

POSTAL AND TELECOMMUNICATIONS REGULATORY AUTHORITY OF ZIMBABWE (POTRAZ)



ANNUAL POSTAL AND TELECOMMUNICATIONS SECTOR PERFORMANCE REPORT

2020

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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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 2020. 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 facilitating orderly growth of these sectors. The following trends characterised the postal and telecommunications sector in 2020:

- **Market structures remain relatively unchanged**

Market structures remained relatively unchanged across postal and telecommunications markets in 2020; save for the licensing of a new Internet Access Provider, Dark Fibre Africa (DFA). 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 Telephony 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. Pecus
		7. Powertel
		8. Telecontract
		9. Dark Fibre Africa Zimbabwe
		10. Transmedia
Internet Access	Data and Internet Services	1. CommIT

Provider (Class B)		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

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

The year 2020 was characterised by a trend of growing revenues, amidst rising operating costs across all subsectors, owing to the inflationary economic environment. Annual sector revenue for 2020 was ZW\$38.8 billion up from ZW\$4.5 billion recorded in 2019; this represents an annual variance of 751.7% and an inflation adjusted growth rate of 89.9%. Operating costs for the sector in 2020 amounted to ZW\$20.6 billion up from ZW\$3.3 billion recorded in 2020, giving an annual variance of 528.5% and an inflation adjusted growth rate of 40.1%. Bandwidth costs, depreciation, staff costs and network maintenance comprised the bulk of the operating costs of telecommunication operators. Capital expenditure totalled ZW\$900.6 million up from ZW\$180.3 million recorded in 2020. This represents an annual variance of 399.4% and an inflation adjusted growth rate of 11.3%.

- **Decline in active fixed and mobile telephony subscriptions and marginal growth in active internet & data subscriptions**

The total number of active fixed telephony lines declined by 5.1% to reach 252,067 as at 31 December 2020, from 265,734 recorded as at 31 December 2019. As a result, the fixed density declined by 0.1% to reach 1.7% as at 31 December 2020, from 1.8% recorded as at 31 December 2019. The total number of active mobile subscriptions declined marginally by 0.03% to record 13,191,708 as at 31 December 2020, from 13,195,902 recorded as at 31 December 2019. The mobile penetration rate for 2020 was 90.5%, declining by 0.1% from 90.6% recorded in 2019. On the other hand, active internet and data subscriptions grew by

0.4% to reach 8,875,649 in 2020 from 8,836,299 subscriptions recorded in 2019; hence the internet penetration rate increased by 0.3% to reach 60.9% in 2020 from 60.6% recorded in 2019.

- **Decline in voice traffic amidst growth in internet and data usage**

Total mobile and fixed voice traffic declined by 0.9% to record 6,095,683,710 minutes in 2020 from 6,150,783,671 minutes recorded in 2019. International voice traffic recorded a huge decline in 2020. International incoming traffic declined by 20.6% to record 136.7 million minutes from 172.4 million minutes recorded in 2019. International outgoing traffic also declined by 59.3% to record 25.7 million minutes from 63.1 million minutes recorded in 2019. On the other hand, the sector recorded a surge in internet and data usage due to the increased adoption of e-learning and telecommuting. A total of 48,781 TB of mobile internet and data were consumed in 2020. This represents a growth in usage by 36.5% from 35,733 TB recorded in 2019. Used international incoming bandwidth capacity also increased by 36.6% to record 159,665 in 2020 from 116,927 recorded in 2019.

- **Decline in postal and courier volumes**

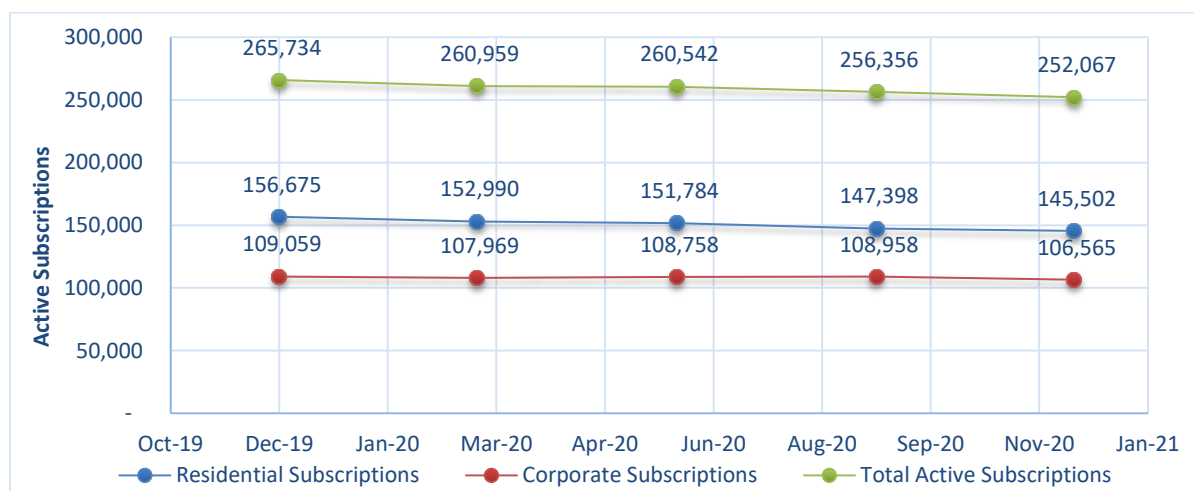
Total postal and courier volumes declined by 57% to record 2.3 million items in 2020, from 5.3 million items in 2019. The postal and courier business was severely affected by the COVID-19 pandemic in 2020. The implementation of lock-down restrictions in various jurisdictions negatively impacted the channelling of mail, international courier in particular. International incoming courier declined by 60.2% to record 464,456 items in 2020, from 1.17 million items recorded in 2019. International outgoing courier also declined by a record 70.5% to record 53,204 items in 2020, from 180,341 items recorded in 2019.

1. SUBSCRIPTIONS & PENETRATION RATES

1.1 FIXED

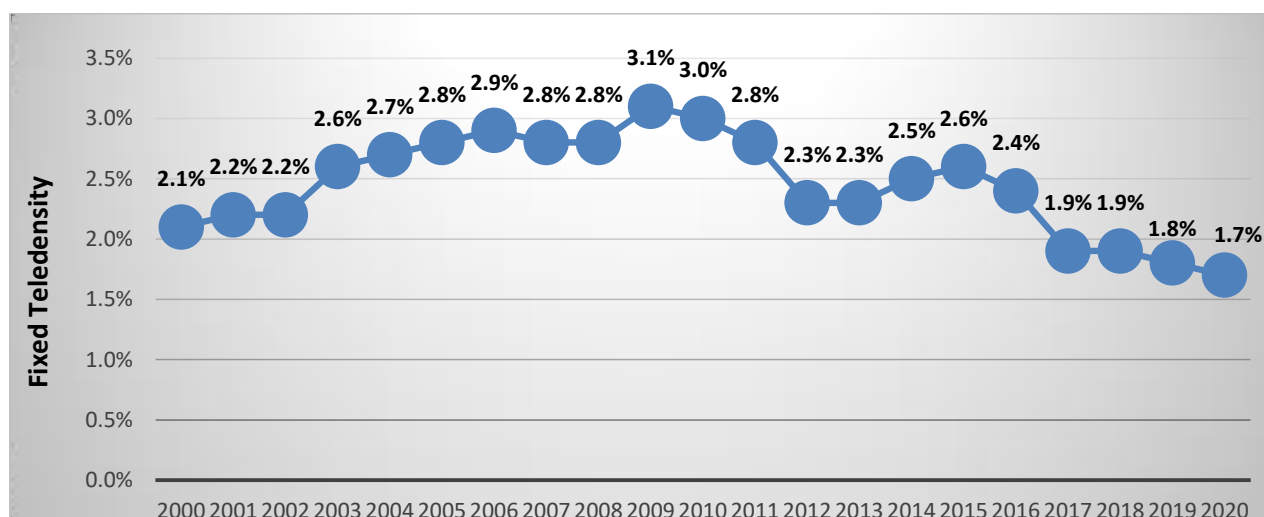
The total number of active fixed telephony lines declined by 5.1% to reach 252,067 as at 31 December 2020, from 265,734 recorded as at 31 December 2019. There was a decline in both residential and corporate subscriptions over the course of the year as shown in Figure 1 below:

Figure 1: Decline in Fixed Telephony Subscriptions



The Public Switched Telephone Network (PSTN) continues to face competition from mobile telephony and Voice over Internet Protocol (VoIP) amongst other emerging technologies. The fixed density declined by 0.1% to reach 1.7% as at 31 December 2020, from 1.8% recorded as at 31 December 2019 as shown in Figure 2 below:

Figure 2: Fixed Tele-density



1.2 MOBILE

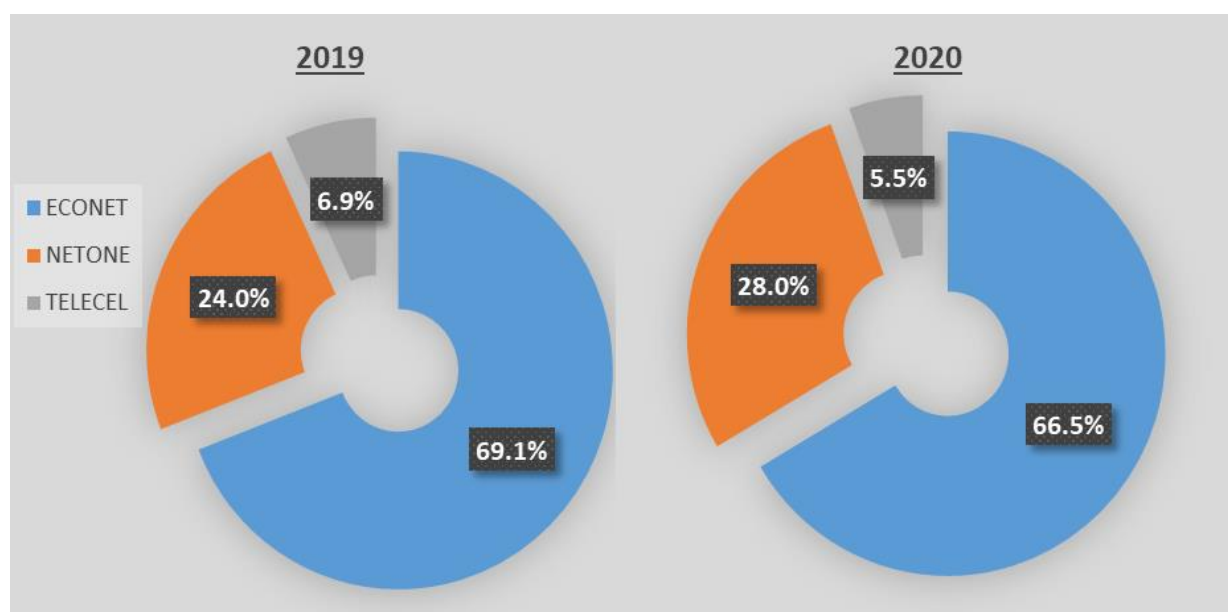
The total number of active mobile subscriptions declined marginally by 0.03% to record 13,191,708 as at 31 December 2020, from 13,195,902 recorded as at 31 December 2019. All the mobile operators, with the exception of NetOne, recorded a decline in annual active mobile subscriptions as shown below:

Table 1: Active Mobile Subscriptions per Operator

	Active Subscriptions 2019	Active Subscriptions 2020	% Change
Econet	9,117,826	8,773,300	-3.8%
Telecel	910,677	727,094	-20.2%
NetOne	3,167,399	3,691,314	16.5%
Total	13,195,902	13,191,708	-0.03%

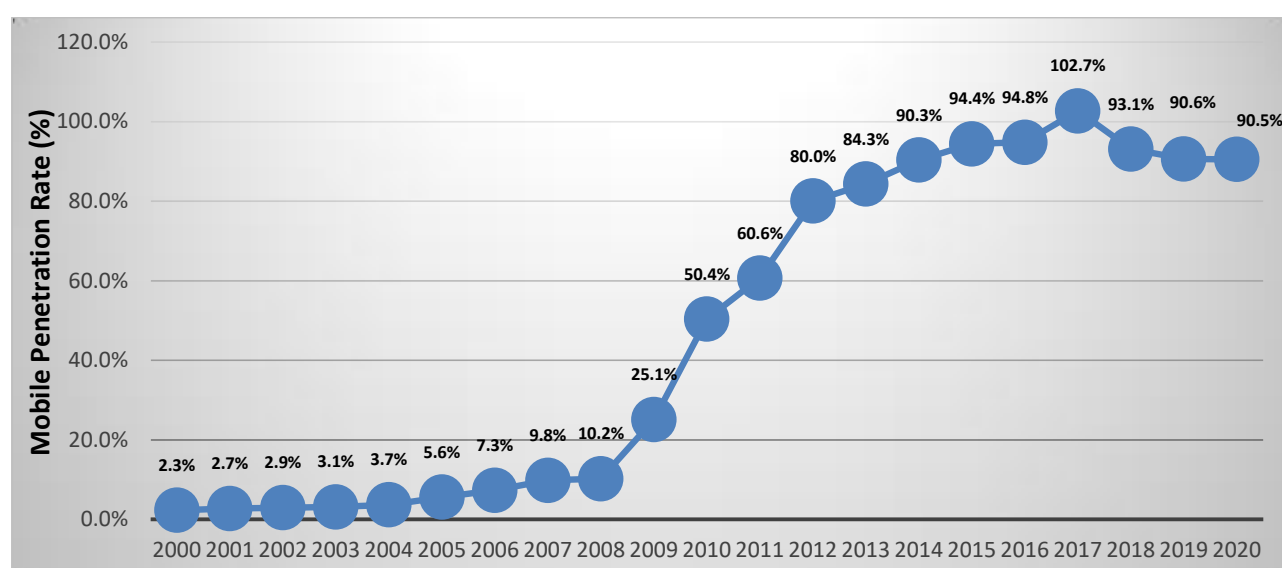
NetOne`s subscriber market share grew, whereas Econet and Telecel`s market share declined in line with the decline in their subscriber bases, as shown below:

Figure 3: Market Share of Mobile Subscriptions



The mobile penetration rate for 2020 was 90.5%, down by 0.1% from 90.6% recorded in 2019 as shown below:

Figure 4: Mobile Penetration Rate



1.3 INTERNET

The total number of active Internet and data subscriptions grew by 0.4% to reach 8,875,649 in 2020, from 8,836,299 subscriptions recorded in 2019. The annual growth of internet subscriptions per category is shown in the following table:

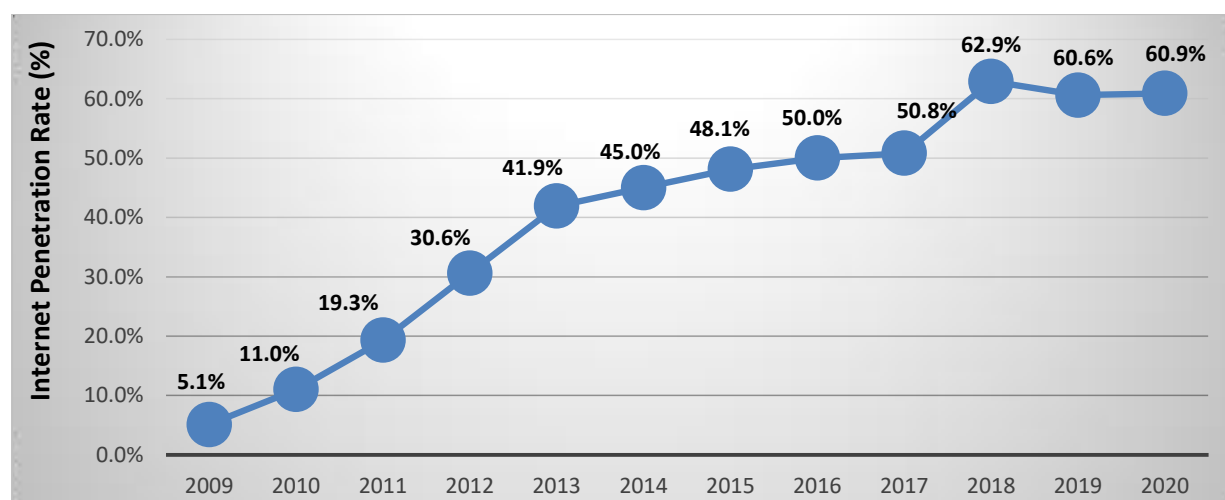
Table 2: Active Internet Subscriptions

Technology	2019	2020	Annual Variation
Mobile Internet (3G, LTE...)	8,659,875	8,695,188	0.4%
Leased Lines	2,123	1,486	-30%
ADSL	106,036	112,133	5.7%
WiMAX	2,156	1,661	-23%
CDMA	22,834	14,065	-38.4%
VSAT	3,395	2,427	-28.5%
Active Fibre links	39,880	48,689	22.1%
TOTAL	8,836,299	8,875,649	0.4%

Source: POTRAZ, Operator Returns

The above information shows the growing adoption of Fibre and DSL in lieu of other fixed technologies such as leased lines, whose subscriptions are gradually declining. The Internet penetration rate increased by 0.3% to reach 60.9% from 60.6% recorded in 2019 as shown in Figure 5 below:

Figure 5: Internet Penetration Rate

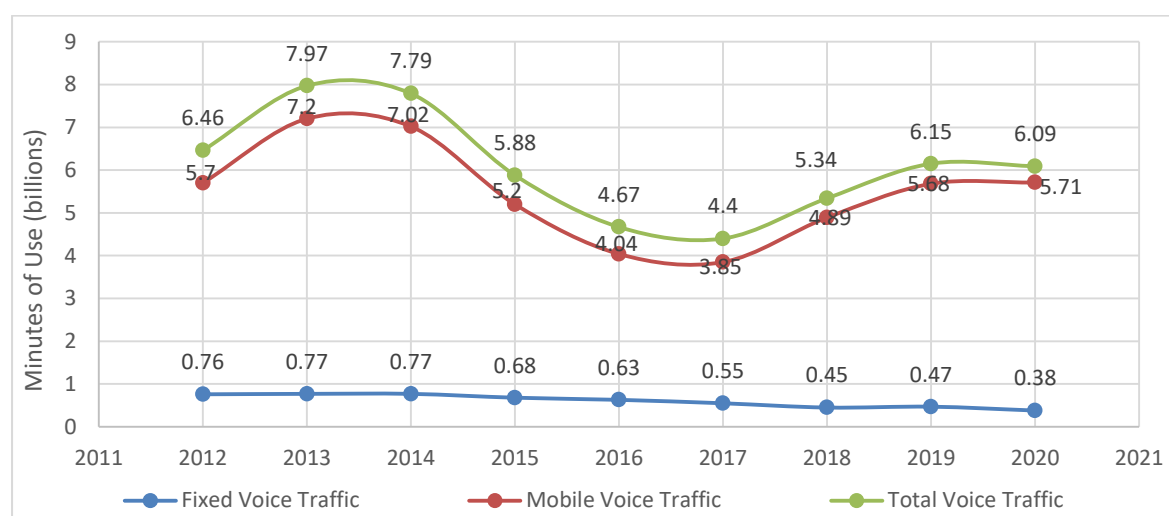


2. TRAFFIC AND USAGE PATTERNS

2.1 VOICE TRAFFIC

Total mobile and fixed voice traffic declined by 0.9% to record 6,095,683,710 minutes in 2020 from 6,150,783,671 minutes recorded in 2019. Fixed voice traffic declined whereas mobile voice traffic increased as shown below:

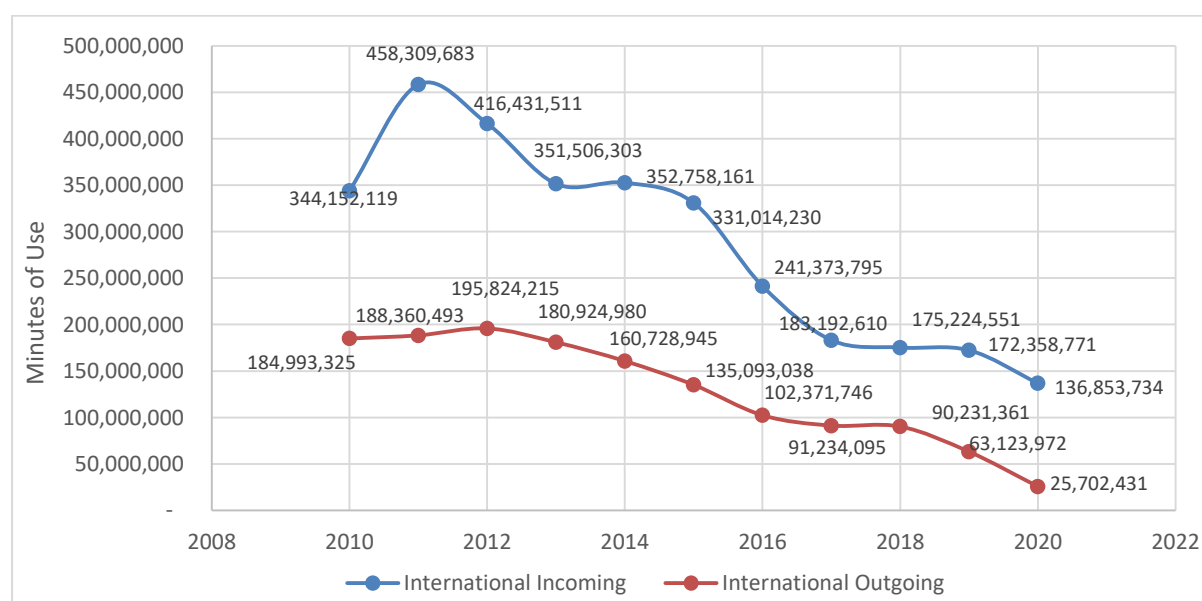
Figure 6: Mobile Voice Traffic



The growth in mobile voice traffic emanated from an increase in national on-net traffic due to promotional offerings. The decline in fixed voice traffic is attributable to the decline in active fixed telephony subscriptions. The scaling down of corporate operations due to COVID-19 also contributed to the decline in fixed voice traffic, as the bulk of traffic comes from corporate lines.

