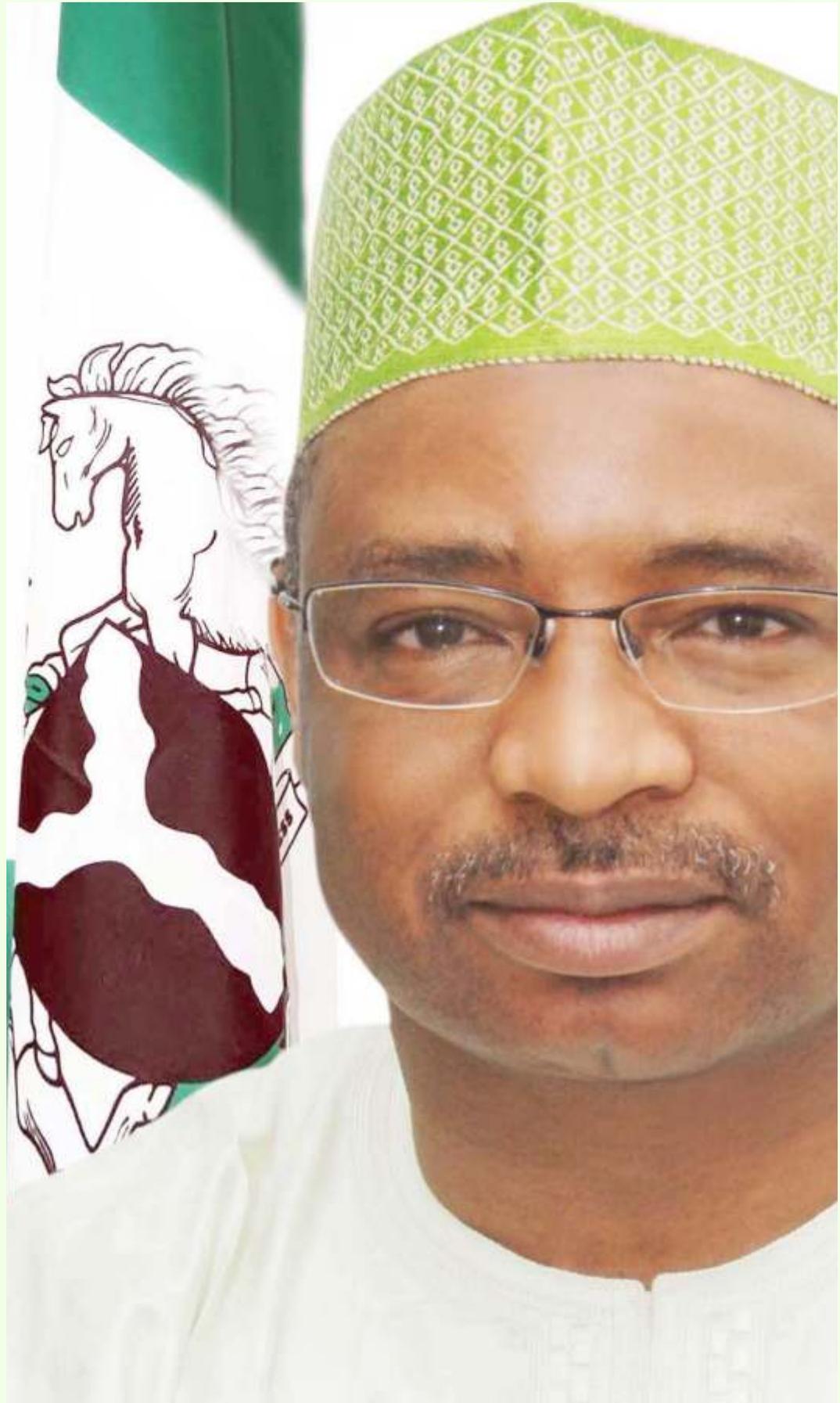
First Prize
on
Reporting ICT
Research & Innovation



IDENTITY AS NATIONAL ASSET

Will Nigeria Unlock The Goldmine?

Between Pride and Privilege



- the Question of Identity



As nations struggle to find peace and progress within their borders, humans who are constantly in a state of flux, darting from place to place, must be uniquely identified for who they are and where they originate from, for overall development in a secure world. Thus, the sum of any country's population is an advantage yet to be fully appreciated by many; and the real strength lies in the identity of the peoples as the real asset of nations. By MKPEABANG

Identity A National Asset

Who are you? Just three words; but very powerful words! This is the very first question that confronts us upon stepping outside of our immediate environment, our comfort zone. We must identify ourselves for our own self-worth, safety, for recognition, as a channel to gain access to wherever we intend to enter, to be accepted and thereby to be counted among others.

At ports of entry, at hospitals, at schools, on visits to public and private

offices, at sport arena, to board a flight, in some countries even on the streets, the question is always repeated: who are you? It may be asked in various forms; but it remains the same. Thus, it is demanded of us to identify ourselves; at that time, one form of identification or the other becomes necessary depending on the environment.

But what if in all this, one simple identification document suffices? Although this is already the case in various countries in the Europe, the United States and much of Asia, in most countries in Africa however, this is still a dream too far to be realised.

The crucial issue at the centre of this equally very important question is identity.

Thus, in very simple terms: our

identity is our most prized possession, our most valuable asset; it is our everything, without which we are actually nobody. We are only who we are because of our identity. This is a very simple fact that it is interesting that countries are also called advanced because they recognise the importance of identity and accord it that much respect, such that it is practically impossible for one to claim to be another – and get away with it.

As a result, it is not just enough to have an identity, any identity; but verifiable and authenticated identity. From fingerprints to the eyes, from the blood or DNA to the voice, there is so much that has been taken into consideration to identify each person



President Buhari being enrolled for his National ID Card



Senate President Bukola Saraki being enrolled for his National ID Card

as a unique entity. With biometric therefore, and authenticated through the electronic system by an authorised identity management authority, each individual's uniqueness is captured in a database that can become accessible and verifiable anywhere in the world especially in today's electronic dominated world.

It is no longer amazing therefore that once a crime is committed, through various agents – from fingerprints to saliva, to sweat, to blood sample, law enforcement agents easily name the suspects in those countries where the process of data capturing and proper identity management have been centrally verified and located.

Also, it is easy to ascertain the number of persons at scenes of disaster soon after it might have occurred; whereas, in the absence of such a database, all that rescue teams do at such scenes is guess work.

So it is not enough for anyone to say who he or she is; it goes beyond that. To authenticate one's personality, one form



Speaker Yakubu Dogara being enrolled

of identity or the other is a prerequisite.

In Nigeria, citizens are required at various turns to fill forms to show their places of birth, local government and state of origin; all in an effort to authenticate their identity. Going further, they are issued all manners of documents, which, in future upon request, must be presented.

Many politicians, for instance, have been known to lose certain elections or the opportunity to represent one area or

the other owing to questionable identity or identity documents. While some have been caught to have presented fake or improper documents, such as birth certificates, others have been found to possess age declarations at multiple times each one different from the others. All this is possible because Nigeria still suffers from a lack of a central database where citizens' data have been captured, verified, authenticated and stored as obtains in many countries in Europe, Asia as well as the United States.

Importance of Identity for Development



Globally, there is growing recognition of the importance of identification for sustainable development. For instance, the role identity plays is recognised formally in target 16.9 of the Sustainable Development Goals, which calls for providing “legal identity for all, including through birth registration” by 2030. Identification is also an enabler of many other development targets, from social protection (delivering support) to financial inclusion (opening bank or mobile accounts and establishing a credit record) to women's empowerment.

Identity as bedrock of overall development

Thus, having a recognised identity is crucial for achieving several development outcomes, more so for developing countries like Nigeria, no expense should be spared in ensuring that citizens are captured hence having a centralised database managed by a national institution charged with the responsibility. Identity is indeed, the foundation stone upon which all other parts of the structure will rest,

As experience in many countries have shown, all other security agencies rely on information from the identity system to perform their functions flawlessly and seamlessly; thus, identification is accorded a higher pride of place including special budgeting to ensure the identity management lacks no funds in the execution of its responsibilities, much the same as the countries budget adequately for the military, the police and all other social institutions of the state.

Whether as a tool for security through which terrorism and influx of illegal aliens can be fought, whether as a tool for taxation where each unique unit becomes taxable entity, whether as a channel for accessing social welfare by citizens, identity is indeed the most valuable asset that countries cherish and hold dear. Nigeria will be doing well to follow the same line in budgeting adequately to have a credible identity system where every citizen is captured and has the unique number.

Identity is essential to realising political and social rights and to participate in a modern economy. Indeed, a well-functioning ID system can strengthen state capacity and reduce corruption and waste by making programmes and subsidies more effective and transparent.

Effective identification, including for remote and electronic transactions, can reduce transactions costs and create economic opportunities, including for the poor.

