Building a better future for all

with a citizen digital & biometric ID system

Advancing what matters

Atos

850 million people

globally are living without a legal and verifiable ID[1]

[1]ID4D Global Dataset, World Bank 2021

Citizen digital ID: an essential building block

A secure citizen digital ID is the foundation of a well-functioning and inclusive society. Without proof of identity, people can't exercise their rights or access essential services. An effective citizen digital ID system also helps governments to keep their citizens and nation states safe and secure.

Yet, for a host of reasons, it has proved too complicated or too costly for many governments to implement a uniform citizen digital ID strategy. Meanwhile biometric technologies are evolving to offer new levels of trust and security.

Here's where Atos can help.

As a trusted partner and technology integrator, Atos is focused on accelerating the shift to a safe and secure digital society. We design, integrate and operate secure citizen digital ID & biometric ecosystems, enabling governments and public agencies to meet critical challenges and build a better future for all.

Today's citizen digital ID landscape

Global inclusion is increasing

Unique digital IDs empower citizens into more opportunities throughout their lives, from accessing education and financial services, to benefitting from healthcare and social support.

That's why the World Bank is actively involved in financing digital ID systems as part of its mission to promote inclusive and sustainable development.

Its Identification for Development (ID4D) initiative exists to accelerate delivery of robust, inclusive and responsible digital identification systems as a priority.

ID4D is currently helping 49 countries to implement ID and civil registration systems. This includes shaping $1.5 billion in financing in 35 countries.

Driving development across Africa

About 542 million people in Africa do not have a foundational identification[2]

The African Union's Digital Transformation Strategy for Africa (2020-2030) aims to create an inclusive digital society and economy across the continent. The target is for 99.9% of people in Africa to have a digital legal identity by 2030. This aligns with the World Bank's Digital Economy for Africa initiative to ensure that every individual, business and government in Africa is digitally enabled by 2030.

Harnessing the power of biometrics

In every country and across many sectors, the use of contactless identification has increased dramatically since 2020. This creates new demands and opportunities for governments and citizens.

Biometric technologies have matured. Fingerprint, iris and facial recognition are powerful ways to help prevent fraud, enhance data security, and provide a fast, reliable and trusted means of unique identification.

[2]Digital Transformation Strategy for Africa 2020-2030

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Makhtar Diop's

Managing Director and Executive Vice President - International Finance Corporation (World Bank Group)

'ID's are taken for granted by those who have them. But lack of identification creates barriers for each individual affected and for the countries they live in'

A day in the life of a citizen

A citizen-centric digital & biometric ID: security, trust and inclusion

Citizen-Centric Digital ID System

Rayan starts his day by heading to his university to attend classes. As he enters the campus, he simply scans his Citizen Digital ID and biometry at the entrance gate, granting him access to the facilities and verifying his student status

After a productive day at university, Rayan decides to grab lunch at the nearby café. However, on his way there, he witnesses a minor accident involving a pedestrian and a motorbike. Concerned for the victim, Rayan quickly calls emergency services. When the police arrive, Rayan uses his digital ID to provide his contact information and eyewitness account, assisting in the incident report

Later in the afternoon, Rayan visits a hospital to pick up some medication. At the pharmacy, he uses his digital ID to access his medical records and ensure that the prescribed medication is correct

In the evening, Rayan receives a notification on his smartphone reminding him to pay his electricity bill. He opens the app of the electricity agency, where his digital ID is already linked to his account. With just a few taps, Rayan securely completes the payment

Before heading home, Rayan stops by the telecom agency to inquire about upgrading his mobile phone plan. Using his digital ID and biometry, he swiftly verifies his identity and preferences, allowing the telecom agent to tailorthe best plan for him in minutes.

Key challenges for governments and agencies

A secure and unique digital ID is essential for citizens to access not only public services and voting rights, but also everyday private sector services such as telecoms, banking and credit facilities.

Yet while the benefits are clear, many governments face significant challenges in the face of technical and resourcing constraints.

Cost. Investment required to build and connect new systems from scratch can be prohibitive for governments and public agencies.

Trust. In the digital world, citizens need to learn to trust online transactions. Governments and public service providers must ensure that citizens and consumers are safe.

