

Driving Digital Transformation of the Economy in The Republic of Congo

Opportunities, policy recommendations
and the role of mobile



Contents

Executive Summary	3
1. Introduction	9
2. The Mobile Sector in Congo	
2A. Mobile Telecoms	12
2A.1. Mobile subscriber penetration	12
2A.2. Mobile coverage and the internet usage gap	14
2A.3. Mobile data usage and tariffs	16
2A.4. Domestic and international fibre connectivity	17
2B. Mobile money	18
3. Digital development in Congo	
3A. National economic development strategy	22
3B. National digital development initiatives	24
3C. Assessment of Congo's progress on digitalisation	25
3D. The impact of digitalisation on the economy of Congo	27
4. Regulatory and policy challenges	
4A. Regulatory and policy framework — overview	30
4B. Policy challenge 1 — Costs and operational conditions	32
4C. Policy challenge 2 — Taxes on mobile telecoms & mobile moneys	41
4D. Policy challenge 3 — Smartphone affordability, digital skills	43
4E. Policy challenge 4 — Regulatory reforms	48
5. The impact of Policy Recommendations	
5A. Impact on coverage	53
5B. Impact of the tax recommendations on internet adoption	54
5C. Impact of the policy recommendation on the usage gap	55
5D. Impact on Congo's DAI ranking	56
5E. Impact on tax receipts	58
5F. Impact on the broader economy	59
Glossary of Abbreviations	61
Annex 1 — Congo Electronic Communications Regulatory Framework	63
Annex 2 — Methodology for estimating broadband adoption	65

Executive Summary

The Republic of Congo (Congo) has set a digital transformation strategy, justified by the challenge to digitalise the Congolese economy in all its components and to reduce the digital divide in the country. This is outlined in the Government plans and strategies, including the National Development Plan 2022-2026, the Congo Digital Strategy 2030, and the World Bank Digital Acceleration Project (PATN).

International organisation digital indices such as the International Telecommunications Union (ITU)'s Global ICT Development Index¹ and the GSMA's Digital Nations and Society Index² reflect the progress already made by Congo in promoting digitalisation and the need to continue this progress. The country is in line with other countries within the CEMAC region but remains behind the leading African countries.

The mobile telecommunications sector (including mobile money) is a critical partner for the achievement of Congo's digital objectives. It provides the digital infrastructure and connectivity that underpins ongoing digitalisation.³

The digital sector should be approached as a strategic investment priority. Strengthening digital infrastructure and the broader digital ecosystem can enable the sector to become a key pillar of the diversification of the Congolese economy. Digitalisation has the potential to increase productivity across multiple sectors, support the development of new economic activities, and improve public revenue mobilisation, notably through more efficient and transparent tax collection systems.

Government and the regulatory authorities can support the mobile sector to deliver the infrastructure and services needed for the country's further digital transformation. This can be done through enhancing the regulatory framework for the sector, optimising the fiscal framework and using the power of government to stimulate demand for digital.



¹ The ITU's Global ICT Development Index assigned Congo a score of 49.6 in 2025, below the African average (56) and behind some neighbouring countries such as Gabon (76.1) and Angola (52.8). Congo's score increased significantly between 2024 and 2025, the ITU has pointed to methodology and data updates being the main cause. Data available on the ITU website.

² GSMA Digital Africa Index - Digital Nations and Society (2025) scored Congo at 26 which is comparable with other CEMAC countries (Gabon 32, Cameroon 40), however is falling behind other African countries such as South Africa (66), Kenya (59), Ghana (50), Senegal (49), Rwanda (49), and Nigeria (45).

³ Throughout this study, the term digitalisation (sometimes referred to as Information Communication Technologies ("ICT")) is used to denote the adoption of new technologies by consumers, businesses and governments across economic sectors. Digital transformation is the economic transformation resulting from such adoption. The digital economy encompasses the actors and exchanges taking place in the economy as a result of digitalisation.

Table 1
Summary of policy challenges and recommendations.

Policy challenge 1 Costs and operational conditions of providing digital infrastructure and services
Recommendation 1.1 - Reform of wholesale fibre transmission services market It is recommended that the ARPCE introduce regulatory reforms to allow other licencees to self-provide both domestic and international fibre transmission services and also to sell them on a wholesale basis to third parties. In the interim period, prior to this reform being implemented, it is recommended that ARPCE moves towards a regulatory framework for wholesale transmission services that is cost-orientated and non-discriminatory.
Recommendation 1.2 - Review of spectrum policy It is recommended that the ARPCE should undertake a comprehensive spectrum management review. This should include, among other things: • Reviewing the total amount of spectrum assigned to MNOs. • Reviewing timelines for the award of new spectrum licences. • Reviewing fees charged for spectrum. • Continued observation and management of cross-border interference to ensure problems do not return.
Recommendation 1.3 - Reducing the cost and improving the efficiency of network deployment It is recommended that the government reduce the costs that operators face when deploying high-capacity infrastructure. This includes, but is not limited to: • Consultation on a priority national infrastructure policy and applicable regulation for telecommunications. • Establishment of a single digital “one-stop-shop” for managing the permitting process. • Elimination of the fibre-optic deployment fee.
Recommendation 1.4 - QoS regulations It is recommended that the ARPCE review the QoS regulatory framework in Congo. This should include the following components: • A public consultation on QoS to obtain stakeholder views on the best way of delivering high levels of quality to customers. • Alignment with international best practice on quality of service. This should include consideration of countries where the regulator does not impose binding QoS regulations on the industry. • Consideration of other sector challenges, such as the high cost of deploying network infrastructure, particularly the prohibition on operators building their own domestic and international transmission networks. • The framework for the quality of services delivered by networks, including improved transparency through access to audit logs. The end result of this process should be an action plan, jointly developed by the ARPCE, mobile operators and other stakeholders that is aimed at delivering the most efficient and effective quality of service to customers throughout Congo.

Recommendation 1.5 - Reducing the cost of power for mobile operators

It is recommended that the government establish and implement a masterplan that:

- Establishes a partnership with the mobile network operators and energy companies to support telecoms energy supply requirements.
- Is integrated into the overall national strategy and commitments on energy and economic development.
- Includes lower grid electricity charges for the telecoms sector.
- Applies a diesel tax relief incentive.
- Implements VAT exemptions on renewable energy and solar equipment for mobile operators and tower companies to lower costs.
- Provides for additional incentives for sites located in rural and remote areas.

Recommendation 1.6 - Review of the Universal Service Funding arrangements

It is recommended that the FASUCE undertakes a USF policy review.

This should consider, amongst other things:

- Development of a clear process and methodology for projects to be funded by the USF. This should include the process for identifying underserved areas to be supported, the project financing mechanism, implementation, monitoring and reporting mechanisms and the overall governance arrangement for the projects.
- The participation by USF contributors (including MNOs and infrastructure providers) at each stage of the process.
- An increase in subsidies for mobile broadband coverage in rural, remote and low populated areas to cover both capex and opex for towers. This should include access roads, backhaul transmission, energy and other utilities.
- The introduction of a pay or play mechanism to incentivise investment in USF projects, notably the rural mobile broadband coverage programme.
- Provision for exemptions for frequency and infrastructure fees or diesel fuel taxes for operators implementing USF funded projects.
- The use of shared infrastructure by operators and effective infrastructure sharing regulation for USF projects.
- Publication of annual reports with audits of the USF to enhance transparency and public awareness.

Policy challenge 2

High and complex taxes on mobile telecoms services and mobile money

Recommendation 2.1 - Review the tax regime for the digital sector

It is recommended that the government and regulatory authorities conduct a review of taxation on mobile telecoms and mobile money providers. The regime should balance the objectives of raising government revenues, broadening the tax base, and enabling digital economy. This should include:

- Removal of the TTCE (tax on electronic communications).
- Reduce the 5% sector levy (RGL) to 3% to bring it closer to regional benchmarks.
- Reduce the 1% USF levy.
- Reduce the levy on mobile money cash withdrawals from 1.0% to 0.5% to bring Congo in line with BEAC regulatory fees.
- Reduction in the fees for mobile backhaul spectrum.
- Review of other sector-specific taxes and regulatory fees (also see Recommendation 3.1 on taxes that directly impact the affordability of smartphones).

Policy challenge 3

Smartphone affordability, digital skills and other demand barriers

Recommendation 3.1 - Reduce taxes on entry-level smartphones

It is recommended that the government and regulatory authorities conduct a review of taxation and fees that affect the affordability of entry-level smartphones. This should include:

- Removal of the CFA 10,000 SIM enabled device tax.
- Removal of remaining customs duties and regulatory approval fees (equivalent to 20% to 30% of value) on imported entry-level smartphones.

Recommendation 3.2 - Continued work on digital safety and security

It is recommended that the government should continue to work with the mobile sector and other stakeholders to progress the Cybersecurity Strategy and in National Data Governance Strategy. It is also recommended that the country continues to participate in international and regional Cybersecurity and data protection frameworks, notably the African Union Convention on Cybersecurity and Personal Data Protection (Malabo Convention).

Policy challenge 4

Regulatory reforms to enable the digital economy

Recommendation 4.1 - Review of the licensing framework

It is recommended that the government continue and complete the review of the 2009 Law as quickly as possible. This review should include the following elements:

- Adoption of fully technology neutral (or unified) licences covering both services and spectrum usage.
- Simplification of administrative procedures and the licence and authorisation fee structure.
- Reduction of overlapping institutional responsibilities for authorisations, declarations, and licences.
- This revision of the law and applicable regulations should be conducted through a comprehensive and transparent consultation process.

Recommendation 4.2 - Updating regulations for emerging technologies

It is recommended that a review is undertaken to develop regulations for emerging technologies, particularly satellite-based services. This should be based on the following principles:

- Transparency and predictability. Ensure clear and transparent regulatory requirements to facilitate efficient market entry and build industry confidence.
- Regulatory parity. Allow for equitable treatment of sectoral laws and regulations across all service providers.
- Harmonisation. Align regional and international policies to reduce fragmentation and enhance regulatory efficiency.
- Collaboration and consultation. Strengthen dialogue among governments, regulators and industry stakeholders for informed and inclusive policymaking.
- Balance innovation with regulation. Encourage technological progress while maintaining compliance, consumer protection and national security to build trust.

Recommendation 4.3 - Improving the regulation of mobile financial services

It is recommended that a Memorandum of Understanding (or applicable regulatory instrument) between ARPCE and other regulatory financial institutions is agreed to ensure that there is regulatory certainty and transparency for all parties. The future framework should formally recognise the complementary roles of sectoral and monetary authorities. This will help ensure regulatory coherence across these authorities giving transparency and harmonisation to the sector. It is also recommended that the necessary steps are taken to implement interoperability between MFS providers in Congo.

The adoption of these policy recommendations will have a significant impact on the sector and on the economy as a whole.

01

Extending 4G mobile network coverage from 86% to 97% population (with remaining remote areas covered by alternative technologies), contributing to the Digital Strategy 2030 nationwide access objective and the PATN target of 45% unique broadband penetration.

02

An estimated 540,000 additional unique mobile internet (broadband) subscribers by 2030, bringing the total number of unique mobile internet subscribers to 2.20 million (31% population). This would reduce the mobile internet usage gap by 7 percentage points and would provide a significant contribution to the PATN objective of 1.5 million people with new or improved broadband access.

03

Increased digitalisation would significantly contribute to economic transformation across important sectors such as agriculture, industry, transportation, trade, government and healthcare. The potential macroeconomic impact of these digitalisation recommendations on the whole economy would be close to FCFA 870 billion in 2030.

04

The proposed sector tax policy recommendations combined with the other policy recommendations would result in **economic growth that will have a FCFA 93 billion net tax impact in 2030 (FCFA 174 billion over the whole period) and would contribute to the Government's e-government objectives**. The effect of these policy recommendations will be a significant boost to the rate of digital adoption in Congo. This will be reflected in a reduction in the mobile internet usage gap compared to the baseline business as usual scenario.

97%*

4G population coverage from 86% (remaining remote areas to be covered by alternative technology)

+540,000

additional unique mobile internet subscribers, totalling 2.20 million (31% total population)

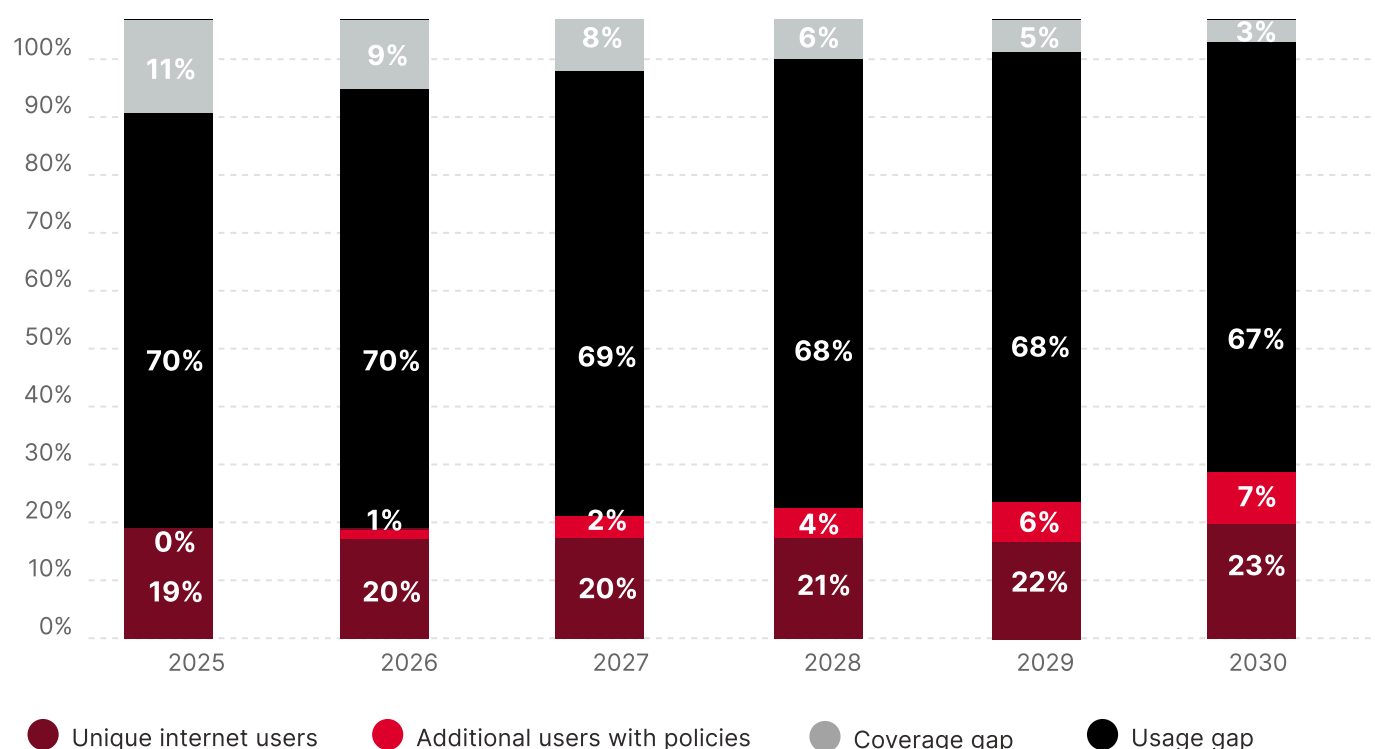
FCFA 870 Billion

potential macroeconomic impact across key sectors such as agriculture, industry, transportation, trade, government and healthcare

FCFA 93 Billion

net tax impact in 2030, including FCFA 174 billion over the whole period from digitalisation

Figure 1
Impact of the Recommendations on the Usage Gap.



The policies recommended in this report would increase annual tax revenues by FCFA 93 billion by 2030. The combined effect of the policy recommendations in this report will be to increase the total amount of tax collected in each year except the first one. Although there will be a reduction in the amount of tax collected directly from the telecommunication sector, this will be offset by taxes collected from the economy as a whole. Over the next five years, the total increase in tax collected is forecast to be FCFA 173 billion (Table 2).

Table 2
Congo — Combined Impact of Policy Recommendations on Tax Revenues.

Combined scenario	2026	2027	2028	2029	2030
Tax change from mobile sector (billion FCFA)	-40	-40	-39	-38	-38
Tax increase from wider economy (billion FCFA)	12	30	49	69	88
Additional tax collected from digitalisation (billion FCFA)	6	15	24	33	42
Net tax impact (billion FCFA)	-22	5	34	63	93

1. Introduction

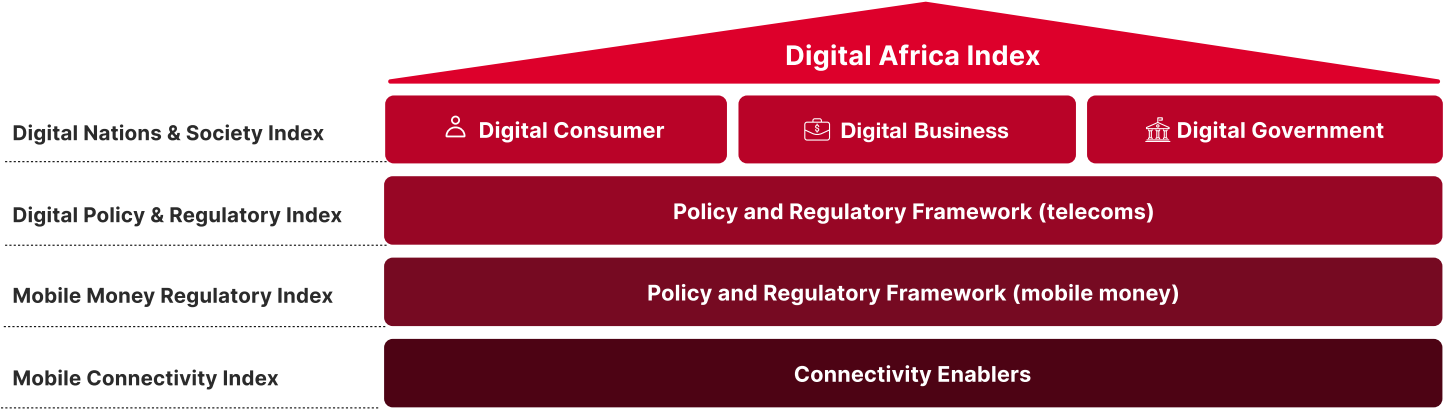


Congo has set out a digital transformation strategy aimed at digitalising the Congolese economy and reducing the digital divide. This is outlined in the National Development Plan 2022-2026, the Congo Digital Strategy 2030, and the World Bank Digital Acceleration Project. The strategy is being implemented in the context of continental and global initiatives such as the African Union Agenda 2063 and the United Nations Sustainable Development Goals.

This report examines the role of digital technologies in the Congo’s development plans. It begins with an overview of the telecommunications sector and examines its role in the country’s overall digital development strategy. The report identifies opportunities to accelerate digital transformation in the country through targeted policy reforms. It then goes on to quantify the impact of these reforms on the sector and the economy as a whole.

This report includes some of the analysis undertaken for the **GSMA’s Digital Africa Index (DAI)**. This was first published in October 2024 and updated in October 2025. It includes a **Digital Nations and Society Index (DNSI)** and a **Digital Policy and Regulatory Index (DPRI)**, and complements the GSMA’s Mobile Connectivity Index (MCI) and the Mobile Money Regulatory Index (MMRI). The DAI provides a comprehensive assessment of African countries’ progress in digital transformation and allows users to track and evaluate efforts at sector reform (Figure 2).

Figure 2
GSMA Digital Africa Index⁴



Source: GSMA

This report is structured as follows:

Section 2 Focuses on the mobile telecommunications sector, assessing its performance in terms of infrastructure, access, and adoption of digital services and mobile money. It identifies some important policy challenges and quantifies the impact of each policy recommendation scenario.

Section 3 Summarises the country’s digital development strategy, as contained in a series of policy and strategy documents. It also summarises the comparative analysis of Congo’s progress on digital development compared with other countries in Africa.

Section 4 Identifies key policy and regulatory challenges facing the sector, makes recommendations for reforms and analyses the potential impact of those recommendations.

Section 5 Summarises the expected impact of these policy recommendations.

4 GSMA Africa Digital Index presentation 2025.

2. The Mobile Sector in Congo



2. The Mobile Sector in Congo

2A. Mobile Telecoms

Congo currently has two mobile operators - Airtel Congo and MTN Congo. Airtel acquired Warid Congo in 2013 with the merger becoming effective at the end of 2014. The operator Azur, although still licenced, is no longer operational.

Congo Telecom, the state-owned incumbent operator, originated from the restructuring of SOTELCO in 2003 following its separation from the national postal service (SOPECO).

Congo Telecom is fully owned by the Congolese state and is focused on fixed network infrastructure. For the past five years, the company has been implementing a commercial revival plan known as "Transform," which includes the transition to FTTH, with an increase in speeds and a reduction in prices. The operator also has a mobile licence covering 2G, 3G and 4G.