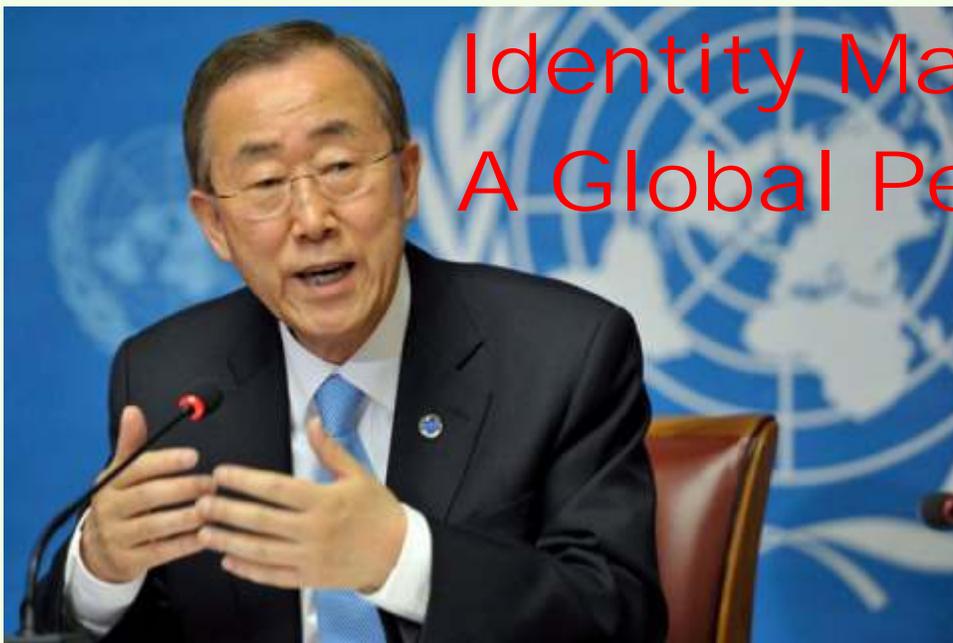
At the same time, driven by a number of powerful factors related to security, development and new technology, many countries have been introducing new ID programmes or upgrading existing ones to increase their capabilities. Conventional ID systems are rapidly giving way to



Deputy Senate President Ike Ekweremadu displays his National ID Card

digital ID or e-ID systems, even in poor countries. Almost all of the new systems and most upgrades to existing ones involve the use of digital databases, data analysis and transfer, and digital biometric technology.

The question is not whether this trend will continue but how and how effectively the new systems will support inclusive development.



UN Secretary-General, Ban Ki Moon

Identity Management: A Global Perspective

Countries have very different ID architectures. The legal, institutional, and technological arrangements to register and identify people differ a great deal. Some countries have developed strong centralized systems, either in a Ministry (Home Affairs, Justice) or an autonomous agency dedicated to providing registration and identification services (Pakistan's NADRA, Peru's RENIEC or India's UIDAI).

Some have multiple incompatible competing systems—voter ID, tax ID, bank ID, pension ID as well as an undeveloped national ID system (Mexico, Nigeria, Tanzania). Some still rely on “local ID” that is administered at the community level (Ethiopia).

According to Alan Gelb and Julia Clark of the Centre for Global Development, formal identification is a prerequisite for development in the modern world. The inability to authenticate oneself when interacting with the state—or with private entities such as banks—inhibits access to basic rights and services, including education, formal employment, financial services, voting, social transfers, and more.

Unfortunately, under documentation is pervasive in the developing world. Civil registration systems are often absent or cover only a fraction of the population. In contrast, people in rich countries are almost all well identified from birth. This “identity gap” is increasingly recognised as not only a symptom of underdevelopment but as a factor that makes development more difficult and less inclusive. Many programs now aim to provide individuals in poor countries with more robust official identity, often in the context of the delivery of particular services. Many of these programs use

digital biometric identification technology that distinguish physical or behavioural features, such as fingerprints or iris scans, to help “leapfrog” traditional paper-based identity systems.

The technology cannot do everything, but recent advances enable it to be used far more accurately than previously, to provide identification (who are you?) and authentication (are you who you claim to be?). Technology costs are falling rapidly, and it is now possible to ensure unique identity in populations of at least several hundred million with little error, they wrote.

Further, they write that rich and poor countries differ in many ways, including the provision of identity services to their citizens. Most wealthy nations have robust identification systems based on strong basic official documentation such as birth certificates. These traditional, paper-based systems—though susceptible to fraud on an individual level—are sufficient for most purposes and can reasonably ensure uniqueness within a population. Citizens in rich countries can generally “prove” who they are to acceptable standards, whether for interactions with the state (voting, claiming social security payments,

obtaining passports) or with non-state institutions (opening a bank account, buying a house).

Conversely, many people living in poor countries lack any official documentation (UNICEF, 2005). In a sense, these individuals do not formally exist, and are therefore excluded from the many points of engagement between a modern state and its citizens. They cannot open bank accounts or register property. There is no easy way to confirm that they have received the public transfers or services to which they are entitled. Traditional social structures may provide local recognition, but communal systems of identification break down with internal migration and urbanisation.

Governments in poor countries are asked to carry out many functions that were not expected of more advanced governments until relatively recent times, including providing universal access to healthcare and education, implementing know your customer (KYC) rules for financial institutions, and administering a wide variety of transfer programs. Each of these functions services requires state–citizen interactions that often rely on formal identification to ensure eligibility. Unfortunately it is in these poor countries that there exists identity gap; and, this “identity gap” has profound implications for development. For many poor people, this “identity gap” severely limits opportunities for economic, social and political development. Robust identification services are urgently needed to close this gap, but identity management systems have historically taken centuries to develop and mature in industrialised countries (Higgs, 2011). Biometric identification technology is a potential solution.

The Indian Experience

The Unique Identification Authority of India (UIDAI) is a central government agency of India. Its objective is to collect the biometric and demographic data of residents, store them in a centralised database, and issue a 12-digit unique identity number called Aadhaar to each resident. It is considered the world's largest national identification number project.

The 12-digit Aadhaar number could soon replace all card transactions in India. Soon the 12-digit Aadhaar number could replace all card transactions as the Indian government is gearing up to strengthen the Aadhaar enabled transactions as part of its drive to help India become a cashless economy. The move, which is part of an all-round approach towards enabling digital payments and is being driven by NITI

Aayog, would also see government soon coming out with a clear-cut defined policy to disincentivise cash transactions in the country.

UIDAI in India

The Unique Identification Authority of India (UIDAI) is a statutory authority established under the provisions of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 ("Aadhaar Act 2016") on 12 July 2016 by the Government of India, under the Ministry of Electronics and Information Technology (MeitY).

Prior to its establishment as a statutory authority, UIDAI was functioning as an attached office of the then Planning Commission (now NITI Aayog) vide its Gazette Notification No.-A-43011/02/2009-Admn.I dated 28th January, 2009. Later, on 12 September 2015, the Government revised the Allocation of Business Rules to attach the UIDAI to the Department of Electronics & Information Technology (DeitY) of the then Ministry of Communications and Information Technology.

UIDAI was created with the objective to issue Unique Identification numbers (UID), named as "Aadhaar", to all residents of India that is (a) robust enough to eliminate duplicate and fake identities, and (b) can be verified and authenticated in an easy, cost-effective way. The first UID number was issued on 29 September 2010 to a resident of Nandurbar, Maharashtra. The Authority has so far issued more than 107 crore Aadhaar numbers to the residents of India.

Under the Aadhaar Act 2016, UIDAI is responsible for Aadhaar enrolment and authentication, including operation and management of all stages of Aadhaar life cycle, developing the policy, procedure and system for issuing Aadhaar numbers to individuals and perform authentication and also required to ensure the security of identity information and authentication records of individuals.

The UIDAI was set up by the Government of India in January 2009, as an attached office under aegis of Planning Commission vide its a gazette notification. The UIDAI is mandated to assign a 12-digit unique identification (UID) number (termed as Aadhaar) to all the residents of India. As per the



Indian Prime Minister, Narendra Modi

notification, the UIDAI has been given the responsibility to lay down plan and policies to implement UID scheme, to own and operate the UID database and be responsible for its updating and maintenance on an on-going basis. The implementation of UID scheme entails generation and assignment of UID to residents; defining mechanisms and processes for interlinking UID with partner databases; operation and



management of all stages of UID life cycle; framing policies and procedures for updating mechanism and defining usage and applicability of UID for delivery of various services among others. The number is linked to the resident's basic demographic and biometric information such as photograph, ten fingerprints and two iris scans, which are stored in a centralised database.

Starting with issuing of first UID in September 2010, the UIDAI has been targeting to issue UID - a unique 12 digit

Aadhaar number to all the residents that (a) is robust enough to eliminate duplicate and fake identities, and (b) can be verified and authenticated in an easy and cost-effective way online anywhere, anytime.

Enrolment and Update Ecosystem

Enrolment Ecosystem consists of Registrars and Enrolment Agencies. Registrar is an entity authorised or recognized by UIDAI for the purpose of enrolling individuals. Enrolment Agencies are appointed by Registrars and are responsible for collecting demographic and biometric information of individuals during the

enrolment process by engaging certified Operators/Supervisors.

