Independent Communications Authority of South Africa

350 Witch-Hazel Avenue, Eco Point Office Park
Eco Park, Centurion
Private Bag X10, Highveld Park 0169
Telephone number: (012) 568 3000/1

The State of the ICT Sector Report of South Africa

March 2024

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Independent Communications Authority of South Africa ("ICASA / the Authority") is pleased to release the 9th annual State of Information Communication Technology ("ICT") sector report.

The Authority acknowledges the paramount importance of access to comprehensive and timely ICT indicators for effectively regulating the sectors under its jurisdiction, namely broadcasting, postal services, and telecommunications. These indicators serve as vital benchmarks, guiding sector policy research and ensuring alignment with global standards, as well as data collected by other regulatory bodies. The data used in compiling this report was obtained through a comprehensive questionnaire distributed to key stakeholders covering the period from 1 October 2022 to 30 September 2023. Pricing data for voice, SMS, prepaid bundles, and post-paid bundles utilized in this report pertains to the year 2024. Additionally, data was sourced from various reputable sources, including the International Telecommunication Union's (ITU) 2023 report, OOKLA's 2024 data, and Statistics South Africa's (Stats SA) 2022 report. Similar to previous analyses, this report includes comparisons of indicators such as internet speeds for both fixed and mobile broadband on a global scale, encompassing both download and upload speeds.

The Authority received a total of ninety-eight (98) responses from the Electronic Communications Service ("ECS") and Electronic Communications Network Service ("ECNS") licensees, twenty-nine (29) responses from television and radio broadcasters and only seven (7) responses from postal service operators. All the big operators have responded to the questionnaire.

According to the 2022 General Household Survey ("GHS") report by Stats SA, the national percentage of households with Internet access from any location decreased from 77.5% in 2021 to 75.3% in 2022. However, there was an increase in the proportion of households with Internet access specifically at home, rising from 10.4% in 2021 to 13% in 2022. This trend indicates a nuanced pattern in Internet accessibility, with a slight overall decline in general access while the availability of Internet within households notably improved during the same period.

As of 2023, a total of 4,921 schools were connected to the internet as mandated by ICASA's Universal Service and Access obligations. KwaZulu Natal province boasts the highest number with 1,087, followed by the Eastern Cape province with 789, while Gauteng province recorded the lowest at 202. These schools encompass both mainstream and schools for learners with special educational needs.

Telecommunication service providers have invested in batteries, generators, and other backup power systems to ensure uninterrupted service delivery during load shedding events. The total amount spent on batteries by service providers during load shedding was R2.5 billion in 2023, while R930 million was spent on generators during the same period.

In 2023, the telecommunications sector experienced a marginal overall revenue increase of 0.07%, reaching R208.2 billion compared to R208.1 billion in 2022. There was a notable increase in revenue from fixed internet and data during the same period. In contrast, revenue from total fixed lines and total mobile services exhibited declines of 14.56% and 1.54% in 2023, respectively. These statistics underscore dynamic shifts in revenue streams within the telecommunications industry, indicating a noteworthy rise in the demand for fixed internet and data services alongside decreases in traditional fixed lines and mobile voice services.

In 2023, employment across the telecommunications, broadcasting, and postal sectors collectively decreased by 5.60%. The telecommunications sector experienced a decline of 4.39%, while the broadcasting sector saw a reduction of 8.87%. Similarly, the postal sector witnessed a slight decrease in employment by 1.07%. These figures highlight sector-specific fluctuations within the broader employment landscape, indicative of varying industry challenges and economic influences. Despite the overall decline, each sector exhibits distinct patterns reflecting its unique dynamics and response to market conditions during 2023.

In 2022, 5G population coverage stood at 20%, however, by 2023, it surged to 38.42%, marking a substantial increase within a year. This significant growth indicates rapid expansion and adoption of 5G technology, likely driven by mobile communications services and infrastructure investments. The rise in coverage suggests a growing accessibility to faster and more reliable mobile networks, potentially paving the way for enhanced connectivity, Internet of Things ("IoT") integration, and advanced digital services. This upward trend underscores the increasing prominence and potential transformative impact of 5G technology on communication networks and digital ecosystems.

The overall revenue from broadcasting services experienced a decline of 14.43%, dropping from R41.2 billion in 2022 to R35.2 billion in 2023. The decreased revenue is as a results a notable 10.72% decrease in the total number of Pay TV subscriptions, dropping from 8,305,578 in 2022 to 7,415,593 in 2023. This decrease is attributed to the decline in numbers due to inter alia, the challenging economic conditions faced by consumers, instances of load shedding, and potential competition from non-broadcast players.

The postal services demonstrated a more notable increase of 3.17% in 2023, this growth in postal service revenue was driven by unreserved postal sector.

The total number of parcel delivered by postal sector, encompassing both local and international mail centre volumes, witnessed a notable increase of 30.82% from 15.2 million in 2022 to 19.9 million in 2023. This uptick reflects a growing demand for parcel services, likely driven by factors such as e-commerce expansion and changes in customer preferences. The surge in parcel delivery indicates a thriving market for shipping goods both domestically and internationally, highlighting the importance of efficient logistics networks to meet the evolving needs of businesses and customers in the modern era. The unreserved postal sector continues to show signs of growth, this growth however favours innovation and introduction of new technologies and faster speeds for consumers.

1 INTRODUCTION

The report presents the performance and developments in the ICT sector, focusing on the three areas that are regulated by ICASA, namely, the telecommunications, broadcasting, and postal services. It is ICASA's constitutional mandate to regulate these 3 (telecommunications, postal services, and broadcasting) sectors. The report thus details the assessment and body of information that present factors such as financial, employment, subscriptions etc on the ICT sector.

The report aims to provide up to date information to enable interested parties to make informed decisions on the ICT sector. The report can assist interested parties concerned with the ICT sector in South Africa

ICASA Mandate

ICASA is a creature of statute and derives its mandate from the Constitution of the Republic of South Africa, 1996 ("Constitution"), the Independent Communications Authority of South Africa, 2000 (Act No. 13 of 2000) ("ICASA Act"), the Broadcasting Act, 1999 (Act No. 4 of 1999) (Broadcasting Act"), the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("ECA"), and the Postal Services Act, 1998 (Act No. 124 of 1998) ("Postal Act"). The Authority regulates the telecommunications, postal services, and broadcasting sectors in the public interest.

Within this mandate, the Authority's responsibility includes the collection of information and statistics on the ICT sector to monitor, report and ensure that policies and regulations are fact-based.

The Authority also has a responsibility to ensure that all South Africans have access to affordable and high-quality services within the ICT sector.

Methodology

In terms of section 4(3)(g) of the ICASA Act, ICASA has the mandate to request and obtain specific information and data from all licensees at any given time. The Authority makes use of questionnaires customized for ECS, ECNS, Television and Radio Broadcasters as well as Postal service operators to solicit data on ICT indicators. The questionnaires cover data over a 12-month period ending on 30 September of each year, unless otherwise specified. For confidentiality reasons, the information gathered is aggregated to conceal stakeholder-specific information.

The Authority conducts extensive data validation, data pre-processing and analysis using various statistical tools for interpretation, discovery and communication of patterns and trends within the data. The primary aim of conducting this analysis is to draw meaningful insight from the collected data for purposes of narrating the South African state of the ICT Sector.

Limitations

The following possible limitations to the report should be borne in mind when interpreting the information collected:

- The unreserved postal sector always had a low response rate to the questionnaire; and
- the data contained in the report is self-reported by licensees, which therefore requires a more rigorous data-validation process.

Structure of the report

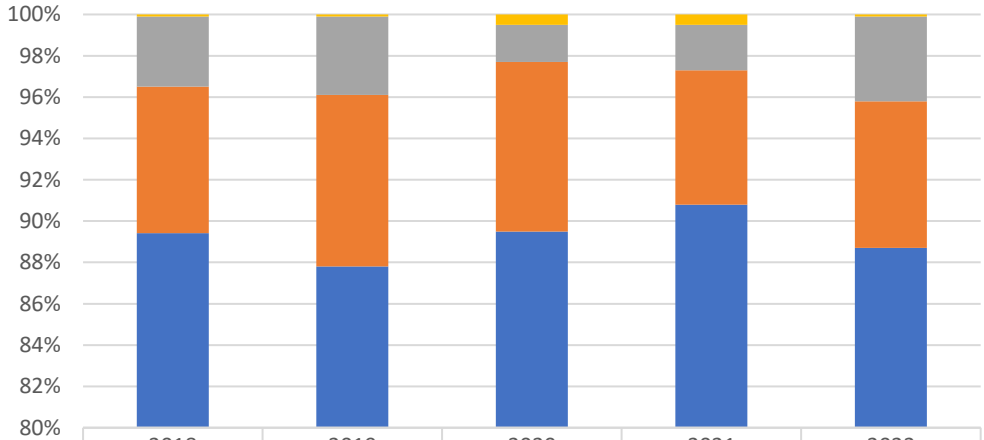
The report is structured as follows: Section 2 presents information as collected by Stats SA. Section 3 looks at information as collected by the Authority. The information is then broken down and presented per sector: Telecommunications Sector (Section 4), Broadcasting Sector (Section 5), and Postal Services Sector (Section 6). Section 7 provides a conclusion.

2 INFORMATION ON THE ICT SECTOR AS REPORTED BY STATISTICS SOUTH AFRICA

In accordance with the Annual Operational Performance Plan of ICASA, the State of ICT Sector Report is released every year on or before March 31st, one year before Stats SA's GHS report.

According to the GHS report, there was a 2.1% decline in the proportion of households solely reliant on cellular phones for communication, which decreased from 90.8% in 2021 to 88.7% in 2022. Meanwhile, households using both cellular and fixed (landline) phones increased from 6.5% to 7.1% over the same period. Additionally, the percentage of households lacking access to either a landline or cellular phone increased from 2.2% to 4.1% between 2021 and 2022.

Graph 1: Proportion of households who have a functional landline and/or cellular telephone in the Republic of South Africa from 2018 to 2022

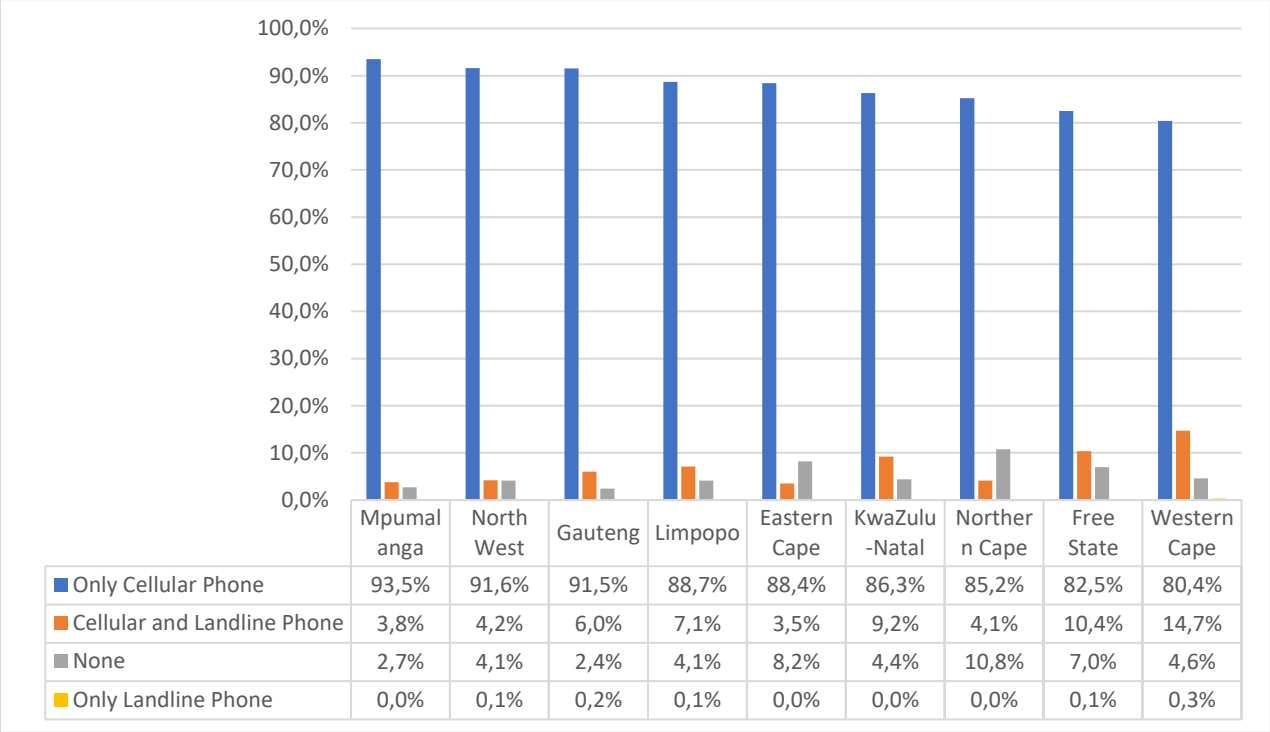


	2018	2019	2020	2021	2022
Only Landline Phone	0,1%	0,1%	0,5%	0,5%	0,1%
None	3,4%	3,8%	1,8%	2,2%	4,1%
Cellular and Landline Phone	7,1%	8,3%	8,2%	6,5%	7,1%
Only Cellular Phone	89,5%	87,8%	89,4%	90,8%	88,7%

Source: StatsSA GHS, 2018- 2022.

According to the GHS report, in terms of the province's household using only cellular phones, Mpumalanga Province was the highest with 93.5% followed by the North West Province with 91.6% and the lowest was the Western Cape Province by 80.4% in 2022. For the proportion of households who have no access to neither a cellular phone nor a landline, Northern Cape Province was the highest at 10.8% and MP is the lowest at 2.7% for the same period. The proportion of households who have the highest access only to landline phones was Western Cape with 0.3% in 2022.

Graph 2: Percentage of Households who have functional landline and cellular telephone in their dwellings by province for 2022.

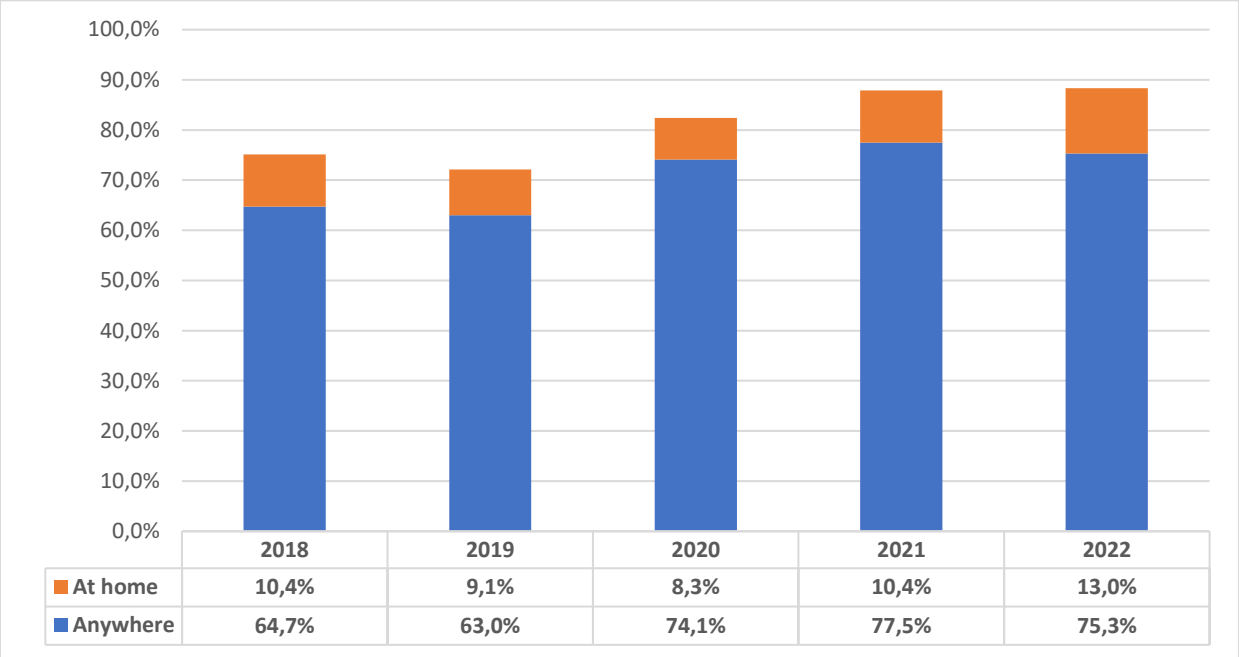


	Mpumalanga	North West	Gauteng	Limpopo	Eastern Cape	KwaZulu-Natal	Northern Cape	Free State	Western Cape
Only Cellular Phone	93,5%	91,6%	91,5%	88,7%	88,4%	86,3%	85,2%	82,5%	80,4%
Cellular and Landline Phone	3,8%	4,2%	6,0%	7,1%	3,5%	9,2%	4,1%	10,4%	14,7%
None	2,7%	4,1%	2,4%	4,1%	8,2%	4,4%	10,8%	7,0%	4,6%
Only Landline Phone	0,0%	0,1%	0,2%	0,1%	0,0%	0,0%	0,0%	0,1%	0,3%

Source: StatsSA GHS, 2022.

In 2022, there was a decrease in the national percentage of households with Internet access from any location, which decreased from 77.5% in 2021 to 75.3% in 2022. Conversely, the proportion of households with Internet access specifically at home showed an increase, from 10.4% in 2021 to 13% in 2022. This shift suggests a nuanced pattern in Internet accessibility, with a slight overall decline in general access while the availability of Internet within the household setting has notably improved over the same period.

Graph 3: Percentage of Households with access to the Internet at home, or for which at least one member has access to or used the Internet nationally 2022.



	2018	2019	2020	2021	2022
At home	10,4%	9,1%	8,3%	10,4%	13,0%
Anywhere	64,7%	63,0%	74,1%	77,5%	75,3%

Source: StatsSA GHS, 2018 - 2022.

The Internet access is further broken down in terms of place of access such as metropolitan, urban, or rural status at both Provincial and National levels. In 2022, the proportion of households using mobile devices to access internet at National level are shown on the table below. In 2022, 69.6% of households nationally had access to the Internet using mobile devices, with the majority of this access accounted for by Households living in metropolitan areas at 74.1% and urban areas sitting at 71.2%. Mobile devices are also the most used means of accessing the Internet by Households in rural areas at 61.1%.

Table 1: Households' access to the Internet by place of access, urban/rural status, and province, 2022

Place where internet is accessed	Rural/Urban status	Province (per cent)									
		WC	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
At home	Metro	39,4	15,6	_	7,1	15,1	_	19,6	_	_	21,4
	Urban	29,0	3,8	9,4	5,4	9,0	7,6	11,4	6,3	9,3	10,7
	Rural	5,1	0,5	6,3	7,9	1,1	0,5	12,8	2,0	1,9	1,6
	Total	**34,7**	**6,6**	**8,4**	**6,2**	**8,3**	**3,5**	**18,6**	**3,9**	**3,4**	**13,0**
At work	Metro	17,7	16,6	_	10,2	17,8	_	19,9	_	_	18,6
	Urban	25,2	8,7	12,9	7,6	13,9	9,7	15,5	6,0	12,6	12,7
	Rural	16,2	4,8	6,7	8,9	3,9	3,7	2,8	4,2	2,7	4,1
	Total	**19,8**	**9,8**	**10,9**	**8,6**	**11,6**	**6,2**	**19,3**	**5,0**	**4,8**	**12,9**
Using mobile devices	Metro	70,8	69,5	_	70,6	86,7	_	72,6	_	_	74,1
	Urban	67,6	69,7	67,8	66,9	75,9	73,5	64,6	82,0	68,2	71,2
	Rural	41,3	55,9	62,6	68,7	61,6	60,2	46,0	71,7	58,9	61,1
	Total	**68,5**	**63,6**	**66,1**	**68,2**	**74,6**	**65,7**	**71,5**	**76,2**	**60,8**	**69,6**
At Internet cafes or educational facilities	Metro	17,3	12,4	_	8,2	10,4	_	19,1	_	_	16,6
	Urban	19,4	6,4	4,2	7,8	4,8	7,6	11,9	6,3	5,3	8,7
	Rural	3,9	3,7	1,8	2,3	3,7	3,1	8,6	4,5	1,7	3,2
	Total	**17,3**	**7,4**	**3,4**	**7,3**	**6,6**	**5,0**	**18,2**	**5,3**	**2,5**	**10,8**

Source: StatsSA GHS, 2022

3 ICT DATA COLLECTED BY ICASA

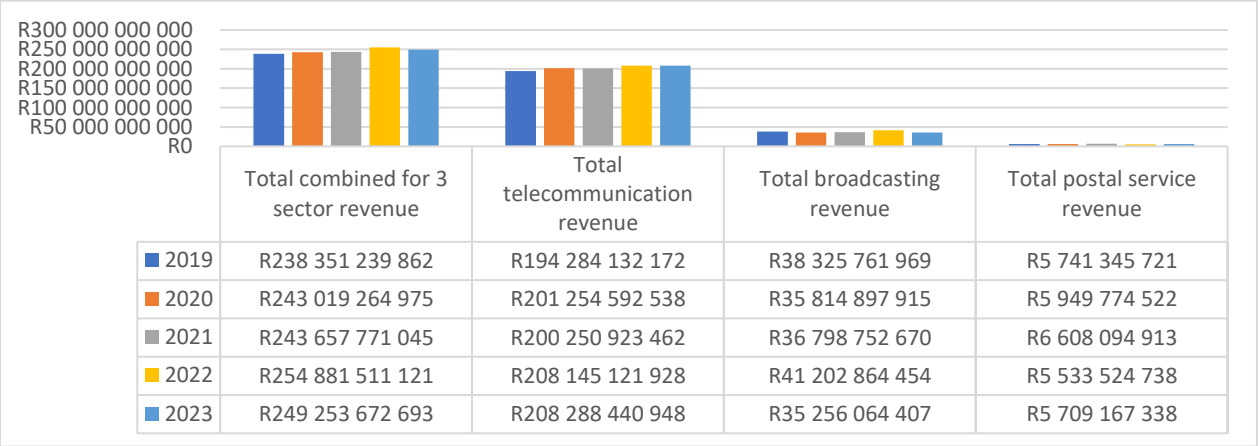
This section reports on the aggregated data that was received by ICASA through questionnaires sent to licensees in November 2023.

3.1 Revenue for the three sectors regulated by ICASA.

The overall combined revenue for the three sectors (telecommunications, broadcasting, and postal) sectors saw a 2.21% decline, dropping from R254.8 billion in 2022 to R249.2 billion in 2023, this decline was primarily influenced by decreased revenues in broadcasting services, which experiencing a downturn in 2023. Conversely, telecommunications services and postal services demonstrated a marginal increase of 0.07% and respectable increase of 3.17%, respectively for the same period.

Over a five-year period[1], the combined revenue of the three sectors experienced a modest 1.12% increase. Within this timeframe, telecommunications services revenue saw a 1.76% rise, while broadcasting services revenue declined by 2.07%. Additionally, postal services revenue experienced a slight decrease of 0.14% during the same period.

Graph 4: Total revenue of the 3 sectors, for the 12 months ending 30th September each year



	Total combined for 3 sector revenue	Total telecommunication revenue	Total broadcasting revenue	Total postal service revenue
2019	R238 351 239 862	R194 284 132 172	R38 325 761 969	R5 741 345 721
2020	R243 019 264 975	R201 254 592 538	R35 814 897 915	R5 949 774 522
2021	R243 657 771 045	R200 250 923 462	R36 798 752 670	R6 608 094 913
2022	R254 881 511 121	R208 145 121 928	R41 202 864 454	R5 533 524 738
2023	R249 253 672 693	R208 288 440 948	R35 256 064 407	R5 709 167 338

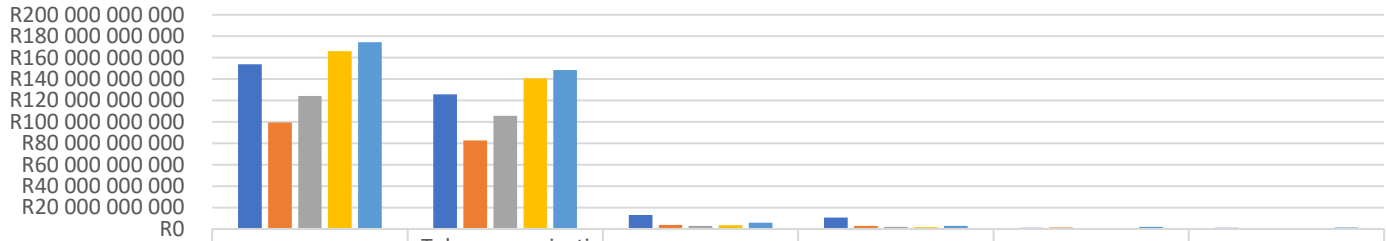
Source: ICASA Electronic Telecommunications, Broadcasting and Postal Questionnaire 2019 – 2023.

[1] *Telecommunications, Broadcasting and Postal Questionnaire 2019 – 2023*

3.2 Procurement spend to all suppliers in all 3 sectors.

Total telecommunication procurement spend to all suppliers was R174 billion in 2023, with R148 billion (85.15%) of that spent on suppliers on the basis of their B-BBEE rating level. Total broadcasting services procurement spend to all suppliers was R5.7 billion in 2023, with R2.9 billion (51.54%) of that spent on suppliers on the basis of their B-BBEE rating level. Total postal services procurement spend to all suppliers was R1.9 billion in 2023, with R1.5 billion (76.94%) of that spent on suppliers on the basis of their B-BBEE rating level. It worth noting that there was a significant decrease in procurement spend in 2020 due to Covid-19, broadcasting sector has not recovered from this effect.

Graph 5: Procurement spend to all suppliers in all 3 sectors.



	Telecommunication Procument Spend from all suppliers	Telecommunication Procument Spend paid to suppliers based on the B-BBEE Procument Recognition Levels	Broadcasting Procument Spend from all suppliers	Broadcasting Procument Spend paid to suppliers based on the B-BBEE Procument Recognition Levels	Postal service Procument Spend from all suppliers	Postal service Procument Spend paid to suppliers based on the B-BBEE Procument Recognition Levels
2019	R153 709 327 406	R125 580 981 745	R12 966 834 308	R10 703 663 708	R1 212 745 251	R1 092 692 234
2020	R99 474 448 024	R82 629 651 919	R3 906 586 239	R2 831 135 359	R1 529 349 393	R36 767 989
2021	R124 166 572 439	R105 744 926 535	R2 831 020 620	R2 037 867 747	R288 366 514	R44 550 384
2022	R166 088 114 064	R140 656 257 045	R3 452 184 689	R1 661 978 084	R311 501 157	R47 537 462
2023	R174 448 994 355	R148 548 687 099	R5 764 476 023	R2 970 808 031	R1 957 859 862	R1 506 454 359

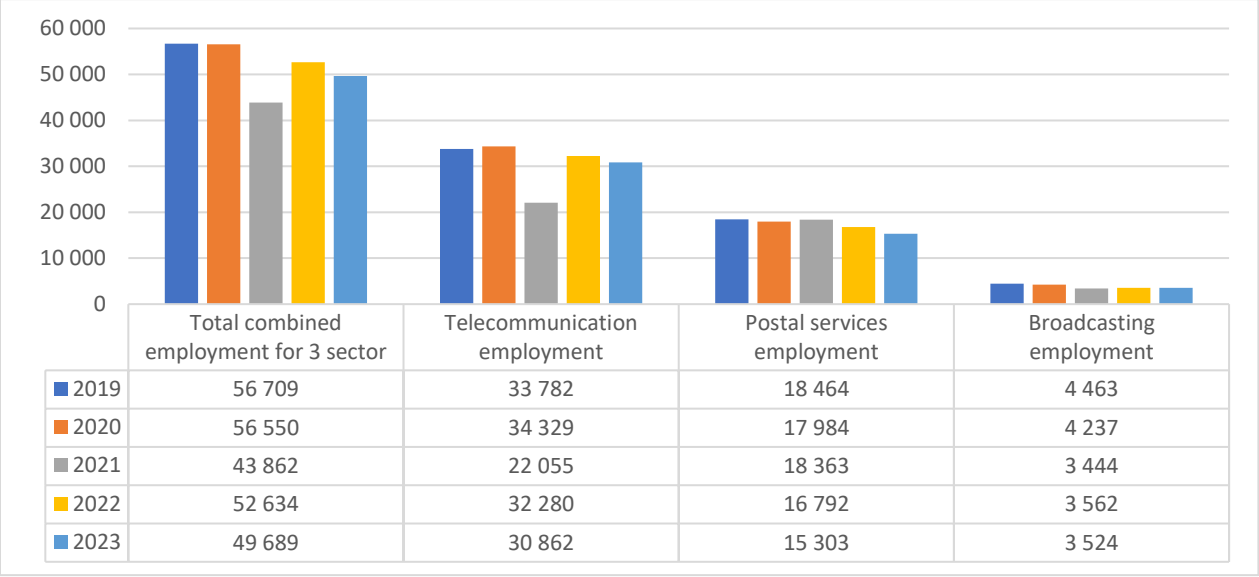
Source: ICASA Electronic Communications, Broadcasting and Postal Questionnaires, December 2019 – 2023.

3.3 Employment levels for the three sectors that ICASA regulates.

In 2023, employment across all three sectors collectively decreased by 5.60%. The decline in employment for each sector are as follows: the telecommunications sector experienced a decrease of 4.39%, the broadcasting sector saw a reduction of 8.87%, and the postal sector witnessed a slight decline in employment by 1.07%. The decrease in unemployment is not unique to the ICT sector but follows the high unemployment rate in South Africa.

Over a 5-year period, the total employment for the three sectors decreased by 3.25%. Telecommunications decreased by 2.23%, broadcasting employment decreased by 4.59% and postal service employment still shows a decline in terms of growth as it decreased by 5.73% for the same period.

Graph 6: Total employment for the 3 sectors, as of 30th September each year



	Total combined employment for 3 sector	Telecommunication employment	Postal services employment	Broadcasting employment
2019	56 709	33 782	18 464	4 463
2020	56 550	34 329	17 984	4 237
2021	43 862	22 055	18 363	3 444
2022	52 634	32 280	16 792	3 562
2023	49 689	30 862	15 303	3 524

Source: ICASA Electronic Communications, Broadcasting and Postal Questionnaires 2019 – 2023.

4 TELECOMMUNICATIONS SECTOR

In 2023, the telecommunications sector saw a modest uptick in revenue, which increased by 0.07% from R208.1 billion in 2022 to R208.2 billion. This slight rise was driven by total fixed internet and data revenue that showed a growth of 45.85% in 2023. However, a decline was observed in both total fixed line revenue and total mobile services revenue of 14.57% and 1.54% respectively in 2023.

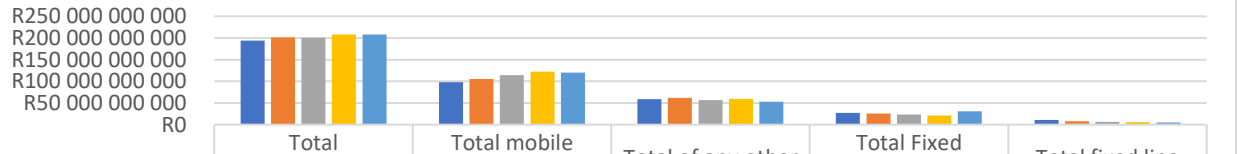
Examining the contributing factors further, while the dip in fixed line and mobile services revenue underscored challenges within traditional telecommunication services, the uptick in fixed internet and data revenue suggests a shift towards digital connectivity and data-driven services.

4.1 Telecommunications Sector Revenues

In 2023, the telecommunications sector total revenue slightly increased by 0.07% from R208.1 billion in 2022 to R208.2 billion. This increase was as a result of the total fixed internet and data revenue[2] which experienced a significant increase of 45.85% in 2023. These figures underscore dynamic shifts in revenue streams within the telecommunications industry, with divergent trends observed across different service categories on the table below.

For the period spanning 5 years, the overall revenue in the telecommunications sector increased by 1.76%. Specifically, during this time, revenue from mobile services increased by 5.20%, and revenue from fixed internet and data increased by 3.30%. However, revenue from fixed line services saw a notable decrease of 18.24% over the same period.

Graph 7: Telecommunications revenue, for the 12 months ending 30th September each year.



	Total telecommunication revenue	Total mobile services revenue (Rm)	Total of any other revenue	Total Fixed Internet and data revenue	Total fixed line revenue
2019	R194 284 132 172	R98 071 800 081	R58 768 274 771	R26 790 096 707	R10 653 960 614
2020	R201 254 592 538	R105 670 253 917	R62 165 693 130	R25 335 440 726	R8 083 204 765
2021	R200 250 923 462	R113 945 854 241	R56 294 725 060	R23 493 901 812	R6 516 442 350
2022	R208 145 121 928	R121 997 905 960	R59 659 355 796	R20 915 629 887	R5 572 230 285
2023	R208 288 440 948	R120 113 480 913	R52 908 999 736	R30 505 505 575	R4 760 454 724

Source: ICASA Electronic Communications Questionnaire 2019 - 2023
Note: Includes revenues from telecommunication services earned from retail fixed-telephone, mobile-cellular, internet and data services offered by telecommunication operators (both network and virtual, including resellers) and interconnection, equipment sales and any other revenue.

