Communications Sector Regional Report

Table of Contents

Communication From the Executive Secretary - EACO

Bridging the digital divide, promoting innovation, and ensuring robust regulatory frameworks to support the dynamic telecommunications landscape

Dear Stakeholders,

It is my pleasure to present the 2023 report on the telecommunications sector in the East African region. This report consolidates data collected and analysed by the East African Communications Organisation (EACO) Secretariat using inputs from the EACO Databank. The Statistics that were launched in 2023 during the Congress and Assemblies cover six East African Countries that are part of EACO. We hope to include data from Somalia and DRC once they join EACO. Broadcasting and Postal sector indicators shall also be added in the next FY 2024/2025. The indicators used align with those reported to the International Telecommunication Union (ITU), ensuring consistency and reliability. This document provides an authoritative overview of the sector's development over the past two years, December 2022 to December 2023.

Our region has witnessed remarkable advancements in network coverage, a surge in mobile and internet subscriptions, and notable growth in mobile money services. These developments have been pivotal in driving socio-economic growth, fostering digital inclusion, and enhancing connectivity across East Africa.

To facilitate meaningful comparisons that reflect the diversity of Member States in terms of population and economic profiles, the report focuses on indicators based on percentages and proportionality rather than absolute values. This approach ensures a more accurate and relevant analysis across different countries.

As we look to the future, our focus will remain on bridging the digital divide, promoting innovation, and ensuring robust regulatory frameworks to support the dynamic telecommunications landscape.

Thank you for your continued support and commitment.

Sincerely,

Dr. Ally Simba,
Executive Secretary, EACO

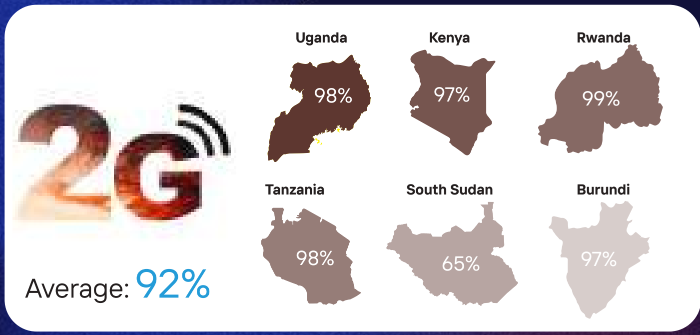
EAC Telecom Sector Statistics 2023

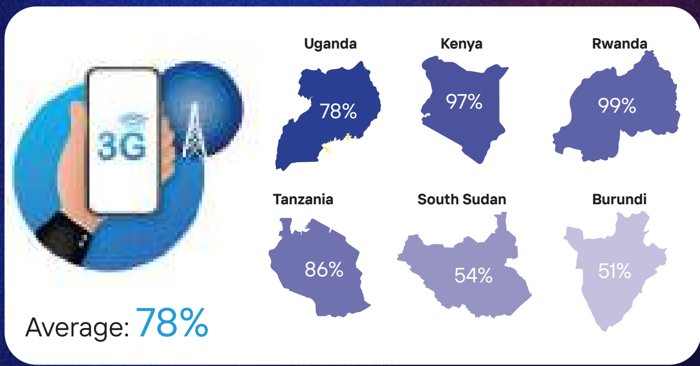
Mobile Telephony

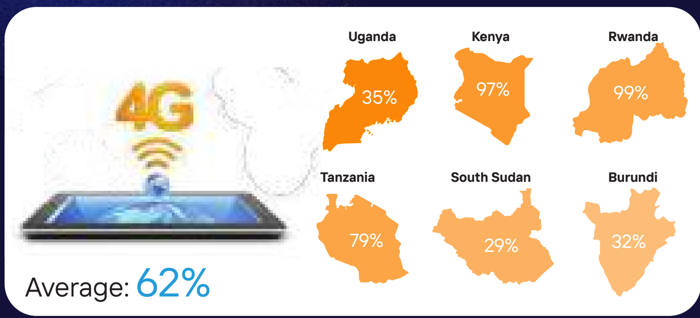
199.7 Million Subs
100% Penetration

8.6 Billion Subs
111% Penetration

Population Coverage







Mobile Internet Subscriptions

61% Penetration
122.3 Million Subs

67% Penetration
4.6 Billion Subs

Domestic Voice Traffic (Minutes)

346.5 Billion Minutes
+15%

Internet Traffic (GB)

2.9 Billion GB
54%

EAC Incoming Voice Traffic (Minutes)

1.6 Billion Mins
31%

EAC Outgoing Voice Traffic (Minutes)