In co-ordination with the Registrars, the Enrolment Agencies set up Enrolment Centres, where residents can enrol for Aadhaar. Multiple fingerprint scanners, iris scanners, and cameras used for enrolment are certified by STQC and UIDAI, and all connect to the UIDAI designed standard Application Programming Interface (API). Appointment of multiple registrars, multiple enrolment agencies, and multiple technology providers has created an environment of healthy competition within.

Authentication Ecosystem

The UIDAI has set up a scalable ecosystem for the purpose of instant authentication of residents. The Aadhaar authentication ecosystem is capable of handling tens of millions of authentications on a daily basis, and can be scaled up further as per the demand. The UIDAI has appointed a number of Authentication Service Agencies (ASAs) and Authentication User Agencies (AUAs) from various Government and non-Government organisations. The UIDAI, in partnership with STQC, has also laid down the technical standards for biometric devices, and certified a number of them.

Since the authentication service is provided online and in real-time, the UIDAI has also established two data centres where authentication and other online services such as e-KYC are deployed in active-active mode to ensure high availability. Banks and payment

network operators have embedded Aadhaar authentication into micro-ATMs in order to provide branch-less banking anywhere in the country in a real-time, scalable and interoperable manner.

Enrolment success

As of 26 November 2016, a total of 1,081,564,541 Aadhaar numbers have been issued in the project for the Indian population of 1,210,601,445; that is already 89.34% covered.

Expenditure

By July 2013, the government had spent a total of US\$460 million on the project. By February 2015, the government had spent US\$840 million on the project and generated 786.5 million Aadhaar numbers. By end of 2015, total of US\$890 million had been spent.

Background

The Unique Identification project was initially conceived by then Planning Commission as an initiative that would provide a clear and unique identity number for each resident across the country and would be used primarily as the basis for efficient delivery of welfare services. It would also act as a tool for effective monitoring of various programs and schemes of the Government.

Much before the creation of the UIDAI, efforts were undertaken by the Government of India to provide an identity to residents first in 1993, with the issuance of photo identity cards by the Election Commission, and further in 2003, with the approval of Multipurpose National Identity Card (MNIC).

2006

The concept of unique identification was first discussed and worked upon in 2006, when administrative approval for the project "Unique ID for BPL families" was given on 03 March 2006 by the Department of Information Technology, Ministry of Communications and Information Technology. This project was to be implemented by NIC over a period of 12 months. Subsequently, a Processes Committee to suggest processes for updation, modification, addition and deletion of data fields from the core database under the Unique ID for BPL families Project was set up on 03 July 2006.

Thereafter, a "Strategic Vision on the UID Project" was prepared by M/s Wipro Ltd (consultant for the design phase and program management phase of the Pilot UIDAI project) and submitted to the Processes Committee. It envisaged the close linkage that the UID would have to the electoral database. The Committee also appreciated the need of a UID Authority to be created by an executive order under the aegis of the then Planning Commission to ensure a pan-departmental and neutral identity for the Authority and at the same time enable a focused

approach to attain the goals set for the XI Plan. The seventh meeting of the Process Committee on 30 August 2007 decided to furnish to then Planning Commission a detailed proposal based on the resource model for seeking its "in principle" approval.

At the same time, the Registrar General of India was engaged in the creation of the National Population Register and issuance of Multi-purpose National Identity Cards to citizens of India. Therefore, it was decided, with the approval of the Prime Minister, to constitute an Empowered Group of Ministers (EGoM) to collate the two schemes – the National Population Register under the Citizenship Act, 1955 and the Unique Identification Number project of the Department of Information Technology.

2009

Subsequent to the recommendations of the Committee of Secretaries and decision of the EGoM, the UIDAI was constituted and notified by then Planning Commission in January 2009 as an

appointed as the first Chairperson of the UIDAI vide notification (No.-A-43011/02/2009-Admn.I (Vol. II) on 02 July 2009 in the rank and status of a Cabinet Minister for an initial tenure of five years. Shri Ram Sevak Sharma, IAS, joined the authority as its first Director General in July 2009.

The Prime Minister's Council on UIDAI, constituted on 30 July 2009 in its first meeting on 12 August 2009 approved the broad strategy and approach on UID system submitted by the UIDAI.

Later, this Council was substituted by a Cabinet Committee on UIDAI which was constituted by the Government of India vide its order no. 1/11/6/2009 dated 22 October 2009. The functions of this Committee, as per this notification included all issues relating to the Unique identification Authority of India including its organization, plans, policies, programmes, schemes, funding and methodology to be adopted for achieving the objectives of the Authority.

Social Security number in the US

In the United States, a Social Security

number (SSN) is a nine-digit number issued to U.S. citizens, permanent residents, and temporary (working) residents under section 205(c)(2) of the Social Security Act, codified as 42 U.S.C. § 405(c)(2). The number is issued to an individual by the Social Security Administration, an independent agency of the United States government. Although its primary purpose is to track individuals



US President, Barack Obama

attached office of the then Planning Commission with the role and responsibilities laid down in the said notification. Shri Nandan Nilekani was

for Social Security purposes, the Social Security number has become a de facto national identification number for taxation and other purposes.

Role of Biometrics in Refugee Identity Crisis Management

The protracted Syrian civil war has caused one of the "biggest refugee and migration crises since World War II" as said by U.N. General Secretary, Ban Ki-moon. As a result, nearly 12 million Syrians, equivalent to half of the Syrian population, have fled their homes.

European countries have wrestled with its immigration policies on whether to welcome in more migrants. Despite the humanitarian concern, there is fear that a massive influx of migrant refugees will pose a grave security and stability threat.

The Paris terrorist attacks on



November 13, 2015 have made things more complicated. According to media reports, one of the terrorists impersonated as a Syria refugee and entered Greece in October. From there, he moved to many countries and eventually made his way to Paris for the attacks. People not only in EU, US and Gulf but all over the globe are now living in doubt whether there are any IS forces hiding into the country and when the next terror attack would happen. The migrants have provoked an identity crisis in EU and other countries that requires unity of the nations.

Biometrics is the measurement of human characteristics such as: finger, face, iris, ear, etc. Since the old-fashioned authentication methods such as password or credentials become insecure and cumbersome, biometrics has risen to be the most secure one in identity management and access control. Regarding identity management, biometric recognition has been deployed in many countries for an effective and secured identity management. One of the biggest national ID projects that cannot be pretermitted is the UIDAI (Unique Identification Authority of India). Its object is to collect fingerprint, iris data and photograph of 1.2 billion residents.

Another example is that UNHCR (United Nations High Commissioner for Refugees) has rolled out a significant project to register and verify the identities of displaced persons around the world by building a breakthrough Biometric Identity Management system (BIMS). As of today, 17,000 refugees in Malawi camp, over 120,000 refugees in Thailand camp and roughly 100,000 refugees to date in Chad have had their biometric identity registered. Identification of refugees becomes a necessary thing to grant access to financial and food subsidies. As most of them have lost their identity documents during the fleeing, giving them a new ID using biometric system is the safest and fastest way to secure their access. In a broader perspective, these refugees' biometrics data can be shared between countries in order to keep track of refugees while they move across borders, thus keeping the safety and stability of host countries and others. Biometrics has

proved as a digital innovation to improve people's lives and make a significant social and economic change. Especially as the refugee identity crisis becomes a global issue, the role of biometrics is even more critical.

According to *BiometricUpdates*, the Malaysian and American governments have signed an agreement to share a database containing the biometric records of about 1.2 million people suspected of terrorism and other serious crimes. As another movement, UK Government has decided to work with UNHCR in order to implement biometric screening on any Syrian refugees that coming to the UK. Furthermore, recently in the U.N. Agenda 2030 document, the United Nations has set

a goal that: "By 2030, provide legal identity for all, including birth registration." In a new report issued in collaboration with Accenture, the World Bank is calling on governments to "work together to implement standardized, cost-effective identity management solutions." The new biometric IDs are not just for refugees but will be for everyone in the world. Apparently, biometrics with its superior advantages can ease the refugee's management by reducing the fraudulence in identity and enhancing the security of the border control system. We really hope for a world when U.N biometric for all humanity is in place and people's identity will be protected and secured.

Identity for Development: Opportunities and Challenges for Africa

By ALAN GELB and ANNA DIOFASI,
Centre for Global Development

An official identity is essential for any person to participate in a modern economy and to access basic rights and services. It empowers people to vote, register assets, own bank accounts and travel. Adequate ID systems also help governments to engage with their citizens in a streamlined and efficient manner. National ID (NID) systems are currently in use or under development in at least 150 countries and many are strengthening these systems. Security is one driver for this process, particularly after the events of September 11, 2001. As legal identity is recognized as one of the Sustainable Development Goals for 2015-2030, development is another driver. A third driver is the rapid advances that have been made in digital technology, including biometrics and its incorporation into ID systems. At the same time, in order to realize the full potential of ID programs for development, a number of concerns and policy challenges need to be addressed even as systems are strengthened.