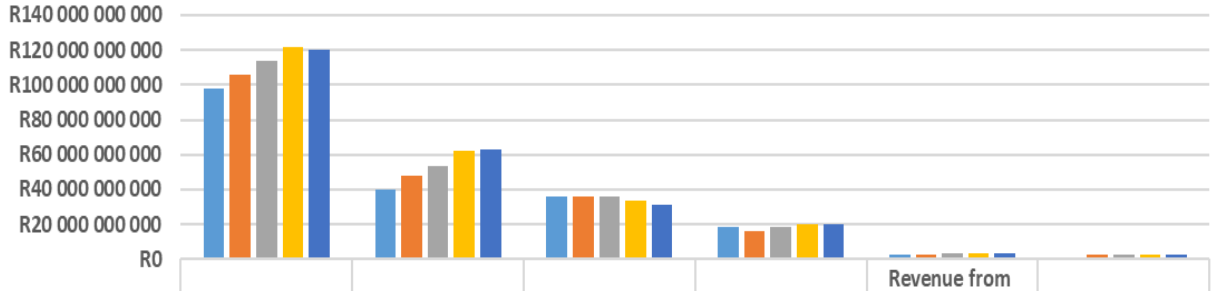
[2] *It should be noted that the significant increase in total fixed internet and data revenue is as a result of one operator moving line item of any other revenue which was reported in 2022 to total fixed Internet and data revenue in 2023.*

4.1.1 Total Mobile Services Revenue (Rm)

In 2023, the total mobile services decreased by 1.54%, the decrease was from voice revenue which decreased by 6.98% (from 33 billion in 2022 to 31 billion in 2023, which amounts to a difference of 2 billion in these period). The total revenue from mobile data services slightly increased by 1.55%, while revenue from Other mobile services revenue increased by 0.3%.

For a period of 5 years, total mobile services revenue services increased by 5.20%, revenue from outbound roaming (R) increased by 37.64%, revenue from mobile data increased by 12.03%, and revenue from text and multimedia messaging services increased by 7.87%. However, revenue from voice services decreased by 3.81% for the same period.

Graph 8: Mobile services revenue for the 12 months, ending 30th September each year.



	Total mobile services revenue (Rm)	Revenue from mobile data services	Revenue from voice services	Other mobile services revenue	Revenue from text and multimedia messaging services	Revenue from outbound roaming (R)
2019	R98 071 800 081	R40 124 141 859	R36 247 358 086	R18 506 714 023	R2 542 494 484	R651 091 629
2020	R105 670 253 917	R48 071 241 971	R36 143 659 167	R16 198 912 702	R2 767 430 165	R2 489 009 912
2021	R113 945 854 241	R53 128 234 464	R36 101 920 184	R18 256 374 065	R3 644 150 398	R2 815 175 130
2022	R121 997 905 960	R62 234 431 138	R33 364 856 049	R20 038 349 117	R3 636 696 919	R2 723 572 737
2023	R120 113 480 913	R63 200 961 447	R31 034 769 803	R20 098 686 768	R3 442 145 619	R2 336 917 275

Source: ICASA Electronic Communications Questionnaire 2019 - 2023

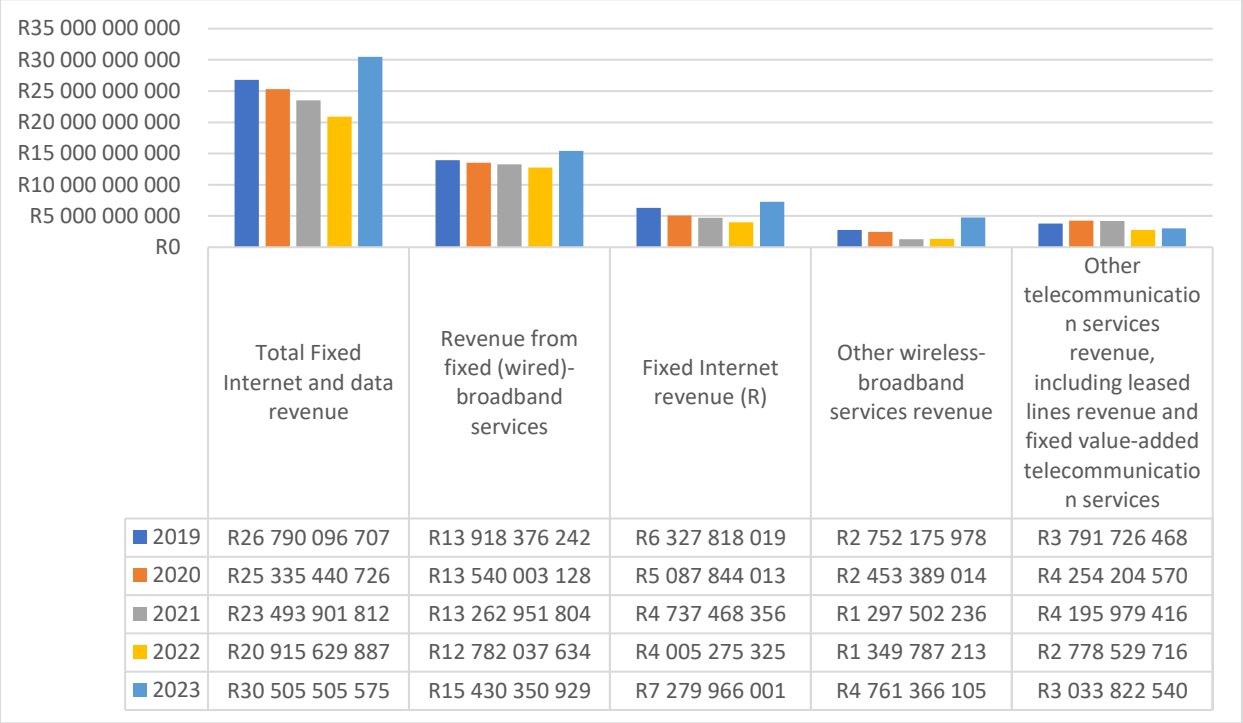
Note: This includes retail mobile revenue from the provision of voice services from national and international calls; outbound roaming abroad; mobile data; and text messaging and multimedia messaging (SMS and MMS) and any other mobile revenue. Excludes equipment revenue and termination (interconnection) revenue and any other revenue categories e.g., other wholesale services.

4.1.2 Total Fixed Internet and Data Revenues

In 2023, there was a substantial increase in total fixed internet and data revenue which increased by 45.85% from R20.9 billion in 2022 to R30.5 billion in 2023.[3]

Over a 5-year period, total fixed internet and data revenues increased by 3.30%. The revenue from fixed internet services also increased by 3.57% for the same period.

Graph 9: Fixed internet and data revenue, 12 months ending 30th September each year.



	Total Fixed Internet and data revenue	Revenue from fixed (wired)-broadband services	Fixed Internet revenue (R)	Other wireless-broadband services revenue	Other telecommunication services revenue, including leased lines revenue and fixed value-added telecommunication services
2019	R26 790 096 707	R13 918 376 242	R6 327 818 019	R2 752 175 978	R3 791 726 468
2020	R25 335 440 726	R13 540 003 128	R5 087 844 013	R2 453 389 014	R4 254 204 570
2021	R23 493 901 812	R13 262 951 804	R4 737 468 356	R1 297 502 236	R4 195 979 416
2022	R20 915 629 887	R12 782 037 634	R4 005 275 325	R1 349 787 213	R2 778 529 716
2023	R30 505 505 575	R15 430 350 929	R7 279 966 001	R4 761 366 105	R3 033 822 540

Source: ICASA Electronic Communications Questionnaire, December 2019 – 2023.

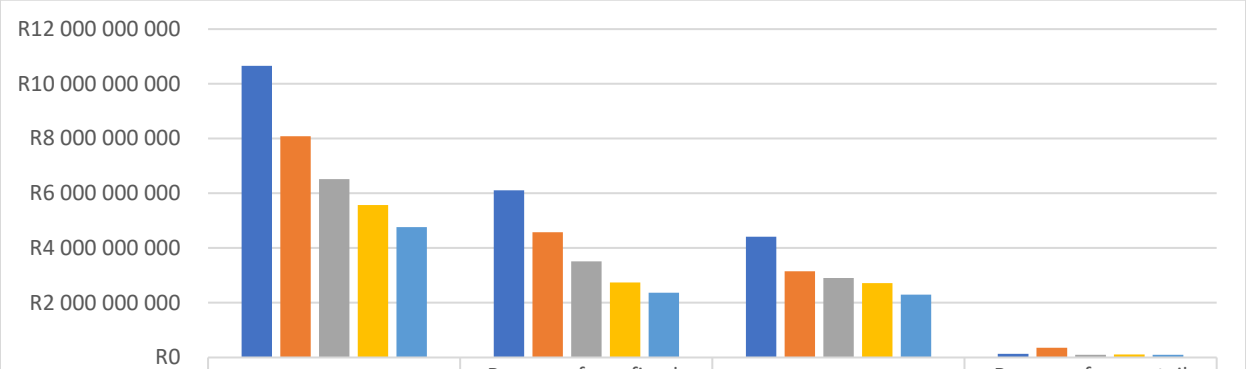
[3] *The increase in total fixed internet and data revenue is as a result of one operator shifting revenue from "any other revenue" on graph 7 which was reported in 2022 to a "total fixed Internet and data revenue" on graph 9 in 2023.*

4.1.3 Total Fixed Line Revenue[4]

In 2023, the total revenue from fixed line services dropped from R5.5 billion in 2022 to R4.7 billion, marking a decrease of 14.57%. This decline encompassed revenue generated from retail fixed-telephone services, fixed-telephone subscription charges, and fixed-telephone calls.

For a period of 5 years, the total fixed line revenue decreased by 18.24%.

Graph 10: Total Fixed line revenue, 12 months ending 30th September each year.



	Total fixed line revenue	Revenue from fixed-telephone subscription charges	Revenue from fixed-telephone calls	Revenue from retail fixed-telephone services
2019	R10 653 960 614	R6 103 435 777	R4 413 373 568	R137 151 269
2020	R8 083 204 765	R4 575 278 396	R3 150 430 268	R357 496 101
2021	R6 516 442 350	R3 517 593 998	R2 903 360 189	R95 488 163
2022	R5 572 230 285	R2 743 241 716	R2 723 211 382	R105 777 187
2023	R4 760 454 724	R2 368 400 284	R2 295 182 145	R96 872 295

Source: ICASA Electronic Communications Questionnaire, December 2019 - 2023.

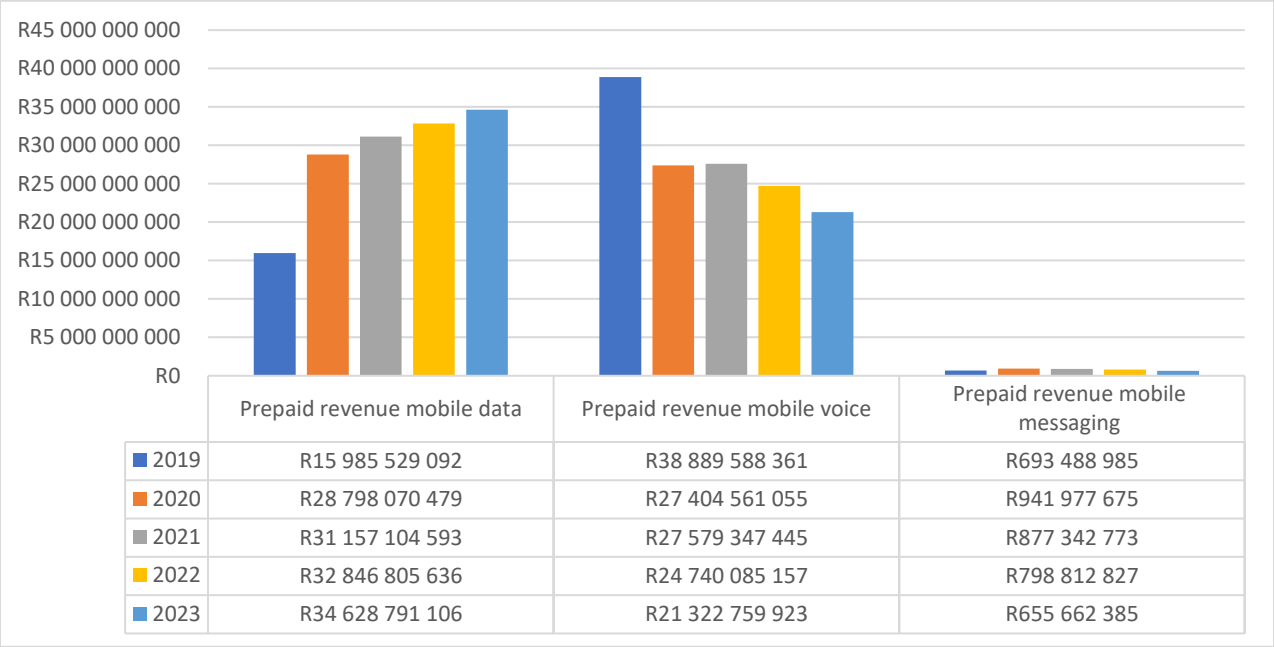
[4] *Sum of revenue from retail fixed-telephone services refers to revenue received for the connection (installation) of fixed-telephone services, revenue from recurring charges for subscription to the PSTN and revenue from fixed-telephone calls.*

4.1.4 Prepaid Mobile Voice, Data and Messaging Revenue

The revenue from prepaid mobile data increased by 5.43% in 2023. The prepaid voice and messaging decreased by 13.81% and 17.92% in 2023, respectively.

For a period of 5 years, revenue from prepaid mobile data increased by 21.32%. The revenue from prepaid mobile voice and messaging decreased by 13.95% and 1.39% respectively for the same period.

Graph 11: Prepaid mobile voice, data and messaging revenue for the 12 months ending on 30th September each year.



	Prepaid revenue mobile data	Prepaid revenue mobile voice	Prepaid revenue mobile messaging
2019	R15 985 529 092	R38 889 588 361	R693 488 985
2020	R28 798 070 479	R27 404 561 055	R941 977 675
2021	R31 157 104 593	R27 579 347 445	R877 342 773
2022	R32 846 805 636	R24 740 085 157	R798 812 827
2023	R34 628 791 106	R21 322 759 923	R655 662 385

Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.1.5 Prepaid data prices (month validity)

Over the past four years, there has been a slight fluctuation in the prices of prepaid data bundles in South Africa. The lowest price for a 100MB bundle was R20 in 2021, which decreased to R15 between 2022 and 2024. Similarly, the price of a 1024MB bundle was R95 in 2021, but it has since been reduced to R79 from 2022 to 2024.

It worth noting that in 2024, the lowest price (R79) of 1024MB (equivalent to 1G) for prepaid is twice as much as the lowest price (R40) of 1G for post-paid.

Table 2: Prepaid data price (month validity)

Prepaid data Bundle prices								
Data Bundle (MB)	Lowest prices				Highest prices			
	2021	2022	2023	2024	2021	2022	2023	2024
100(MB)	R20	R15	R15	R15	R20	R20	R20	R20
250 (MB)	R35	R35	R35	R35	R35	R35	R35	R35
500 (MB)	R69	R65	R69	R65	R79	R69	R69	R69
1024 (MB)	R95	R79	R79	R79	R99	R99	R85	R85
1536 (MB)	R149	R89	R89	R89	R149	R99	R99	R99
2048 (MB)	R139	R139	R139	R146	R199	R149	R149	R149
3072 (MB)	R199	R199	R199	R179	R279	R229	R229	R209
5120 (MB)	R299	R299	R299	R279	R349	R299	R299	R314
6144 (MB)	R299	R299	R299	R299	R399	R349	R349	R349
10240 (MB)	R469	R469	R469	R493	R499	R469	R469	R469
20480 (MB)	R699	R599	R599	R599	R899	R699	R699	R699

Source: ICASA Electronic Communications Questionnaire for 2021 - 2024.

4.1.6 Post-paid data prices (month validity)

Post-paid prices have not changed much over the past 4 years for examples since 2021, the lowest post-paid data bindle price for 1G has remain constant at R40.

Table 3: Post-paid data price (month validity)

Post-paid data Bundle prices								
Data Bundle (GB)	Lowest price				Highest price			
	2021	2022	2023	2024	2021	2022	2023	2024
1 GB	R40	R40	R40	R40	R79	R79	R81	R87
2 GB	R60	R60	R60	R60	R110	R119	R123	R132
3 GB	R179	R149	R149	R149	R179	R179	R179	R189
4 GB	R100	R99	R99	R99	R100	R100	R100	R100
5 GB	R221	R199	R99	R99	R221	R215	R215	R229
6 GB	R129	R129	R99	R99	R129	R129	R129	R129
10 GB	R200	R149	R149	R149	R332	R320	R320	R339
14 GB	R259	R259	R259	R259	R259	R259	R259	R259
20 GB	R355	R199	R199	R199	R539	R539	R539	R569
30 GB	R645	R399	R399	R215	R645	R645	R645	R679
50 GB	R959	R499	R499	R499	R959	R959	R959	R999
100 GB	R1 700	R1 700	R1 699	R1 699	R1 700	R1 700	R1 699	R1 799
200 GB	R2 100	R2 100	R349	R349	R2 100	R2 100	R2 099	R2 099

Source:ICASA Electronic Communications Questionnaire for 2021 - 2024.

4.1.7 Prepaid and Post-paid Voice and Messaging prices

The price range per minute, for prepaid voice is from R0.66 to R2.50 and for post-paid is from R0.35 to R2.15, the voice rates are all flat rates.

The local SMS's price range for prepaid is between R0.15 and R0.52 and post-paid is R0.30 to R0.55.

The international SMS price range for prepaid is from R1.61 to R2 and post-paid is R1.52 to R1.74.

Table 4: Prepaid and post-paid voice and SMS prices

Price range	Voice (Per minute)	SMS (Local)	SMS (International)
Prepaid	R0.66 to R2.50	R0.15 to R0.52	R1.61 to R2.00
Post-paid	R 0.35 to R 2.15	R 0.30 to R 0.55	R 1.52 to R1.74

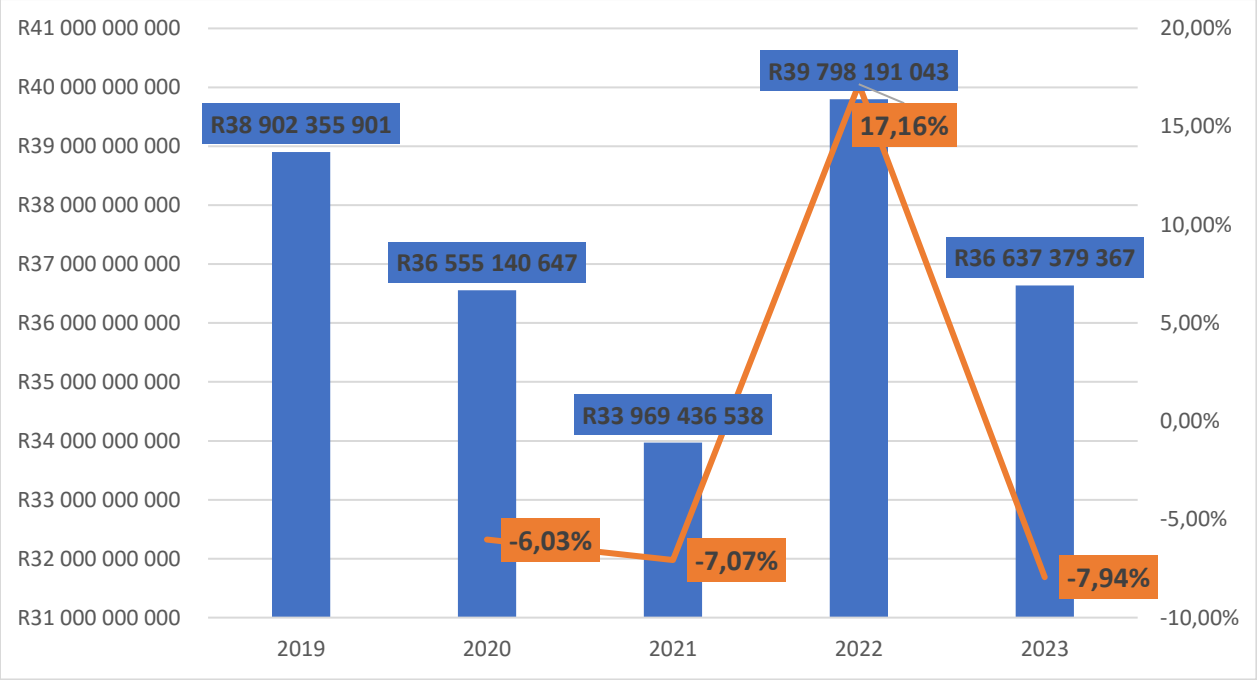
Source:ICASA Electronic Communications Questionnaire as of 2024.

4.2 Total Telecommunications Investment

In 2023, the telecommunications sector experienced a notable decrease in total investment, declining by 7.94% compared to the previous year. The total investment in the sector decreased from R39 billion in 2022 to R36 billion in 2023, reflecting a significant downturn in financial commitment. It worth noting that the 2022 investment might be high due to spectrum auction, therefore the decrease in 2023 might not be significant compared to 2022.

Over a 5-year period, the total telecommunications investment decreased by 1.49%.

Graph 12: Total telecommunication investment, for the 12 months ending 30th September each year.



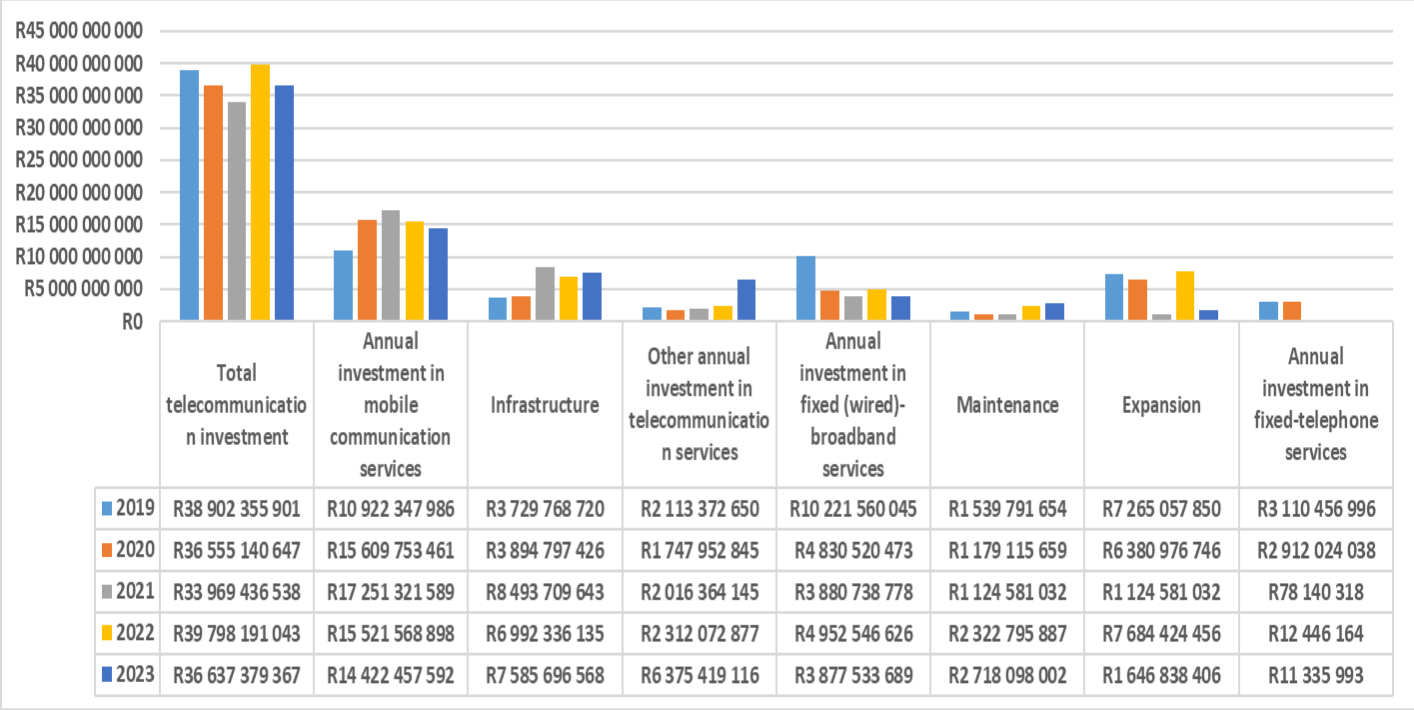
Source: ICASA Electronic Communications, Broadcasting and Postal Questionnaires 2019 - 2023.

4.2.1 Telecommunications Investment Breakdown

The table below illustrates the allocation of telecommunications investments spend by service providers for the year 2023.

Over a 5-year period, the annual investments in mobile communication services and infrastructure increased by 7.20% and 19.42%, respectively.

Graph 13: Telecommunication investment breakdown, for the 12 months ending 30th September each year.



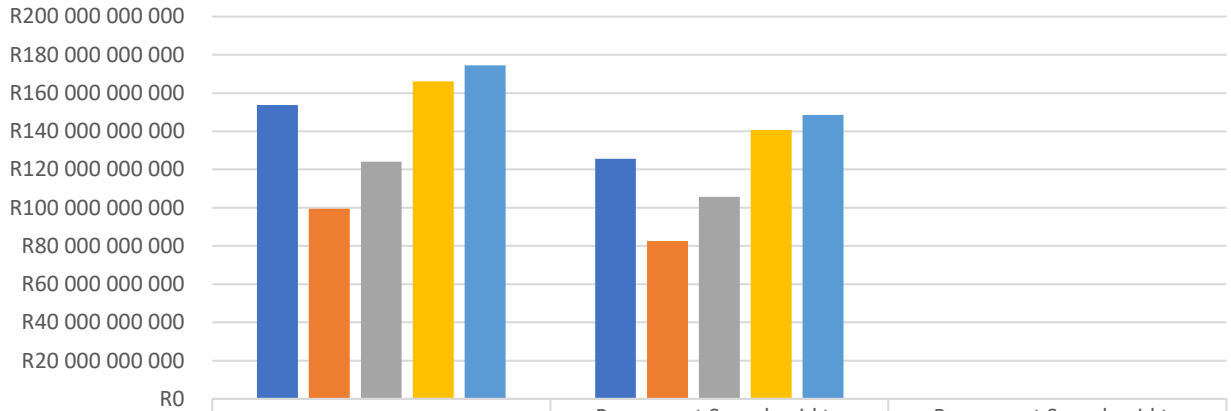
	Total telecommunication investment	Annual investment in mobile communication services	Infrastructure	Other annual investment in telecommunication services	Annual investment in fixed (wired)-broadband services	Maintenance	Expansion	Annual investment in fixed-telephone services
2019	R38 902 355 901	R10 922 347 986	R3 729 768 720	R2 113 372 650	R10 221 560 045	R1 539 791 654	R7 265 057 850	R3 110 456 996
2020	R36 555 140 647	R15 609 753 461	R3 894 797 426	R1 747 952 845	R4 830 520 473	R1 179 115 659	R6 380 976 746	R2 912 024 038
2021	R33 969 436 538	R17 251 321 589	R8 493 709 643	R2 016 364 145	R3 880 738 778	R1 124 581 032	R1 124 581 032	R78 140 318
2022	R39 798 191 043	R15 521 568 898	R6 992 336 135	R2 312 072 877	R4 952 546 626	R2 322 795 887	R7 684 424 456	R12 446 164
2023	R36 637 379 367	R14 422 457 592	R7 585 696 568	R6 375 419 116	R3 877 533 689	R2 718 098 002	R1 646 838 406	R11 335 993

Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.3 Telecommunications Procurement Spend to All Suppliers Based on B-BBEE Ranking

Based on the B-BBEE ranking levels, telecommunications procurement spend to all suppliers was 85.15% around R148 billion was spend from R174 billion in 2023. The table below shows that from 2019 to 2023, 80% was spend on the B-BBEE.

Graph 14: Telecommunication procurement spend to all suppliers based on the B-BBEE, for the 12-month period ending 30th September each year.



	Procument Spend from all supplliers	Procument Spend paid to supplliers based on the B-BBEE Procument Recognition Levels	Procument Spend paid to supplliers based on the B-BBEE Procument Recognition Levels (% spend/ contributed)
2019	R153 709 327 406	R125 580 981 745	81,70%
2020	R99 474 448 024	R82 629 651 919	83,07%
2021	R124 166 572 439	R105 744 926 535	85,16%
2022	R166 088 114 064	R140 656 257 045	84,69%
2023	R174 448 994 355	R148 548 687 099	85,15%

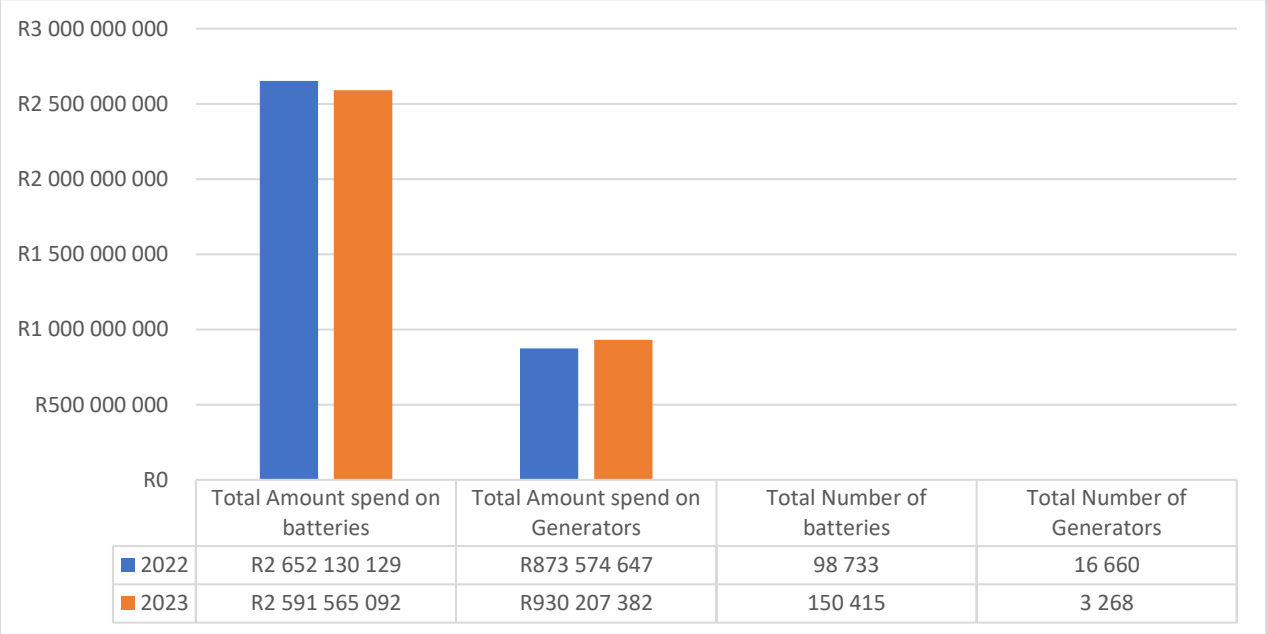
Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.4 Battery and Generator used when there is no electricity (Loadshedding) and Revenue spend during this period by telecommunications licensees.

Licensees invested in batteries, generators, and other backup power systems to ensure uninterrupted service delivery during loadshedding events, the total amounts spend on batteries by service providers during loadshedding was R2.5 billion and R930 million was spend on generators during this period.

About 3,268 generators and 150,415 batteries were purchased to counteract the effects of loadshedding by service providers in 2023.

Graph 15: Battery and Generator used when there is no electricity (Loadshedding) and Revenue spend during this period by service providers, for the 12-month period ending 30th September 2023



	Total Amount spend on batteries	Total Amount spend on Generators	Total Number of batteries	Total Number of Generators
2022	R2 652 130 129	R873 574 647	98 733	16 660
2023	R2 591 565 092	R930 207 382	150 415	3 268

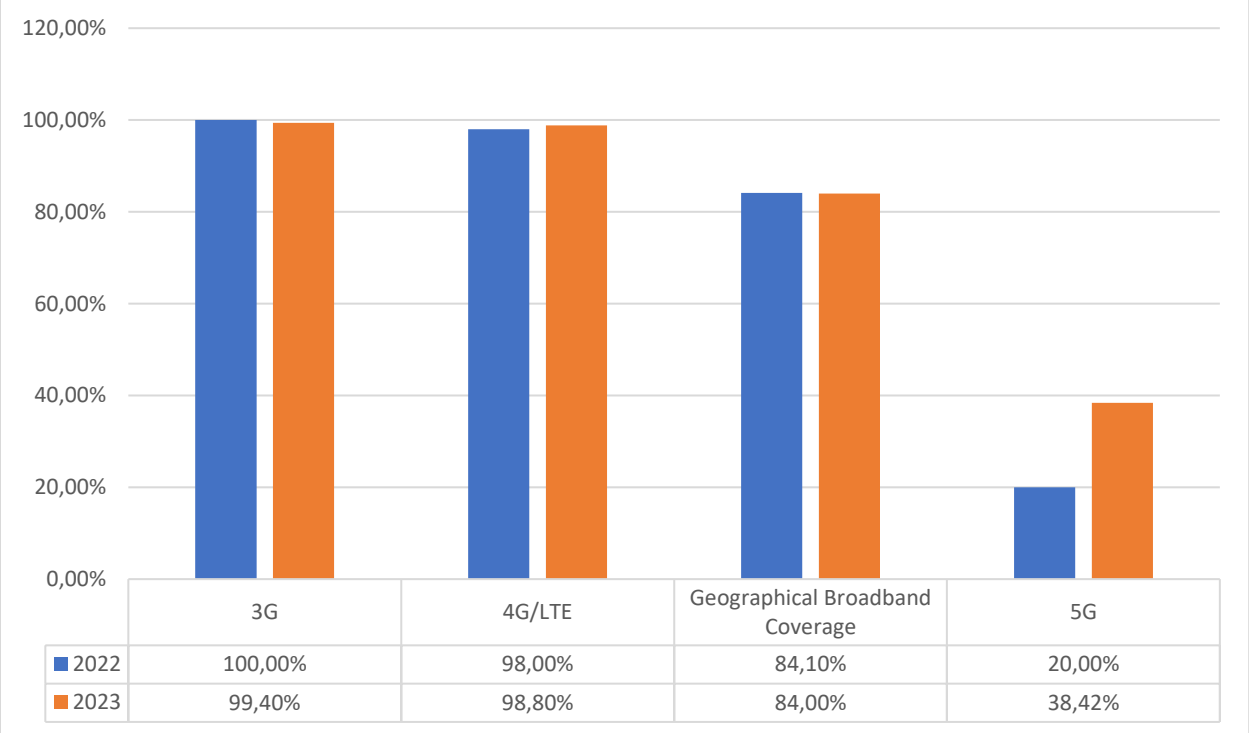
Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.5 National Population Coverage

The table below illustrates the population coverage of 3G, 4G/LTE, and 5G networks in South Africa for both in 2022 and 2023. This data provides insights into the extent to which these mobile network technologies have penetrated the country over the specified period.