611 Million Mins
8%

Mobile Money Subscriptions

128.7 Million Subs
64% Penetration

Volume of Mobile Money Transaction

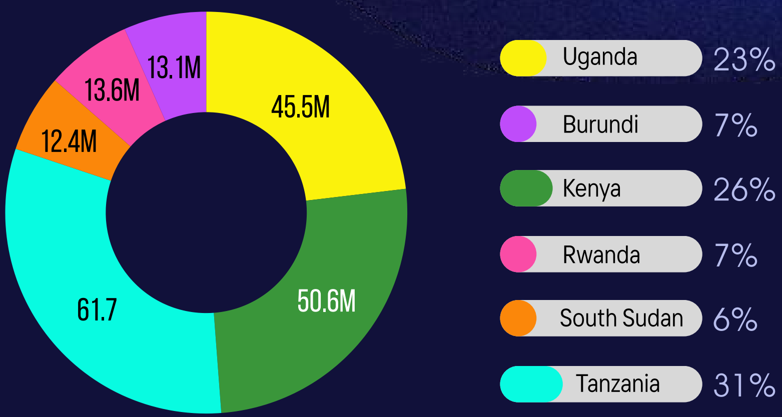
24.8 Billion
+13%

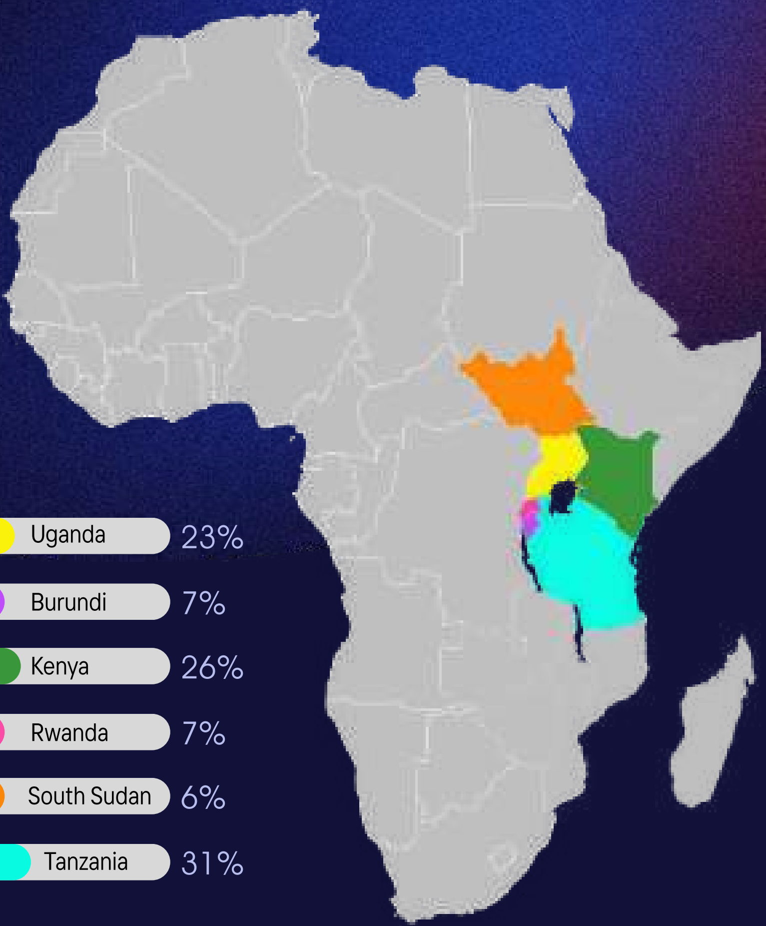
YEAR ON YEAR GROWTH RATE (2022-2023)

Country Facts

Year	Country Name	Population (million)	Land Area	Buying Rate ($)	Selling Rate ($)	Average Rate ($)	Submission Currency
Dec-23	Burundi	13.1	27,834	2,833	2,879	2,856	FBu
Dec-23	Kenya	50.6	580,367	156	157	156	KES
Dec-23	Rwanda	13.6	26,338	1,252	1,277	1,264	Frw
Dec-23	South Sudan	12.4	610,745	1,054	1,087	1,071	SSP
Dec-23	Tanzania	65.5	945,087	2,494	2,519	2,506	TZS
Dec-23	Uganda	45.5	241,037	3,900	3,700	3,800	UGX

Population Distribution





Network Coverage

Across the region, 2G coverage has remained stable with a regional average of 92%. All countries maintain high coverage, ensuring basic communication services are widely accessible.

The East African Community (EAC) has made significant progress in expanding mobile network coverage. The majority of EAC member states provide basic mobile connectivity, though the extent of coverage varies among them. These variations are influenced by factors such as infrastructure investments and regulatory environments. Rwanda leads the region with a mobile network penetration rate of 99%, followed by Tanzania, Uganda, Burundi, and Kenya.

Percentage of the population covered by a mobile-cellular network refers to the percentage of inhabitants within range of a mobile-cellular signal, irrespective of whether or not they are subscribers or users.

This is calculated by dividing the number of inhabitants within range of a mobile-cellular signal by the total population and multiplying by 100.

