

POSTAL AND TELECOMMUNICATIONS REGULATORY AUTHORITY OF ZIMBABWE (POTRAZ)



ANNUAL POSTAL AND TELECOMMUNICATIONS SECTOR PERFORMANCE REPORT

2021

Disclaimer:

This report has been prepared based on data provided by service providers. The information provided in this quarterly report is subject to alteration in case of any revisions or updates from the service providers. Although every effort has been made to ensure accuracy of the data contained in this report, the Authority is not liable for the inaccuracy of any information.

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1. EXECUTIVE SUMMARY

This report presents annual information on the performance of the markets within the postal and telecommunications sector during the period January to December 2021. The report covers data on subscriptions, usage traffic, infrastructure deployment, revenues, investment and employment in the postal and telecommunication sector. The data collected is also used by the Authority to monitor and inform policy decisions aimed at facilitate orderly growth of these sectors. The following trends characterised the postal and telecommunications sector in 2021:

- **Decline in fixed telephone subscriptions and growth in mobile telephone as well as Internet & data subscriptions**

The total number of active fixed telephone lines declined by 3.4% to reach 243,421 as at 31 December 2021, from 252,067 recorded as at 31 December 2020. As a result, the fixed density declined by 0.1% to reach 1.6% as at 31 December 2021, from 1.7% recorded as at 31 December 2020. On the other hand, active mobile subscriptions grew by 8.1% to reach 14,257,590 as at 31 December 2021, from 13,191,708 recorded as at 31 December 2020. The mobile penetration rate grew by 3.9% to reach 94.4% as at 31 December 2021, from 90.5% recorded as at 31 December 2020. The total number of active Internet and data subscriptions also grew by 7.3% to reach 9,526,421 as at 31 December 2021, from 8,878,649 recorded as at 31 December 2020; hence the Internet penetration rate increased by 2.4% to reach 63.1% from 60.9% recorded in 2020.

- **Overall growth in Internet & data usage as well as voice traffic**

A total of 96,194TB of mobile Internet and data were consumed in 2021. This represents a 97.2% growth from 48,781 TB of mobile Internet and data that were consumed in 2020. Used incoming international bandwidth capacity also increased by 22.2% to record 195,158Mbps from 159,665 recorded in 2020. Used outgoing international Internet bandwidth capacity also increased by 18.8% to record 54,464Mbps from 45,845Mbps recorded in 2020, signalling an increase in consumption of local online content. Total mobile and fixed voice traffic also increased by 24.6% to record 7.6 billion minutes from 6.1 billion minutes recorded in 2020.

- **Growth in postal and courier volumes**

Total postal and courier volumes increased by 7.2% to record 2.4 million items in 2021 from 2.3 million items in 2020. International incoming and outgoing postal and courier volumes recorded growth, whereas domestic postal and courier volumes declined. The increase in volumes is attributable to the relaxation of mail channelling restrictions in various jurisdictions. Despite the improvement in volumes in the year under review, mail volumes remain depressed and are significantly lower than the pre-COVID era where annual volumes exceeded 1 million items.

- **Growth in sector revenues vis-à-vis rising operating costs**

The year 2021 was characterised by a trend of growing revenues, amidst rising operating costs across all subsectors, owing to the inflationary economic environment. Total telecommunications sector revenue for 2021 was ZWL107 billion up from ZW38.8 billion recorded in 2020; this represents an annual variance of 175.9% and an inflation adjusted growth rate of 39%. Telecommunications operating costs amounted to ZWL64.3 billion up from ZW20.6 billion recorded in 2020, giving an annual variance of 212.6% and an inflation adjusted growth rate of 57.4%. Capital expenditure totalled ZW5.1 billion in 2021, from ZW900.6 million recorded in 2020. This represents an annual variance of 467.2% and an inflation adjusted growth rate of 185.7%. The capital expenditure was mainly on LTE and fibre expansion projects.

Postal and courier operators generated a total of ZWL1.5 billion up from ZW560.9 million recorded in 2020; this represents an annual variance of 173.8% and an inflation adjusted growth rate of 37.9%. Postal and courier operating costs amounted to ZWL1.4 billion up from ZW472.3 million recorded in 2020, giving an annual variance of 194.6% and an inflation adjusted growth rate of 48.4%. Capital expenditure totalled ZW25.6 million in 2021, from ZW12.1 million recorded in 2020. This represents an annual variance of 112.7% and an inflation adjusted growth rate of 7.1%.

- **Market structures remain relatively unchanged**

Market structures remained relatively unchanged across postal and telecommunications markets in 2021. The list of the licensed operators in the various markets as at 31 December 2020 is provided in the following table:

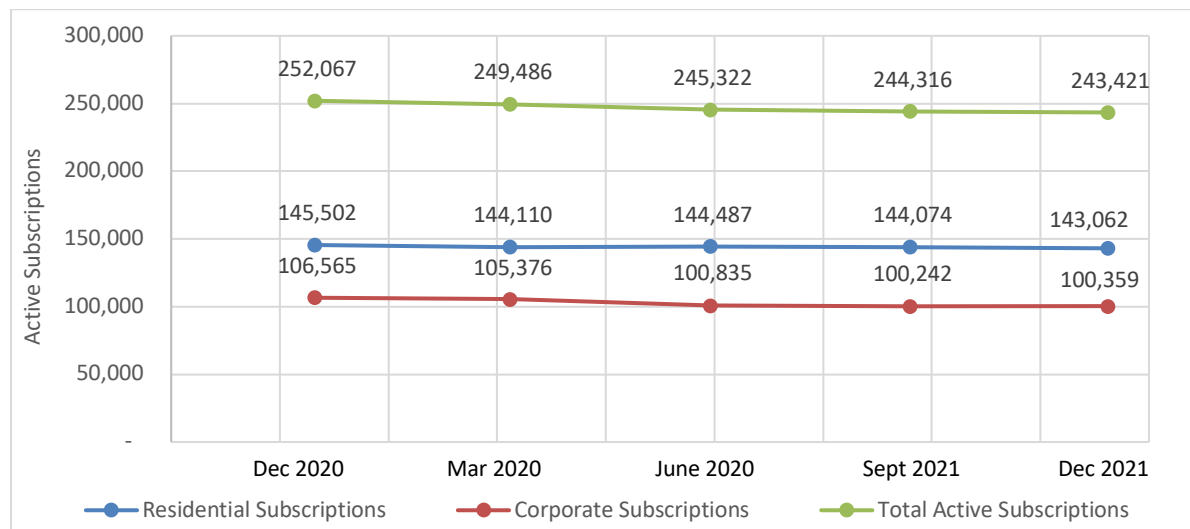
Market	Service Description	Licensed Operators
Fixed Telephone Service	Fixed Voice and Fixed Internet Services	1. TelOne
Mobile Cellular Services	Mobile Voice and Internet Services	1. Econet
		2. NetOne
		3. Telecel
Internet Access Providers (Class A)	Data and Internet Services	1. Africom
		2. TelOne
		3. Aquiva
		4. Dandemutande
		5. Liquid
		6. Pegasus
		7. Powertel
		8. Telecontract
		9. Dark Fibre Africa Zimbabwe
		10. Transmedia
Internet Access Provider (Class B)	Data and Internet Services	1. CommIT
		2. NetOne
Postal Services	Postal Services	1. ZIMPOST
Courier Services	Domestic and International Courier Services	1. DHL
		2. FEDEX
		3. Courier Connect
		4. Unifreight/Swift
		5. Innscor Transport Company t/a Overnight express
		6. United Parcel Services
		7. Skynet

2. SUBSCRIPTIONS & PENETRATION RATES

2.1 FIXED

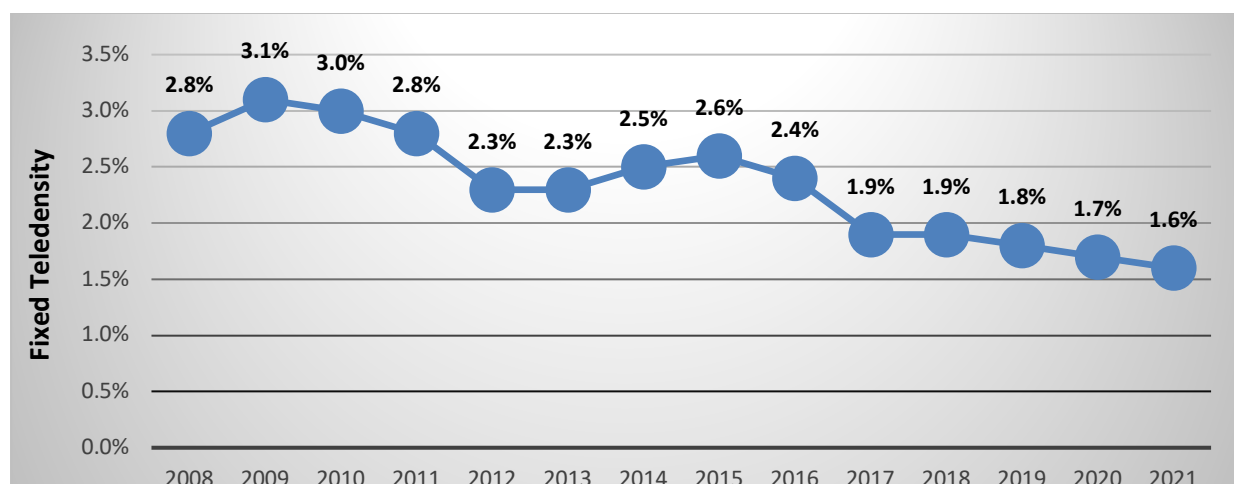
The total number of active fixed telephone lines declined by 3.4% to reach 243,421 as at 31 December 2021, from 252,067 recorded as at 31 December 2020. There was a decline in both residential and corporate subscriptions over the course of the year as shown in Figure 1 below:

