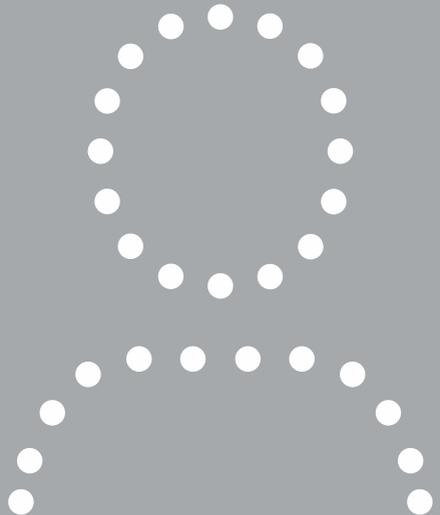

GEN
KEY



Erasing ghost workers

What we do. How we do it.





We have a problem. Public sector workers have been increasing rapidly in Africa, and with this increase comes a rise in fraud related activities. Public sector fraud such as existence of ghost workers and making repeated payments for the same work done to different accounts costs Africa a loss of 50 billion USD annually. The problem keeps persisting, but the application of biometrics in the public sector provides a way out.

The number of workers in the civil service has been increasing globally and across Africa, registering a population of 450+ million civil servants¹. The rise in the members of the public sector is accompanied by the rise in fraud in the sector. Fraud is orchestrated by many parties in the public service scheme: from individual consultants, payroll engineers, recruitments and human resource managers to average public sector entry-level level employees.

Numerous countries in Africa have reported several cases of fraud² resulting in huge losses to governments and states. Many publications have been made proposing different measures to stop and reduce public sector fraud, and to curb its impacts on citizens.

Public sector fraud can occur in many instances. The situation of ghost workers - making payments to dead or fictitious accounts, making multiple payments to the same accounts, making the same payments to multiple accounts or making payments for work no done, are different instances of fraud perpetuated in the public sector.

Africa loses an estimated 50 billion US Dollars annually³ due to these public sector fraud and their fraud related activities.

This problem can however be stopped and prevented.

Africa loses an estimated 50 billion USD from public sector fraud and other fraud related activities.

¹ https://www.ilo.org/public/english/bureau/stat/download/wp_pse_e.pdf

² <https://www.bbc.com/news/world-africa-46520946>

³ <https://www.un.org/africarenewal/magazine/december-2013/africa-loses-50-billion-every-year>

How can biometrics help solve this problem sustainably?

Biometric-based civil registers provide a viable solution towards preventing fraud and erasing ghost workers in the civil service. Such registers provide numerous benefits such as enabling proof-of-presence and enabling multi-modal systems for various harsh circumstances.

Biometric ID systems for civil registers can broadly be constituted of three interconnected elements. These are:

- **Identity** - Building a clean civil register and ID verification

- **Management Information System** - A central hub that classifies, updates and processes the data

- **Beneficiary Programs** - Linking the register to various programs such as payment of salaries, tracking payments and Human Resource management.

In order for any ID management initiative to work effectively, each part of this process must work together efficiently and securely, from identifying members and building a register to initiating any auxiliary beneficiary program, ensuring a strong end-to-end infrastructure.

Biometric based civil registers can go a long way to prevent fraud in the civil service by initiating a simple 3-faced solution.



Identity



Beneficiary Programs



MIS

How this works



Identity

Identity has three core functions that provide a complete end-to-end solution. These are:

- Registering people's data.
- Making sure every identity is unique.
- Verifying a person's Identity (e.g. when receiving payments or benefits).

The first function, registering people's data, builds the biometric register in order to identify, classify and target eligible civil servants for benefits. Using GenKey's purpose-built software and tablets, trained operatives can register targeted populations, capturing a mixture of biometric and biographic data.

The second function, making sure every identity is unique, is critical to ensuring the register is credible and that one person = one unique ID.