Percentage of Population Covered by a Mobile Cellular Telephone Network

Figure 1: Population covered by a Mobile Network in the EACO Member States

2G Population Coverage

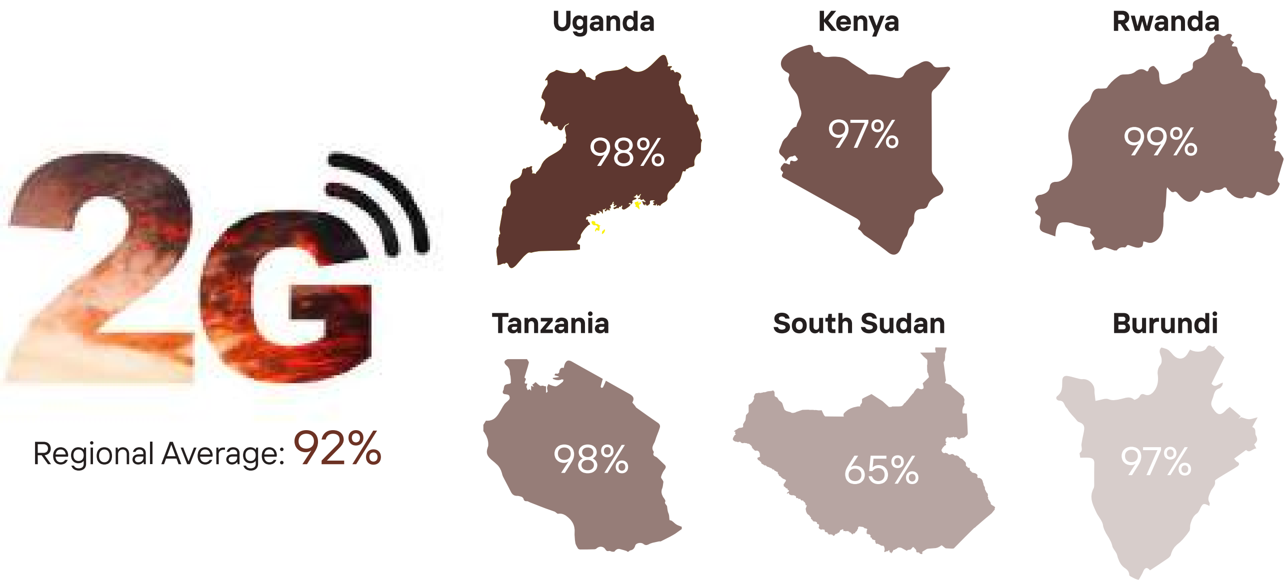


Figure 2: The population coverage of 2G network in the East African Countries in 2023

Across the region, 2G coverage has remained stable with a regional average of 92%. Countries like Burundi, Kenya, Rwanda, and Uganda maintain high coverage, ensuring basic communication services are widely accessible. Notably Tanzania showed significant progress increasing from 94% to 98%, attributed to continued infrastructure investments and rural coverage initiatives.

3G Population Coverage

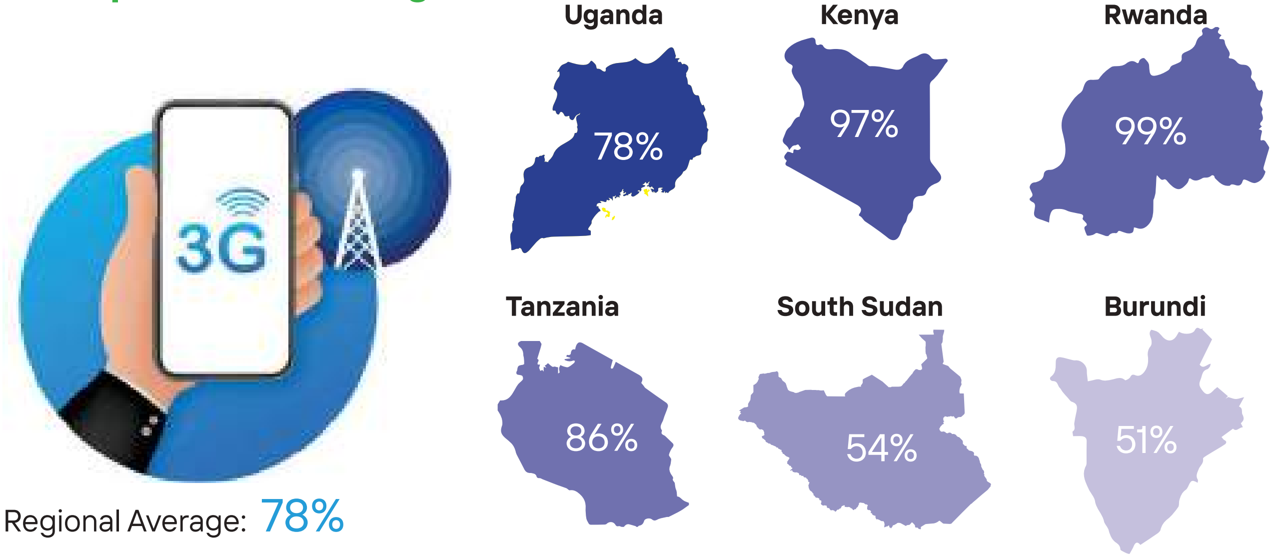


Figure 3: *The population coverage of 3G network in the East African Countries in 2023*

Regarding 3G coverage, the regional average increased from 71% to 78%. Kenya and Rwanda lead with almost universal 3G coverage, maintaining rates of 97% and 99%, respectively. There have been significant gains in Tanzania and Uganda: Tanzania's 3G coverage rose from 60% to 86%, and Uganda's increased from 66% to 78%, driven by targeted investments and regulatory support for telecom operators. In contrast, the growth in Burundi and South Sudan has stagnated, with both countries seeing no significant changes at 51% and 54%, respectively, indicating potential areas for focused development.

