



# E-GOVERNANCE IN SOUTH AFRICA 2025

PROSPECTS AND CHALLENGES

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This report outlines South Africa's digital governance strategy, anchored in long-term frameworks such as the National e-Government Strategy and the 2025 Digital Transformation Roadmap. It highlights key initiatives including the rollout of digital identity and biometric systems, the eFiling platform for taxes, and integrated services in education, healthcare, and justice. The report also details regulatory developments in data protection, cybersecurity, and AI, alongside technical efforts to improve interoperability, accessibility, and digital inclusion. While progress is evident, challenges remain in modernizing legacy infrastructure and coordinating fragmented initiatives.

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# Introduction

The process of e-government development in South Africa dates back to 2001, when the Electronic Government. The Digital Future: A Public Service IT Policy Framework<sup>1</sup> was introduced. The Framework identified four key areas for the sector development, namely the interoperability of systems, information technology security, economies-of-scale, and elimination of duplication within the sector.

Digital development in South Africa is guided by the National Development Plan: Vision 2030<sup>2</sup> developed in 2012 by the National Planning Commission with the objective of making South Africa an inclusive digital society. The process was supported by the elaboration of the National Integrated ICT Policy White Paper<sup>3</sup> in 2016. The document is built on three pillars crucial for successful e-government development and creation of digital society. Among them were digital transformation, access and inclusion.

The National e-Government Strategy and Roadmap<sup>4</sup>, worked out in 2017 by the Telecommunications and Postal Services Department (The Department of Communications and Digital Technologies since 2019), outlines a new approach to electronic government development and sets a programme of action. As stated in the Strategy, more focused attention was planned to be given to infrastructure development, acceleration of the expansion of

e-Government services and development of e-Government platforms.

In 2020, the Knowledge Executive, a Canadian consulting agency, and Genesis Analytics, a South-African based consulting firm drafted the ICT and Digital Economy Master Plan for South Africa<sup>5</sup>. The Master Plan offers a wide range of suggestions on how South Africa could benefit from the use of digital technologies, as well as provides some insights on coordination of the digital ecosystem of the government and private actors.

## In May 2025, the Government introduced the South Africa's Roadmap For The Digital Transformation Of Government<sup>6</sup>

The strategic document was elaborated within the MyMzansi<sup>7</sup> project, which is a unified digital government services initiative and is to serve as a platform with data resources on the Roadmap implementation. The document was collaboratively elaborated by the Interdepartmental Working Group (IDWG), comprising the Presidency and Secretary of the Cabinet, the Department of Communications and Digital Technologies and National Treasury, as well as the Government Information Technology Officers Council (GITOC). The Roadmap is envisaged to be implemented in two phases (2025-2027 and 2028-2030), and builds on the experience of India, Brazil and the United Kingdom.

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1 Department of Public Service and Administration. Electronic Government. The Digital Future. A Public Service IT Policy Framework. URL: [https://www.gov.za/sites/default/files/gcis\\_document/201409/it0.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/it0.pdf)

2 The Presidency. National Planning Commission. National Development Plan 2030: Our future - make it work. URL: [https://www.gov.za/sites/default/files/gcis\\_document/201409/ndp-2030-our-future-make-it-work.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-work.pdf)

3 Department Of Telecommunications And Postal Services. Electronic Communications Act: National Integrated ICT Policy White Paper. URL: [https://www.gov.za/sites/default/files/gcis\\_document/201610/40325gon1212.pdf](https://www.gov.za/sites/default/files/gcis_document/201610/40325gon1212.pdf)

4 Department Of Telecommunications And Postal Services Notice 886 Of 2017. National e-Government Strategy and Roadmap. URL: [https://www.gov.za/sites/default/files/gcis\\_document/201711/41241gen886.pdf](https://www.gov.za/sites/default/files/gcis_document/201711/41241gen886.pdf)

5 Genesis Analytics and Knowledge Executive. ICT and Digital Economy Masterplan for South Africa. URL: [https://www.ellipsis.co.za/wp-content/uploads/2020/08/ICT-and-Digital-Economy-Masterplan-for-South-Africa\\_Draft-for-discussion\\_-August\\_-2020.pdf](https://www.ellipsis.co.za/wp-content/uploads/2020/08/ICT-and-Digital-Economy-Masterplan-for-South-Africa_Draft-for-discussion_-August_-2020.pdf)

6 Republic Of South Africa. South Africa's Roadmap for the Digital Transformation of Government. URL: [https://www.stateofthenation.gov.za/assets/downloads/South\\_Africa\\_Roadmap\\_for\\_the\\_Digital\\_Transformation.pdf](https://www.stateofthenation.gov.za/assets/downloads/South_Africa_Roadmap_for_the_Digital_Transformation.pdf)

7 MyMzansi. A Roadmap for the Digital Transformation of the South African Government. URL: <https://www.mymzansi.org.za/>

The roadmap encompasses four key digital government initiatives aimed at transforming public service delivery:

1. **Digital Identity** focuses on enabling secure, functional digital IDs and a system for verified document sharing and digital wallets.
2. **Data Exchange** enhances the use of government data through real-time access for operational needs, bulk access for policy-making and research, and the development of personalized and proactive public services.
3. **Digital Payments** aims to streamline financial interactions with instant, effortless payments, improved social grant distribution via SASSA, and integration of government-to-person (G2P) payments into the IFMS system.
4. **Trusted Digital Channels** strengthens digital engagement through the GOV.ZA information portal, the MyMzansi services platform, and an integrated HR management system.

These initiatives are supported by coordinated delivery via an Inter-Departmental Working Group (IDWG), the development of internal digital capabilities, innovation partnerships with non-government actors, and foundational enablers such as standards, interoperability, and security.

The South African ICT landscape features a diverse array of international investors, including companies from the United States, European countries, China, and other regions. In 2022, the World Bank estimated<sup>8</sup> that the amount of public private partnerships investment in ICT was USD 198.5 mln. In 2023, investment in ICT with private participation in South Africa comprised<sup>9</sup> USD 230,000.

In March 2025, the European Union (EU) announced<sup>10</sup> an investment package worth **USD 5** bln under the Global Gateway Initiative. The partnership encompasses<sup>11</sup> development in various areas (energy transition, pharmaceutical industry, ICT). In terms of digital development, it targets **digital regulation** development (ICT policies, cross-border data governance) and **rural connectivity** via expansion of telecom infrastructure.

European firms, including Vodacom (a subsidiary of the UK's Vodafone), have pledged significant investments in South Africa's ICT sector. Over the 2018-2023 period, Vodacom committed<sup>12</sup> ~USD 3,2 bln over five years to enhance network resilience and expand rural coverage. Cassava Technologies, a UK-headquartered company operating in the domains of fiber networks, data centers, renewable energy, cloud and cybersecurity, has allocated ~USD 247 million for fiber network and data centers network expansion.

The United States Trade and Development Agency (USTDA) largely supported the development of the sector as well. In 2017, USTDA provided<sup>13</sup> a grant to the City of Cape Town to fund a feasibility study assessing investments in enabling infrastructure, intelligent transportation systems, safety and security, digital inclusion, and digital literacy. Over USD 100 mln was allocated for the projects coming after the study. The following year USTDA hosted the South Africa Smart Cities Reverse Trade Mission (RTM). In 2021, USTDA partnered with Dark Fibre Africa (DFA), a local provider of telecommunications infrastructure. The initiative was aimed at funding a feasibility study for expanding fiber networks into South Africa's rural areas.

8 The World Bank. Private Participation in Infrastructure Project Database. Public private partnerships investment in ICT (current USD). URL: <https://data.worldbank.org/indicator/IE.PPN.ICTI.CD>

9 The World Bank. Private Participation in Infrastructure Project Database. Investment in ICT with private participation (current USD). URL: <https://data.worldbank.org/indicator/IE.PPI.ICTI.CD>

10 Reuters. EU pledges 4.7 billion euros to South Africa as Trump brings them closer. URL: <https://www.reuters.com/world/africa/european-union-announces-47-billion-euro-investment-package-south-africa-2025-03-13/>

11 European Commission. International Partnerships. South Africa. URL: [https://international-partnerships.ec.europa.eu/countries/south-africa\\_en](https://international-partnerships.ec.europa.eu/countries/south-africa_en)

12 Engineering News. Firms pledge billions worth of ICT investments in South Africa. URL: <https://www.engineeringnews.co.za/article/companies-pledge-billions-for-ict-investment-in-south-africa-2023-04-28>

13 USTDA. USTDA Supports ICT in South Africa with U.S. Technologies. URL: <https://www.ustda.gov/ustda-supports-ict-in-south-africa-with-u-s-technologies/>

# E-Government in South Africa

## 2024

Draft National Artificial Intelligence (AI) Plan released at the National AI Summit 2024 — Phase II of South Africa Connect Project rolled out

Defence Artificial Intelligence Research Unit (DAIRU) launched

The National Policy on Data and Cloud published

Biometric Movement Control System (BMCS) deployed at 68 ports of entry

## 2022

AI Institute of South Africa (AIISA) established

The South Africa e-Visa implemented

## 2019

The SITA 2020–2024 Strategic Plan approved

The National Department of Communications and Digital Technologies was established

## 2017

The National e-Government Strategy and Roadmap worked out

## 2015

The e-Tender Publication portal and the Central Supplier Database

Gauteng Department of e-Government established, Gauteng and Western Cape e-Government Strategies were developed

## 2013

The Protection of Personal Information Act adopted

## 2012

ICT Modernisation Programme initiated

The e-Government Framework was developed and SITA started offering e-services

## 2003

A free SARS eFiling platform launched for submitting tax returns and declarations, etc.