In 2022, 5G coverage stood at 20%, however, by 2023, it surged to 38.42%, marking a substantial increase within a year.

Graph 16: National population coverage for 3G, 4G/LTE and 5G



	3G	4G/LTE	Geographical Broadband Coverage	5G
2022	100,00%	98,00%	84,10%	20,00%
2023	99,40%	98,80%	84,00%	38,42%

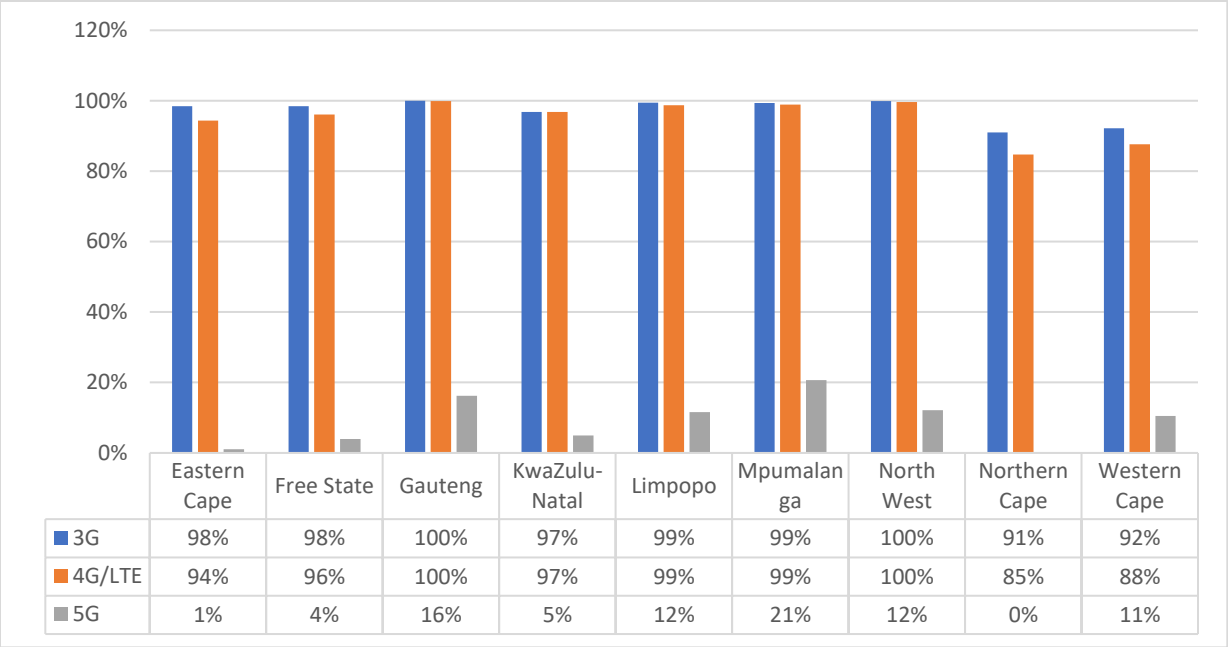
Source: ICASA Electronic Communications Questionnaire 2022 and 2023.

4.5.1 Rural Population Coverage

In 2023, with respect to 3G and 4G/LTE, all provinces were above 85% coverage as reported by the licensees.

In rural areas, only the Northern Cape province does not have 5G coverage in 2023.

Graph 17: Rural Population Covered per province in 2023.



	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape
3G	98%	98%	100%	97%	99%	99%	100%	91%	92%
4G/LTE	94%	96%	100%	97%	99%	99%	100%	85%	88%
5G	1%	4%	16%	5%	12%	21%	12%	0%	11%

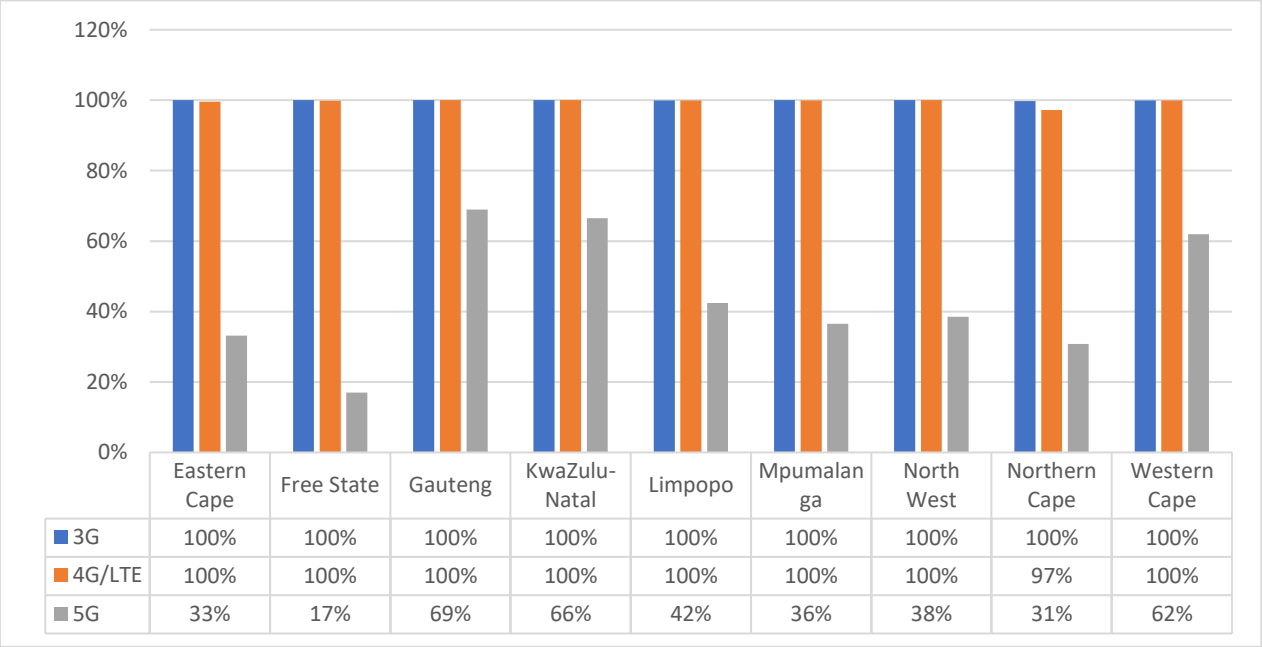
Source: ICASA Electronic Communications Questionnaire 2023.

4.5.2 Urban Population Coverage

In 2023, with respect to 3G and 4G/LTE coverage, all provinces were at (97% to 100%).

Gauteng was the highest province with 69% 5G coverage and the Free State province the lowest with 17% 5G coverage in 2023.

Graph 18: Urban Population Covered per province in 2023.



	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape
3G	100%	100%	100%	100%	100%	100%	100%	100%	100%
4G/LTE	100%	100%	100%	100%	100%	100%	100%	97%	100%
5G	33%	17%	69%	66%	42%	36%	38%	31%	62%

Source: ICASA Electronic Communications Questionnaire 2023.

4.6 Mobile Cellular and Smartphone Subscriptions

Mobile cellular subscriptions increased by 1.78% in 2023 and Smartphone[5] subscriptions increased by 1.48% for the same period.

The increase in smartphone subscriptions means that many people in South Africa have access to the internet, GPs technology, e-commerce, and mobile banking, etc.

Graph 19: Mobile Cellular and Smartphone Subscriptions, as of 30th September each year

	2019	2020	2021	2022	2023
Mobile cellular subscriptions	96 972 459	94 952 509	103 167 525	106 800 158	108 700 620
Smartphone subscriptions	53 380 748	60 438 901	65 313 134	73 883 537	74 977 556

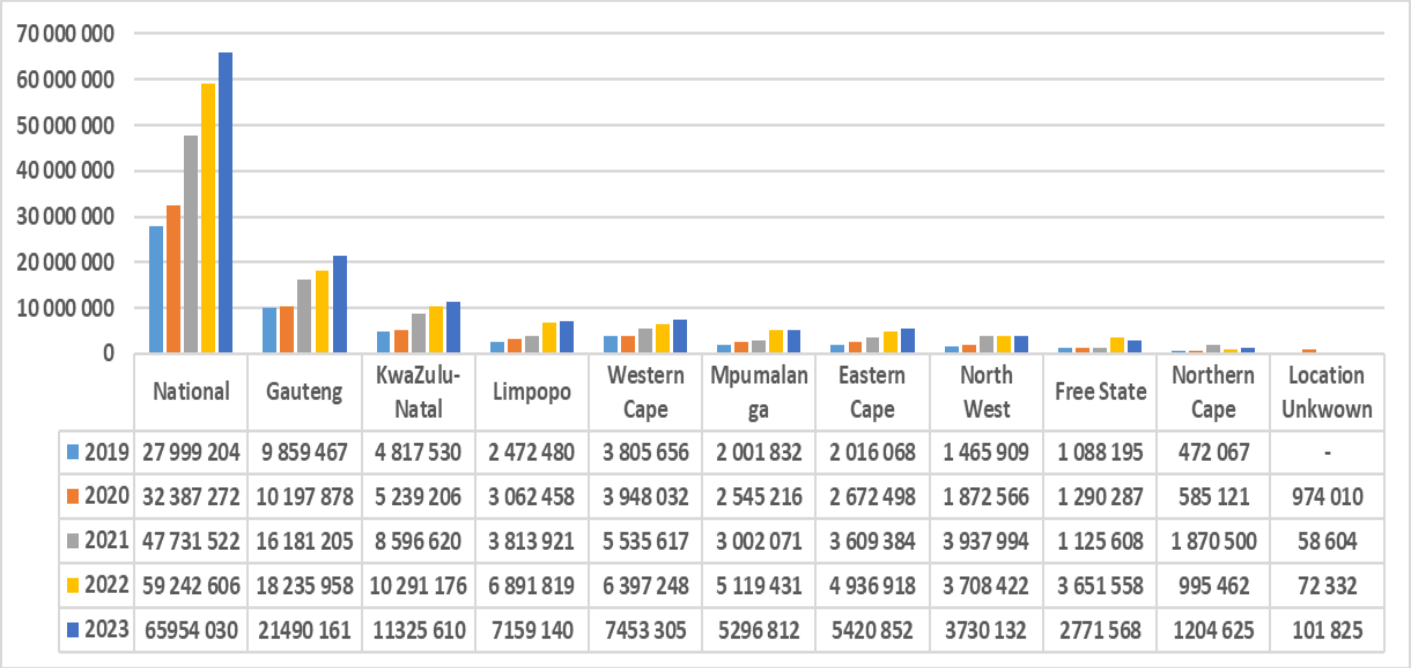
Source: ICASA Electronic Communications Questionnaire. 2019 - 2023.

[1] *A smartphone is a mobile phone with advanced features: it has Wi-Fi connectivity, web browsing capabilities, a high-resolution touchscreen display and the ability to use apps. The majority of smartphones use one of the following mobile operating systems: Android, Symbian, iOS, and Windows Mobile.*

4.6.1 Total Number of LTE[6] Devices

The total number of LTE devices moved from 59 million in 2022 to 65 million in 2023, the continued proliferation of LTE devices is in line with a move to a digital world.

Graph 20: Total number of LTE Devices per Province in 2023.



	National	Gauteng	KwaZulu-Natal	Limpopo	Western Cape	Mpumalanga	Eastern Cape	North West	Free State	Northern Cape	Location Unkwown
2019	27 999 204	9 859 467	4 817 530	2 472 480	3 805 656	2 001 832	2 016 068	1 465 909	1 088 195	472 067	-
2020	32 387 272	10 197 878	5 239 206	3 062 458	3 948 032	2 545 216	2 672 498	1 872 566	1 290 287	585 121	974 010
2021	47 731 522	16 181 205	8 596 620	3 813 921	5 535 617	3 002 071	3 609 384	3 937 994	1 125 608	1 870 500	58 604
2022	59 242 606	18 235 958	10 291 176	6 891 819	6 397 248	5 119 431	4 936 918	3 708 422	3 651 558	995 462	72 332
2023	65954 030	21490 161	11325 610	7159 140	7453 305	5296 812	5420 852	3730 132	2771 568	1204 625	101 825

Source: ICASA Electronic Communications Questionnaire 2019 – 2023.

[6] *List of devices with LTE support 'called 4G'. LTE, an acronym for Long Term Evolution, marketed as 4G LTE, is a standard for wireless communication of high-speed data for mobile phones and data terminals.*

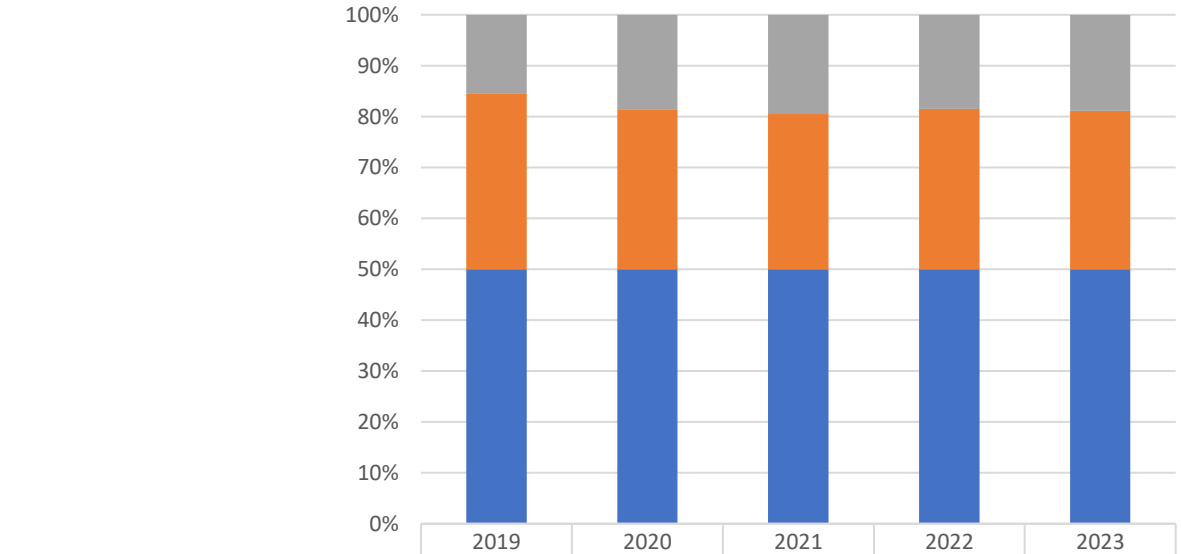
4.7 Persons Employed in the Telecommunications Sector

Employment data used in this report is different from StatsSA data due to different telecommunication sector definitions, the Authority only focuses on its licensees.

Between 2022 and 2023, there was a notable 4.39% decrease in total employment within the telecommunications sector, decrease from 32,280 to 30,862. Additionally, the proportion of female employees relative to the total workforce saw a decline from 11,943 in 2022 to 11,665 in 2023, marking a 2.33% decrease.

Over a 5-year period, the telecommunications sector's total employment decreased by 2.23% and female employment increased by 2.62%.

Graph 21: Persons employed in the telecommunications sector, as of the 30th of September each year.



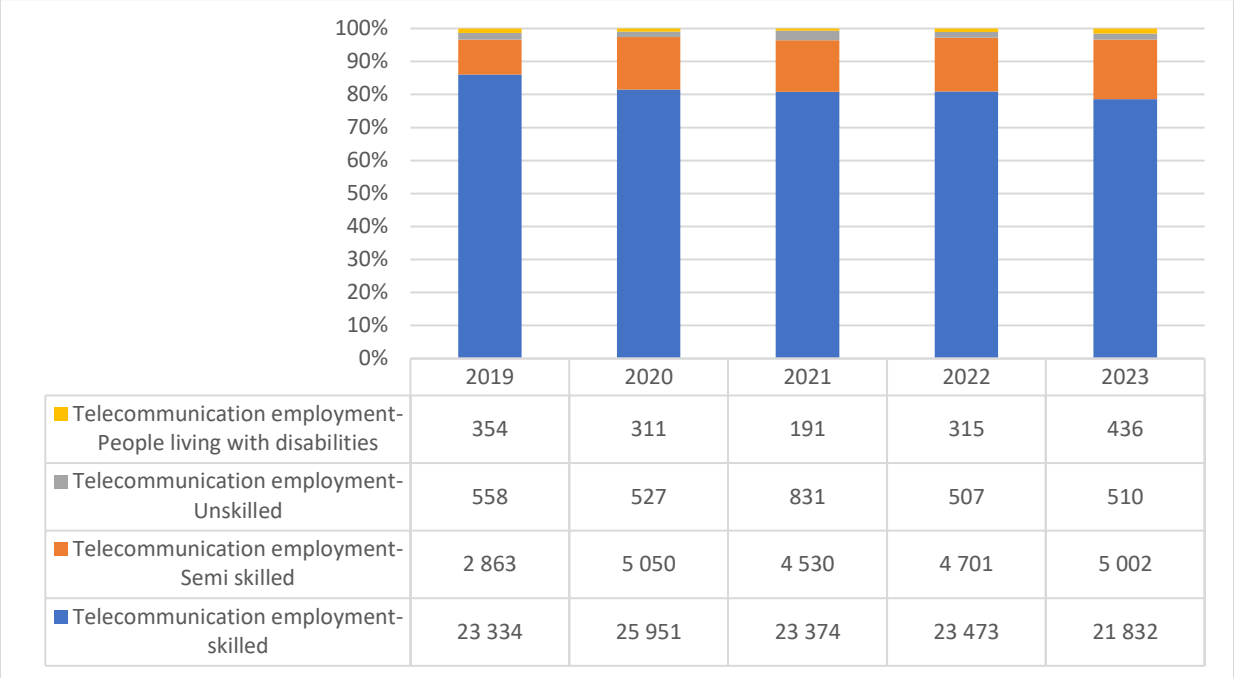
	2019	2020	2021	2022	2023
Telecommunication employment- female	10 517	12 820	8 603	11 943	11 665
Telecommunication employment- male	23 265	21 509	13 452	20 337	19 197
Telecommunication employment - Total	33 782	34 329	22 055	32 280	30 862

Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.8 Persons Employed in the Telecommunications Sector Breakdown

In the telecommunications industry in 2023, there were approximately 21,832 skilled employees, 5,002 semi-skilled employees, 510 unskilled employees, and an estimated 436 employees living with disabilities.

Graph 22: Persons employed in the telecommunications sector breakdown from 2019 to 2023.



	2019	2020	2021	2022	2023
Telecommunication employment-People living with disabilities	354	311	191	315	436
Telecommunication employment-Unskilled	558	527	831	507	510
Telecommunication employment-Semi skilled	2 863	5 050	4 530	4 701	5 002
Telecommunication employment-skilled	23 334	25 951	23 374	23 473	21 832

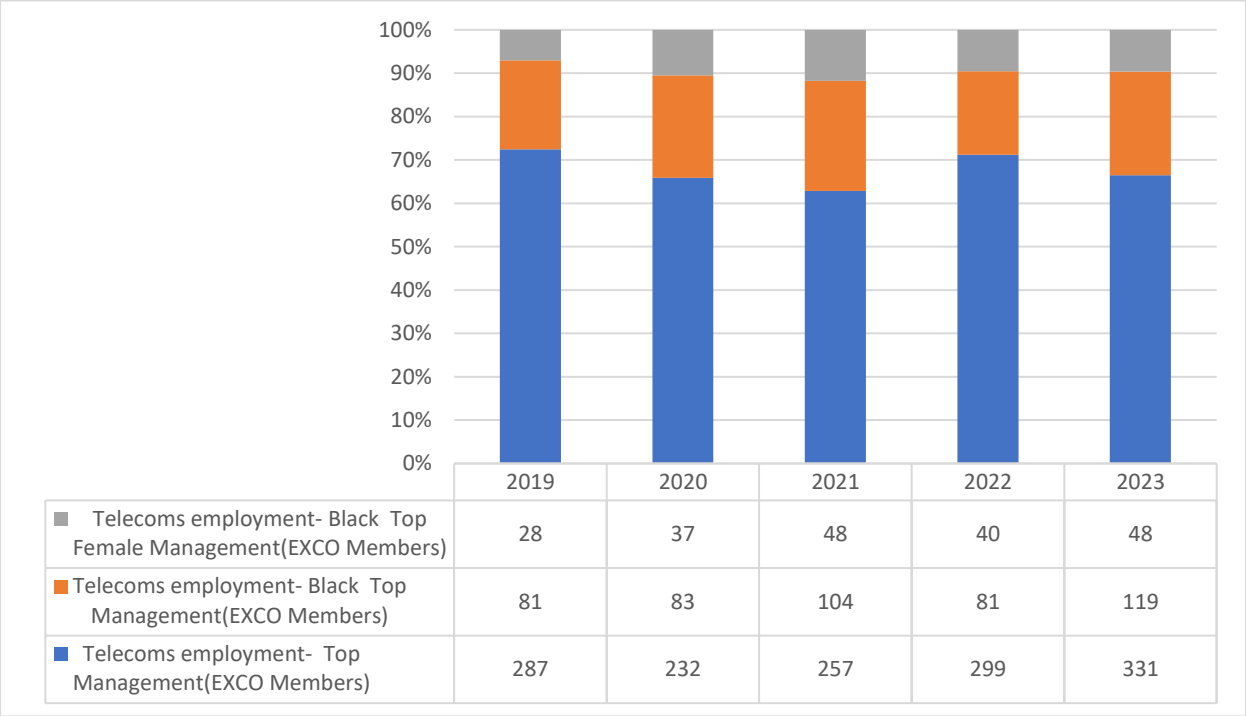
Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.9 Black Economic Empowerment Employment Measures

In 2023, the employment of Top Management (EXCO members) rose by 16.34%, climbing from 299 in 2022 to 331 in 2023. Similarly, Top Black Management employment increased by 22.12%, reaching 119 from 81 in 2022. Additionally, Top Female Management employment experienced a growth of 20%, increasing from 40 in 2022 to 48 in 2023.

For a period of 5 years, Top management increased by 3.63%, Top Black Management increased by 10.09%, and Top Female Management increased by14.42%.

Graph 23: Telecommunication Black Economic Empowerment Measures, for the 12-month period ending 30th September each year.



	2019	2020	2021	2022	2023
Telecoms employment- Black Top Female Management(EXCO Members)	28	37	48	40	48
Telecoms employment- Black Top Management(EXCO Members)	81	83	104	81	119
Telecoms employment- Top Management(EXCO Members)	287	232	257	299	331

Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

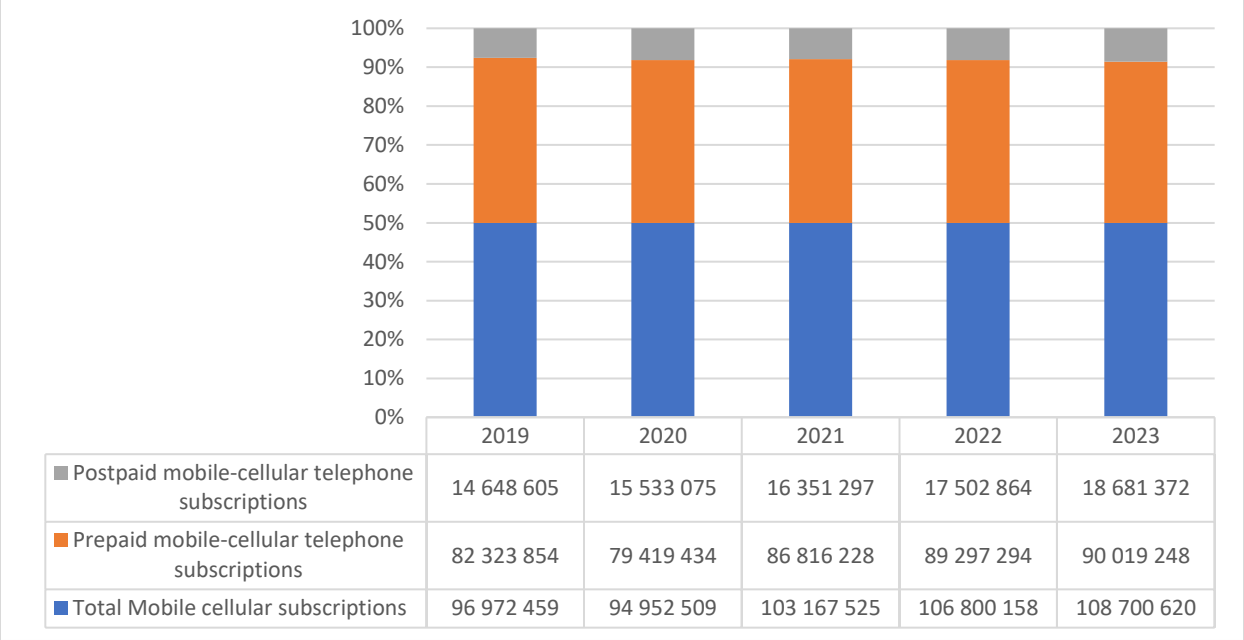
4.10 Telecommunications Subscriptions

4.10.1 Mobile Cellular (Prepaid and Post-paid mobile Cellular Phone Voice) Subscriptions

The total Mobile cellular subscriptions slightly increased by 1.78% from 106 million in 2022 to 108 million in 2023. Prepaid and post-paid mobile-cellular telephone subscriptions increased by 0.81% and 6.73%, respectively in 2023.

For a period of 5 years, the total mobile cellular subscriptions (prepaid and post-paid combined) increased by 2.90%.

Graph 24: Prepaid and post-paid mobile cellular voice subscriptions, as of 30th September each year



	2019	2020	2021	2022	2023
Postpaid mobile-cellular telephone subscriptions	14 648 605	15 533 075	16 351 297	17 502 864	18 681 372
Prepaid mobile-cellular telephone subscriptions	82 323 854	79 419 434	86 816 228	89 297 294	90 019 248
Total Mobile cellular subscriptions	96 972 459	94 952 509	103 167 525	106 800 158	108 700 620

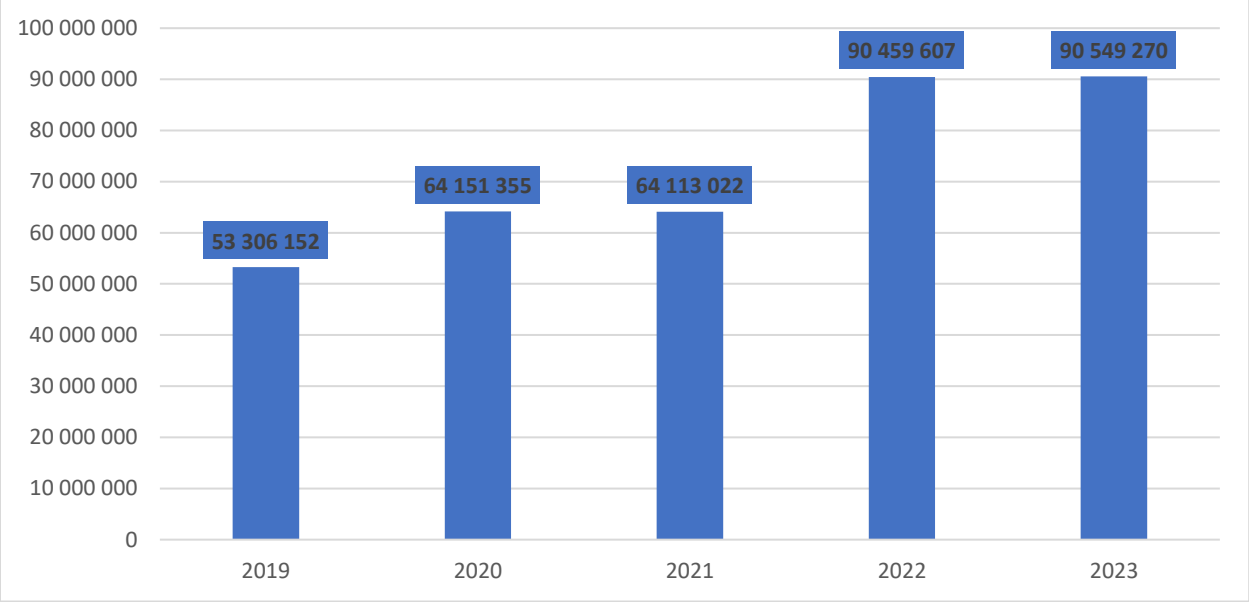
Source: ICASA Electronic Communications Questionnaire 2019 - 2023

Note: The definition of prepaid subscribers is adopted from the ITU definition of 3-month active subscribers. Some South African operators do not have this metric available but rather count SIMs that have not been disconnected within a 90-day window implying that the number may be overstated according to the strict definition. Top up bundles and machine-to-machine subscriptions were included in post-paid mobile cellular subscriptions.

4.10.2 Mobile Cellular Active Subscriptions (Active for more than 90 Days)

Mobile Cellular subscriptions that have been active for more than 90 days subscriptions slightly increased by 0.10% in 2023.

Graph 25: Mobile Cellular Active Subscriptions (Active for more than 90 Days), as of 30th September 2023



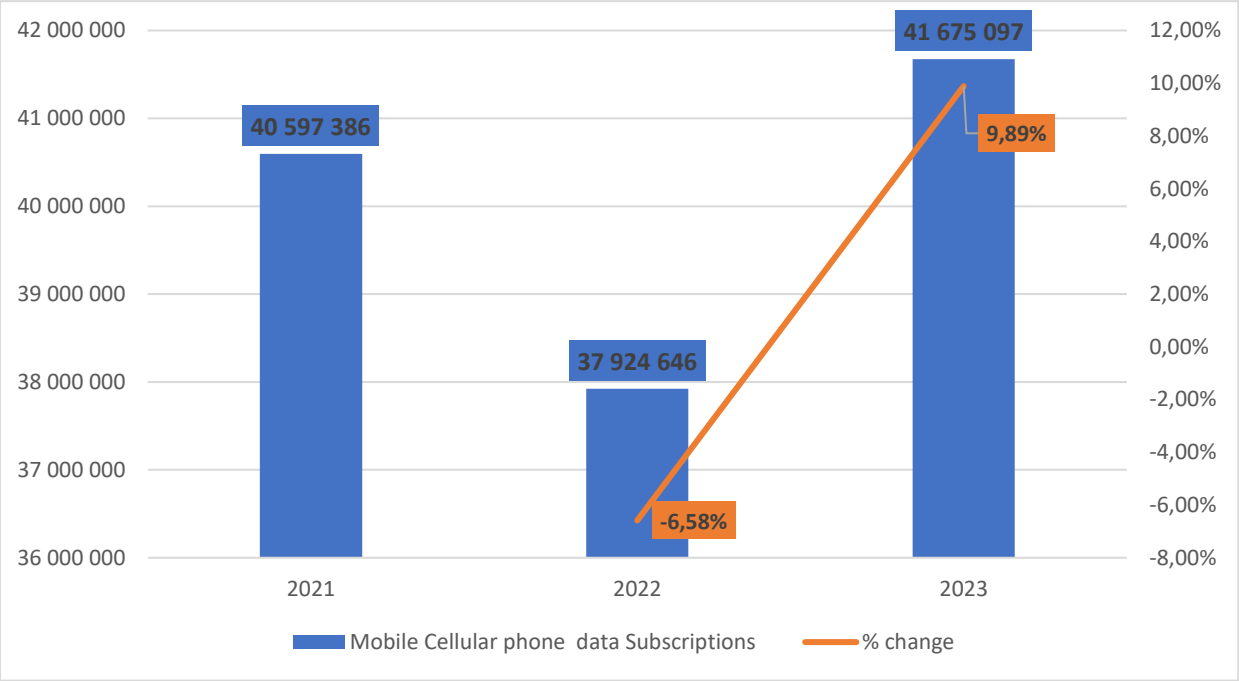
Source: ICASA Electronic Communications Questionnaire 2019 – 2023.

Note: The definition of prepaid subscribers is adopted from the ITU definition of 3-month active subscribers. Some South African operators do not have this metric available but rather count SIMs that have not been disconnected within a 90-day window implying that the number may be overstated according to the strict definition. Top up bundles and machine-to-machine subscriptions were included in post-paid mobile cellular subscriptions.