Table 3
Telecoms Sector Operators in Congo.

Segment	Operators (active)
• Mobile and FWA	• Airtel, MTN
• Fixed (FTTH)	• CanalBox, Congo Telecom
• Metropolitan and cross-border fibre infrastructure	• Congo Telecom, Silicone Connect, and Airtel Congo. Mamb Services and Rofa are two other concession holders operating on less active links
• National Backbone	• Congo Telecom (via PCN), Silicon Connect
• International Connectivity	• MTN, Congo Cable
• Landing stations	• WACS (Congo Telecom, MTN member of the consortium), 2Africa (Airtel)

2A.1. Mobile subscriber penetration

The total mobile subscriber penetration rate, based on active SIM cards, is around 100% (Table 4).

Table 4
Total Number of Subscribers and Penetration Rate.

	2020	2021	2022	2023	2024	2025
Total subscribers (million)	5.6	5.6	5.7	5.9	6.0	5.9
Penetration rate over total pop.	106.1%	103.8%	101.0%	96.2%	95.4%	92.4%

Source: ARPCE

The number of unique mobile users is lower than the number of active SIM cards because many users have multiple SIM cards. Estimating the number of unique users is important for policy because it is a measure of how many people have access to mobile services. However, it is difficult to estimate from MNO subscriber data alone because they typically do not have information on the number of unique individuals using their networks and users may have active SIMs from more than one operator.

The GSMA uses a range of different techniques, including surveys and modelling, to estimate the number of unique mobile users using a consistent methodology that allows cross-country comparison. They use a similar approach to estimate the number of unique internet users.

The GSMA estimates that, in 2025, there were approximately 2.28 million unique mobile users in Congo, equivalent to 35% of the total population. This metric, for Congo, lies slightly below the average for Central Africa and well below the average for the whole African continent (Table 5).

Table 5
Unique Mobile Subscriber Penetration, 2024-25.

	2024	2025
Congo	18.0%	18.8%
Central Africa	18.6%	19.5%
Africa	27.6%	28.4%

Source: GSMA Intelligence

There were 5.9 million mobile internet active SIMs in 2025, a penetration rate of 58.0%, up from 54.5% in 2020 (Table 6). MTN Congo is the leader in the mobile internet market with a market share of 66% in 2025 compared to 34% for Airtel Congo.

It is estimated that there were 1.21 million unique internet users in 2025, representing a unique user internet penetration rate of 18.8%. This is close to the Central Africa average of 19.5%. The technologies primarily used are 3G (39% of connections), 4G (28%) and 2G (31%). 5G connections amount to 2% with both mobile operators having obtained licences for 5G technology in 2024.

Table 6
Mobile Internet Penetration, 2020-25.

	2020	2021	2022	2023	2024	2025
Market penetration - mobile internet	54.5%	57.8%	54.2%	55.9%	59.2%	58.0%

Source: ARPCE

Table 7
Mobile Internet Unique Users As % of Population, 2024-25

	2024	2025
Congo	18.0%	18.8%
Central Africa	18.6%	19.5%
Africa	27.6%	28.4%

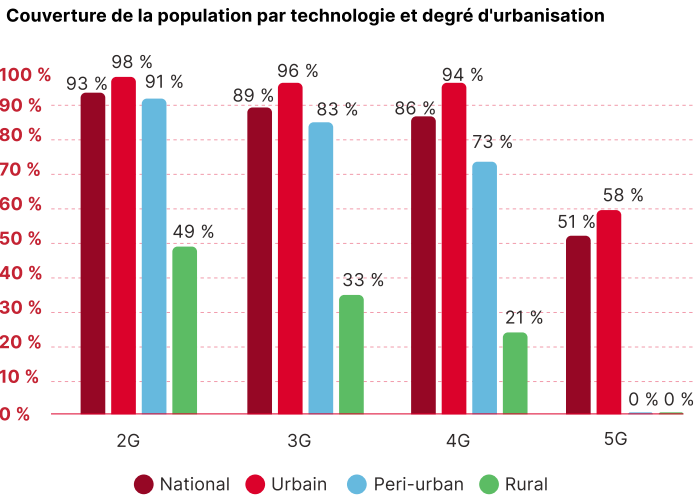
Source: GSMA Intelligence

2A.2. Mobile coverage and the internet usage gap

Congo has good mobile broadband network coverage with nearly 90% of the population living within range of a 3G or 4G network. 5G rollout started in November 2024, focusing on the 2 major cities of Brazzaville and Pointe-Noire. Despite this progress, it is ranked among the countries in the lower “emerging” category in the GSMA Mobile Connectivity Index 2025, with an overall score of 41 points and an infrastructure score of 56 points (on a scale of 100, which represents the highest score).⁵

A key challenge is that there are significant coverage gaps in rural and remote areas. GSMA analysis finds that mobile internet population coverage in rural areas is only 33% for 3G, and 21% for 4G. Almost 80% of the rural population do not have 4G coverage and half do not have coverage at all (Figure 3,4).

Figure 3
Mobile Network Population Coverage by Technology and Degree of Urbanisation, 2025.

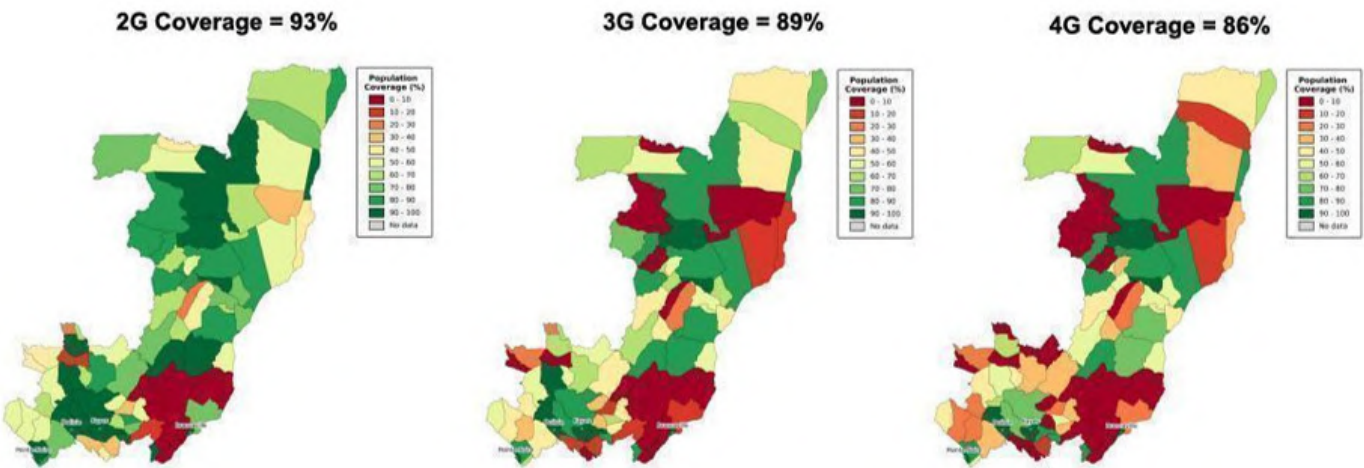


Source: GSMA Intelligence

Note: Analysis of operator data and population data by GSMA Intelligence and GoYo Analytics. Urban and rural classification are based on Global Human Settlement Layer (GHSL) “Degree of Urbanisation Classifications”.

5 GSMA Mobile Connectivity Index 2025.

Figure 4
Population Coverage Maps Network Technology, 2025.



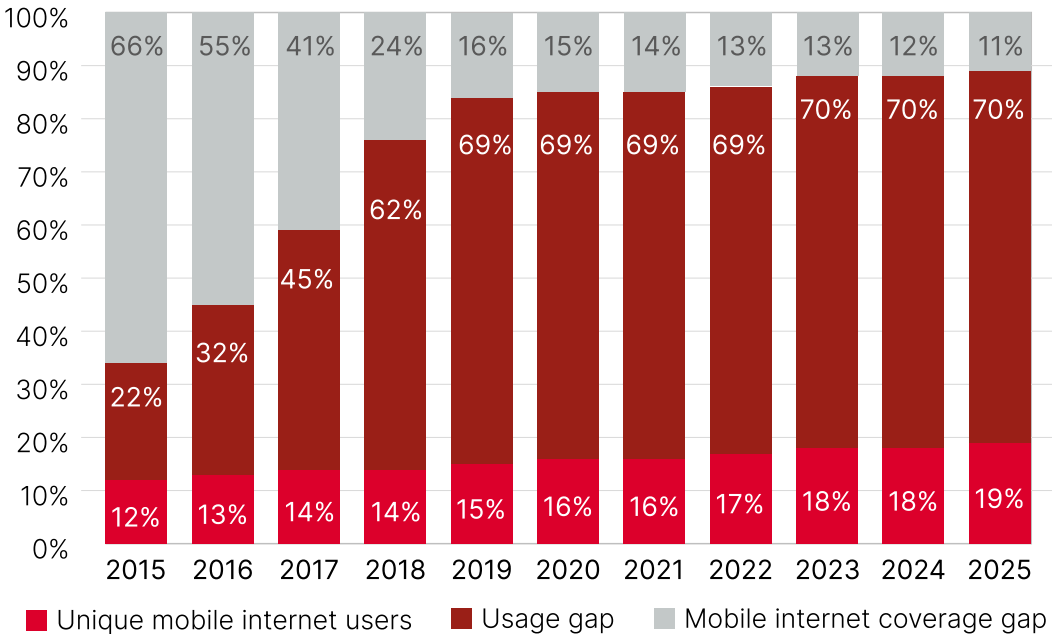
Source: GSMA Intelligence

Note: Analysis of operator data and population data by GSMA Intelligence and GoYo Analytics. Urban and rural classification are based on Global Human Settlement Layer (GHSL) "Degree of Urbanisation Classifications".

Congo has seen steady growth in broadband network coverage and adoption. The mobile broadband networks expanded quickly in the period 2015 to 2020 but population coverage has stalled at around 89% for the past six years. The adoption of mobile broadband has increased slowly over the same period, increasing by less than 1 percentage point of the population each year.

Currently, 19% of the population use mobile broadband. 11% of the population live beyond the range of the mobile broadband networks (the "coverage gap"). 70% of the population live within range of the mobile broadband networks. (Figure 5.)⁶

Figure 5
Congo Mobile Broadband Internet Population Coverage and Usage, 2015-25.



Source: GSMA Intelligence

6 The "coverage gap" is the proportion of the population that is not covered by the mobile broadband networks. The "usage gap" is the proportion of the population that lives within range of the mobile broadband networks but does not use the internet.

Congo lags behind other countries in central Africa on mobile broadband adoption. Despite the steady growth in the networks, mobile broadband usage in Congo (18.8%) remains marginally behind the regional average for Central Africa (19.5%) even though the mobile broadband population coverage in Congo (89%) is above the regional average (86%).

This points to Congo’s high usage gap which sits at 70% compared with the Central Africa average of 66%. Mobile broadband usage in Congo is considerably behind the average for Africa as a whole which stands at 28% (Table 8).

Table 8
Mobile Internet Coverage and Usage, Congo Compared to the Region, 2025.

	Congo	Central Africa	Africa
Mobile broadband usage	19%	19%	28%
Mobile broadband usage gap	70%	66%	66%
Mobile broadband coverage gap	11%	14%	5%

Source: GSMA Intelligence

2A.3. Mobile data usage and tariffs

Data consumption in Congo has soared in recent years, increasing four-fold between 2020 and 2024 (Table 9).

Table 9
Congo Total Mobile Data Traffic, 2020-24.

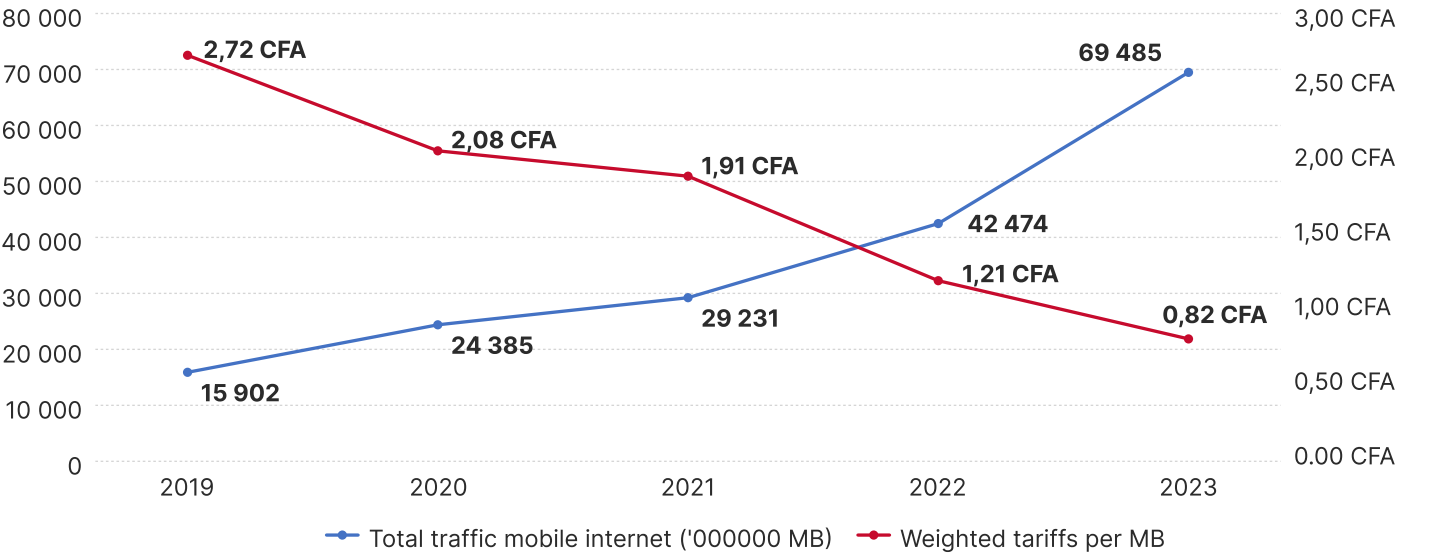
	2020	2021	2022	2023	2024
Total Mobile Data Traffic (TB)	23.3	27.9	40.5	66.3	86.6
Year-on-year change		19.8%	45.3%	63.3%	30.7%

Source: ARPCE — No data published for 2025

The fixed broadband market is also showing growth potential. Five main operators are present in the fixed internet market: Congo Telecom, the Vivendi Africa Group (GVA) with its Canal Box brand, Airtel Congo (FWA), MTN Congo (FWA) and SOFIA, which covers part of the fixed internet market for businesses in Pointe-Noire. Other operators such as Alink Telecom, PI Service/Sky TIC and AMC Telecom are also present in this market. Available technologies include FTTH, fixed LTE and satellite solutions.

Mobile data service prices have fallen continuously in recent years. Data prices fell by 44% between Q1-2022 and Q1-2023. This is the primary factor underlying the rapid increase in data traffic volumes. The price reductions have been the result of increased competition among the two mobile operators, infrastructure development like fibre optic networks and measures to reduce costs through, for example, tower sharing (Figure 6).

Figure 6
Congo Mobile Data Prices and Traffic Volumes, 2019-23.



Source: Operators & ARPCE

2A.4. Domestic and international fibre connectivity

Congo has launched several national and regional fibre optic infrastructure projects. These have significantly improved broadband connectivity in the country by linking major population centres with high capacity networks and providing access to the very large amounts of international bandwidth available on submarine cables.

The National Coverage Project (PCN) is a national telecommunications network modernisation project funded by the government. It has deployed approximately 3,000 km of fibre-optic cable connecting Pointe-Noire, Dolisie, Brazzaville, Oyo, and Ouesso, and metropolitan fibre networks have been built in Brazzaville, Pointe-Noire, and Oyo. The PCN network is operated and marketed by Congo Telecom.

Énergie Électrique du Congo (E2C) has 1,100 km of fibre optic network. Management of part of the unused capacity of this network was granted in September 2020 to Silicone Connect for a period of 10 years. Another portion of the capacity is used by Congo Telecom. Congo Telecom, together with Silicone Connect, provide wholesale capacity leased services to other telecommunications operators, including Airtel and MTN. This arrangement is overseen by the ARPCE in accordance with the regulatory framework.

Congo has been interconnected to the Democratic Republic of Congo (DRC) via a Congo Telecom under-river cable linking Brazzaville to Kinshasa since 2017. Other private operators, Airtel and Silicone Connect, also have under-river cables connected to Kinshasa.

Congo has been interconnected to Gabon since 2018. This was developed as part of the regional Central African Backbone (CAB) project, the first phase of which was financed by the World Bank. This infrastructure has been operated and marketed since 2019 by Mamb Services, a Congolese company, under a seven-year public service delegation. Congo has also been connected to Cameroon since 2022 and will be connected to the Central African Republic in the near future, as part of Phase 2 of the CAB project, financed by the African Development Bank (AfDB).

Congo is connected to the West Africa Cable System (WACS) with a landing station located in Matombi in the Kouilou Department. WACS connects from South Africa to the United Kingdom along the coast of West Africa, and has provided Congo with international digital access since May 2012.

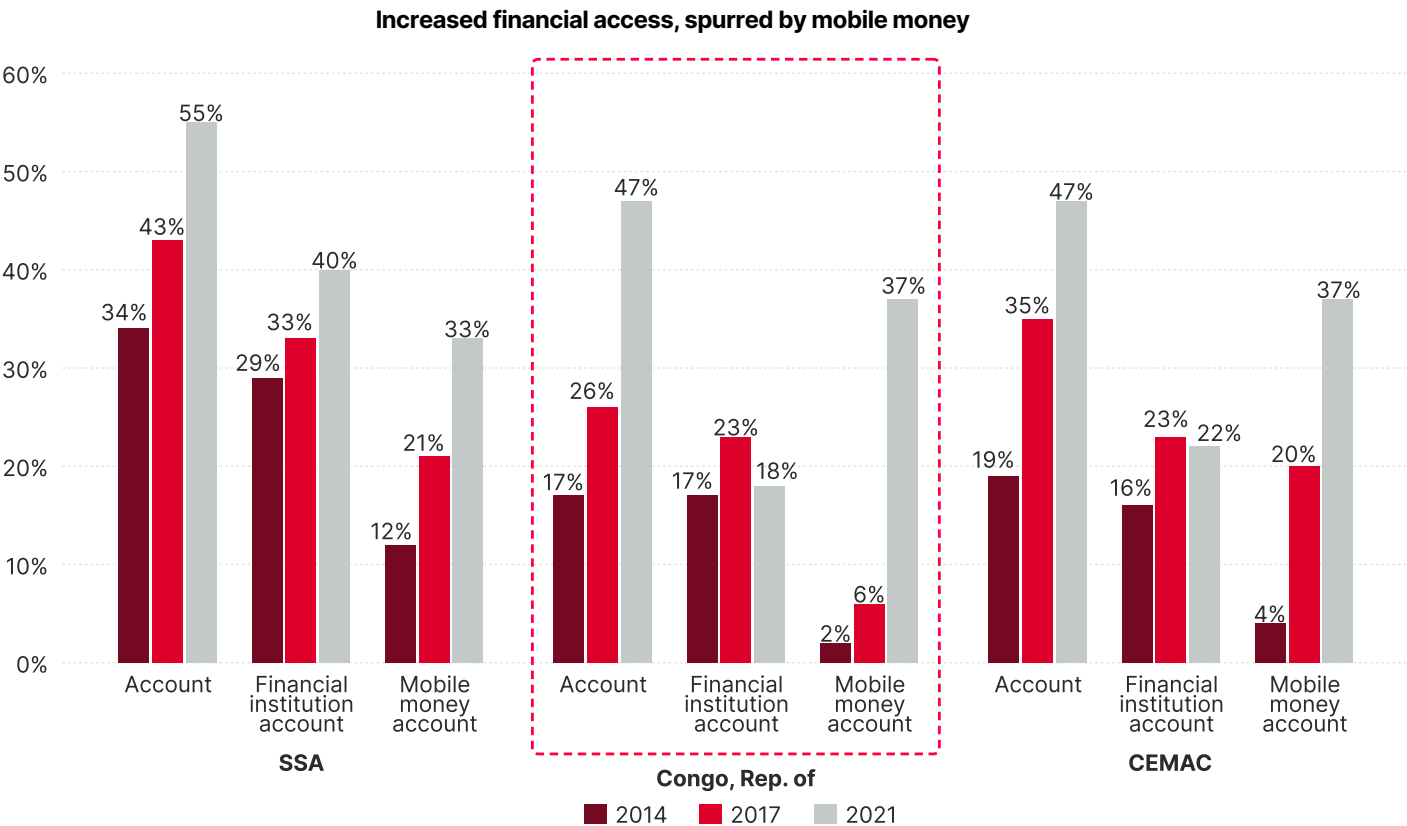
Congo has also been connected to the 2Africa submarine cable since August 2023. Airtel owns and operates the landing station through which the 2Africa cable connects.