The Trend in Africa

Sub-Saharan Africa (Africa) is no exception to this global trend. At least 23 National Identification (NID) programs or programs of similar type have been introduced since 2000 compared with only 15 in the four prior decades. Many countries are modernizing their systems. This often includes adopting digital biometrics (fingerprints, face and increasingly iris) and issuing 'smart' ID cards that enable more

accurate user authentication and access to financial transactions as well as other applications. Following the lead of countries like Estonia, which has the world's most fully developed e-ID system, African countries such as Kenya are starting to move towards e-services and e-government in a more broad sense. With Estonia's e-ID, citizens almost never need to appear in person at government offices; they can transact and e-sign documents remotely with equivalent legal status as in-person signature.

With growing momentum, the Second Government Forum on Electronic Identity in Africa (ID4Africa) took place this May in Rwanda, following the first Forum in 2015 in Tanzania. It provided an unprecedented opportunity to share experience across the continent: thirty six countries participated together with international experts and industry representatives. The third Forum will take place in Namibia in April 2017. The World Bank has also launched an initiative, ID4D, to provide a more integrated approach to ID issues as they relate to development.

African countries are at different stages in respect to ID systems, which can be assessed from three perspectives: do they issue robust credentials that are unique (each individual has only one identity), difficult to forge and easy to verify against a central data register? Do they cover a large proportion of the population or only a few privileged citizens

or those in urban areas? Is the ID system integrated – upstream, into a well-developed civil registry, and downstream, into a wide range of applications, such as voting, KYC requirements for bank and mobile accounts or the payment of pensions and social transfers? The graphic in Figure 1 outlays the African systems as assessed by such criteria. The classifications, although still in a preliminary stage,



Chairwoman of the African Union, Dr. Nkosazana Dlamini-Zuma

provide some indication of the diversity of Africa's systems. Some countries, like South Africa, Botswana and Zimbabwe, have highly developed systems that cover almost all of the relevant population and are used for a wide range of purposes. Others have rudimentary systems or ones that cover only a modest proportion of the population. Despite efforts to expand coverage, Tanzania's national ID card is only held by about 10% of the adult population.

Why ID? An opportunity around every corner

ID systems can facilitate public programs while saving funds by improving targeting and reducing leakage. Africa has been at the forefront of innovative uses of ID (Gelb and Decker, 2011). Since the mid-1990s, South Africa has used fingerprint-based biometric ATMs, smartcards and bank accounts to deliver pensions and social grants, including to locations with limited connectivity. The system of social grants now covers some 16.5 million people. In the Democratic Republic of Congo, iris technology facilitated disarmament, demobilization and reintegration. Ex-combatants were enrolled in a cash transfer program to help them adjust to civilian life. Following iris scans, 110,000 received an ID card and a PIN which they could use to collect 13 monthly cash payments from over 8,000 airtime sales agents. In rural areas where distribution through vendors proved difficult, mobile teams delivered cash using only iris scans for identification.

Digital ID systems also facilitate the delivery of emergency relief. The Dowa Emergency Cash Transfer (DECT) program in Malawi covered 11,000 rural families; fingerprints were used for initial registration and to verify payments at mobile ATMs in conjunction with smartcards. The program improved recipients' nutritional and health status but highlighted the cost of creating a special

system for each program in the absence of a proper national ID system. Digital ID systems underpin emergency relief in several other countries, for example, programs for refugees in Northern Kenya.

Strong ID can also support financial inclusion. In Kenya, bank, mobile and microfinance account-holders are identified by their national ID numbers. Negative and (more recently) positive credit histories must be shared across the system. Non-financial entities, such as utility companies, may also participate on a reciprocal basis. The result has been a sharp fall in the ratio of non-performing loans, and an increase in the number of credit accounts and information-based financial products.

Strong ID can save governments millions by cutting leakage and corruption. As part of a civil service reform, Nigeria eliminated over 43,000 ghost workers from the public payroll following an audit using biometric identification in 2011; this is reported to have saved the country over \$60 million. The largest case of using an advanced ID system to underpin subsidy reform comes from India which eliminated around 40 million "ghost" beneficiaries when it replaced its market subsidy on LPG cylinders by direct bank transfers. The annual saving from this one initiative, at about \$1 billion, recoups the entire cost of providing a unique ID number (Aadhaar) to some 830 million people – a figure almost as great as the entire population of sub-Saharan Africa (Gelb and Diofasi, 2015).

Robust ID credentials can also facilitate free movement of persons across Africa's numerous borders without compromising security. The 15 ECOWAS member states are taking the lead. The Community plans to launch a biometric ID card in 2016 to serve as a travel document in the region (ECOWAS, 2014). In East Africa, Kenya, Uganda and Rwanda have also concluded an agreement to accept national ID credentials for travel among the three countries.

Thinking big: the challenge of scaling up ID programs

African countries, like others, need a strategic approach to ID to maximize its development impact. They confront a number of challenges that call for innovation and coordination, including the design of their ID architecture and ID management,

as well as technology and legislative action. Fragmented systems need to be integrated.

When it comes to ID programs, less is often more. Some countries have a multitude of 'functional' programs, each developed to serve a particular purpose – voter registration, customer ID for banks and healthcare cards, among others – that coexist with national ID initiatives. Multiple systems drive up costs, hamper interoperability across programs and can also undermine demand for a core system of civil and national registration.

Nigeria provides an example of a need for integration. A 2006 report by the Committee on Harmonization of National Identity Cards identified 12 on-going ID card projects at the time, including eight with biometric components. Not much progress has been made since then. Even as over 67 million people were registered and issued voter cards in the run-up to its recent elections, as of February 2015, only six million have been enrolled in the country's national e-ID program. A previous biometric national ID program launched in 2003 registered 37 million citizens but has since been abandoned. The banking system recently launched its own biometric identification program, the bank verification number (BVN), which is required to access all banking services. As of late June 2015, the BVN program had enrolled about 14 million customers from a total of over 28 million. The fragmentation of IDs and associated multiple registrations is not just an inconvenience for citizens, but also a waste of public resources. Nigeria is estimated to have spent as much as \$2 billion on ID schemes for a population of 173 million over the last 10 years. This is twice as much as the Aadhaar program has spent to date.

Voter registration offers an opportunity to strengthen national ID systems. Costs for the biometric technology alone can easily reach \$5 per voter, making registration a very costly recurring exercise. Investing in



Alan Gelb is a Senior Fellow at the Centre for Global Development

voter registration may be popular with political parties as well as foreign donors, but often does not translate into a longer-run investment. If the momentum behind voter ID were harnessed to transform a one-off event into a permanent national ID program based on continuous civil registration, the savings and benefits for all would be substantial.

Civil and birth registration need to be strengthened

In much of Africa, birth registration rates are too low to provide a strong foundation for national ID. Less than 45% of Sub-Saharan African children under the age of five have been registered in contrast to 98% in Central and Eastern Europe, 92% in Latin America and the Caribbean, and over 75% in East Asia (UNICEF, 2014). Birth registration was boosted by providing incentives, using mobile technology and making the process more flexible. South Africa linked registration to the provision of child support grants. Uganda piloted the use of mobile technology for birth registration as part of an EU-UNICEF program, which has led to entire villages and hospital settings moving from negligible birth registration rates to almost 100% coverage; the program has been extended to Mozambique and Burkina Faso. In Kenya, the MOVE-IT program uses health workers to report births that can then be registered by the local offices of the civil registry.

Countries are increasingly promoting a cradle-to-grave approach to ID, where the unique identification number is issued at birth. In Argentina, for example, after issue at birth, the NID is first updated between the ages of five and eight with a photo and a thumbprint and updated again after age 14. When the civil registry covers only a fraction of the population – as is the case in much of Africa – determining true identity at the age of 16-18 can be more difficult.

ID must be financially sustainable

Basing an ID program in continuous civil registration and its integration across applications is vital to bringing down costs and ensuring that the program is financially

sustainable. Interoperability should be a primary concern when developing a harmonized ID infrastructure and as new applications are added, countries need to be aware of the risk of lock-in to proprietary vendor hardware or software that can inflate long-term operating costs and reduce flexibility. The more widely the ID is used, the greater the potential cost-recovery. Pakistan's ID agency,

NADRA, covers its operating costs from revenues and cross-subsidizes the provision of the basic ID from the fees levied for more sophisticated services. Rwanda follows a similar approach, charging more for drivers' licenses and passports than for basic national ID.

ID programs must be inclusive

Strong identification can facilitate inclusion but can also be a mechanism for exclusion. There are over 720,000 formerly stateless persons in Africa – a number that is underpinned by exclusionary nationality laws, but many other people have unclear national status. Over 20 countries have no provisions regarding a child's right to nationality or a path to citizenship for those with foreign-born parents (Manby, 2010) and only a handful of African countries automatically confer citizenship from birth to those born on their territory. Several countries still grant greater rights to men than women to pass citizenship to their children or spouses. Citizenship by naturalization is often almost impossible to obtain in practice and many countries allow naturalized citizenship to be withdrawn on arbitrary grounds. Half of Africa's states even allow revocation of a person's birth nationality.