4.10.3 Mobile Cellular Phone Data users

Mobile cellular data users increased by 9.89%, from 37 million in 2022 to 41 million in 2023.

Graph 26: Mobile cellular phone data subscriptions, as of 30th September each year



Source: ICASA Electronic Communications Questionnaire 2021 – 2023.

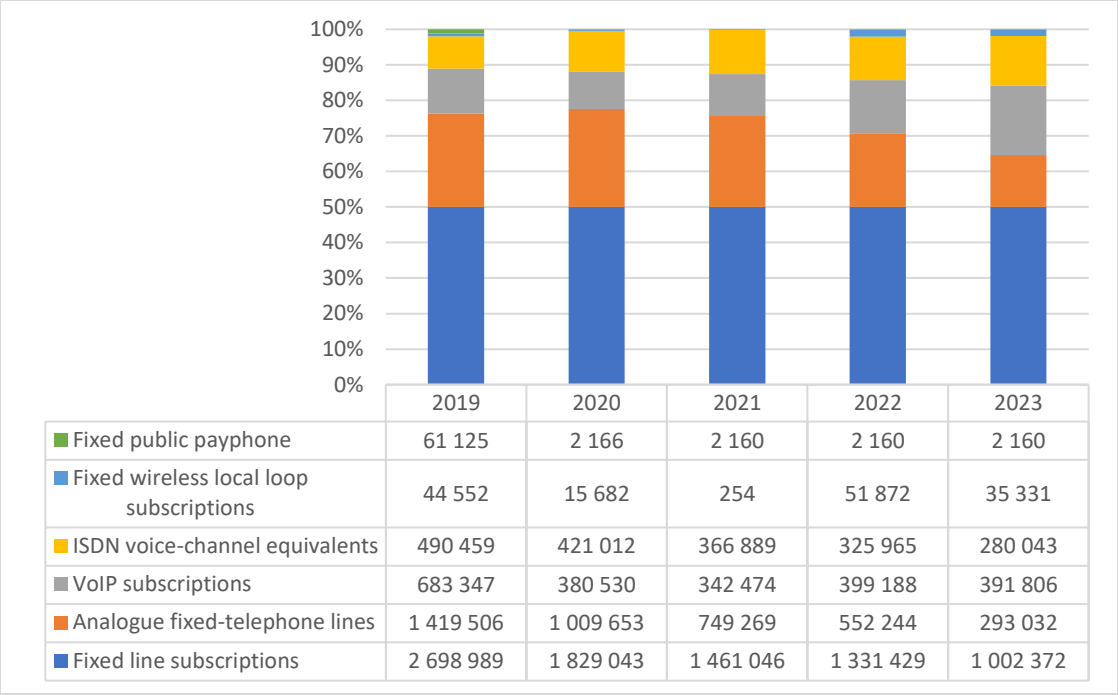
Note: All LTE connections are included in 'mobile'. There is room for the definition of 'mobile broadband subscriptions' to be improved in subsequent reports, noting that it was not possible to accurately distinguish between handset data usage and mobile data usage on other devices, or alternatively to distinguish SIMs used for both voice and data from SIMs dedicated to data usage. It was also necessary to count total internet subscriptions rather than 'broadband' subscriptions, as it was not possible to accurately break out 'narrowband' internet, albeit this is now a small minority of total internet subscriptions. 'Wireless broadband' number may be incomplete in respect of some players, especially those operating in unlicensed spectrum bands.

4.10.4 Fixed Line Voice Subscriptions

Fixed line voice subscriptions decreased[7] by 24.71% in 2023 - the details are shown on the graph below.

Over a 5-year period, Fixed line subscriptions decreased by 21.93%.

Graph 27: Fixed line subscriptions, as of 30th September each year



	2019	2020	2021	2022	2023
Fixed public payphone	61 125	2 166	2 160	2 160	2 160
Fixed wireless local loop subscriptions	44 552	15 682	254	51 872	35 331
ISDN voice-channel equivalents	490 459	421 012	366 889	325 965	280 043
VoIP subscriptions	683 347	380 530	342 474	399 188	391 806
Analogue fixed-telephone lines	1 419 506	1 009 653	749 269	552 244	293 032
Fixed line subscriptions	2 698 989	1 829 043	1 461 046	1 331 429	1 002 372

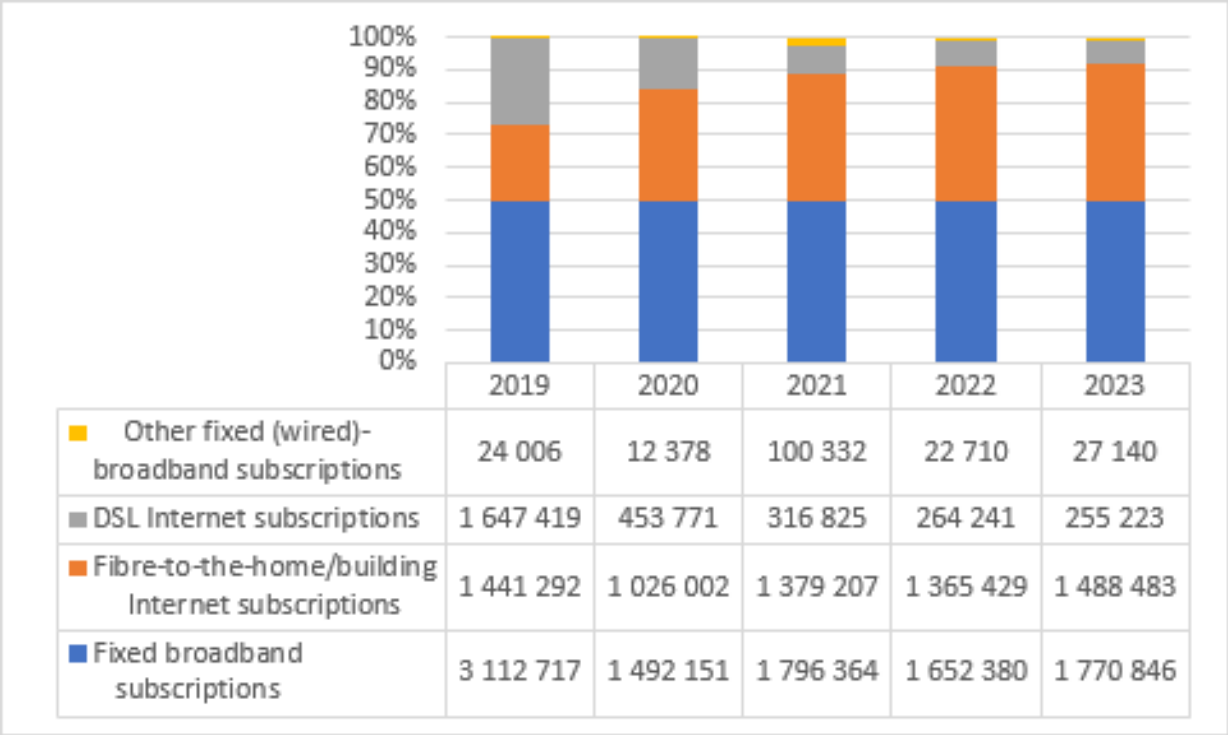
Source: ICASA Electronic Communications Questionnaire, December 2019 - 2023.

[7] *One of the operators revised* its *VOIP subscription* for the *2022 figure.*

4.10.5 Fixed Line Broadband Subscriptions

In 2023, there was a 7.17% increase in total fixed broadband subscriptions. This growth stemmed from the rise in fiber-to-the-home/building internet subscriptions, which increased by 9.01%, and other fixed (wired) broadband, which increased 19.51% during the same period. However, DSL internet subscriptions experienced a decrease of 3.41% in 2023.[8]

Graph 28: Fixed broadband subscriptions, as of 30th September each year



	2019	2020	2021	2022	2023
Other fixed (wired)-broadband subscriptions	24 006	12 378	100 332	22 710	27 140
DSL Internet subscriptions	1 647 419	453 771	316 825	264 241	255 223
Fibre-to-the-home/building Internet subscriptions	1 441 292	1 026 002	1 379 207	1 365 429	1 488 483
Fixed broadband subscriptions	3 112 717	1 492 151	1 796 364	1 652 380	1 770 846

Source: ICASA Electronic Communications Questionnaire 2020 - 2023.

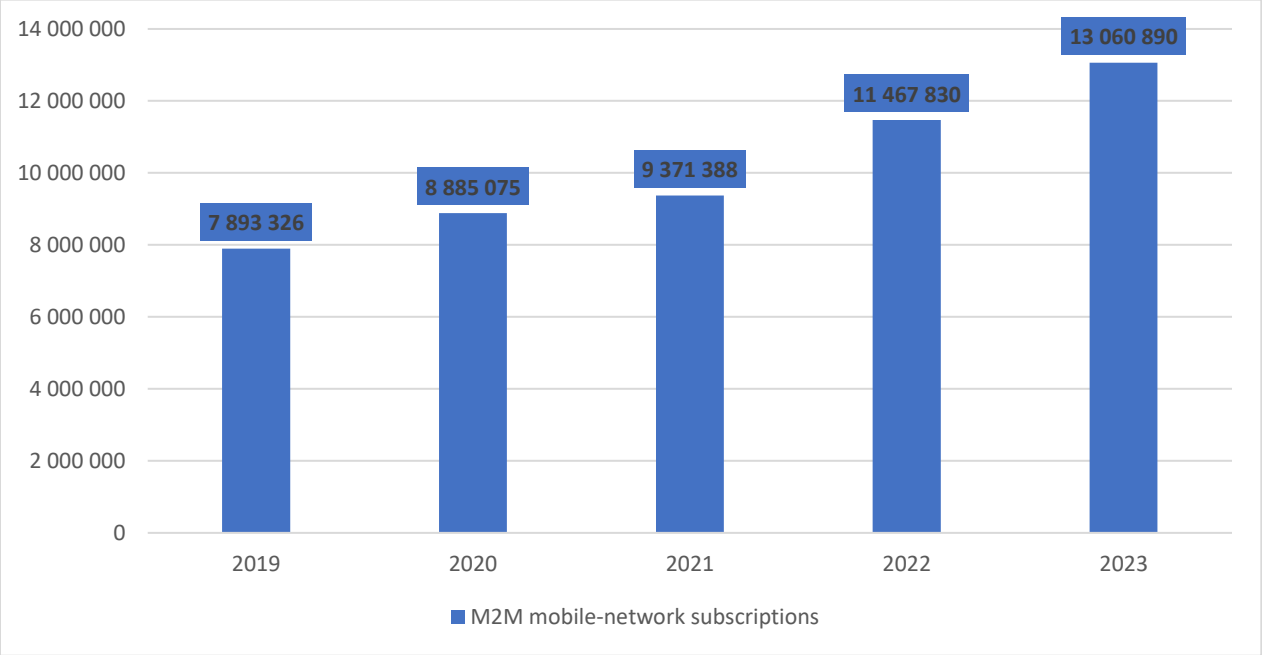
[8] *One operator that submitted DSL information in 2019 has not submitted DSL information since 2020.*

4.10.6 Machine-to-Machine (''M2M'')[9] Mobile Subscriptions

M2M mobile-network subscriptions increased by 13.89% from 11 million in 2022 to 13 million in 2023.

Over a 5-year period, M2M mobile-network subscriptions increased by 13.42%.

Graph 29: M2M mobile-network subscriptions, as of 30th September each year



Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

[9] *M2M mobile-network subscriptions. M2M mobile-network subscriptions refers to the number of mobile-cellular machine- to-machine subscriptions that are assigned for use in machines and devices (cars, smart meters, consumer electronics) for the exchange of data between networked devices and are not part of a consumer subscription. For instance, SIM-cards in personal navigation devices, smart meters, trains, and automobiles should be included. Mobile dongles and tablet subscriptions should be excluded.*

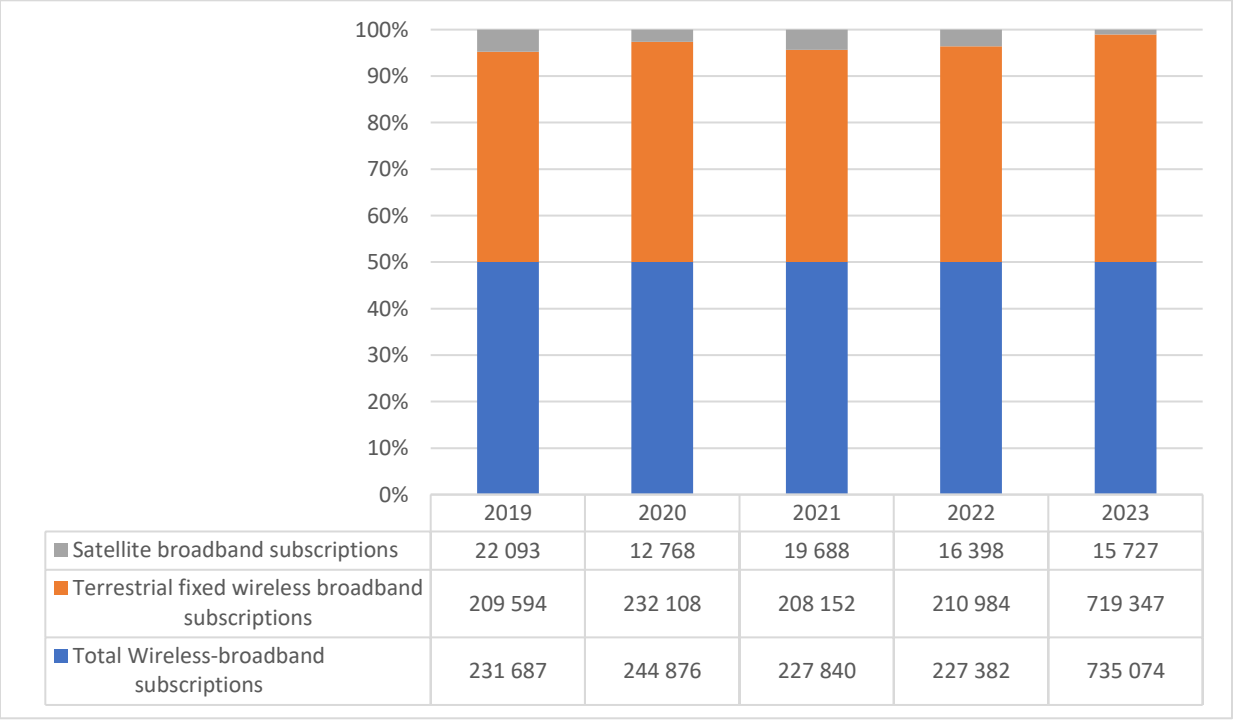
4.10.7 Broadband subscriptions

The combined total of wireless broadband and terrestrial fixed broadband subscriptions exhibited growth throughout 2023, as depicted in the graph below. However, satellite broadband subscriptions decreased by 4.09% over the same period.

The significant increase in terrestrial fixed wireless broadband subscriptions was as a result of one of the operators migrating its mobile-broadband subscriptions to terrestrial subscriptions.

For a period of 5 years, the total wireless-broadband subscriptions increased by 33.46%.

Graph 30: Wireless-broadband subscriptions, as of 30th September each year



	2019	2020	2021	2022	2023
Satellite broadband subscriptions	22 093	12 768	19 688	16 398	15 727
Terrestrial fixed wireless broadband subscriptions	209 594	232 108	208 152	210 984	719 347
Total Wireless-broadband subscriptions	231 687	244 876	227 840	227 382	735 074

Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

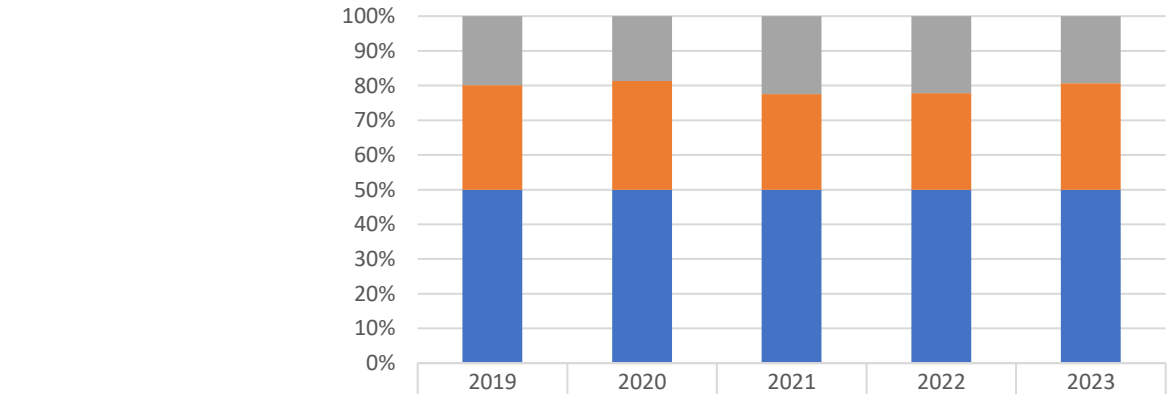
4.11 Network Traffic

This section delves into the utilization patterns of telecommunication operator networks, focusing specifically on the volume of traffic measured in minutes. It provides insights into how extensively these networks are being utilized for various communication activities such as voice calls, video calls, and other forms of data transmission. By analysing traffic volumes, operators can gauge the demand for their services, identify peak usage periods, and make informed decisions regarding network capacity and optimization strategies. Understanding these usage trends is crucial for ensuring efficient network management, improving service quality, and meeting the evolving needs of customers in an increasingly connected world.

4.11.1 Fixed Line Traffic

The total fixed line traffic slightly increased by 0.37% and Local fixed-to-fixed telephone traffic in minutes increased by 10.72% in 2023. However, Long-distance fixed-to-fixed telephone traffic in minutes decreased by 12.62% for the same period.

Graph 31: Fixed line traffic, in minutes, for the 12-month period ending 30th September each year.



	2019	2020	2021	2022	2023
Long-distance fixed-to-fixed telephone traffic, in minutes	2 531 615 436	1 560 379 505	1 529 322 955	1 685 608 477	1 472 818 518
Local fixed-to-fixed telephone traffic, in minutes	3 833 825 566	2 607 594 305	1 869 197 103	2 117 615 933	2 344 542 320
Total Fixed line traffic	6 365 441 002	4 167 973 810	3 398 520 058	3 803 224 410	3 817 360 837

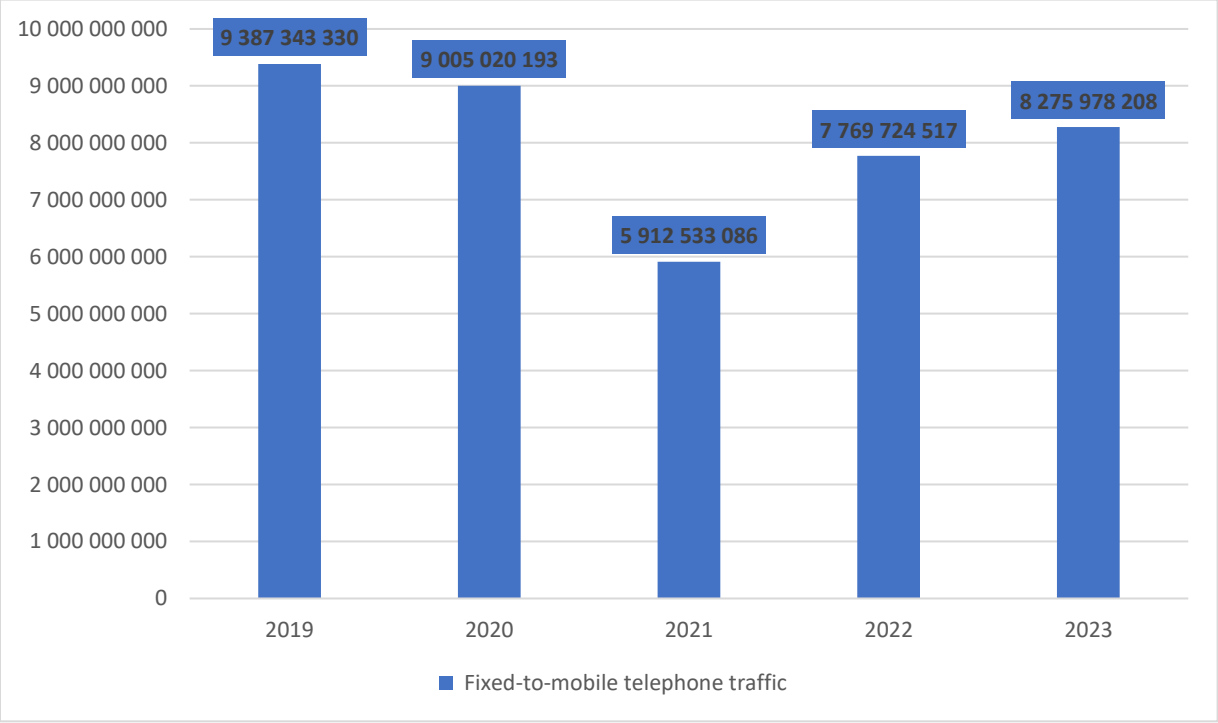
Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.11.2 Fixed-to-Mobile Telephone Traffic

Fixed-to-mobile telephone call traffic increased by 6.52% from 7.7 billion minutes in 2021 to 8.2 billion minutes in 2023.

Over a period of 5 years, fixed-to-mobile telephone call traffic decreased by 3.10%.

Graph 32: Fixed-to-mobile telephone traffic minutes, for the 12-month period ending 30th September each year.



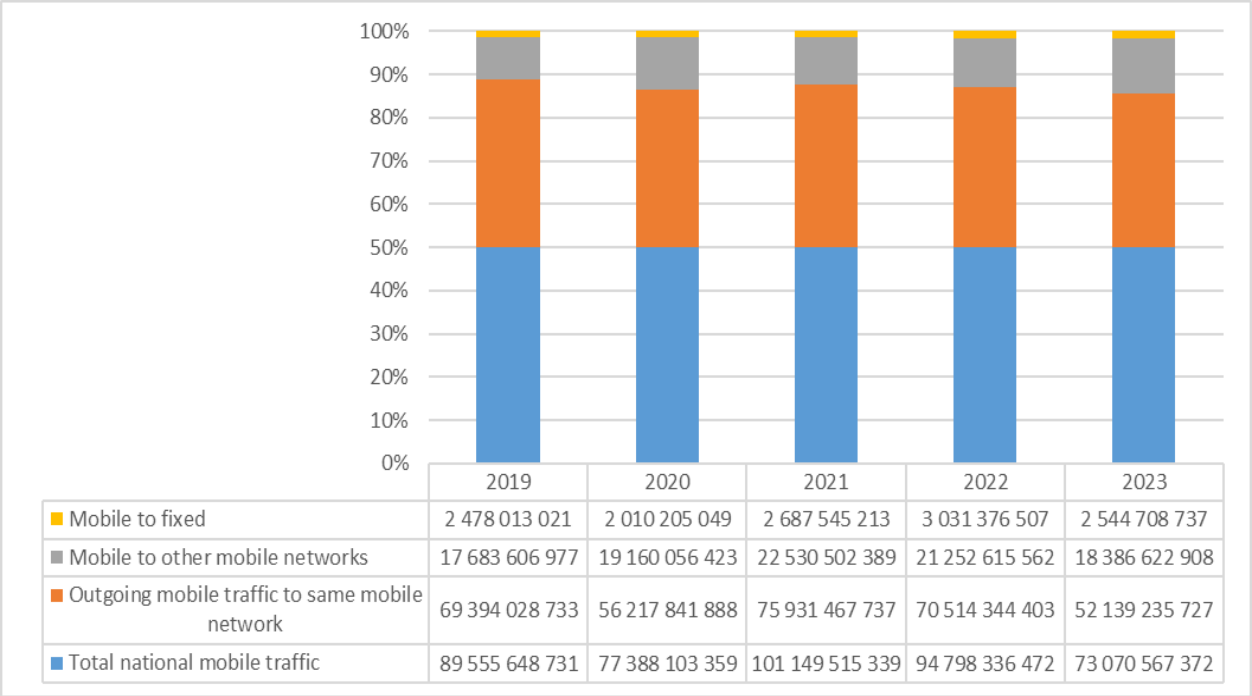
Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.11.3 Total National Mobile Traffic (Minutes)

The total national mobile traffic decreased by 22.92%, Mobile to other mobile networks decreased by 13.49%, and Outgoing mobile traffic to same mobile network in minutes also decreased by 26.06%, and Mobile to fixed decreased by 16.05% in 2023.

For a period of 5 years, the total national mobile traffic in minutes decreased by 4.96%.

Graph 33: Mobile voice traffic in minutes for the 12-month period ending 30th September each year.



	2019	2020	2021	2022	2023
Mobile to fixed	2 478 013 021	2 010 205 049	2 687 545 213	3 031 376 507	2 544 708 737
Mobile to other mobile networks	17 683 606 977	19 160 056 423	22 530 502 389	21 252 615 562	18 386 622 908
Outgoing mobile traffic to same mobile network	69 394 028 733	56 217 841 888	75 931 467 737	70 514 344 403	52 139 235 727
Total national mobile traffic	89 555 648 731	77 388 103 359	101 149 515 339	94 798 336 472	73 070 567 372

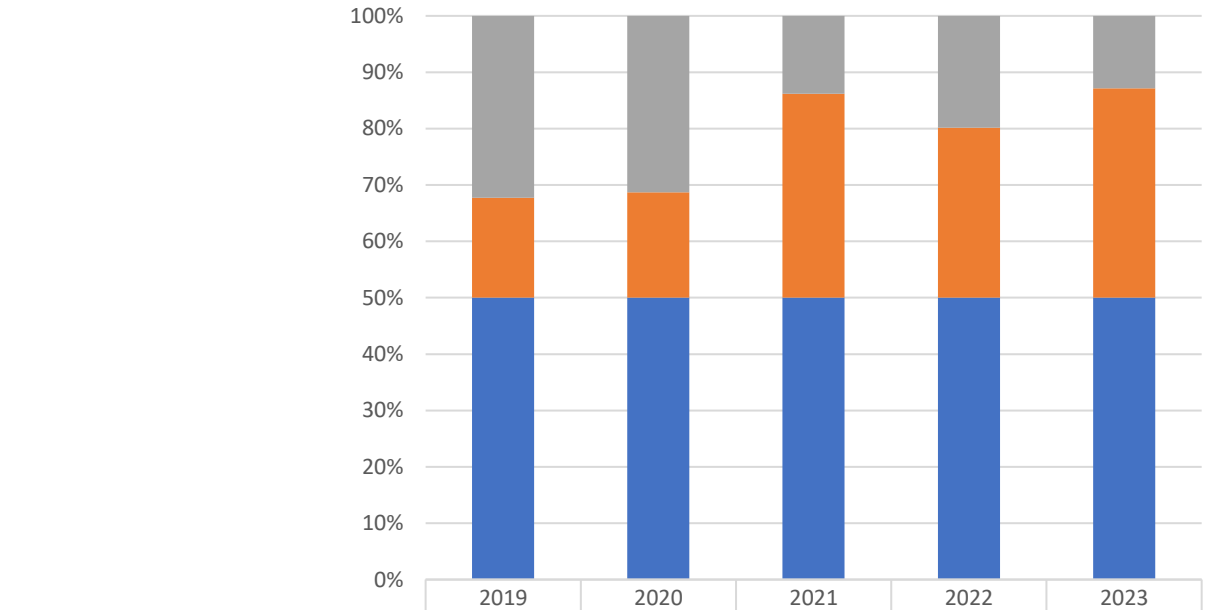
Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.11.4 International Incoming and Outgoing Fixed Telephone Traffic

The total international (incoming and outgoing) fixed-telephone traffic increased by 38.16% in 2023. International incoming fixed telephone decreased by 10.99% for the same period.

For a period of 5 years, the international (incoming and outgoing) fixed-telephone traffic increased by 2.68%.

Graph 34: International fixed line traffic in minutes (million) for the 12-month period ending 30th September each year.



	2019	2020	2021	2022	2023
International incoming fixed-telephone traffic, in minutes	180 371 946	142 551 161	89 167 567	89 233 309	79 870 770
International outgoing fixed-telephone traffic, in minutes	99 377 389	85 348 326	233 434 942	135 878 119	231 147 010
Total International (incoming and outgoing) fixed-telephone traffic	279 749 335	227 899 487	322 602 509	225 111 427	311 017 780

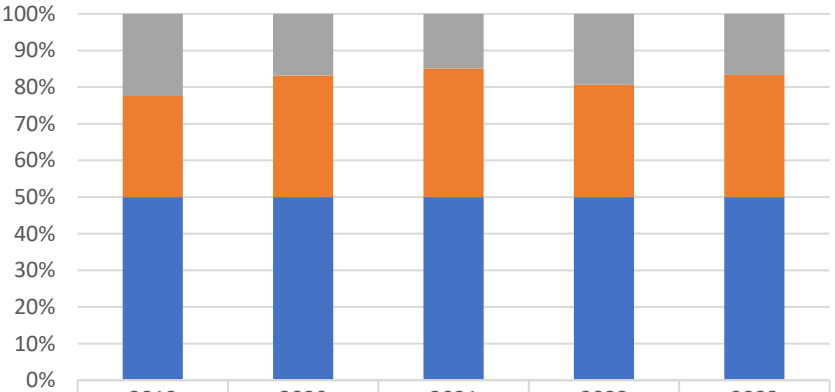
Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.12 International Internet Bandwidth Capacity in Megabits per second ("Mbps")

The total international internet bandwidth (Mbps) capacity increased by 37.61%, from 2.1 million in 2022 to 2.9 million in 2023.

For a 5-year period, the total international internet bandwidth capacity increased by 25.73%.

Graph 35: International internet bandwidth Megabits per second (Mbps) for the 12-month period ending 30th of September each year.



	2019	2020	2021	2022	2023
International outgoing Internet bandwidth	527 701	381 319	402 370	828 379	979 825
International incoming Internet bandwidth	650 999	754 698	947 320	1 311 743	1 965 294
Total International Internet (incoming/outgoing)bandwidth (Mbps) capacity	1 178 700	1 136 017	1 349 690	2 140 122	2 945 120

Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

4.13 Comparison of Internet Speeds

South Africa's fixed broadband and mobile internet speeds, including both download and upload speeds, were compared over the years to better understand its trajectory of growth.

4.13.1 South Africa's Internet Speed

Despise the significant increase in fixed broadband download and upload speed by OOKLA's Speedtest Intelligence[10], South Africa's fixed broadband speed ranking has declined since 2020, which was at number 96 out of 178 countries in the world and now is at 103 out of 178 countries.

In terms of mobile broadband speed ranking, South Africa holds the 53rd position out of 146 countries, with a download speed of 47.95 Mbps and an upload speed of 8.13 Mbps.

Table 5: South Africa Speedtest 2020-2024

Fixed Broadband					
Year	2020	2021	2022	2023	2024
Fixed Broadband speed (ranking)	96	87	100	95	103
Fixed Broadband download speed (Mbps)	26,87	38,25	28,63	43,23	43,66
Fixed Broadband upload speed (Mbps)	19,12	26,3	23,16	33,06	37,24
Mobile Broadband					
Year	2020	2021	2022	2023	2024
Mobile Broadband speed (ranking)	60	55	61	58	53
Mobile download speed (Mbps)	31,36	38,95	30,36	34,71	47,95
Mobile upload speed (Mbps)	9,41	10,71	7,12	6,79	8,13

Source: OOKLA, Speeedtest intelligence 2020 - 2024.

[10] https://www.speedtest.net/

4.13.2 Speedtest benchmark with South African neighbouring countries

In 2024, South Africa held the 103rd position globally for fixed broadband speedtest ranking out of 178 countries, the highest among its neighbouring countries, followed by Lesotho which was ranked at 131 while Botswana had the lowest ranking at 169.

South Africa held the 53rd position for mobile broadband out of 146 countries, which was also the highest among its neighbouring countries. Botswana followed at the 63rd position, while Eswatini and Lesotho were not measured.

Table 6: Speedtest benchmark South African neighbouring countries in 2024

Fixed Broadband							
	South Africa	Lesotho	Zimbabwe	Mozambique	Namibia	Eswatini	Botswana
Fixed Broadband speed (ranking)	103	131	148	149	158	163	169
Fixed Broadband download speed (Mbps)	43,66	25,37	14,2	14,05	10,47	9,51	7,56
Fixed Broadband upload speed (Mbps)	37,24	13,86	11,01	6,72	8,83	5,46	6,08
Mobile Broadband							
	South Africa	Botswana	Zimbabwe	Namibia	Mozambique	Eswatini	Lesotho
Mobile Broadband speed (ranking)	53	63	88	111	113	-	-
Mobile download speed (Mbps)	47,95	40,61	27,39	21,74	21,41	-	-
Mobile upload speed (Mbps)	8,13	12,68	11,71	9,12	14,47	-	-

Source: OOKLA, Speeedtest intelligence 2024.

4.14 International Comparison of South Africa's ICT Development Index ("IDI") ranking scores 2023.

The IDI therefore aims to measure the extent to which connectivity is universal and meaningful. The index comprises 10 indicators organized in two pillars, capturing the two dimensions of Universal and meaningful connectivity (UMC). The IDI therefore lends itself to use as an advocacy tool that will contribute to making UMC a policy priority at the country level.

The IDI provides a high-level, partial view of the state of meaningful connectivity. It does not capture all the specificities and circumstances of individual countries. The IDI results must therefore be interpreted with caution; they must be contextualized and complemented with additional data and qualitative information.

