

ID4AFRICA LIVECAST SUPPLEMENT

Malawi ID Roadmap

Detailed Discussion with
Principal Secretary – NRB
Mphatso Sambo

December 7, 2022

This is a supplement that accompanies the LiveCast interview between the LiveCast host Dr. Joseph Atick and NRB Principal Secretary Mphatso Sambo. It provides in depth information that goes beyond the live interview and that would not be possible to cover during the broadcast due to time limitation. It contains important lessons learned that can benefit the identity community in Africa. We thank the NRB and PS Sambo for allowing us to publish this supplement to accompany the LiveCast broadcast on 7 December 2022.

Watch LiveCast Segment here: <https://www.youtube.com/@ID4AFRICAMEDIA/featured>

Q: What is the NRB?

NRB is the government department established by the National Registration Act of 2010 within the ministry of homeland security that is Mandated to Implement, Coordinate, Manage and Maintain the National Registration and Identification System (NRIS) for Malawi.

The National Registration Bureau (NRB) pursuant to its mandate is responsible for the continuous, permanent and compulsory recording of the occurrence and characteristic of vital events, issuance of digital identity documents and functions as the National Identity Clearinghouse (Single Source of Truth (SSOT)).

The NRB has successfully established a civil registration and vital statistics and an identity management system to register citizens and issue smart digital identity cards, birth and death certificates. NRB has a database with above 10 million Malawians registered with biographic data, Photos (ICAO Standard) and 10 Fingerprints. The identity management system supports data transmission, de-duplication, adjudication, generation and assigning of unique National Identification Numbers to all citizens. Furthermore, the current system provides for the personalization of smartcard (chip encoding with citizens' biometric and specific biographic data) as well as ID card production/printing.

Q: Can you give us some statistics on the current ID coverage of the population?

Currently we have 10.3 million registrants against 10.9 million eligible citizens for national ID in our population register and NRB has issued more than 9 million national IDs to its citizens as of 2021.

The following are yearly new registrations

Registration (year)	Male	Female	% of registered female	Total
Mass registration (2017)	4,201,175	4,967,514	54%	9,168,689
Continuous registration (2018)	402,880	280,304	41%	683,184
Continuous registration (2019)	38,461	32,173	46%	70,634
Continuous registration (2020)	37,303	30,100	45%	67,403
Continuous registration (2021)	117,855	138,709	54%	256,564
Total	4,797,674	5,448,800	53%	10,246,474

On average NRB is registering at least 110,000 citizens annually.

Q: Explain who is left out and why?

Under continuous registration the most affected population is that from the rural areas. The rural population fail to register because:

- NRB does not have adequate field offices in these localities. As such accessibility becomes a challenge.
- Budgetary constraints make it difficult for NRB to carry out outreach registrations in these areas.

Q: Prior to 2017, Malawi did not have any national ID. You ran a 6-month campaign that ended up enrolling majority of the adult population and now you are extending into the digital identity domain. What lessons can you share with us about how to successfully deploy a national identity system with high coverage of the population?

About 9.16 million citizens were registered in a mass registration campaign which lasted 180 days. The registration drive hired a cohort of young Malawians who were trained to process applications and handle registration equipment. The registration drive utilized portable offices with 2,000 solar-powered Biometric Registration Kits (BRK). The BRKs included a digital camera, laptop, fingerprint scanner, card reader, photo booth, and solar panel.

The registration drive included a robust civic education campaign through the media, district-level SMS campaigns, political parties, and faith-based organizations. Community mobilization and awareness occurred through a wide variety of local gatherings such as football matches and weddings, road shows, community meetings, awareness rallies on market days, interactive drama performances, music and dance shows, radio, and TV jingles, and in schools. This campaign helped dispel misinformation, create trust that the government was fully committed to the new system, and to generate demand for IDs.

Partnerships were key in a campaign of such magnitude. UNDP and other cooperating partners helped NRB to achieve this success. Leveraging on the experiences these partners like UNDP have made the registration achievable.