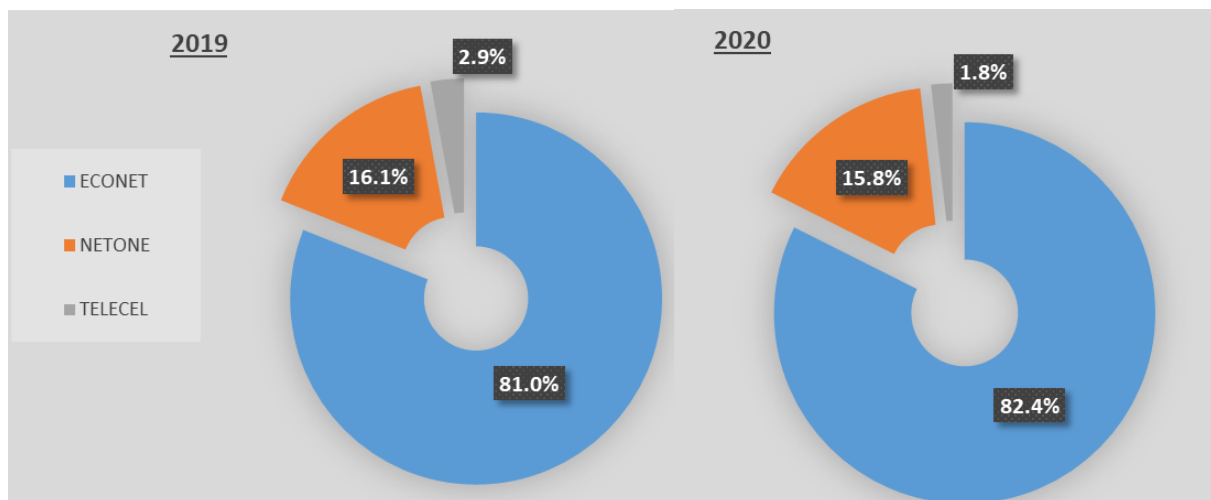
International voice traffic recorded a huge decline in 2020. Total international incoming traffic declined by 20.6% to record 136.7 million minutes from 172.4 million minutes recorded in 2019. International outgoing traffic also declined by 59.3% to record 25.7 million minutes from 63.1 million minutes recorded in 2019. International traffic has been declining over the years as shown below:

Figure 7: International Traffic



The decline in international traffic is largely attributable to the substitution effect of alternative calling platforms presented mainly by Over-The-Top services (OTTs); this substitution was exacerbated by low disposable incomes amidst the COVID-19 pandemic. A comparison of the market share of annual mobile voice traffic is shown in Figure 8 below:

Figure 8: Mobile Voice Traffic Market Share

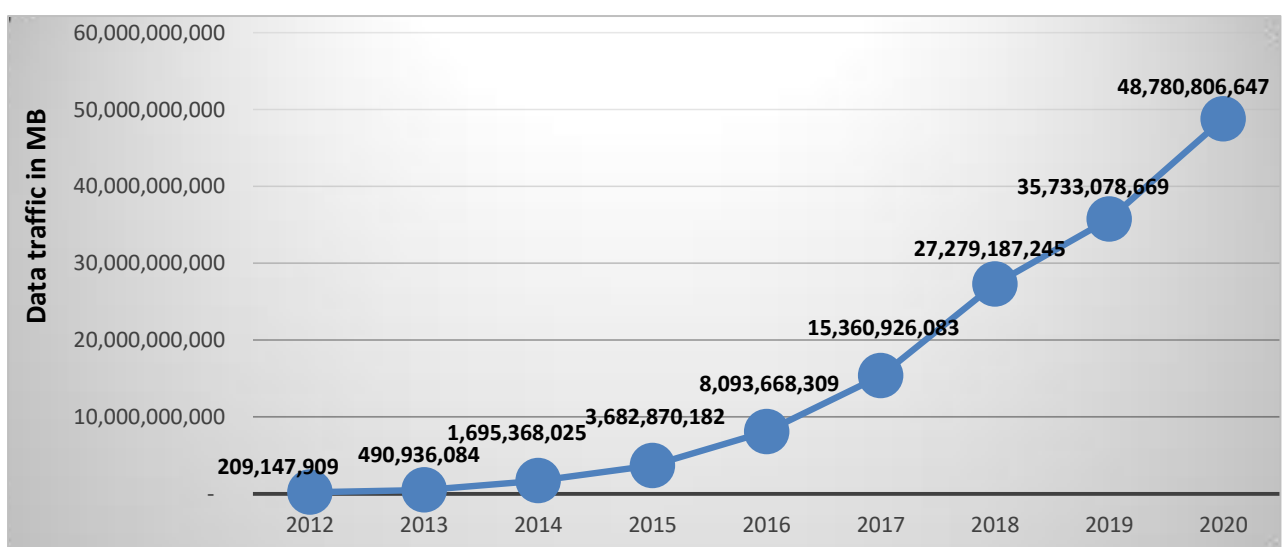


As shown above, Econet's voice traffic market share increased by 1.4% whereas Telecel and NetOne's market share declined by 1.1% and 0.3% respectively.

2.2 INTERNET & DATA TRAFFIC

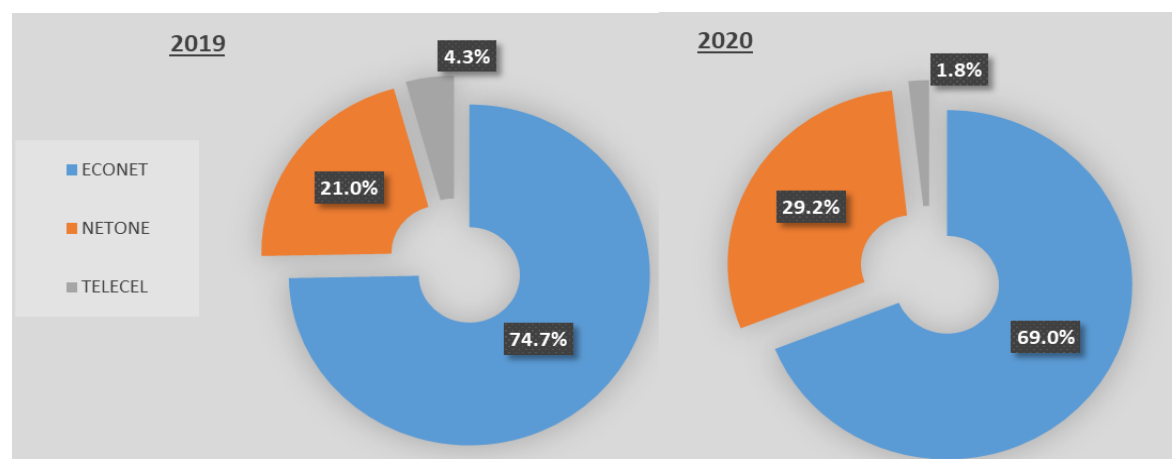
A total of 48,781 TB of mobile Internet and data were consumed in 2020. This represents usage grew by 36.5% from 35,733 TB recorded in 2019. Demand for internet and data has been consistently growing as illustrated below:

Figure 9: Growth in Mobile Internet & Data Usage



In 2020, mobile Internet and data usage was driven mainly by the increased adoption of e-learning and the work-from-home arrangements in light of COVID-19. 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 10: Market Share of Mobile Internet & data traffic



As shown above, NetOne gained market share of mobile Internet and data traffic in relation to the other mobile network operators. Used international incoming bandwidth capacity also increased by 36.6% to record 159,665 in 2020 from 116,927 recorded in 2019.