4G Population Coverage

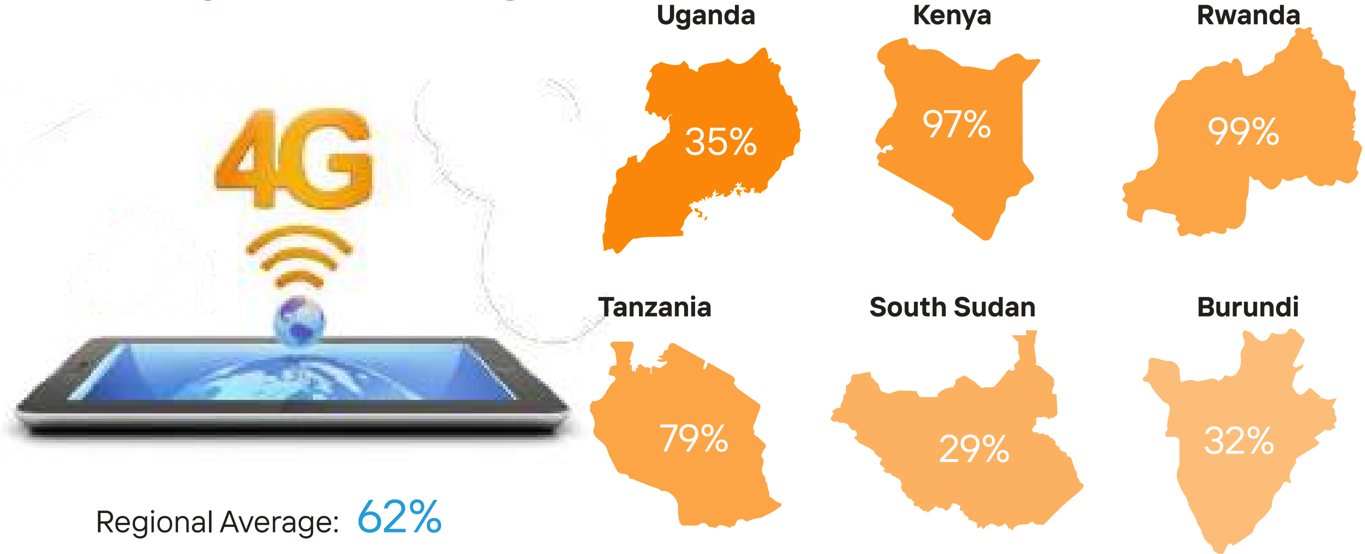


Figure 4: *The population coverage of 4G network in the East African Countries in 2023*

There has been a significant increase in 4G coverage across the EAC member states. The average population coverage has risen from 52% to 62%, with Rwanda and Kenya leading the way with close to or exceeding 97% 4G coverage in 2023. Tanzania has shown remarkable growth, increasing its 4G coverage from 35% to 79%. Burundi and Uganda have also shown growth, with Burundi's coverage rising from 27% to 32% and Uganda's from 27% to 35%.

Mobile network coverage typically remains higher in urban areas than in rural areas. This is due to factors such as the higher cost of deploying infrastructure in rural areas, lower population density, and varying levels of investment for network rollout.

Telephone Subscriptions

The mobile industry in East Africa is experiencing significant growth, with the average mobile penetration rate across the region reaching 100% in 2023. This growth outpaces both the average for the ITU Africa Region (92% in 2023, up from 82% in 2021) and the global average (111% in 2023, up from 107% in 2021).

Several countries in East Africa are experiencing particularly strong growth. Uganda's mobile penetration rate jumped from 70% in 2021 to 81% in 2023. South Sudan also saw a significant increase, from 29% to 36% over the same period.

Kenya and Tanzania have the two highest mobile penetration rates in the region, at 129% and 113% respectively in 2023. Kenya's penetration rate increased by 2 percentage points between 2021 and 2023, while Tanzania's rose by 16 percentage points. Rwanda's mobile penetration rate is also high, at 94% in 2023. This represents a significant increase from the 84% in 2021.

The growth of the mobile industry in East Africa is being driven by several factors, including the increasing availability of mobile data and voice services as well as growing government investment in ICT infrastructure. Mobile money is also playing a major role in driving mobile penetration, as it provides a convenient and secure way for people to send and receive payments.

East Africa is one of the fastest-growing mobile markets in the world, and this growth is expected to continue in the coming years. This presents a significant opportunity for mobile operators, handset manufacturers, and other players in the mobile ecosystem.

Mobile Active Subscriptions

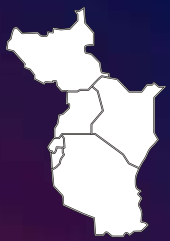
Country	Mobile Active Subs 2023	Pen. Dec. 2023	YOY Growth
Burundi	8,646,686	66%	12%
Kenya	66,754,709	129%	2%
Rwanda	12,763,076	93%	17%
South Sudan	4,441,597	36%	36%
Tanzania	70,215,144	113%	17%
Uganda	36,911,845	81%	23%
	EACO Computed Regional Av.	100%	
	ITU Africa Region Av. (2023)	92.0%	
	ITU Global Av. (2023)	111.0%	