Figure 1: Decline in Fixed Telephone Subscriptions



Corporate fixed telephone lines recorded a decline of 5.8% to reach 100,359 as at 31 December 2021 from 106,565 recorded as at 31 December 2020. Household/residential subscriptions also declined by 1.7% to reach 143,062 from 145,502 recorded as at 31 December 2020. As a result, the fixed density declined by 0.1% to reach 1.6% as at 31 December 2021, from 1.7% recorded as at 31 December 2020 as shown in Figure 2 below:

Figure 2: Fixed Teledensity



The fixed teledensity has been declining over the years due to competition from emerging services such as Voice over Internet Protocol (VoIP).

2.2 MOBILE

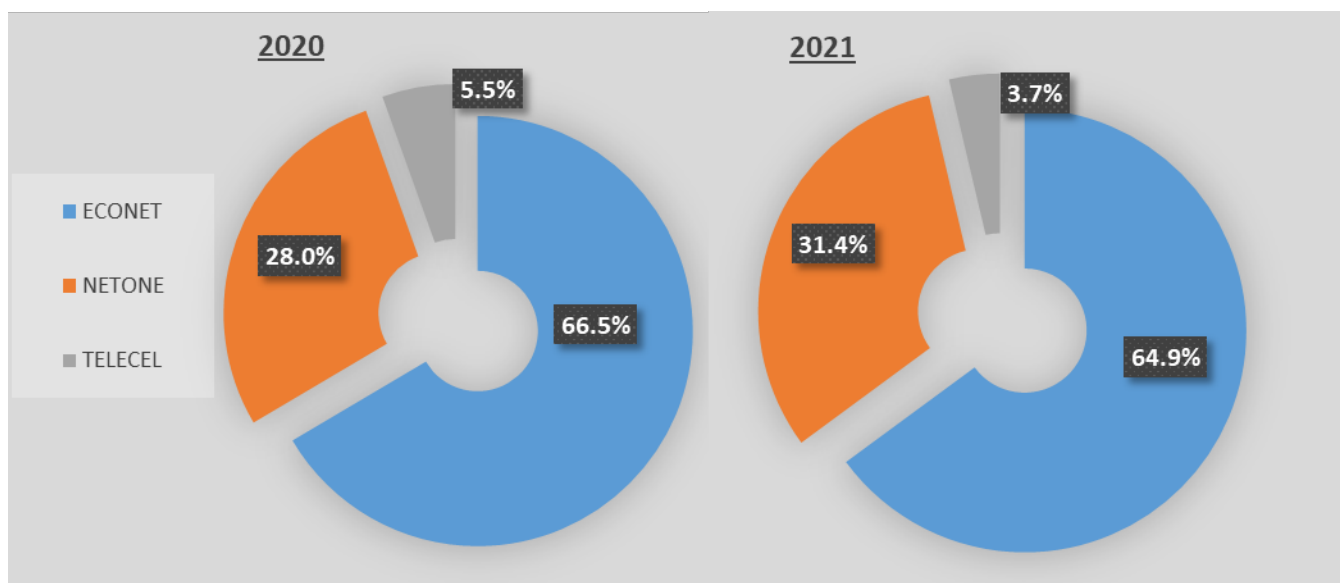
The total number of active mobile subscriptions as at 31 December 2021 was 14,257,590; this represents an 8.1% growth from 13,191,708 recorded as at 31 December 2020. All the mobile operators, with the exception of Telecel, recorded growth in annual active mobile subscriptions as shown below:

Table 1: Active Mobile Subscriptions per Operator

	Active Subscriptions 2020	Active Subscriptions 2021	% Change
Econet	8,773,300	9,253,453	5.5%
NetOne	3,691,314	4,470,592	21.1%
Telecel	727,094	533,545	-26.6%
Total	13,191,708	14,257,590	8.1%

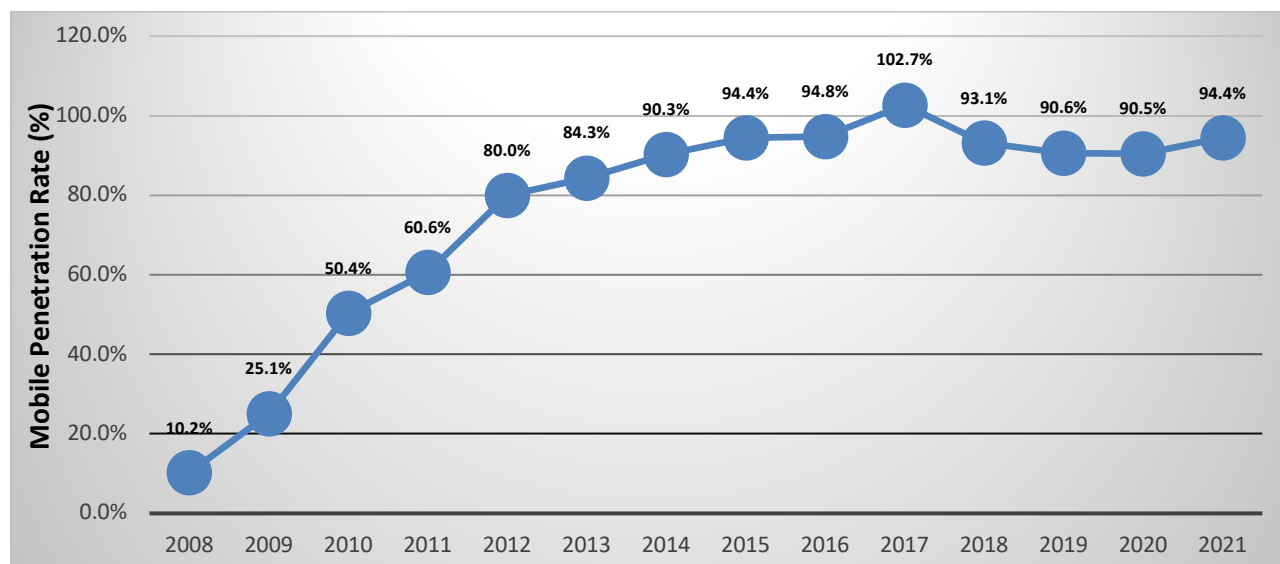
NetOne's subscriber base has been consistently declining over the past years. Their subscriber market share of 3.7% at the close of 2021, as shown in Figure 3 below, is a huge dip from their 2012 market share of 20.9%.

Figure 3: Market Share of Mobile Subscriptions



The mobile penetration rate grew by 3.9% to reach 94.4% as at 31 December 2021, from 90.5% recorded as at 31 December 2020 as shown in Figure 4 below:

Figure 4: Mobile penetration rate



The growth in the mobile penetration rate is a result of the growth in active mobile telephone subscriptions during the period under review.

2.3 INTERNET

The total number of active Internet and data subscriptions grew by 7.3% to reach 9,526,421 as at 31 December 2021, from 8,878,649 recorded as at 31 December 2020. The growth was driven by the increase in mobile Internet and data subscriptions, who account for 97.9% of total subscriptions as shown below:

Table 2: Active Internet subscriptions

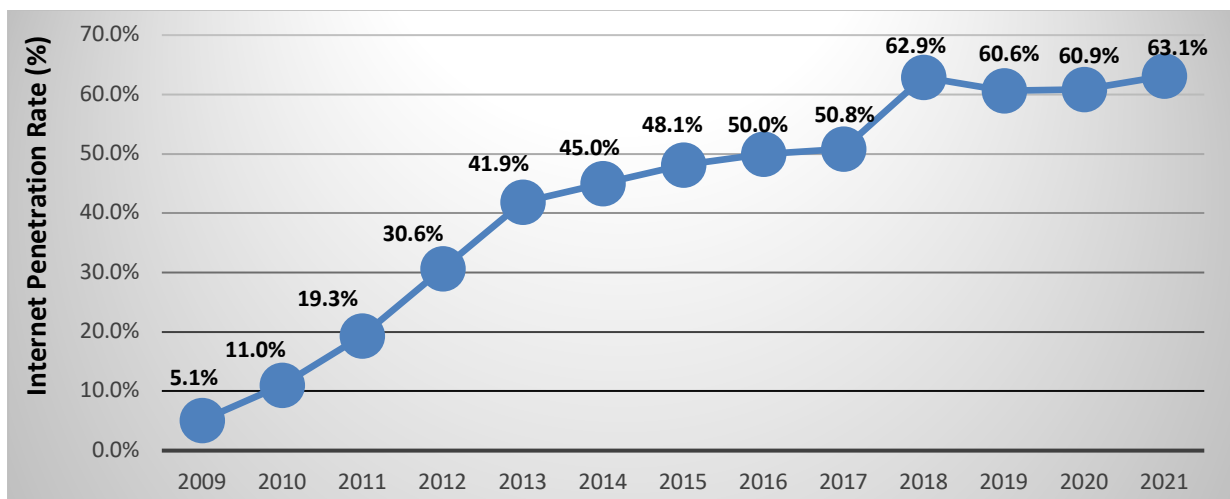
Technology	2020	2021	Annual Variation
Mobile Internet (3G, LTE...)	8,695,188	9,331,088	7.3%
Leased Lines	1,486	2,446	64.6%
DSL	112,133	111,701	-0.4%
WiMAX	4,661	6,185	32.7%
CDMA	14,065	10,344	-26.5%