Strengthening NID programs therefore risks formalizing exclusion, leaving many long-term residents, their children and even their grandchildren permanently stateless. Recognizing the increasing risk of marginalization, the African Union has called for a Convention on African Nationality in its report "The Right to a Nationality in Africa" (ACHPR, 2014). This is an urgent problem that, if left unattended, could greatly complicate the process of formalizing nationality in Africa.

Action is needed to protect personal data and privacy

National ID programs do not themselves need to collect and store large volumes of personal data, but

the use of a common number facilitates the integration of other databases such as those dealing with medical records or financial status. The growth of such large databases raises concern over data security and data privacy, and misuse of data by the government or private entities. African countries lag in this area – as of 2015, only 14 countries had adopted laws providing a framework for data privacy (O'Donoghue, 2015). However, many are catching up: seven African countries are considering the implementation of data protection bills. The number is expected to continue to increase as countries accede to the African Union Convention on Cyber Security and Personal Data Protection (2014).

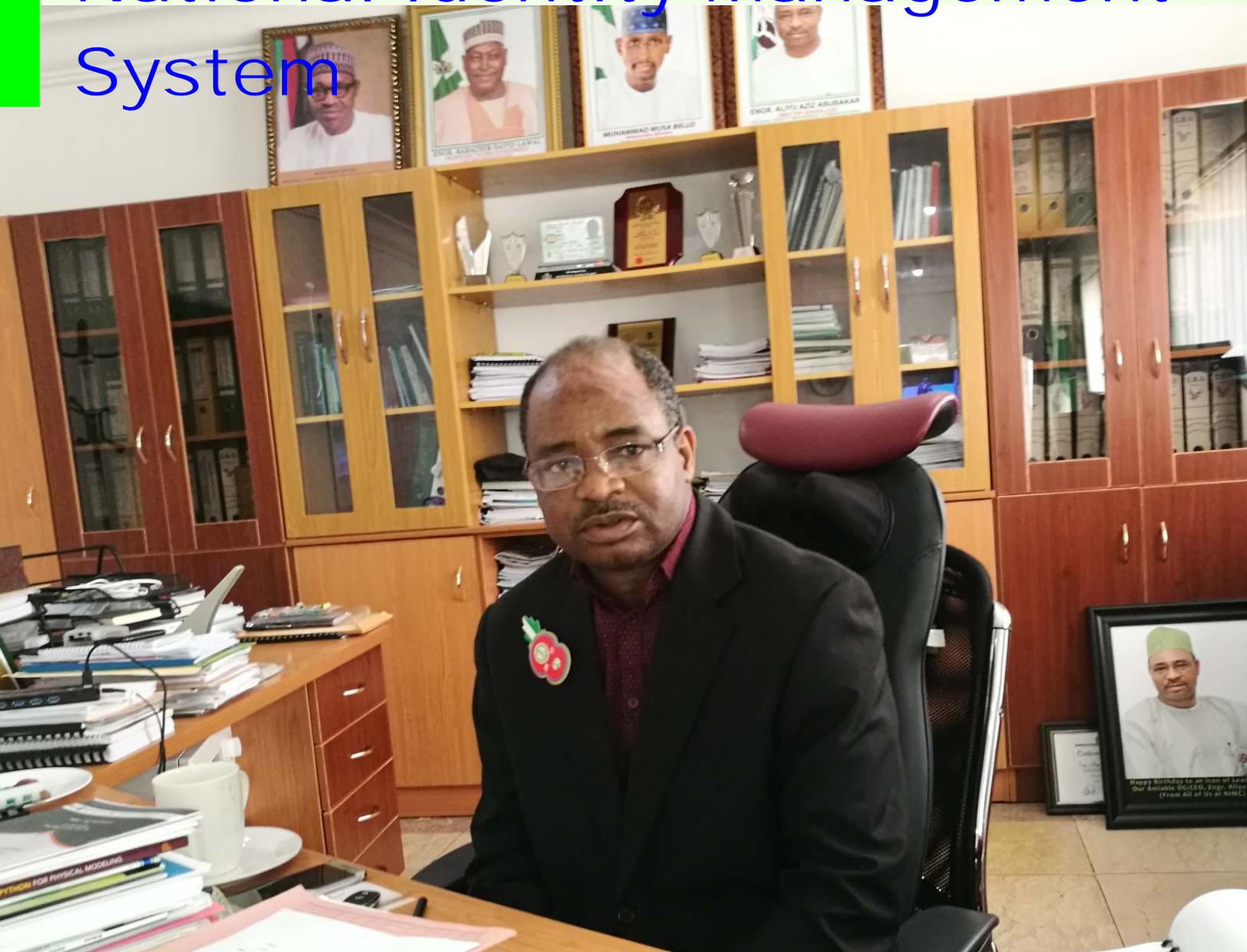
Conclusion

Worldwide, many developing countries are making investments in their ID systems, seeking to create a stronger foundation for development policies and programs. African countries have implemented a number of successful ID programs, making use of digital technologies to reform the delivery of social grants, manage government payrolls and facilitate access to credit. The lessons learned from these success stories point to the need for a strategic approach at the country level to ensure that systems are cost-effective, inclusive, and ready to provide a foundation for e-government and the e-economy. Coordination between national programs can help produce region-wide benefits through increased opportunities for cross-border trade, employment and travel. At the same time, the formalization of legal identity raises a number of urgent policy and implementation issues that will need to be addressed if Africans are to reap the full benefit.



Anna Diofasi is a researcher at the Centre for Global Development

NIMC Has Capacity for Robust National Identity Management System



Recognising the importance of having an identity database for its sustenance and development, Nigeria established the National Identity Management Commission (NIMC) in 2007 with the mandate to create, manage, maintain and operate the country's National Identity Database. At this critical time in global affairs where security challenges limit resources and hamper growth, government's will power to fully fund NIMC for it to function properly and deliver on its mandate can unlock the undiscovered treasure in identity as national asset. In this interview, Director-General/Chief Executive Officer of NIMC, Engr. ALIYU ABUBAKAR AZIZ spoke with MKPE ABANG on the agency's unrelenting efforts to fulfil its mandate, among other issues. Excerpts:

Congratulations on your first anniversary, having been appointed on November 23, 2015. I believed that you have settled down fully for the challenges of this assignment. What was your immediate reaction when your name was mentioned by President Muhammadu Buhari to take over this assignment?

Can I really remember my reaction? Well, may be when I told people that I have been appointed, I remember what the people said, more than myself, people mentioned that what you sow is what you reap; they may be referring to the fact that I have always been in this new National Identity Management System way back from the time of

the Presidential Committee for Harmonisation of Identity Management System. So, I felt that I was capable and I had the thinking that the environment was still the same. But when I took over the mantle, I found out that the environment was no longer the same as before. So, that has been the major challenge. I can say that I felt elated about the appointment and I believe that I will be able to make great changes and that this appointment is like a stepping stone for other future appointments.

Having taken up the responsibility, can you pinpoint for us, within the first one year in office, what you will say has been the highpoint of

your duty here, I mean your achievements so far?

Well, because of the environment, as I said, I found out that I inherited a budget that is like only two per cent of our requirement, therefore the strategy was that we focus on our core function and that core function is registration and that is where we have gotten some achievements. At the time that I came in, it was approximately seven million record and my vision then was to multiply that seven by 10, which I called '10 X' by the end of December this year. But so far, it is more looking like we may likely multiply by only two and not 10 as envisaged because of the lack of adequate resources to do that.

When you say adequate resources, are you referring to human resources or financial resources?

Actually we have human resources but we don't have enough equipment and also we don't have the financial strength for logistics needed to be able to meet that initial projection; but we have human capacity to carry out the activities.

From your own understanding of identity, what would you say is the importance of identity, for those who may not know?

Well, I will say that identity is perhaps the most important aspect in any country's socio-political life; identity is important in budget, security and also in planning. Those three things are very important for every nation. Every year, we carry out budget activities and without using the actual number of people that we know, there is growing distrust among citizens and residents. And also most of the commercial activities today are now e-commerce, e-business; so you need electronic identification system really to build on such kind of payment system. And for planning purpose too, we have been planning without proper record. So, identity will help us in those three major areas to fight corruption; fight terrorism; and also enable a trustworthy system of governance.

When you hear people say that Nigeria has now reached 180 million or a little bit above, and these figures are given to us by either United Nations or other international agency, what is your immediate reaction to that?

The point is that we have a very large population and also our birth rate too is growing. In fact, my estimation before was that we were adding 5.5 million babies every year; but when UNICEF came here, they corrected me that actually, currently, we are adding seven million children to our population every year. So, it is really growing, especially, when you go to the rural areas or markets, you see a large number of people. And since you need to carry out financial activities electronically, so it definitely means that we require identity management system to be up to speed in today's world. We are really a large population, whether it reaches that figure or not does not matter; what we should work towards is to register everybody without leaving out anybody and that would really help us and with that, we will be planning for the next 100 years, not even five years planning that we have been talking about.