Q: Explain how you are doing that? Do you have fixed bureaus or you still schedule campaigns?

Malawi has 28 administrative districts. NRB has placed its offices in all these districts in a decentralized set up. These district registration offices are open to the public. The operations of these offices are under the district commissioner who heads district administration on behalf of the central government.

In a bid to bring services to the people NRB has also opened field offices placed in some post offices across the country.

The above-mentioned registration points (District Offices and Field Offices) are not enough to service all the people in the country as such NRB periodically, funds permitting, carry out outreach registration activities across the country.

The registration exercise should be noted that it is capital intensive, as such partnerships are paramount to achieving success.

Awareness campaigns should be tailor-made to create demand amongst the populace.

Innovations in technology are also paramount. Technology to be used in registration should help to minimize queueing time by the clients. Such that people do not get demotivated.

Q: How is digital identity different than an electronic identity card? How are you explaining it to the population?

Following the successful implementation of the first phase of National ID registration with over 10 million people registered and smartcards distributed, the National Registration Bureau (NRB) in a bid to strengthen digital transformation as mandated is currently formulating a comprehensive digital transformation strategy for the establishment of a **secure, user-friendly, and privacy-preserving digital identity ecosystem that enables trusted interactions between citizens, government authorities and the private sector, while providing** a standardized, interoperable and secure data sharing layer for identity authentication and data sharing.

The proposed system will offer a range of services that drastically reduce security risks, ensure privacy and trust and guarantee secure authenticated and verifiable transactions associated with business processes, **leveraging digital identity for**

- financial inclusion
- secure ID documentation verification
- enhance KYC
- e-Payment/e-Wallet
- social services in health and education
- e-Government services (e.g., Linkage with Social Security, License Office etc.)

and promote the use of e-verification of citizens identity seamlessly with enhanced security.

The strategy also aims to explore the potential of Self-Sovereign Identity (SSI) technologies to ensure secure electronic identification and authentication of registrants based on self-sovereign (e-ID), providing the citizens with secure and complete ownership of their identity and allowing cross-platform interoperability.

Objectives

- **Creating a resilient enterprise digital identity ecosystem** with a universal framework which can rapidly, automatically and securely verifies citizen identities with a variety of components, including ID documents, biometric information etc. The proposed overarching digital identity ecosystem should be easily adoptable by other sectors and must work on a cross-platform to ensure seamless integration.
- **Develop a data-sharing layer that is interoperable, and** can rapidly, automatically, and securely verifies citizens identities on demand with a variety of components, including Document-based, Smartphone-based, Biometric-based, Code Scanning etc.
- **The implementation shall span across the standard process and procedure for an enterprise software development lifecycle.**

Q: What challenges or growing pains would you say NRB is facing today?

NRB is facing the following notable challenges:

- **Expiring ID cards challenge.**
NRB has seen a number of ID cards expiring. Replacing the same has been a challenge because NRB does not have enough field offices to cater for those whose card are expiring. Budgetary constraints make it difficult to implement outreach registration.
- **Continuous Registration challenge.**
More and more people are turning legible age for ID registration. NRB is failing to register this age group of people timely basically because the above-mentioned challenges.
- **ID printing challenge.**

Over time ID printing capacity has been dwindling at NRB. This has been due to breaking down of the printers, scarcity of printing consumables and forex shortages that have made difficult to procure printers and consumables.

The card production facility uses small-scale ID card printers which fail to withstand the printing workload and for which there is no active maintenance contract. As such, the turnaround time for ID card registration is compromised and this situation puts the whole NRIS program under risk. There are plans to replace current printers with heavy duty ID card printers and ensure their proper servicing, maintenance and repairs to increase the printing capacity, improve turnaround time for ID card registration and ensure continuity of Government's ID efforts. UNDP intends to procure additional ZXP Card printers and desktop computers on behalf of NRB to increase the number of working stations in the Card Production Facility (CPF). UNDP is also in the process of procuring printer consumables such as ribbons, transfer films and laminates to ensure continuity of ID production.