VSAT	2,427	2,653	9.3%
Active Fibre links	48,689	62,004	27.3%
TOTAL	8,878,649	9,526,421	7.3%

Source: POTRAZ, Operator Returns

ADSL and CDMA were the only two categories to record a decline in active subscriptions. DSL faces competition from Fibre whilst CDMA has been declining over the years as it is gradually being replaced by other technologies. The Internet penetration rate increased by 2.4% to reach 63.1% from 60.9% recorded in 2020 as shown in Figure 5 below:

Figure 5: Internet penetration rate



The Internet penetration rate is expected to continue growing as access, demand and the scope of digital services improves.

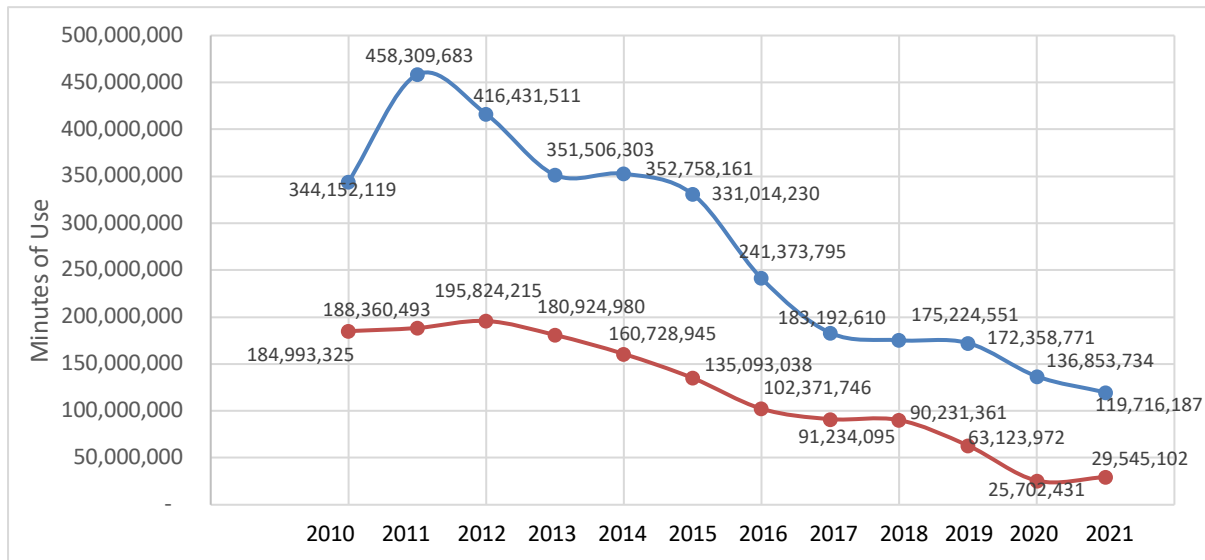
3. TRAFFIC AND USAGE PATTERNS

3.1 VOICE TRAFFIC

Fixed voice traffic declined by 5.1% to record 352,891,636 minutes in 2021, from 371,780,745 minutes recorded in 2020. The decline in fixed voice traffic is attributable to the decline in active subscriptions as well as substitution with VoIP and mobile. The scaling down of corporate operation due to COVID-19 also contributed to the decline in fixed voice traffic, as the bulk of traffic comes from corporate lines.

On the other hand, mobile voice traffic increased by 27% to record 7,256,772,789 minutes in 2021 from 5,713,889,986 minutes recorded in 2020. The growth in mobile voice traffic emanated from an increase in national on-net traffic due to promotional offerings. Total international incoming traffic declined whereas international outgoing traffic increased as shown in Figure 6 below:

Figure 6: International traffic

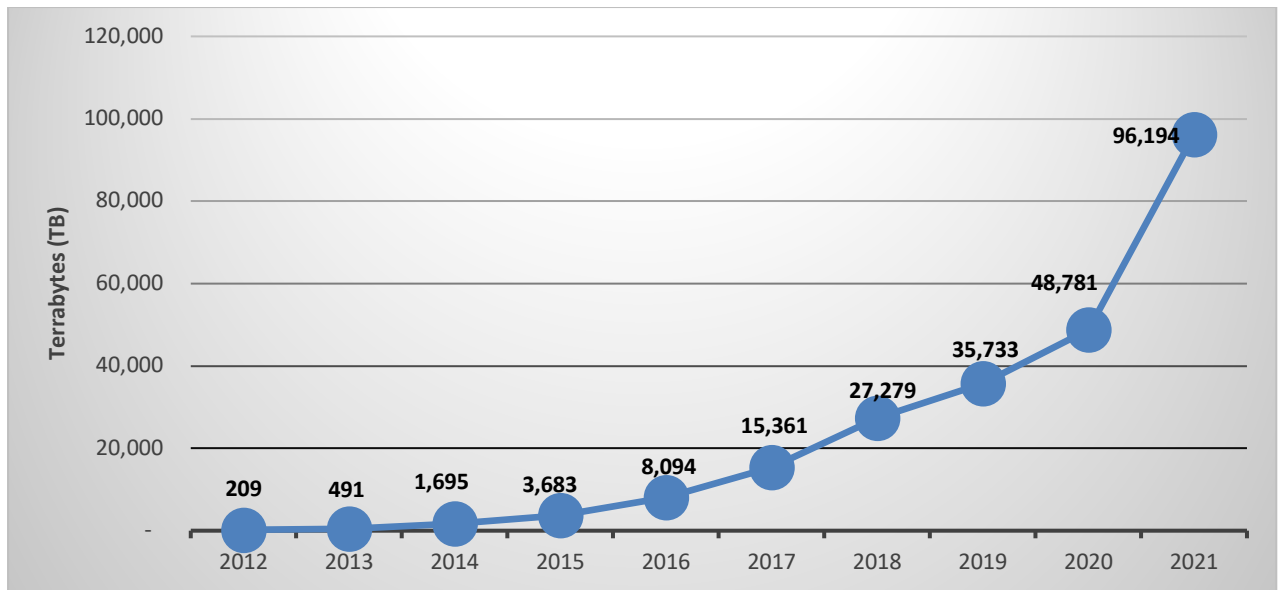


As shown above, international voice traffic has been declining over the years, particularly international incoming traffic. In the year under review, international incoming traffic declined by 12.5%, whereas international outgoing traffic increased by 15%. This implies a decline in foreign currency earnings from international voice traffic.

3.2 INTERNET & DATA TRAFFIC

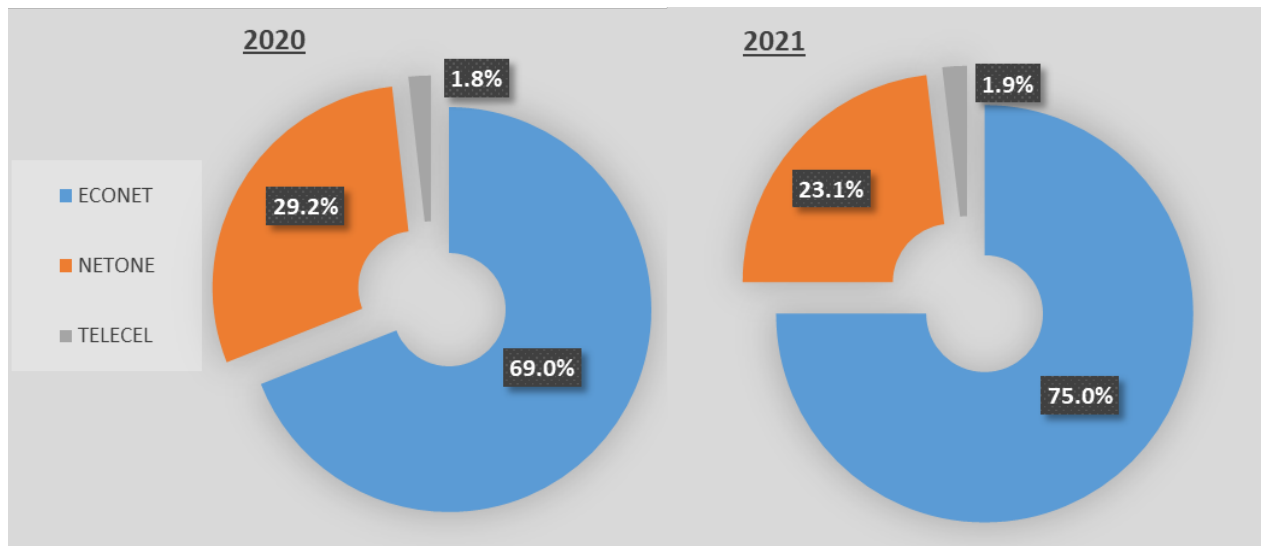
A total of 96,194TB of mobile Internet and data were consumed in 2021. This represents a 97.2% growth from 48,781 TB of mobile Internet and data that were consumed in 2020. Demand for Internet and data has been consistently growing as illustrated below:

Figure 7: Growth in mobile Internet & data usage



Internet and data usage was driven mainly by the growth in active subscriptions, increased adoption of e-learning, e-conferencing, work-from-home arrangements in light of COVID-19 as well as increased use of social media. Based on the mobile data usage per mobile operator, the market share of mobile data usage over the course of the year was as follows:

Figure 8: Market Share of Internet & data traffic

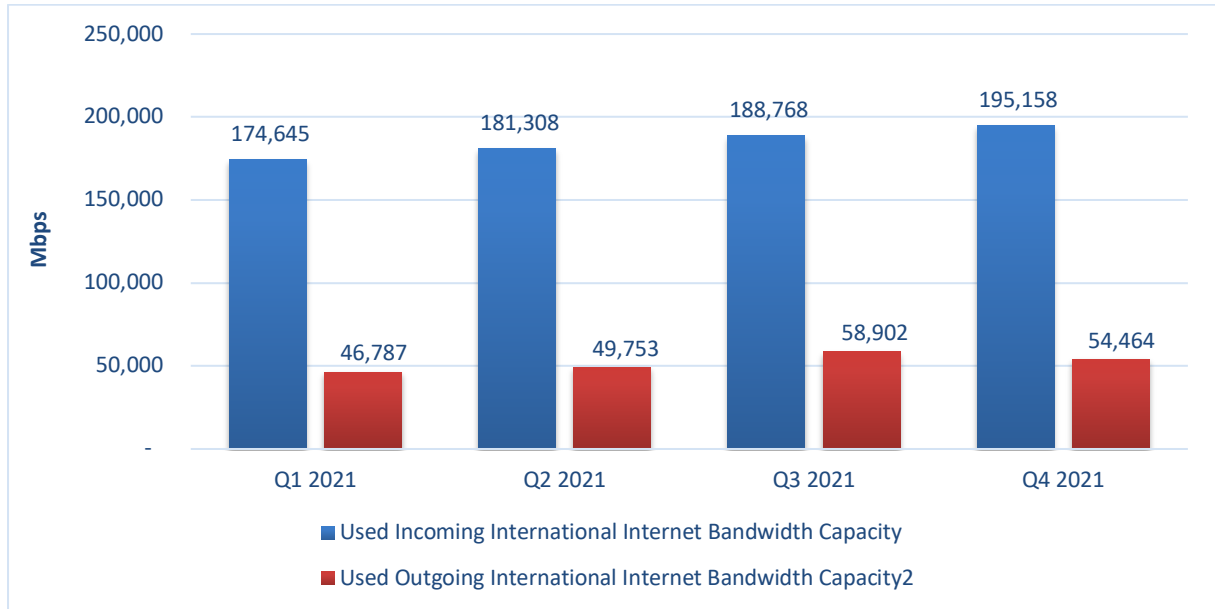


As shown above, NetOne lost market share of mobile Internet and data traffic by 6.1%, whereas, Econet and Telecel gained 6% and 0.1%, respectively.

Used incoming international bandwidth capacity also increased by 22.2% to record 195,158Mbps from 159,665 recorded in 2020. Used outgoing international Internet bandwidth capacity also increased by 18.8% to record 54,464Mbps from 45,845Mbps recorded in 2020,

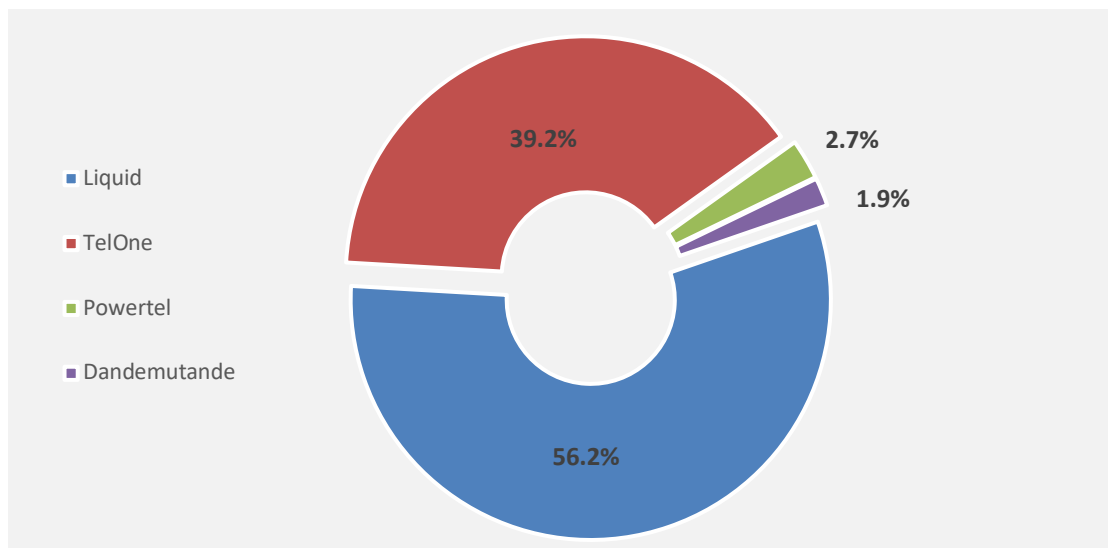
signalling an increase in consumption of local online content. The growth in used incoming and outgoing international Internet bandwidth capacity over the past year is shown in Figure 9 below:

Figure 9: International Internet Bandwidth Capacity



Used international Internet bandwidth capacity is expected to continue growing as the number of users increases and the scope of services widens due to Internet of Things improves. The market share of used international Internet bandwidth capacity was as follows:

Figure 10: Market Share of Used International Internet Bandwidth Capacity



3.3 POSTAL & COURIER VOLUMES

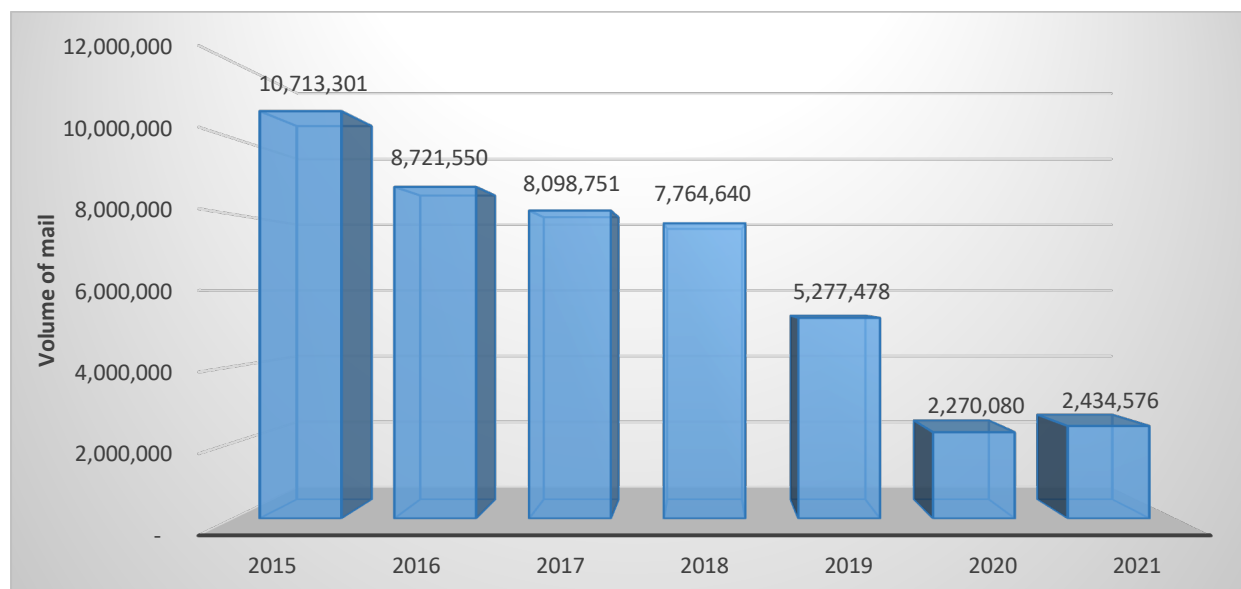
Total postal and courier volumes increased by 7.2% to record 2.4 million items in 2021 from 2.3 million items in 2020 as shown in Table 3 below:

Table 3: Postal & Courier Volumes

	2020	2021	% Growth
Domestic postal	1,220,688	1,186,780	-2.8%
domestic courier	524,732	477,724	-9.0%
International incoming postal & courier	464,456	646,930	39.3%
International outgoing postal & courier	53,204	123,142	131.5%
Total postal & courier	2,270,080	2,434,576	7.2%

The increase in mail volumes is attributable to the easing of Covid-19 mail channelling restrictions in various jurisdictions. Mail volumes over the past seven years is shown in Figure 11 below:

Figure 11: Postal & Courier Volumes



Despite the improvement in volumes in the year under review, mail volumes remain depressed and are significantly lower than the pre-COVID era, as shown above.