2B. Mobile money

Congo is lagging its peers when it comes to access to traditional financing services.⁷ In 2021, only 18 percent of the adult population had access to a formal account at a bank or another type of traditional financial institution, placing Congo well below the SSA average and just below the average for the CEMAC area.

But overall access to financial services has increased significantly as a result of the rapid growth of mobile money. Between 2014 and 2021, the proportion of adults with mobile money increased from 2% to 37% bringing the total proportion of the population with access to a financial account to 47%. This is below the SSA average of 55% but the same as the average in CEMAC countries (Figure 7).

Figure 7
Impact of Mobile Money on Financial Access in Congo and Regional Benchmarks.



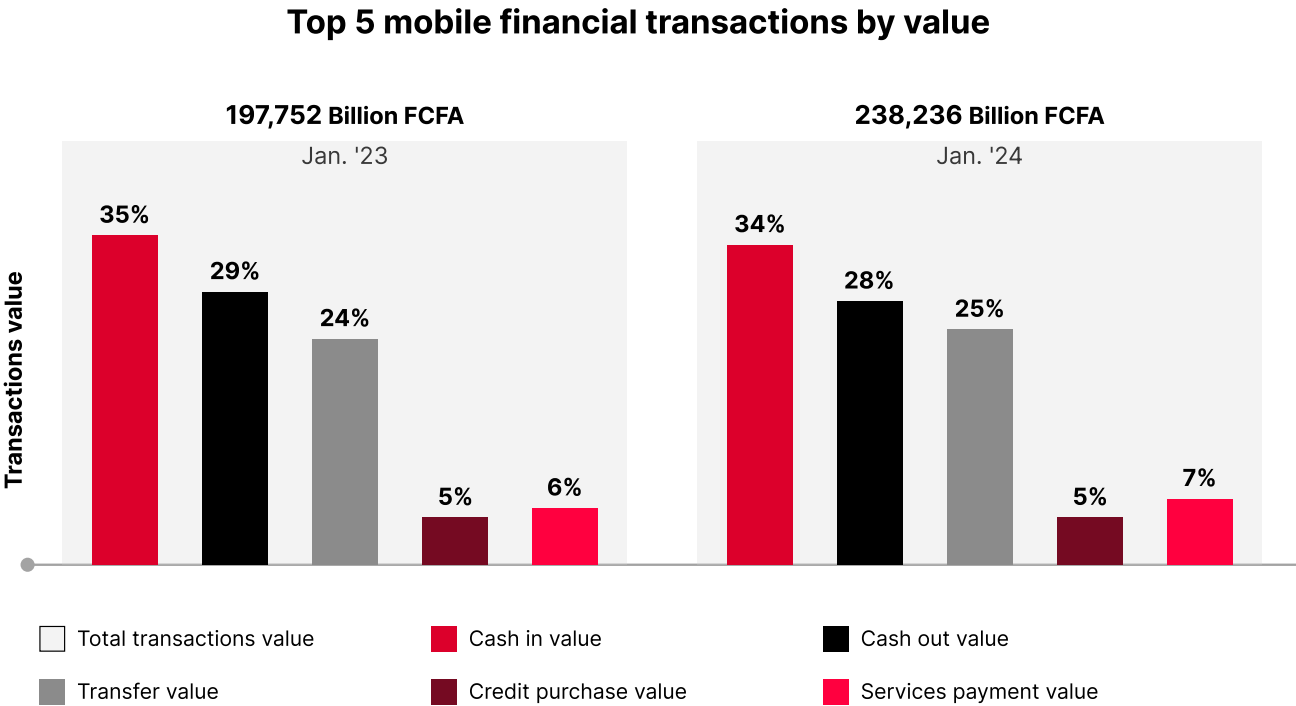
Source: IMF 2024

7 Financial Inclusion in Congo, an unfinished Agenda, 2024, IMF report

Congo is making progress on its level of financial inclusion. It is aiming to reach the targets set out in the 2022— 2027 sub-regional financial inclusion strategy set by Bank of Central African States (BEAC).⁸ This strategy aims to enhance financial inclusion access and usage for vulnerable populations, particularly youth, women, rural populations, and MSMEs in the CEMAC region, with the goal of increasing financial inclusion from 32% in 2021 to 60% by 2027 and 75% by 2030.

The total value of mobile money transactions has grown rapidly as the adoption of mobile money has accelerated. Total transaction value increased by 20% between 2023 and 2024 and it has continued to grow since then. Around 90% of the value of mobile money transactions were for cash-in, cash-out or cash transfers. Only 11-12% of the value of mobile money transactions was for credit purchases or services payment (Figure 8).

Figure 8
Congo Mobile Money Transaction Value, Jan 2023-Jan 2024



Source: National Treasury⁹

The main mobile money providers in Congo are the mobile network operators Airtel Congo and MTN Congo. The latest ARPCE mobile money figures show that during the first quarter of 2025, the mobile financial services market recorded total revenue of FCFA 7.7 billion, representing a 28% increase compared to FCFA 6.0 billion in Q1 2024. The total value of mobile money transactions reached FCFA 222 billion in 2024, a 21% increase compared to May 2022.¹⁰

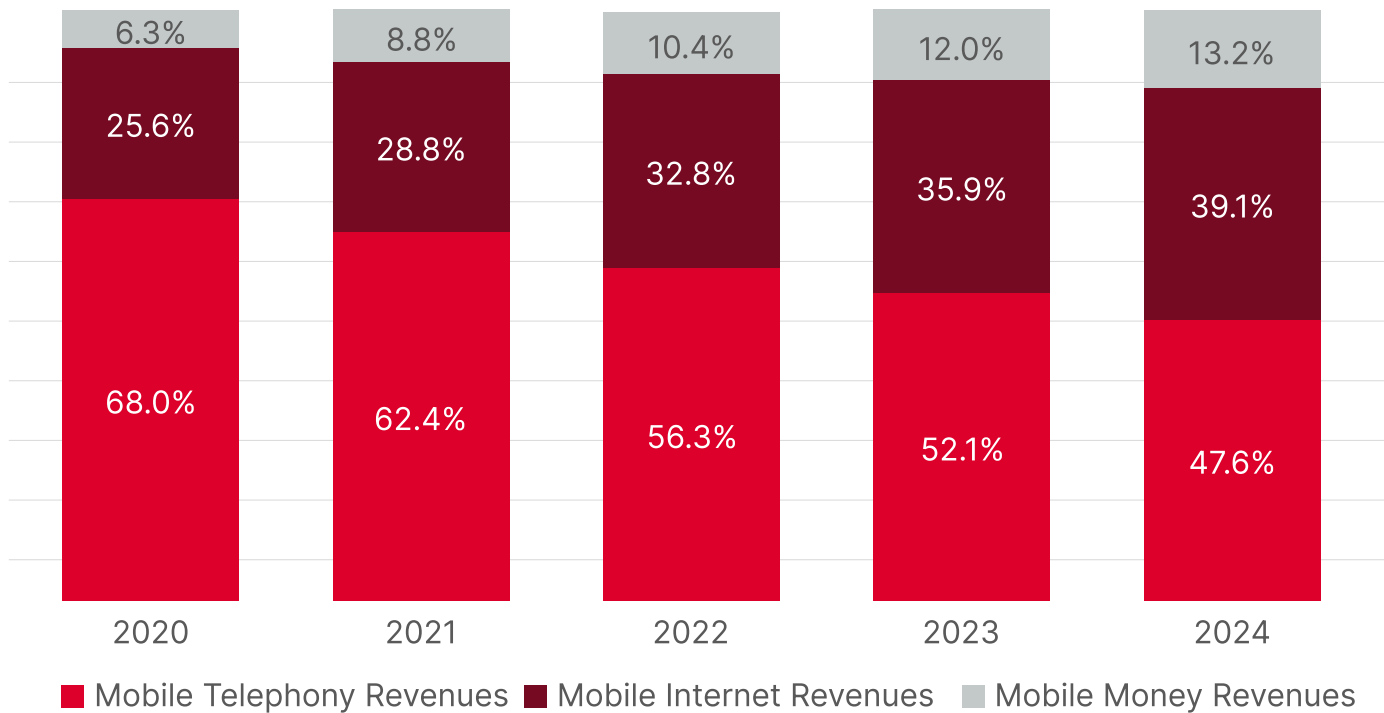
As of 2024, MTN Congo was the market leader in terms of revenue, with 81% market share.

MTN subscribers made the highest number of transactions, approximately 57 million, while Airtel recorded over 14 million.

The growth in mobile money adoption and usage in Congo has made a small but growing contribution to the MNOs' revenues. By 2024, mobile money revenue accounted for 13.2% of their total (Figure 9).

8 BEAC
9 The digital sector in Congo-Brazzaville — Trésor français, August 2024.
10 ARPCE mobile money report, May 2023.

Figure 9
Mobile Operators Revenues.



Source: ARPCE



3. Digital development in Congo



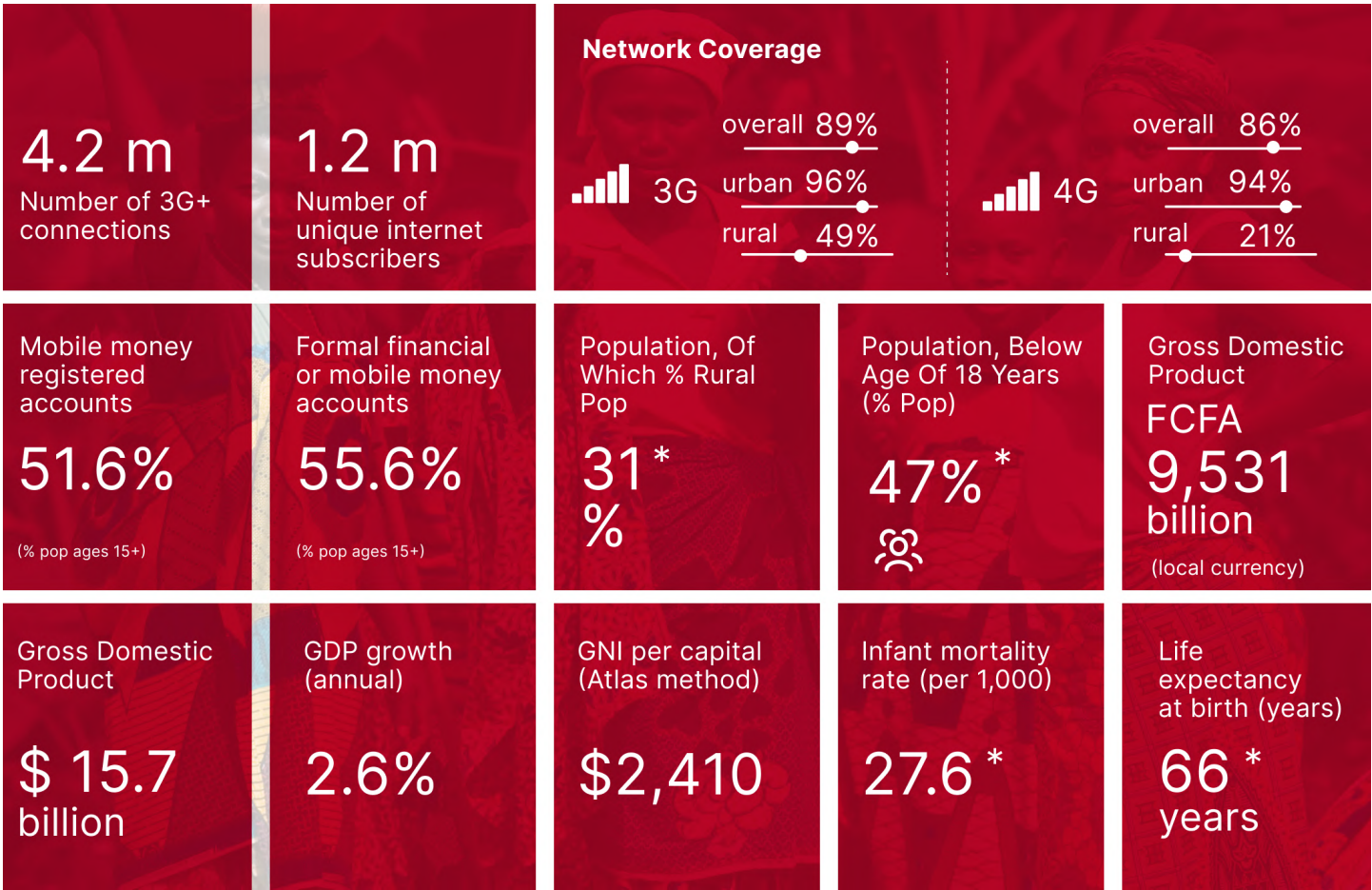
3 Digital development in Congo

Congo has set out a comprehensive strategy for digital transformation of the country. This is contained in a series of individual plans and strategies.

3A. National economic development strategy

The Republic of Congo covers 342,000 km2 and has a population of 6.1 million people, of which 47% are under 18 years old. More than half of the population lives in its two main cities — Brazzaville and Pointe-Noire. The Congolese economy is projected to maintain an average growth rate of 3.2% over the period 2026-2027.

Figure 10
Congo — Key Indicators.



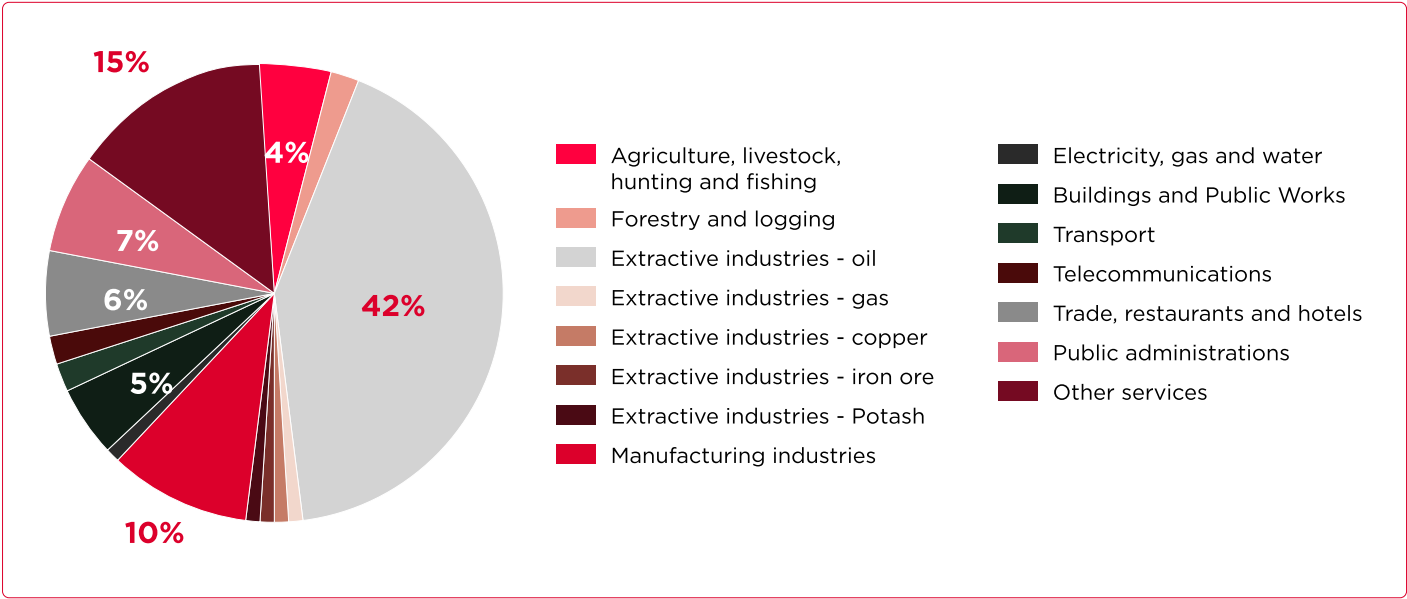
Data for 2024, except 2023 if marked *, or 2022 if marked +, or 2021 if marked

Source: World Bank World Development Indicators, GSMA Intelligence, Findex.

The oil sector accounts for about half of the country's gross domestic product (GDP) and 80% of its exports, making it the third largest producer in Sub-Saharan Africa.¹¹

The country also has a wealth of mineral resources that remain largely untapped (Figure 11). Problems of poverty and lack of infrastructure in Congo remain major challenges.

Figure 11
Congo — Breakdown of GDP



Source: CNSEE and BEAC — CONGO gross domestic product by sector 2023

The broader contribution of the telecommunications sector to the economy includes the rest of the mobile ecosystem and its supply chains. It also has an effect on productivity in the wider economy. It is estimated that the full contribution of the

telecommunications sector to the national economy in 2024 was 7.2% of GDP (Figure 12).

Figure 12
Congo — Economic Contribution of the Telecommunications Sector, 2024

Component	% of GDP
Mobile operators	1.6%
Remainder of mobile ecosystem	0.8%
Indirect (supply chain)	0.6%
Productivity stimulus in wider economy	4.2%
Total	7.2%

Source: GSMA Mobile Economy Sub-Saharan Africa

11 World Bank Republic of Congo summary, April 2025.

Problems of poverty and lack of infrastructure in Congo remain major challenges. Poverty rates remain high at around 46%.¹² Addressing this through broad-based economic growth is a key priority for the country. The country is making efforts to diversify its economy and reduce its dependence on oil revenue. These efforts have had some success, with non-oil sectors expanding in recent years resulting in marginal positive real economic growth.

The digital economy will be a key component of any future economic growth and diversification away from dependence on the oil sector. The digital sector is, itself, a source of economic growth, employment and increased tax revenues. But it also has a broader impact on the economy through the positive impact it has on productivity in other sectors. This is reflected in the priority that digital is given in the national economic development strategy.

3B. National digital development initiatives

The National Development Plan (NDP 2022–2026)¹³ includes the development of the digital economy among its six priority pillars along with agriculture, industry, tourism, economic free zones, and the promotion of real estate.

National development strategy of the digital economy — Congo Digital 2030. This is a comprehensive plan focused on transforming the country into a knowledge-based society through digital technologies. It was developed in partnership with global institutions and is based on the following four pillars:

01

Infrastructure & Connectivity:

Expanding 4G/5G and rural fibre;

02

Digital Public Platforms:

Interoperable IDs and payment systems;

03

Human Capital & Inclusion:

Training 250k youth and digital literacy;

04

Cybersecurity & Digital Trust:

Protecting the data and systems.

The Digital Acceleration Project (PATN)^{14, 15} —

The Government launched the Digital Transformation Acceleration Project (PATN) in 2023 with the support of the World Bank, which is providing USD 100 million of financing.¹⁶ The overall objective of the PATN is to increase access to high-speed Internet for underserved populations and to improve the capacity of the Congolese administration to provide digital public services.

In June 2025, the Minister in charge of Telecoms launched the next phase of the PATN. This is supported by a FCFA 10 billion grant from the European Union and a FCFA 17 billion loan from the European Investment Bank (EIB). The project targets education, health systems, administrative connectivity, and youth training.

Digitalisation of public services. The government has begun efforts to digitalise core government functions. Public sector digitalisation efforts have primarily focused on the government's main administrative systems and online government information portals. Various computerisation projects have progressed in recent years, using digital technologies to improve public financial governance. Several reforms have been launched in the financial departments of the Ministry of Economy and Finance to better collect and secure public revenue. These include the Integrated Public Finance Management System (SIGFIP), the Tax Management System (E-TAX) developed internally by the ministry's information systems directorate, and the Computerized Customs System (E-DOUANES).

¹² Republic of the Congo Overview: Development news, research, data | World Bank.

¹³ PND 22-26 Republic of CONGO.

¹⁴ Congo Digital acceleration Project WBG.

¹⁵ Agence Ecofin press release.

¹⁶ Project Appraisal Document PATN.

Some digitalisation of public services to enable administrative formalities to be completed online have been undertaken. Digital transactional platforms have also been created, in conjunction with mobile phone operators, to enable the electronic payment of telecommunications bills (fixed internet and television), electricity and, more recently, land transport taxes.

Connectivity improvements.¹⁷ The government's digital ambitions are being supported by investments into digital infrastructure. This includes the connection to the 2Africa submarine cable, establishment of public Wi-Fi access points and construction of data centres. The government is also investing in digital skills incubators that will support training of young people in the necessary technologies to enable them to fully participate in the digital economy.

The Congo's energy sector has also become a catalyst for fostering tech innovation. French oil major TotalEnergies launched its own incubator in 2019, supporting seven digital startups that integrate energy and technology. Projects like AndrewTek, which focuses on energy optimisation in buildings, and GazTech, offering smart metering for LPG access, highlight the potential to support energy sector growth through digitalisation.

3C. Assessment of Congo's progress on digitalisation

Congo is making progress with its digital transformation but benchmarking the country's performance compared to other African countries highlights the need for further effort.

The GSMA Digital Nations and Society Index (DNSI) shows that Congo is below the African average for the adoption and integration of digital technologies. The DNSI measures the extent to which digital technologies are adopted and integrated into daily life by consumers and businesses.¹⁸ It includes a range of metrics which are then combined to form an overall index score that measures the level of digitalisation in each country in Africa.