2.3 POSTAL & COURIER VOLUMES

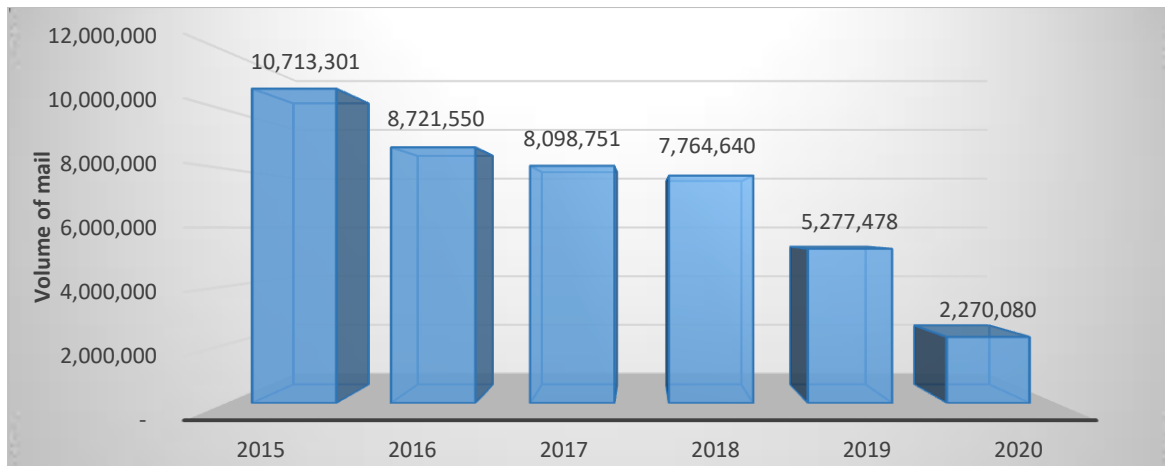
Total postal and courier volumes declined by 57% to record 2.3 million items in 2020 from 5.3 million items in 2019. The decline in postal and courier volumes per category is shown below:

Table 3: Postal & Courier Volumes

	2019	2020	% Growth
Domestic postal	3,212,620	1,220,688	-62.0%
domestic courier	716,456	524,732	-26.8%
International incoming postal & courier	1,168,061	464,456	-60.2%
International outgoing postal & courier	180,341	53,204	-70.5%
Total postal & courier	5,277,478	2,270,080	-57.0%

The postal and courier business was severely affected by the COVID-19 pandemic in 2020. The implementation of restrictions in various jurisdictions impacted the channelling of mail, in particular international courier volumes. Postal and courier volumes were the lowest in six years as shown in Figure 11 below:

Figure 11: Postal & Courier Volumes



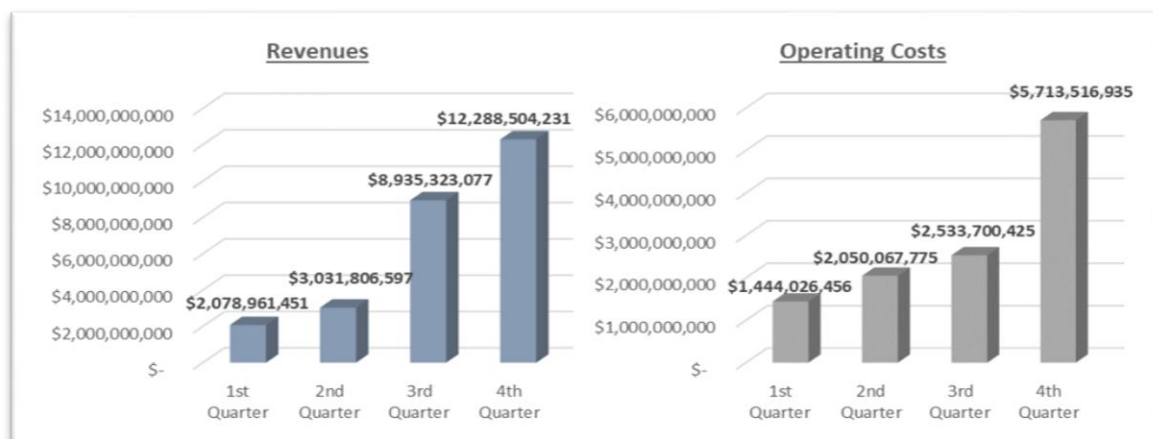
The pandemic slowed down business activity, thereby negatively impacting on postal and courier volumes.

3. REVENUES & INVESTMENT

3.1 MOBILE

The year 2020 was characterised by growing revenues and rising operating costs for mobile network operators as shown in Figure 12 below:

Figure 12: Mobile Network Revenues & Costs



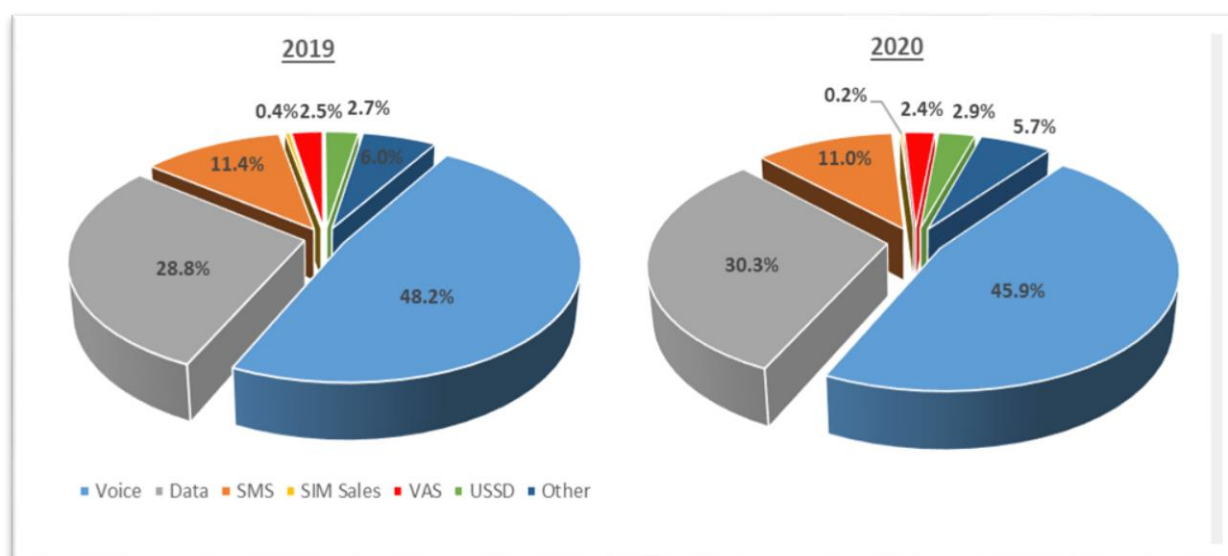
Total mobile network revenue for 2020 was ZW\$26.3 billion, up from ZW\$3.1 billion recorded in 2019. Mobile network operating costs amounted to ZW\$11.7 billion, up from ZW\$2,115,134,726 recorded in 2019. Total investment by mobile network operators in 2020 was ZW\$248.1 million as compared to ZW\$70.2 million invested in 2019. An annual comparison of the absolute and the inflation adjusted figures is shown in Table 4 below:

Table 4: Mobile Revenue, Operating Costs & Investment

	2019 (ZW\$)	Adjusted (CPI) (ZW\$)	2020 (ZW\$)	Absolute Variance	Adjusted Variance
Revenue	3,101,281,298	13,912,473,843	26,334,595,356	749.2%	89.3%
Costs	2,115,134,726	9,488,580,275	11,741,311,591	455.1%	23.7%
Investment	70,174,478	314,805,558	248,087,414	253.5%	-21.2%

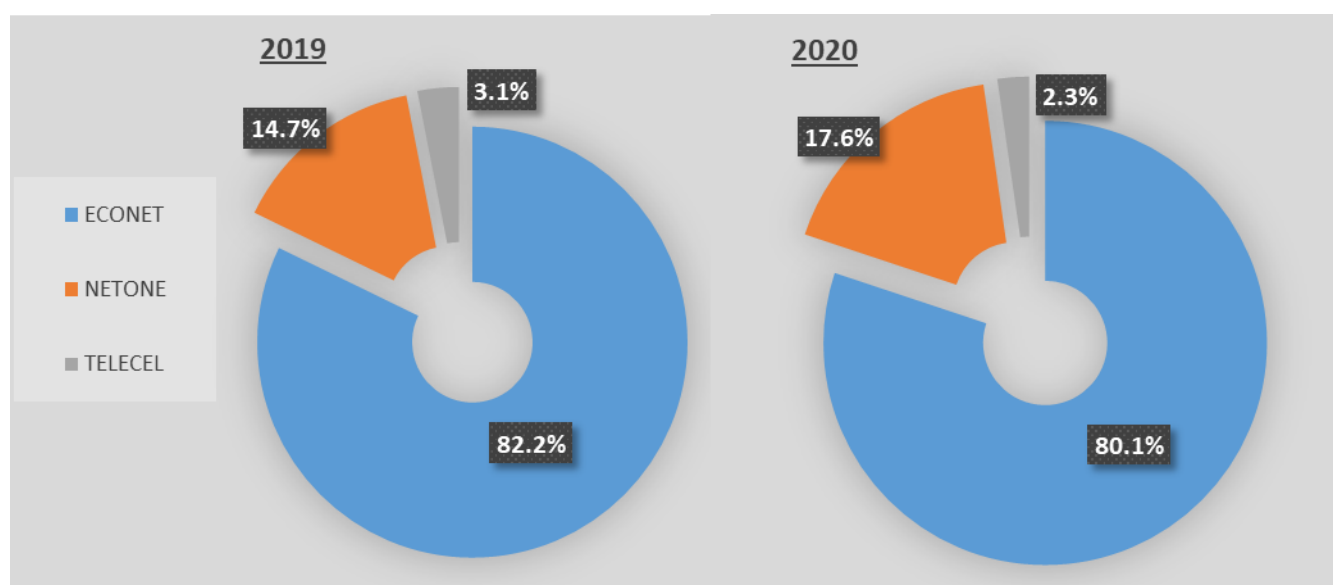
An annual comparison of the mobile network revenue contribution per service is shown in Figure 13 below:

Figure 13: Mobile Network Revenue Contribution per Service



As shown above, voice is still the main revenue contributor for the mobile network, unlike the fixed network. However, the contribution of internet and data increased due to the growth in usage. Figure 14 below shows an annual comparison of the mobile revenues market share.

Figure 14: Market Share of Mobile Revenues



Econet continued to command over 80% of total mobile network revenues. However, in the year under review, Econet's market share declined by 2.1%. Telecel also lost revenue market share by 0.8% whereas NetOne gained 2.9%.

3.2 IAP REVENUES & INVESTMENT

Internet Access Providers generated a total of ZW\$9.3 billion in 2020 from ZW\$971 million recorded in 2020. Operating costs amounted to ZW\$6.1 billion from ZW\$738.6 million recorded in 2019. Total capital expenditure by IAPs in 2020 was ZW\$426.4 from ZW\$68.1 million recorded in 2019. An annual comparison of the absolute and the inflation adjusted figures is shown in Table 5 below:

Table 5: IAP Revenues & Investment

	2019 (ZW\$)	Adjusted (CPI) (ZW\$)	2020 (ZW\$)	Absolute Variance	Adjusted Variance
Revenue	970,971,842	4,355,819,114	9,310,206,823	858.9%	113.7%
Costs	738,559,676	3,313,208,699	6,110,912,314	727.4%	84.4%
Investment	68,055,177	305,298,288	426,446,156	526.6%	39.7%

The capital expenditure by IAPs was mainly on the national fibre backbone. An annual comparison of the IAP revenue market share is shown in Table 6 below:

Table 6: IAP Revenues Market Share

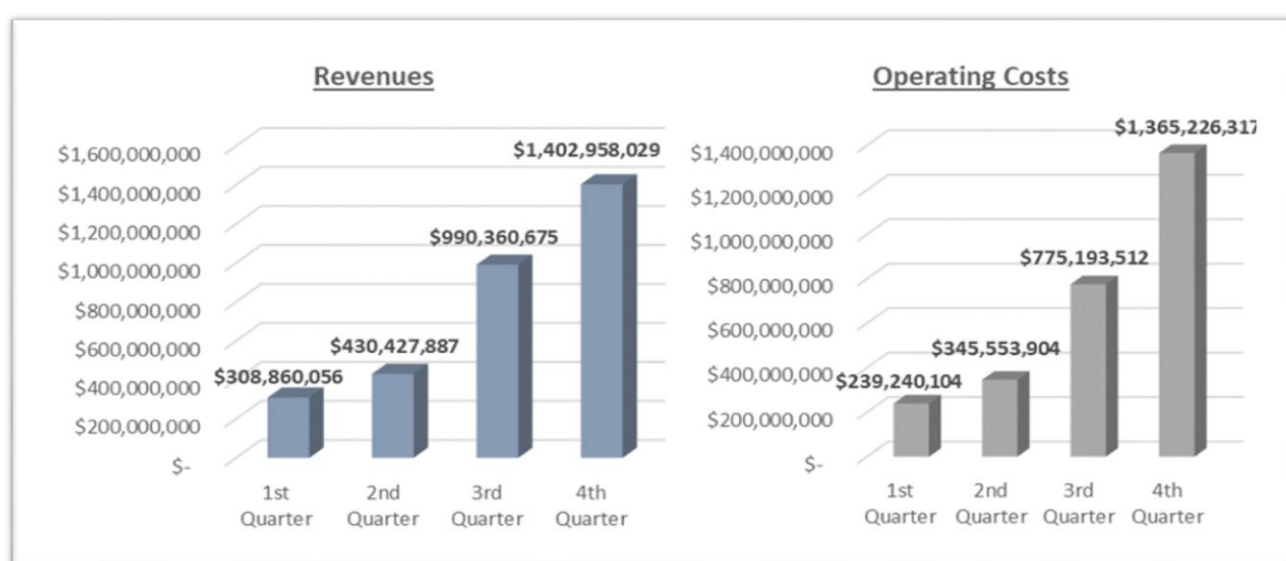
	Market Share of IAP Revenues 2019	Market Share of IAP Revenues 2020	% Change
Liquid	60.4%	63.5%	3.1%
TelOne	22.7%	22.3%	-0.4%
Powertel	8.1%	7.0%	-1.1%
Dandemutande	6.2%	4.9%	-2.3%
Africom	1.9%	1.1%	-0.8%
Telecontract	0.9%	1.2%	0.3%
Total	100%	100%	100%

As shown above, Liquid`s revenue market share grew considerably in 2020, reasserting their dominance in the Internet Access Provision subsector.