4. REVENUES & INVESTMENT

4.1 FIXED TELEPHONY REVENUES & INVESTMENT

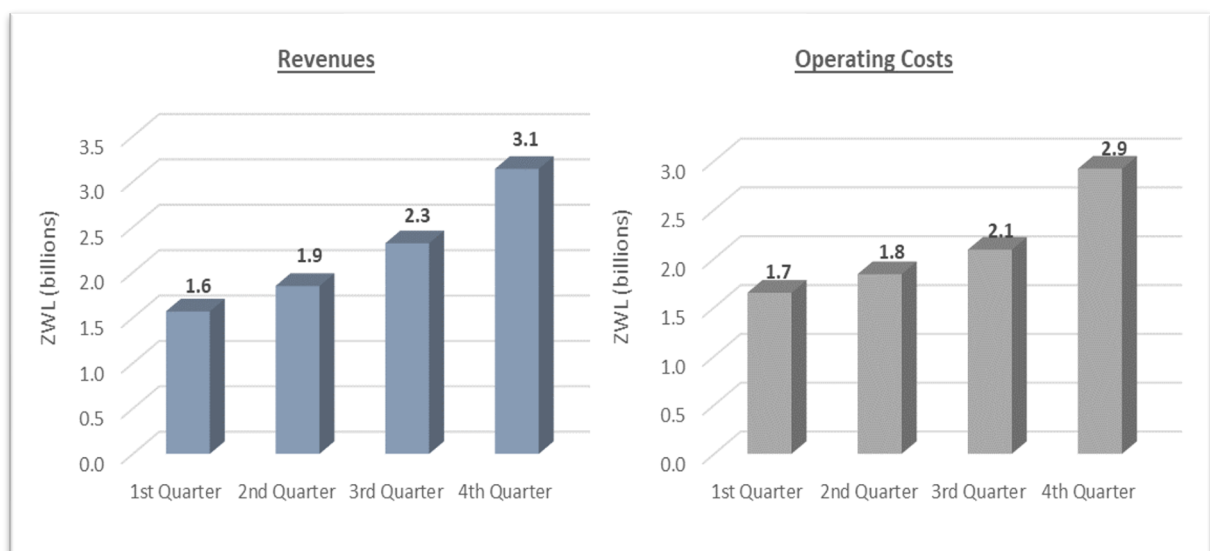
The fixed network generated a total revenue of ZW8.9 billion in 2021; Operating costs mounted to ZWL8.5 billion, whilst capital expenditure was ZWL454.8 million. An annual comparison of the absolute and the inflation adjusted figures is shown in Table 4 below:

Table 4: Fixed Network Revenue, Costs & Investment

	2020 (Absolute)	2021 (Absolute)	% Growth	CPI Adjusted Growth Rate
Revenue	3,132,606,647	8,878,870,002	183.4%	42.8%
Costs	2,725,213,837	8,507,786,979	212.2%	57.2%
Investment	226,019,602	454,791,883	101.2%	1.3%

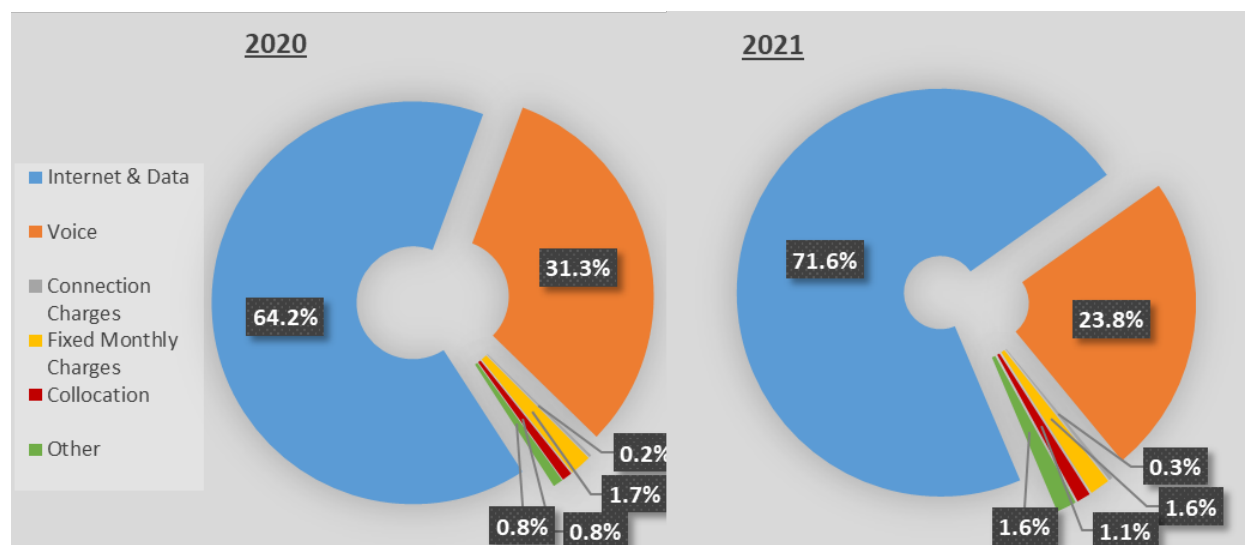
The growth rate for operating costs was higher than the revenue growth rate as shown above. A trend of growing revenues vis-à-vis growing operating costs was evident during the course of the year as shown below:

Figure 12: Fixed Telephone Revenues & Operating Costs



The contribution of Internet and data service continued to exceed that of voice service. The annual variation in the revenue contribution by service is shown in Figure 13 below:

Figure 13: Contribution to revenue by service



The revenue contribution of voice service decline in line with the overall decline in fixed voice traffic. On the other hand, the revenue contribution of Internet and data grew considerably due to increased usage.

4.2 MOBILE

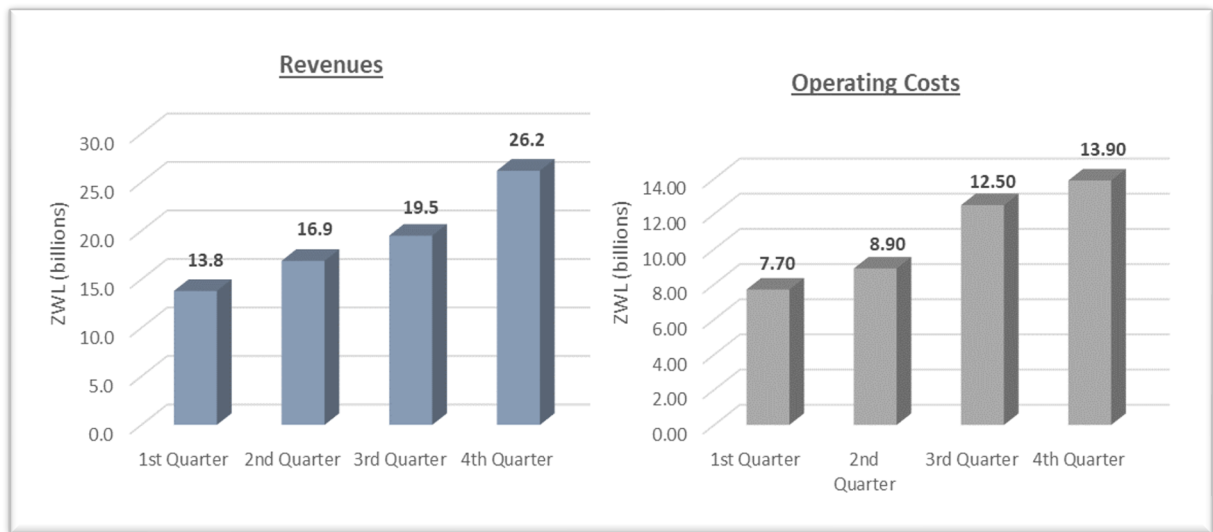
An annual comparison of the absolute and the inflation adjusted mobile revenue, operating costs and investment is shown in Table 5 below:

Table 5: Mobile Revenue, Operating Costs & Investment

	2020 (Absolute)	2021 (Absolute)	% Growth	CPI Adjusted Growth Rate
Revenue	26,334,595,356	76,379,685,041	190.0%	46.1%
Costs	11,741,311,591	42,910,828,756	265.5%	84.1%
Investment	248,087,414	3,596,377,718	1,349.6%	630.1%