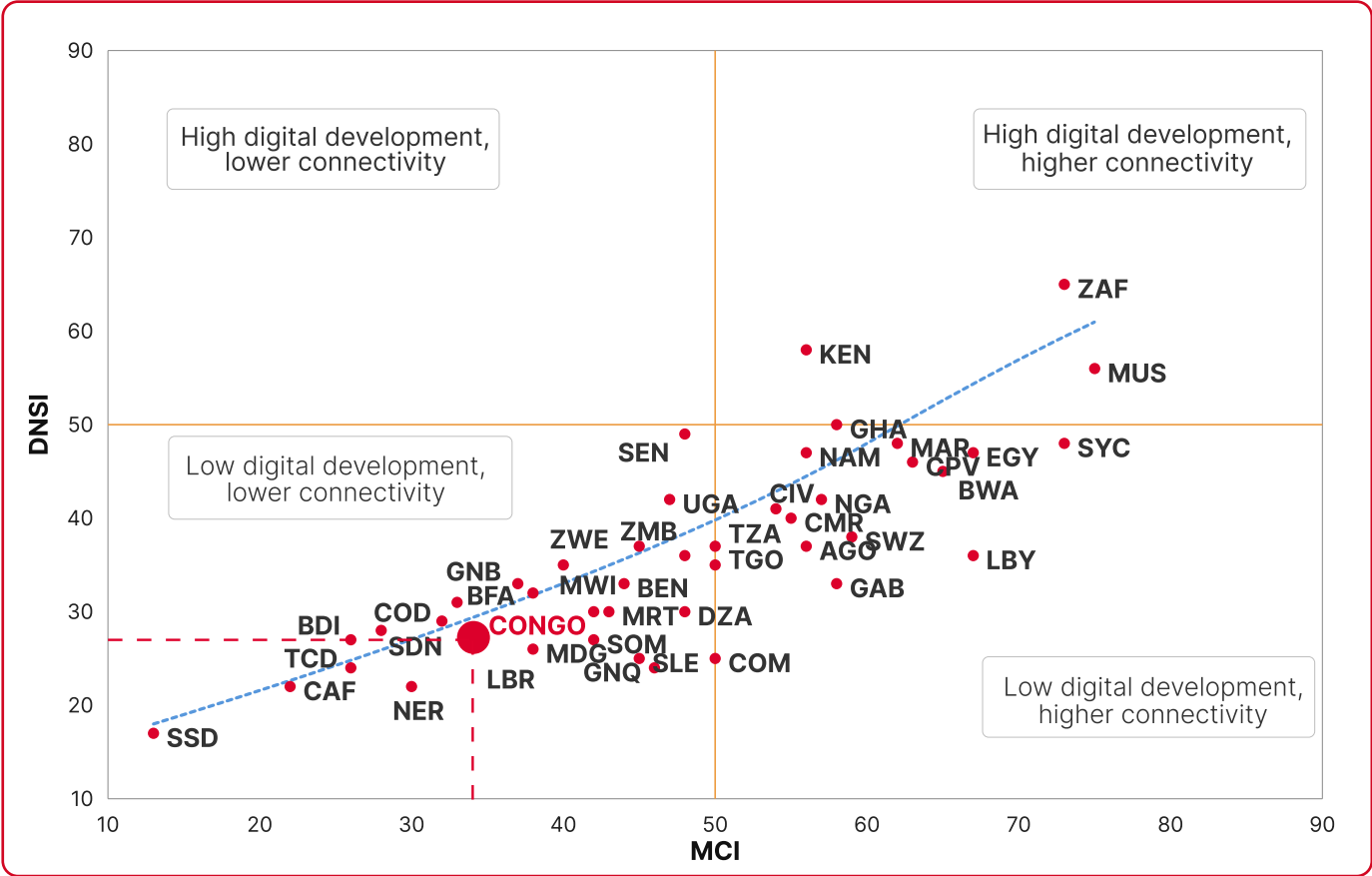
Congo's overall index score (26) is below the average for Africa (36) and also below some other CEMAC countries such as Gabon (32) and Cameroon (39). It is further behind leading countries in other sub-regions in Africa such as South Africa (66), Kenya (59), Ghana (50), Senegal (49), Rwanda (48) and Nigeria (45).

Across Africa, there is a clear relationship between the level of digital adoption among consumers and businesses and the extent and depth of digital connectivity. Countries that have lower levels of connectivity tend to also have lower levels of digitalisation. Congo is among the African countries with a combination of relatively low levels of connectivity and also low levels of digitalisation (Figure 13).

¹⁷ Congo Energie & Investment Forum: 5G Launch Signals New Era for Congo's Digital Economy.

¹⁸ See GSMA DNSI for more details.

Figure 13
Digital Nations and Society Index (DNSI) and Mobile Connectivity Index (MCI) Scores in Africa, 2025.



Source: GSMA Digital Africa Index 2025

The relationship between connectivity and digitalisation shows the importance of addressing both areas simultaneously. This indicates that it is not possible to accelerate digitalisation of an economy and society without also addressing connectivity challenges. Investing in e-government initiatives, digital skills development or other

efforts to promote digitalisation are likely to be unsuccessful if the country does not also reform and support the sector to promote affordable access.

3D. The impact of digitalisation on the economy of Congo

Congo has made some progress in digitalisation in some areas of the economy. Working together, the mobile operators, companies in other sectors and the government have implemented numerous initiatives that have had a positive impact.

The government has launched several initiatives to promote the use of digital in agriculture. The Ministry of Agriculture is working closely with universities and research centres to integrate digital literacy and agritech training into agricultural education.

This includes using mobile apps and remote sensing for crop monitoring and pest control. The Agence Nationale de Valorisation des Résultats de la Recherche et de l'Innovation (ANVRI) has also launched a smart greenhouse project which features a 1,000 m² experimental farm equipped with digital tools like Android apps for plant identification, disease diagnostics, and automated irrigation.¹⁹

Industrial development in Congo is also being positively impacted by digital technologies. The national digital strategy recognises the value of the integration of automation, data analytics, IoT, machine learning, and AI technologies into production processes. This enables the digitalisation of manufacturing operations, predictive maintenance, real-time monitoring, and customisation of products.

For example, companies such as the Zanaga Iron Ore Project are exploring the use of AI and real-time analytics to map mineral-rich zones, autonomous equipment and remote monitoring to reduce risk and improve yield, and digital systems to optimise extraction and maintenance.²⁰

Digital technologies are also positively impacting growth in trade in goods and services. GSMA has estimated that digital wallets and mobile money services will process over USD 500 billion transactions across Africa and UNCTAD estimates that over half a billion people on the continent are becoming e-commerce users.²¹ The IFC estimates that more than 600,000 formal businesses and 40 million microbusinesses in Africa could benefit from digital transformation through reducing the cost of business.²²

Congo is part of the African Continental Free Trade Area (AfCFTA) which has introduced a Digital Trade Protocol to create a harmonized framework for digital trade, including market access, data governance, and digital payments.²³ Open APIs are being adopted by mobile operators and technology companies to improve efficiency and service delivery for enterprise clients' business processes. These include cross-border payments and financial solutions, location tracking, notification systems, and authentication systems, real time consumption tracking and automated billing and alerts and security and fraud prevention.

19 Les Echo Congo Brazzaville article - Agritech, November 2024; France Directorate General of Treasury - Agricultural Sector in Congo-Brazzaville, October 2023.

20 Zanaga Iron Ore Project website.

21 GSMA article - what is the opportunity for e-commerce in Africa? March 2023.

22 IFC report - Digital Opportunities in African Businesses, May 2024.

23 Ministers of Justice Adopt AfCFTA Protocol on Digital Trade Annexes in Zanzibar - AfCFTA.

The mobile operators in Congo provide digital services that directly benefit SMEs, increasing their productivity. Airtel Congo's Soteka platform provides an e-commerce marketplace for retailers and customers for the purchase and receipt of goods and services securely, integrated with Airtel Money payments.

MTN's MoMo Pay allows users to pay for goods and services at partner merchants and currently supports over 1.9 million active merchants. Through MoMo, small businesses can access microloans and insurance products, helping them scale operations and manage risk.

Digitalising government services has had a significant impact on the quality and reach of public services in many African countries. It is widely recognised across Africa that digitalisation is one of the most effective ways of increasing the quality and availability of public services. The African Union Digital Transformation strategy 2020-2030 identifies digital governance, digital education, and digital health as critical sectors.

The government of Ethiopia has used digital payment channels to pay with coupons for subsidised fuel mandated by the government to prevent illegal activities, fuel wastage and promoted digital payments adoption.²⁴

By 2024, more than 1,600 gas stations were participating in the scheme with 141,000 vehicles paying through Telebirr with the subsidy transaction and 1.1 million vehicles paying without the subsidy.

Congo is still lagging behind in the development of e-government. The United Nations e-Government Index (EGDI) conducted most recently in 2024, ranks Congo 162nd out of 193 countries. This is part of the "lower" EGDI group and is ranked after countries such as Kenya (108th), Gabon (121st), Nigeria (144th), and Cameroon (155th).²⁵

Initiatives are underway to improve the level of digitalisation of the public sector. Under the World Bank Digital Acceleration Project, a new eGov one stop portal is under development. The project targets 10 transactional e-government services on the eGov one stop shop portal by December 2027.



24 GSMA report - Driving Digital Transformation of the Economy in Ethiopia, October 2024, Page 28.

25 UN E-Government Development Index 2024.

4. Regulatory and policy challenges in the telecommunications and mobile money sectors



4. Regulatory and policy challenges

The Congolese digital ecosystem is at a pivotal moment in its development. The operators and the government have the shared objective to develop the digital economy, improve services to citizens,

optimise public revenue from the sector and safeguard operators' financial capacity. However, despite this the industry faces many challenges.

4A. Regulatory and policy framework — overview

The telecommunications sector is governed by the Electronic Communications Law No. 9-2009 of 25 November 2009 (2009 Law) and the ARPCE Law 2009. These laws established L'Agence de Regulation des Postes et des Communications Electroniques (ARPCE) as the new body regulating postal and electronic communications. It also strengthened the legal and governance framework of the sector.

The Ministry of Posts, Telecommunications and the Digital Economy is responsible for the sector. In implementing this mandate, it relies on the structures under its supervision:

- ➔ ARPCE — the sector regulator
- ➔ Digital Economy Development Agency (ADEN) — responsible for implementation of sector policy and digitalisation of the country
- ➔ General Directorate of Posts and Telecommunications (DGPT).

A National Commission for Personal Data has also been established.²⁶ Its mission is to ensure the implementation of personal data processing and to inform data subjects and data controllers of their rights and obligations.

A consultation process on the revision of the 2009 Law has been undertaken to align the national framework with CEMAC regulations and international standards. The forthcoming amendments are expected to modernise the licensing regime through more flexible and technology-neutral authorisations, to cover digital services and satellite segments, and to strengthen competition and tariff regulation.

The need for this regulatory modernisation is illustrated by the ITU's cross-country regulator benchmarking exercise. The ITU G5 Benchmark evaluates countries' progress toward inclusive, cross-sector digital regulation. Congo was ranked 125th out of 193 countries globally and 22nd out of the 44 African countries in the G5 Benchmark in 2023. The country was listed as "Transitioning" with a score of 41.82.²⁷

²⁶ Law No. 29 of 10/10/2019 on the protection of personal data.

²⁷ ITU Benchmark of fifth-generation collaborative digital regulation 2023: Global and regional trends.

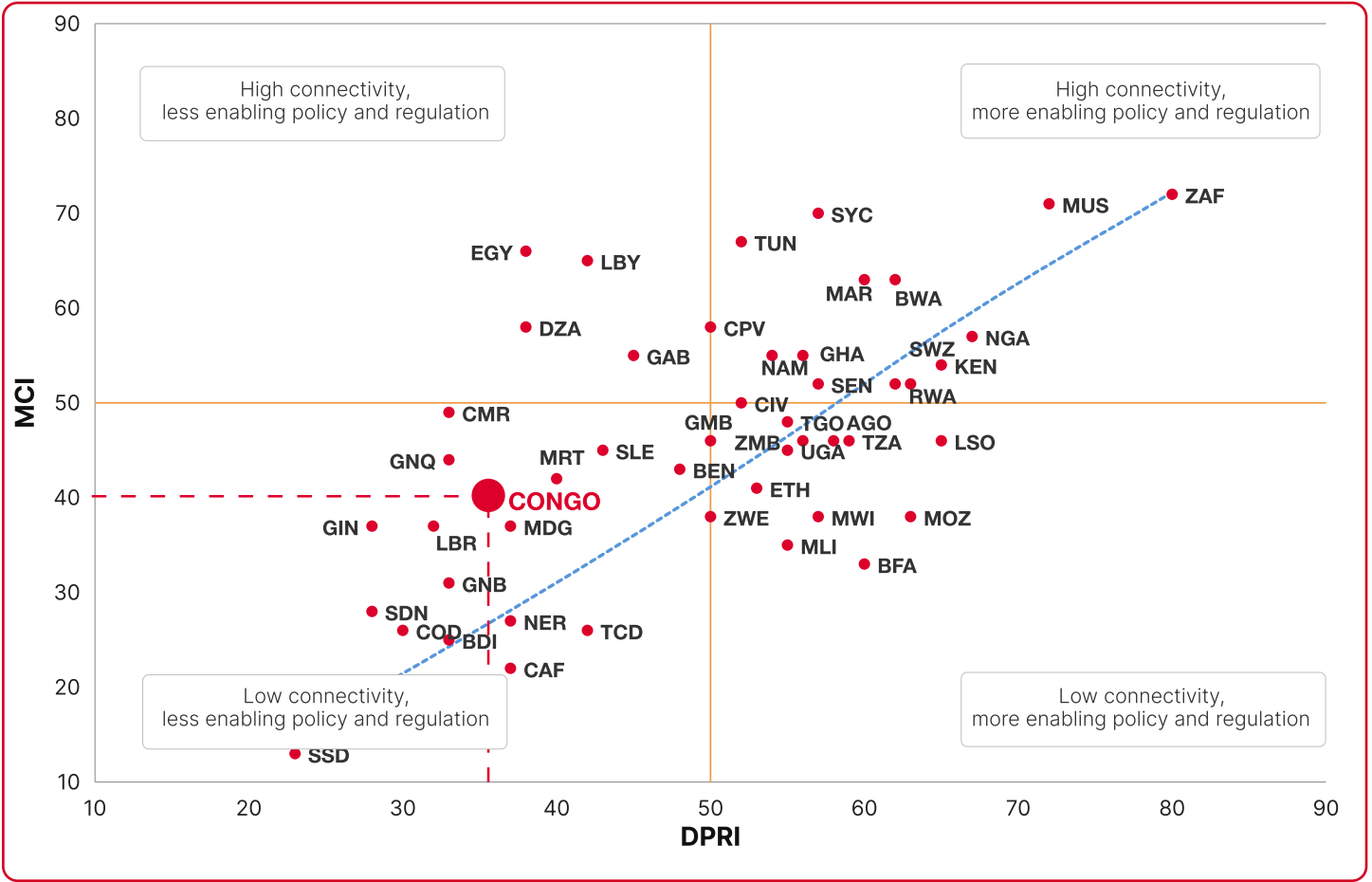
The GSMA Digital Policy and Regulatory Index (DPRI) 2025 also indicates that Congo is lagging behind other countries in the region. The DPRI is an index that combines a range of indicators to measure how a country is performing in terms of the policy levers available to accelerate digital objectives. It covers key areas such as licensing and spectrum, network regulation, consumer protection, tax and public policy for the digital sector.²⁸ Congo has an average score of 33 out of 100 on the DPRI. This is below the African average (47) and behind leading African countries, including South Africa (80) and Senegal (63).

The GSMA Digital Africa Index (DAI) combines the different sub-indices published by the GSMA. This allows a comparison of countries' performance on the different index scores. The analysis above indicated the strong relationship between connectivity and digital adoption. The DAI also shows the relationship between the quality

of the policy and regulatory framework on the one hand and the level of connectivity on the other. Countries that score highly on the quality of policy and regulation also have better connectivity. This highlights the importance of continually improving the regulatory framework and institutions.

Congo is an illustration of this relationship. Its score on the DPRI is lagging behind benchmark countries and its performance on connectivity is also below that of other countries. This provides a clear indication of the policy and regulatory priorities for the sector. If these are addressed, Congo's score on the DPRI measure will improve and this will result in better connectivity (Figure 14).

Figure 14
Mobile Connectivity Index (MCI) and Digital Policy and Regulatory Index (DPRI) Scores in Africa, 2025.



Source: GSMA Digital Africa Index 2025

Four key policy areas stand out as priorities for the sector. Addressing these challenges will improve connectivity and digitalisation. This will ultimately result in accelerated economic and social development:

01

Costs and operational conditions of providing digital infrastructure and services;

02

High and complex taxes on mobile telecoms services and mobile money;

03

Device affordability, digital skills, and other demand barriers;

04

Regulatory reforms required to enable further development of the digital economy.

4B. Policy challenge 1 — Costs and operational conditions of providing digital infrastructure and services

4B.1 Domestic and international fibre transmission

Domestic long-haul transmission services are mainly provided via the national backbone network. The MNOs use this network for connectivity between the main cities and other key nodes such as borders and the submarine cable landing stations. Prices charged for these transmission services are understood to have been high in Congo compared to other countries in the region although they have been reduced in recent years.

Domestic long-haul transmission is a critical part of the overall network infrastructure in the country. The commercial and technical importance of these networks increases as the volume of data carried by the network grows with the transition to 4G and ultimately 5G. Single national transmission networks are common in Africa following investment by governments into fibre-optic infrastructure. The experience of this approach to network development has been mixed.

Such national backbone networks have been good for expanding connectivity through national territories and have been used to connect smaller towns that may not have otherwise been connected on a purely commercial basis. However, these networks have often suffered from reliability issues and have charges higher prices than is seen in a competitive market. These costs are ultimately been passed on to customers in the form of higher retail prices or lower broadband speeds. Countries that have successfully incentivised telecoms operators to invest in their own transmission infrastructure have benefited from improved network redundancy, increased network capacity and lower costs.

The expansion of international connectivity via submarine fibre-optic cables landing in Africa over the past decade has had a dramatic effect on the region's digital services. Countries that have multiple submarine cables and more than one landing station have seen dramatic increases in the amount of international capacity available to domestic operators. They have also seen significant falls in the prices of international capacity. Together, this has had a major beneficial impact on the telecommunications sector and its customers because the cost of delivering high-speed broadband has fallen and operators have been able to offer better quality of service to its customers.

The key to successful expansion of international connectivity has been competition in this market segment. Competition between providers of international capacity and between landing stations has driven the steep falls in the price of international bandwidth. There has been little or no regulatory intervention on price or quality.

With the landing of the 2Africa cable, Congo has an opportunity to benefit in a similar way. There are now multiple potential suppliers of submarine cable capacity in Congo and they are able to compete with each other.

This is a significant step forward in the development of the market which will translate into lower costs and higher quality of services. It is recommended that the country should adopt a light-touch approach to regulation and allow competition to set supply and pricing conditions.

Recommendation 1.1 — Wholesale fibre transmission services market

It is recommended that the ARPCE facilitates investment into additional domestic transmission infrastructure in Congo. This will create more network and route redundancy and thereby improve the quality of services that operators are able to offer their customers.

In parallel with this, the price of wholesale transmission services on the national backbone should be cost-orientated and non-discriminatory.

It is recommended that ARPCE adopts a light-touch approach to regulating the market for international capacity. This should focus on competition as the primary determinant of supply and prices for international capacity on the submarine cables.

4B.2. Spectrum

ARPCE's Decision No.053 of June 2014 introduced technological neutrality in the use of spectrum. This decision confirmed it would allow MNOs holding spectrum in the 900 MHz and 1800 MHz bands to refarm it for 3G and 4G technologies, respectively. It also confirmed that MNOs would not be charged any additional fees for the frequencies that they already held.

Despite this step forward, several spectrum-related challenges remain. These negatively affect coverage, quality, and cost.

— **Technology neutrality.** ARPCE's decision is positive but restrictions on spectrum use in other bands remain. The GSMA recommends full technology neutrality.

— **Cross-border spectrum interference.** Operators have faced cross-border interference on specific frequency bands. ARPCE has reached agreements with neighbouring countries which has largely solved this problem, though challenges remain with the DRC.

— **Limited and delayed spectrum assignments.** Congo took longer than many other countries to assign spectrum that the operators wanted to use for mobile broadband.²⁹

— **High fees for mobile backhaul spectrum.**³⁰ Fees have been amongst the highest in the region. The GSMA estimates mobile backhaul spectrum fees are equivalent to 5% of mobile operators' total revenues in Congo. This is 10 times higher than the median for Sub-Saharan Africa (0.5%).³¹

29 GSMA Digital Policy and Regulatory Index 2025 spectrum assignment score for Congo is 58 out of 100, behind Tanzania (100), Nigeria (91), Namibia (81), and Uganda (80).