Data governance and compliance. Meeting local regulatory requirements is critical, particularly in relation to how and where data is stored and how personal data is used.

Citizen experience. Systems and services need to be designed with citizens at the heart to build responsive services and avoid costly or inefficient siloes.
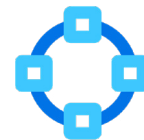
Interoperability. As systems evolve for different organizations and providers, it's critical that common standards and frameworks are followed so that data flows and services are joined up.

Measurable success. Public and private sector use cases need to be carefully selected and outcome-driven to ensure returns on public investment.

# Advancing your digital & biometric ID system together

Whether you are starting from scratch, or already have a citizen digital ID system, we can help.

Atos works with governments, agencies and their partners, encompassing

every element of a citizen-centric digital & biometric ID system.

Dedicated to digital inclusion, we know what it takes to design and deliver exceptional citizen-centric experiences while aligning with your operational goals.

Whatever platform you choose, our experts will work with you and your partners to:
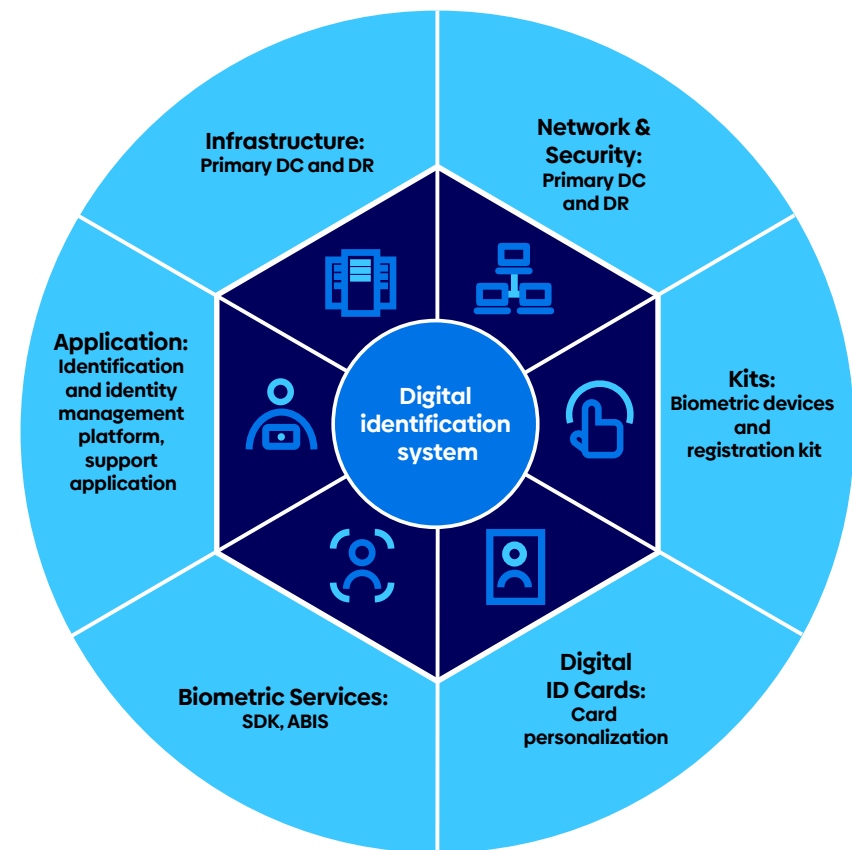
- Shape and articulate your citizen digital & biometric ID vision