## 1998

The South African Multiple Option Settlement (SAMOS) system developed by the South African Reserve Bank (SARB)

## 1995

The White Paper on the transformation of public service released

## 2023

Gauteng Digital Platform launched

First digital census completed

## 2020

The Official Identity Management Policy published

## 2018

The National e-Government Central Portal was launched

SARB introduced the National Payment System Framework and Strategy: Vision 2025 and the National Payment System policy was issued

Launch of e-Government Central Portal and the Government Private Cloud

## 2016

The ABIS (Automated Biometric Identification System) project was started

The National Integrated ICT Policy White Paper adopted

## 2014

The Department of Telecommunications and Postal Services established

## 2011

The Centre for Artificial Intelligence Research (CAIR) established

## 2004

The e-Government Batho Pele Gateway (a publicly accessible, central government services information portal) established

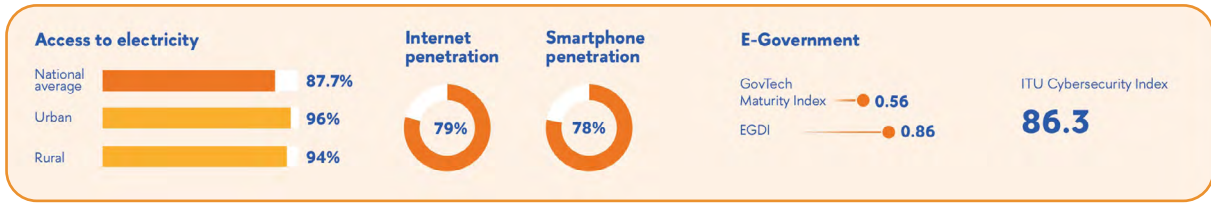
## 2002

The State IT Agency (SITA) established

The Electronic Communication and Transactions Act adopted

## 1997

The Batho Pele White Paper on transforming public service delivery released



Source: prepared by the HSE Center for African Studies based on data of the World Bank and ITU.

In 2022, the U.S. International Development Finance Corporation (DFC) allocated<sup>14</sup> USD 83 million for development for Africa Data Centers, the continent's primary network of data center facilities with headquarters in South Africa. The funding is a part of a USD 300 loan provided by DFC, with the funds being allocated not for development of South African data storage facilities, but also in other countries where Africa Data Centers operate.

Asian countries are also expanding to the South African ICT market. In 2023, South Africa and Singapore signed a Memorandum of Understanding (MoU) with an objective to foster digital transformation and capacity building. Within the Singapore-Africa Partnership launched in 2022, over 1000 South African officials were trained<sup>15</sup>.

Chinese companies have made substantial inroads into South Africa's ICT infrastructure and services. In 2019, Huawei established a cloud data center in Johannesburg, thus expanding its services across government, finance, education, and telecom sectors. In 2023, Huawei inaugurated an Innovation Center in Johannesburg. South African President Cyril Ramaphosa lauded the initiative, emphasizing its role in propelling the country into the Fourth Industrial Revolution by fostering technological advancements and innovation. The same year the company partnered<sup>16</sup> with South Africa's Department of Communications and Digital Technologies (DCDT) to support broadband infrastructure development and skills training.

China Telecom, a state company, collaborates with MTN South Africa, second largest local operator, and Huawei. In 2024, three companies signed<sup>17</sup> a MoU to collaboratively develop in 5G, cloud, AI and business solutions.

## Rankings

**In the 2024 United Nations E-Government Development Index (EGDI), South Africa ranked 40th out of 193 countries, maintaining its position as the continent's leader in e-government development**

Its EGDI score improved from 0.73 (2022) to 0.86. This indicates ongoing progress in digital government development.

## Regulatory authorities

The **National Department of Communications and Digital Technologies** was established in 2019. It is the leader of South Africa digital transformation and is mandated to foster the adoption of technologies of the Fourth Industrial Revolution (4IR) in the country.

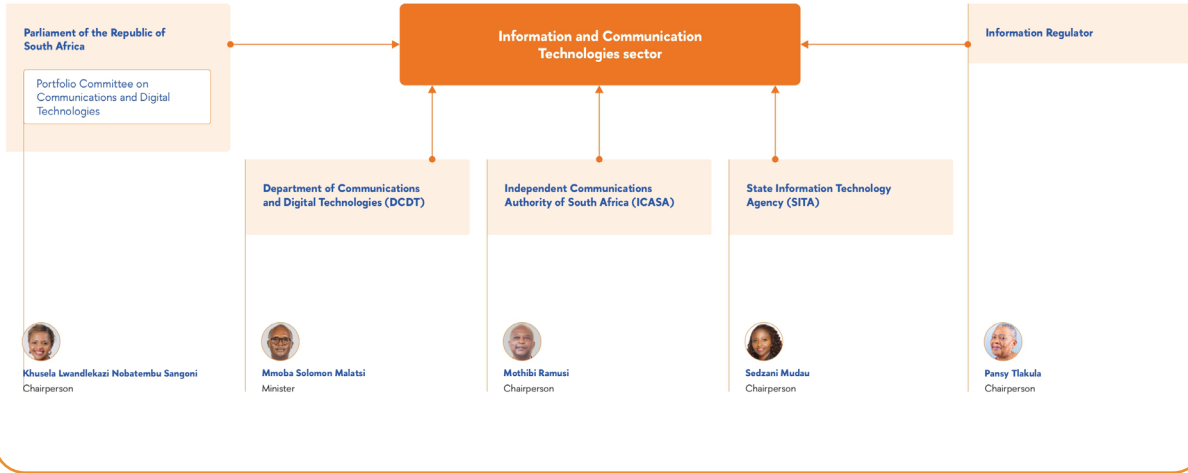
14 U.S. International Development Finance Corporation. DFC Disburses \$83 Million for Africa Data Centres to Expand ICT Infrastructure in South Africa. URL: <https://www.dfc.gov/media/press-releases/dfc-disburses-83-million-africa-data-centres-expand-ict-infrastructure-south>

15 Energy Capital & Power. South Africa and Singapore Strengthen Collaboration. URL: <https://energycapitalpower.com/south-africa-singapore-ict-human-capital-development/>

16 Engineering News. DCDT, Huawei partner to help SA reach its ICT development goals. URL: <https://www.engineeringnews.co.za/article/dcdt-huawei-partner-to-help-sa-reach-its-ict-development-goals-2023-08-11>

17 Reuters. S.Africa's MTN teams up with China Telecom, Huawei on 5G, AI. URL: <https://www.reuters.com/business/media-telecom/safricas-mtn-teams-up-with-china-telecom-huawei-5g-ai-2024-11-26/>

**ICT sector regulators**  
South Africa



**State Information Technology Agency (SITA)**, overseen by the **Department of Communications and Digital Technologies**, is the main entity responsible for execution of the National e-Government Strategy and Roadmap. As stated in the SITA 2020–2024 Strategic Plan<sup>18</sup>, the Agency has been a driving force behind the digitisation of the public sector.

The **Independent Communications Authority of South Africa (ICASA)** was created in 2000 as a merger of the South African Telecommunications Regulatory Authority (SATRA) and the Independent Broadcasting Authority (IBA). The mandate of the Authority is to promote competition in the ICT sector.

The **Information Regulator** is an independent body established under the Protection of Personal Information Act (POPIA) of 2013. It is responsible for monitoring and enforcing compliance with POPIA and the Promotion of Access to Information Act (PAIA), ensuring the protection of personal information processed by public and private bodies.

## Regulations

### Cybercrime Law

The **Cybercrimes Act 19 of 2020**<sup>19</sup> is South Africa’s primary legislation aimed at combating cybercrime and enhancing cybersecurity. Signed into law in June 2021, the Act addresses the growing threat of cybercrime by consolidating existing laws and introducing new offences related to digital activities.

### Data Privacy Law

The **Protection of Personal Information Act (POPIA)**<sup>20</sup>, enacted in 2013 and fully effective from 1 July 2021, is South Africa’s comprehensive data protection legislation. It aligns with global standards, such as the EU’s GDPR, aiming to safeguard individuals’ personal information and uphold their constitutional right to privacy.