GenKey's ABIS solution maintains and updates the registered data, running a constant deduplication check to ensure every ID is unique. This process of enrollment and deduplication happens continuously so that the data is always up to date – especially important in countries with high levels of migration.

The third function, verifying a person's ID, enables operators to quickly authenticate the identity of members, ensuring any right benefit goes to the right claimant. This is a quick task, with members simply placing their finger on a mobile scanning device, or having their eyes against an iris scanner, or by the use of any other modality. Using a tablet, the operator can then access the MIS to validate, accept or reject a beneficiary on the spot.

Tablets can be configured to the needs of each government department / agency, and can also be integrated with various beneficiary programs such as salary payments or HR management.

Management Information

Systems (MIS)

The Management Information System (MIS) handles the member and beneficiaries information. It classifies each member according to their biographic, socio-economic or any other specific data, to allow for easier management of members of any civil register.

Multiple government departments and agencies are able to retrieve and update the MIS, by verifying a person's unique ID.

GenKey partners with MIS providers.

Beneficiary Programs

When a credible civil register is built and an MIS is in place, governments and agencies are capable of providing programs and services to beneficiaries, such as the payment of salaries, the provision of social assistance or the execution of any beneficiary program through verifying each identity.

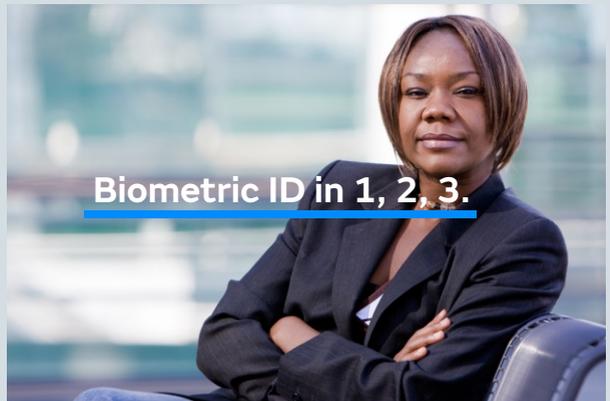
When a beneficiary program is linked to a credible biometric-based register (via the MIS), the program coordinating agency can reliably verify a member's identity before issuing any assistance or payment of salaries, potentially saving millions of dollars in fraud and misdirected payments.

Our expertise is founded in the 'ID'.

No single biometric provider can offer a complete end-to-end biometric ID management and beneficiary system. Each of the core three functions (identity, MIS and beneficiary programs) require specialist technical expertise.

GenKey's expertise is in providing leading biometric identity solutions, from registration to verification.

Our technology is designed to integrate with partner systems to create a seamless experience for governments, from setting-up a register to issuing benefits. When created and deployed effectively, biometric-based civil registers are key drivers for socio-economic development. The benefits are enormous, ranging from saving millions through fraud reduction and ensuring beneficiaries of payments receive what is due them.





**Registration of the Prime Minister of Niger,
Brigi Rafini**

Case Study: Building a civil register in Niger

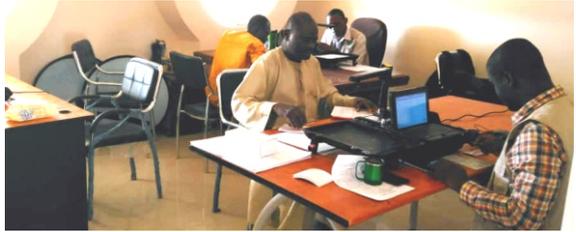
The Problem.

Niger has been faced with a sharp increase in members of the civil service sector as a result of several major recruitments. At the end of 2017, the civil service number was estimated at around 130,000 persons.

Due to the diversity of services involved in the management of the careers and remuneration of civil servants and the lack of accurate coordination of centralized services, it is highly impossible to produce exact statistics on the number of staff in the civil service. Controlling the figures is even more difficult for contract staff which were recently added to the national pay management services of the State.