In the long run, it is recommended for NRB to operationalize a purpose-built card printing facility with adequate printing capacity and all the appropriate security measures and controls embedded. This will ensure that cards are printed in a secure environment with a predictable capacity that can be scaled as needed, to accommodate government registration needs. At

the same time, future investments in the ID cards, including customization and printing, may benefit from a broader review of the Government's credential options strategy.

Q: What is motivating the move to purely digital identity?

The following Advantages are driving forces toward digital identity:

- › Use of permissioned blockchain and face biometric:
 - › Use with a mobile wallet App: The app can contain all the information from the current ID Card, as well as other Government issued information.
 - › Users can share information with other entities, securely and with consent.
 - › Information will be secured using users' biometrics.
 - › Explore use of 'QR Cards' for 'non-mobile' use
- › Can coexist with current solution.
 - › Citizens with a current ID Card can get a Digital ID.
 - › System will verify identity and issue a Digital ID with the information in the ID Card.
- › Cost Reduction
 - › No renewal needed → revocation is done digitally.
 - › No need for expensive 'smart card'.
- › Verification using blockchain cryptography.
- › Privacy: only required information is shared.
- › Easy data exchange between systems:
 - › Trusted data exchange.
 - › Low effort of integration.
 - › No need for physical readers.

Can be extended to other information: Driving License, eHealth, etc.

Q: Let us talk about the impact of the National Identity System on public and private sectors? And how do you see it evolving as you migrate to digital identity?

1. Use of national ID by sectors

To leverage the full potential of the ID system for seamless transactions, it is necessary to develop and strengthen the identity verification and authentication layer on the top of these foundations, leveraging technology, trust frameworks, the private sector, and the experience of other countries. Malawi is well positioned to give a further push to the digital transformation efforts by focusing the next few years on:

- Refining mechanisms for enabling service providers to verify identity (at registration) and authenticate people (when the service is delivered) *in-person*, with higher levels of assurance than a visual inspection of the ID cards would offer;
- Put in place a digital authentication mechanism for *remote* verification and authentication so people can securely transact and access services online.

1.1 COVID-19 tracking, testing and vaccination

At the Ministry of Health's (MoH)'s request, UNDP's NRIS Project supported the MoH with the development of a USSD application for people to report symptoms of COVID-19 to enable the

mapping of the spread of the virus. The NRIS also coordinated the development of an application for pre-registration for COVID-19 vaccinations, building on MoH's existing e-vaccine platform.

COVID-19 testing, and vaccination process have been closely aligned with the NRIS in Malawi. The NRIS Project co-designed COVID-19 contact tracing, geo-fencing, and patient registration apps in association with the Malawi University of Science and Technology (MUST). In addition, NRIS offered the MoH the use of a test server to host the COVID-19 Vaccine application developed by the NRIS ICT team for further support to MoH's e-Vaccine platform. On completing of the COVID -19 app the NRIS team installed it on this test server and sent it to MoH on a short-term loan.

1.2 Social protection programs

A trusted and inclusive foundational ID system with close to universal coverage can facilitate efficient and secure government-to-person (G2P) payments delivered as part of a government's social protection programs. The uniqueness of the ID number helps to ensure that G2P payments are only issued to the intended recipient and that there is no duplication of benefits. Furthermore, the unique ID is used to connect different government systems: for example, the social registry can use the unique ID to cross-check, in near real-time, whether the same individual is employed by the government or receiving benefits through another program. At the same time, care should be taken that data sharing across registries is done in a transparent, secure, and privacy-conscious manner. Finally, linking an ID to a government payment can help issue that payment to a fully functional financial account (by helping to meet the KYC requirements necessary to open an account), thus helping to build pathways to financial inclusion.