### E-Government Standards

In 2024, the Department of Telecommunications and Postal Services drafted the **Digital Government Policy Framework (DGPF)**<sup>21</sup> aimed to establish

18 State Information Technology Agency (SITA). 2020-2024 Strategic Plan. URL: <https://www.sita.co.za/sites/default/files/Strategic%20Plan%202020-2024.pdf>

19 Government Gazette. Act No. 19 of 2020: Cybercrimes Act, 2020. URL: [https://www.gov.za/sites/default/files/gcis\\_document/202106/44651gon324.pdf](https://www.gov.za/sites/default/files/gcis_document/202106/44651gon324.pdf)

20 Government Gazette. No.4 of 2013: Protection of Personal Information Act, 2013. URL: [https://www.gov.za/sites/default/files/gcis\\_document/201409/3706726-11act4of2013popi.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/3706726-11act4of2013popi.pdf)

21 DPSA. Draft Digital Government Policy Framework. URL: <https://www.dpsa.gov.za/dpsa2g/documents/egov/2024/DRAFT%20DIGITAL%20GOVERNMENT%20POLICY%20FRAMEWORK.pdf>

guiding principles for further development of policies targeting the use of digital technologies in public service delivery. Among the key objectives of the Framework are institutionalization of a governance mechanism for public service transfer into the digital sphere; identification of norms and standards for the departments; and analysis of the necessary technology interventions for digital transformation.

## E-Government Interoperability Framework

South Africa's e-Government Interoperability Framework is primarily structured around the **Minimum Interoperability Standards (MIOS)**<sup>22</sup> of 2007, which provide comprehensive guidelines to ensure seamless interaction among government information systems. These standards are pivotal for enhancing public service delivery through integrated digital platforms. In addition to MIOS, South Africa has developed sector-specific interoperability frameworks, such as the **Health Normative Standards Framework (HNSF)**<sup>23</sup> for the health sector, to address unique requirements and promote standardized practices within specific domains.

## Electronic Signature Law

The use of electronic signatures in South Africa is regulated by the **Electronic Communications and Transactions Act 25 (ECTA)**<sup>24</sup> of 2002. The act distinguishes an electronic signature and an advanced electronic signature. The latter requires a digital certificate issued by an accredited service provider, viz. the one that has been designated as a preferred authentication service provider with its products accredited by the South African Accreditation Authority. According to the **Electronic Signature Guidelines**<sup>25</sup>,

South Africa Post Office (SAPO) and Lawtrust are the accredited authentication service provided under the ECT Act. SAPO is the provider preferred by the Government.

## AI Regulations

In May 2019, South Africa endorsed the **OECD Council's Recommendation on Artificial Intelligence**<sup>26</sup>. This non-binding agreement established the first international standards aimed at fostering trustworthy AI that respects human rights and democratic values.

Building upon this foundation, in August 2024, South Africa's Department of Communications and Digital Technologies (DCDT) unveiled the **National Artificial Intelligence (AI) Policy Framework**<sup>27</sup>. This framework seeks to harness AI's transformative potential while addressing ethical, social, and economic considerations. Key objectives include promoting inclusive growth, ensuring transparency and accountability in AI systems, and safeguarding human rights. The policy emphasizes the development of a robust AI ecosystem through coordinated research and development, talent cultivation, and infrastructure enhancement.

## One-stop shop portal

SITA has implemented the e-Government Portal<sup>28</sup> that serves as a single point of entry to more than 100 services, including birth, health, education, employment and social services. The platform provides G2B and G2C services.

**All public services are interoperable and can be accessed through the website<sup>29</sup> of the Government of South Africa**

22 DPSA. Minimum Interoperability Standards (MIOS) for Information Systems in Government. URL: [https://www.dpsa.gov.za/dpsa2g/documents/egov/MIOSVer4\\_1\\_2007.pdf](https://www.dpsa.gov.za/dpsa2g/documents/egov/MIOSVer4_1_2007.pdf)

23 Government Gazette. No. 47357. 2021 Health Normative Standards Framework. URL: [https://www.health.gov.za/wp-content/uploads/2022/10/HNSF\\_Gazette\\_21\\_October\\_2022.pdf](https://www.health.gov.za/wp-content/uploads/2022/10/HNSF_Gazette_21_October_2022.pdf)

24 Government Gazette. No. 25 of 2002: Electronic Communications and Transactions Act, 2002. URL: [https://www.gov.za/sites/default/files/gcis\\_document/201409/a25-02.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/a25-02.pdf)

25 DPSA. Electronic Signature Guidelines Appendices. URL: <https://www.dpsa.gov.za/dpsa2g/documents/egov/2019/Electronic%20Signature%20Guidelines%20Appendices%20final.pdf>

26 OECD AI Principles overview. URL: <https://oecd.ai/en/ai-principles>

27 DCDT. SA National AI Policy Framework. URL: <https://www.dcdt.gov.za/sa-national-ai-policy-framework/file/338-sa-national-ai-policy-framework.html>

28 South African e-Services Portal. URL: <https://www.eservices.gov.za/>

29 South African Government. Official Information and Services. URL: <https://www.gov.za/>



Source: South African e-Service Portal

## Technical Structure

The e-Services South African e-Service Portal shows several typical issues. Among them are HTML Errors, such as duplicate IDs, as multiple elements use the same id (e.g., repeated models or images). IDs must be unique per page. Another issue is unclosed tags, as some modals and forms are missing proper closing tags (</form>, </div>). Improper nesting was identified as well: elements like <button> inside <a> or improper block/inline nesting are engraved into the code. Deprecated attributes with possible usage of outdated HTML attributes in certain older code sections.

The site includes multiple CSS files, some of them may contain styles not used on the current page. This can lead to increased page load times.

## Performance

The performance monitoring metrics show that the website requires improvement in order to provide good user experience.

Accessed via the desktop version over the period from March 28 to April 24, 2025<sup>30</sup>, the website's First Contentful Paint (FCP) amounted to 3.3 seconds. The Speed Index stands at 3,4s, with a figure

representing good user experience amounts to 1.3s or less. The Largest Contentful Paint (LCP) is 3.9s (good user experience — 1.2s). The main page's Time to First Byte (TTFB) stands at 0.7s (good user experience — 0.8s). Total Blocking Time (TBT) is 0ms (average — 150ms). Cumulative Layout Shift (CLS) takes 0ms (good user experience — 0.1 or less).

Over the period of between March and April 2025<sup>31</sup>, the portal was visited by 516 thousand visitors during the month – which is insignificant compared to the population of South Africa exceeding 64.5 million. The number of visitors has significantly decreased since January 2025, when the portal was accessed by over 1 mln people. The average duration of time spent on the site was 4 minutes 26 seconds. The website is ranked 372 in the traffic rank of South Africa.

## Security

Regarding security, the website supports TLS 1.0, TLS 1.1 and TLS 1.2 protocols<sup>32</sup>. For privacy improvement, it is recommended to **disable deprecated protocols** TLS 1.0 and TLS 1.1 to eliminate support for outdated protocols and improve the overall security grade, **configure DNS**

30 Analysed through PageSpeed Insights. URL: <https://pagespeed.web.dev/>

31 Analysed through SimilarWeb. URL: <https://www.similarweb.com/>

32 Analysed through SSL Labs. URL: <https://www.ssllabs.com/>



**Certification Authority Authorization (CAA) records** to specify which certificate authorities are permitted to issue certificates for your domain, consider **enabling OCSP Must Staple** to enhance certificate revocation checking mechanisms, and **ensure timely renewal of the SSL certificate** before it expires on 29 May 2025 to maintain uninterrupted secure connections.

The website is hosted in Cape Town by Central Computer Services, with State Information Technology Agency SOC Ltd being the provider.

## Accessibility

Accessibility evaluation<sup>33</sup> of the South African eServices portal indicates 15 errors, such as linked image missing alternative text, missing form labels, 3 contrast errors as well as 22 alerts (nearby images having the same alternative text, orphaned form labels, missing first level headings). The page is using 100 ARIA (Accessible Rich Internet Applications)-related attributes across its HTML elements.

## Localization and Multilingual Support

The website has a built-in Google Translate engine, which enables the website translation to all languages supported by Google. The portal is initially built in English.

# Identification

National Population Register (NPR)<sup>34</sup> operated by the Department of Home Affairs (DHA) is used to verify the identity, status and rights of citizens. The NPR contains biometrics (thumbprints and facial

biometric data). However, under the broad ICT Modernisation Programme, initiated by the DHA in 2012 and aimed at refurbishing the department's delivery systems, the National Identity System (NIS) will replace the NPR.

According to the Official Identity Management Policy<sup>35</sup> published in 2020, the new system will facilitate the security and reliability of civil and immigration status bound to identity and biometric data. While the NIS was initially slated for implementation by March 2024, recent updates indicate that the system is still undergoing development and testing. The DHA continues to work towards full deployment, with the goal of enhancing service delivery and ensuring the security and reliability of identity verification processes.

**The Smart ID Card<sup>36</sup>, which replaces the green ID book (a previous type of identification document), has a unique identity number and stores the biometrics of a person. In order to register, an ID Number is required**

The ABIS (Automated Biometric Identification System) project<sup>37</sup> started in 2016 and conducted by the Department of Home Affairs is an upcoming integrated multi-modal system. ABIS is expected to serve as a centralised source for biometric authentication across public and private institutions. Fingerprints and facial recognition currently stored within the Home Affairs National Identification System (HANIS)<sup>38</sup> will be transferred to the new system.