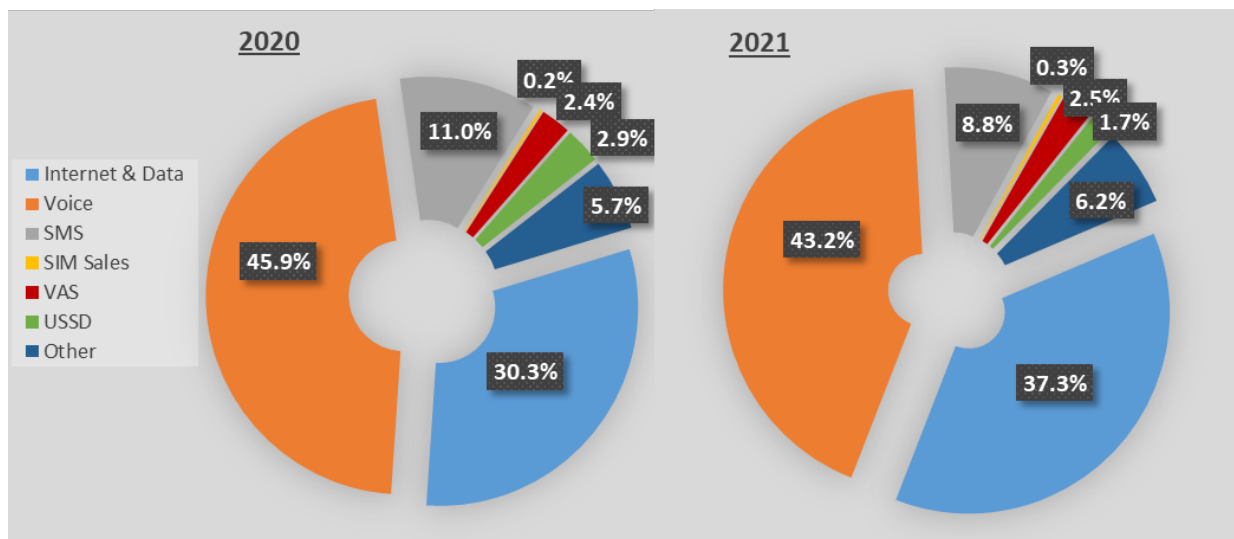
As shown above, operating costs grew by a higher margin than the growth in revenues, which is reflective of the inflationary environment. The year 2021 was characterised by growing revenues vis-à-vis rising operating costs for mobile network operators as shown in Figure 14 below:

Figure 14: Mobile Network Revenues & Costs



The mobile network revenue contribution per service in the year 2021 is shown in Figure 15 below:

Figure 15: Mobile Network Revenue Contribution per Service



Although voice is still the main revenue contributor for the mobile network, its revenue contribution is declining and being replaced by Internet and data.

4.3 IAP REVENUES & INVESTMENT

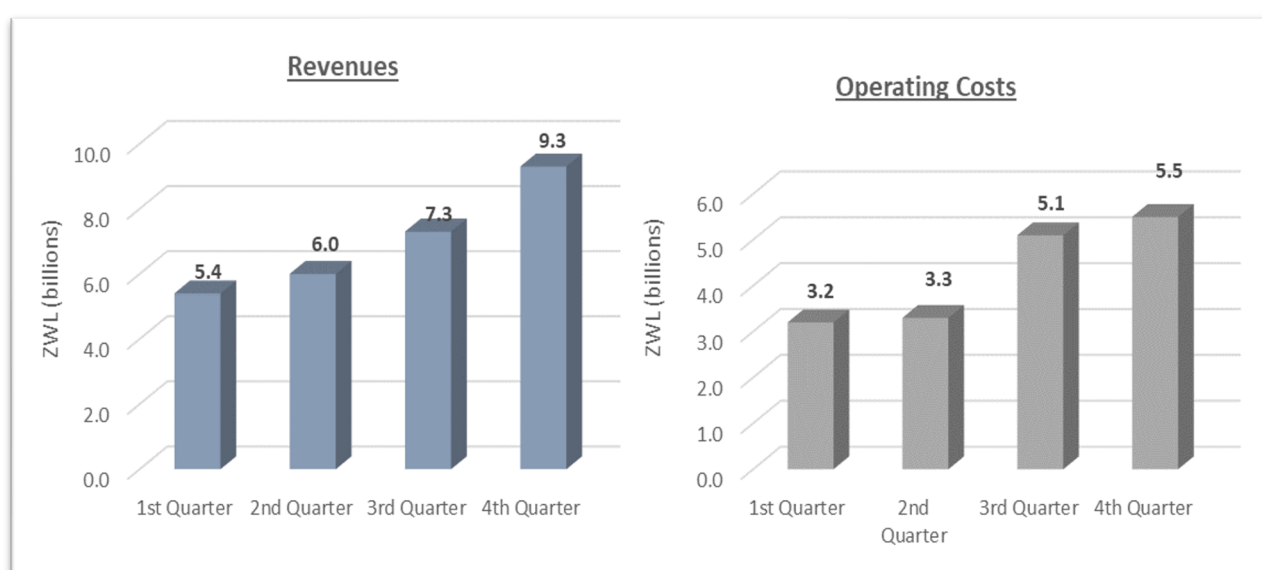
Internet Access Providers generated a total of ZW27.9 billion in 2021; Operating costs amounted to ZW17.2 billion, whereas capital expenditure amounted to ZWL1.1 billion. An annual comparison of the absolute and the inflation adjusted figures is shown in Table 6 below:

Table 6: IAP Revenues & Investment

	2020 (Absolute)	2021 (Absolute)	% Growth	CPI Adjusted Growth Rate
Revenue	9,310,206,823	27,940,179,437	200.1%	51.1%
Costs	6,110,912,314	17,155,250,786	180.7%	41.4%
Investment	426,446,156	1,056,332,104	147.7%	24.8%

The capital expenditure by IAPs was mainly on the national fibre backbone. As with other markets, operating costs were consistently increasing as shown in Figure 16 below:

Figure 16: IAP Revenues & Operating Costs



4.4 POSTAL & COURIER

Postal & courier operators generated a total of ZW1.5 billion in 2021; Operating costs amounted to ZW1.4 billion, whereas capital expenditure amounted to ZWL25.7 million. An annual comparison of the absolute and the inflation adjusted figures is shown in Table 7 below:

Table 7: Postal & Courier Revenue, Costs & Investment

	2020 (Absolute)	2021 (Absolute)	% Growth	CPI Adjusted Growth Rate
Revenue	560,895,590	1,535,975,246	173.8%	37.9%
Costs	472,316,803	1,391,220,022	194.6%	48.4%
Investment	12,075,265	25,680,858	112.7%	7.1%

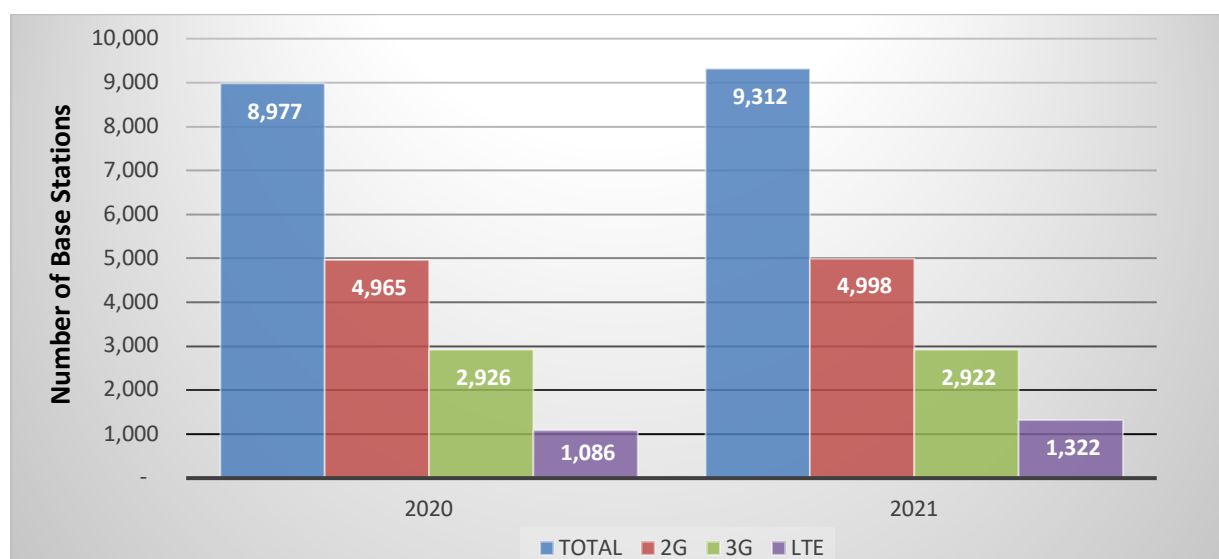
As shown above, operating costs grew by a higher margin than the growth in revenues, which is reflective of the inflationary environment.