3.3 FIXED TELEPHONY REVENUES & INVESTMENT

A trend of growing revenues vis-à-vis growing operating costs was evident during the course of the year as shown below:

Figure 15: Fixed Telephony Revenues & Operating Costs



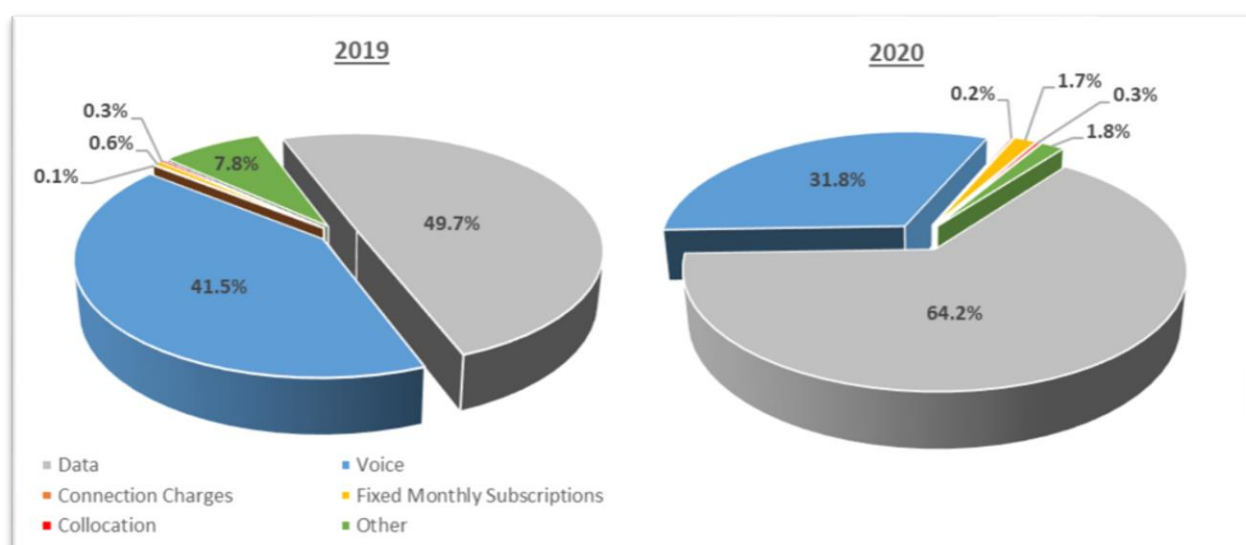
The fixed network generated a total revenue of ZW\$3,132,606,647 in 2020 up from ZW\$480,517,654 recorded in 2019. Operating costs amounted to ZW\$2,725,213,837 from ZW\$420,583,760 recorded in 2019. Total capital expenditure for 2020 was ZW\$226,019,602 from ZW\$42,097,844 recorded in 2019. An annual comparison of the absolute and the inflation adjusted figures is shown in Table 7 below:

Table 7: Fixed Network Revenue, Costs & Investment

	2019 (ZW\$)	Adjusted (CPI) (ZW\$)	2020 (ZW\$)	Absolute Variance	Adjusted Variance
Revenue	480,517,654	2,155,621,709	3,132,606,647	551.9%	45.3%
Costs	420,583,760	1,886,755,826.90	2,725,213,837	548%	44.4%
Investment	42,097,844	188,852,637.74	226,019,602	436.9%	19.7%

The contribution of Internet and data services continued to exceed that of voice service as shown in Figure 16 below:

Figure 16: Contribution to revenue by service



This phenomenon is consistent with the exponential growth of data as consumption becomes more data-centric as people adapt to the new normal arising out of the COVID-19 Pandemic whereby most business activities and work are now conducted online.

4. MOBILE MONEY

4.1 SUBSCRIPTIONS

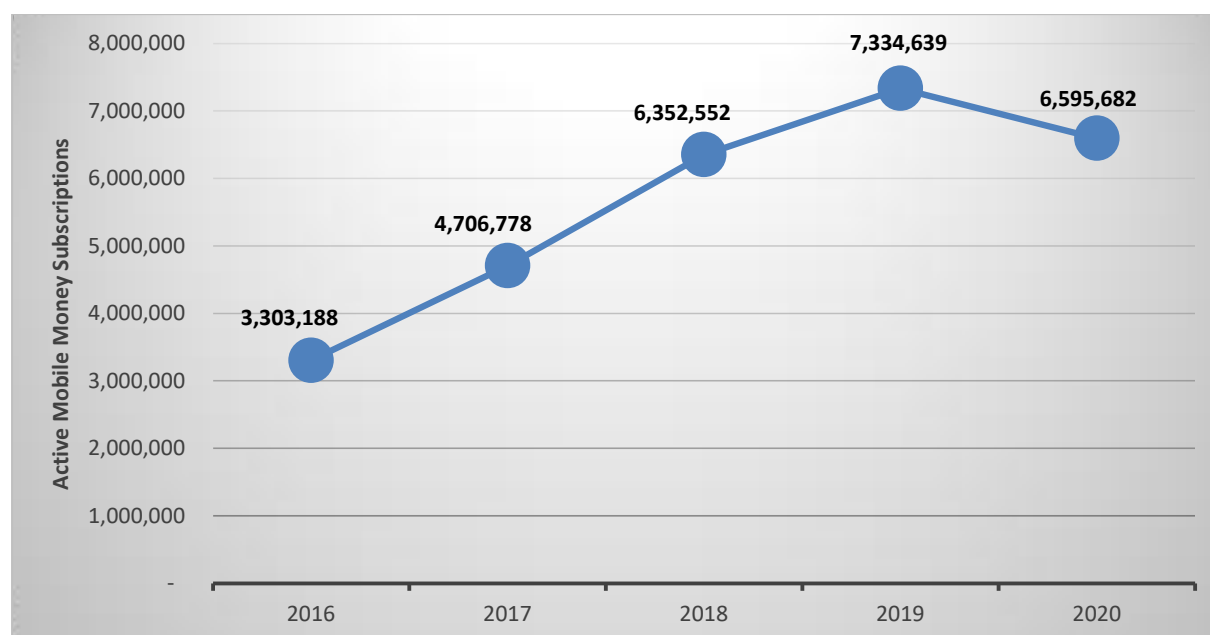
The total number of active mobile money subscriptions was 6,495,682 as at 31 December 2020; this represents a decline of 11.4% from 7,334,639 as at 31 December 2019. Table 8 below gives an annual comparison of active mobile money subscriptions per operator:

Table 8: Active mobile money subscriptions

	2019	2020	% Growth
Ecocash	6,812,368	5,553,981	-18.5%
Telecash	53,311	5,222	-90.2%
One Money	468,960	936,479	99.7%
Total	7,334,639	6,495,682	-11.4%