Global Penetration

111%

Africa Penetration

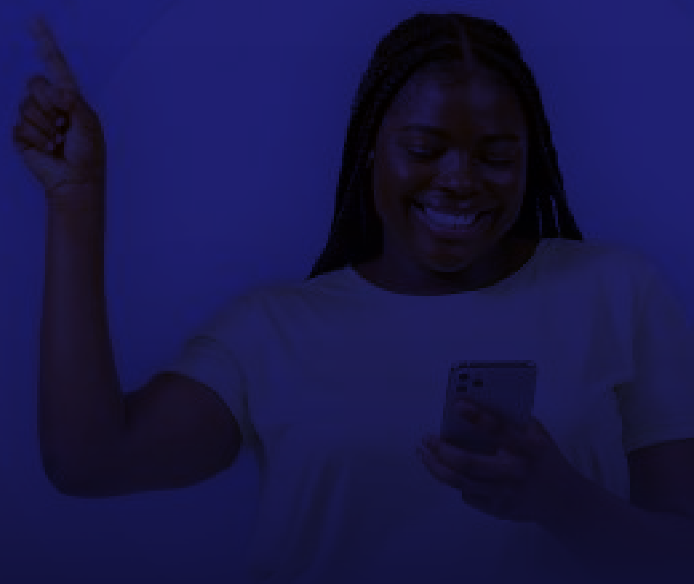
92%



EAC Penetration

100%

Mobile Internet Subscriptions



East Africa is experiencing a mobile internet boom, with several countries posting penetration rates that outpace the regional and continental averages.

The data reveals a significant disparity in mobile internet penetration across the region. Kenya and Tanzania lead the pack with penetration rates of 72% and 55% respectively. This suggests a critical mass of the population in these countries is actively using the internet through their mobile phones. Conversely, countries like Burundi (66%) and South Sudan (13%) lag far behind, highlighting the challenges they face in expanding mobile internet access.

The influx of low-cost smartphones from Chinese manufacturers has made mobile phones more accessible to a wider population. Increased competition among mobile network operators and government interventions are driving down data costs, making internet access more affordable. Services like M-Pesa in Kenya have created a financial ecosystem reliant on mobile phones, driving internet usage for transactions and money management. The development of localized apps designed for low-bandwidth environments caters to diverse needs (communication, social media, entertainment) and fuels mobile internet usage.

Overall, the average mobile internet penetration rate in the East African Community (EAC) region increased from 49% in 2022 to 51% in 2023, a year-over-year growth of 16%. This growth outpaces the average for Africa, which rose from 37% to 40%, and approaches the global average, which increased slightly from 66% to 67%. Uganda saw a notable increase from 30% in 2022 to 35% in 2023, representing a year-over-year growth of 22%. Rwanda's penetration increased from 64% to 68%, with a 12% growth rate.

East Africa is one of the fastest-growing mobile internet markets in the world, and this growth is expected to continue in the coming years. This presents a significant opportunity for mobile operators, handset manufacturers, and other players in the mobile ecosystem.

Country	Internet Subs	Internet Pen
Burundi	3,002,592	23%
Kenya	51,018,744	72%
Rwanda	9,277,634	68%
South Sudan	1,579,533	13%
Tanzania	35,885,592	55%
Uganda	15,947,403	35%