5. TELECOMMUNICATIONS INFRASTRUCTURE

5.1 MOBILE BASE STATIONS

The total number of base stations increased by 3.7% to reach 9,312 as at 31 December 2021, from 8,977 recorded as at 31 December 2020; a total of 335 new base stations were deployed over the course of the year. The breakdown in base stations by technology is shown in Figure 17 below:

Figure 17: Mobile Base Stations



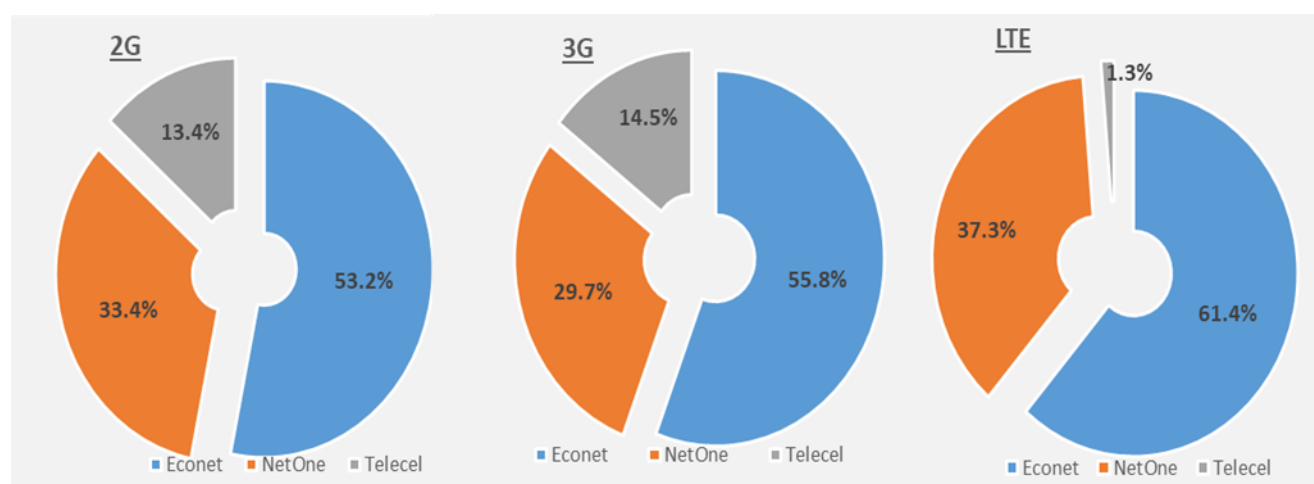
LTE eNode Bs had the biggest number of deployments as shown above. Population coverages as at 31 December 2020 are shown in the table below:

Table 8: Mobile Network Population Coverage

		2020	2021	Variance (%)
2G	Rural	74.40%	74.90%	0.50%
	Urban	99.85%	99.87%	0.02%
	Total	93.44%	93.54%	0.10%
3G	Rural	67.17%	67.25%	0.08%
	Urban	99.89%	99.9%	0.01%
	Total	83.94%	84.01%	0.07%
LTE	Rural	1.83%	2.64%	0.81%
	Urban	91.99%	92.83%	0.84%
	Total	34.98%	39.12%	4.14%

As shown above, the biggest gains were on LTE. NetOne and Econet embarked on LTE expansion projects over the course of 2021. The market share of mobile base stations was as follows:

Figure 18: Market share of mobile base stations

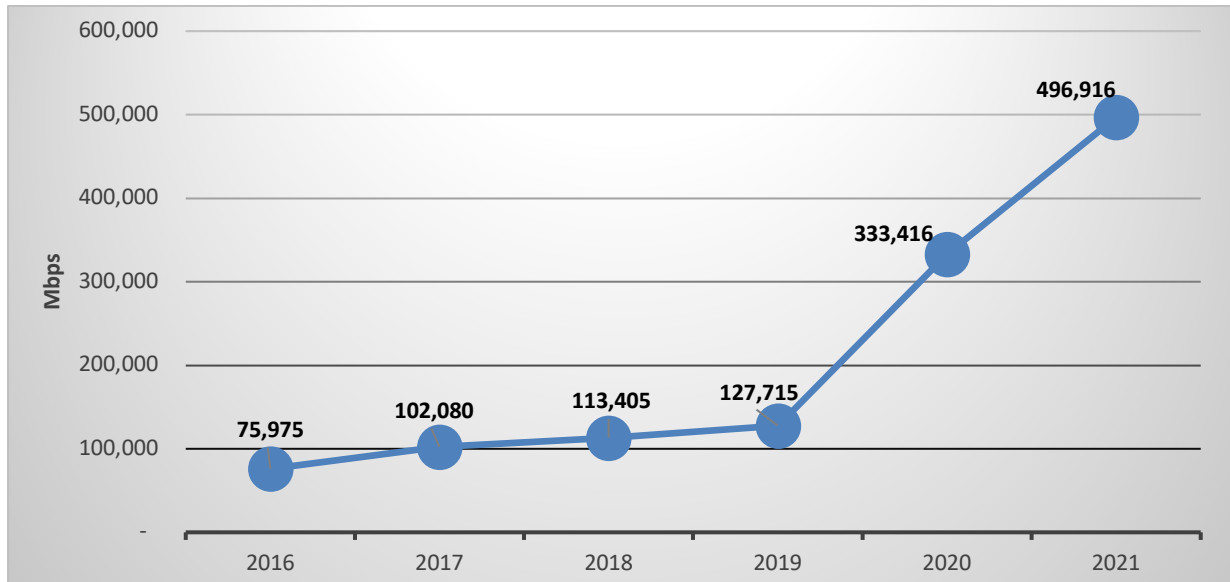


As shown above, Econet remains the dominant operator in terms of network coverage for all technologies i.e. 2G, 3G and LTE.

6. INTERNATIONAL INTERNET BANDWIDTH

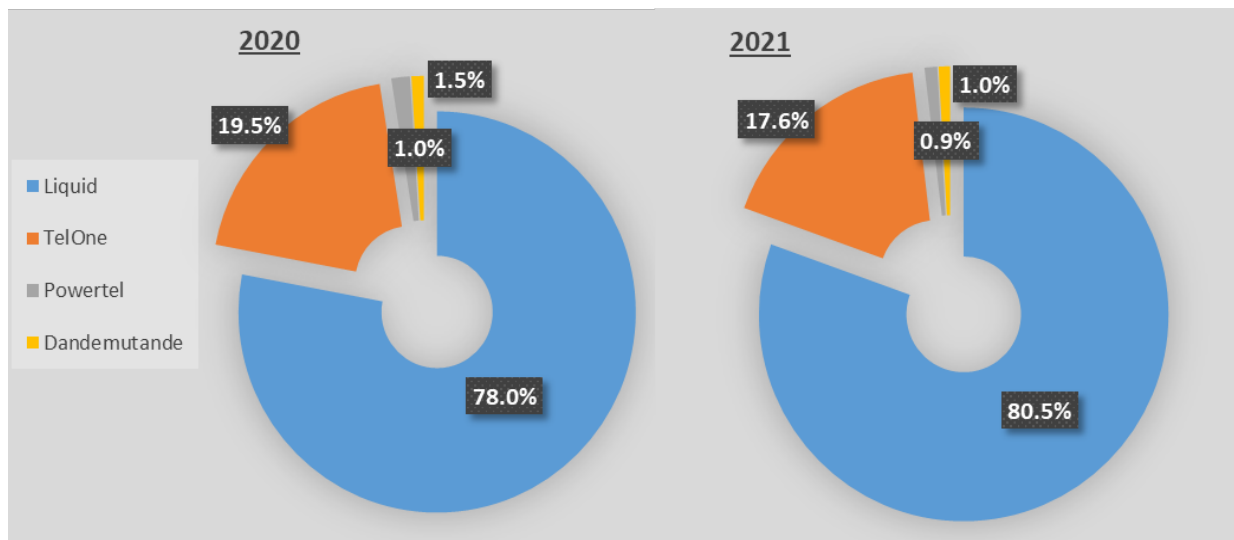
Equipped international incoming Internet bandwidth increased by 49% to reach 496,916Mbps as at 31December 2021, from 333,416Mbps as at 31 December 2020. Demand for data and Internet services rose has been increasing over the years; to meet this demand, Internet Access Providers had to increase their bandwidth capacities as shown

Figure 19: Equipped International Incoming Internet Bandwidth Capacity



An annual comparison of the market share of equipped international Internet bandwidth is shown in Figure 20 below:

Figure 20: Market share of equipped bandwidth capacity



As shown above, Liquid gained market share of equipped international Internet bandwidth capacity in relation to the other Internet Access Providers, due to their expansion during the course of 2020.