The situation is practically the same at the level of the Agence Nigérienne des Allocations et des Bourses (ANAB), the State structure in charge of managing grants and various allowances for the benefit of Niger students. The institution experiences enormous difficulties in controlling the actual number of staff and, incidentally, in its annual budget programming.

Consequently, there is not a comprehensive Human Resource and ID management system for public officials (civil servants, contract workers, auxiliaries, national civic service conscripts), pensioners, and students receiving grants and social assistance.



What we're doing to solve the problem.

GenKey is building a biometric system for registering, identifying and authenticating state employees and students receiving grants and/or various forms of social assistance. This will serve as an emblem of a future national population register, to which other systems of identification, verification and authentication can be grafted.

The biometric system will also be the exclusive source of basic data for business whose processing involves individuals who must first be identified, for example, the Human Resource Management Information System (HRMIS). More specifically, an individual only appears in the HRMIS if and only if the person has been identified in the biometric system.

GenKey's Necto, a complete biographic and biometric registration and verification solution, GenKey's SPIRE, an Identity Management Solution capable of maintaining and managing individual Identity Profiles across different contexts, and GenKey ABIS, GenKey's deduplication solution, are part of the GenKey solution being used to enroll ultimately the 400,000 civil servants, students and retirees.

“We are committed to helping PCDS to enhance the performance of the different ministries. Our biometric technology is a very effective tool to identify uniquely all beneficiaries of the state.”

Michiel Loeff, CEO GenKey

Impact of what we're doing.

A system of hierarchical registers will be set up and will include the national identification register, the register of public officials, the register of pensioners and the register of students. Consolidated registers and files containing cleaned and sanitized data will also be established and validated.

At the end of the project, the state of Niger will also be able to monitor the target population in an automated way. Each individual in the target population will be enrolled in a unique way, so as to constitute sanitized and audited registers that will be used by the services concerned. Identification cards for the target populations will be printed and distributed.

“Being able to ensure that the Government of Niger is only paying legitimate beneficiaries is essential and provides a quick return on investment for the project. Moreover, the biometric registration will allow some future applications to be deployed, such as proof of presence and biometric identification for sensitive access control.”

Marie Claire Hanounou, Director of the PCDS



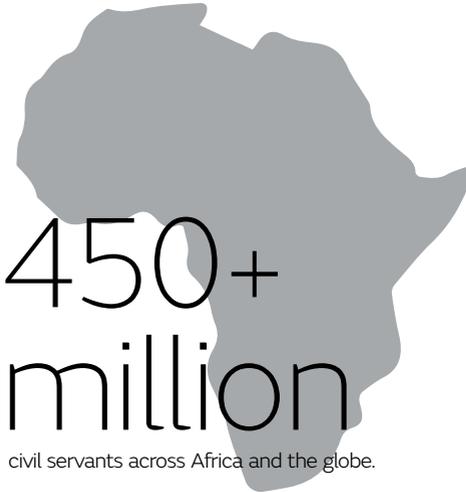
Registration of the Niger Minister of State for Interior, Mohamed Bazoum

Reducing public sector fraud, one person at a time.



50 billion

An estimated 50 billion USD lost each year in Africa due to public sector fraud and other fraud related activities.



450+
million

civil servants across Africa and the globe.

130k

130,000 civil servants in Niger alone according to a 2017 census.

400k

GenKey is ultimately enrolling 400,000 civil servants, students with grants and pensioners of the state.

We're GenKey. We're experts in biometrics.

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We work with governments and their partners to help millions of people across Africa to register and verify their identity.

Our 3 step approach is proven to deliver large scale ID programs across a wide range of markets, including elections, healthcare and social protection to name a few.

There are 1 billion people with no legal identity, that means no birth certificate, no ID card, no passport. Nothing. What's more, it's estimated that over 600 million children alive today have no registered birth. Access to a legal identity is one of the UN Sustainable Development Goals. It calls for every person to have a legal identity by 2030.

It's GenKey's mission to help bring about *Identity for all.*