Talking about registering everybody, what are the strategies that you think NIMC can adopt in ensuring that each state is duly registered into the system?

Currently, the strategy is to collaborate with state governments, local governments and also to collaborate with our sister federal agencies, especially, to harmonise the existing databases and also to go out together whenever we are going to capture again. The era of working alone capturing data by agencies is over; now we have to go out together. If National Population Commission is going out for Census, they should go out with NIMC to also capture the biometrics of the individuals so that we don't do it twice. If INEC (Independent National Electoral Commission) is going to do registration for voters, again, we need to go out and do it together and then other existing small databases have to then harmonise with the National Identity Management System so that we can reduce cost and also eliminate the duplicates and ghosts that have been existing in most of the systems that we have.

Talking about duplication, today we have almost every major government agency, from the telecom regulator to the immigration to the banking system, each one having biometric database of everybody who uses their system; what would be your advice to the government or to the industry for us to have a unified biometric system?

Already, Mr President himself has spoken and he has directed that all these separate databases must be harmonised. And in fact, the



Vice President has been spearheading this since December last year and we have had several meetings and also been talking to all those other agencies that it is high time we commenced this harmonisation and integration. So far, the CBN (Central Bank of Nigeria) Governor has given instruction for the BVN database to be harmonised with that of the NIMC and that has been going on steadily. On the SIM register also, the Executive Vice Chairman of the Nigerian Communications Commission has agreed to pass the database of all SIMs registered to us so that we can harmonise it with the national identity management system. Similarly with other agencies, since we now have price of oil falling in the international market, finances have been affected and I think it has now made other agencies to start thinking differently. Before, vendors can go to agencies and tell them not to worry about NIMC and carry out their own activity, but that was when there was money; right now, there is no money. The Ministry of Finance will not allow any agency to spend any money like that. The Ministry of Budget and National Planning will also not allow for such different databases to be captured again. So, all of us need to work together to achieve the main objectives.

Now tell us, if all these splintered databases are all brought together to be housed by NIMC, do you have enough robust system, well secured to be able to handle this?

We have a robust system. We have built standard system and we have high throughput equipment. We have certifications from ISO and other agencies to make sure that all the processes that we do are world class standards. We have engineers and professionals in that field of managing database and we also have the storage to do that as well as data recovery site. So, in terms of technical capacity, we have it; probably we may need more assistance in logistics and the rest of it, but in terms of capacity, NIMC has it and that has been attested to by all Committees in the National Assembly that have been visiting our data centre to see what we really have. So, we are capable of doing that.

Okay, talking about the National Assembly and going back to the issue of central database, would you for instance, support a possibility

of the National Assembly having a law that ensures that there is no other body or institution holding a database but NIMC?

Well, in terms of law, already, the law that we have covers everything. It covers registration from birth to death by NIMC and it has covered a compulsory and mandatory usage of NIMC. That has been in the Act that we have now, so the law is there; but in Nigeria, enforcement of the law has always been the difficulty and mind you, the board of NIMC is also made up of all these other agencies that are also capturing data. The whole idea is to harmonise, to reduce cost of government activities and also allow the data to be used electronically to authenticate people that are carrying out transactions online and the rest of it.

Let me talk about people in the rural areas and those in not very urban areas, they may not be very familiar with the importance of having a specific National Identity Number which is issued by NIMC; can you advise people what this number is all about?

I think sometimes they say when you have some kind of difficulty, then it becomes a lesson. So for people like from my own zone, North East zone, where we have this unfortunate terrorism activities, everybody is now aware of the need to really have a government document, whether it is in form of paper or in form of card because the security situation there is so hard and it is only in Nigeria that you can just remain and do your activities without having any form of identification. All over the world, be it in terms of paper or in any other form, you must have some form of identification and it has to be verified. So, it is very important, as I said, for security and it is also very important for national planning and budgeting. So, I believe that even the local people will now know that it is very important to have some form of identification and it is useful. So far, we have been breaking the law, like if you don't have the identification number and you go and open a bank account, you are actually doing something against the law. But as I said, we have not been enforcing the law because we have not captured majority of the data, but very soon, it will become compulsory. And I believe that the rural people really know the importance of identity and they really need a form of identification. Way back in 2008, we carried out a privacy impact assessment throughout the country and the result was very good, nobody ever said they don't want their data to be taken in terms of making sure that they are safe.

We are talking about revenue generation, it is on record, of course, that everybody who is identified can easily be captured within the revenue database, such that agencies like the Federal Inland Revenue Service would be able to get taxing documentation from

such a person; do you see NIMC for instance as being an agency that can help in revenue generation whereby everybody who is within that database becomes a revenue agent for the government?

I think it is an acceptable norm everywhere that people pay taxes; that you have to give something in order to gain something out of the system. There has to be value for value. And wherever you see that people are not paying taxes, again, it may be the system does not know them or the system decided to ignore them so that they can also not ask for their own rights. But definitely, when you pay your taxes, you can ask for your right. You can ask what the government is going to do for you; you can question the infrastructure in your area; you can question the public services,

especially schools and hospitals around your place. So, the importance is to know everybody; to financially include everyone and also to encourage people to pay their own taxes and therefore allow them to demand for services to be provided and ultimately, it will also reduce corruption to the barest minimum.

From what you are saying, it means for instance, that if NIMC is able to register 187 million Nigerians, that's a huge revenue base for the federal government, therefore, are you implying that the national identification system is an asset.

Indeed, the national identity database is of course, a national asset which needs to be clearly understood especially for the potential contributions it can make to the country if properly harnessed; and it can be used also for authentication of every other government services, including e-governance and also taxes. If you know through the database, for a certain area that these are the people that are due to pay taxes, and then from your tax return, this is the number of people that have paid taxes, it would allow you to now start asking questions and also the politicians too would know and tell their people that if you want to demand something from government, you also need to pay your taxes. So, identity is really a national asset. Also if there is social intervention that is required like if there is flood or fire in a particular area, you can really know those people affected and using the smart card again, you can even pay them whatever tokens you want to pay them, thereby eliminating all the middle men that would have siphoned the funds that are meant for that particular area. And also, if there is reciprocity, then you will see that it will now make the people to pay their taxes happily instead of the idea of sending the tax man or whatever being used before, people will definitely pay their taxes. It is an old system that you have to go door to door to ask people to pay their taxes. If it is simplified, they can use their card too to do financial transactions, pay their taxes and also use it to receive



benefits from the government.

From what you are saying, it means technology plays significant roles in what you are doing; can you tell us about it?

Of course, technology plays a greater role on our system. First of all, we use technology in capturing the data; transmitting the information to our backend is also with the help of technology and everything that is done at the backend is also about technology and artificial intelligence. And also, thank God that now we have a lot of young people that know this type of technology and it's not difficult for them to understand it and utilise it in many different ways that we may not be able to think about now.

Talking about legacy, you are here now, in five or 10 years when you leave this important agency, what legacy would you like to leave behind?

Well, today makes it 371 days that I have been here and I have 1089 days remaining; so I have an app that reminds me of the number of days that I have left and what I want to leave behind is that at the end of my tenure we should have at least, 100 million authentic identification in our own database; clean, at least 100 million by 22nd of November 2019. And at that particular time, there will be a lot of verifications and authentication activities that will be carried out and that time also, the negative image of Nigeria abroad would have been eliminated because they can query the database and know the person to whom they are dealing with. So, we would have changed the image of Nigeria and make e-commerce, e-business activities seamless. And also, we would have built better trust and credibility for Nigerians.

Excellent! Talking about image for Nigeria, a lot of people, as you may be aware, when their wives are pregnant, they want to go outside Nigeria to go and have their babies so that their babies can have citizenship of that country, do you have a feeling that one day, through this system that we are building, we would have a system that people would be longing to come to Nigeria to have their babies in order to have kind of number when they have their babies?

Well, we are planning with the Committee on National Diaspora and also the Special Assistant to the President on Foreign Affairs and Diaspora to really provide this service for Nigerians wherever they are in this world. And we believe that they are important to us because of the current world politics that has been happening. Instead of them being immigrants, we want them to be good ambassadors of Nigeria and expatriates. And also, Nigerians in Diaspora will feel at home wherever they are and then they will be good ambassadors of Nigeria because they will be able to show their identity and their identity can be verified and then they will build a proper trust system. So, we believe the number is really important and the number is the identity. You said some go to countries like US so that they can get the Social Security number, but we also want to assure every Nigerian that they can get their National Identification Number (NIN) and that number can be verified wherever you are, therefore, it will become very important for you to have your NIN than having any other number. We believe also that it will give Nigerians trust and credibility so that they don't need to long for somebody else's number. We also believe that we are going to build trust into our own system that wherever you are, you will be proud to be a Nigerian and also it will allow us to plan, not only for five years but to plan for 100 years. And when we plan for something like 100 years, including Nigerians from wherever they are, you will just imagine what we would be able to do. I understand that it's a Nigerian (Adebayo Ogunlesi) that owns Gatwick Airport; you can imagine if that type of person decides to also come and invest in Nigeria, the kind of Airport he could build. So, we have many Nigerian engineers, scientists and all that everywhere and now that the world is connected, we want them to be proud of Nigeria wherever they may be and to also have this number. So, the number is really important.