The main objectives of the IDI are to measure[11]:

- the level and evolution over time of ICT developments within countries and the experience of those countries relative to others;
- progress in ICT development in both developed and developing countries;
- the digital divide, i.e. differences between countries in terms of their levels of ICT development; and
- the development potential of ICTs and the extent to which countries can make use of them to enhance growth and development in the context of available capabilities and skills.

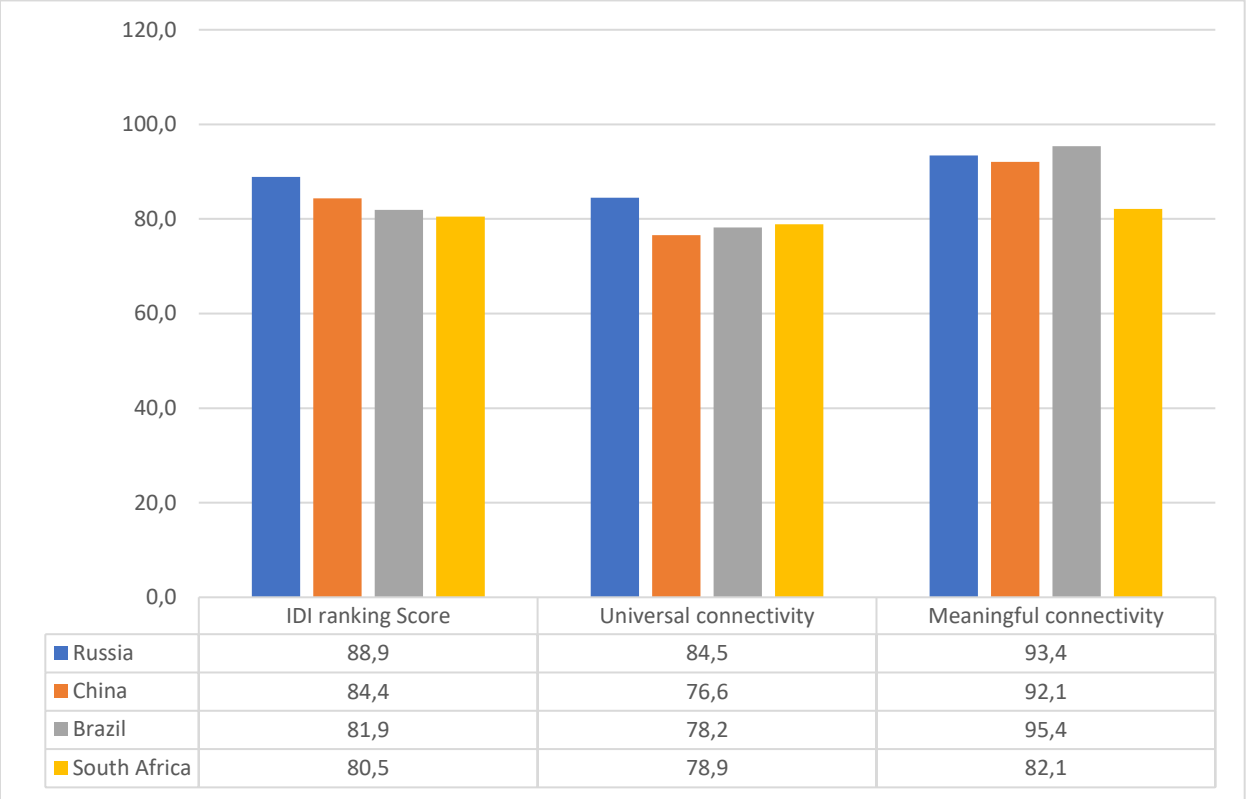
[11] *https://www.itu.int/hub/publication/D-IND-ICT_MDD-2023-2/*

4.14.1 BRICS IDI ranking score.

According to the ITU ranking scores, South Africa score is not far from member states whereby the group is led by Russia with 88,9 followed by China at 84,4, followed by Brazil with 81,9, and South Africa is at 80,5. This comparison highlights the varying levels of ICT development among these BRICS countries.

Kindly note that India did not participate in the study.

Graph 36: South Africa IDI ranking score compared to BRICS countries 2023.



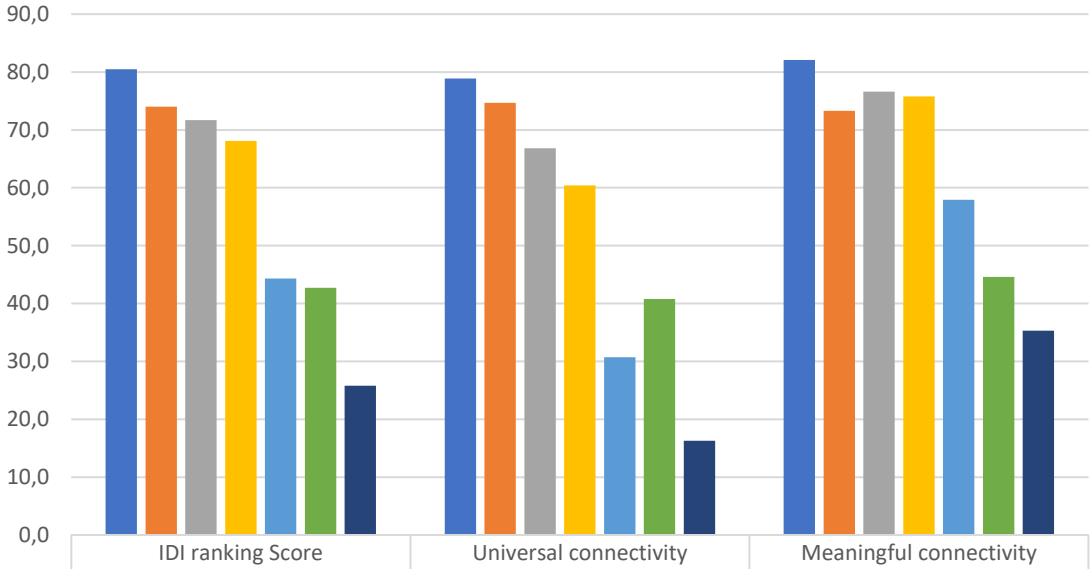
	IDI ranking Score	Universal connectivity	Meaningful connectivity
Russia	88,9	84,5	93,4
China	84,4	76,6	92,1
Brazil	81,9	78,2	95,4
South Africa	80,5	78,9	82,1

Source: ITU database, 2023.

4.14.2 IDI Ranking Score for South Africa with Neighbouring Countries.

The graph provided depicts the breakdown of the IDI scores for South Africa and its neighbouring countries. It offers a comparative analysis of ICT development across the region. South Africa's score is compared with those of its neighbouring nations, offering insights into the relative levels of technological advancement in the area.

Graph 37: South Africa IDI ranking score compared to international countries 2023.



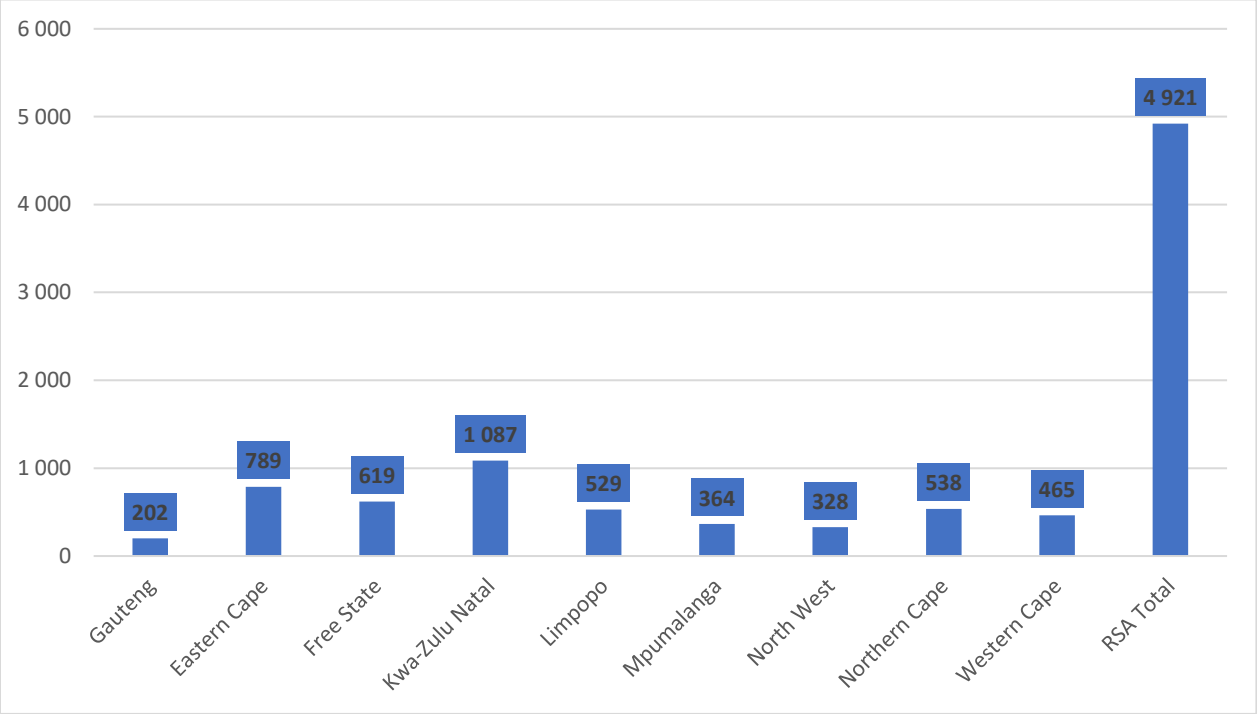
	IDI ranking Score	Universal connectivity	Meaningful connectivity
South Africa	80,5	78,9	82,1
Botswana	74,0	74,7	73,3
Eswatini	71,7	66,8	76,6
Namibia	68,1	60,4	75,8
Lesotho	44,3	30,7	57,9
Zimbambwe	42,7	40,8	44,6
Mozambique	25,8	16,3	35,3

Source: ITU database, 2023.

4.15 Number of Schools Connected to the Internet Based on Obligations Imposed by ICASA

The total number of schools connected to the internet based on universal service obligations imposed by ICASA was 4,921 as at 2023.

Graph 38: Number of schools connected to the internet as of 2023.



Source: ICASA Compliance & Consumer Affairs database, 2023.

5 THE BROADCASTING SECTOR

The consistent revenue loss in broadcasting points to a market that may have reached maturity. Furthermore, traditional broadcasters appear to be facing possible competition from service providers in the OTT space who are able to compete with traditional broadcaster for viewership. There has been a sharp decline in number of TV viewers in South Africa. Similar phenomena are seen in the telecommunications space with revenue from telephone calls and text messages lower due to uptake of OTT services like video calling and instant messaging. However, this is slightly offset by an increase internet usage by consumers.

The collective revenue generated by broadcasting services underwent a notable decline of 14.43% between 2022 and 2023, dwindling from R41.2 billion to R35.2 billion. Despite this overarching decrease, specific sectors within the industry showcased resilience, registering notable increases in revenue streams during the same period.

Notably, among the breakdown of revenue categories, infomercials witnessed a significant surge, recording a robust increase of 13.05%. This uptick suggests a heightened interest or effectiveness in this form of advertising within the market. Similarly, revenue derived from membership fees experienced a noteworthy rise of 18.26%, indicative of a growing subscription-based model or the success of membership programs implemented by broadcasting entities.

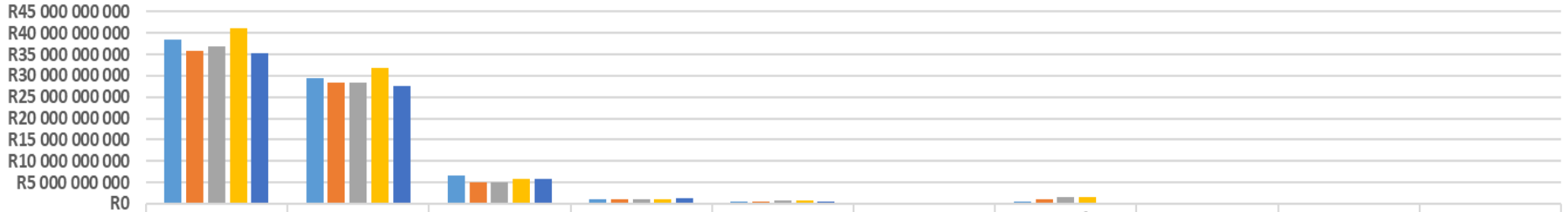
Moreover, revenue from any other revenue demonstrated a commendable increase of 10.06% during the same timeframe. This category likely encompasses diverse income streams beyond traditional advertising and subscription models, showcasing the industry's adaptability and ability to explore alternative revenue sources.

5.1 Broadcasting Revenue

The overall revenue from broadcasting services experienced a decline of 14.43%, dropping from R41.2 billion in 2022 to R35.2 billion in 2023. This decline was driven by broadcasting subscription revenue that showed a decrease of 13.37% in 2023. On the contrary, revenue from infomercials increased by 13.05%, revenue from membership fees increased by 18.26%, and revenue from any other increased by 10.06% during the same period, however, this increase come from the lower base.

For the period of 5 years, the total revenue from broadcasting services decreased by 2.07%.

Graph 39: TV and Radio broadcasting revenues for the 12-month period



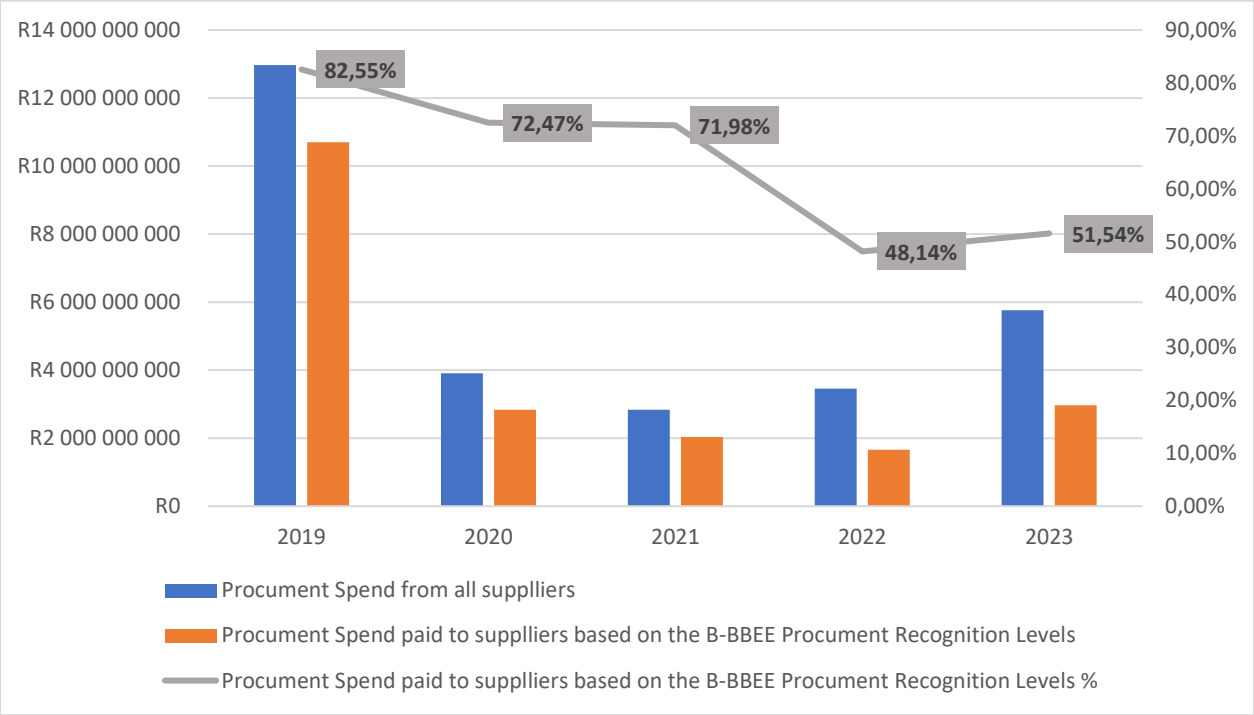
	Total revenue	Broadcasting Subscriptions Revenue	Broadcasting Advertising Revenue	Total of any other revenue	Revenue from sponsorships	Revenue from Government or State grant	Revenue from Broadcasting Promotions (with flighting code)	Revenue from donations	Revenue from infomercials	Revenue from membership fees
2019	R38 325 761 969	R29 552 474 837	R6 526 380 420	R1 092 957 907	R538 833 271	R92 217 049	R493 549 925	R9 579 462	R17 211 421	R2 557 677
2020	R35 814 897 915	R28 300 604 807	R5 003 077 915	R940 257 248	R397 527 711	R108 798 175	R1 021 198 419	R8 097 574	R17 377 974	R17 958 093
2021	R36 798 752 670	R28 372 345 149	R5 050 590 836	R1 047 885 075	R642 772 173	R87 169 736	R1 569 936 033	R11 551 610	R12 240 565	R4 261 493
2022	R41 202 864 454	R31 877 590 486	R5 837 998 968	R1 064 890 100	R773 573 946	R118 083 659	R1 510 223 894	R9 423 246	R7 258 655	R3 821 502
2023	R35 256 064 407	R27 616 914 516	R5 809 389 035	R1 172 018 344	R513 658 312	R82 615 389	R39 944 426	R8 802 492	R8 202 539	R4 519 355

*Source: ICASA Broadcasters Questionnaire, December 2019- 2023 (*data includes TV & radio broadcasting*).*

5.2 Broadcasting Black Economic Empowerment Measures

The proportion of procurement spend to suppliers based on their B-BBEE procurement recognition level was 51.54% in 2023.

Graph 40: Broadcasting sector procurement spend to all suppliers based on B-BBEE, for the 12-month period ending 30th September.



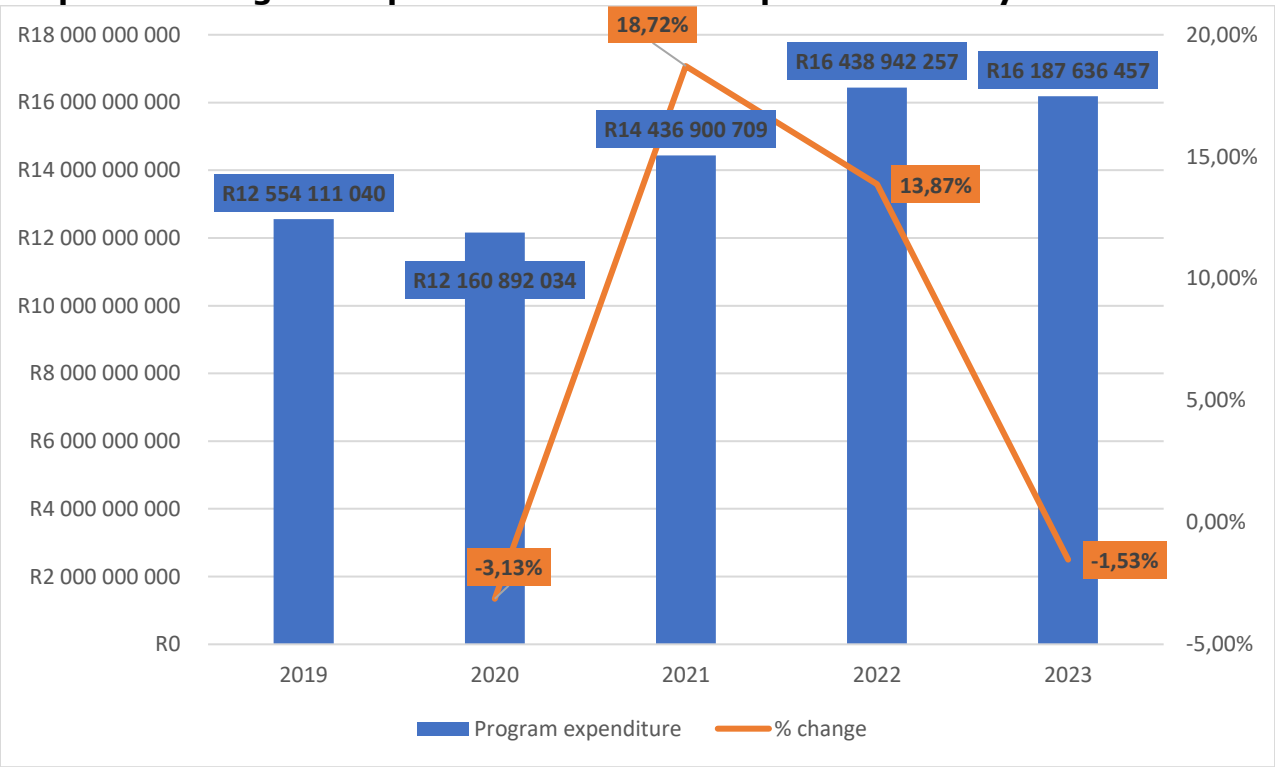
Source: ICASA Broadcasters Questionnaire, December 2019 - 2023.

5.3 Programme expenditure

The broadcasting for TV and radio Programme expenditure slightly decreased by 1.53% in 2023, from R16.4 billion in 2022 to R16.1 billion in 2023.

For a period of 5 years, the expenditure moved from R12.5 billion in 2019 to R16.1 billion in 2023, reflecting a 6.56% increase.

Graph 41: Program expenditure as of 30th September each year



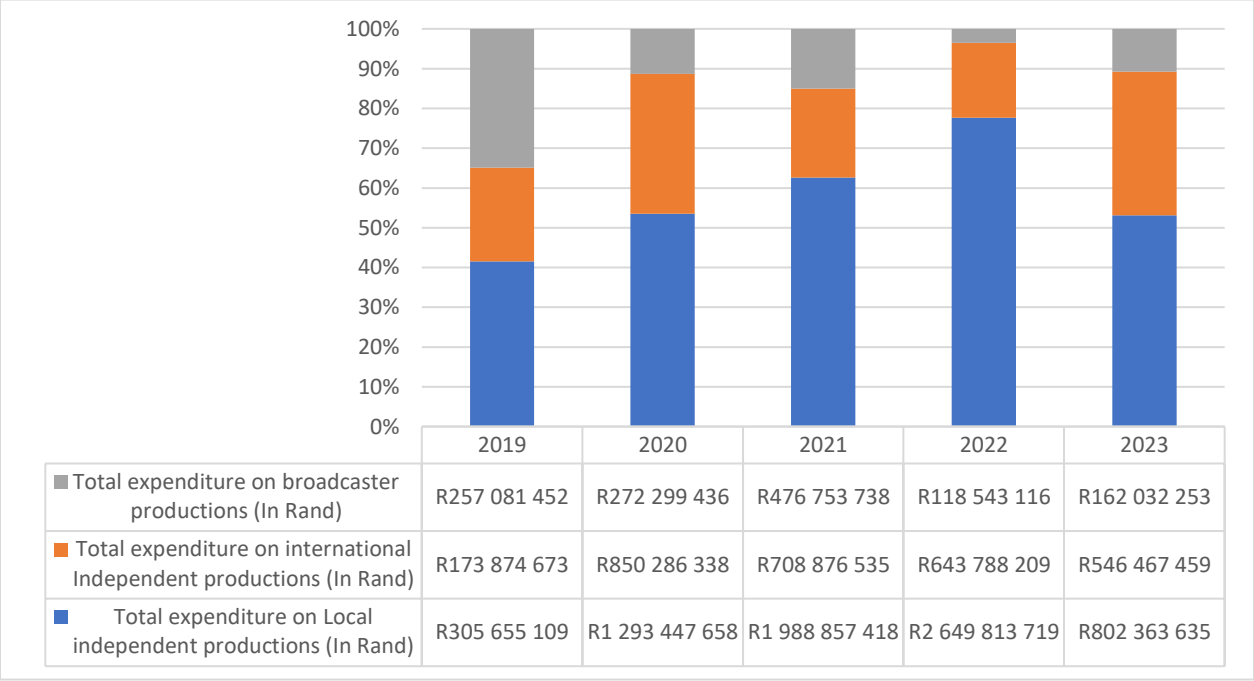
Source: ICASA Broadcasters Questionnaire, December 2019- 2023.

5.4 Broadcasting productions expenditure

In 2023, the total expenditure on broadcaster productions increased by 36.69%. However, expenditures on both local and international independent productions experienced a decline during the same period as shown on the graph below.

For a period of 5 years, the total expenditure on independent broadcaster productions decreased by 10.90%.

Graph 42: Broadcasting productions expenditure as of 30th September each year



	2019	2020	2021	2022	2023
Total expenditure on broadcaster productions (In Rand)	R257 081 452	R272 299 436	R476 753 738	R118 543 116	R162 032 253
Total expenditure on international Independent productions (In Rand)	R173 874 673	R850 286 338	R708 876 535	R643 788 209	R546 467 459
Total expenditure on Local independent productions (In Rand)	R305 655 109	R1 293 447 658	R1 988 857 418	R2 649 813 719	R802 363 635

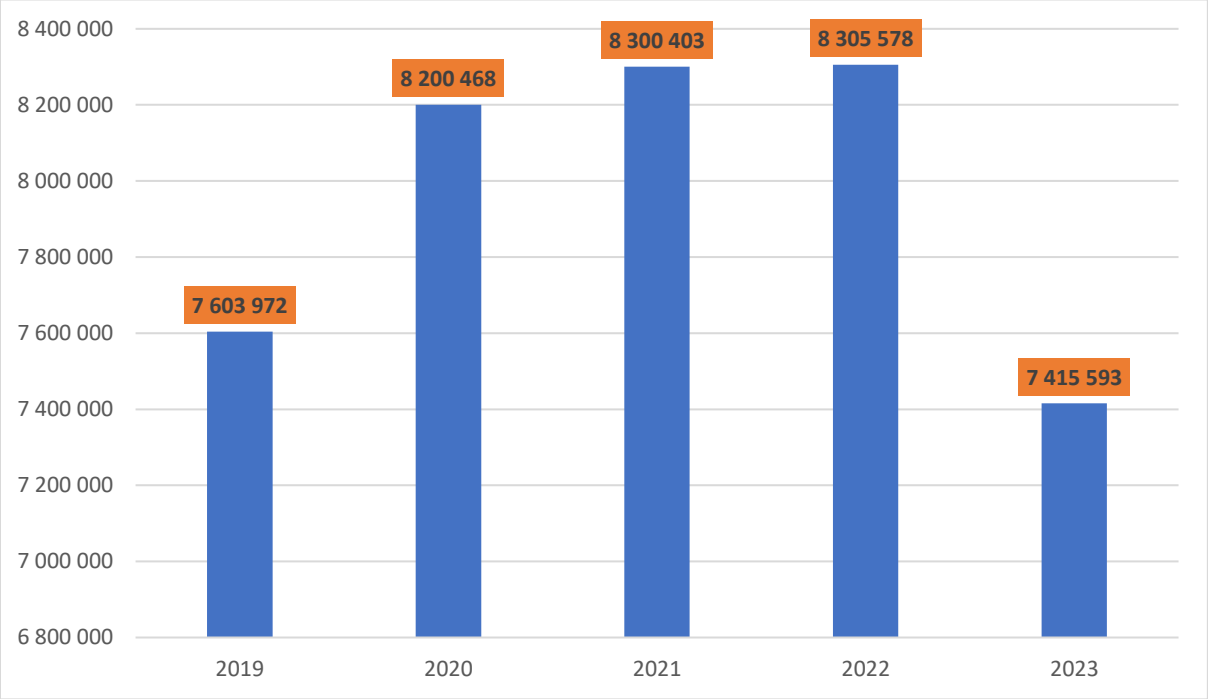
Source: ICASA Broadcasters Questionnaire, December 2019 - 2023.

5.5 Number of Pay TV Subscribers

The total number of Pay TV subscriptions significantly decreased by 10.72% in 2023.

For the period of 5 years, Pay TV subscriptions decreased by 0.63%.

Graph 43: Number of Pay TV subscribers as of 30th September each year.

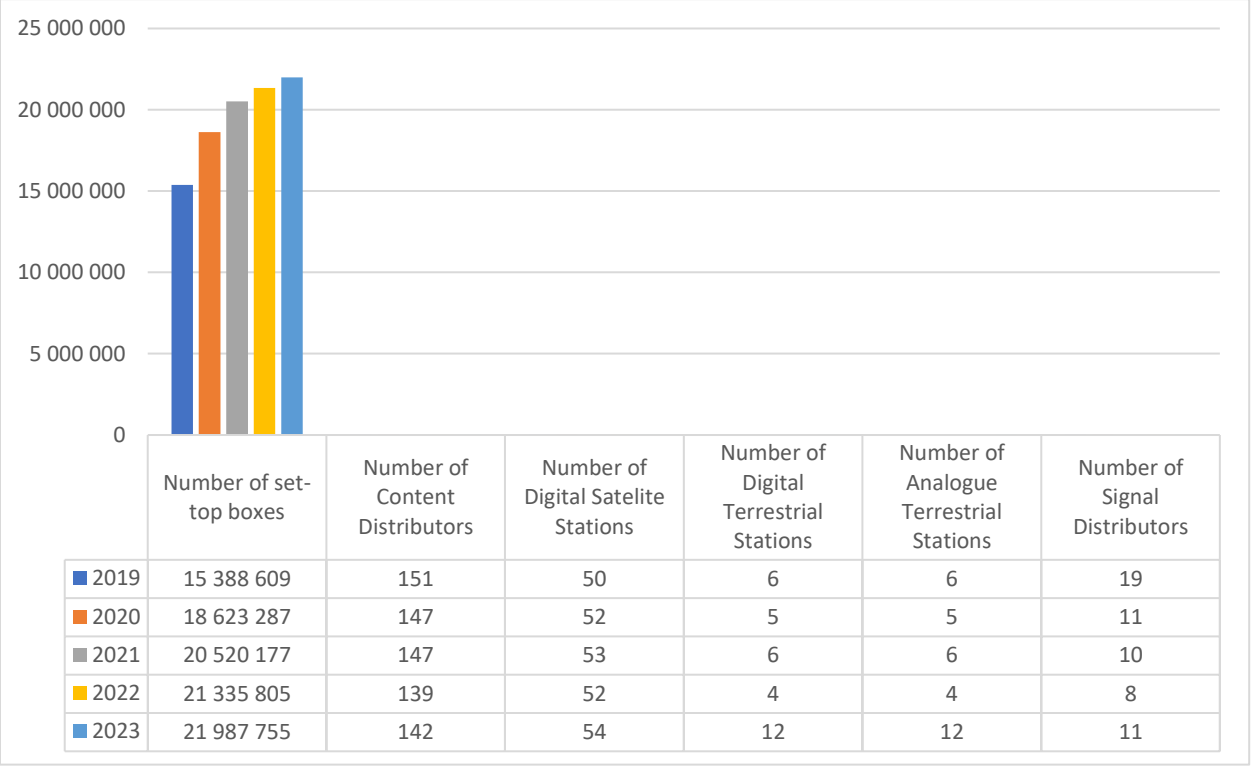


Source: ICASA Broadcasters Questionnaire, December 2019 - 2023.

5.6 Total Number of Television Stations and Distributors

The number of set-top boxes increased by 3.06%, the number of Digital Terrestrial stations increased by 2.30%, and the number of Content Distribution increased by 2.16% in 2023.

Graph 44: Total Number of Television Stations and Distributors as of 30th September each year



	Number of set-top boxes	Number of Content Distributors	Number of Digital Satelite Stations	Number of Digital Terrestrial Stations	Number of Analogue Terrestrial Stations	Number of Signal Distributors
2019	15 388 609	151	50	6	6	19
2020	18 623 287	147	52	5	5	11
2021	20 520 177	147	53	6	6	10
2022	21 335 805	139	52	4	4	8
2023	21 987 755	142	54	12	12	11

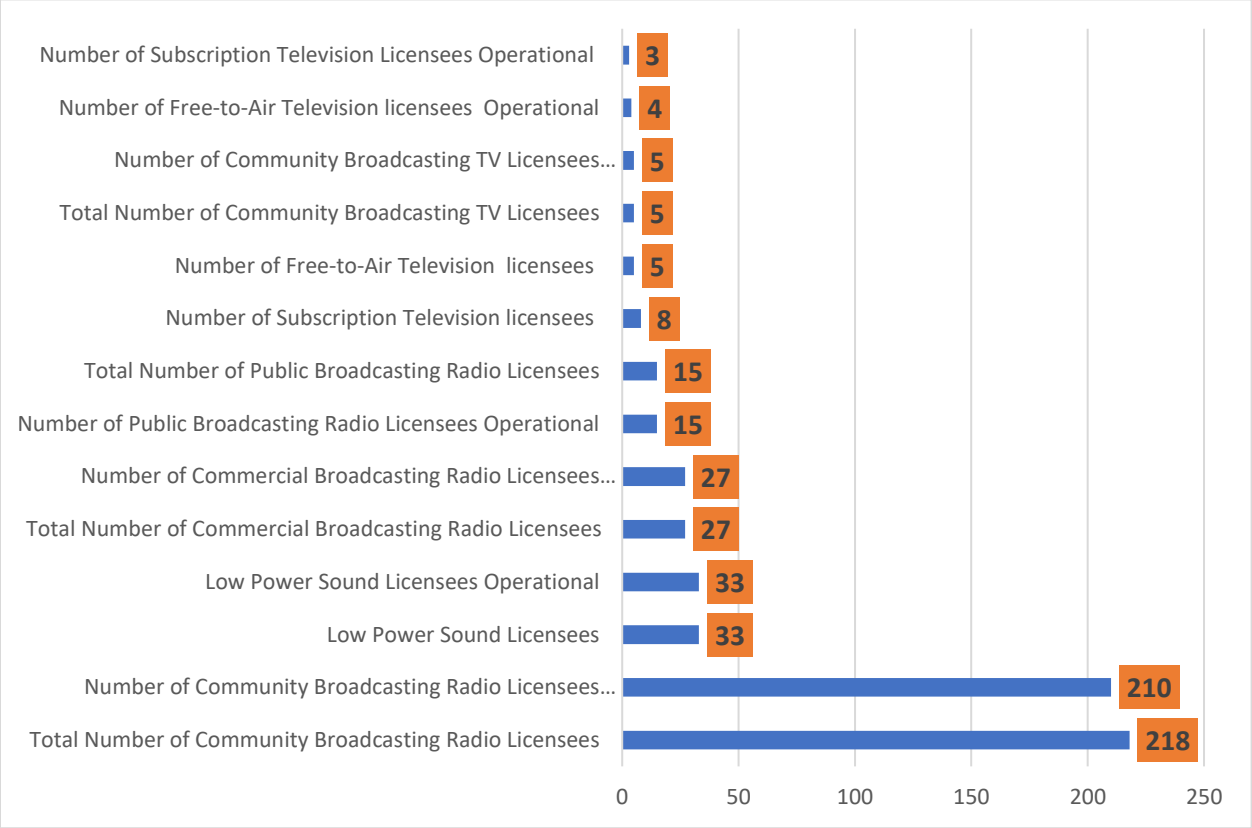
Source: ICASA Broadcasters Questionnaire, December 2019 - 2023.