Mobile Internet Penetration

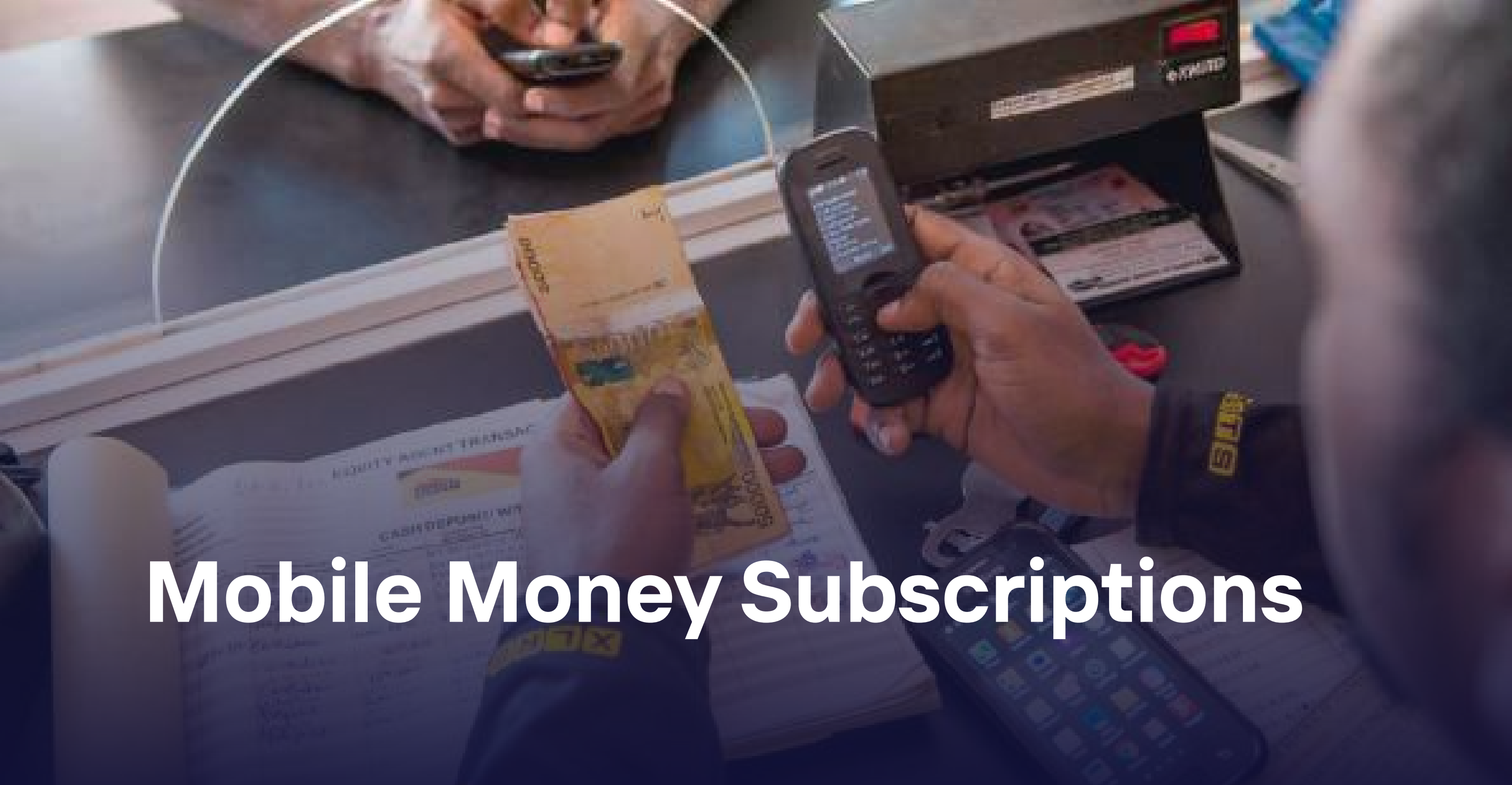
61%

122.3 Million Subs

EAC Regional Av. **61%**

Africa Av. **37%**

Global Av. **67%**



Mobile Money Subscriptions

The East African region witnessed a significant surge in mobile money adoption in recent years. The average mobile money service penetration across East African countries reached 64% by December 2023, compared to 49% in December 2021.

Kenya maintained its lead in mobile money penetration, with a significant increase from 59% in 2021 to 75% in 2023. This growth can be attributed to the continued success of M-Pesa, a mobile money service launched in 2007 by Safaricom, the largest mobile network operator in Kenya. Tanzania also saw substantial growth, with its mobile money penetration rising from 66% in 2021 to 81% in 2023, a 29% increase.

Rwanda and Uganda witnessed tremendous growth in mobile money adoption as well. Rwanda's penetration rate increased from 39% in 2021 to 50% in 2023, a 34% increase, while Uganda's rate surged from 36% to 60%, a 77% increase. This can be partly attributed to government initiatives aimed at promoting financial inclusion, such as encouraging the use of mobile money for government payments.

South Sudan showed significant growth, with its mobile money penetration rising from 9% in 2021 to 10% in 2023. Despite this growth, the penetration rate remains relatively low, indicating significant potential for future expansion. Burundi's mobile money penetration saw a modest increase from 18% in 2021 to 17% in 2023, reflecting a 6% growth rate.

The overall mobile money subscriber base in the EAC region grew from approximately 94 million in 2021 to nearly 129 million in 2023. This surge is driven by the increasing availability of mobile money services, the proliferation of low-cost smartphones, and the push for digital financial inclusion by governments across the region.

Country	Dec-23	MM Pen.
Burundi	2,270,426	17%
Kenya	38,002,803	75%
Rwanda	6,798,504	50%
South Sudan	1,259,975	10%
Tanzania	52,875,129	81%
Uganda	27,466,947	60%
Regional Av.	**128,673,784**	**64%**