30 Mobile backhaul spectrum refers to microwave spectrum used to transmit traffic from mobile sites back to the core network when fibre links are not possible.

31 GSMA Intelligence analysis - 4G coverage and investment in Congo Brazzaville (September 2025). SSA benchmark reflects the median for microwave backhaul fees - as a proportion of revenue - in 21 other African markets.

Recommendation 1.2 — Review of spectrum policy

It is recommended that the ARPCE should undertake a comprehensive spectrum management review. This should include, among other things:

- Continually monitoring the total amount of spectrum assigned to MNOs and ensuring that it remains in line with best practice in the region.
- A reduction in the fees for mobile backhaul spectrum.
- Continued observation and management of cross-border interference to ensure problems do not return.

4B.3. The cost of infrastructure deployment and maintenance

Until very recently, the sector has faced regulatory difficulties in fibre infrastructure construction and maintenance. Operators have been required to pay levies when constructing new fibre infrastructure, based on usage and distance. This was in addition to payment for Rights of Way (RoW) and the cost of other permits required to build new network infrastructure. These multiple regulatory fees and charges raise the cost of building new network infrastructure and therefore discourages investment. Congo has had one of the highest regulatory fee costs per fibre kilometre in the region, and significantly higher than other countries such as the DRC, Malawi and Niger.³²

The Government has taken some major steps to reduce the cost of infrastructure deployment in 2026. The 2026 Finance Law substantially revised the levies imposed on operators wishing to deploy fibre-optic networks. The previous urban deployment regime was based on a fee of FCFA 1,000 per Mbps per kilometre. The new framework introduces a flat fee of FCFA 2 million per 10 Gbps per 100 km. Operators have noticed a significant reduction in their fibre deployment invoice, in some cases as much as 80%.

Despite this improvement, major practical challenges remain for operators wanting to build new high-capacity infrastructure. The permitting process, difficulty and the cost of obtaining rights of way, lack of coordination between players and the government, customs and other administrative process are all a burden on network builders.

Other countries have made significant efforts to improve the efficiency of these processes. For example, the Indian government passed reforms to introduce a national right of way policy and introduced a single rights of way platform in 2022 across all 36 States and central government ministries, which has contributed to increasing connectivity of villages from 50% in 2020 to 93% by March 2023.³³ Other countries, such as Nigeria and Tanzania, have reduced the fees they charge for rights of way in order to encourage network deployment.³⁴

32 "Reduction of Regulatory fees in the telecommunications sector in Congo", UniCongo report, 2024.

33 www.gatishaktisanchar.gov.in.

34 GSMA digital economy report for Nigeria (2024).

Recommendation 1.3 — Reducing the cost and improving the efficiency of network deployment

It is recommended that the government reduce the costs that operators face when deploying high-capacity infrastructure. This includes, but is not limited to:

-  Consultation on a priority national infrastructure policy and applicable regulation for telecommunications.
-  Establishment of a single digital “one-stop-shop” for managing the permitting process.
-  Further reduction of levies imposed on operators when building fibre-optic networks.

4B.4. Quality of Services regulation

QoS standards are set and monitored by the ARPCE on a regular basis. The ARPCE carries out an assessment of the QoS every six months.^{35 36} Following the evaluation in June-July 2025, mobile operators committed to network optimisation efforts while highlighting the persistent challenges that they face.³⁷

These include:

- the saturation of the mobile backhaul links used to connect different areas of the network;
- a reliance on costly VSAT connections, which are prone to solar interference;
- ongoing challenges of spectrum interference from networks in the DRC on the 2.1 GHz band;
- dependence on the national backbone network for long-haul transmission services.

The operators also face operational constraints which may lie outside of ARPCE’s responsibility but nevertheless impact on their ability to meet QoS standards. These constraints include delays in equipment delivery, energy instability and deteriorating road conditions in the country. These all hinder efforts at network modernisation and raise the costs of network operations.^{38 39}

In a competitive market, operators have a strong incentive to provide a high quality of service to customers and they continually invest in their networks to improve the customer experience.

As a general rule, regulation of QoS is not required because competition forces operators to continually improve the quality of service. QoS regulation can often be counterproductive because it distorts operators’ investment decisions, forcing them to strengthen the capacity of existing networks at the expense of expanding network coverage. QoS regulations can impose requirements on MNOs which are financially unsustainable and, in some cases, technically not feasible.

Where the sector legal framework requires the regulator to set QoS requirements and monitor compliance, it is essential that this is done in a way that maximises benefits to consumers and is financially sustainable. It is also essential that other aspects of sector regulation support operators in meeting the QoS requirements. Issues such as spectrum and the cost of deploying networks that have been discussed above are key factors in determining whether the operators are able to meet the QoS regulations in a sustainable way.

35 Decision 165 ARPCE, July 1st, 2019.

36 The ARPCE reaffirms its authority in monitoring the quality of service of mobile networks.

37 Mobile Service Quality: The Regulator Orders Airtel and MTN to Optimise Their Networks.

38 ARPCE Releases Its Survey on Mobile Networks.

39 ARPCE Urges Airtel and MTN to Address Mobile Service Shortcomings.

Competition between operators in Congo incentivise them to deliver a high quality of services to customers. However, while there is a law in place that requires such regulation, it is essential that it is implemented in a way that maximises benefit to consumers. The criteria currently used to measure QoS in Congo date back to 2019 ⁴⁰ although there is a provision under Decision No. 165 of July 2019 for ARPCE to revise these benchmarks when new technologies emerge. This provides an opportunity for ARPCE to review its approach to QoS regulation and design a new framework that takes better account of

market forces and financial sustainability. Further transparency and cooperation between the ARPCE and the operators in monitoring network performance would also help operators to meet any regulatory QoS obligations in the most efficient and effective way.

Recommendation 1.4 — QoS regulations

It is recommended that the government reduce the costs that operators face when deploying high-capacity infrastructure. This includes, but is not limited to:

-  A public consultation on QoS to obtain stakeholder views on the best way of delivering high levels of quality to customers.
-  Alignment with international best practice on quality of service. This should include consideration of countries where the regulator does not impose binding QoS regulations on the industry.
-  Consideration of other sector challenges, such as the high cost of deploying network infrastructure, particularly the prohibition on operators building their own domestic and international transmission networks.
-  The framework for the quality of services delivered by networks, including improved transparency through access to audit logs.

The end result of this process should be an action plan, jointly developed by the ARPCE, mobile operators and other stakeholders that is aimed at delivering the most efficient and effective quality of service to customers throughout Congo.

4B.5. Energy

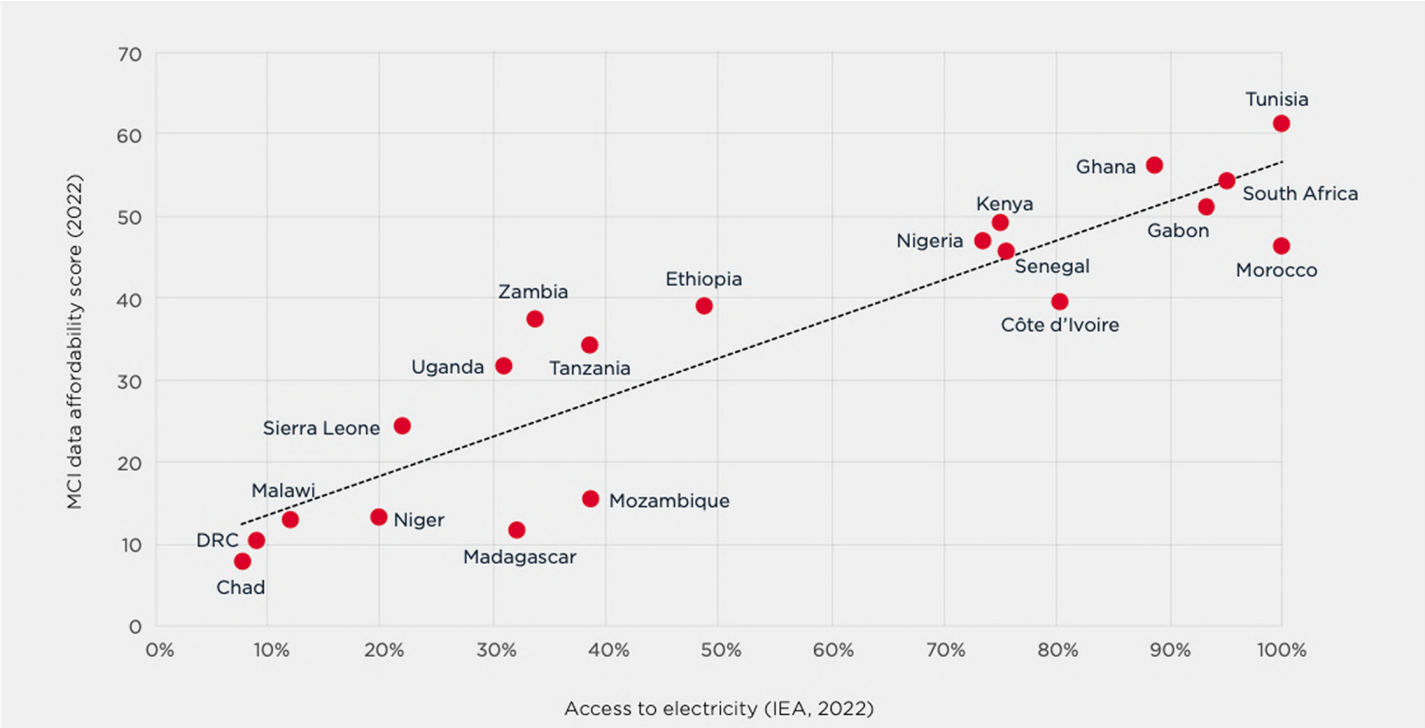
The cost of providing power to mobile sites is a major operational and financial challenge for mobile network operators in Congo. The average daily electricity supply to telecom sites is estimated at around 10 hours, compared with 23 hours in Ghana and 24 hours in Senegal. As a result, operators must rely extensively on backup power solutions such as diesel generators and batteries to maintain network availability. It is estimated that the combined energy expenditure of the two main operators amounts to approximately FCFA 8.5 billion per year.⁴¹

The cost of power has a major impact on the prices that operators are required to charge for their services. Operators need to pass their operating costs through to customers if they are to be financially viable. Higher power costs paid by operators therefore translate into higher prices paid by customers for data and voice services. This is seen across Africa where there is a strong relationship between the average cost of power and the average cost of mobile data, relative to incomes (Figure 15).

⁴⁰ Decision 165 ARPCE, July 2019

⁴¹ White paper ARPCE, Novembre 2025.

Figure 15
Relationship Between Energy Costs and Data Affordability in Selected African Countries.

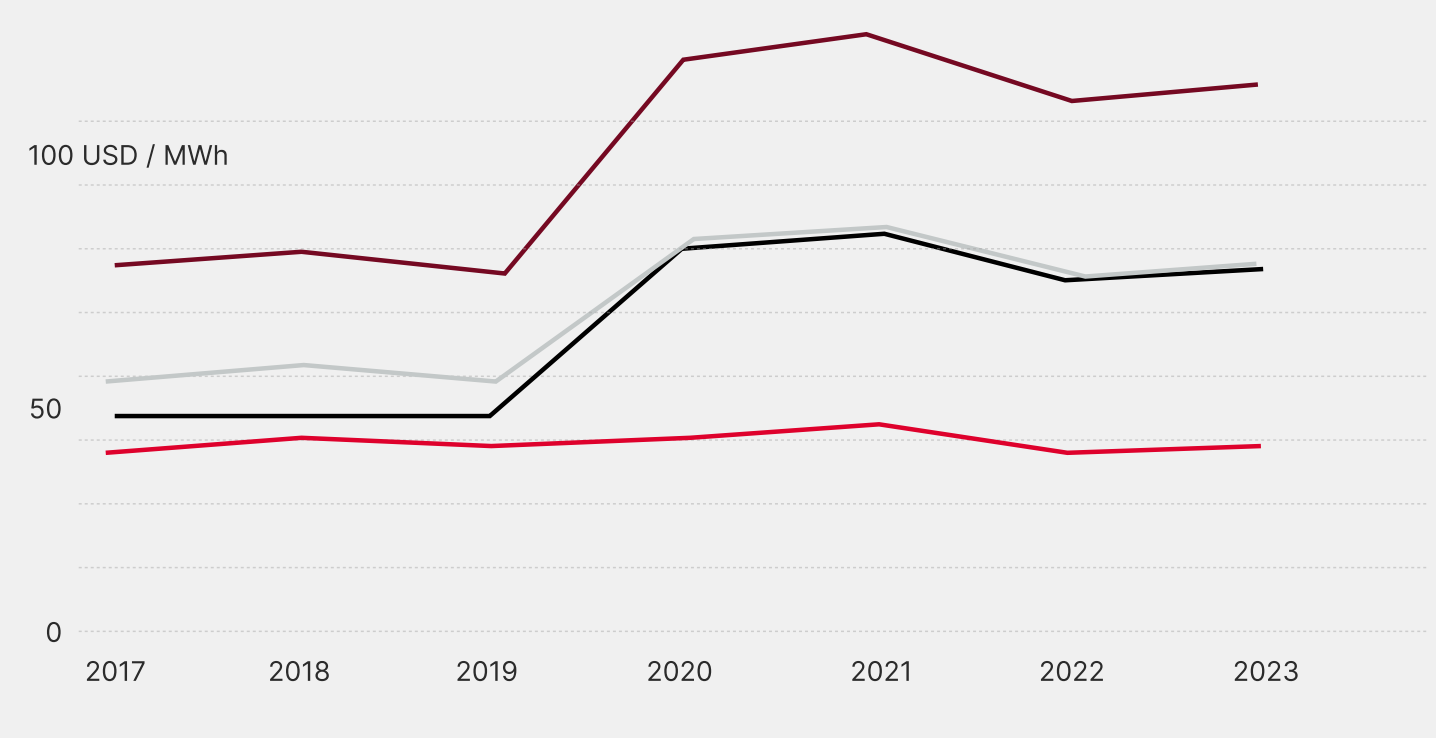


Source: GSMA⁴²
 Note: The GSMA Mobile Connectivity Index data affordability score (0-100) is based on data costs as a percentage of monthly income.

Electricity prices in Congo have risen in recent years. The average electricity price in Congo has increased from 81.35 USD/MWh in 2022 to 83.70 USD/MWh in 2023.

Since 2017, the average electricity price in Congo has fluctuated between 58.11 USD/MWh (2019) and 91.49 USD/MWh (2021) (Figure 16).⁴³

Figure 16
Congo — Average Price of Electricity, 2017-23.



42 Rural renewal: telcos and sustainable energy in Africa.
 43 <https://www.global-climatescope.org/markets/republic-of-the-congo>.

Fuel costs for backup generators have also risen dramatically. Diesel prices rose by 25% in October 2024 following an earlier increase in January 2024.⁴⁴ This particularly affects the cost of maintaining network availability in areas where sites are not connected to the electricity grid or where grid power is particularly unreliable.

The mobile operators are continuing to develop solutions for their off-grid power requirements. This includes a focus on renewable energy sources that would reduce their environmental impact and their dependence on high-cost diesel generated power (Table 10).

Table 10
Congo Mobile Operators’ Renewable Energy Programmes.

	Airtel Congo is actively working on renewable energy initiatives, as part of Airtel Africa's broader commitment to achieving net zero emissions by 2050, reducing emissions intensity by 62% by 2032.⁴⁵
	MTN Congo is implementing the MTN Group net zero (by 2040) and energy program, tailored to energy supply conditions of the country, including energy management tooling, hybrid energy solutions and more efficient technology options.⁴⁶

The tax regime for solar equipment does not provide incentives for further expansion of solar power supplies for mobile sites. The Electricity Code provides that any import of facilities and production equipment for generation, transmission and distribution of electricity is free of import duty.⁴⁷ However, solar panels and related equipment are subject to 16% VAT and a 1% CEMAC integration tax. This increases the cost of installing such equipment on mobile networks, thereby maintaining the reliance on unreliable grid energy and costly diesel-powered generators.

To address this challenge, the World Bank and African Development Bank are leading Mission 300 Initiative to connect 300 million Africans to electricity by 2030.

The lack of availability of low-cost grid electricity is experienced throughout Sub-Saharan Africa. The region accounts for more than 80% of the world’s population that does not have access to grid electricity.⁴⁸

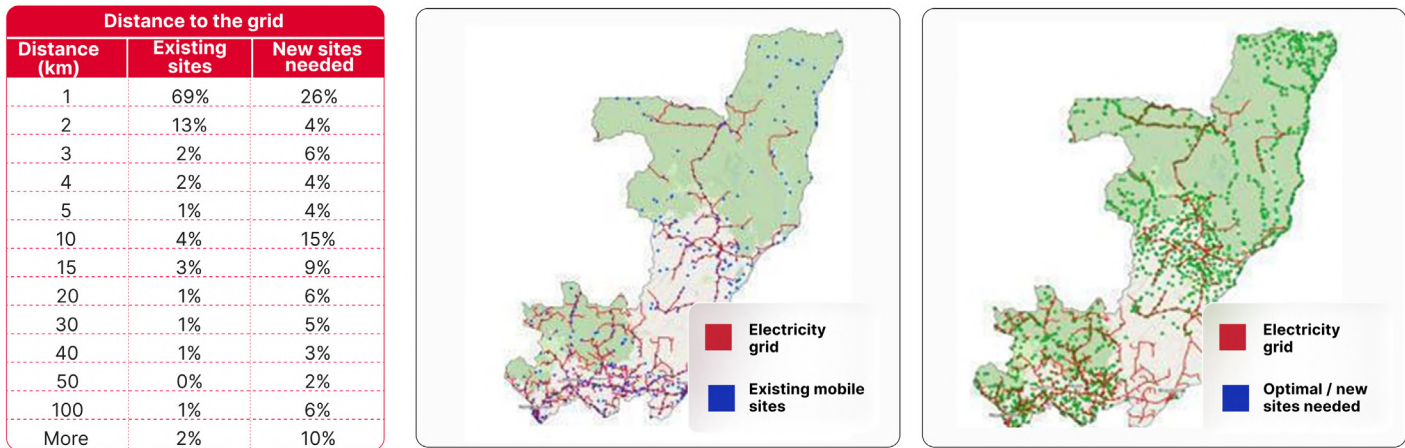
Governments are implementing new energy investment compacts and programmes. For example, Nigeria’s Distributed Access through Renewable Energy Scale-Up programme was launched in 2024 with the aim of bringing clean and renewable energy to 17.5 million Nigerians underserved or unserved. This project is supported by USD 750 million from the World Bank and includes financing for private sector to rollout solar hybrid mini-grids and standalone solar systems.⁴⁹ Congo recently submitted its Mission 300 Initiative energy compact in September 2025.⁵⁰ However, the practical impact of this on the ability of mobile operators to reduce their operating costs is unlikely to be seen in the near future.

44 <https://www.africanews.com/2023/10/18/fuel-prices-surge-in-congo-amidst-protests-and-economic-struggles>.
 45 Airtel Africa — Journey to a net zero future.
 46 MTN Group Sustainability Report 2023.
 47 Law No 14-2003 of April 10, 2003 on the Electricity Code.
 48 GSMA Intelligence, Rural renewal: telcos and sustainable energy in Africa, 2024.
 49 See Mission300Africa website. GSMA The Mobile Economy for Africa 2025, Pages 29 — 30.
 50 African Development Bank press release, Mission 300 Progresses as Seventeen Additional African Countries Unveil Energy Compacts, September 2025.

In the short-term, operators could reduce their operating costs if they were able to connect their sites to the existing electricity grid. The annual opex cost of off-grid diesel sites are ~16% higher than on-grid.⁵¹ By connecting more sites to the grid, operators could reduce their dependence on diesel generators for power. The capital cost of doing this is strongly affected by the distance between the site and the nearest point of presence of the electricity grid. The further away the site is from the grid, the more it costs to connect.

Analysis shows that 69% of mobile sites that are not currently connected to the electricity grid, are located less than 1km from it. This indicates that the operating cost of these sites could be reduced by supplying them with grid power within a reasonable timeframe and likely at manageable cost (Figure 17).

Figure 17
Electricity Grid and Mobile Site Locations.



Source: GSMA Intelligence analysis of operator, GHSL, and World Bank data

Connection to the electricity grid will not be financially viable for a significant proportion of current and future 4G sites. 31% of existing 4G mobile network sites are more than 1 kilometre from the nearest electricity grid infrastructure but more than 74% of new sites required to expand 4G coverage to the remainder of the population are located more than 1 kilometre. These sites are likely to be dependent on off-grid power for the foreseeable future.⁵²

Any measures that would reduce the cost of providing energy to mobile sites will result in lower prices for customers and further rollout of networks into rural areas. Lower power costs will feed through into lower prices for mobile services, higher QoS and further extension of the grid into rural areas. The mobile operators are investing in improving energy supplies for mobile sites through investing in solar solutions. They would also support any efforts to increase the number of sites that are connected to electricity supplied via the national electricity grid.