**Government subsidies set-top boxes are not included **

5.7 Total Number of TV and Radio licences

The total number of TV and radio stations in South Africa that the Authority is regulating in 2024 is depicted in the graph below.

Graph 45: Total Number of transmissions and licenses subscriptions



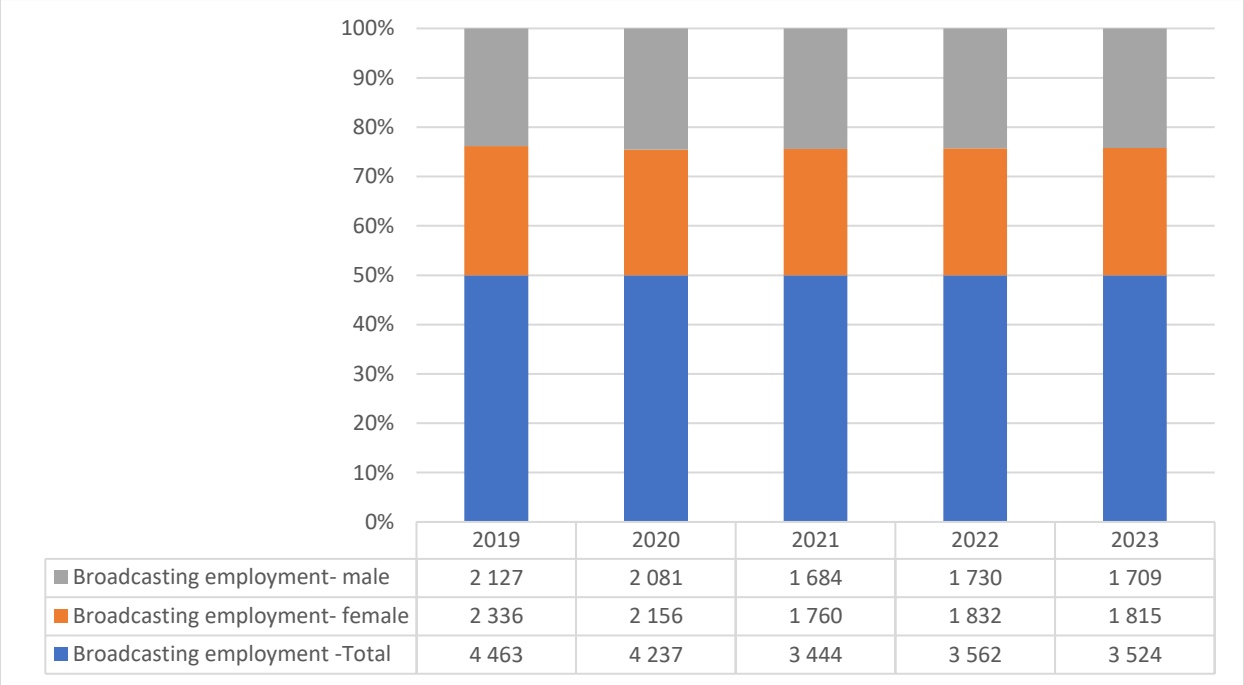
Source: ICASA Licensing and Compliance, 2024.

5.9 Broadcasting Sector Employment

The total number of people employed in the broadcasting sector slightly decreased by 1.07%, female employees also decreased by 0.93% in 2023.

Over a 5-year period, both the total number of people employed in the broadcasting sector and the female employment decreased by 5.73% and 6.11%, respectively.

Graph 46: People employed in the broadcasting sector, as of the 30th of September each year.



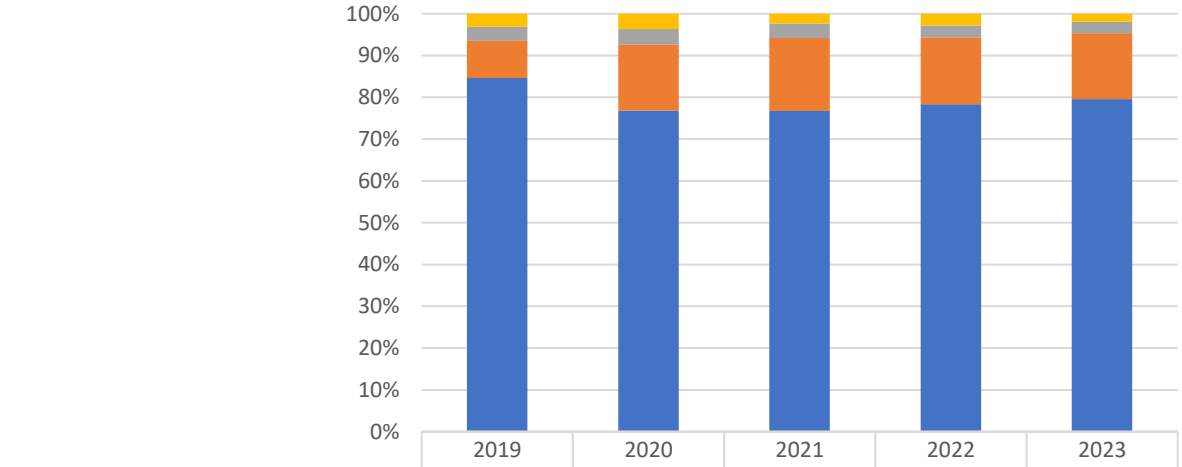
	2019	2020	2021	2022	2023
Broadcasting employment- male	2 127	2 081	1 684	1 730	1 709
Broadcasting employment- female	2 336	2 156	1 760	1 832	1 815
Broadcasting employment -Total	4 463	4 237	3 444	3 562	3 524

Source: ICASA Broadcasters Questionnaire, December 2019 - 2023.

5.9.1 Breakdown of Persons Employed in the Broadcasting Sector

From 2022 to 2023, the employment composition within the broadcasting industry underwent the following changes: skilled employment rose marginally from 2,629 to 2,633; semi-skilled employment declined from 537 to 522; the number of individuals with disabilities decreased from 95 to 90; and unskilled employment decreased from 95 to 64 positions. These figures illustrate the shifting dynamics of workforce distribution within the sector over the specified period, reflecting alterations in demand, skill requirements, and possibly organizational restructuring initiatives.

Graph 47: Persons employed in the broadcasting sector breakdown in 2023.



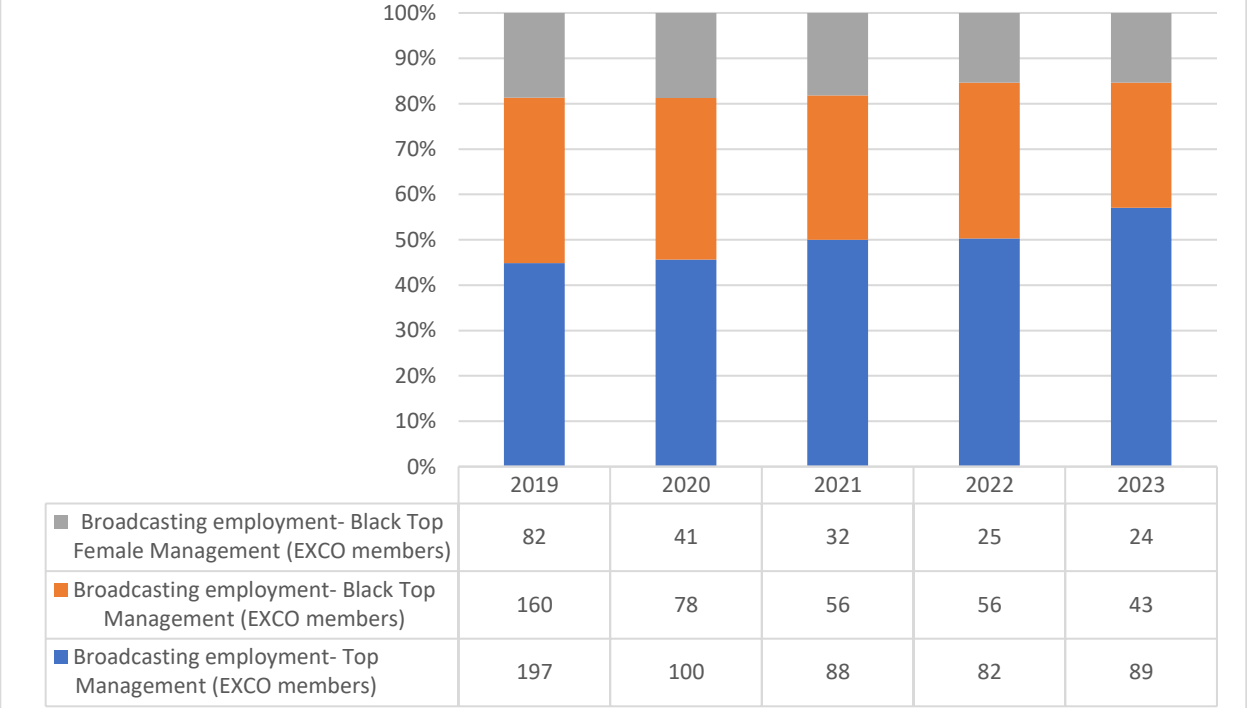
	2019	2020	2021	2022	2023
Broadcasting employment- Unskilled	125	112	63	95	64
Broadcasting employment- living with disabilities	131	112	91	95	90
Broadcasting employment- Semi skilled	355	481	467	537	522
Broadcasting employment- skilled	3 353	2 340	2 048	2 629	2 633

Source: ICASA Broadcasters Questionnaire, December 2019 - 2023.

5.9.2 Proportion of Black People in Top Management in the Broadcasting Sector

Top management (EXCO members) employees increased from 82 in 2022 to 89 in 2023. Top female employees slightly decreased from 25 in 2022 to 24 in 2023. Black top management employees decreased from 56 in 2022 to 43 in 2023.

Graph 48: Broadcasting Black Economic Empowerment Measures, for the 12-month period ending 30th September each year.



	2019	2020	2021	2022	2023
Broadcasting employment- Black Top Female Management (EXCO members)	82	41	32	25	24
Broadcasting employment- Black Top Management (EXCO members)	160	78	56	56	43
Broadcasting employment- Top Management (EXCO members)	197	100	88	82	89

Source: ICASA Broadcasters Questionnaire, December 2019 - 2023.

6 POSTAL SERVICES SECTOR

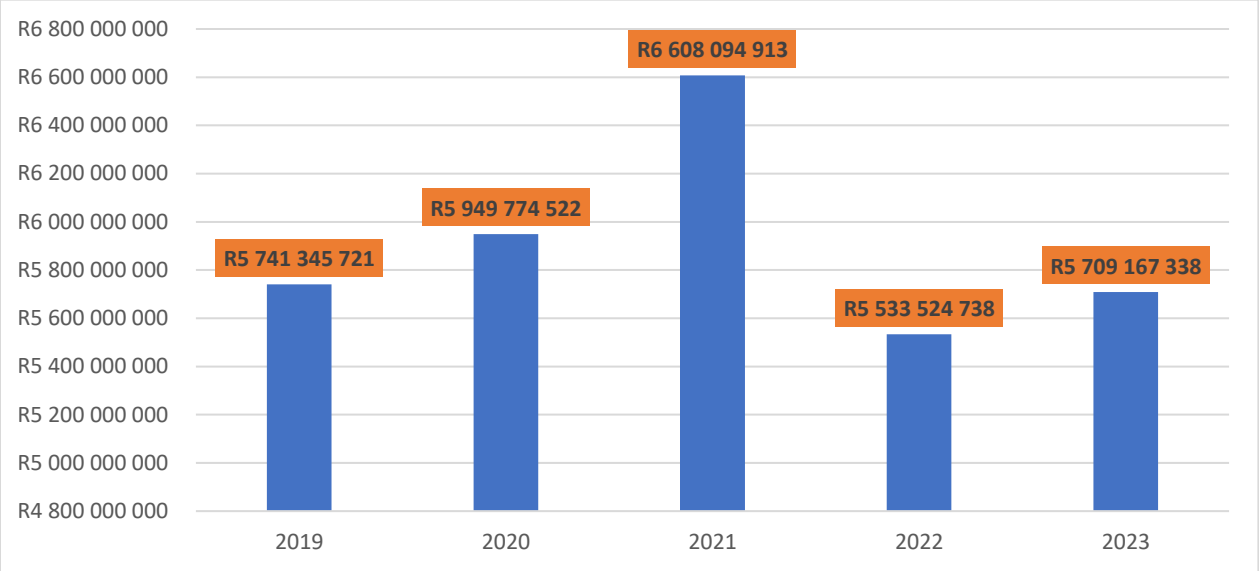
In 2023, despite significant challenges within the postal sector, there was a notable uptick in total revenue, registering a 3.17% increase, this growth was driven by unreserved postal operators.

Among the prominent challenges facing South Africa's postal services are dwindling demand for traditional mail delivery due to the increasing prevalence of digital communication methods. Additionally, rising operational costs, inefficiencies in service delivery, and stiff competition from private courier services have exacerbated the sector's woes.

6.1 Postal Sector Revenue

Revenue from postal services increased from R5.5 billion in 2022 to R5.7 billion in 2023.

Graph 49: Postal sector revenue, 12-month period ending 30th September each year.

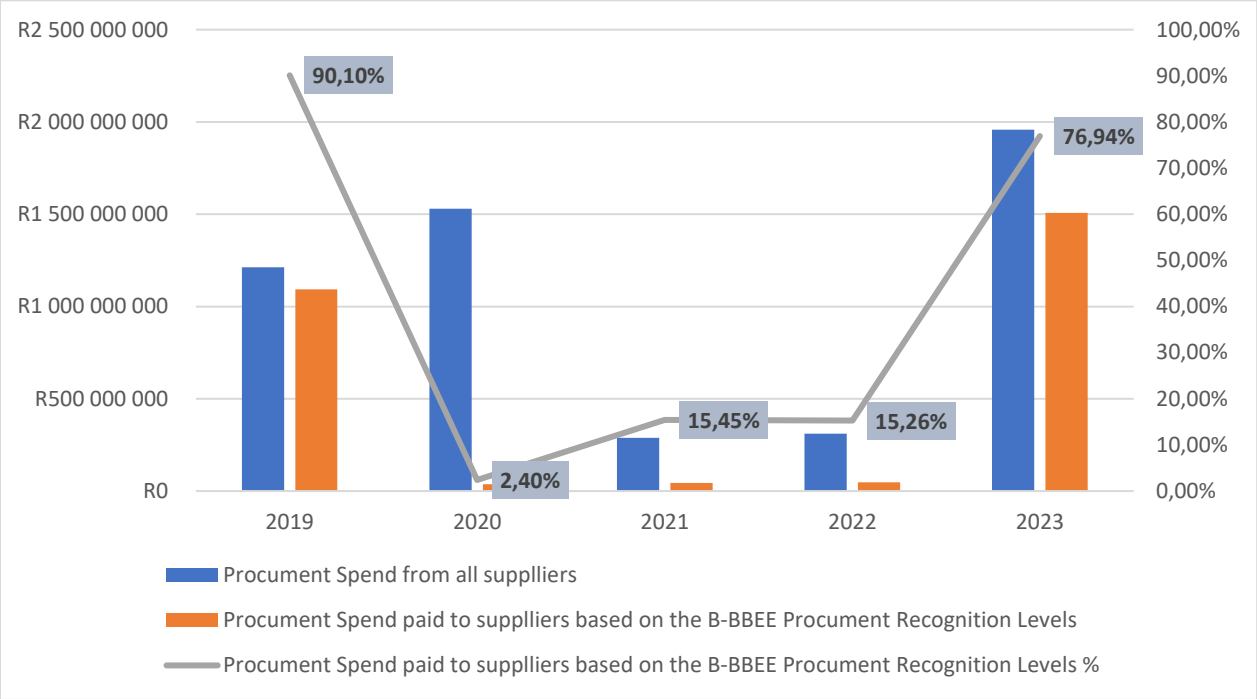


Source: ICASA Postal Questionnaire, December 2019 - 2023
We had low response rate from unreserved postal sector

6.2 Postal Sector Black Economic Empowerment Measures

The percentage of total spending to all suppliers that was allocated to the postal industry based on supplier B-BBEE rating was 76.94% in 2023.

Graph 50: Postal sector procurement spend to suppliers based on the B-BBEE Procurement Recognition Levels, for the 12-month period ending 30th September each year

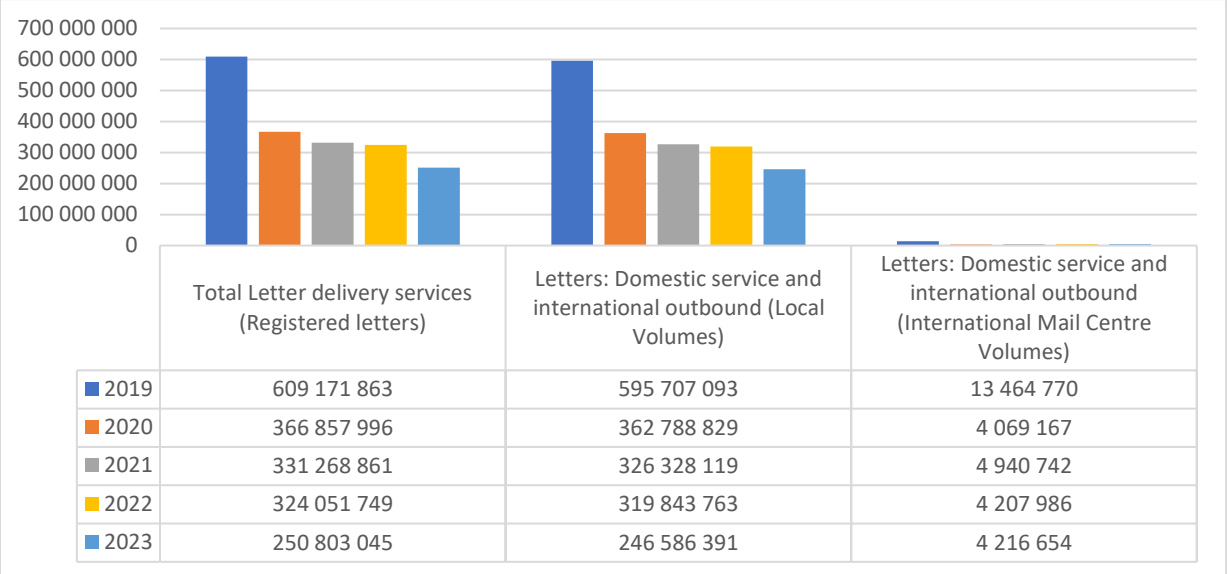


Source: ICASA Postal Questionnaire, December 2019 - 2023
*Note: *we had low response rate from unreserved postal sector**

6.3 Total Letter delivery services (Registered letters)

The total number of delivered letters decreased from 324 million in 2022 to 250 million in 2023[12], this decrease was driven by domestic service and international outbound at the Local Volumes.

Graph 51: Total number of letter delivery services (registered letters), as of 30th September each year



	Total Letter delivery services (Registered letters)	Letters: Domestic service and international outbound (Local Volumes)	Letters: Domestic service and international outbound (International Mail Centre Volumes)
2019	609 171 863	595 707 093	13 464 770
2020	366 857 996	362 788 829	4 069 167
2021	331 268 861	326 328 119	4 940 742
2022	324 051 749	319 843 763	4 207 986
2023	250 803 045	246 586 391	4 216 654

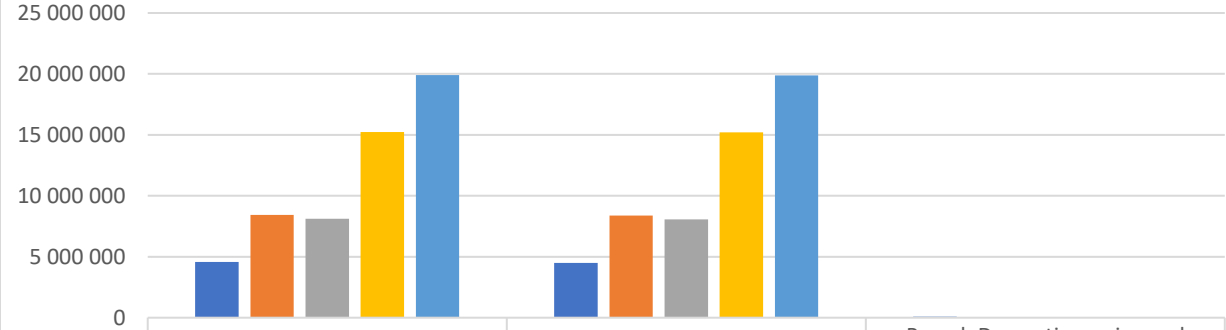
Source: ICASA Postal Questionnaire, December 2019 - 2023
*Note: *we had low response rate from unreserved postal sector**

[12] *Domestic service and international outbound (international mail Centre volumes) 2022 figure was amended.*

6.4 Total numbers of Parcel delivery services

The total number of parcel delivery[13] services increased exponentially by 30.82%, from 15.2 million in 2022 to 19.9 million in 2023.

Graph 52: Total number of parcel delivery services, as of 30th September each year



	Total number of Parcel delivery services	Parcel: Domestic service and international outbound (Local Volumes)	Parcel: Domestic service and international outbound (International Mail Centre Volumes)
2019	4 575 844	4 489 798	86 046
2020	8 427 395	8 372 381	55 014
2021	8 126 907	8 076 820	50 087
2022	15 221 103	15 195 528	25 575
2023	19 912 214	19 888 915	23 299

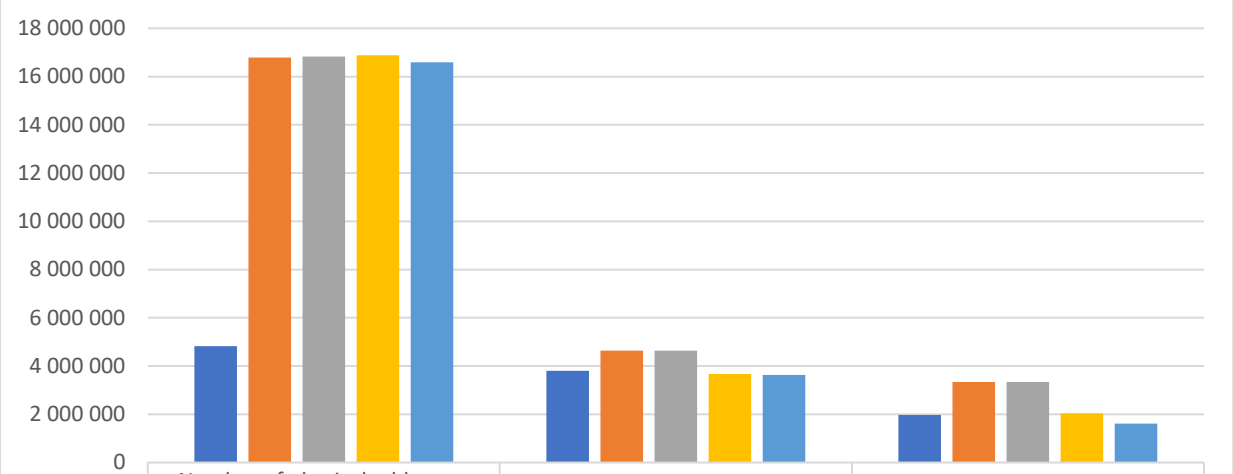
Source: ICASA Postal Questionnaire, December 2019 - 2023
*Note: *we had low response rate from unreserved postal sector**

[13] *One of the operator revised its International Mail Centre Volume figure for the year 2022.*

6.5 Number of PO Boxes, PO Boxes rented, and Physical addresses in database.

In 2023, there was a decline in the number of physical addresses, PO Boxes, and rented PO Boxes recorded in the database. This decrease is attributed to the rising popularity of alternative methods such as email for receiving statements and other communications. The convenience and efficiency of electronic communication have led to a shift away from traditional mail services. As a result, fewer individuals and businesses are relying on physical addresses and PO Boxes for their correspondence needs. This trend reflects a broader transition towards digital solutions in modern communication, marking a significant change in consumer behaviour and preferences.

Graph 53: Number of PO Boxes, PO Boxes rented, and physical addresses in database as of 30th September each year.



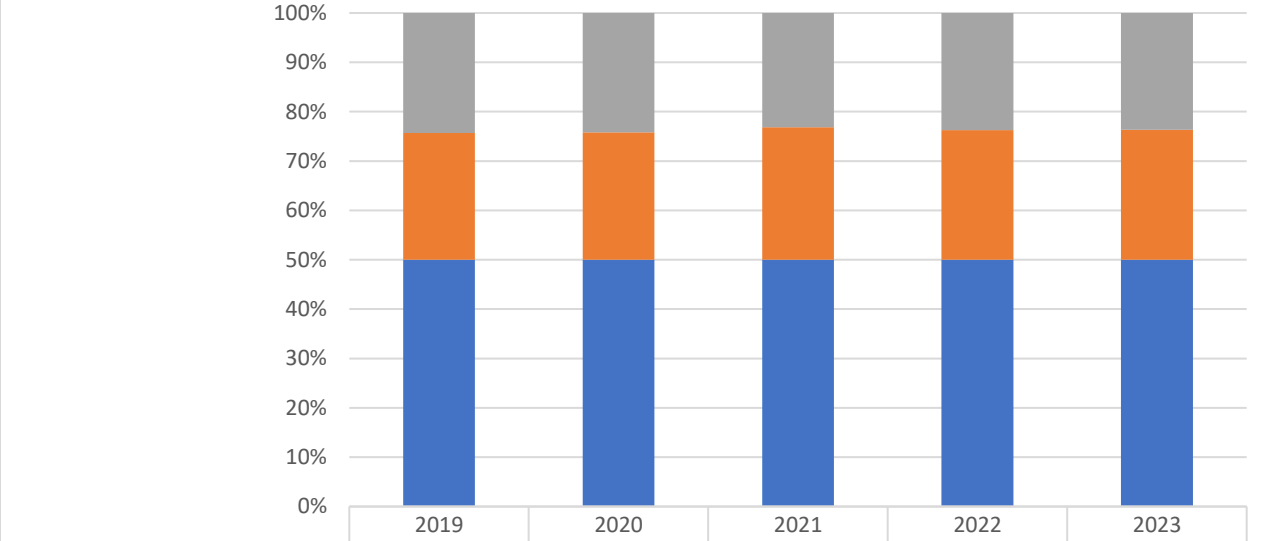
	Number of physical addresses in database	Number of PO Boxes	Number of PO Boxes rented
2019	4 821 028	3 806 972	1 974 445
2020	16 789 554	4 642 638	3 333 402
2021	16 824 061	4 642 638	3 333 402
2022	16 887 364	3 669 390	2 043 070
2023	16 586 621	3 629 037	1 610 191

Source: ICASA Postal Questionnaire, December 2019 - 2023
*Note: *we had low response rate from unreserved postal sector**

6.6 Postal Service Sector Employment

As it is shown on the table below, the employment for postal service sector decreased from 16 thousand in 2022 to 15 thousand in 2023.

Graph 54: Persons employed in Post Service Sector, by gender, as of 30th September each year.



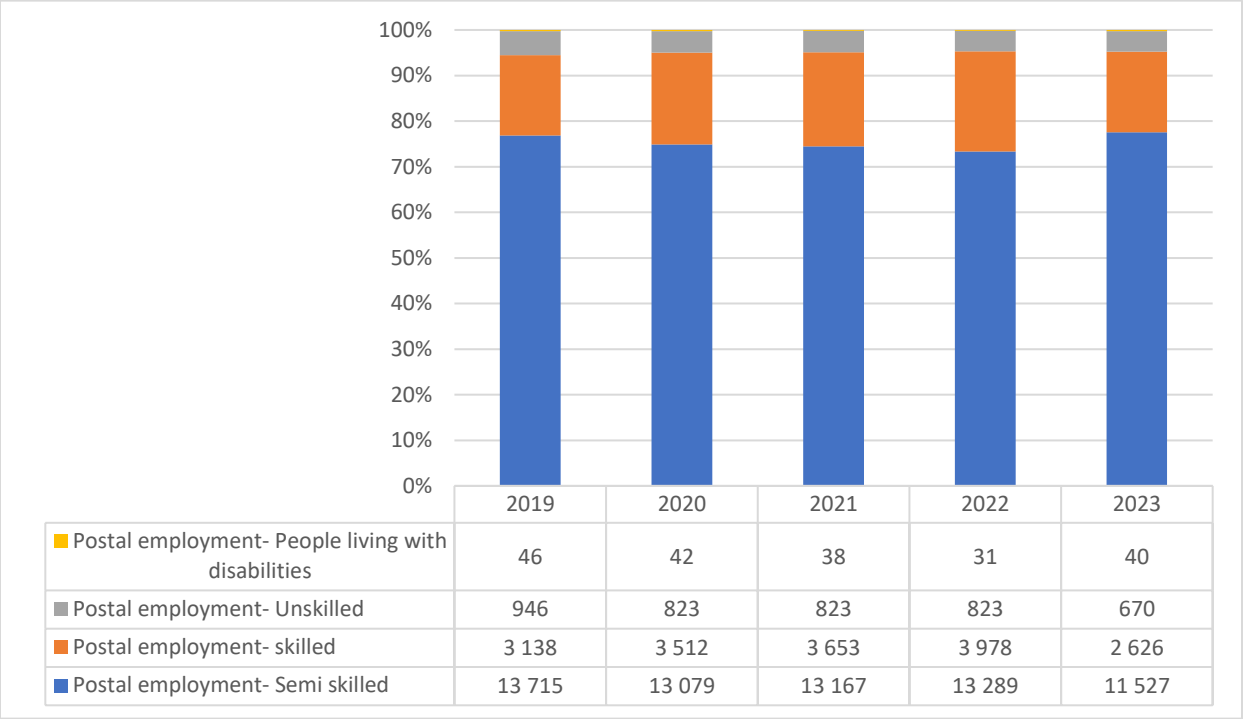
	2019	2020	2021	2022	2023
Postal employment- female	8 985	8 702	8 502	7 960	7 235
Postal employment- male	9 479	9 282	9 861	8 832	8 068
Postal employment -Total	18 464	17 984	18 363	16 792	15 303

Source: ICASA Postal Questionnaire, December 2019 - 2023
*Note: *we had low response rate from unreserved postal sector**

6.7 Breakdown of Persons Employed in the Postal Sector

The number of semi-skilled employees decreased by 13.26%, skilled employees decreased by 33.99%, and unskilled employees decreased by 18.59% in 2023. However, during the same period, the number of employees living with disabilities increased by 29.03%.

Graph 55: Persons employed in the postal sector breakdown, for the 12-month period ending 30th September each year.