In March 2025, the DHA announced<sup>39</sup> a comprehensive upgrade to its digital verification system, significantly improving performance and reducing error rates to below 1%. This upgrade enhances the reliability of identity verification for services such as banking, social grants, and other public services.

33 Analysed through WAVE. URL: <https://wave.webaim.org/>

34 South African Government. Civic services. URL: <https://www.gov.za/about-government/government-system/civic-services#National%20Population%20Register>

35 Department of Home Affairs. Draft Official Identity Management Policy. URL: [https://static.pmg.org.za/Draft\\_Official\\_Identity\\_Management\\_Policy\\_Version\\_with\\_Call\\_for\\_Comments.pdf](https://static.pmg.org.za/Draft_Official_Identity_Management_Policy_Version_with_Call_for_Comments.pdf)

36 Department of Home Affairs. Know your new Smart ID Card. URL: <https://www.dha.gov.za/index.php/id-smart-card>

37 Department of Home Affairs. What is ABIS? URL: <https://www.dha.gov.za/index.php/civic-services/abis>

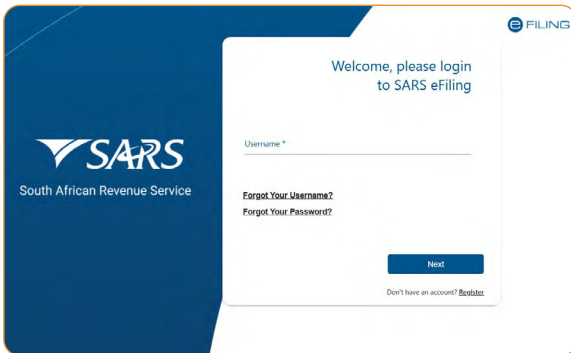
38 Parliamentary Monitoring Group. HANIS & Automated Biometric Identification System (ABIS); Bosasa contract at Lindela, with Minister. URL: <https://pmg.org.za/committee-meeting/28025/>

39 South African Government. Home Affairs upgrades critical digital verification system. URL: <https://www.gov.za/news/media-statements/home-affairs-upgrades-critical-digital-verification-system-24-mar-2025>

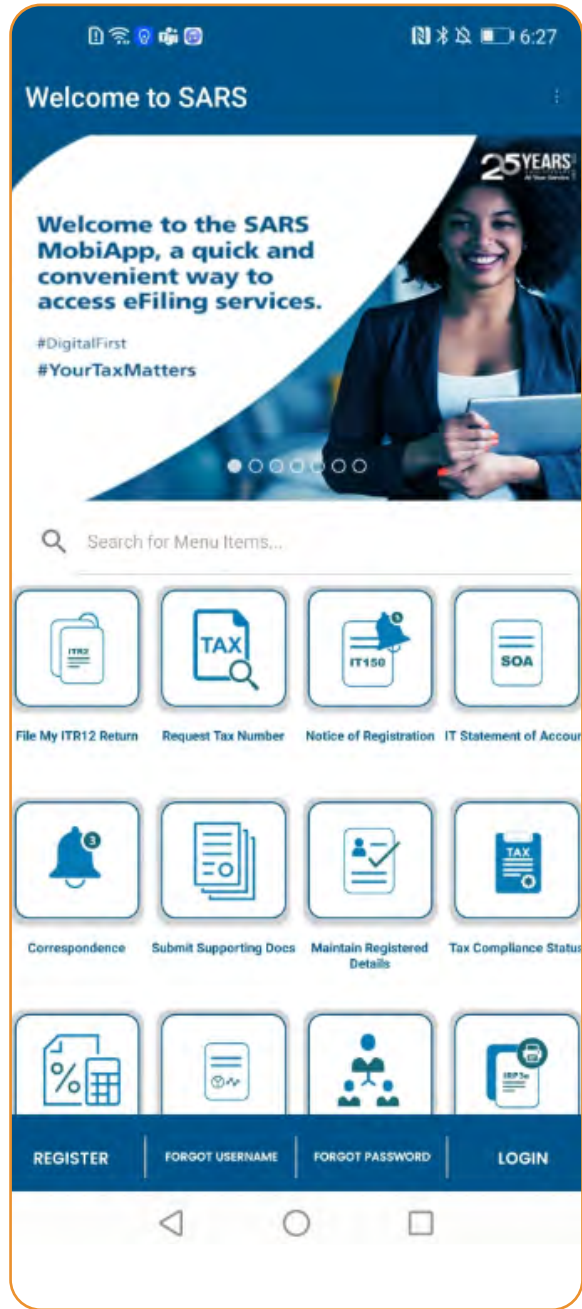
# e-Taxes

South African Revenue Service (SARS) eFiling<sup>40</sup> platform serves as a tool for submitting tax returns and declarations and provides a range of related services, including registration for income tax, tax product registration, and filing income tax returns. Taxpayers, tax specialists, enterprises and organisations are able to register, submit declarations and make payments within the platform.

The SARS MobiApp<sup>41</sup> was developed by the South African Revenue Service (SARS) to mirror the functionalities of the eFiling platform, allowing users to file returns, make payments, and access tax information on-the-go. The app is available for download on major platforms, including the Apple App Store, Google Play Store, and Huawei AppGallery. WhatsApp service is also available by messaging SARS at 0800 11 7277, so taxpayers can request services such as tax reference numbers, statements of account, and return statuses. USSD service via Dialing 1347277# provides access to services like Personal Income Tax registration, tax calculators, and account balance inquiries. SMS service functions while sending specific keywords to 47277 allows users to receive information on tax reference numbers, return due dates, and more.



Source: SARS eFiling



Source: Google Play, SARS Mobile eFiling - Apps on Google Play

40 South African Revenue Service. SA's Tax and Customs System. URL: <https://www.sars.gov.za/about/sars-tax-and-customs-system/>

41 SARS MobiApp. URL: <https://www.sars.gov.za/tax-practitioners/sars-mobi-app/>

# Education

In 2003, the Department of Education adopted the Draft White Paper on e-Education<sup>42</sup> which provided a framework for integrating ICT into the education system. It emphasizes the development of digital infrastructure, teacher training, and the creation of digital content to support learning. The policy aims to ensure that all learners and educators have access to quality digital resources and are equipped with the necessary skills to utilize them effectively. A so-called schools' "ICT Maturity" was further highlighted in a policy brief prepared by the Department of Science and Innovation in 2021.

According to the research carried out by the Department of Technology and Vocational Education of Tshwane University of Technology in 2024<sup>43</sup>, several systemic barriers prevent the effective ICT integration into classroom reality. The investigation categorized its findings into four primary themes: the critical insufficiency of internet coverage within classrooms, a prevalent reluctance among teachers to assign ICT-based tasks to learners

due to concerns about misuse and restrictive school policies, significant deficiencies in teacher professional development for ICT skills, and a widespread unawareness among teachers regarding existing ICT policies at the school level.

Launched in 2015, Operation Phakisa<sup>44</sup> focuses on accelerating ICT integration in education through five key workstreams, namely connectivity and ensuring schools have access to reliable internet services; devices to provide learners and educators with appropriate digital devices; teacher professional development and availability of training programs to enhance educators' ICT competencies; digital content development and distribution to Create and disseminating quality digital learning materials; and e-Administration aimed at implementing digital systems for efficient school management.

# Healthcare

**The Health Patient Registration System managed by the Department of Health provides the Patient Registry and the Master Patient Index utilising citizen's unique identification number**

The screenshot shows the KnowledgeHub website interface. At the top, there is a navigation bar with 'Courses', 'Webinars', 'eLibrary', 'Log In', and 'Sign Up'. Below the navigation bar, the 'Courses' section is displayed. The 'All courses' section features four course cards:

- Basic HIV Course for Health Care Professionals**: A card with a green background and a woman in a white lab coat.
- Adult Primary Care 2020 Update**: A card with a blue background and a person in a blue uniform.
- COVID-19 Vaccination Training for Health Workers**: A card with a white background and two people wearing masks.
- Update on Switching Stable 1st and 2nd Line ART Patients to DTG Containing Regimen (TLD Update)**: A card with a green background and a woman in a blue lab coat.

Source: KnowledgeHub. Courses

42 Department of Education. Draft White Paper on e-Education. URL: [https://www.gov.za/sites/default/files/gcis\\_document/201409/e-education1.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/e-education1.pdf)

43 Mnisi, B. R., Mtshali, T. I., & Moses, M. (2024). Moving beyond the challenges of learning through technologies: The current status of ICT integration in South African schools. *Journal of Education and E-Learning Research*, 11(1), 128–134. URL: <https://files.eric.ed.gov/fulltext/EJ1430371.pdf>

44 Department of Planning, Monitoring and Evaluation. Operation Phakisa: ICT in Education. URL: <https://www.operationphakisa.gov.za/operations/Education%20Lab/Pages/default.asp=x>

**e-Library**

The screenshot shows an e-Library search interface. At the top, there is a search bar labeled 'Search by title' with a magnifying glass icon. Below the search bar are five filter dropdown menus: 'Language', 'Publication year', 'Publisher', 'Resource type', and 'Topic'. Two search results are displayed, each featuring a colorful icon of a person with arms raised. The first result is titled '2024 Community Health Worker (CHW) Training Materials for Foundation Phase', with a type of 'Guides/Guidelines' and a year of '2024'. The second result is titled 'NATIONAL INTEGRATED MATERNAL AND PERINATAL CARE GUIDELINES FOR SOUTH AFRICA', also with a type of 'Guides/Guidelines' and a year of '2024', and a topic of 'Maternal and Child Health'.