Mobile Money Penetration
64%
128.7 Million Subs

Mobile Money Agents
2 Million

Domestic Voice Traffic

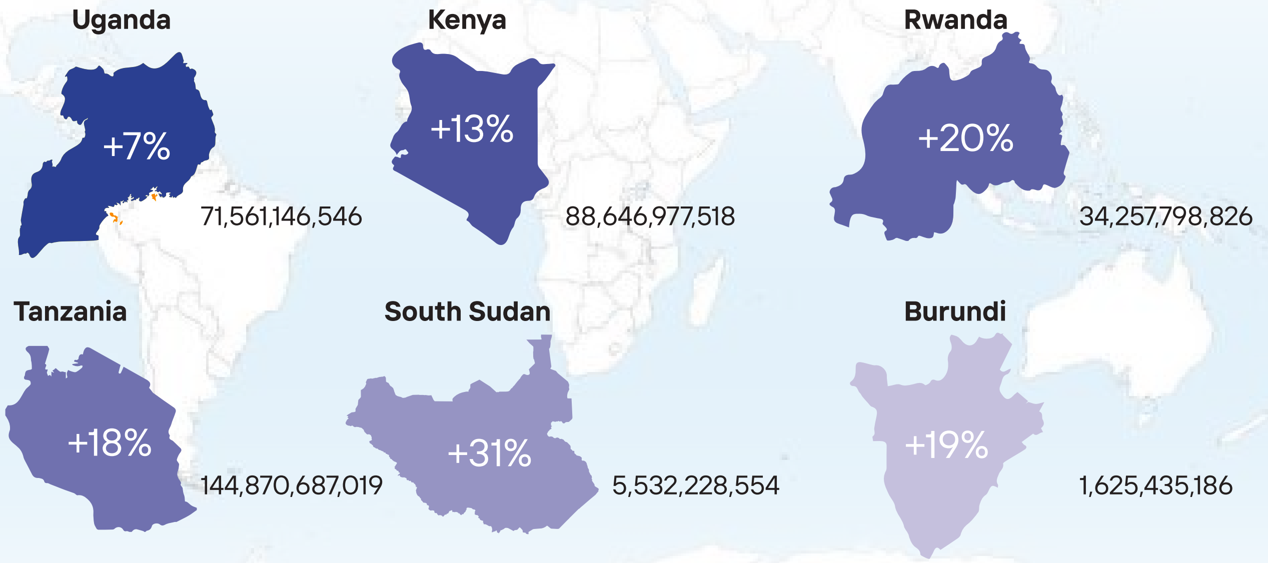


Figure 5: *Domestic voice traffic in billion minutes, 2023*

The domestic voice traffic segment in the ICT sector across East African markets has exhibited diverse performance trends from 2022 to 2023.

Burundi's domestic voice traffic increased by 19%, from 1.37 billion minutes in 2022 to 1.63 billion minutes in 2023. The country's expanding population and rising mobile phone penetration rates have contributed significantly to increased domestic call volumes.

Kenya recorded a 13% growth in domestic voice traffic, rising from 78.13 billion minutes in 2022 to 88.65 billion minutes in 2023.

This substantial increase can be largely attributed to aggressive strategies by telecom operators to enhance service quality and affordability. For instance, innovations such as bundled offers combining voice, data, and SMS services have made domestic calls more economical for users, particularly under the initiatives of leading operators like Safaricom.

Rwanda experienced a robust 20% growth in domestic voice traffic, climbing from 28.60 billion minutes in 2022 to 34.26 billion minutes in 2023. Government policies supporting ICT infrastructure development, coupled with a competitive telecom sector, have led to lower call tariffs and improved service quality.

South Sudan saw a significant 31% increase in domestic voice traffic, from 4.21 billion minutes in 2022 to 5.53 billion minutes in 2023. This growth reflects ongoing efforts to rebuild and expand telecommunications infrastructure following years of conflict.

Tanzania, however, witnessed an 18% growth in domestic voice traffic, rising from 122.74 billion minutes in 2022 to 144.87 billion minutes in 2023. This growth is driven by the expansion of mobile network services and competitive pricing strategies introduced by telecom operators. The youthful population's increasing reliance on mobile communications has further fueled this growth, particularly with tailored products aimed at niche voice markets.

Uganda's domestic voice traffic grew by 7%, from 66.71 billion minutes in 2022 to 71.56 billion minutes in 2023. This growth can be attributed to the rise of voice packages that are tailored to the consumer need for both onnet and offnet calls.

Overall, the East African domestic voice traffic segment expanded by 15% from 301.76 billion minutes in 2022 to 346.49 billion minutes in 2023, reflecting the region's dynamic ICT sector and increasing connectivity among its populations.

Burundi's Domestic Voice +19%

1.4 billion mins **2022** to
1.6 billion mins **2023**

Kenya's Domestic Voice +13%

78.1 billion mins **2022** to
88.6 billion mins **2023**

Tanzania's Domestic voice +18%

122.7 billion mins in **2022** to
144.8 billion mins in **2023**

South Sudan's Domestic Voice +31%

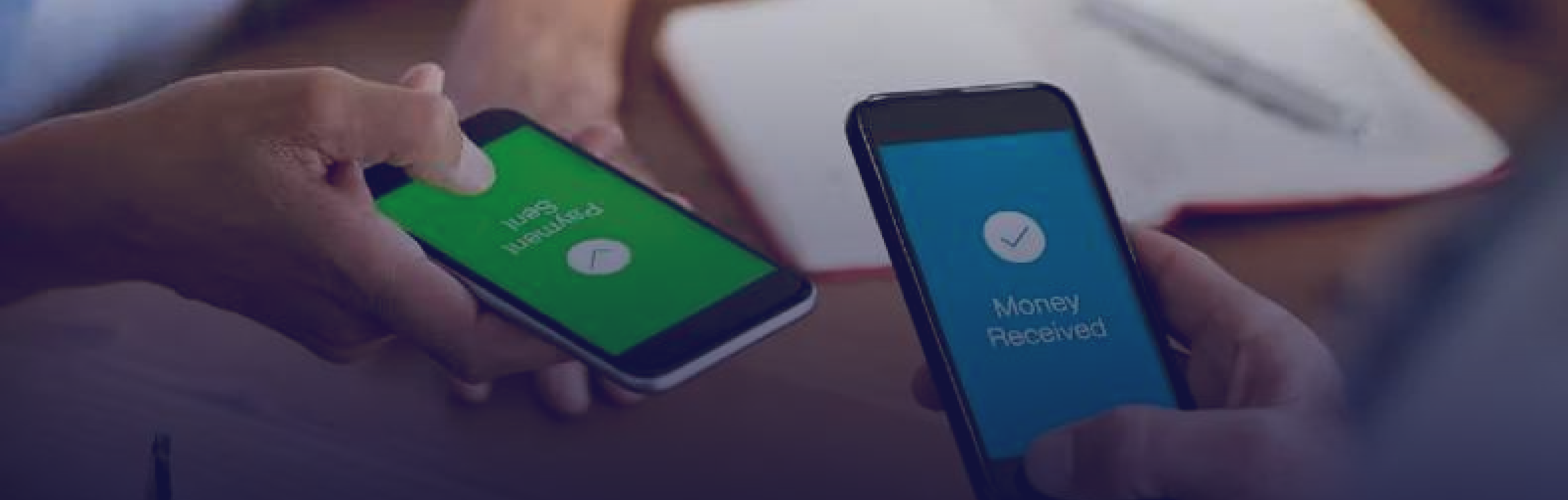
4.2 billion mins **2022** to
5.5 billion mins **2023**