- Design and customize the right digital ID & biometric solutions end to end

- Create a seamless and responsive citizen-centric experience

- Devise and deliver data security, governance and compliance

- Design business processes and workflows

- Integrate and orchestrate your citizen digital & biometric ID system.
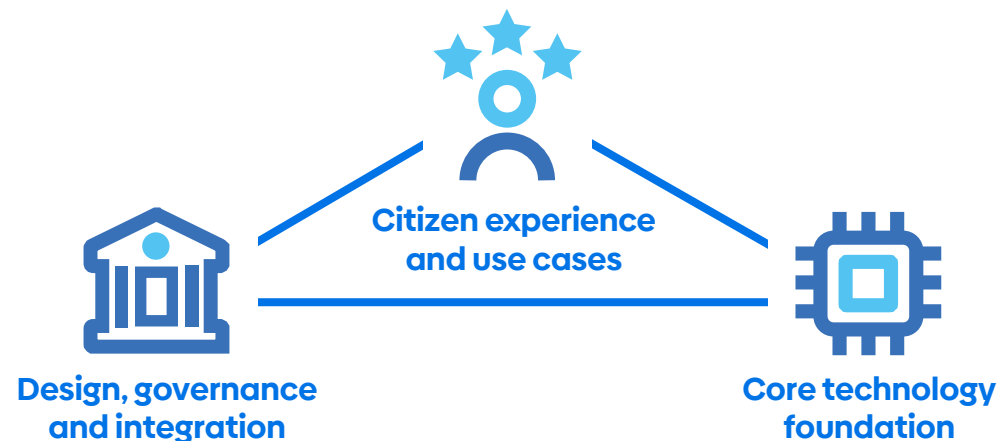
Our catalog of solutions and services

We use modular building blocks and open architecture, bringing governments, public agencies and their partners an efficient and flexible way to advance faster together.
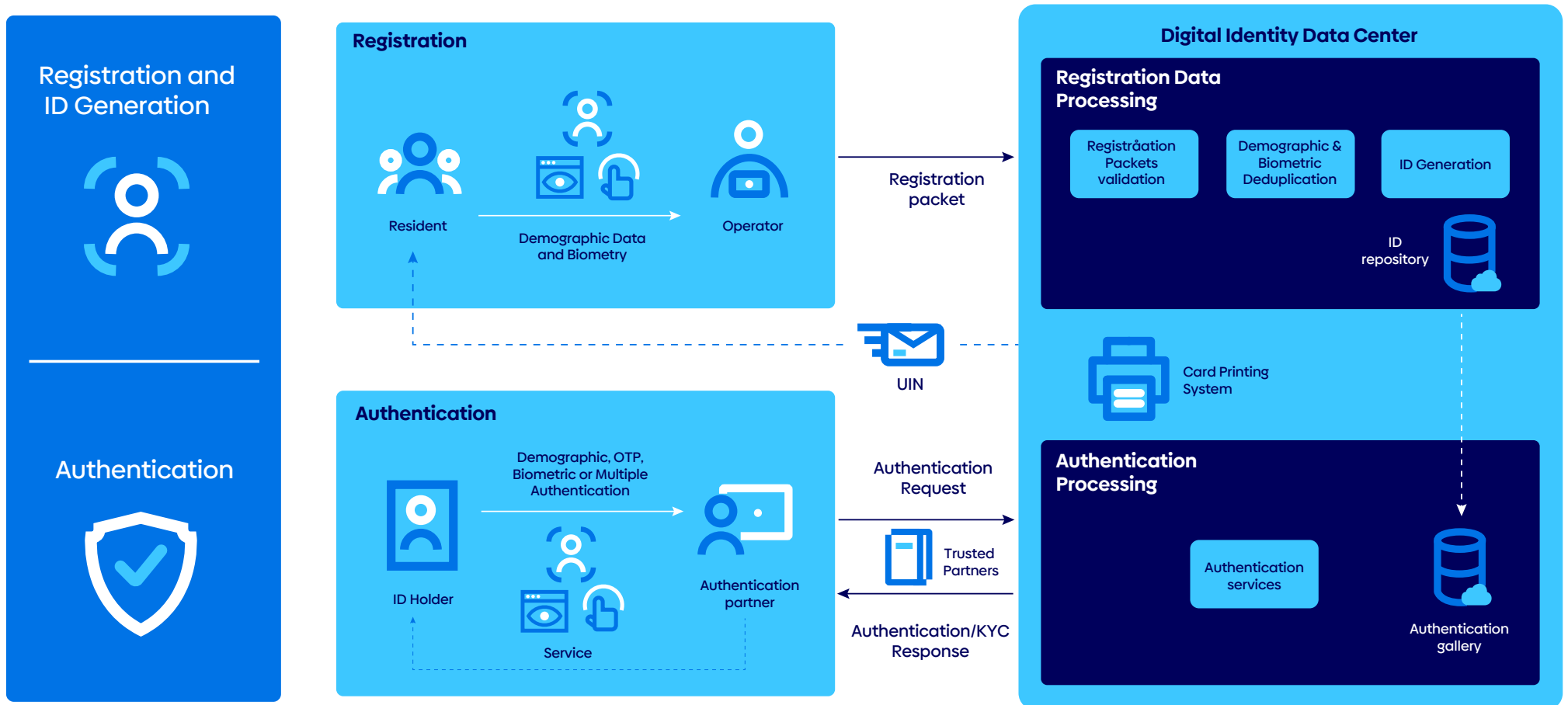
We leverage a combination of biometric authentication, identity proofing and identity federation technologies to establish and verify the digital identity of individuals in various contexts, such as online transactions, access to critical systems, and e-government services.