Source: KnowledgeHub, e-Library

The Home Affairs National Identification System (HANIS) can be used for the identification of patients as well. The System enables medical workers to access the demographic information and medical records of the patients.

The National Health Insurance (NHI)<sup>45</sup> is a health financing system designed to provide access to health services free of charge for all the citizens. Citizens can take advantage of the health facilities using an NHI Card.

The Department of Health grants the ability to improve one’s professional skills by enrolling on a course within the Knowledge Hub<sup>46</sup>. The platform offers a vast variety of courses and webinars in the medical sphere as well as allows the use of eLibrary.

## e-Justice

The documents and legal acts of South Africa can be accessed through the website of the Government. Keyword search and filters on document type and subject are available.

The Integrated Justice System (IJS)<sup>47</sup> is a government initiative designed to modernize and integrate the criminal justice process across multiple departments, including the South African Police Service (SAPS), Department of Home Affairs, Department of Justice and Constitutional Development, Department of Correctional Services, and the National Prosecuting Authority. In 2024, briefs on implementation of the system were held between SITA and agencies responsible for legal affairs. As of early 2025, new components such as the Integrated Person Management (IPM) solution are being piloted<sup>48</sup>.

Court Online<sup>49</sup> is an e-filing system used for litigation. Through the system, pleadings and documents could be issued to the court online. The system, which encompasses Evidence Management Application (CaseLines), was implemented in January 2020 in the Gauteng Division of the High Court, encompassing both Pretoria and Johannesburg. This followed a successful pilot phase conducted during the third and fourth terms of 2019.

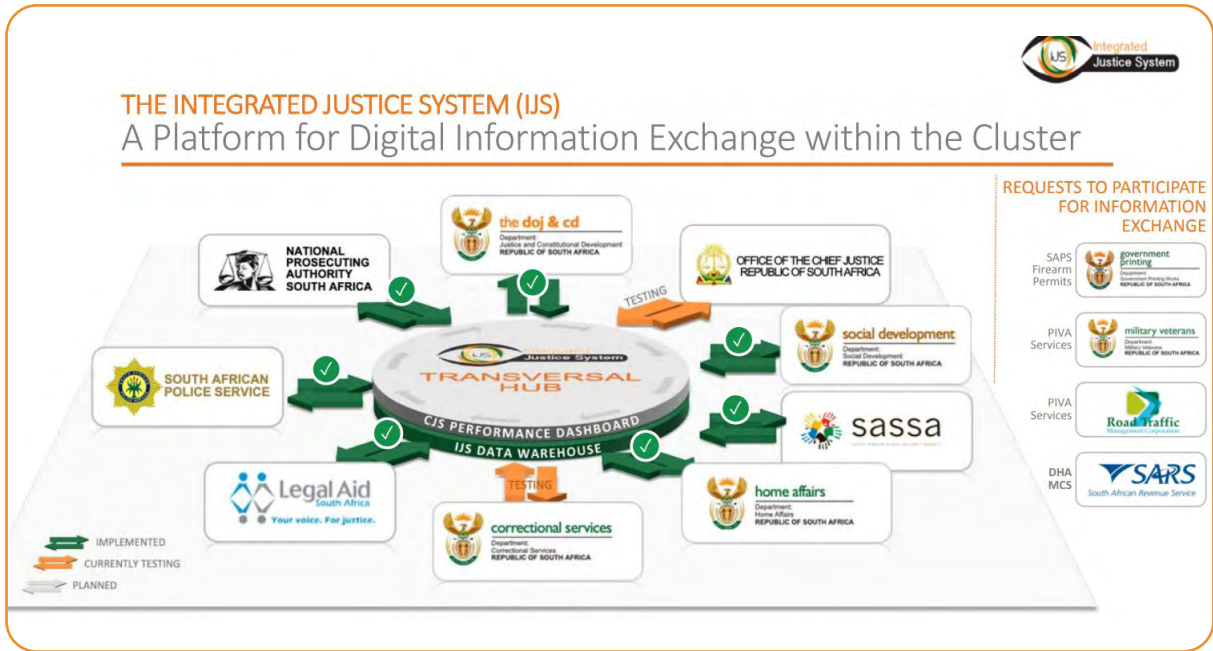
45 Department of Health. National Health Insurance. URL: <https://www.health.gov.za/nhi/>

46 Department of Health. The Knowledge Hub. URL: <https://knowledgehub.health.gov.za/>

47 Unathi Ngumla. Integrated Justice System (IJS) — Providing an Integrated BI & Reporting Platform for GBV in the JCPS Cluster. URL: <https://www.socdev.fs.gov.za/wp-content/uploads/2020/07/INTEGRATED-JUSTICE-SYSTEM-Presentation-NXL.pdf>

48 Department of Justice and Constitutional Development. IJS News. Breaking Departmental Barriers in Justice Delivery. URL: <https://www.justice.gov.za/newsletter/IJS/202503-IJS-Newsletter.pdf>

49 The South African Judiciary. Court Online. URL: <https://www.judiciary.org.za/index.php/court-online>



Source: IJS - Providing an Integrated BI & Reporting. Platform for GBV in the JCPS Cluster

## Court Online is a comprehensive digital platform designed for e-filing, case management, and evidence handling

It enables legal practitioners and litigants to electronically file documents, manage court schedules, and handle evidence without the need for physical presence in court. The platform supports real-time updates and facilitates virtual hearings.

## e-Elections

In March 2025, the Independent Electoral Commission (IEC) hosted a three-day conference to launch South Africa’s first Green Paper on e-voting. The event marked the beginning of a six-month national consultation aimed at

gathering input from voters, political parties, civil society, and other stakeholders. The goal is to develop a comprehensive policy on e-voting that aligns with South Africa’s social and infrastructural landscape.

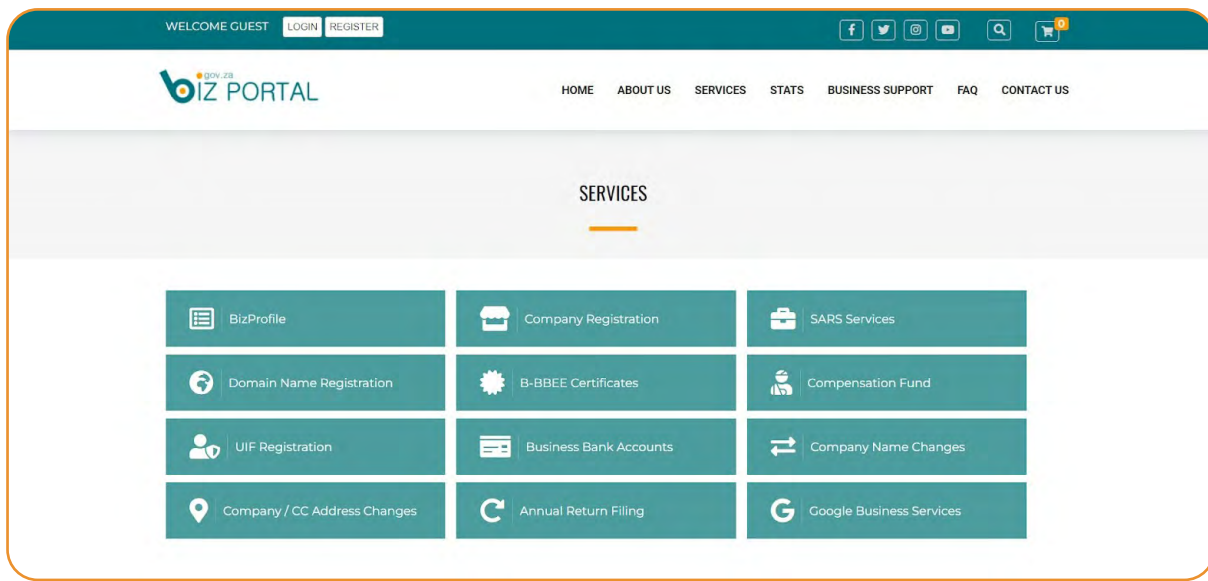
## Payment Systems

The South African Multiple Option Settlement (SAMOS)<sup>50</sup> system is a real-time gross settlement system (RTGS) operated by the South African Reserve Bank (SARB), the central bank of South Africa which provides domestic settlement services. Regional settlement services are processed by the South African Development Community (SADC)-RTGS<sup>51</sup> system that was put into operation in 2013. In 2018, the SARB introduced the National Payment System Framework and Strategy: Vision 2025<sup>52</sup> with the aim of raising awareness on electronic payments.