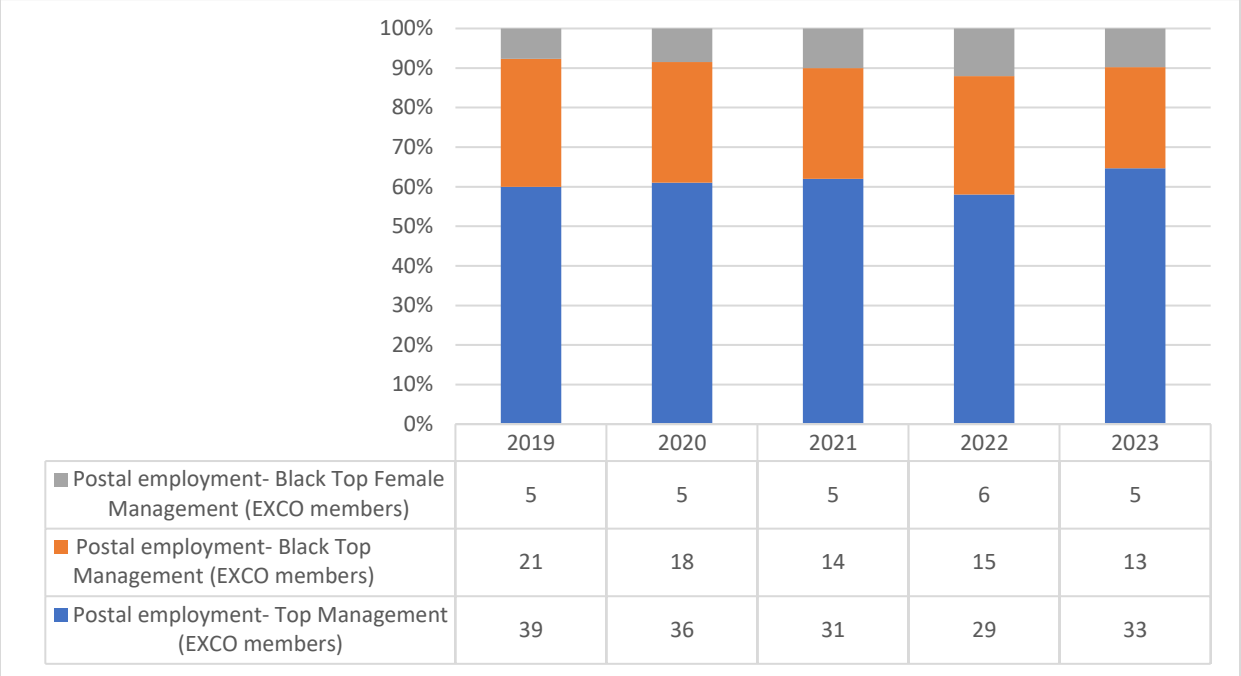
	2019	2020	2021	2022	2023
Postal employment- People living with disabilities	46	42	38	31	40
Postal employment- Unskilled	946	823	823	823	670
Postal employment- skilled	3 138	3 512	3 653	3 978	2 626
Postal employment- Semi skilled	13 715	13 079	13 167	13 289	11 527

Source: ICASA Postal Questionnaire, December 2019 - 2023
*Note: *we had low response rate from unreserved postal sector**

6.8 Postal service sector Black Economic Empowerment Measures

The top management (EXCO members) increased by 13.79% in 2023. However, top black management and the top female black management decreased by 13.33% and 16.67% for the same period.

Graph 56: Postal sector Black Economic Empowerment Measures, for the 12-month period ending 30th September each year.



	2019	2020	2021	2022	2023
Postal employment- Black Top Female Management (EXCO members)	5	5	5	6	5
Postal employment- Black Top Management (EXCO members)	21	18	14	15	13
Postal employment- Top Management (EXCO members)	39	36	31	29	33

Source: ICASA Postal Questionnaire, December 2019 - 2023
*Note: *we had low response rate from unreserved postal sector**

7 CONCLUSION

The following highlights are worth noting with respect to the telecommunications sector.

- Mobile data revenue now contributes more than half of the revenue from Mobile services. This is a clear increase from the same position in 2019 when it only made up just about 40%. The shift to a data driven world and adoption of OTT services that have replaced traditional voice and texting is clearly visible in the data.

- The Authority recognises the impact of the current loadshedding phenomenon in South Africa. Following the termination of the National State of Disaster on impact of severe electricity supply constraints the Authority established a Council committee that has been tasked with looking at possible ways in which licensees in the identified sectors can be given relief caused by load shedding challenges. The Committee will receive inputs from all the affected stakeholders to ensure that relevant relief is provided for the benefit of consumers and to ensure continuation of services during power cuts.

- The growth in 5G coverage shows positive investments made by the MNOs into providing cutting edge fast internet to consumers and business. However, there's a worrying digital divide with respect to access to and uptake of 5G services. 4G coverage provides the backbone of mobile services and has remained largely consistent with last year at 98.80%.

- Rural coverage in the Northern Cape province continues to lag behind other provinces, it is imperative as part of the universal access requirements that rural coverage should improve. The successful IMT spectrum auction promises to ensure greater coverage particularly in rural areas. Spectrum such as the sub-1GHz has greater propagation or coverage over far larger areas with less investment in infrastructure required.

- Transformation of the telecommunications sector has shown a slight growth with an increase in female representation at executive management of firms. The industry can continue to increase the numbers to ensure that the transformation targets are met. The continued growth in the industry affords firms in the industry with an opportunity to use the growth as a catalyst for transformation.

- School connectivity is one of the universal service obligations imposed by ICASA. It is critical that in a digitising world, South African schools do not fall behind in having access to the internet. The has been an uptick in schools connected over the years, spurred on by the experience during the pandemic.

The following highlights are worth noting with respect to the broadcasting sector.

- In 2023, there was a substantial 10.72% decline in the overall count of Pay TV subscriptions. This notable decrease suggests a shifting landscape in consumer preferences for television services, potentially influenced by factors such as the rise of alternative streaming platforms, changes in viewing habits, and increased competition in the entertainment industry. Understanding and adapting to these dynamics is crucial for Pay TV providers. It should also be noted that the Authority is currently conducting an inquiry into subscription broadcasting services market in terms of section 4B of the ICASA Act, that will will enable the Authority to understand the factors that may have contributed to new subscription broadcasting service licensees' inability to gain traction in the market in terms of attracting subscribers and launching their services.

- The quantity of set-top boxes saw a modest rise of 3.06%, climbing from 21.3 million in 2022 to 21.9 million in 2023. This increase indicates continued demand for set-top boxes, likely driven by factors such as the expansion of digital television services, technological advancements, and consumer

preferences for enhanced viewing experiences. Set-top boxes play a crucial role in accessing digital television content, providing users with features like high-definition viewing, interactive services, and access to a broader range of channels. The uptick in set-top box adoption underscores the ongoing transition towards digital broadcasting platforms and the importance of these devices in modern home entertainment setups. As such, manufacturers and service providers in the television industry should continue to innovate and offer compelling solutions to meet the evolving needs of consumers in an increasingly digital-centric landscape.

The following highlights are worth noting for the postal services sector.

- Postal service revenue is highly dependent on the general state of the economy as there has been a shift towards ecommerce which has become a large driver of the market. The revenue generated from postal services increased by 3.17% from R5.5 billion in 2022 to R5.7 billion in 2023. The increase of revenue was potentially influenced by various factors such as shifts in consumer preferences towards digital communication channels, increased competition from alternative delivery services, and evolving market dynamics.

- In both local and international mail centres, the aggregate volume of parcel delivery services witnessed a notable upsurge of 30.82% between 2022 and 2023. Specifically, the total count surged from 15.2 million parcels in 2022 to 19.9 million parcels in 2023. This significant increase underscores a growing reliance on parcel delivery services, likely influenced by various factors such as the expansion of e-commerce, shifts in consumer behaviour towards online shopping, and evolving supply chain dynamics. The rise in parcel volumes reflects a broader trend in modern commerce, where expedited and efficient delivery of goods plays a pivotal role in meeting consumer expectations and maintaining competitiveness in the market. As such, understanding and adapting to this trend is crucial for stakeholders in the logistics and postal

sectors to effectively manage operations and meet the growing demand for parcel delivery services.

APPENDICES

Appendix 1: ICASA questionnaire respondents, January 2024

ICASA questionnaire respondents, January, 2024	
Telecommunication's Licensees	
1	**Afrihost SP (Pty) Ltd**
2	**Amobia**
3	**ASK Internet Technologies CC**
4	**AT&T South Africa (Proprietary) Limited**
5	**Axxess DSL (Pty) LTD**
6	Backspace Technologies
7	**Bethnet cc**
8	**BITCO TELECOMS**
9	**Blue Shadow Investments (Pty) Ltd**
10	Borwood Communications (Pty) Ltd
11	**Bundu NetworX (Pty) Ltd**
12	**Cape Connect Internet (Pty) Ltd**
13	**Carfone OFS Pty Ltd**
14	**Catalytic Connections (PTY) Ltd**
15	**Cell C Ltd**
16	**China Telecom South Africa (Pty) Ltd**
17	**Cipherwave Networks (Pty) Ltd**
18	**Compatel Africa**
19	**Comput8 IT (Pty) Ltd t/a COMPUTATE**
20	Comsol Networks
21	**CRAZYWEB TECH PTY LTD**
22	**CUBE ICT SOLUTIONS (PTY) LTD**

23	**Cutman Bush Net cc**
24	**CWNET**
25	Cybersmart (Pty) Ltd
26	**Dark Fibre Africa Pty Ltd**
27	Datonet (Pty) Ltd
28	**DAVO CORP CC**
29	**Dimension Data**
30	**Dube Tradeport**
31	**E WISP**
32	**Edelnet**
33	**Equation Business Solutions**
34	**Evolution Tel (Pty) Ltd**
35	**First Technology Pty Ltd**
36	**Francois Okennedy W.O.R.X (Pty) ltd.**
37	**Fulloutput 1086 cc**
38	**Fusion Voice & Data**
39	**Future Perfect Corporation CC T/A Vanilla**
40	Group Lumen South Africa (Pty) Ltd.
41	Hero Telecoms (Pty) Ltd
42	**ICTGlobe Management**
43	**Imaginet**
44	**Imply I.T**
45	**Infogro PTY LTD**
46	**InterActive Systems Designs (Pty) Ltd**
47	**Interexcel World Conenction**
48	**Internet Uncapped CC**

49	**IT Square t/a TekConnect**
50	**IZAK SCHALK WILLEM VAN ZYL**
51	**KCS- Group**
52	**Kibo Connect (Pty) Ltd**
53	**Kliq Holdings**
54	**LaserNet (Pty) Ltd**
55	Letaba Networks (Pty) Ltd
56	Lidino Trading 534 t/a Nuwcom Wireless
57	Link Africa (Pty) Ltd
58	**Linux Based Systems Design SA (Pty) Ltd**
59	**Liquid Telecommunications South Africa (Pty) Ltd**
60	**Metro Fibre**
61	MTN
62	**Mweb, a divison of Internet Solutions Digital (Pty) Ltd**
63	**Nexus Net Wired and Wireless (Pty) Ltd**
64	**NW Internet Service CC**
65	**Orange Business Services South Africa Pty Ltd**
66	**Platoon Trade and Invest 149 (PTY) LTD TA Wanatel PTY) LTD**
67	**Product Merchandiser**
68	**Pronto Computer Solutions**
69	**Radiospoor (Welkom) Pty Ltd**
70	**RAIN (PTY) LTD**
71	**Reunert Limited**
72	Saicom Voice Services (Pty) Ltd
73	**SCAN RF Projects (Pty) Ltd**
74	Seagle Telecom

75	**Simigenix (Pty) Ltd**
76	SKYBER WIFI ENTERPRISES
77	**Skynology (PTY)LTD**
78	**SMS CELLULAR SERVICES PTY LTD**
79	**SMSPORTAL (PTY) LTD**
80	**SONIC**
81	**techCONNECT ISP**
82	**Technolutions Connected Services Holdings**
83	**Telkom**
84	**Telviva (Pty) Ltd**
85	**Think Speed**
86	TT CONNECT (PTY) LTD
87	**Urban Wisp**
88	**Viva Telecoms CC**
89	**Vodacom (Pty) Ltd**
90	**Vox Telecommunications (Pty) Ltd**
91	**Voys Telecom SA (Pty)Ltd**
92	**Wanatel PTY) LTD**
93	**Wispernet (Pty) Ltd**
94	**Wizard Net**
95	**WTRV Trust (Reseller)**
96	**Xlink Communications**
97	**Xnet Internet Services (Pty) Ltd**
98	**Zululand Wireless Network CC**
Broadcasting Licensees	
1	702

2	947
3	**BOKONE-BOPHIRIMA FM**
4	Bush Radio
5	**Cape Talk**
6	Deukom (Pty) Ltd.
7	e.tv (Pty) Ltd
8	Faith Broadcasting Terrestrial NPC
9	**Fine Music Radio**
10	**GROOTFM 905 NPC**
11	**Impact Radio**
12	**K FM**
13	Lekoa Multi-Media and Communication DC
14	**Life Broadcasting**
15	**LINK FM TRUST**
16	**Modiri FM**
17	MultiChoice (Pty) Ltd
18	Ngqushwa FM
19	**On Digital Media**
20	**Pretoria FM NPC**
21	Radio Islam
22	**Radio Laeveld**
23	**RADIO TYGERBERG**
24	Rocasat NPC t/a 100.5FM Radio Laeveld
25	SABC (Radio)
26	SABC (TV)
27	**UMOYA COMMUNICATIONS (PTY) LTD T/A ALGOAFM**

28	Univen FM
29	Witzenberg Radio (WRFM)
Postal Services Licensees	
1	**NightWing Couriers**
2	**PATHTEQ QPL LOGISTICS**
3	**SAPO**
4	**Postnet South Africa**
5	**RC Couriers**
6	**Royale International**
7	**The Courier Guy**

Appendix 2: Definitions of Telecommunications categories

Definitions of Telecommunications categories	
ICT	Information Communication Technology
Stats SA	Statistics South Africa
ECS	Electronic Communications Services
ECNS	Electronic Communications Network Services
GHS	General household survey
ISP's	Internet Service Providers

Telecommunications sector
The telecommunications sector comprises fixed and mobile telecommunications services as well as the provision of Internet access.
Total telecommunication investment
Total annual investment in telecommunication services, also referred to as annual capital expenditure, refers to the investment during the financial year in telecommunication services (including fixed, mobile and Internet services) for acquiring or upgrading property and networks. Property includes tangible assets such as plant, intellectual and non-tangible assets such as computer software. The indicator is a measure of investment in telecommunication infrastructure in the country and includes expenditure on initial installations and additions to existing installations where the usage is expected to be over an extended period of time. It excludes expenditure on research and development (R&D), annual fees for operating licences and the use of radio spectrum, and investment in telecommunication software or equipment for internal use.
Annual investment in fixed-telephone services
Refers to investment in fixed-telephone services for acquiring and upgrading property and networks within the country. This refers to annual investment in assets related to fixed-telephone networks and the provision of services.
Annual investment in fixed (wired) broadband services
Refers to investment in fixed (wired)-broadband services for acquiring and upgrading property and networks within the country. This refers to annual investment in assets related to fixed (wired)-broadband networks and the provision of services.
Annual investment in mobile communication services

Refers to investment in mobile services for acquiring and upgrading property and networks within the country. It should include investments made for mobile-broadband services. This refers to annual investment in assets related to mobile communication networks and the provision of services. It should include investment in mobile-broadband networks.
Other annual investment in telecommunication services
Refers to investment in other telecommunication services, such as fixed wireless-broadband, satellite and leased lines.
Total telecommunications revenue
The aggregated revenue includes the total telecommunications services revenue and any other revenue.
Total telecommunication services revenue
The sum of revenue from all telecommunication services (in local currency at current prices). Revenue from all telecommunication services refers to revenue earned from retail fixed-telephone, mobile-cellular, Internet and data services offered by telecommunication operators (both network and virtual, including resellers) offering services within the country during the financial year under review. It includes retail revenues earned from the transmission of TV signals but excludes revenues from TV content creation. Exclude: (i) wholesale revenues (e.g. termination rates), (ii) revenues from device sales and rents, (iii) VAT and excise taxes. Any deviation from the definition should be specified in a note, including clarifications on what TV revenues are included/excluded (e.g. IPTV, cable TV, pay satellite and free-to-air TV).
Total fixed line services revenue
This aggregate value is defined as the sum of Fixed line voice revenue, fixed (wired) internet revenue, Other fixed (wireless) broadband revenue and Other fixed telecommunications services revenue as defined below.
Total fixed line voice revenue
Sum of revenue from retail fixed-telephone services refers to revenue received for the connection (installation) of fixed-telephone services, revenue from recurring charges for subscription to the PSTN and revenue from fixed-telephone calls.
Revenue from fixed-telephone connection charges

Revenue from fixed-telephone connection charges refers to retail revenue received for connection (installation) of fixed- telephone services. This may include charges for transfer or cessation of services.
Revenue from fixed-telephone subscription charges
Revenue from fixed-telephone subscription charges refers to revenue from recurring charges for subscriptions to the PSTN, including Internet access if it cannot be separated from fixed-telephone.
Revenue from fixed-telephone calls
Revenue from fixed-telephone calls refers to retail fixed-telephone revenue received from charges for local, national long-distance and international calls.
Fixed (wired) internet revenue
Revenue from fixed (wired) Internet services refers to retail revenue received from the provision of fixed (wired) Internet services such as subscriptions, traffic and data communication. It excludes the provision of access lines used to connect to fixed (wired) Internet (such as fixed-telephone lines used to access DSL connections). This includes revenue from fixed (wired)-broadband services (previously a separate indicator under ITU code i7311_fb, but for reporting purposes here counted together with any small residual narrowband internet revenue in a single indicator, viz. fixed wired internet).
Other (wireless) broadband services revenue
Revenue from other wireless-broadband services refers to the retail revenue received from the provision of high-speed (at least 256 Kbit/s) data connectivity and related services over a wireless infrastructure other than mobile cellular, such as satellite or terrestrial fixed wireless broadband infrastructures.
Other fixed telecommunication services revenue, including leased lines revenue and fixed value-added telecommunication services
Revenue from leased lines refers to retail revenue received from the provision of leased lines.
Revenue from fixed value-added telecommunication services refers to the retail revenue generated by the telecommunication service sector for fixed value-added

telecommunication services, such as call forwarding, itemized billing, conference calls and voice-message services.
Value-added means additional services beyond the basic telephone service line rental and calls
Other telecommunication revenue refers to any other retail telecommunication services revenue received but not accounted for elsewhere.
Total mobile services revenue (retail)
Revenue from mobile networks refers to retail revenue earned from the provision of mobile-cellular communication services, including all voice, SMS and data (narrowband and broadband) services offered by mobile operators offering services within the country during the financial year under review. Revenues from value added services (e.g. premium SMS) should be included. Data reported should exclude: (i) wholesale revenues (e.g. termination rates), (ii) revenues from device sales and rents, (iii) VAT and excise taxes.
Revenue from mobile voice services
Refers to all mobile-cellular retail revenue from the provision of voice services. It includes voice revenues from national and international calls but excludes revenues from roaming services.
Revenue from outbound mobile cellular roaming
Refers to all mobile-cellular retail roaming revenue from own subscribers roaming abroad. It does not cover foreign mobile subscribers roaming into the country and international calls originating or terminating on the country's mobile networks.
Revenue from mobile data services
Refers to revenue from the provision of non-voice services including messaging (other than SME and MMs), data and Internet services, including M2M/telemetry. It excludes other mobile-cellular services and wireless Internet access services not relating to mobile networks (e.g. satellite or terrestrial fixed wireless technologies).
Revenue from text and multimedia messaging services
Refers to revenue from text messaging and multimedia messaging (SMS and MMS). Some countries may account for this in different ways. For example, some mobile plans include free SMS or MMS that are liable to be classified as voice revenue rather

than mobile-messaging revenue. The treatment of premium messages – where users pay an additional amount over the regular messaging rate – can vary among operators, since they typically share the revenue with a premium-service provider. Operators may also include revenue from international messaging in other categories. The preference is to include all revenue earned by the operator from the provision of messaging services to retail customers.
Other mobile services revenue
Any other mobile revenue, like banking
Total of any other revenue
Sum of interconnection revenue, equipment sale revenue and any other revenue
Interconnection revenues
Revenues from terminating voice and messaging traffic coming from outside the operator's own network
Equipment revenue
Revenues from equipment sales
Any other revenue
Any other revenue which could include wholesale revenues, excluding voice termination (interconnection); IT type services; revenue of a capital nature. E.g. sale of assets or a business.
Telecommunications employment
Persons employed in full-time equivalents
Persons employed in full-time equivalents refers to the total number of persons, in full-time equivalent (FTE) units, employed by telecommunication operators in the country for the provision of telecommunication services, including fixed-telephone, mobile-cellular, Internet and data services. This indicator excludes staff working in broadcasting businesses that offer only traditional broadcasting services. Part-time staff should be expressed in terms of full-time staff equivalents (FTE).
Telecoms employment- female
Persons employed by all telecommunication operators; female should be expressed in terms of full-time staff equivalents.
Telecommunication Subscriptions

Fixed-telephone subscriptions
Fixed-telephone subscriptions refers to the sum of active analogue fixed- telephone lines, voice-over-IP (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions, ISDN voice-channel equivalents and fixed public payphones. This indicator was previously called Main telephone lines in operation.
Analogue fixed-telephone lines
Analogue fixed-telephone lines refer to the number of active lines connecting subscribers' terminal equipment to the PSTN and which have a dedicated port in the telephone-exchange equipment. It includes all post-paid lines and those prepaid lines that have registered an activity in the past three months. This term is synonymous with the terms 'main station' and 'direct exchange line' (DEL) that are commonly used in telecommunication documents.
VoIP subscriptions
VoIP subscriptions refers to the number of voice-over-Internet protocol (VoIP) fixed-line subscriptions. It is also known as voice over broadband (VoB), and includes VoIP subscriptions through fixed wireless, DSL, cable, fibre optic and other fixed-broadband Internet platforms that provide fixed telephony using IP. It excludes software-based VoIP applications (e.g. VoIP with Skype using computer-to-computer or computer-to-telephone). Those VoIP subscriptions that do not imply a recurrent monthly fee should only be counted if they have generated inbound or outbound traffic within the past three months.
Fixed wireless local loop subscriptions
Fixed wireless local loop (WLL) subscriptions refers to subscriptions provided by licensed fixed-line telephone operators that provide 'last-mile' access to the subscriber using radio technology and where the subscriber's terminal equipment is either stationary or limited in its range of use.
ISDN voice-channel equivalents
ISDN voice-channel equivalents refers to the sum of basic-rate and primary-rate voice-channel equivalents (B-channel equivalents). Basic-rate voice-channel equivalents is the number of basic-rate ISDN subscriptions multiplied by 2, and

primary-rate voice-channel equivalents is the number of primary-rate ISDN subscriptions multiplied by 23 or 30, depending on the standard implemented.
Fixed public payphones
Fixed public payphones refers to payphones that are available to the public using the fixed network.
Mobile cellular subscriptions
Mobile-cellular telephone subscriptions, by post-paid and prepaid Mobile-cellular telephone subscriptions refers to the number of subscriptions to a public mobile-telephone service that provide access to the PSTN using cellular technology.
Prepaid mobile-cellular telephone subscriptions
Refers to the total number of mobile-cellular telephone subscriptions that use prepaid refills. These are subscriptions where, instead of paying an ongoing monthly fee, users purchase blocks of usage time. Although the definition of prepaid subscribers from the ITU definition is 3 month active subscribers (those used at least once in the last three months for making or receiving a call or carrying out a non-voice activity such as sending or reading an SMS or accessing the Internet), some South African operators do not have this metric available but rather count SIMs that have not been disconnected within a 90 day window, reporting, implying that the number may be overstated according to the strict definition. The indicator applies to all mobile-cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging and telemetry services.
Post-paid mobile-cellular telephone subscriptions
Refers to the total number of mobile-cellular subscriptions, including top up bundles, where subscribers are billed after their use of mobile services, at the end of each month. The post-paid service is provided on the basis of a prior arrangement with a mobile- cellular operator. Typically, the subscriber's contract specifies a limit or allowance of minutes, text messages, etc. The subscriber will be billed at a flat rate for any usage equal to or less than that allowance. Any usage above that limit incurs extra charges. Theoretically, a subscriber in this situation has no limit on use of mobile

services and, as a consequence, unlimited credit. M2M mobile-network subscriptions are included in post-paid subscriptions
M2M mobile-network subscriptions
M2M subscriptions is a subset of post-paid mobile cellular subscriptions and refers to the number of mobile-cellular machine- to-machine subscriptions that are assigned for use in machines and devices (cars, smart meters, consumer electronics) for the exchange of data between networked devices and are not part of a consumer subscription. For instance, SIM-cards in personal navigation devices, smart meters, trains and automobiles should be included. Mobile dongles and tablet subscriptions should be excluded.
Internet and data subscriptions
Fixed broadband subscriptions
Fixed-broadband subscriptions refers to fixed subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 Kbit/s. This includes cable modem, DSL, fibre-to-the- home/building, other fixed (wired)-broadband subscriptions, satellite broadband and terrestrial fixed wireless broadband. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It should include fixed WiMAX and any other fixed wireless technologies. It includes both residential subscriptions and subscriptions for organizations.
DSL Internet subscriptions
Refers to the number of Internet subscriptions using digital subscriber line (DSL) services to access the Internet, at downstream speeds greater than or equal to 256 Kbit/s. DSL is a technology for bringing high-bandwidth information to homes and small businesses over ordinary copper telephone lines. It should exclude very high-speed digital subscriber line (VDSL) subscriptions if these are provided using fibre directly to the premises.
Fibre-to-the-home/building Internet subscriptions
Refers to the number of Internet subscriptions using fibre-to-the-home or fibre-to-the-building, at downstream speeds equal to, or greater than, 256 Kbit/s. This should

include subscriptions where fibre goes directly to the subscriber's premises or fibre-to-the-building subscriptions that terminate no more than 2 metres from an external wall of the building. Fibre-to-the-cabinet and fibre-to-the-node are excluded.
Other fixed (wired) broadband subscriptions
Refers to Internet subscriptions using other fixed (wired) broadband technologies to access the Internet (other than DSL, cable modem, and fibre), at downstream speeds equal to, or greater than, 256 Kbit/s. This includes technologies such as ethernet LAN, and broadband-over-powerline (BPL) communications. Ethernet LAN subscriptions refer to subscriptions using IEEE 802.3 technology. BPL subscriptions refer to subscriptions using broadband-over-powerline services. Users of temporary broadband access (e.g. roaming between PWLAN hotspots), users of WiMAX and those with Internet access via mobile-cellular networks are excluded.
Wireless broadband subscriptions
Wireless-broadband subscriptions refers to the sum of satellite broadband, terrestrial fixed wireless broadband and active mobile-broadband subscriptions to the public Internet. The indicator does not cover fixed (wired) broadband or Wi-Fi subscriptions.
Satellite broadband subscriptions
Satellite broadband subscriptions refers to the number of satellite Internet subscriptions with an advertised download speed of at least 256 Kbit/s. It refers to the retail subscription technology and not the backbone technology.
Terrestrial fixed wireless broadband subscriptions
Terrestrial fixed wireless broadband subscriptions refer to the number of terrestrial fixed wireless Internet subscriptions with an advertised download speed of at least 256 Kbit/s. This includes fixed WiMAX and fixed wireless subscriptions but excludes occasional users at hotspots and Wi-Fi hotspot subscribers. It also excludes mobile-broadband subscriptions where users can access a service throughout the country wherever coverage is available."
Mobile data subscriptions
Number of prepaid and post-paid mobile subscriptions that were used to access the Internet the last 3 months, regardless of speed.

Traffic
Fixed line voice traffic
This aggregated value is the sum of Fixed line traffic (i.e. fixed-to-fixed) and all other fixed line originated traffic (Fixed to mobile and international outgoing).
Fixed line traffic
Refers to domestic fixed-to-fixed telephone traffic, in minutes. Domestic fixed-to-fixed telephone traffic refers to completed local and domestic long-distance fixed-telephone voice traffic. The indicator should be reported as the number of minutes of traffic during the reference quarter. This excludes minutes used for dial-up Internet access.
Local fixed-to-fixed telephone traffic, in minutes
Refers to effective (completed) fixed-telephone line voice traffic exchanged within the local charging area in which the calling station is situated. This is the area within which one subscriber can call another on payment of the local charge (if applicable). This is reported in the number of minutes, which should exclude minutes used for dial-up Internet access.
Long-distance fixed-to-fixed telephone traffic, in minutes
Refers to effective (completed) fixed national long-distance telephone voice traffic exchanged with a station outside the local charging area in which the calling station is situated. This is reported as the number of minutes of traffic. It excludes local calls, calls to mobile networks, calls abroad, and calls to special service numbers such as ISPs for Internet dial-up.
Fixed-to-mobile telephone traffic
Refers to total traffic from all fixed-telephone networks to all mobile-cellular networks within the country.
International incoming and outgoing fixed-telephone traffic
Refers to the sum of international incoming and outgoing fixed-telephone voice traffic.
International outgoing fixed-telephone traffic, in minutes
Refers to effective (completed) fixed-telephone voice traffic originating in a given country to destinations outside that country. This should include traffic to mobile

phones outside the country. This is reported in number of minutes of traffic. It excludes calls originating in other countries. It should include VoIP traffic.
International incoming fixed-telephone traffic, in minutes
Refers to effective (completed) fixed-telephone voice traffic originating outside the country with a destination inside the country, irrespective of whether the call was from a fixed or mobile subscriber. It excludes minutes of calls terminating in other countries, but includes VoIP traffic
Mobile voice traffic
This aggregated value is the sum of Total national mobile traffic, as defined below, and international outgoing from mobile.
Total national mobile traffic
Domestic mobile-telephone traffic refers to the total number of minutes of calls made by mobile subscribers within a country (including minutes to fixed-telephone and minutes to mobile-phone subscribers).
Outgoing mobile traffic to same mobile network
Refers to the number of minutes of calls made by mobile subscribers to the same mobile network (within the country). This refers to the number of minutes originating on mobile networks and terminating on the same mobile network (on-net). It does not cover minutes of calls from mobile to fixed or mobile to other mobile networks.
Mobile to other mobile networks
Outgoing mobile traffic to other mobile networks, in minutes refers to the number of minutes of calls made by mobile subscribers to other mobile networks (within the country). The indicator refers to the number of minutes originating on mobile networks and terminating on different domestic mobile networks (off-net). It does not cover minutes of calls from mobile to fixed or mobile to the same mobile networks.
Outgoing mobile traffic to fixed networks
Refers to the number of minutes of calls made from mobile-cellular networks to fixed-line telephone networks within the country. The indicator refers to the number of minutes originating on mobile networks and terminating on fixed-line telephone networks within the country.
International outgoing from mobile

Outgoing mobile traffic to international refers to the number of mobile minutes originating in a country to any destinations outside that country.
Incoming international traffic to mobile network
Refers to the number of incoming minutes (fixed and mobile) received by mobile networks originating in another country.
Mobile data traffic
Mobile data traffic (within the country) refers to data traffic originated within the country from mobile networks. Download and upload traffic should be added up and reported together. Traffic should be measured at the end-user access point. Wholesale and walled-garden traffic should be excluded. The traffic should be reported in terabytes.
SMS traffic
SMS sent refers to the total number of mobile short-message service (SMS) messages sent, both to national and international destinations. This should exclude messages sent from computers to mobile handsets or to other computers.
SMS international traffic
SMS international refers to the total number of mobile short-message service (SMS) messages sent to international destinations. This should exclude messages sent from computers to mobile handsets or to other computers.
Population coverage
3G population coverage
Percentage of the population covered by at a 3G mobile network refers to the percentage of inhabitants that are within range of a 3G mobile-cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants that are covered by a 3G mobile-cellular signal by the total population and multiplying by 100.
4G/LTE etc. population coverage
Percentage of the population covered by a 4G/LTE mobile network refers to the percentage of inhabitants that are within range of a 4G/LTE mobile-cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the

number of inhabitants that are covered by a 4G/LTE mobile-cellular signal by the total population and multiplying by 100. Note that all LTE variants are included.
Internet bandwidth
International Internet bandwidth
International outgoing Internet bandwidth
Refers to the total outgoing used capacity of international Internet bandwidth, in Mbit/s. This is measured as the sum of outgoing (uplink) capacity of all Internet exchanges offering international bandwidth.
International incoming Internet bandwidth
Refers to the total incoming used capacity of international Internet bandwidth, in Mbit/s. This is measured as the sum of incoming (downlink) capacity of all Internet exchanges offering international bandwidth.
Smartphone subscriptions
A smartphone is a mobile phone with advanced features: it has Wi-Fi connectivity, web browsing, capabilities, a high-resolution touchscreen display and the ability to use apps. The majority use one of the following mobile operating systems: Android, Symbian, iOS, Blackberry OS and Windows Mobile.
Fixed post-paid local telephone services prices
Installation fee for residential telephone service
Installation fee for residential telephone service refers to the one-off charge involved in applying for a basic residential post-paid fixed-telephone service. Taxes should be included. If not included, it should be specified in a note including the applicable tax rate.
Monthly subscription for residential telephone service
Monthly subscription for residential telephone service refers to the recurring fixed charge for subscribing to a residential post-paid fixed-telephone service. The charge should cover the rental of the line but not the rental of the terminal (e.g. telephone set). If the rental charge includes any allowance for free or reduced rate call units, this should be indicated in the note. Taxes should be included. If not included, it should be specified in a note including the applicable tax rate.
Price of a three-minute local call to a fixed-telephone line, peak rate

Price of a three-minute local call (peak-rate) to a fixed-telephone line refers to the price of a three-minute peak local call from a residential fixed-telephone line, including any call set-up charges, within the same exchange area using the subscriber's own terminal (i.e. not from a public telephone). Taxes should be included. If not included, it should be specified in a note including the applicable tax rate.
Price of a three-minute local call to a fixed-telephone line, off-peak rate
Price of a three-minute local call to a fixed-telephone line refers to the price of a three-minute off-peak local call from a residential fixed-telephone line, including any call set-up charges, within the same exchange area using the subscriber's own terminal (i.e. not from a public telephone). Taxes should be included. If not included, it should be specified in a note including the applicable tax rate.
Mobile-cellular prepaid prices
Mobile-cellular prepaid-price of a one-minute local call (peak, on-net)
Refers to the price per minute of a peak prepaid call from a mobile-cellular telephone with a prepaid subscription to another subscriber in the same network. Taxes should be included. If not included, it should be specified in a note including the applicable tax rate.
Mobile-cellular prepaid-price of a one-minute local call (off-peak, on-net)
Refers to the price per minute of a prepaid call from a mobile-cellular telephone with a prepaid subscription made to the same mobile-cellular network during off-peak time. Off-peak refers to the cheapest rate before mid-night. If the only off-peak period is after mid-night, the peak price should be used. Taxes should be included. If not included, it should be specified in a note including the applicable tax rate.
Mobile-cellular prepaid-price of SMS (on-net)
Mobile-cellular prepaid – price of SMS refers to the price of sending a short-message service (SMS) message from a mobile-cellular telephone with a prepaid subscription to a mobile-cellular number of the same network (on-net). Taxes should be included. If not included, it should be specified in a note including the applicable tax rate.
ICT Sector Black Economic Empowerment Measures
Telecoms employment -Black Top Management

Persons employed by all telecommunication operators, Black Top Management, should be expressed in terms of full-time staff equivalents. This should include Exco and other Executives.
Procurement Spend to all suppliers
Total spend on all goods and services procured by an Entity.
Procurement Spend to all suppliers based on the B-BBEE Procurement Recognition Levels
Total spend on all goods and services procured by an Entity based on the B-BBEE Procurement Recognition Levels.
Number of Schools connected based on obligations imposed by ICASA
Total number of Schools connected based on obligations imposed by ICASA to operators.