51 Source: operator information.
52 GSMA Intelligence - 4G coverage and investment in Congo Brazzaville, September 2025.

A review of the USF arrangements in Congo is needed to make them more effective at addressing the coverage and usage gaps in the country. There are examples of successful USFs in other countries in Africa which could be used to inform the review of the arrangements in Congo. A good example is the Tanzania Universal Communications Service and Access Fund subsidy programme, supported by the World Bank, which has resulted in 4G mobile broadband coverage of 1,643 towers, covering 4,250 villages and

reaching 18.5 million people.⁵⁶ The GSMA and the African Telecommunications Union (ATU) have also published information detailed best practice in the design and operation of USFs.⁵⁷

In cases where USF mechanisms are not able to be funded and implemented effectively, efficiently and in a timely manner, it may be better to phase them out and allow operators to reinvest their USF contributions in network expansion.

Recommendation 1.6 — Review of the Universal Service Funding arrangements

It is recommended that the FASUCE undertakes a USF policy review. This should consider, amongst other things:

-  Development of a clear process and methodology for projects to be funded by the USF. This should include the process for identifying underserved areas to be supported, the project financing mechanism, implementation, monitoring and reporting mechanisms and the overall governance arrangement for the projects.
-  The participation by USF contributors (including MNOs and infrastructure providers) at each stage of the process.
-  An increase in subsidies for mobile broadband coverage in rural, remote and low populated areas to cover both capex and opex for towers. This should include access roads, backhaul transmission, energy and other utilities.
-  The introduction of a pay or play mechanism to incentivise investment in USF projects, notably the rural mobile broadband coverage programme.
-  Provision for extions for frequency and infrastructure fees or diesel fuel taxes for operators implementing USF funded projects.
-  The use of shared infrastructure by operators and effective infrastructure sharing regulation for USF projects.
-  Publication of annual reports with audits of the USF to enhance transparency and public awareness.

⁵⁶ Tanzania Universal Communications Service and Access Fund (UCSAF) article - Connecting Rural Communities: UCSAF's Role in Tanzania's Digital Transformation. For description of the subsidy mechanism and recommendations - see World Bank Group report, Allocating universal service subsidies using electronic multi-round reverse auctions: Telecommunications in Tanzania, June 2023.

⁵⁷ GSMA and ATU report, Universal service funds in Africa Policy reforms to enhance effectiveness, October 2023.

4C. Policy challenge 2 — High and complex taxes on mobile telecoms services and mobile money

Taxes levied on the digital sector have a major impact on the growth and development of digital services. Most taxes are ultimately passed on to customers either in the form of higher prices or reduced investment. Studies have found that 90% of changes to the value of consumer taxes (e.g. sales and usage taxes) are passed through to consumers, while 85% of changes to the value of operator taxes (e.g. revenue and profit taxes, spectrum and licence fees) are passed through to consumers.⁵⁸ Studies also show that higher mobile data and handset prices lowers mobile broadband adoption.⁵⁹

UNECA has recently found that sector excise duty directly reduces the net revenue a telco receives and lowers all revenue-based taxes and fees. An increase of 10% in an excise duty results in an overall tax increase of less than 10%, and in some cases may actually reduce tax revenues due to its chilling effect of mobile broadband growth. UNECA finds that simplifying the tax regime and reducing sector-specific taxes will not only enhance broadband penetration but also lead to a significant increase in revenues due to enhanced productivity and growth as well as widening of the tax base.⁶⁰

4C.1. Mobile telecoms taxation

The overall rate of tax paid by the mobile telecoms sector in Congo is one of the highest in Sub-Saharan Africa. This is primarily driven by the level of sector specific taxes and fees in addition to VAT, excise duties, and corporate taxes.⁶¹

The current tax framework for the mobile telecoms sector in Congo is complex and the overall effect is to increase the cost of providing telecoms services. There are at least 19 taxes and fees applying to the telecom sector, including several sector-specific fees and a number of general taxes. The multiple taxes, levied at different levels of government increase compliance costs, diverting resources from investment in infrastructure. For the government, the large number of different taxes create higher costs for tax collection and auditing.

The government has taken some measures to reduce the tax burden on the sector. The 2026 Finance Law did introduce some reductions in the overall tax burden on the sector. This includes lowering the tax payable on sites and the measures taken in relation to excise duty. This will have a beneficial impact on the sector. However, the tax framework that remains still creates a high overall tax burden and one that is overly complex.

Among the many taxes and fees levied on operators in the sector, the sector levy (RGL) stands out as being particularly high by international standards. Prior to the 2026 Finance law, this levy was set at 4% of gross revenues. This was already high and constitutes a significant financial burden on the industry. The draft 2026 Finance Law proposed a 50% increase in this to 6% but this was ultimately set at 5%. Such sector levies are not uncommon in Africa but are typically set at below 3%. Although it imposed on the operators, it is a general sector-specific tax that is ultimately passed through to customers in the form of higher prices and lower investment.

58 World Bank 2022, "Using Geospatial Analysis to Overhaul Connectivity Policies", Table A.2.

59 See separate methodological document for details on the elasticities used.

60 UNECA Presentation "Optimizing Africa's ICT Tax Regimes Towards Economic Growth and Job Creation" dated 18 March 2025.

61 <https://taxsummaries.pwc.com/republic-of-congo/corporate/other-taxes>.

The problem of the high level of the tax in Congo is made worse by the uncertainty about it from one year to the next. The practice of setting the levy in the annual Finance Law means that operators face significant financial uncertainty from one year to the next. This creates risk for operators which translates into lower levels of investment.

Designing the optimal tax regime for the mobile sector requires a balance between raising revenue for the government without compromising the national objectives of digitalisation. A simpler tax structure would reduce compliance costs for both operators and the government which would benefit everyone in Congo.

4C.2. Mobile money taxation

Congo has one of the highest cumulative regulatory fees on mobile money among BEAC countries.

The government and central bank charges fees in addition to the BEAC regulatory fees. In addition, there is an annual supervisory regulatory fee and a 1% tax on withdrawals and P2C transfers. This is further complicated by the principle of co-regulation of the mobile money sector by ARPCE and the central bank (COBAC).

Figure 18
Mobile Money Regulatory Fees — BEAC Framework, Congo and other BEAC Countries.⁶²

BEAC regulatory fee framework		 Congo	 Other BEAC countries
Type	Amount		
 Licensing fee	CFCA 5 – 10 million	Follows BEAC baseline	Follow BEAC baseline
 Annual supervisory fee (Includes compliance costs)	CFCA 2 – 5 million	Follows BEAC baseline + extra annual regulatory fee to Ministry of Finance (CFCA 2 – 5 million)	Follow BEAC baseline
 Transaction levy	0.2 – 0.5% Per transaction (deposits, withdrawals, transfers)	BEAC baseline + extra 1% tax on withdrawals and P2C transfers	● Central African Republic, Chad, Equatorial Guinea follow BEAC baseline ● Gabon reduced 5% levy to 0.5% in 2025 ● Cameroon charges 0.2% levy + flat fee 4 FCFA
 Interbank settlement fee	CFCA 1 – 2 million Annually	Follows BEAC baseline	Follow BEAC baseline

62 BEAC.

4C.3. Tax recommendations

Reform of the tax regime faced by the mobile operators is required. It needs to be simplified and the overall level of tax on the sector reduced. This should be done in a comprehensive and considered way, taking into account the experience from other countries around the world. The GSMA has outlined

a set of principles for designing tax frameworks for the digital economy.⁶³ These principles include enhancing affordability, incentivising investment and promoting digitalisation, particularly among low income households.

Recommendation 2.1 — Review the tax regime for the digital sector

It is recommended that the government and regulatory authorities conduct a review of taxation on mobile telecoms and mobile money providers. The regime should balance the objectives of raising government revenues, broadening the tax base, and enabling digital economy. This should include:

- ☒ Removal of the TTCE (tax on electronic communications)
- ☒ Reduce the 5% sector levy (RGL) to 3% to bring it closer to regional benchmarks
- ☒ Reduce the 1% USF levy
- ☒ Reduce the levy on mobile money cash withdrawals from 1.0% to 0.5% to bring Congo in line with BEAC regulatory fees
- ☒ Reduction in the fees for mobile backhaul spectrum
- ☒ Review of other sector-specific taxes and regulatory fees (also see Recommendation 3.1 on taxes that directly impact the affordability of smartphones)

4D. Policy challenge 3 — Smartphone affordability, digital skills and other demand barriers

Affordability of entry-level smartphones is one of the greatest barriers to the digital economy and inclusion. Others include literacy and digital skills, safety and security concerns.

4D.1. Smartphone affordability

The affordability of smartphone devices, particularly entry-level smartphones, is one of the key barriers to digitalisation throughout Africa. Affordability is a function of the price of the device and the average income levels of the consumers. Smartphone affordability in Sub-Saharan Africa is low compared to all other regions, except South Asia (Figure 19).

Figure 19
Affordability of an Internet-Enabled Handset Across Low- and Middle-Income Countries by Region, 2020–24.⁶⁴

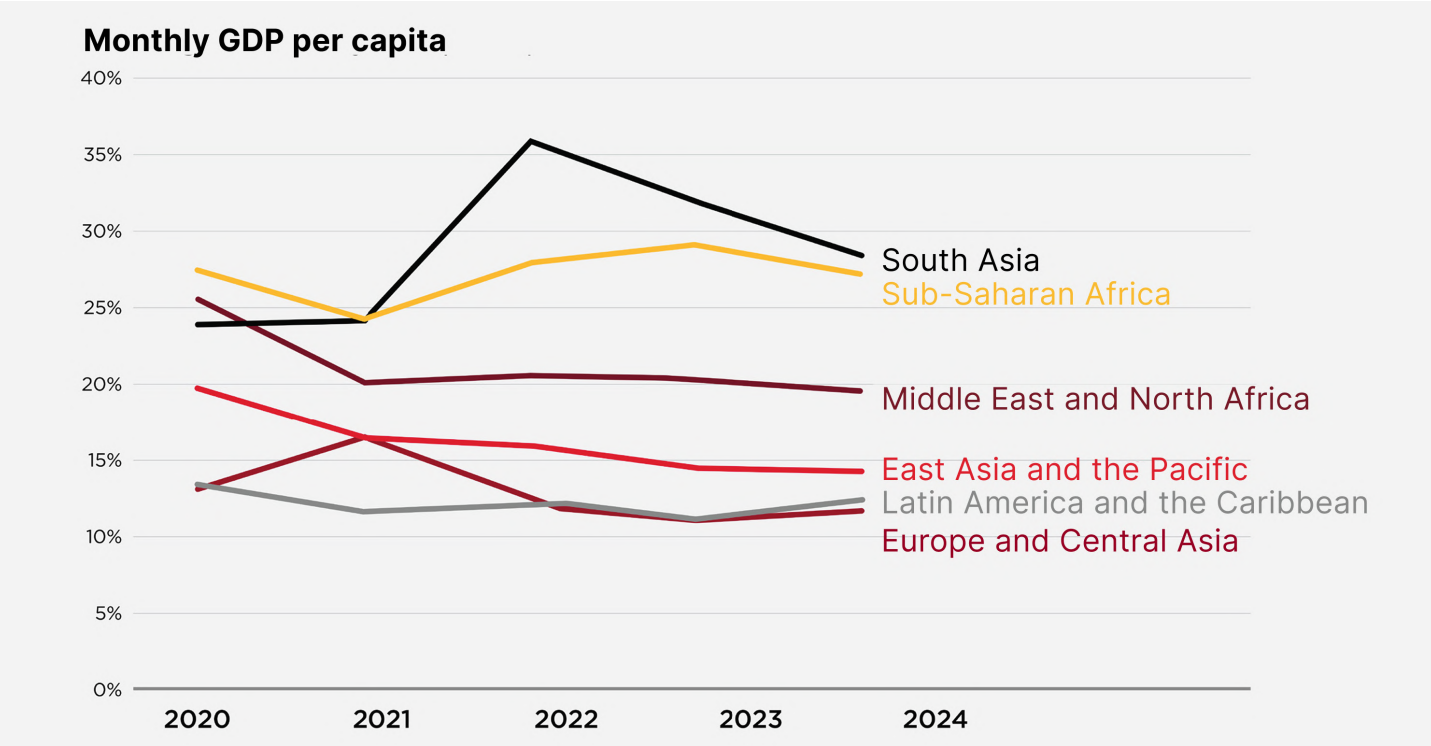


Table 11
The GSMA Handset Affordability Coalition.

The GSMA Handset Affordability Coalition was recently launched by the GSMA in collaboration with **six of Africa's mobile operators**, including **Airtel** and **MTN**. This initiative includes:

- Engagement with the Original Equipment Manufacturers (OEMs) and technology companies on the development of reduced cost entry-level smartphones, using baseline minimum requirements including memory, RAM, camera quality, display size, battery performance and other features.
- A call to action for governments to remove taxes on entry-level smartphone prices below USD 100.

GSMA Intelligence estimates that:

USD 40
priced smartphones could bring mobile internet within reach for **20 million people** in Sub-Saharan Africa⁶⁵

USD 30
priced smartphones could bring mobile internet within reach for **30 million people** in Sub-Saharan Africa⁶⁵

64 GSMA, The Mobile Economy Africa 2025, Page 40.
65 GSMA press release - GSMA and Leading African operators propose minimum requirements for affordable 4G smartphones, October 2025.

The GSMA has recently published a report on Accelerating Smartphone Adoption in Africa.⁶⁶

This included a range of recommendations to improve the affordability of smartphones, particularly for entry-level devices. This report recommended that governments should remove taxes on entry-level smartphones priced below USD 100. Such action typically reduces the cost of entry-level devices by around 50% and thereby increases the prospects of achieving the sub-USD 40 target for affordable 4G smartphones. Other recommendations include promoting the recycling of used smartphones, supporting device financing mechanisms and addressing cultural sensitivities around debt and repayment commitments.

Tax is an important determinant of smartphone affordability in Congo. Taxation significantly increases the prices paid by consumers for smartphones. These include taxes levied on devices when they are imported into the country and then further taxes that are levied at the point of sale.

Some of the taxes on smartphones have been reduced but others have increased. The government has reduced customs duties on terminal equipment (by 57%) over recent years. However, there remain significant regulatory costs associated with importing smartphones into the country. For example, the type approval [homologation] fee is levied according to the number of units of each type of device. Rather, this fee should be limited to the approval of a specific type of device to ensure that it meets national technical standards.

It should not be determined by the number of units that are being imported. The 2026 Finance Law also introduced the SIM enabled device tax. This is intended to charge a fee when a new SIM-enabled device is activated on the network. This new fee presents two major problems for the sector and for consumers:

- At FCFA 10,000, this charge represents a very significant additional cost which is targeted at the activation of new broadband devices. This fee will be collected by the operators but it is levied on consumers so will be passed through to them in the form of higher prices. This raises the cost of digital adoption and will threaten the country's ability to meet its own digital strategy.
- The technical details of this tax are yet to be determined. The uncertainty around it and the likely cost of implementing it are a challenge for operators and impose a further financial burden on the industry.
- It is clear that, despite some improvements in the tax regime faced by operators, there remains a significant tax burden on smartphones and a high cost of compliance.

Recommendation 3.1 — Reduce taxes on entry-level smartphones

It is recommended that the government and regulatory authorities conduct a review of taxation and fees that affect the affordability of entry-level smartphones. This should include:

-  Removal of the CFA 10,000 SIM enabled device tax.
-  Removal of remaining customs duties and regulatory approval fees (equivalent to 20% to 30% of value) on imported entry-level smartphones.

66 GSMA Intelligence Accelerating Smartphone Adoption in Africa, November 2025.

4D.2. Digital literacy and skills

It is widely accepted that advancing digital literacy and skills is an important factor in promoting digital development.⁶⁷ Promoting digital literacy and skills are a priority for Congo. The AI Talent Readiness Index, ranked Congo with a digital skills score of 6.85, placing it 41st out of 54 African

countries.⁶⁸ The mobile operators, in Congo, are partnering with government on improving digital literacy and skills (Table 12).

Table 12
Digital Literacy and Skills Initiatives in Congo.

 Education institutions & government programmes	World Bank Congo Digital Acceleration Project targets 20 institutions and education facilities (of which 10 are in rural areas) providing government-approved courses and certificates by December 2027. ⁶⁹
	Airtel Congo & UNICEF partnership includes: — Free internet access to educational platforms in 16 schools and youth training centres across Brazzaville, Pointe-Noire, and Dolisie. — Schools equipped with digital labs to help students engage with online learning tools like Learning Passport, Home School, and Akelius. — Plans to expand to 100 schools and training centres.⁷⁰
	MTN Data-Smart — digital literacy programme based on the GSMA Mobile Internet Skills Training Toolkit, providing free resources to teach people the basic skills to access and use mobile internet. MTN Skills Academy — platform offering digital and financial skills training: coding, web development, digital marketing and data analytics.⁷¹ MTN has trained 6,000 young people online out of a planned 10,000, the government wants much more in terms of quantity and quality.⁷² The 10-episode series, available on MTV Base and @MTNCongo's YouTube channel, has reached over 52 million people across Africa, engaging more than 5.5 million young participants.⁷³ 52M+ people reached across Africa 5.5M+ young participants engaged

67 GSMA Digital Inclusion Policy Brief - Advancing digital skills for great digital inclusion, November 2025.

68 talentindex.ai/digital-skills.

69 World Bank Congo Digital Acceleration Project Implementation Status and Results Report, 2024.

70 Airtel Africa and UNICEF announce multi-million dollar partnership to scale-up digital learning for children across Africa, October 2021.

71 MTN Group Sustainability Report 2023.

72 ibid.

73 MTN Room of Safety.

An emerging area for Congo to consider is the use of digital technologies to advance digital skills and digital services adoption. Increasingly embedded solutions and APIs are being used in online services and apps to integrate digital skills and how to use training, and to tailor content based on user location, device type, and local language requirements in accordance with applicable cybersecurity, data protection and privacy regulations.

The GSMA Open Gateway initiative, launched in 2023, aims to harness the capabilities of mobile network operators worldwide by providing access through standardised APIs. As of September 2025, there are 60 APIs available for development and 14

mobile network operators across 12 countries have adopted this initiative in Africa. This includes Airtel and MTN Group.⁷⁴ It is recommended that Congo works in partnership with local and international technology companies, mobile operators, and app developers to use embedded solutions and APIs in government public services and commercial services.

4D.3. Safety and security

Digital safety and security remain a major challenge for Congo, as for all countries. As the country makes progress in its goal of digitalisation, it exposes more of the population to the risks of online safety and security. Mobile operators are working closely with the government, regulators, and partners to ensure safety and security of users (Table 13).

Table 13
Mobile Operator Programmes on Safety and Security.

	Airtel adopts strict cybersecurity and data protection standards and undertakes public awareness campaigns to educate users about online fraud and scams and asks customers to report suspicious activities and verify communications from Airtel through official channels. Airtel has launched its AI-powered anti-spam alert service in 2025, enhancing customer security. Airtel holds ISO 27001 and 22301 certifications as well as an SOC certification.
	MTN complies with national legislation, and also follows global cybersecurity and data protection standards, including ISO/IEC 27001:2013, United States National Institute of Standards and Technology Cybersecurity Framework, and European Union General Data Protection Regulation (GDPR). MTN has conducted awareness programs targeting young girls, educating them on safe internet practices and the risks associated with social media usage.⁷⁵ The company launched campaigns to combat online child exploitation, emphasising the importance of digital safety for minors.

74 GSMA, The Mobile Economy Africa 2025, Pages 25-26.
75 MTN Youth Cyber Awareness campaigns.

Recommendation 3.2 — Continued work on digital safety and security

It is recommended that the government should continue to work with the mobile sector and other stakeholders to progress the Cybersecurity Strategy and in National Data Governance Strategy.

It is also recommended that the country continues to participate in international and regional Cybersecurity and data protection frameworks, notably the African Union Convention on Cybersecurity and Personal Data Protection (Malabo Convention).

4E. Policy challenge 4 — Regulatory reforms to enable the digital economy

The regulation of the sector has a major impact on how it develops. Regulatory rules on infrastructure, customer protection, spectrum and new technologies all affect how operators are incentivised to invest and compete. The continual technological innovation in the sector means that the regulatory framework also has to evolve.

4E.1. Modernisation of the telecommunications legal and regulatory framework

The regulatory framework for the sector is in need of an overhaul. The Electronic Communications Law 2009 (2009 Law) is now over 15 years old. Since it came into force, the market has changed significantly. Data has long overtaken voice as the primary driver of digitalisation and digital transformation has progressed throughout the economy. The PATN includes a review of the 2009 Law and the consultation process for this is underway. This is an opportunity to align the national sector legal framework with CEMAC regulations and international standards.