50 South African Reserve Bank. Domestic Settlement Services. South African Multiple Option Settlement (SAMOS) system. URL: <https://www.resbank.co.za/en/home/what-we-do/payments-and-settlements/settlement-services>

51 South African Reserve Bank. Regional Settlement Services. SADC-RTGS operations. URL: <https://www.resbank.co.za/en/home/what-we-do/payments-and-settlements/SADC-RTGS>

52 South African Reserve Bank. The National Payment System Framework and Strategy. Vision 2025. URL: <https://www.resbank.co.za/content/dam/sarb/what-we-do/payments-and-settlements/Vision%202025.pdf>



Source: BizPortal. Services

## G2B Services

BizPortal<sup>53</sup> is a platform developed by the Companies and Intellectual Property Commission (CIPC) with the objective of alleviating business operations in South Africa and eliminating the paper-based approach. The Portal offers company registration and a variety of related services including tax registration and domain name registration.

SME South Africa<sup>54</sup> platform, being a **private** initiative, grants access to a vast array of business guides and reviews of business software and technical tools. Within this platform citizens can also find funding for their businesses. After filling in the form on the website the person is connected with the lenders. The partners of SME South Africa are Lulalend, a privately held company financed by the Venture Capital, Retail Capital, a division of TymeBank Limited, and Genfin, which is a part of the Genfin Holdings Group, an investment company operating in South Africa and the UK.

## Public Procurement

The eTender Publications Portal<sup>55</sup> managed by the Office of the Chief Procurement Officer (OCPO) is a website where all public sector tender opportunities are published. Information on Procurement Data and Procurement Plans is also provided.

The service was introduced in order to reduce government expenditure on public procurement procedures since, according to the OECD calculations<sup>56</sup> based on the data from Government Finance Statistics, South Africa ranked 2nd on the continent (after Rwanda) in terms of government procurement spending as percentage of GDP. As per IMF 'Public Procurement In South Africa: Issues And Reform Options' report (2023)<sup>57</sup>, in 2021/2022 fiscal year the public procurement spending in South Africa comprised 15% of GDP.

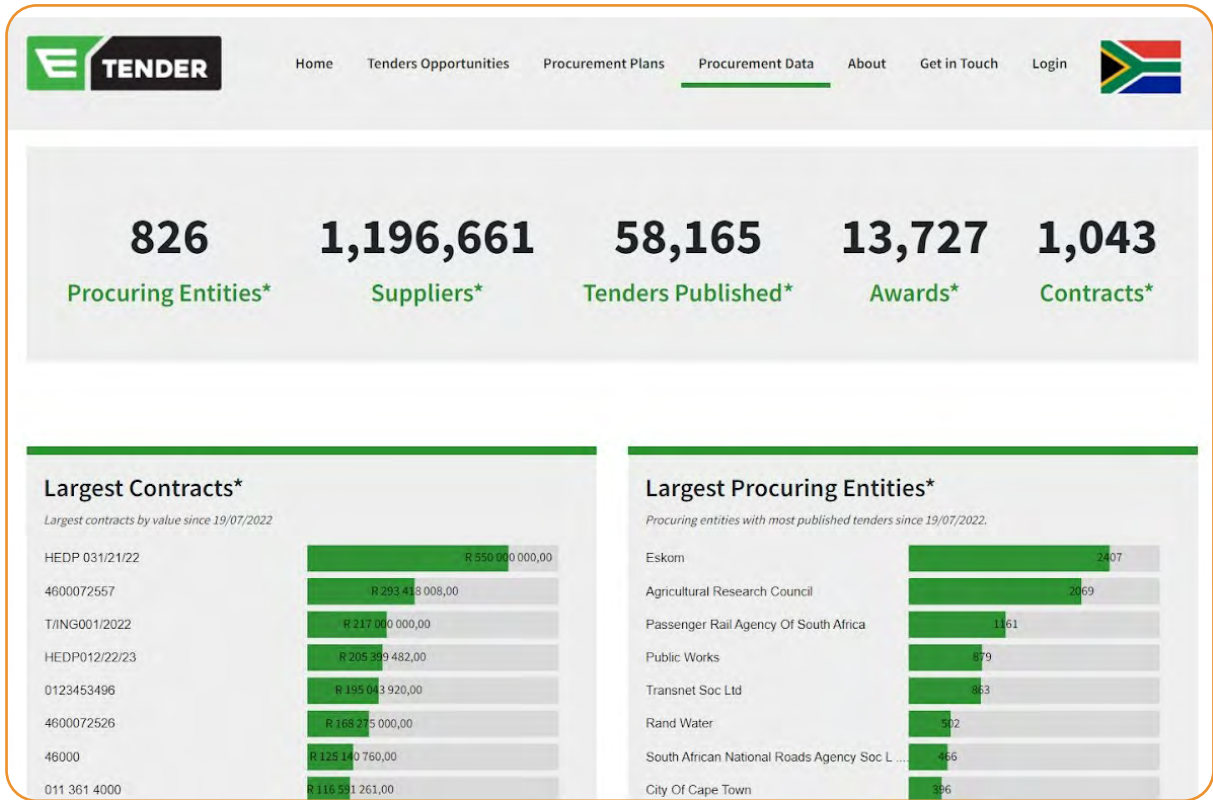
53 BizPortal. URL: <https://www.bizportal.gov.za/default.aspx>

54 SME South Africa

55 eTender. URL: <https://data.etenders.gov.za/>

56 OECD. Africa's Development Dynamics 2022. Regional Value Chains for a Sustainable Recovery. URL: [https://www.oecd.org/en/publications/africa-s-development-dynamics-2022\\_2e3b97fd-en/full-report.html](https://www.oecd.org/en/publications/africa-s-development-dynamics-2022_2e3b97fd-en/full-report.html)

57 IMF eLibrary. Public Procurement In South Africa: Issues And Reform Options. 2023. URL: <https://www.elibrary.imf.org/view/journals/002/2023/195/article-A002-en.xml>



Source: eTender

## Labour services

Employment Services of South Africa and the South Africa Labour Market Information System allow both individuals and organisations to search within the South African Labour Market Information System<sup>58</sup> operated by the Department of Employment and Labour. Individuals have an opportunity to browse employment possibilities, while organisations may post the information on the open positions in the company.

Employment Equity Online Reporting (EE)<sup>59</sup> is an online service for employers to submit their employment equity reports in compliance with the Employment Equity Act, which was adopted with the purpose of promoting equal opportunities and fair treatment in employment. The information


on the login procedure and deadlines for the submission are provided on the home page of the portal.

The KZN e-Recruitment<sup>60</sup> system is an online platform developed by the KwaZulu-Natal (KZN) Provincial Government in South Africa to streamline the job application process for positions within provincial departments and public entities. In 2023, the system was put online. It allows job seekers to register, create profiles, upload necessary documents, and apply for vacancies online. This initiative, part of the “Sthesha Waya-Waya” (“working anytime” in Zulu) campaign, aims to modernize recruitment processes and enhance accessibility for job seekers across the province.

58 Department of Employment and Labour. South Africa Labour Market Information System. URL: <https://de-lmis.labour.gov.za/>


59 Department of Employment and Labour. Employment Equity Online Reporting for 2024. URL: <https://ee.labour.gov.za/DMISO/>

60 Province of KwaZulu-Natal. KZN Online. Vacancies & e-Recruitment. URL: [https://www.kznonline.gov.za/index.php?option=com\\_content&view=article&id=290&Itemid=709](https://www.kznonline.gov.za/index.php?option=com_content&view=article&id=290&Itemid=709)



**employment & labour**  
Department  
Employment and Labour  
REPUBLIC OF SOUTH AFRICA

DOL Systems Portal



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**Login**

Username:

Password:

**Log In**

[Forgot Password](#) | [Register](#)

### EMPLOYMENT EQUITY ONLINE REPORTING FOR 2022

The EE online reporting service is closed for 2022 reporting.

The EE online reporting service is closed for 2022 reporting

Login Procedure
Who must report
EE Online Benefits
Useful Advice

Organizational changes
EE Public Registers
EEA2 Reports

[Additional Information](#)

#### How to login

- If you are reporting for the first time, please click on "Register" and follow the prompts.
- The reminder letter sent to previously registered employers via email to CEO/Accounting Officer and EE Manager contains an activation link.
- Open and view Reminder letter from the email.
- Click the activation link on the Reminder Letter and press **"activate"** to create your password.
- Should you choose to click **"cancel"** or not complete the activation process your reminder letter will become void and you will be requested to go to **"forgot password"**.
- Should the EE system provide **"Logon option"** it means that your account has been previously activated and you should go to **"forgot password"** on the login screen.
- **If no reminder letter has been received, click on "forgot password" on the login screen and follow the prompts.**
- The rule for acceptable passwords: Password must be alphanumeric and consist of a minimum of 8 characters (at least 1 special character, one uppercase character and 1 lowercase character).
- Please note that a new password is required every reporting year.
- [Login Problems, click here...](#)

**Information**

Employment    Equity    Helpline:  
0860101018

**Provincial Offices:**  
[Eastern Cape](#)  
[Free State](#)  
[Gauteng](#)  
[KwaZulu-Natal](#)  
[Limpopo](#)  
[Mpumalanga](#)  
[North West](#)  
[Northern Cape](#)  
[Western Cape](#)

**Website:** [www.labour.gov.za](http://www.labour.gov.za)

**News feed**  
For further information on employment equity legislative matters please click on the tabs in the middle of this screen.