Total fixed line voice revenue
Sum of revenue from retail fixed-telephone services refers to revenue received for the connection (installation) of fixed-telephone services, revenue from recurring charges for subscription to the PSTN and revenue from fixed-telephone calls.
Revenue from fixed-telephone connection charges
Revenue from fixed-telephone connection charges refers to retail revenue received for connection (installation) of fixed- telephone services. This may include charges for transfer or cessation of services.
Revenue from fixed-telephone subscription charges
Revenue from fixed-telephone subscription charges refers to revenue from recurring charges for subscriptions to the PSTN, including Internet access if it cannot be separated from fixed-telephone.
Revenue from fixed-telephone calls
Revenue from fixed-telephone calls refers to retail fixed-telephone revenue received from charges for local, national long-distance and international calls.
Fixed (wired) internet revenue
Revenue from fixed (wired) Internet services refers to retail revenue received from the provision of fixed (wired) Internet services such as subscriptions, traffic and data

communication. It excludes the provision of access lines used to connect to fixed (wired) Internet (such as fixed-telephone lines used to access DSL connections). This includes revenue from fixed (wired)-broadband services (previously a separate indicator under ITU code i7311_fb, but for reporting purposes here counted together with any small residual narrowband internet revenue in a single indicator, viz. fixed wired internet).
Other (wireless) broadband services revenue
Revenue from other wireless-broadband services refers to the retail revenue received from the provision of high-speed (at least 256 Kbit/s) data connectivity and related services over a wireless infrastructure other than mobile cellular, such as satellite or terrestrial fixed wireless broadband infrastructures.
Other fixed telecommunication services revenue, including leased lines revenue and fixed value-added telecommunication services
Revenue from leased lines refers to retail revenue received from the provision of leased lines.
Revenue from fixed value-added telecommunication services refers to the retail revenue generated by the telecommunication service sector for fixed value-added telecommunication services, such as call forwarding, itemized billing, conference calls and voice-message services.
Value-added means additional services beyond the basic telephone service line rental and calls
Other telecommunication revenue refers to any other retail telecommunication services revenue received but not accounted for elsewhere.
Total mobile services revenue (retail)
Revenue from mobile networks refers to retail revenue earned from the provision of mobile-cellular communication services, including all voice, SMS and data (narrowband and broadband) services offered by mobile operators offering services within the country during the financial year under review. Revenues from value added services (e.g. premium SMS) should be included. Data reported should exclude: (i) wholesale revenues (e.g. termination rates), (ii) revenues from device sales and rents, (iii) VAT and excise taxes.

Revenue from mobile voice services
Refers to all mobile-cellular retail revenue from the provision of voice services. It includes voice revenues from national and international calls but excludes revenues from roaming services.

Revenue from outbound mobile cellular roaming
Refers to all mobile-cellular retail roaming revenue from own subscribers roaming abroad. It does not cover foreign mobile subscribers roaming into the country and international calls originating or terminating on the country's mobile networks.
Revenue from mobile data services
Refers to revenue from the provision of non-voice services including messaging (other than SME and MMs), data and Internet services, including M2M/telemetry. It excludes other mobile-cellular services and wireless Internet access services not relating to mobile networks (e.g. satellite or terrestrial fixed wireless technologies).
Revenue from text and multimedia messaging services
Refers to revenue from text messaging and multimedia messaging (SMS and MMS). Some countries may account for this in different ways. For example, some mobile plans include free SMS or MMS that are liable to be classified as voice revenue rather than mobile-messaging revenue. The treatment of premium messages – where users pay an additional amount over the regular messaging rate – can vary among operators, since they typically share the revenue with a premium-service provider. Operators may also include revenue from international messaging in other categories. The preference is to include all revenue earned by the operator from the provision of messaging services to retail customers.
Other mobile services revenue
Any other mobile revenue, like banking
Total of any other revenue
Sum of interconnection revenue, equipment sale revenue and any other revenue
Interconnection revenues
Revenues from terminating voice and messaging traffic coming from outside the operator's own network

Equipment revenue
Revenues from equipment sales
Any other revenue
Any other revenue which could include wholesale revenues, excluding voice termination (interconnection); IT type services; revenue of a capital nature. E.g. sale of assets or a business.
Telecommunications employment
Persons employed in full-time equivalents
Persons employed in full-time equivalents refers to the total number of persons, in full-time equivalent (FTE) units, employed by telecommunication operators in the country for the provision of telecommunication services, including fixed-telephone, mobile-cellular, Internet and data services. This indicator excludes staff working in broadcasting businesses that offer only traditional broadcasting services. Part-time staff should be expressed in terms of full-time staff equivalents (FTE).
Telecoms employment- female
Persons employed by all telecommunication operators; female should be expressed in terms of full-time staff equivalents.
Telecommunication Subscriptions
Fixed-telephone subscriptions
Fixed-telephone subscriptions refers to the sum of active analogue fixed- telephone lines, voice-over-IP (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions, ISDN voice-channel equivalents and fixed public payphones. This indicator was previously called Main telephone lines in operation.
Analogue fixed-telephone lines
Analogue fixed-telephone lines refer to the number of active lines connecting subscribers' terminal equipment to the PSTN, and which have a dedicated port in the telephone-exchange equipment. It includes all post-paid lines and those prepaid lines that have registered an activity in the past three months. This term is synonymous with the terms 'main station' and 'direct exchange line' (DEL) that are commonly used in telecommunication documents.
VoIP subscriptions

VoIP subscriptions refers to the number of voice-over-Internet protocol (VoIP) fixed-line subscriptions. It is also known as voice over broadband (VoB), and includes VoIP subscriptions through fixed wireless, DSL, cable, fibre optic and other fixed-broadband Internet platforms that provide fixed telephony using IP. It excludes software-based VoIP applications (e.g. VoIP with Skype using computer-to-computer or computer-to-telephone). Those VoIP subscriptions that do not imply a recurrent monthly fee should only be counted if they have generated inbound or outbound traffic within the past three months.
Fixed wireless local loop subscriptions
Fixed wireless local loop (WLL) subscriptions refers to subscriptions provided by licensed fixed-line telephone operators that provide 'last-mile' access to the subscriber using radio technology and where the subscriber's terminal equipment is either stationary or limited in its range of use.
ISDN voice-channel equivalents
ISDN voice-channel equivalents refers to the sum of basic-rate and primary-rate voice-channel equivalents (B-channel equivalents). Basic-rate voice-channel equivalents is the number of basic-rate ISDN subscriptions multiplied by 2, and primary-rate voice-channel equivalents is the number of primary-rate ISDN subscriptions multiplied by 23 or 30, depending on the standard implemented.
Fixed public payphones
Fixed public payphones refers to payphones that are available to the public using the fixed network.
Mobile cellular subscriptions
Mobile-cellular telephone subscriptions, by post-paid and prepaid Mobile-cellular telephone subscriptions refers to the number of subscriptions to a public mobile-telephone service that provide access to the PSTN using cellular technology.
Prepaid mobile-cellular telephone subscriptions
Refers to the total number of mobile-cellular telephone subscriptions that use prepaid refills. These are subscriptions where, instead of paying an ongoing monthly fee, users purchase blocks of usage time. Although the definition of prepaid subscribers from the ITU definition is 3 month active subscribers (those used at

least once in the last three months for making or receiving a call or carrying out a non-voice activity such as sending or reading an SMS or accessing the Internet), some South African operators do not have this metric available but rather count SIMs that have not been disconnected within a 90 day window, reporting, implying that the number may be overstated according to the strict definition. The indicator applies to all mobile-cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging and telemetry services.
Post-paid mobile-cellular telephone subscriptions
Refers to the total number of mobile-cellular subscriptions, including top up bundles, where subscribers are billed after their use of mobile services, at the end of each month. The post-paid service is provided on the basis of a prior arrangement with a mobile- cellular operator. Typically, the subscriber's contract specifies a limit or allowance of minutes, text messages, etc. The subscriber will be billed at a flat rate for any usage equal to or less than that allowance. Any usage above that limit incurs extra charges. Theoretically, a subscriber in this situation has no limit on use of mobile services and, as a consequence, unlimited credit. M2M mobile-network subscriptions are included in post-paid subscriptions
M2M mobile-network subscriptions
M2M subscriptions is a subset of post-paid mobile cellular subscriptions and refers to the number of mobile-cellular machine- to-machine subscriptions that are assigned for use in machines and devices (cars, smart meters, consumer electronics) for the exchange of data between networked devices and are not part of a consumer subscription. For instance, SIM-cards in personal navigation devices, smart meters, trains and automobiles should be included. Mobile dongles and tablet subscriptions should be excluded.
Internet and data subscriptions
Fixed broadband subscriptions
Fixed-broadband subscriptions refers to fixed subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or

greater than, 256 Kbit/s. This includes cable modem, DSL, fibre-to-the-home/building, other fixed (wired)-broadband subscriptions, satellite broadband and terrestrial fixed wireless broadband. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It should include fixed WiMAX and any other fixed wireless technologies. It includes both residential subscriptions and subscriptions for organizations.
DSL Internet subscriptions
Refers to the number of Internet subscriptions using digital subscriber line (DSL) services to access the Internet, at downstream speeds greater than or equal to 256 Kbit/s. DSL is a technology for bringing high-bandwidth information to homes and small businesses over ordinary copper telephone lines. It should exclude very high-speed digital subscriber line (VDSL) subscriptions if these are provided using fibre directly to the premises.
Fibre-to-the-home/building Internet subscriptions
Refers to the number of Internet subscriptions using fibre-to-the-home or fibre-to-the-building, at downstream speeds equal to, or greater than, 256 Kbit/s. This should include subscriptions where fibre goes directly to the subscriber's premises or fibre-to-the-building subscriptions that terminate no more than 2 metres from an external wall of the building. Fibre-to-the-cabinet and fibre-to-the-node are excluded.
Other fixed (wired) broadband subscriptions
Refers to Internet subscriptions using other fixed (wired) broadband technologies to access the Internet (other than DSL, cable modem, and fibre), at downstream speeds equal to, or greater than, 256 Kbit/s. This includes technologies such as ethernet LAN, and broadband-over-powerline (BPL) communications. Ethernet LAN subscriptions refer to subscriptions using IEEE 802.3 technology. BPL subscriptions refer to subscriptions using broadband-over-powerline services. Users of temporary broadband access (e.g. roaming between PWLAN hotspots), users of WiMAX and those with Internet access via mobile-cellular networks are excluded.
Wireless broadband subscriptions

Wireless-broadband subscriptions refers to the sum of satellite broadband, terrestrial fixed wireless broadband, and active mobile-broadband subscriptions to the public Internet. The indicator does not cover fixed (wired) broadband or Wi-Fi subscriptions.
Satellite broadband subscriptions
Satellite broadband subscriptions refers to the number of satellite Internet subscriptions with an advertised download speed of at least 256 Kbit/s. It refers to the retail subscription technology and not the backbone technology.
Terrestrial fixed wireless broadband subscriptions
Terrestrial fixed wireless broadband subscriptions refer to the number of terrestrial fixed wireless Internet subscriptions with an advertised download speed of at least 256 Kbit/s. This includes fixed WiMAX and fixed wireless subscriptions but excludes occasional users at hotspots and Wi-Fi hotspot subscribers. It also excludes mobile-broadband subscriptions where users can access a service throughout the country wherever coverage is available."
Mobile data subscriptions
Number of prepaid and post-paid mobile subscriptions that were used to access the Internet the last 3 months, regardless of speed.

Traffic
Fixed line voice traffic
This aggregated value is the sum of Fixed line traffic (i.e. fixed-to-fixed) and all other fixed line originated traffic (Fixed to mobile and international outgoing).
Fixed line traffic
Refers to domestic fixed-to-fixed telephone traffic, in minutes. Domestic fixed-to-fixed telephone traffic refers to completed local and domestic long-distance fixed-telephone voice traffic. The indicator should be reported as the number of minutes of traffic during the reference quarter. This excludes minutes used for dial-up Internet access.
Local fixed-to-fixed telephone traffic, in minutes

Refers to effective (completed) fixed-telephone line voice traffic exchanged within the local charging area in which the calling station is situated. This is the area within which one subscriber can call another on payment of the local charge (if applicable). This is reported in the number of minutes, which should exclude minutes used for dial-up Internet access.
Long-distance fixed-to-fixed telephone traffic, in minutes
Refers to effective (completed) fixed national long-distance telephone voice traffic exchanged with a station outside the local charging area in which the calling station is situated. This is reported as the number of minutes of traffic. It excludes local calls, calls to mobile networks, calls abroad, and calls to special service numbers such as ISPs for Internet dial-up.
Fixed-to-mobile telephone traffic
Refers to total traffic from all fixed-telephone networks to all mobile-cellular networks within the country.
International incoming and outgoing fixed-telephone traffic
Refers to the sum of international incoming and outgoing fixed-telephone voice traffic.
International outgoing fixed-telephone traffic, in minutes
Refers to effective (completed) fixed-telephone voice traffic originating in a given country to destinations outside that country. This should include traffic to mobile phones outside the country. This is reported in number of minutes of traffic. It excludes calls originating in other countries. It should include VoIP traffic.
International incoming fixed-telephone traffic, in minutes
Refers to effective (completed) fixed-telephone voice traffic originating outside the country with a destination inside the country, irrespective of whether the call was from a fixed or mobile subscriber. It excludes minutes of calls terminating in other countries, but includes VoIP traffic
Mobile voice traffic
This aggregated value is the sum of Total national mobile traffic, as defined below, and international outgoing from mobile.
Total national mobile traffic

Domestic mobile-telephone traffic refers to the total number of minutes of calls made by mobile subscribers within a country (including minutes to fixed-telephone and minutes to mobile-phone subscribers).
Outgoing mobile traffic to same mobile network
Refers to the number of minutes of calls made by mobile subscribers to the same mobile network (within the country). This refers to the number of minutes originating on mobile networks and terminating on the same mobile network (on-net). It does not cover minutes of calls from mobile to fixed or mobile to other mobile networks.
Mobile to other mobile networks
Outgoing mobile traffic to other mobile networks, in minutes refers to the number of minutes of calls made by mobile subscribers to other mobile networks (within the country). The indicator refers to the number of minutes originating on mobile networks and terminating on different domestic mobile networks (off-net). It does not cover minutes of calls from mobile to fixed or mobile to the same mobile networks.
Outgoing mobile traffic to fixed networks
Refers to the number of minutes of calls made from mobile-cellular networks to fixed-line telephone networks within the country. The indicator refers to the number of minutes originating on mobile networks and terminating on fixed-line telephone networks within the country.
International outgoing from mobile
Outgoing mobile traffic to international refers to the number of mobile minutes originating in a country to any destinations outside that country.
Incoming international traffic to mobile network
Refers to the number of incoming minutes (fixed and mobile) received by mobile networks originating in another country.
Mobile data traffic
Mobile data traffic (within the country) refers to data traffic originated within the country from mobile networks. Download and upload traffic should be added up and reported together. Traffic should be measured at the end-user access point.

Wholesale and walled-garden traffic should be excluded. The traffic should be reported in terabytes.
Population coverage
3G population coverage
Percentage of the population covered by at a 3G mobile network refers to the percentage of inhabitants that are within range of a 3G mobile-cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants that are covered by a 3G mobile-cellular signal by the total population and multiplying by 100.
4G/LTE etc. population coverage
Percentage of the population covered by a 4G/LTE mobile network refers to the percentage of inhabitants that are within range of a 4G/LTE mobile-cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants that are covered by a 4G/LTE mobile-cellular signal by the total population and multiplying by 100. Note that all LTE variants are included.
Internet bandwidth
International Internet bandwidth
International outgoing Internet bandwidth
Refers to the total outgoing used capacity of international Internet bandwidth, in Mbit/s. This is measured as the sum of outgoing (uplink) capacity of all Internet exchanges offering international bandwidth.
International incoming Internet bandwidth
Refers to the total incoming used capacity of international Internet bandwidth, in Mbit/s. This is measured as the sum of incoming (downlink) capacity of all Internet exchanges offering international bandwidth.
BRICS
the acronym coined for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa
Vitual post users

Is a digital mailbox post service that you access via any computer, tablet, or smartphone. Receive, forward, pick up, shred, or discard mail and packages. It allows you to manage your postal mail and packages with our smartphone app or online anytime, from anywhere

Broadcasting definitions used.

Indicators	Indicator Definition
Total revenue	The aggregated revenue includes Total Broadcasting Services Revenue and should tie back to your overall revenue
Total broadcasting services revenue	Sum of revenue from all broadcasting services specifically itemised below (in local currency at current prices).
Revenue from Broadcasting Promotions (with flighting code).	Revenue from Broadcasting Promotions (with flighting code). Excludes revenue from promotions without flighting code.
Total of any other revenue	Any other revenue not specifically itemised above
Broadcasting employment - Total	Persons employed in full-time equivalents. Persons employed in full-time equivalents refers to the total number of persons, in full-time equivalent (FTE) units, employed by telecommunication operators in the country for the provision of telecommunication services, including fixed-telephone, mobile-cellular, Internet and data services. This indicator excludes staff working in broadcasting businesses that offer only traditional broadcasting services. Part-time staff should be expressed in terms of full-time staff equivalents (FTE).
Broadcasting employment-female	Persons employed by all broadcasting licensees; female should be expressed in terms of full-time staff equivalents.
Broadcasting employment-people living with disabilities.	Persons employed by all broadcasting licensees who are living with disabilities.
Broadcasting employment-Unskilled	Persons employed by all broadcasting licensees who possess no particular skills and usually do not require formal education.

Broadcasting employment- Semiskilled	Persons employed by all broadcasting licensees who have or requires less training.
Broadcasting employment- skilled	Persons employed by all broadcasting licensees who have special skill, training, knowledge, and (usually acquired) ability in their work. A skilled worker may have attended a college, university or technical school.
Broadcasting employment- Top Management (EXCO members)	Persons employed by all broadcasting licensees, Top Management, should be expressed in terms of full-time staff equivalents. This should include Exco and other Executives.
Broadcasting employment- Black Top Management (EXCO members)	Persons employed by all broadcasting licensees, Black Top Management, should be expressed in terms of full-time staff equivalents. This should include Exco and other Executives.
Broadcasting employment- Black Top Female Management (EXCO members)	Persons employed by all broadcasting licensees, Black Top Female Management, should be expressed in terms of full-time staff equivalents. This should include Exco and other Executives.
Investment	Total annual investment in broadcasting services, also referred to as annual capital expenditure, refers to the investment during the financial year in broadcasting services. The indicator is a measure of investment in broadcasting infrastructure in the country and includes expenditure on initial installations and additions to existing installations where the usage is expected to be over an extended period of time. It excludes expenditure on research and development (R&D), annual fees for operating licences and the use of radio spectrum, and investment in broadcasting software or equipment for internal use.
Total Number of Local independent productions	Local independent television product means a production of television content by a person not directly or indirectly employed by any broadcasting service licensee; or by a person who is not controlled by or is in control of any broadcasting services.
Total Number of international independent productions	International independent television product means a production of television content by a person not directly or indirectly employed by any broadcasting service licensee; or by a person who is not controlled by or is in control of any broadcasting services.

Music royalties spend (In Rand)	Music royalties are typically agreed as a percentage of gross or net revenues derived from the use of an asset or fixed price per unit sold of an item of such, but there are also other modes and metrics of compensation. A royalty interest is the right to collect a stream of future royalty payments
International Music royalties spend (In Rand)	Music royalties are typically agreed as a percentage of gross or net revenues derived from the use of an asset or fixed price per unit sold of an item of such, but there are also other modes and metrics of compensation. A royalty interest is the right to collect a stream of future royalty payments
Local Music royalties spend (In Rand)	Music royalties are typically agreed as a percentage of gross or net revenues derived from the use of an asset or fixed price per unit sold of an item of such, but there are also other modes and metrics of compensation. A royalty interest is the right to collect a stream of future royalty payments

Postal Sector Definitions used.

Indicators required	Indicator Definition
Postal employment- female	Persons employed by all Postal licensees; female (should be expressed in terms of full-time staff equivalents.
Postal employment- People living with disabilities	Persons employed by all Postal licensees who are living with disabilities.
Postal employment- Unskilled	Persons employed by all Postal licensees who possess no skills and usually do not require formal education.
Postal employment- Semiskilled	Persons employed by all Postal licensees who have or requires less training.
Postal employment- skilled	Persons employed by all Postal licensees who have special skill, training, knowledge, and (usually acquired) ability in their work. A skilled worker may have attended a college, university or technical school.
Postal employment- Top Management (EXCO members)	Persons employed by all Postal licensees, Top Management, should be expressed in terms of full-time staff equivalents. This should include Exco and other Executives.

Postal employment- Black Top Management (EXCO members)	Persons employed by all Postal licensees, Black Top Management, should be expressed in terms of full-time staff equivalents. This should include Exco and other Executives.
Postal employment- Black Top Female Management (EXCO members)	Persons employed by all Postal licensees, Black Top Female Management, should be expressed in terms of full-time staff equivalents. This should include Exco and other Executives.
Letter delivery services (Registered letters)	Letter post: letter-post items essentially consist of letters, postcards, printed papers (newspapers, periodicals, advertising, etc.), small packets, items for the blind and, as applicable in the domestic service, commercial papers or samples of merchandise; items should not exceed 2 kg in weight
Letters: Domestic service and international outbound (International Mail Centre Volumes)	Letter post: letter-post items essentially consist of letters, postcards, printed papers (newspapers, periodicals, advertising, etc.), small packets, items for the blind and, as applicable in the domestic service, commercial papers or samples of merchandise; items should not exceed 2 kg in weight
Letters: Domestic service and international outbound (Local Volumes)	Letter post: letter-post items essentially consist of letters, postcards, printed papers (newspapers, periodicals, advertising, etc.), small packets, items for the blind and, as applicable in the domestic service, commercial papers or samples of merchandise; items should not exceed 2 kg in weight
Parcel delivery services	Parcels: non-express items containing mainly goods. Parcels included should not exceed 50 kg
Parcel: Domestic service and international outbound (International Mail Centre Volumes)	Parcels: non-express items containing mainly goods. Parcels included should not exceed 50 kg
Parcel: Domestic service and international outbound (Local Volumes)	Parcels: non-express items containing mainly goods. Parcels included should not exceed 50 kg
Express delivery services (EMS)	Express items: items containing correspondence, documents and goods

	which are processed in the most rapid way. Again, the items included should not exceed 50 kg.
Express: Domestic service and international outbound (International Mail Centre Volumes)	Express items: items containing correspondence, documents and goods which are processed in the most rapid way. Again, the items included should not exceed 50 kg.
Express: Domestic service and international outbound (Local Volumes)	Express items: items containing correspondence, documents and goods which are processed in the most rapid way. Again, the items included should not exceed 50 kg.
Mail delivery Parameters (Physical Address %)	Mail delivery Parameters with Physical Address in %
Mail delivery Parameters (PO Boxes %)	Mail delivery Parameters with PO Boxes in %
Number of inhabitants per postal service point	Number of inhabitants per postal service point
Investment	Total annual investment in broadcasting services, also referred to as annual capital expenditure, refers to the investment during the financial year in broadcasting services. The indicator is a measure of investment in broadcasting infrastructure in the country and includes expenditure on initial installations and additions to existing installations where the usage is expected to be over an extended period of time. It excludes expenditure on research and development (R&D), annual fees for operating licences and the use of radio spectrum, and investment in broadcasting software or equipment for internal use.

Appendix 3: Aggregated data from ICASA questionnaires

The table below lists the aggregated figures from the three ICASA questionnaires to the electronic communications licensees, the TV broadcasting licensees, and the postal services operators, for the period of 1 October 2022 -30th September 2023. For definitions, please refer to the Appendix 2 above, and for more clarification please refer to the notes accompanying the associated figures in the report.

Telecommunication data used	
Total telecommunication services revenue	**R208 288 440 948**
Total fixed line revenue	**R4 760 454 724**
Revenue from retail fixed-telephone services	R96 872 295
Revenue from fixed-telephone subscription charges	R2 368 400 284
Revenue from fixed-telephone calls	R2 295 182 145
Total Fixed Internet and data revenue	**R30 505 505 575**
Fixed Internet revenue (R)	R7 279 966 001
Revenue from fixed (wired)-broadband services	R15 430 350 929
Other wireless-broadband services revenue	R4 761 366 105
Other telecommunication services revenue, including leased lines revenue and fixed value-added telecommunication services	R3 033 822 540
Total mobile services revenue (Rm)	**R120 113 480 913**
Revenue from voice services	R31 034 769 803
Revenue from outbound roaming (R)	R2 336 917 275
Revenue from mobile data services	R63 200 961 447
Revenue from text and multimedia messaging services	R3 442 145 619
Prepaid revenue mobile voice	R21 322 759 923
Prepaid revenue mobile data	R34 628 791 106
Prepaid revenue mobile messaging	R655 662 385
Other mobile services revenue	R20 098 686 768
Total of any other revenue	**R52 908 999 736**
Interconnection revenues	R4 693 470 280
Equipment revenue	R29 778 570 460
Any other revenue	R18 436 958 996
Total telecommunication investment	**R36 637 379 367**
Annual investment in fixed-telephone services	R11 335 993
Annual investment in fixed (wired)-broadband services	R3 877 533 689
Annual investment in mobile communication services	R14 422 457 592
Infrastructure	R7 585 696 568
Expansion	R1 646 838 406
Maintenance	R2 718 098 002

Other annual investment in telecommunication services	R6 375 419 116
Fixed line subscriptions	**1 002 372**
Analogue fixed-telephone lines	293 032
VoIP subscriptions	391 806
Fixed wireless local loop subscriptions	35 331
ISDN voice-channel equivalents	280 043
Fixed public payphone	2 160
Mobile cellular subscriptions	**108 700 620**
Prepaid mobile-cellular telephone subscriptions	**90 019 248**
Prepaid mobile-cellular telephone subscriptions (Urban area)	84 555 692
Prepaid mobile-cellular telephone subscriptions (Rural area)	5 463 556
Postpaid mobile-cellular telephone subscriptions	**18 681 372**
Postpaid mobile-cellular telephone subscriptions (Urban area)	17 469 081
Postpaid mobile-cellular telephone subscriptions (Rural area)	1 212 291
Mobile Cellular Active Subscriptions (Active for more than 90 Days)	90 549 270
M2M mobile-network subscriptions	13 060 890
Fixed broadband subscriptions	**1 770 846**
DSL Internet subscriptions	255 223
Fibre-to-the-home/building Internet subscriptions	1 488 483
Other fixed (wired)-broadband subscriptions	27 140
Wireless-broadband subscriptions	**735 074**
Satellite broadband subscriptions	15 727
Terrestrial fixed wireless broadband subscriptions	719 347
Active mobile broadband subscriptions	**79 089 636**
Standard mobile-broadband subscriptions	54 661 074
Dedicated mobile-broadband subscriptions	24 428 562
Mobile data users	41 675 097
Fixed line traffic	**3 817 360 837**
Local fixed-to-fixed telephone traffic, in minutes	2 344 542 320
Long-distance fixed-to-fixed telephone traffic, in minutes	1 472 818 518
International incoming and outgoing fixed-telephone traffic	**311 017 780**
International outgoing fixed-telephone traffic, in minutes	231 147 010
International incoming fixed-telephone traffic, in minutes	79 870 770
Total national mobile traffic	**73 070 567 372**
Outgoing mobile traffic to same mobile network	52 139 235 727
Mobile to other mobile networks	18 386 622 908
Mobile to fixed	2 544 708 737
International outgoing from mobile	345 343 674
International incoming to mobile	183 480 210
SMS traffic	12 236 909 539
SMS international traffic	33 975 389

Mobile data traffic	67 348 719
International Internet bandwidth (Mbps) capacity	**2 945 120**
International outgoing Internet bandwidth	979 825
International incoming Internet bandwidth	1 965 294
Smartphone subscriptions	74 977 556
Total Number of batteries	150 415
Total Number of Generators	3 268
Total Amount spend on batteries	R2 591 565 092
Total Amount spend on Generators	R930 207 382
ICT Sector Black Economic Empowerment Measures	
Telecommunication employment -Total	30 862
Telecommunication employment- female	11 665
Telecommunication employment- people living with disabilities	436
Telecommunication employment- Unskilled	510
Telecommunication employment- Semi skilled	5 002
Telecommunication employment- skilled	21 832
Telecoms employment- Top Management (EXCO Members)	331
Telecoms employment- Black Top Management (EXCO Members)	119
Telecoms employment- Black Top Female Management (EXCO Members)	48
Procurement Spend to all suppliers	R174 448 994 355
Procurement Spend to all suppliers based on the B-BBEE Procurement Recognition Levels	R148 548 687 099
Number of Schools connected based on obligations imposed by ICASA	4 189
Broadcasting data used	
Total broadcasting services revenue	**R35 256 064 407**
Broadcasting Advertising Revenue	**R5 809 389 035**
Broadcasting Subscriptions Revenue	**R27 616 914 516**
Revenue from Broadcasting Promotions (with flighting code).	**R39 944 426**
Revenue from sponsorhips	**R513 658 312**
Revenue from Government or State grant	**R82 615 389**
Revenue from donations	**R8 802 492**
Revenue from infomercials	**R8 202 539**
Revenue from membership fees	**R4 519 355**
Total of any other revenue	**R1 172 018 344**
Itemised expenditure	**R16 187 636 457**
Program expenditure	**R16 187 636 457**
Subscriber and registered viewership numbers	**7 872 626**
Number of Pay TV subscribers	7 415 593
ICT Sector Economic Empowerment Measures	

Broadcasting employment -Total	3 524
Broadcasting employment- female	1 815
Broadcasting employment- people living with disabilities	90
Broadcasting employment- Unskilled	64
Broadcasting employment- Semi skilled	522
Broadcasting employment- skilled	2 633
Broadcasting employment- Top Management (EXCO members)	89
Broadcasting employment- Black Top Management (EXCO members)	43
Broadcasting employment- Black Top Female Management (EXCO members)	24
Procurement Spend to all suppliers	**R5 764 476 023**
Procurement Spend to all suppliers based on the B-BBEE Procurement Recognition Levels	**R2 970 808 031**
Total Number of Television (stations and distributors)	21 988 062
Number of Digital Satellite Stations	54
Number of Digital Terrestrial Stations	88
Number of Analogue Terrestrial Stations	12
Number of Signal Distributors	11
Number of set-top boxes	21 987 755
Number of Content Distributors	142
Investment	**R34 154 649**
Infrastructure	**R2 585 268**
Expansion	**R450 000**
Maintenance	**R12 379 273**
Others	**R18 740 108**
Total expenditure on Local independent productions (In Rand)	**R802 363 635**
Total expenditure on international Independent productions (In Rand)	**R546 467 459**
Total expenditure on broadcaster productions (In Rand)	**R162 032 253**
Postal services data used	
Total Postal service revenue	**R5 709 167 338**
Retail products revenue	**R843 482 000**
Services rendered – Postal	**R1 418 594 000**
Services rendered - Agency and money transfer	**R836 823 000**
Services rendered – Courier	**R2 600 951 422**
Balancing figure below	
Total of any other revenue	**R9 316 916**
Postal employment -Total	15 303
Postal employment- female	7 235
Postal employment- people living with disabilities	40
Postal employment- Unskilled	670
Postal employment- Semi skilled	11 527

Postal employment- skilled	2 626
Postal employment- Top Management (EXCO members)	33
Postal employment- Black Top Management (EXCO members)	13
Postal employment- Black Top Female Management (EXCO members)	5
Procurement Spend to all suppliers	**R1 957 859 862**
Procurement Spend to all suppliers based on the B-BBEE Procurement Recognition Levels	**R1 506 454 359**
Letter delivery services (Registered letters)	**250 803 045**
Letters: Domestic service and international outbound (International Mail Centre Volumes)	4 216 654
Letters: Domestic service and international outbound (Local Volumes)	246 586 391
Parcel delivery services	**19 912 214**
Parcel: Domestic service and international outbound (International Mail Centre Volumes)	23 299
Parcel: Domestic service and international outbound (Local Volumes)	19 888 915
Number of PO Boxes	3 629 037
Number of PO Boxes rented	161 020
Number of physical addresses in database	16 586 621
Investment	**R4 217 872**
Infrastructure	**R263 310**
Expansion	**R2 535 500**
Maintenance	**R1 419 062**

Source: ICASA Telecommunications, TV Broadcasting and Postal Questionnaires, January 2024.