Citizen experience and use cases

Design, governance and integration

Core technology foundation

Infrastructure: Primary DC and DR

Network & Security: Primary DC and DR

Application: Identification and identity management platform, support application

Digital identification system

Kits: Biometric devices and registration kit

Biometric Services: SDK, ABIS

Digital ID Cards: Card personalization

How a citizen digital & biometric ID system works

Logical View

Registration and authentication processes

Registration and ID Generation

Authentication

Registration

Resident → Demographic Data and Biometry → Operator

Registration packet →

UIN

Authentication

ID Holder → Demographic, OTP, Biometric or Multiple Authentication → Authentication partner

Service

Authentication Request →

Trusted Partners

← Authentication/KYC Response

Digital Identity Data Center

Registration Data Processing

- Registråation Packets validation
- Demographic & Biometric Deduplication
- ID Generation

ID repository

Card Printing System

Authentication Processing

- Authentication services

Authentication gallery

Safeguarding citizens, building trust

We leverage our expertise in cybersecurity and data privacy, we design and deploy secure digital & biometric ID processes that mitigate fraud, enhance privacy and enable secure access to digital services. Incorporating advanced biometric, cryptographic and authentication technologies, we help to build trust and security in digital interactions.

This includes implementing robust cybersecurity measures, encryption protocols and secure data storage practices to safeguard the integrity and confidentiality of digital identities.

We also provide continuous monitoring, threat detection and incident response capabilities to protect against evolving cyber threats.

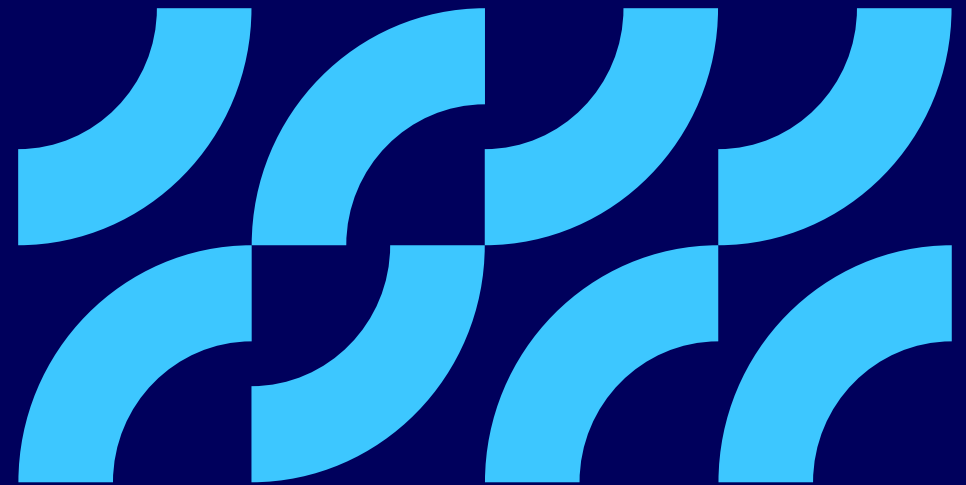# Citizen digital & biometric ID in the cloud

We can work with on-premise infrastructure, or we can help you to move to cloud with a smooth and secure migration.