**Activation of user account**

- Only activated users will be able to login.
- Activation link sent to CEO and EE manager.

Source: Employment Equity Online Reporting (EE)

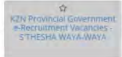
### Applicant - Step by Step Guide

**View vacancies and Apply** 11

Select the **Browse Jobs** option within the menu on the left hand side of the screen 10

Update your **profile** with your **personal & education information, languages, references and attachments** 9

Select the **My Profile (Z83)** option within the menu on the left hand side of the screen 8

Select the  service from the available services 7



1 Open the **KZN Online** website using [www.kznonline.gov.za/kznjobs](http://www.kznonline.gov.za/kznjobs) and follow the instructions

2 The **South African e-Services Portal** ([www.eservices.gov.za](http://www.eservices.gov.za)) will be displayed

3 Register using your **ID and personal information** (If previously registered, skip to no 4)

4 Use the **One Time Pin (OTP)** received via your **Cellphone or e-Mail** to complete the registration

5 Login using your **username (e-Mail address) & password** created when registering

6 Select the **Employment & Labour**  option

?

For queries/support contact [KZNHelpDeskRecruit@KZNpremier.gov.za](mailto:KZNHelpDeskRecruit@KZNpremier.gov.za) OR call 080 122 9099 (Toll-free)



Source: KZN Online. Vacancies & e-Recruitment

E-Governance Knowledge Hub

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## Tourism

The Government of South Africa enables tourists to access the South African Tourism website<sup>61</sup>. The website consists of 4 sections, namely, Corporate and media, Travel, Travel Trade and Business events. For instance, the 'travel' section stores information on tourist activities, destinations and events, while the 'business events' part enables discovering the meeting venues.

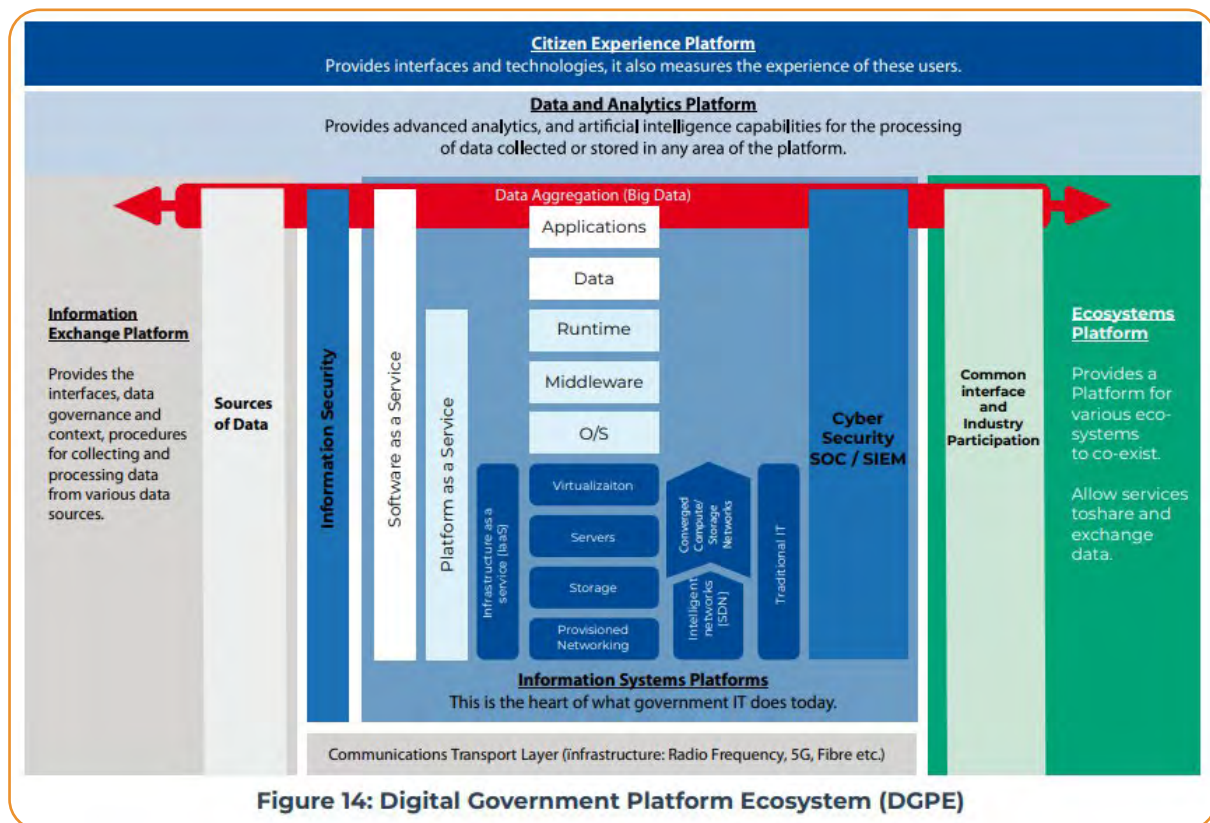
## Data & statistics

Vulekamali<sup>62</sup> is a website which stores South Africa online budget data. Users can download a PDF-file of a national budget review, explore interactive Consolidated Budget Summary and National Budget Summary and examine the budget of each department.

## Government Service Bus

The Digital Government Platform Ecosystem (DGPE), introduced in South Africa in 2020, is a strategic initiative aimed at enhancing digital service delivery across government departments. The DGPE was established to facilitate interoperability and efficient data exchange among public sector entities. The State Information Technology Agency (SITA) has incorporated the DGPE into its digital strategy, emphasizing the development of scalable digital platforms to improve citizen experiences.

This middleware infrastructure facilitates seamless, secure, and standardized data exchange among various government departments and public entities.



Source: SITA Strategic Plan 2020-2025

61 South African Tourism. URL: <https://www.southafrica.net/gl/en/trade>

62 Vulekamali. URL: <https://vulekamali.gov.za/>

**By enabling interoperability between disparate systems, the Government Service Bus aims to break down information silos, enhance service delivery, and improve decision-making processes across the public sector**

The GSB supports real-time sharing of verified citizen and service data—such as identity, employment, and benefits—thereby underpinning initiatives like the Integrated Justice System, e-Home Affairs, and the National Integrated Social Protection Information System (NISPIIS). By promoting efficient, citizen-centric public services, the DGPE and its GSB component play a critical role in South Africa’s digital transformation strategy.

The establishment of the Government Private Cloud is a project of SITA. The work on the project began in 2014. The Government Private Cloud Ecosystem (GPCE), built in partnership with Huawei, IBM and Gijima, was launched in 2018. The objective of the Agency was to build and operate a private cloud in order to facilitate interoperability of all South African Government departments. The project consisted of providing an open data platform and developing a policy framework to direct implementation of Cloud computing by Government departments. According to the SITA Strategic Plan 2020-2025, one of the further objectives of the Agency is to ensure that new applications are written to run on the cloud, as well as that the existing applications are migrated to the cloud.

## Satellite Communication

In 2022, the South African National Space Agency (SANSA) in collaboration with the South African Radio Astronomy Observatory (SARAO) launched a beta version of the Digital Earth South Africa data cube platform<sup>63</sup>. The Digital Earth SA system is expected to enable users to leverage the full geographic data analysis capabilities. The data from commercial satellite providers is distributed to government institutions and state-owned entities, whereas private sector users are only allowed to access open satellite datasets. Additionally, SANSA offers private sector data users Analysis Ready Data (ARD) products at an affordable cost.

The SANSA focuses on four programme areas: Earth Observation, Space Engineering, Space Operations, and Space Science. SunSat was the first satellite built in South Africa and launched into orbit in 1999. SumbandilaSat, constructed in collaboration with Stellenbosch University, the Council for Scientific and Industrial Research, and SunSpace, was launched by Roscosmos in 2009 on a Soyuz-2 at the Baikonur Cosmodrome in Kazakhstan. In 2012, the SANSA started the development of the country’s third Earth Observation Satellite (EO-Sat1). South Africa’s first cubesat, ZACube-1 (also known as TshepisoSat), was launched in 2013, whereas ZACube-2, which used to be the most advanced nanosatellite in Africa, was launched in 2018 by Roscosmos as well.

63 Digital Earth SA. URL: <https://desa.sansa.org.za/>

## Challenges



Based on the 2018 Digital Maturity Assessment of public services conducted by the DPSA, South Africa faces several challenges on the path towards digitalization:

- **Fragmented Digital Initiatives:** The lack of a unified digital strategy has led to siloed efforts across government departments, resulting in inefficiencies and duplicated processes;
- **Outdated ICT Infrastructure:** Many public service systems rely on obsolete hardware and software, hindering efficient service delivery and integration;
- **Cybersecurity Vulnerabilities:** Frequent incidents, including unauthorized disclosures of citizen data, have undermined trust in digital platforms;

For example, a ransomware attack in 2021 on the Department of Justice's IT systems brought down some services for several weeks, underscoring the critical need for robust backups and cybersecurity in the justice sector<sup>64</sup>. The incident eroded confidence and created a backlog as officials had to revert to manual processes temporarily.