7. EMPLOYMENT

The total number of people employed on a full time basis in the postal and telecommunications sector in as at 31 December 2021 was 5,786. This represents a 1% decline from 5,847 full time employees recorded as at 31 December 2020. The number of employees is broken down by subsector and by gender as follows:

7.1 MOBILE NETWORK OPERATORS

The total number of people employed by the mobile networks on a full time basis declined by 1.4% to reach 2,323 in 2021, from 2,356 recorded in 2020. The total number of mobile network employees is broken down by gender in Figure 21 below:

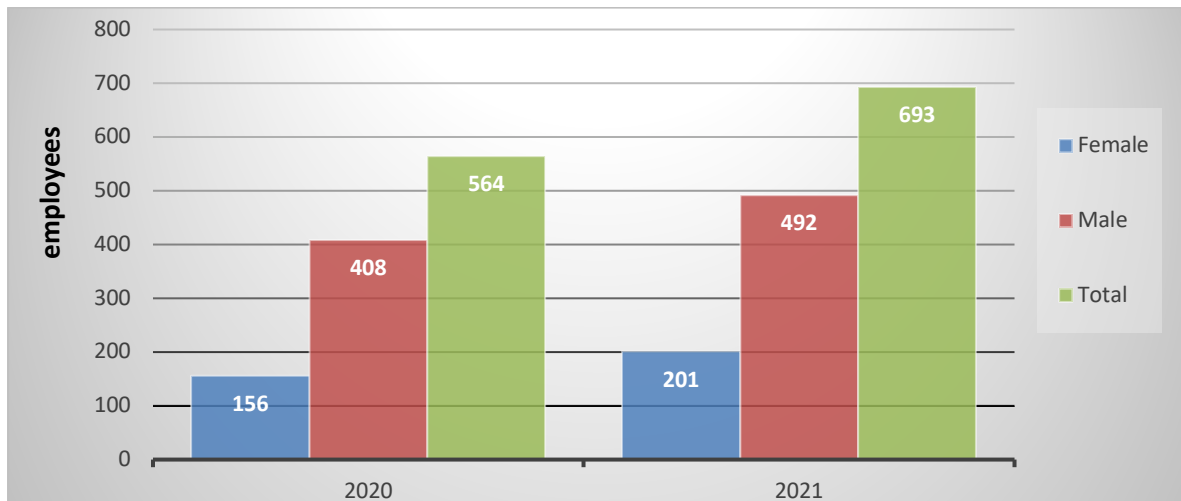
Figure 21: Employment by mobile operators



7.2 INTERNET ACCESS PROVIDERS

As at 31 December 2021, Internet Access Providers employed a total of 693 people on a full time basis. This represents a 22.9% decline from 564 full time employees recorded as at 31 December 2020. The employees are broken down by gender in Figure 22 below:

Figure 22: Employment by Internet Access Providers

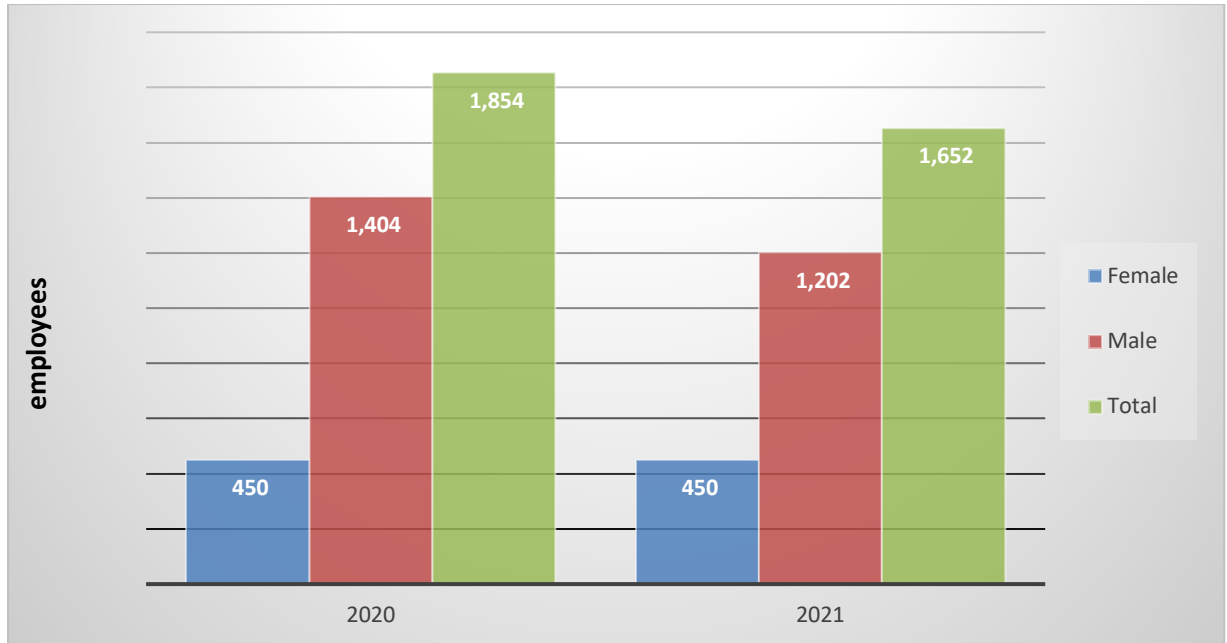


The recruitment of more personnel is in line with the increase in the scale and scope of operations of a number of Internet Access Providers.

7.3 FIXED NETWORK

The total number of people employed by the fixed network on a full time basis declined by 10.9% to reach 1,652 as at 31 December 2021, from 1,864 recorded as at 31 December 2020. The annual comparison is shown in Figure 23 below.

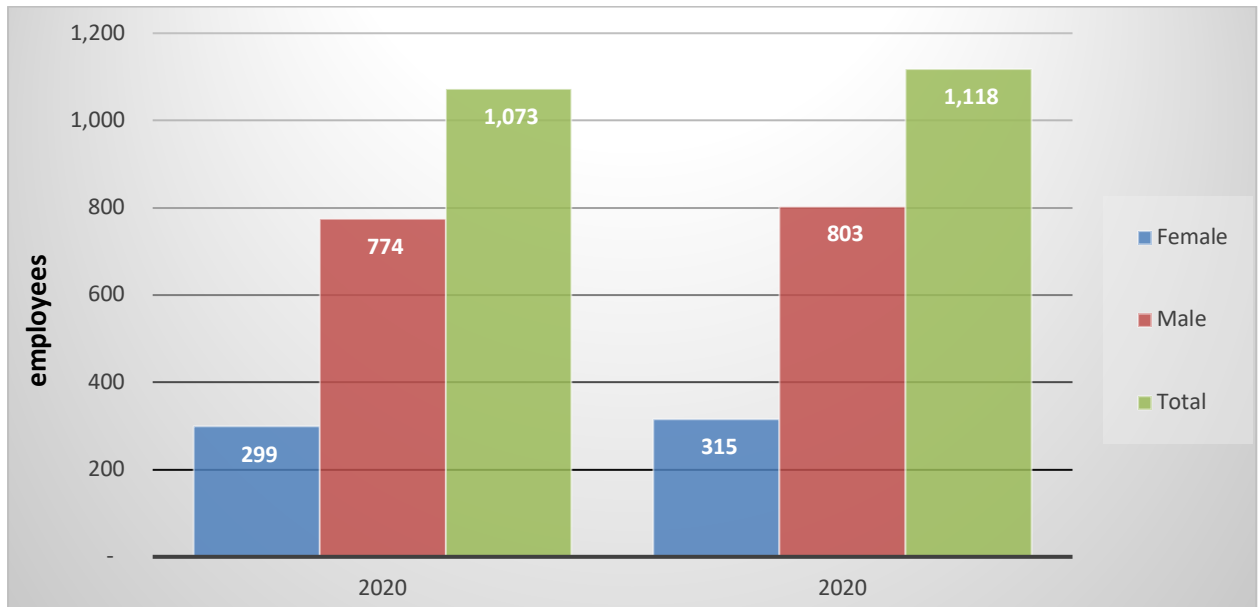
Figure 23: Employment by the fixed network



7.4 POSTAL & COURIER

The postal and courier subsector recorded an overall increase in the number of full time employees as shown in Figure 24 below:

Figure 24: Postal & Courier employees



As shown above, the total number of people employed by postal and courier operators on a full time basis increased by forty-five.

8. OUTLOOK

The year 2021 was characterized by increased reliance on work – from – home, e-learning, e-conferencing resulting from the COVID – 19 effects. As such there was an increased demand for online or Internet connection. Increased demand for Internet connection as well as the dynamic developments and fast-changing technological advances added pressure to the sector, in terms of service delivery. Liquidity constraints coupled with the sector’s in ability to have foreign direct investment, meant much of investment was financed by retained income. Investment in the sector was, therefore, depressed given the sector’s dependency on foreign equipment for new infrastructure and maintenance. Deteriorating exchange rate also affected the purchasing power of both consumers and service providers in real terms.

The year ahead, presents a positive outlook for the Information Communications Technology sector, considering the upheaval that swept across the industry as a result of the COVID-19 pandemic. When the pandemic began two years ago, service providers scrambled to address the changes and fill the needs that the shifts created. In 2022, the industry, including the Regulator, now have an opportunity to address these challenges more deliberately and purposefully so that we lay solid foundations for future innovation and growth.

The various economic reforms by the Government of Zimbabwe have potential to transform the economy in 2022. However, as with the previous year, cost escalations are expected to continue. Increased prioritisation of the sector on the auction based foreign currency market system will ensure continued service delivery and investment the industry.