With more and more governments and enterprises moving to cloud, we can help you put your digital & biometric ID system in the cloud, with infrastructure, security and management services all provided.

This will bring you all the benefits of cloud: high availability, scalability, agility and efficiency. Infrastructure as Code is faster, simpler, easier. And you no longer need any on-premise infrastructure.

As a trusted partner and co-innovator, we work closely with hyperscalers around the world to ensure public bodies get the best from a hybrid cloud environment.

If you're interested in moving to cloud, we'll work with you to understand your business strategy and requirements. Our experts will help you choose and implement the cloud strategy that's right for you.

Why Atos?

Our unique combination of experience and capabilities makes us an ideal partner to help build the citizen digital & biometric IDs of the future.

Our proven and innovative solutions

You can effectively mitigate risks and optimize your efficiency using our comprehensive portfolio of ready-to-go customizable solutions. With our open and modular approach, you get flexibility to adapt and evolve. And early investment won't go to waste if your needs change.

Our integration expertise

Our business is built on our ability to orchestrate and integrate seamless solutions, in collaboration with our trusted partners. That means that we can work in any country with the partners of your choice while enabling standardization, best practice and interoperability.

Our experience

Our expert team has a strong track record on complex citizen digital & biometric ID projects to deliver the required results for governments and their partners.
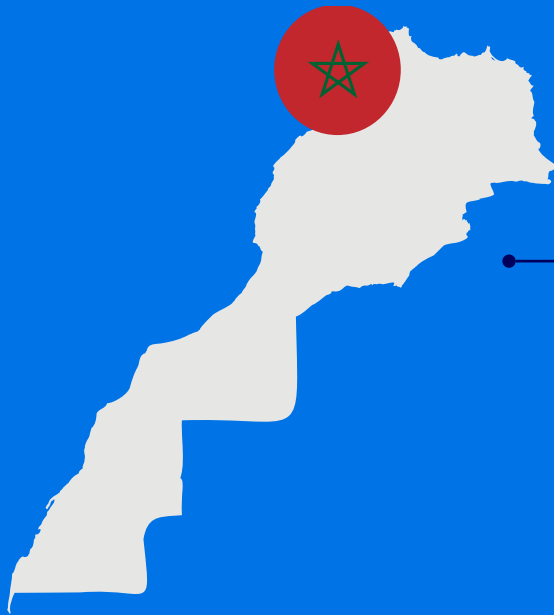
Morocco

In Morocco we helped the Government to build its National Population Registry (NPR), which is crucial to advancing social inclusion. NPR is a comprehensive administrative directory for the people of Morocco, providing streamlined access to essential services. It securely stores demographic and biometric data, offering reliable identification and authentication services. Each entry is unique, enhancing accuracy and reliability through meticulous data deduplication. The platform is integrated with external security and civil registration systems and already encompasses four public agencies as authentication partners.

Togo

In Togo we're helping the Government to implement its digital identification system (e-ID Togo), which assigns a unique identification number to Togolese nationals and residents using demographic and biometric data for identity verification, ensuring access to reliable public, private and social services. The e-ID Togo system is part of a broader initiative by the Economic Community of West African States (ECOWAS) to create interoperable identification systems across six countries. This regional approach aims to facilitate identity cards equipped with digital unique IDs and QR codes, benefiting over 100 million citizens.

What's next?

Advancing together.

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About Atos

Atos is a global leader in digital transformation with c. 95,000 employees and annual revenue of c. € 11 billion. European number one in cybersecurity, cloud and high-performance computing, the Group provides tailored end-to-end solutions for all industries in 69 countries. A pioneer in decarbonization services and products, Atos is committed to a secure and decarbonized digital for its clients. Atos is a SE (Societas Europaea) and listed on Euronext Paris.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Find out more about us

atos.net
atos.net/career

About Tech Foundations

Tech Foundations is the Atos Group business line leading in managed services, focusing on hybrid cloud infrastructure, employee experience and technology services, through decarbonized, automated and AI-enabled solutions. Its 48,000 employees advance what matters to the world's businesses, institutions and communities. It is present in 69 countries, with an annual revenue of € 6 billion.