There are a number of areas in which the sector regulatory framework could be improved. The current technology-specific approach in Congo is restricting licencees' ability to deploy and operate efficient technology to provide services to customers.

— The licence regime should be simplified to ensure activities such as data hosting, backbone transport, and value-added services are covered under operator's licence rather than under multiple licences or authorisations.

— The current system, jointly managed by ARPCE and through the annual finance laws, imposes a regime of compartmentalised technology-specific licences which create financial barriers to investment. Each additional technology application incurs an additional licence fee with fixed amounts and renewal fees that can reach 5% of turnover. This increases the cost of extending the network and providing new services to customers.

— The annual Finance Laws frequently introduce new or revised licensing and regulatory fees. This system creates unpredictability and financial uncertainty for operators which negatively affects investment. Establishing a predictable and coherent link between the regulatory framework and fiscal legislation would strengthen legal certainty and foster investor confidence. All foreseeable fiscal and regulatory parameters—such as licence fees, renewal conditions, spectrum charges, and universal service contributions—should be clarified and stabilised as part of the revised law and regulatory framework to enhance visibility for long-term investment decisions.

The trend in many other countries in Africa is towards full technology neutrality in the licensing regime. This allows licence holders to determine how spectrum and operating licences are used, which technologies are deployed and which services to offer customers.^{76 77}

Recommendation 4.1 — Review of the licensing framework

It is recommended that the government continue and complete the review of the 2009 Law as quickly as possible. This review should include the following elements:

-  Adoption of fully technology neutral (or unified) licences covering both services and spectrum usage.
-  Simplification of administrative procedures and the licence and authorisation fee structure.
-  Reduction of overlapping institutional responsibilities for authorisations, declarations, and licences.

This revision of the law and applicable regulations should be conducted through a comprehensive and transparent consultation process.

4E.2. Regulatory framework for emerging technologies

The competitive landscape in Congo's digital economy is evolving rapidly with the entry of new technologies and new business models. This presents new policy and regulatory issues for the government and regulators. These need to be assessed and the regulatory framework adapted in a way that supports continued investment and sustainable competition.

Recommendation 4.2 — Updating regulations for emerging technologies

It is recommended that a review is undertaken to develop regulations for emerging technologies, particularly satellite-based services. This should be based on the following principles:

-  Transparency and predictability. Ensure clear and transparent regulatory requirements to facilitate efficient market entry and build industry confidence.
-  Regulatory parity. Allow for equitable treatment of sectoral laws and regulations across all service providers.
-  Harmonisation. Align regional and international policies to reduce fragmentation and enhance regulatory efficiency.
-  Collaboration and consultation. Strengthen dialogue among governments, regulators and industry stakeholders for informed and inclusive policymaking.
-  Balance innovation with regulation. Encourage technological progress while maintaining compliance, consumer protection and national security to build trust.

76 GSMA report - Benefits of Technology Neutral Spectrum Licences, 2019.

77 In Côte d'Ivoire, for example, a single ISP licence allows use of frequencies for FWA and Satellite and also allows FTTH deployment. The fee for this is FCFA 150 million.

Another area of rapid technology development that is affecting all African countries is Artificial Intelligence (AI). Recent estimates suggest that AI could boost Africa's economy by USD 2.9 trillion, equivalent to increasing annual GDP by 3% by 2030.⁷⁸ Mobile operators, global technology companies, and local start up technology companies are scaling up investment in AI for smart solution services to businesses and enhanced services for consumers.

For example, Safaricom in Kenya is partnering with IX Africa to deliver East Africa's first AI-ready data centre services for enterprise and cloud-solution clients, MTN Nigeria has launched Tier III data centre to support AI and cloud services, Google is investing USD 37 million to expand AI development in Africa supporting start-ups and education institutions to accelerate AI talent and local solutions, local tech companies are using AI solutions in agriculture, healthcare, and credit-rating analysis.

Mobile operators are also using AI to enhance their network operations and to improve customer experience. Airtel Africa has entered into a partnership with Xtelify to deploy cutting edge AI-powered software platform to simplify network operations and customer services processes MTN is implementing AI solutions to optimise network traffic and enhance customer service delivery.

Policymakers globally and in Africa are responding by developing AI strategies at a continental and country level. The African Union has launched a Continental AI Strategy⁷⁹ and several African countries, such as Benin, Côte d'Ivoire, Egypt, Kenya, Mauritius, Nigeria, Rwanda, and South Africa have developed or are developing national AI strategies.⁸⁰ Congo needs to develop an AI strategy as part of its national digital strategy. This should cover the full range of issues that are arising from the emergence of the technology. If specific regulatory issues are identified, these should be incorporated into the review of the 2009 law and associated regulations.

4E.3. Mobile money regulation

The GSMA Mobile Money Regulatory Index evaluates countries' frameworks for regulating mobile money. This is done across multiple indicators including: transparency and disclosure requirements, requirements for authorisations, consumer protection, KYC and AML procedures, governance and the degree to which the overall policy environment supports the growth of mobile financial services.

Congo was ranked in the middle of the CEMAC countries in the 2025 Index. The 2025 index gives Congo an overall score of 72. This puts it around the middle of the CEMAC countries, but still some way behind Ghana, Africa's leading ranked country with a 96 score. Congo's overall index score suffered from low scores on the "Integrity" and the "Policy Evolution" categories.

The primary challenges for participants in the mobile money ecosystem in Congo is the complexity of the regulatory system and the number of government agencies that are involved in mobile money regulation together with the lack of clarity around the respective roles.



78 AI in Africa — The state and needs of the ecosystem, AI4D Africa, 2024.

79 GSMA Intelligence based on the Continental Artificial Intelligence Strategy, GSMA The Mobile Economy Africa 2025, Page 13

80 GSMA — The Mobile Economy Africa 2025, Pages 13 — 16.

The regulation of Mobile Financial Services (MFS) in Congo and the wider CEMAC zone is one of the challenges to developing the digital economy.

The Bank of Central African States (BEAC) and the Central African Banking Commission (COBAC) are responsible for regulating the issuing of electronic money. As Congo is a member of CEMAC, it is BEAC that:

01

establishes the rules for issuing electronic money and its conversion into fiat or bank money;

02

establishes the rules on the interoperability obligation of technical systems and platforms used to provide payment services;

03

monitors the compliance, security and availability of technical payment solutions;

04

ensures that when a payment service is provided via a mobile phone that the entity in charge of the service has received authorisation from ARPCE to use the technology required to provide this service.

The main role of ARPCE in MFS regulation is to validate the technical platforms used by these mobile operators, monitor and grant authorisations to mobile money platforms and issue USSD codes. A wide range of other government agencies are also involved in the MFS ecosystem.

This regulatory framework involving multiple regulatory bodies creates complexity for MFS providers which raises costs, constrains investment, innovation and competition.

More clarity and certainty about the respective roles and responsibilities would benefit both sector players and consumers.

Recommendation 4.3 — Improving the regulation of mobile financial services

-  It is recommended that the roles and responsibilities relating to regulation of mobile financial services in Congo should be further clarified and formalised, in line with CEMAC guidelines and international best practice.
-  Ideally, the number of regulatory agencies involved in MFS should be reduced and the overall framework simplified.
-  Pending that, clarity about roles and responsibilities of each institution would help MFS operators to navigate the system and reduce compliance costs.

5. The impact of Policy Recommendations



5. The impact of Policy Recommendations

These policy recommendations will have a major impact on the telecommunications sector and on the process of digitalisation in Congo.

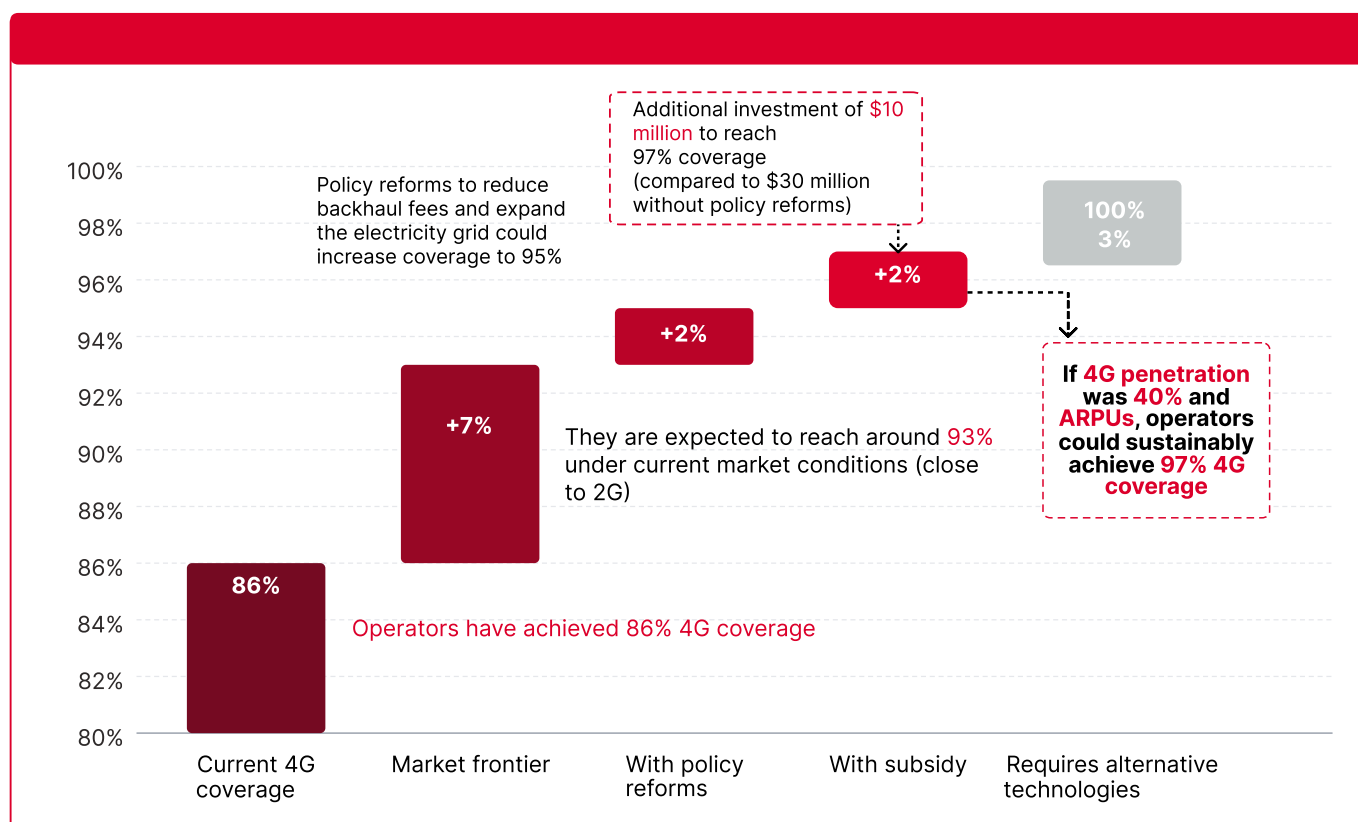
This impact will be seen in the form of expanded network coverage, higher rates of digitalisation, economic growth and increased tax receipts.

5A. Impact on coverage

If these policy recommendations are implemented, 4G network coverage will expand to reach the majority of the population. GSMA analysis estimates that expanding 4G coverage from the current 86% of the total population (and just 21% of the rural population) to 97% of the total population will require at least USD 30 million additional investment beyond what is currently expected. This could be reduced to USD 10 million if the policy recommendations outlined in this report are implemented.

In particular, a reduction in the cost of spectrum fees, reducing the cost of energy and addressing demand-side challenges to increase digital adoption and usage will all reduce the net cost of expanding the network to close to 100% of the population. The remaining 3% of the population are in very remote and sparsely populated areas and are likely to require alternative technologies to provide broadband (Figure 20).⁸¹

Figure 20
Congo — Impact of Policy Recommendations on the Cost of Expanding Broadband Coverage.



Source: GSMA Intelligence

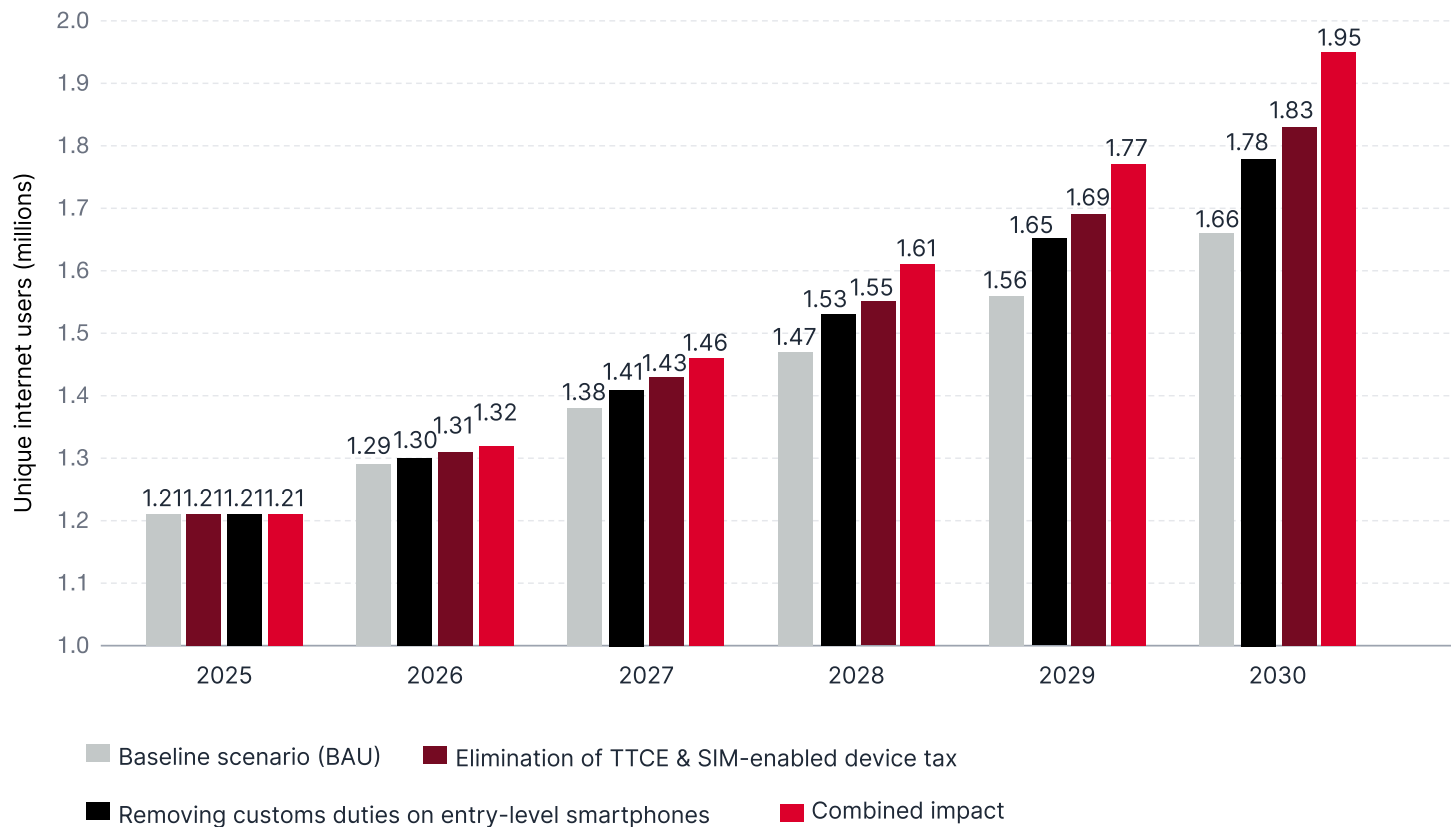
81 GSMA Intelligence — 4G coverage and investment in Congo Brazzaville, September 2025.

5B. Impact of the tax recommendations on internet adoption

This study has analysed the impact of changing the following taxes levied on the digital sector in Congo:

- Eliminating the TTCE (tax on traffic of electronic communications) which amounts to 5% on the value of voice, SMS and data bundles. It is assumed that 85% of this amount will be passed on to consumers.
- Removing the CFA 10,000 SIM-enabled digital device tax contained in the latest tax bill. In doing this it is assumed that 90% of the tax reductions will be passed on to consumers.
- Removing customs duties on entry level smartphones and reducing duties on equipment and software.
- Reducing the high level of fees and other costs associated with approval and commissioning of imported devices and equipment.
- These changes to the fiscal regime faced by the mobile operators would reduce prices paid by end-users for smartphones, data and mobile money services. This would stimulate adoption and raise the overall penetration rate.

Figure 21
Congo — Impact of Tax Policy Recommendations on Internet Adoption.



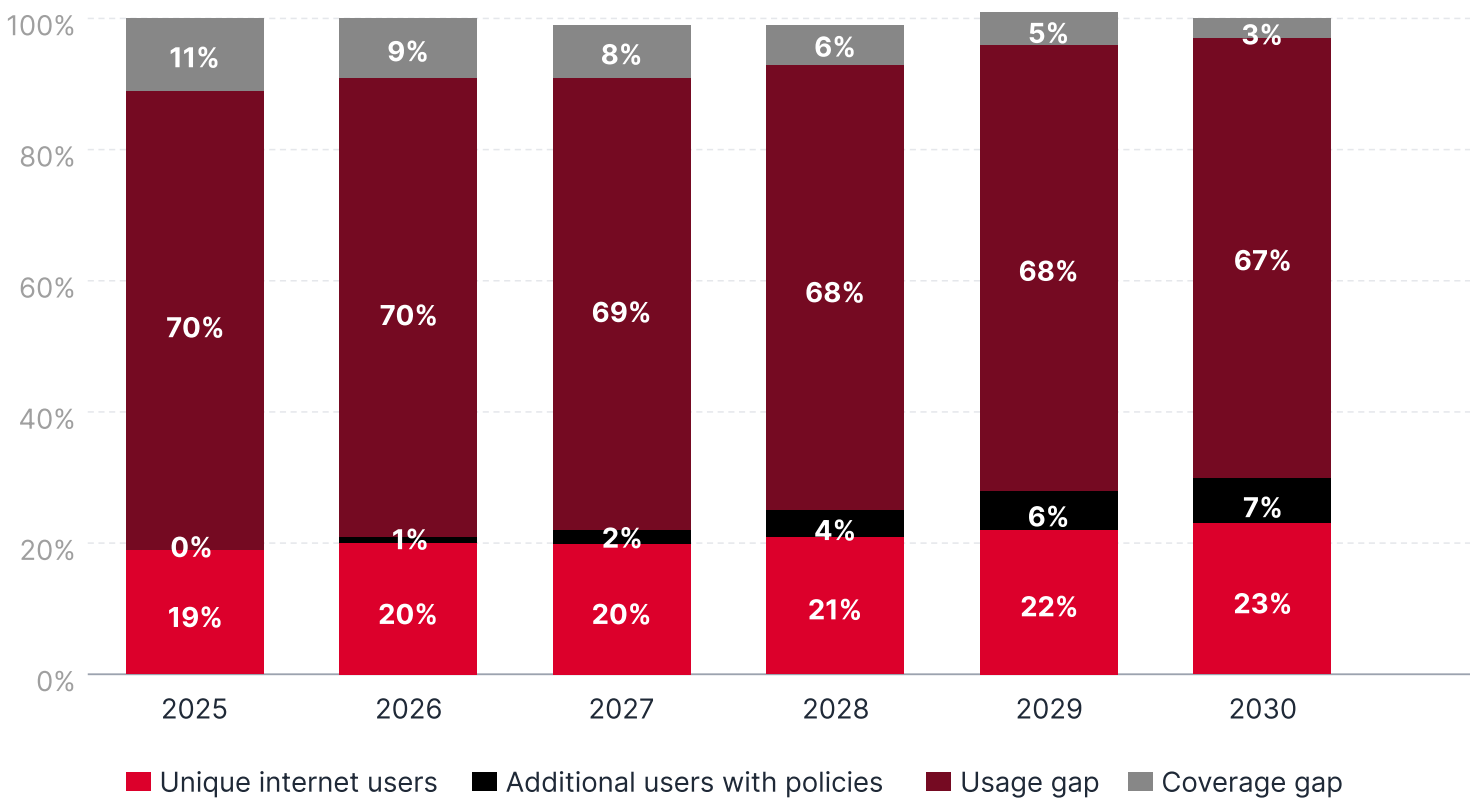
5C. Impact of the policy recommendation on the usage gap

The usage gap in Congo currently stands at 70%. In 2025, 19% of the population were using the internet. Over two-thirds of the population (70%) lived within range of the mobile broadband networks but were not using the internet. A further 11% of the population lived beyond the area covered by mobile internet networks.

Implementing the policy recommendations in this report would materially reduce the usage gap in Congo. Even under the current policy framework for the sector, this situation is expected to improve over time. The baseline scenario includes some

growth in network coverage and internet usage over the next five years. However, in this scenario, by 2030 the proportion of the population using the internet would still be only 23%. The policy recommendations outlined in this report would accelerate this rate of increase in adoption. By 2030, it is estimated that the proportion of the population using the internet would rise by an additional 7 percentage points, bringing the total unique internet user penetration to 30% (Figure 22).