1.3 Financial inclusion and e-KYC

Digital ID systems can help government agencies, financial institutions, and other private sector companies to reduce operating costs associated with verifying a customer's identity, a process commonly referred to as electronic know your customer, or KYC. An ID system that allows for *electronic* KYC (e-KYC) enables institutions to electronically query a trusted ID database to authenticate a prospective customer and verify certain identity attributes about them. This can greatly lower the cost and risk associated with customer identity verification, which can enable financial providers to offer a broader suite of services and to do so at a lower cost, resulting in larger, more inclusive customer bases.

The rollout of this centralized e-KYC database will be utilized by all financial service providers for customer verification in delivery of various services. To date, multiple meetings have taken place between the NRIS team and the RBM resulting in five signed MoUs with FDH, First Capital Bank, MyBucks Bank and Ecobank.

1.4 Agriculture subsidies

1.4.1 Affordable Inputs Program and Farm Input Subsidy Program

UNDP's work with the Ministry of Agriculture to revive the Farm Input Subsidy Program (FISP) coupon redemption scheme began in 2019 using an Android mobile app, leveraging the national ID for authentication. More recently the mobile app was resurrected by developers from the Ministry of Agriculture based on the concept and prototype developed by UNDP, NRB and MoA in 2019. This AIP/FISP application was tested and implemented during the last Affordable Inputs Program (AIP) exercise.

The AIP app saved the Government of Malawi from printing manual coupons which used to be sourced outside the country on costly paper with multiple security elements. The cost of issuing paper coupons alone ranged from MK150 to MK170 million (US \$8.35 million to US \$ 9.47 million). In addition, there were costs to ensure security and distribution of coupons, the Ministry typically employed 10-20 temporary officers who were documenting and reconciling the coupons collected from selling points. With the current system, the company just needs two people to undertake the necessary duties

When the Ministry of Agriculture implemented the nationwide AIP for providing inputs to farming households it utilized the Ministry's Agriculture database with the full support of several other stakeholders including the NRB. The AIP adopted an electronic system which used the National ID to sell the inputs to farming households. For this to be possible, the data of farming households had to be validated with NRB's database. Using 2018-19 farming households census as the baseline, the Ministry of Agriculture had an initial target of 4,279,100 households for 2020-21 which, after validation with NRIS, decreased to 3,788,105, a reduction of 490,995 potential beneficiaries, which resulted in cost savings of MK10 billion (US \$0.56 million). The exclusions covered deceased beneficiaries, registration of household members as full households, duplicate and mismatched entries.

Further recommendations for the Ministry of Agriculture are to develop possibilities to submit online applications to further increase process efficiency and reduce operating costs.

1.5 Issuance of e-passports and e-permits

The linkage with the e-Passport System plays a pivotal role in the validation of the national identity cards submitted by passport applicants in the process of passport application. NRIS has reduced vetting costs associated with the process of identification, hence enhancing efficiency and effectiveness in the issuance of passports, and saving applicants an average of MK11,000 (US \$6.12) per application.

Plans include the use by the DOI of the birth certificates issued by NRB to Malawians (both by birth and descent) as validation documents for issuing passports to persons under 16 years of age.

1.6 Voter registration and elections management

National ID cards have been used as a proof of identify for the 2020 Presidential Elections to authenticate voters on election day. As a result of the adoption of the ID system, Malawi Electoral Commission's (MEC) operational costs have been drastically reduced compared to the 2014 elections. The operational costs of 2018 voter registration (VR) have been drastically reduced as compared to the 2013 registration as millions of paper-based voter registration cards have been eliminated in 2018 by using the national ID card instead and a significant increase in voter registration times - the average time to register a voter in 2018 was 30 seconds as opposed to the past when there were long queues.

According to MEC officials the use of the National ID card in 2018 to register voters cost seven times less than in 2013. The budget for 2013 was MK7,243,848 (US \$403,389), while in 2018 had been MK1,345,731 (US \$74,939). More importantly the biometric voters list hugely improved its accuracy because of the absence of duplications.

Further efforts should be invested into establishing an online verification ahead of the voter registration to enable a transparent and error free electoral process. A technical team had been composed in December 2021 with the purpose of establishing the active link between the two institutions.