In future, it will be much more important than any other number that you can think of.

We are talking about technology and the new system you have is technology driven, is it transferable and is it managed locally?

We have three levels of technology; there are some of them that we do ourselves here, like if I take you from front end where we do data capturing, the equipment that we use, especially the computer systems, they are all made here in Nigeria by Omatek, so that is really local content. Also, we utilise the Nigerian telecommunications companies to send the data to the backend. The enrolment software that is being used to capture is also locally built. At the backend, we have some form of integration; the automated biometric identification, which is the most expensive part that is not made in Nigeria but it is being managed by Nigerians. Then we add some forms of integration and also public infrastructure, then the servers, we get those ones from outside, it's not our own technology. Because we need to build robust system, we are still using technologies from outside, but we believe that in the future, it might be possible for us to build a completely Nigerian system. But in the current 21st Century, that is not really the focus; the focus is to get the best system from wherever you can get it and then put it together yourself and infuse your own local intelligence into it to now utilise it. Also, we believe that the software that is running is also ours. Whenever we ask foreign companies to do something for us, we also always ask for the source code so that our people will learn what that system is all about and also so that we cannot be held to ransom. So we have many companies that we work with locally and internationally. And because we are building a system that Nigerians at home and all over the world will use, we have to be very mindful of building a secure system and infusing our own local intelligence to make sure that it is a secure system.

So, in other words, you are saying that your database is not sitting somewhere in the world but is being managed by you locally?



Yes. Unlike most other federal agencies whose data are being held by some vendors, the data for NIMC is here in NIMC, so, we are the ones managing it and you will be taken there to go and see for yourself. Even right now, there are engineers working there and you can have a look at what Nigerians were able to build. Even when we have a summit here and some of the foreigners do come, when they see it, they say they never thought such things exist in Nigeria. So we have the capacity but we are not saying that we are 100 per cent; but we have the capacity to do at least identity management system because we have been in it for a very long time and we are also exposed to many other systems. We have been to a lot of conferences where we presented papers and also received awards for the kind of system that we have built, including the card.



We have 36 states and Abuja, what would be your advice to each of those controlling these units on enlightening and encouraging their people to register and have their identity?

It is very important, even if they are capturing data, it is always very important to carry out those activities with NIMC, so that we can authenticate the information that they have. But if one state is capturing data on its own and another state is capturing data and so on and so forth, there will still be standalone silos and also because in Nigeria you are free to move to anywhere you want, once a state captures data and maybe provides service for that, the next time you see influx of people from the neighbouring state and finding their way into that particular database. So, that is why you need to talk to all your neighbouring states and you can only do that by participating on National Identity Management database. When you have this single database, then it can help all the states. Again, you know the people that are living in your state for taxation purposes, that is when you need internally generated revenue and also you will know those people and it will also help you security-wise, such that if some people have committed some crimes in other parts of the nation and move to your state, you may be alerted by the security agencies and it

will be easier to verify such information. So far, we have been talking to states, we have also started capturing data for some key states; among them are Kaduna, Gombe and many other states. I believe that in the next two years, we will be able to reach a point whereby we capture a lot of data and nobody else will be looking for someone to come and capture data again, even when vendors come to psyche them, they would have already known that they don't need to create a different silo from the national identity database.

From what you have said, I can summarise that your job is really enormous, what level of funding do you think you require, because you started by talking about issue of fund, what level of fund will make NIMC very efficient the way you

will like it to be?

Well, as I told you earlier that the funding that we are currently having is only about two per cent of our requirement; so, we really need consistent funding for two, three years before we can achieve the goals that I am talking about. I have been working with my boss, the Secretary to Government of the Federation, whom I report to and we have been working with the Vice President and also all the stakeholders; the Ministry of Budget and National Planning and the Minister of Finance. We are all working towards achieving these goals. Right now, there is not much cash, but we look for grants or borrow to make sure that this identity is done with once and for all. What will remain is to really manage the system in the future, but capturing the data has been a major challenge and then making it unique. We have been slow and steady but just to make sure that there are no mistakes; to make sure that where there is a mistake, it should be corrected easily and our experience from doing it in a big bang like 2003, close borders then start data capturing, never worked for us. Also we have been trying as much as possible to let citizens understand that it is actually the number that is their identity, not the card or any other thing. But at the same time, we will work out the process of issuing this card to all people that must have registered.

The Man: Engr. Aliyu Abubakar Aziz

Appointed Director-General/Chief Executive officer of the Nigerian Identity Management Commission on November 23, 2015, by President Muhammadu Buhari, Enr. Aliyu Abubakar Aziz was a pioneer staff of NIMC at its inception and the Director, Information Technology/National Identity Database Department of the Commission. With more than 30 years' post qualification experience in Engineering and Information Technology, spanning both the private and public sectors, Engr. Aziz holds a B.Eng in Civil Engineering and M.Sc in Structural Engineering with Specialty in Computer Aided Design from the Ahmadu Bello University (ABU) Zaria.



Before he joined NIMC at inception, Engr. Aziz was the Information Technology Adviser to the Minister, Federal Capital Territory Administration, where he pioneered the implementation of the first e-government solution that won a Microsoft award in 2006. He served as the Sub-committee Technical Chairman on the Presidential Committee on Harmonisation of ICT which resulted in the formation of Galaxy Backbone. He was also a Deputy Director, Information

Technology at the Bureau of Public Enterprises and the Principal Consultant, Management Information System (MIS) Department, Afri-Projects Consortium.

He was a director at the Secretariat of the Presidential Implementation

Committee in the Office of the Secretary to the Government of the Federation saddled with the responsibilities for the Implementation of Government Decisions on Consumer Credit System, National Outsourcing Initiative and Harmonization of Identification Schemes in Nigeria. The committee oversaw the setting up of the National Identity Management Commission in 2007.

In his professional career, he designed and supervised several landmark structures in Kaduna and Abuja, including the National Universities Commission (NUC) Secretariat, Power Holding Company of Nigeria (PHCN) Headquarters, African Petroleum (AP) Plaza, Nigeria Agricultural and Cooperative Bank (NACB) Office block and several others.

Engr. Aziz is a member of the Nigerian Society of Engineers (NSE), American Society of Mechanical Engineers (ASME), the Computer Association of Nigeria (COAN), the Internet Society (ISOC) and the Nigerian Institution of Structural Engineers (NIStructE) where he is the current Vice President. He is widely travelled and an alumnus of Harvard, Stanford, IMD and Lagos Business School.

Snapshots of achievements – one year on

Engr Aliyu Aziz, took over the mantle of leadership at the National Identity Management Commission (NIMC), as the Director General/CEO on 23rd of November, 2015.

Upon resumption, he had a meeting with members of staff and reeled out a unique leadership approach anchored on the 7Rs mantra that will guide his administration:

Reinvention, Renewal, Refocus, Retention, Reformation, Reinforcement and Replacement.

He also set a target enrolment figure of 70 million by December 31st, 2016 with more of these coming from the harmonization drive as directed by the Presidency.

Despite a rather challenging operating environment however, Engr. Aziz already has to his credit a number of appreciable achievements, some of which are:

Some Achievements

Creation of Zonal Structures

For proper and effective administration he created six zonal structures headed in most cases by Assistant General Managers (AGMs), with the Northwest headquarters being Kaduna, Kaduna State; Northeast, Gombe, Gombe State; North central, FCT; South-south, Port Harcourt, Rivers State, Southeast, Enugu, Enugu State and Southwest headquarters being. Ibadan, Oyo State.

Internal Restructuring

The Strategy and Programme Unit was created with the idea of implementing and monitoring the NIMS project.

Research and Information Security and Risk Management Unit was also created under this dispensation to strengthen NIMC's ability to reduce the degree of risk by demonstrating the workability of a given technology long before a mission is based around it.

Merging of Commission's Secretariat with Legal and Regulatory Services for effective coordination.

Communication

The DG emphasized the need to focus and consolidate on Internal Communication. Staff needed to be properly informed, refocused and well positioned to carry out their functions.

A monthly online newsletter tagged "NIMC News" was introduced to inform staff about happenings and educate them properly. This is circulated via email to all staff. Regular postings on the notice boards, regular use of staff emails, word of mouth and other communication methods were massively deployed to encourage internal communications amongst staff. This help to eradicate rumours and provide timely and verifiable information to staff. Staff are now well informed about policies, mandates, vision and mission of the Commission.

Staff suggestion portal (suggestions@nimc.gov.ng) was created to receive and escalate issues to the DG with regards to complaints and suggestions for an improved system. This is personally acted upon by the DG.

Press Releases were communicated to the media in a timely and efficient way in order to set records straight especially in areas where the Commission was being misrepresented.