- **Limited Data Sharing:** Inadequate mechanisms for interdepartmental data exchange restrict the potential for integrated services and informed decision-making.

**Beyond that, upon the analysis above, other challenges may include:**

- **Budget Constraints and Funding Gaps:** Many government ICT projects suffer from stop-start funding. Departments frequently initiate ambitious digital projects with special allocations, but when those funds expire, they struggle to continue the work out of normal operational budgets.

## Prospects



Among the promising areas for introduction of digital technologies are:

- **Emerging Technologies and Innovation Areas:** The Digital Government Policy Framework (DGPF) highlights inevitable adoption of cloud computing, Internet of Things (IoT), Big Data analytics, mobile tech, and AI in public services. These technologies present opportunities to leapfrog current limitations. For example, IoT and GIS data can improve smart municipal management (smart metering of utilities, etc.), while AI chatbots could enhance customer service on government websites. South Africa's tech community is vibrant, and partnerships with local startups could bring innovative solutions to government challenges.
- **E-Voting:** As noted, e-voting is being explored as a future prospect. If South Africa manages to implement secure e-voting, it could greatly enhance accessibility (e.g., for citizens abroad or those with mobility issues) and possibly improve voter turnout. Even beyond formal voting, digital platforms for public participation (e-participation) — like crowdsourcing inputs on policies or using mobile apps for citizens to give service delivery feedback — are a prospect that can deepen citizen engagement.
- **Digital Agriculture:** Agriculture is a promising area for digitization that has been relatively untapped by the government. There are already private agritech startups (e.g. Farmonaut) and projects in South Africa using drones, satellite data, and mobile apps for farmers. The government could catalyze this by providing open

64 South African Government. Justice and Constitutional Development establishes security breach on IT systems. URL: <https://www.gov.za/news/media-statements/justice-and-constitutional-development-establishes-security-breach-it-systems>

For example, the Department of Home Affairs embarked on a massive project in May, 2025 to digitize 27 million paper records per year (birth, marriage, death certificates, etc.) to improve service efficiency. This was initially funded through a dedicated allocation that ended in 2023/24. To avoid halting the project, Home Affairs had to reprioritize R300 mln (~USD 17,3 mln) from its 2025/26 baseline budget to keep the digitization going<sup>65</sup>. This kind of ad-hoc adjustment indicates a funding gap – the digital initiative was not fully built into the multi-year budget. Such flat budgets (after inflation) mean there is little room for expanding digital services or sustaining new systems at scale. This raises concerns that critical upgrades (hardware refresh, cybersecurity tools, etc.) may be deferred due to funding shortfalls, undermining the reliability of e-services over time.

- **Shortage of ICT professionals:** A fundamental constraint on South Africa’s e-government drive is the shortage of ICT professionals in the public service. The Director-General of the Department of Public Service and Administration (DPSA) reported in 2022 that out of about 1.13 million full-time public servants, only 4,523 were in ICT functions – a mere 0.3% of the workforce<sup>66</sup>. This number is drastically low for a government aiming to digitize on a broad scale. By 2025, the need for technology specialists far outstrips this supply. National and provincial departments alike struggle to recruit enough qualified IT staff to develop, implement, and maintain e-government systems. Capacity is even more limited at the local government level, where many smaller municipalities cannot afford dedicated IT teams and often have to outsource basic IT support.

data (like comprehensive weather or agricultural extension info) and investing in rural connectivity. Digital Agriculture was identified as an area where public-private partnerships could drive growth, with platforms to help farmers access markets and information. Embracing such innovations can boost food security and economic inclusion in rural areas.

- **Public-Private Innovation Partnerships:** Beyond formal PPPs, less structured innovation partnerships – hackathons, innovation labs, sandbox environments for startups to solve public sector problems – are a prospect to inject fresh ideas. There is momentum in this direction: the government has hosted GovTech conferences and innovation challenges. Continuing to open up problem statements to tech entrepreneurs (for example, how to digitize queue management in clinics) can yield creative solutions at low cost, while also developing the local tech ecosystem.
- **Regional Integration:** Prospects include harmonizing digital identity or certification across SADC countries, mutual recognition of digital signatures, and sharing platforms (perhaps a regional marketplace for digital public goods). This could amplify the impact of South Africa’s e-governance investments and create economies of scale.
- **Long-Term Sustainability Measures:** Recognizing the need for sustainability, the government is working on policies like cloud-first strategies (to avoid costly infrastructure duplication), and establishing the Government Private Cloud Ecosystem (GPCE).

65 ITWeb. Home affairs pins hopes on AI to boost productivity, reduce errors. URL: <https://www.itweb.co.za/article/home-affairs-pins-hopes-on-ai-to-boost-productivity-reduce-errors/rW1xLv5noek7Rk6m>

66 ITWeb. DPSA DG lifts lid on state of ICT skills in public service. URL: <https://www.itweb.co.za/article/dpsa-dg-lifts-lid-on-state-of-ict-skills-in-public-service/kLgB1Mez3x2q59N4>

Besides, according to the DPSA's Chief Director of e-Government, as of 2023, some 16 national departments have fewer than three IT staff each<sup>67</sup>. In many departments, there are simply not enough qualified people to maintain existing systems, let alone drive digital transformation. For example, if a provincial department has one or two IT officers, they may spend all their time “keeping the lights on” (maintaining networks, fixing computers), with no capacity to plan new e-services or optimize processes.

- **Retention and Recruitment Difficulties:**

The public sector struggles to attract top IT talent because of the lack of competitive salaries and career paths comparable to the private sector. Jabulani Hugh Hlatshwayo, deputy director-general and CIO of the Department of Justice and Constitutional Development acknowledge in his speech it is “nearly impossible for government to match some of the market rates” for experienced specialists<sup>68</sup>. Rigid civil service pay scales mean an expert cybersecurity analyst or data architect might only be slotted as a mid-level director with modest pay, whereas in industry such skills command executive-level salaries. As a result, “IT specialists are more attracted to the private sector... mainly due to salaries”, and those who do join the public service often leave once they gain experience<sup>69</sup>. The government is left with a junior pool of IT staff – many bright young employees use public service as a training ground and depart for better-paying jobs, creating a revolving door. This internal brain drain of tech professionals forces departments to rely on external consultants and service providers.

The GPCE, launched in 2018, aims to provide scalable, interoperable cloud infrastructure for all departments, which in the long run is more sustainable than each department running its own servers. Likewise, adopting open-source software where feasible can reduce licensing costs. Sustainability also means building local tech talent – prospects here include strengthening university programs in e-government, and fostering a pipeline of young professionals who see public service as an exciting place to deploy their tech skills.

- **Nationwide ICT training:** The Minister of Higher Education has made “digital skills massification” a top priority for the National Skills Fund<sup>70</sup>. Initiatives are underway to train both new ICT professionals and upskill current public servants. The National School of Government (NSG) has introduced specialized courses in November, 2024, such as “Leading Digital Transformation in the Public Sector” for CIOs and IT managers, and a broad-based Digital Transformation Advocacy Program for all public servants<sup>71</sup>. These programs cover emerging technologies (AI, robotics, IoT, cybersecurity) and aim to build a culture of digital innovation in the civil service.

67 News24. Governments' critical IT skills shortage: Only 0.4% of public servants work in IT. URL: <https://www.news24.com/business/tech/governments-critical-it-skills-shortage-only-04-of-public-servants-work-in-it-20230913>

68 ITWeb. Video: Skills gap stifles public sector's IT endeavours. URL: <https://www.itweb.co.za/article/video-skills-gap-stifles-public-sectors-it-endeavours/j5alr7QAKGE7pYQk>

69 Ibid.

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# Knowledge-Sharing Opportunities

## National Best Practices

The Government of South Africa has achieved significant progress in the sphere of G2C services, with availability of labour-oriented ones. Regional services such as the KZN e-Recruitment system and online tools of the Department of Employment and Labour provide a worth-sharing experience.

Digitalisation of taxes has also seen a large progress over the years, with the South African Revenue Service (SARS) eFiling platform and mobile application having largely increased the revenues and compliance.

## Regional inspirations

Given that the Government of South Africa is yet to fully roll out e-elections, responsible agencies could benefit from the experience of their counterparts.

## Namibia

In 2014, Namibia became the first country in Southern Africa to use electronic voting.

The machines were tested in 4 local elections and in a by-election, before being used in the national elections. EVMs used in Namibia were supplied by Bharat Electronics (a majority state-owned Indian company).

## Kenya

In 2022, more than 55,000 electronic machines were deployed across the country for identifying voters and sending results. Biometrics for voter registration and identification were used during the 2013, 2017, and 2022 presidential elections.

## Morocco

As of April 2025, Morocco has implemented e-voting mechanisms within certain governmental institutions, including the House of Councillors (Chambre des Conseillers, upper house of Parliament), which adopted remote electronic voting for legislative sessions in May 2020.