Q: Explain how now KYC for many services have been simplified dramatically?

Digital ID systems can help government agencies, financial institutions, and other private sector companies to reduce operating costs associated with verifying a customer's identity, a process commonly referred to as electronic know your customer, or KYC. An ID system that allows for *electronic* KYC (e-KYC) enables institutions to electronically query a trusted ID database to authenticate a prospective customer and verify certain identity attributes about them. This can greatly lower the cost and risk associated with customer identity verification, which can enable financial providers to offer a broader suite of services and to do so at a lower cost, resulting in larger, more inclusive customer bases.

E-KYC is thus particularly important in efforts to expand financial inclusion, where the regulatory burden of Anti-Money Laundering / countering financing terrorism compliance can raise the cost of onboarding clients, thus reducing the incentives for financial institutions to accommodate low-income customers. Furthermore, by creating opportunities for digital, non-face-to-face onboarding (the process of registering and verifying a customer initially), e-KYC mechanisms can make it easier for governments to digitize G2P payments, reducing certain costs and risks associated with cash payments.

Malawi still has relatively low rates of financial inclusion (45 percent of adults had access to at least one formal financial services product as of 2018), despite substantial progress made over the past several years, thanks in large part to the uptake of mobile money. There is a persistent gender gap, as only 36 percent of women had access to a financial product in the same period.

Q: How you are expanding the linkages going forward as a strategic objective? Do you have an identity authentication service where agencies connect online and verify? What about offline, does that happen through the card itself?

Through Tony Blair Institute (TBI), the Presidential Delivery Unit (PDU) and NRB engages various ministries, departments, and agencies (MDAs) in a drive to expand linkages with NRB in a Digital ID Ecosystem and Data Harmonization. The engagements focus on brokering partnerships for different Ministries Departments Agencies and private sector to link with the National ID in order to authenticate different systems with the National Registration Identification System (NRIS) biometric database. In the last presidential delivery lab NRB immediate strategic objective was to create linkages between MDA information systems and NRIS, prioritizing 10 MDAs (Health, Agriculture, Department of Immigration, Malawi Electoral Commission, Ministry of Gender, Ministry of Lands, DHRMD, MRA).

This far NRB has managed to link with DHRMD on payroll, MEC on voter registration and identification, MRA on tax compliance, Department of Immigration on passport issuance, ministry of Agriculture on targeted farm input programs, Accountant General of pension payroll, department of Registrar General and commercial banks.

Q: What about Civil Registration. Where are you with that?

Birth registration and issuance of a birth certificate confer legal identity to a child. The birth certificate is often used as an identity document for children to access essential services such as healthcare and education. The NRB registers information on births and then reports this information to the National Statistical Office (NSO), which is responsible for producing and sharing statistics related to birth, deaths, and total population.

Following the implementation of the National Registration Act and regulations, the NRB has taken several steps, together with its partners, to improve the birth registration process. This includes the introduction of an Electronic Birth Registration System (EBRS) that has been installed in all major hospitals and allows health staff to electronically notify the NRB of births and deaths. Births are then recorded in the NRB's district registers, where births are recorded, as per the National Registration Act.

For health facilities that are yet to be connected to the EBRS, the NRB district offices regularly collect, by hand, paper-based records from these health facilities and enter the data. A birth registration record is then electronically transmitted to the national database, where they are deduplicated, and a unique ID number (UIN) is generated and assigned to the child, after which, the district offices issue the birth certificate, for the parents to collect.

Out of the 1.8 million electronic birth records created to-date, 915,580 certificates have been printed. However, only about 300,000 birth certificates have been collected by parents. There are likely multiple reasons for this: some parents are perhaps unaware that the certificate is available to collect; they may not be aware that the birth certificate is necessary for any specific purpose; others may not see much use of the birth certificate and therefore delay its collection; while others, especially those in rural areas, may delay collection due to the cost of traveling to the registration center.