"NIMC Time" made its debut on Aso 93.5 FM to drive sensitization of the NIMS project at the grassroots level. NIMC Time airs every Wednesday between 5:30pm to 6:00pm

Harmonization

The harmonization efforts paid off during the period under review with the BVN records

being submitted and cleaned up by the NIMC. So far, over two (2) million records have been cleaned up and NIN issued to those who do not have.

The Nigerian Communications Commission (NCC) in compliance with the directive of the Federal Government agreed to release its records for SIM registration to the NIMC for harmonization for those without NIN.

Some banks now accept the NIN slip as means of identification following collaboration with NIBSS and high level discussion with the CBN Governor.

Enforcement and Regulatory Functions

Additional regulations are in progress for the enforcement of mandatory use of NIN by all stakeholders particularly banks in order to ease the pressure on the demand for the eID cards. The additional regulation will also set standards for biometric capture for Nigeria and for other value added services the Commission is exploring in



order to generate income and ensure timely population of the National Identity Database (NIDB)

The Commission made some arrests and prosecution is on-going for persons attempting to fraudulently enrol more than once which is a punishable offence.

A group of internet job scammers were also recently apprehended and being prosecuted. The suspects had operated a website with the intention of defrauding the general public about non-existent job vacancies in the Commission.

Awards

The NIMC under the leadership of Engr Aliyu Aziz on the 8th of December, 2015 in far away Jakarta, Indonesia, bagged the High Security Print Asia Award for best-in-class as the Regional ID Document of the Year 2015. The award was presented at the High Security Print Asia conference held in Jakarta and aims to promote the best in security printing, system infrastructure and implementation of a government passport, identity or other security card scheme.

Expansion

Increase in Enrolment: In a move to achieve the set target by the DG/CEO upon resumption, enrolment which was at a figure of seven million rose to 12 million in less than one year. This feat was achieved despite the challenges faced by the Commission. The Commission had envisaged and projected the 70million target enrolment subject to availability of funds from the Federal Government. However, due to the modesty and

late release of the 2016 budget, this became a very tall target to meet.

Card production increased from 759,000 to over a million during the period under review.

Card activation and collection also recorded appreciable increase from 150,000 to over 500,000.

Creation of additional Enrolment Centres across the nation, especially in the troubled North East states of Yobe and Borno.

Deployment of additional 142 Card Activation Systems to State Offices from about 60 we had prior to the DG's assumption to bring it to a total of 202.

Card transfer services now available for enrollees whose location changed after enrolment.

Formation of the Private Public Partnership Unit

Upgrade of some of our facilities and infrastructure for better and optimal performance

Partnerships and Collaborations

There is on-going collaborations with Gombe, Kaduna, Kano, Ebonyi and Plateau states on verification services). Secured support in form of enrolment equipment, personnel and logistics are provided by Kaduna and Kano States towards enrolment of their citizens as well as verification of civil servants in these states.

Also, the Kaduna State Government is partnering with NIMC to register all Kaduna State residence.

Commencement of a pilot enrolment of United Nations women in Kaduna State.

Talks are in advanced stage with the UNHCR for the enrolment of 2 million IDPs in the North East. The pilot enrolment is expected to begin before the end of December for the enrolment of about 500,000 IDPs in 14 camps in Borno State.

NIMC is in partnership with the office of the Secretary to the Federal Government (OSGF) to register all Internally Displaced Persons in Abuja camps.

Tour visit by neighbouring countries of Kenya and Niger Republic to understudy the NIMC project

Funding

The Commission like other agencies of government, has been facing serious funding challenges for the past one year; for instance, out of N398,760,382.5 overhead budget allocation for 2016, only N202,395,189.84 has been released to date while only N472,500,000 N945,000,000 capital budget allocation has been released.

Despite the above funding challenges, the DG/CEO, Engr Aliyu Aziz has been able to maintain operational stability through judicious/prudent application of scarce resources. This is evident in the increase in enrolment figures, card production/issuance despite poor funding by the Federal Government.

The DG/CEO has been able to manage the allocations from the Federal Government effectively by placing emphasis on the core activities of the Commission that are critical to increasing enrolment, card production/issuance and management of the data.

The Commission equally continues to implement International Public sector Accounting Standards (IPSAS) and Treasury Single Account (TSA) as directed by the Federal Government.

The DG/CEO has also ensured that the 2017 budget was prepared promptly and accurately in line with the Federal Government budgetary circulars.

NIMC in Brief

The NIMC Act 2007 provides for the establishment of the NIMC, its functions, powers, establishment of the National Identity Database, assignment and use of General Multi-purpose cards, and the National Identification Number (NIN). The Act also provides the Commission with powers to make regulations connected with its functions. The NIMC Act 2007 repeals the law that created the former Department of National Civic Registration (DNCR) and provides for the transfer of its assets and liabilities to the NIMC.

The Act establishes the National Identity Management Commission as the primary legal, regulatory and institutional mechanism for implementing Government's reform initiative (in the identity sector) as contained in the National Policy and NIMC Act, Sections 1, 2, 5 and 6.

Manage

Establish, operate and manage the National Identity Management System (NIMS): Carry out the enrolment of citizens and legal residents as provided for in the Act, Create and operate a National Identity Database, Issue Unique National Identification Numbers to qualified citizens and legal residents

Foster the orderly development of an identity sector in Nigeria. Issue a National Identity Smart Card to every registered person 16 years and above, Provide a secure means to access the National Identity Database so that an individual can irrefutably assert his/her identity [Person Identification Verification Services (PIVS) Infrastructure]

Core Values

The Commission is committed to

promoting the highest standard of ethical behaviour among its management and employees. Our core values emphasize Transparency, Promptness, Integrity, Excellence and Professionalism.

Promptness

The requirement for promptness and efficiency, as well as the culture of timeliness and accuracy in service delivery, is a cardinal feature of NIMC.

Transparency

In the pursuit of creating a national identity management system that is transparent and accountable, NIMC employees are required to maintain the highest ethical standards and create an atmosphere of confidence through openness and clarity in the discharge of their responsibilities.

Integrity

Commitment to honesty and dedication to duty are the remarkable virtues that form the hallmark of all NIMC staff.

Professionalism

Members of Staff of NIMC exhibit a high degree of professionalism in the discharge of their responsibilities. As such, they are competent, accountable, respectful, creative and above all, team players.

Vision Statement

The National Identity Management Commission is to provide sustainable world-class identity management solution to affirm identity, enhance governance and service

delivery in Nigeria by 2019.

Mission statement

It is NIMC's mission to establish and regulate a reliable and sustainable system of National Identity Management that enables a citizen or legal resident affirm their identity in an environment of innovation and excellence.

Functions/Powers

Section (6) of the NIMC Act No. 23 of 2007 outlines that the Commission shall have power to:

Request for any information on data from any person on matters relating to its functions under this Act;

Functions

Section (5) of the NIMC Act No. 23 of 2007 stipulates that the Commission shall:

Assign a unique National Identification Number to any person registered pursuant to paragraphs (b) and (c) of this section and the National Identification Number shall be incorporated into or made compatible with other existing identity related databases or registers in respect of which information or data relating to the registered person has been registered, documented or stored;

Create, manage, maintain and operate the National Identity Database, established under section 14 of this Act including the harmonization and integration of existing identification databases in government agencies and integration of existing identification databases in government agencies and integrating them into the National Identity Database, most importantly, assigning the National Identity Number (NIN) among other relevant functions.

Enrol for your National e-ID card

- Register online, visit www.nimc.gov.ng and follow the instructions. Print the bar-coded receipt and go to any NIMC Enrolment centre with a valid form of identification.
- If you have not registered online, please visit the NIMC Enrolment centre and fill a form.
- At the Enrolment centre, after submitting your enrolment form, your data and biometrics will be captured.
- After your personal details are recorded, you'll receive a slip with your unique National Identification Number (NIN).
- Keep the NIN slip carefully. You'll need it to collect your National e-ID card.
- Visit the NIMC collection centre upon receipt of an SMS telling you that your card is ready for collection.

Collecting your National e-ID card

- Present the NIN slip to collect your National e-ID card.
*NIN slip is for everyone (including non-Nigerians).
- Verify your biometrics.
- To activate your National e-ID card as an identity card, create a secret PIN using any 4-digit number of your choice.
- To activate your card as a payment card, create a 4-digit secret PIN of your choice. Your National e-ID card is now ready for use as a payment card.
* The National e-ID card is issued to every Nigerian 16 and above. Foreigners resident in Nigeria should also apply. Cards can only be collected in person.

Loading your card with money

- Once your National e-ID has been activated as a payment card, visit any Access Bank branch nationwide or any of the participating Banks to load money onto your card.
- To load money onto your National e-ID card, give the bank teller cash or any bank's ATM card to carry out a card to card transaction.
- Once you have loaded money on your National e-ID card, it is now ready to be used for transactions, purchases at merchant outlets, online payments and ATM withdrawals in Nigeria and anywhere in the world.
*A one-time N1,000 fee applies for activating the payment functionality of your National e-ID card.