Figure 22
Congo - Combined Impact of Policy Recommendations on the Mobile Internet Usage Gap, 2025-30.

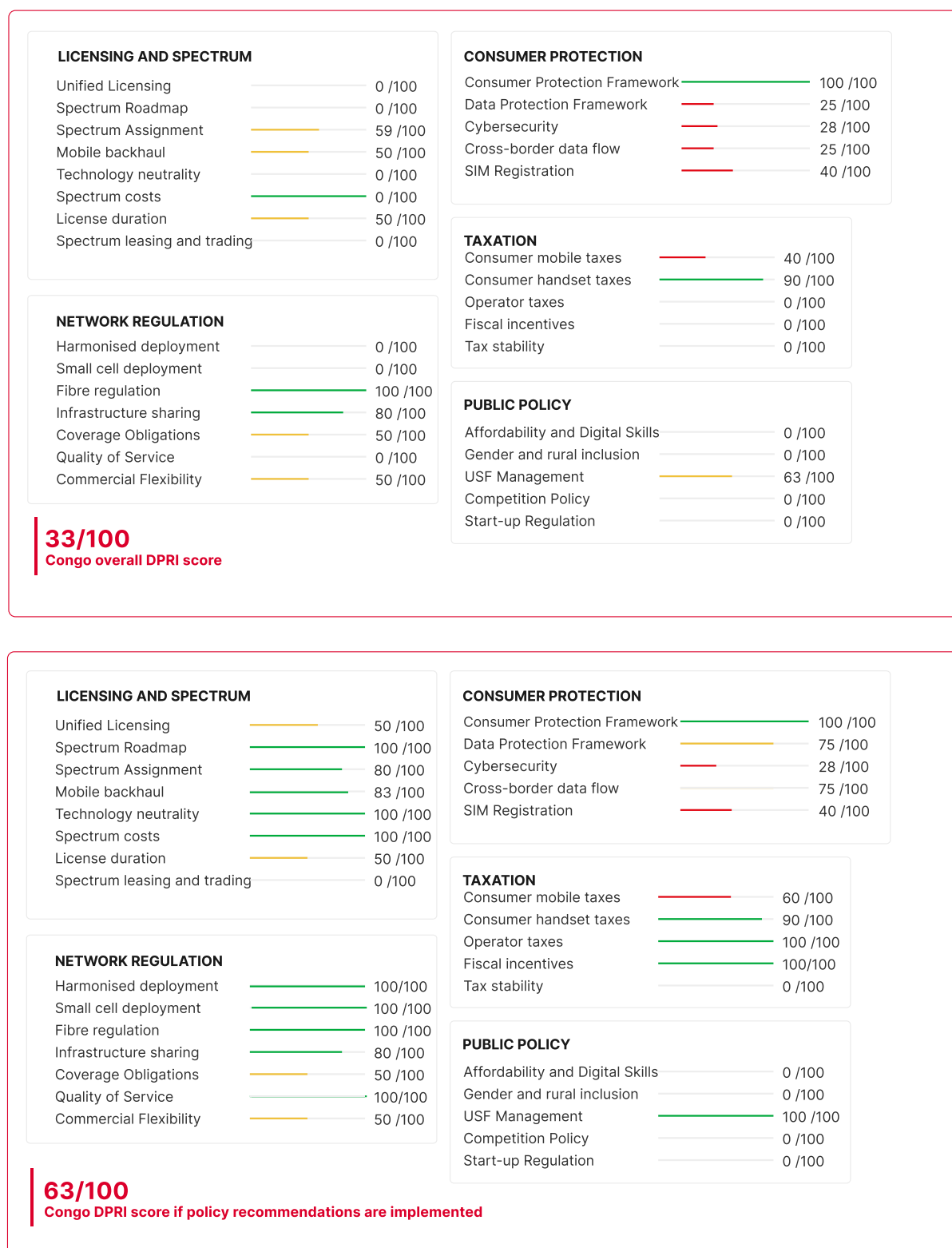


5D. Impact of the policy recommendations on Congo's DAI ranking

Implementing these policy recommendations will have a major impact on Congo's DPRI index score. These policy recommendations address some of the key policy and regulatory challenges facing the sector in the Congo. If implemented, the Congo's score on the DPRI will rise from 33/100 to 63/100.

Figure 23

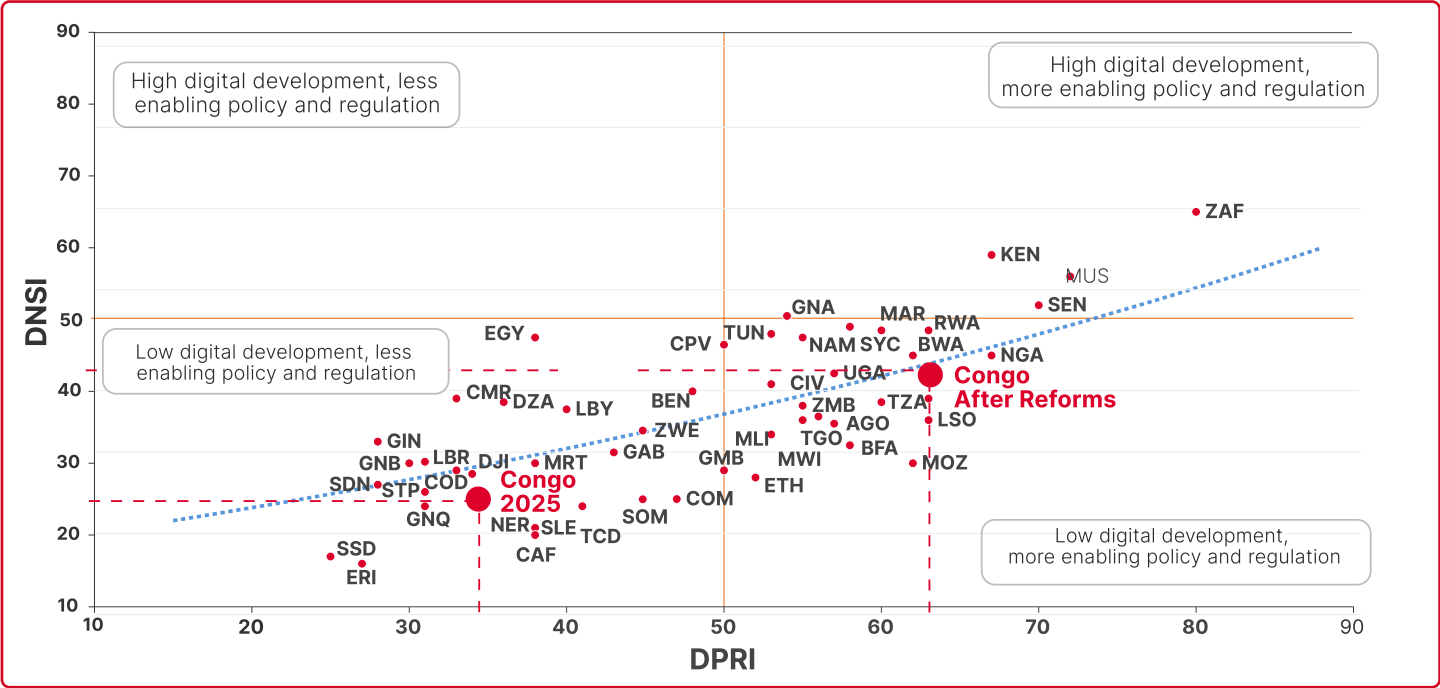
Impact of Policy Recommendations on the DAI Score.



Improving the regulatory framework in the Congo, as reflected in the improved DPRI score, would also increase the level of digital adoption in the country. The DNSI reflects the level of digital adoption in the country. There is a strong relationship between the quality of regulation as reflected in the DPRI score — and the level of digital adoption.

By improving the policy and regulatory framework in the Congo, these recommendations would increase the level of adoption, which would be reflected in the DNSI score, rising from 25.7 to 43.0 (Figure 24).

Figure 24
Impact of the Recommendations on Congo’s DNSI Score.



5E. Impact of the policy recommendations on tax receipts

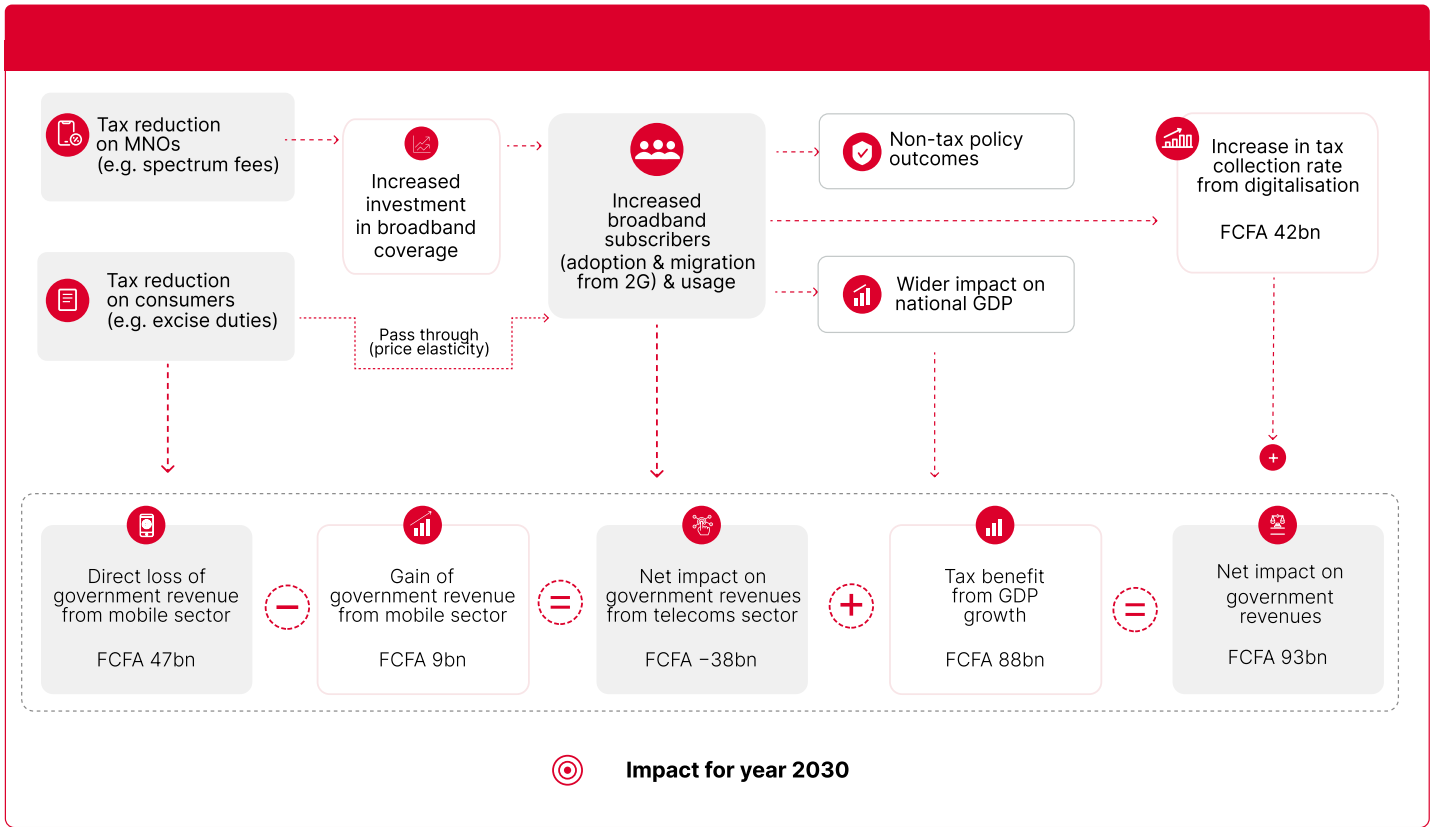
Implementing the policy recommendations outlined in this report would grow the tax revenues collected by the Government of Congo.

The mobile sector is the foundation of the digital economy. The performance of the telecoms sector affects other parts of the economy which, in turn, drives the amount of tax collected by the government. Policies that stimulate digital adoption therefore have a positive impact on tax collection.

The effect of the mobile industry on tax revenues is felt through multiple channels. The direct impact of reduced tax rates on the mobile operators is

to reduce tax revenues. This is compensated, to some extent, by the growth in usage which itself generates taxes. However, there is a broader indirect effect which is felt in several different ways. Increased use of digital technology increases the amount of tax that citizens pay by boosting the rate of formalisation of the economy and increasing tax compliance. Tax revenues rise with economic growth as a whole, by boosting the digital sector, these policy recommendations also increase tax revenues overall (Figure 25).

Figure 25
Methodology for Calculating the Impact of the Policy Recommendations on Tax Revenues.



Source: GSMA Intelligence

The policies recommended in this report would increase annual tax revenues by FCFA 93 billion by 2030. The combined effect of the policy recommendations in this report will be to increase the total amount of tax collected in each year except the first one. Although there will be a

reduction in the amount of tax collected directly from the telecommunication sector, this will be offset by taxes collected from the economy as a whole. Over the next five years, the total increase in tax collected is forecast to be FCFA 173 billion (Figure 26).

Figure 26
Congo — Combined Impact of Policy Recommendations on Tax Revenues.



5F. Impact of the policy recommendations on the broader economy

Increased digitalisation arising from these policy recommendations will have a positive impact throughout the economy. Digitalisation increases productivity in different sectors of the economy and also positively affects the efficiency of public service delivery.

This is reflected in greater sectoral contributions to GDP, increased employment and tax revenues generated by the sector (Figure 27).

Figure 27
Sectoral Impact of Policy Recommendations.

	 Agriculture	 Industry	 Transport	 Trade	 Healthcare	 Government
Increased value-added (FCFA billion)	50	380	30	20	50	40
% of sector GDP	5.5%	6.4%	8.1%	2.6%	9.7%	3.9%
% of Total GDP	0.4%	3.5%	0.3%	0.2%	0.4%	0.4%
Employment	45.000	41.000	13.000	10.000	19.000	16.000
Tax revenue (FCFA billion)	5	39	3	5	5	42*

For methodology: GSMA Driving digital transformation of African economies Evidence and methodology document, 2024.
(*) sum of tax revenue raised from digitalisation of sectors

The overall economic impact of the policy recommendations is expected to be significant. Increased rates of digitalisation increase investment and drive productivity growth throughout the economy. The policy recommendations in this report are expected to increase GDP as a whole by FCFA 870 billion (8%) in 2030 compared to the baseline scenario.



Glossary of Abbreviations

Term	Description
AI	Artificial Intelligence
ARPCE	Agency for Regulation of Post and Electronic Communications
ATM	Automated Teller Machine
ATU	African Telecommunications Union
CEMAC	Economic and Monetary Community of Central Africa
FCFA	Central African Franc
FY	Financial Year
GDP	Gross Domestic Product
GHG	Green House Gases
GSMA	GSM Association
GSMAi	GSMA Intelligence
ICT	Information and Communication Technologies
IoT	Internet of Things
ITU	International Telecommunications Union
MNO	Mobile Network Operator
MW	Megawatt
RAN	Radio Access Network

Term	Description
SIM	Subscriber Identity Module
SME	Small Medium Enterprise
SSA	Sub-Saharan Africa
STEM	Science, Technology, Engineering and Mathematics
UNECA	United Nations Economic Commission for Africa
USF	Universal Service Fund
VAT	Value Added Tax

ANNEX 1 Congo electronic communications regulatory framework

Sector related legislation

- Electronic Communications Law 9-2009
- ARPCE Law 11-2009
- Law n° 30 of 11/10/2023 relating to the opening of the USSD channel to value-added services and their interoperability in Congo.
- Law n° 71 of 16/08/2022 granting the digital and technological innovation start-up label.
- Law n° 27-2020 on Combating Cybercrime.
- Law n° 26-2020 of 5 June 2020 on cybersecurity.
- Law n° 37 of 12 December 2019 on Electronic Transactions, governing e-commerce, digital signatures, and cryptology.
- Law n° 30-2019 of 10 October 2019 on the creation of the Agence Nationale de Sécurité des Systèmes d'Information (ANSSI), the National Agency for Information Systems Security.
- Law n° 29 of 10 October 2019 on the protection of personal data.

These laws have been reinforced through implementing the following decrees:

- Decree n° 2019-172 of 1 July 2019 setting out the terms and conditions for using the radio frequency spectrum.
- Decree n° 2019-123 of 3 May 2019 setting out the terms and conditions for the management of the universal access and service fund for electronic communications (FASUCE).
- Decree n° 2018-112 of 21 March 2018 on the responsibilities and organisation of the Directorate General for the Development of the Digital Economy.
- Decree n° 2018-111 of 21 March 2018 on the organisation of the Ministry of Posts, Telecommunications and Digital Economy.
- Decree n° 2015-255 of 19 February 2015 setting out the conditions for the establishment and operation of electronic communication networks and services, and the distribution of equipment.
- Decree n° 2015-253 of 19 February 2015 on the approval of the national radio frequency band allocation plan.
- Decree n° 2015-254 of 19 February 2015 setting out the terms and conditions for approving terminals and radio equipment, compliance verification, and the technical control of imports of electronic communication equipment.
- Decree n° 2015-244 of 4 February 2015 setting out the terms and conditions for the management of the national numbering plan and the usage conditions of the numbering resources.

- Decree n° 2015-243 of 4 February 2015 on the interconnection of public telecoms networks.
- Decree n° 2015-242 of 4 February 2015 setting out the terms and conditions for regulating the tariffs of electronic communications services.
- Decree n° 2011-734 of 7 December 2011 setting out the conditions for the establishment and operation of very high-speed electronic communication networks and services.
- Decree n° 2010-554 of 26 July 2010 on the identification of subscribers to landline and mobile telephony services, and retention of electronic communications data.
- Decree n° 2009-476 of 24 December 2009 on the creation of the Direction Générale des.
- Postes et Télécommunications, the Directorate General of Posts and Telecommunications or DGPT.
- Decree n° 2025-80 of 2 July 2, 2025 establishing the procedure for the withdrawal of the Digital and Technological Innovation Startup Label;
- Decree n° 2025-81 of 2 July 2, 2025 defining the responsibilities, composition, and operating procedures of the Commission for the Labeling of Digital and Technological Innovation Startups.
- The regulatory framework has been complemented with Ministerial Order No. 11221/MPTNTC/MJDH/MPDN/MID establishing the procedures for identifying subscriptions to fixed and mobile telephone services and retention of electronic communications data.

Several finance laws regulate the taxes, fees, and charges related to the sector, including:

- Finance Law (2013) n° 41.- 2012, 29 December 2012.
- Finance Law (2019) n° 40-2018, 29 December 2018.
- Finance Law (2020) n° 42-2019, 30 December 2019.
- Finance Law (2023) n° n° 77-2022, 27 December 2019.
- Finance Law (2024) n° 39- 2023, 29 December 2023.

ANNEX 2 Methodology for estimating broadband adoption

Subscriber and Internet User Definitions

Unique subscribers	Unique subscribers represent the number of individuals in a market who have access to and use their own mobile handset. Unique subscriber estimates are derived through a combination of consumer survey data and market-level mobile connection data, allowing subscriber penetration and multi-SIM ownership patterns to be reflected in each market.
Unique mobile internet subscribers	Mobile internet subscribers represent unique subscribers who use their mobile phone to access internet services. Estimates are derived from consumer survey data and are validated against market-level mobile internet connection data by technology generation.
Adult unique subscribers	Adult unique subscribers represent the number of unique subscribers aged 18 years and above.
Smartphone internet subscribers	Smartphone internet subscribers represent mobile internet subscribers who access internet services using a smartphone. Estimates are based on consumer survey responses and are cross-checked against the number of registered smartphones in each market.
Internet users	Internet users represent all individuals who access the internet, regardless of whether they personally own a mobile subscription. This includes: • Mobile internet subscribers; • Individuals who access the internet using another person's device; • Individuals who access the internet through non-mobile devices such as PCs, tablets, or fixed broadband connections.

Methodology

GSMA Intelligence subscriber and internet user estimates are primarily based on consumer survey data that captures mobile ownership, smartphone ownership, and internet usage behaviour. Survey respondents are asked whether they own or have access to a mobile phone, whether they use mobile internet services, and the type of device used to access the internet.

The survey also collects information on children within households, including whether children have access to a mobile phone and whether they access the internet. This information is used to estimate mobile ownership and internet usage among individuals below the age of 18.

Survey coverage extends across markets representing approximately 90% of the global population. For countries not covered directly by the GSMA Consumer Survey, estimates are supplemented using a combination of third-party research sources, including government surveys, regulator publications, national statistics agencies, and other reputable market research providers.

All estimates are reviewed against market-level indicators, including mobile connections, mobile internet connections by technology generation, and smartphone adoption levels, to ensure consistency and realism across markets.