In Malawi, 90 percent of births occur in health facilities, rather than at home. This high rate of institutional births provides a strong foundation for capturing of birth and death data and production of vital statistics. The Ministry of Health and Population and the NRB have also established a coding unit at the Kamuzu Central Hospital to code all the deaths occurring in health facilities. As of February 2022, NRB has rolled out mandatory registration of births in 582 public and private health facilities across the country and when a child is born in these facilities, parents are encouraged to register before the mother is discharged. However, out of the 582 facilities, only about 28 District Hospitals and the 3 Central Hospitals of KCH, Queens and Zomba have a VPN connectivity to GWAN that allows rollout of e-BRS and e-DRS for birth and death registration.

Birth registration rates are showing a positive trend in Malawi. The Demographic and Household Survey (DHS 2016) reported that 71 per cent of children under two years of age were registered, slightly more than the 65 per cent of children under the age five years who were registered at the time. However, there are still challenges with ensuring that birth certificates are received by the families, and with the seamless flow of birth registration data to the NRIS.

Q: What enabling legal environment are you trying to put in place?

Data protection

Malawi is yet to adopt a data protection law or framework to govern the collection and sharing of personal data. The advanced draft of Data Protection Bill was submitted to Ministry of Justice in the fall of 2021 for further processing, including presentation to Parliament.

The NIRA Bill

NRB has drafted the National Identification and Registration Authority (NIRA) bill, and undergoing consultation.

The new NIRA bill will be in line with best practices and will fill in the existing gaps in the National Registration Act and respective regulations. Some of the gaps to be addressed include the following:

- Cater for the new digital processes for notification registration, and certification of births, marriages, and deaths
- Provide for issuing of UIN from birth, and allow UIN to be recorded on birth, marriage, and death certificates.
- Align with international recommendations and clearly outlines the data elements to be registered in births, marriage, and death registries, and recorded on birth, marriage, and death certificates.
- Clearly outline which data elements to be collected by health authorities, and other authorities delegated with the power to notify births and deaths (if applicable).
- Clearly outline the processes for birth registration of refugees and stateless persons.
- Clearly outline processes for correcting and amending births, marriage, and death records.
- Allow for collection and sharing of civil registration data for statistical purposes
- Ensure that all civil registration is aligned to international recommendations and best practices.
- Allow for data transmission and sharing between foundational and functional registries, including legal safeguards.
- Data protection and privacy specifically for ID, which may not have been tackled by the main DP law.
- Allow for various types of credentials, which may take a form of plastic cards, mobile ID, digital version of the ID card or other digitally verifiable credential.

Q: How is the NRB funded today? And how do you intend to sustain it?

The current GoM budget for NRIS is not sufficient to meet the minimum requirements for recurrent costs such as salaries, rental space within Post Offices for local NRB field offices, ID card renewal costs, service contract fees to maintain last mile connectivity, and address the IT security needs. As the demand for NRB services increases, there is congestion at the District Registration Offices, creating delays for people seeking services.

Financial sustainability

While the Government of Malawi “has elevated NRB to be an essential service” (quote from UNDP partner), it struggles to meet its annual recurrent budgetary commitments. This financial instability underpins all other challenges.

Both sources of revenue - fees charged to the private sector for eKYC and fees charged to individuals – present challenges. The private sector requires a level of service which the NRIS cannot yet deliver, while the individual fees, combined with travel costs to DROs, create a substantial burden for many, especially considering that 70 percent of the population lives on less than US\$ 1.90 per day.

Further work needs to be done to position the national ID system as a critical national asset which is key to the national development agenda. The NRIS Project has done a preliminary analysis on the NRB’s financial and technical sustainability, which suggest that this situation will be greatly improved once the NIRA Bill is adopted, establishing NRB as an independent authority. This will be one critical step in helping NRB become an institution with adequate funding, staffing, and control over revenues and expenses.

Document URL:

https://www.id4africa.com/2022/files/ID4Africa_LiveCast_Supplement_NRB.pdf