Rwanda's Domestic Voice +20%

28.6 billion mins **2022** to
34.2 billion mins **2023**

Uganda's Domestic voice +7%

66.7 billion mins in **2022** to
71.6 billion mins in **2023**



Internet Traffic

Mobile internet usage in East Africa experienced growth from 2022 to 2023. Across Kenya, Uganda, Burundi, Tanzania (TZ), Rwanda, and South Sudan, total mobile internet traffic surged by 54%, escalating from 1.90 billion gigabytes (GB) in 2022 to 2.92 billion GB in 2023.

Kenya led this surge with a 140% increase in mobile internet traffic, soaring from 281.18 million GB in 2022 to 674.67 million GB in 2023.

Uganda also witnessed substantial growth, with mobile internet traffic rising by 44% from 421.53 million GB to 605.90 million GB during the same period.

Burundi experienced an 85% increase in mobile internet traffic, climbing from 30.57 million GB in 2022 to 56.45 million GB in 2023.

In Tanzania, mobile internet traffic grew by 34%, reaching 1.03 billion GB in 2023 compared to 766 million GB in 2022.

Rwanda saw a 33% increase in mobile internet traffic, rising from 387.55 million GB in 2022 to 514.33 million GB in 2023.

South Sudan recorded growth in mobile internet traffic, surging by 204% from 14.40 million GB in 2022 to 43.84 million GB in 2023.

This growth can be attributed to the accessibility of affordable Chinese smartphones, which have enabled more people to access mobile internet. Furthermore. telecom operators contributed significantly by expanding network coverage and introducing competitive data plans, making internet services more appealing and accessible nationwide.

Mobile Internet Traffic (GB)			
Country	**2022**	**2023**	**Growth**
Kenya	281,183,052	674,669,829	140%
Uganda	421,533,617	605,900,521	44%
Burundi	30,569,401	56,449,432	85%
Tanzania	763,816,226	1,034,141,684	34%
Rwanda	387,550,576	514,332,419	33%
South Sudan	14,403,300	43,844,834	204%
Total	**1,901,241,968**	**2,921,199,058**	**54%**

EAC Voice Traffic

Incoming Traffic

In 2023, the East African Community (EAC) member states experienced robust growth in incoming voice traffic, totaling 1.57 billion minutes, marking a significant 31% increase from 1.19 billion minutes in 2022. Tanzania showed the most remarkable growth since joining the One Network Area (ONA), with incoming traffic surging by 157%, reaching 34.99 billion minutes. This growth underscores the success of the ONA initiative in enhancing regional connectivity and reducing communication costs across borders.

Outgoing Traffic

In 2023, outgoing voice traffic from EAC member states totaled 611.19 billion minutes, reflecting an 8% increase from 565.04 billion minutes in 2022. Tanzania exhibited the most dramatic growth in outgoing traffic, soaring by 969% to 95.47 billion minutes, driven by expanded international connectivity and increased demand for cross-border communication. Across the region, the growth in outgoing traffic can be attributed to enhanced network capacities, improved service offerings by telecom providers, and rising demand for international calls due to increased business activities and personal connections.

Voice Traffic Outgoing to EAC Member States

611.2 Million Minutes

Tanzania	2022	2023
Outgoing to EAC	13,594,473	34,994,641
Incoming from EAC	8,927,113	95,473,684

Voice Traffic Incoming from EAC Member States

1.5 Billion Minutes

Mobile Data Tariffs

Mobile data prices have fallen significantly across East Africa between 2020 and 2023. Every country listed in the table has seen a reduction in the price of a 1GB monthly data bundle. This decrease ranges from -28% in South Sudan to -63% in Tanzania. The regional average price has fallen by 40%, which is even greater than the fall in global and African averages (49% and 42% respectively). This suggests a strong growth in mobile data usage across East Africa.

Mobile data is becoming more affordable. There are a number of possible reasons for this, including increased competition between telecom operators, investment in infrastructure, and a growing demand for mobile data.

Mobile data is likely dominating the internet usage space. The falling price of mobile data, combined with the proliferation of smartphones and tablets, suggests that mobile data is becoming the primary way that people access the internet in East Africa.

Monthly Mobile Data Pricing for a Minimum of 1GB in USD

	2020	2023	Reduction
Burundi	2.44	2.77	0.13
Kenya	4.14	1.87	-55%
Rwanda	1.92	0.76	-60%
South Sudan	8.70	6.25	-28%
Tanzania	3.89	1.44	-63%
Uganda	2.80	1.34	-52%
Regional Av.	3.98	2.41	-40%
African Av	6.24	3.64	-42%
Global Av.	5.09	2.59	-49%