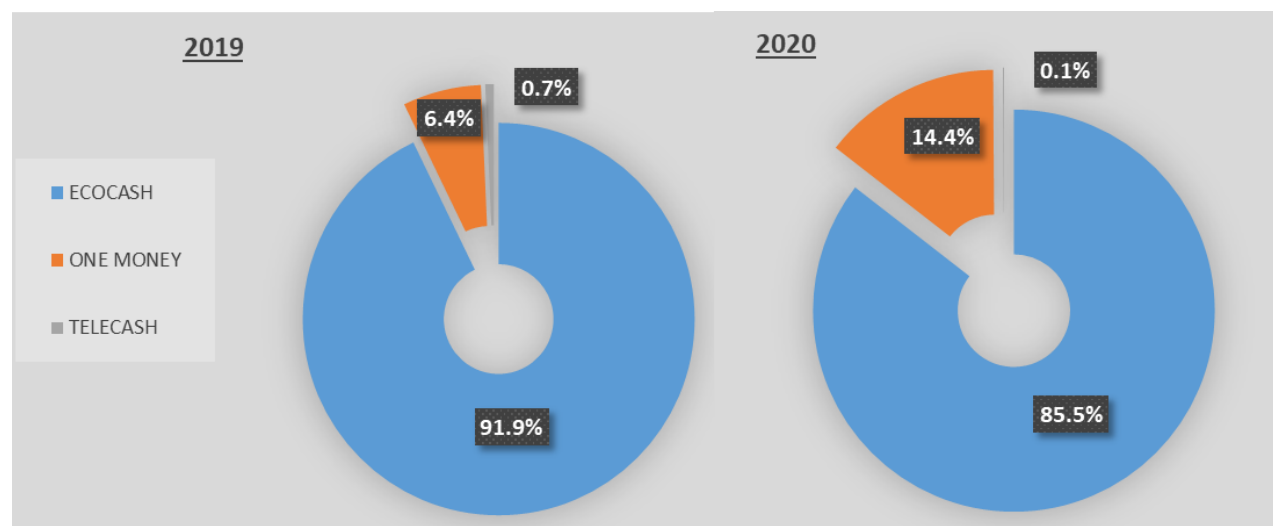
The overall decline in active mobile money subscriptions is attributable to the banning of mobile money agent lines by the Reserve Bank of Zimbabwe. This mainly affected Ecocash as they had the highest number of agent lines. The trend in mobile money subscriptions over the years is shown in Figure 17 below:

Figure 17: Growth in Active Mobile Money Subscriptions



As shown above, active mobile money subscriptions had always been on an upward trend until 2020. However, growth is expected to continue going forward. The annual variation in the market share of mobile money subscriptions is shown in Figure 18 below:

Figure 18: Market Share of Active Mobile Money Subscriptions



Econet and Telecel lost market share in line with the decline in their active mobile money subscriptions. On the other hand, NetOne's market share increased during the course of 2020, as shown above.

4.2 VALUE OF TRANSACTIONS

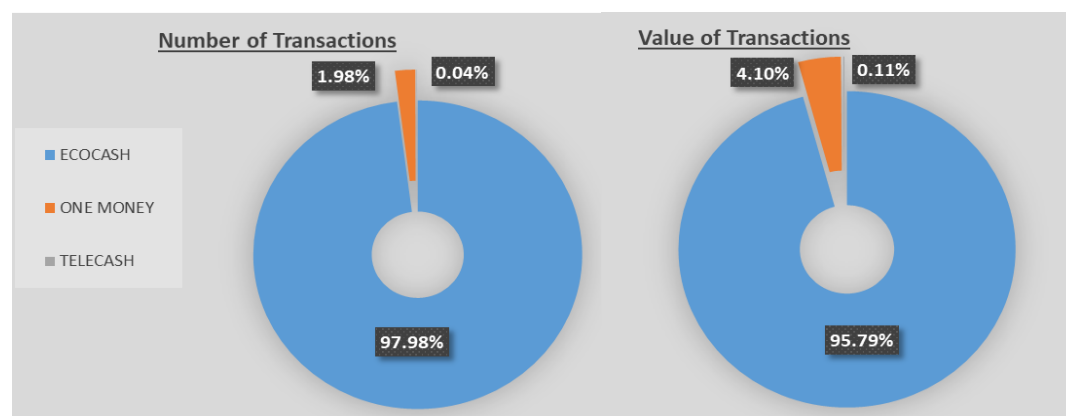
The total number of mobile money transactions processed in 2020 declined by 23.4%, to record ZW\$1.5 billion from ZW\$1.96 billion recorded in 2019. The decline is attributable to the banning of mobile money agent lines. As a result, Cash-In transactions and Cash-Out transactions are no longer being effected. An annual comparison of the volume and value of mobile money transactions is shown in the table below:

Table 9: Value of Mobile Money Transactions

	2019	2020	Variance
Airtime, Bill & Merchant Payments (ZW\$)	14,217,415,922	60,624,264,929	76.5%
Cross Network Transactions (ZW\$)	673,096	2,588,641	74.0%
Number of transactions	1,962,223,589	1,503,229,028	-23.4%

The growth in the value of mobile money transactions is attributable to the growing scope of services that can be settled using mobile money as well as the general inflationary environment. The market share of mobile money transactions was as follows:

Figure 19: Market Share of Mobile Money Transactions



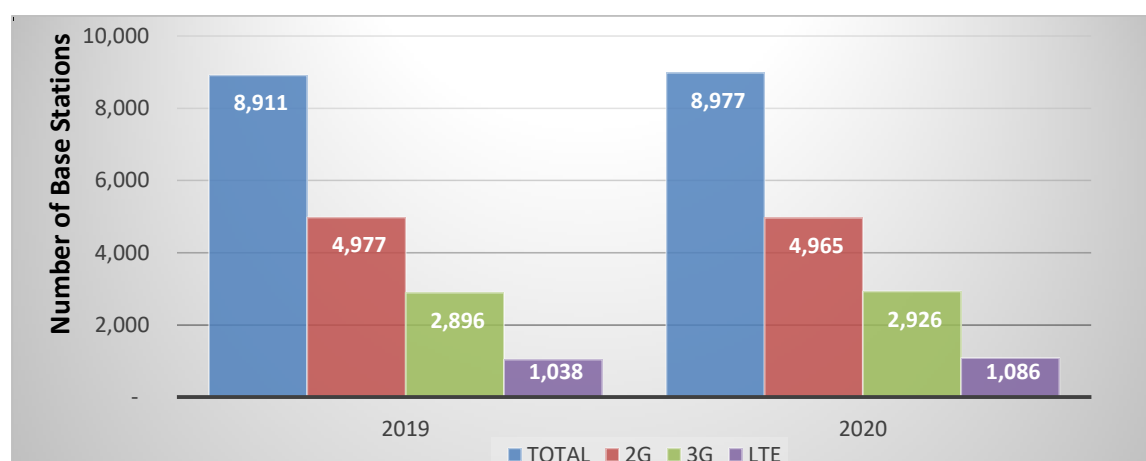
There was no major change in the market share of the volume and value of mobile money transactions in 2020.

5. TELECOMMUNICATIONS INFRASTRUCTURE

5.1 MOBILE BASE STATIONS

The total number of base stations increased by 0.7% to reach 8,977 in 2020 from 8,911 recorded in 2019. The breakdown in base stations by technology is shown in Figure 20 below:

Figure 20: Mobile Base Stations



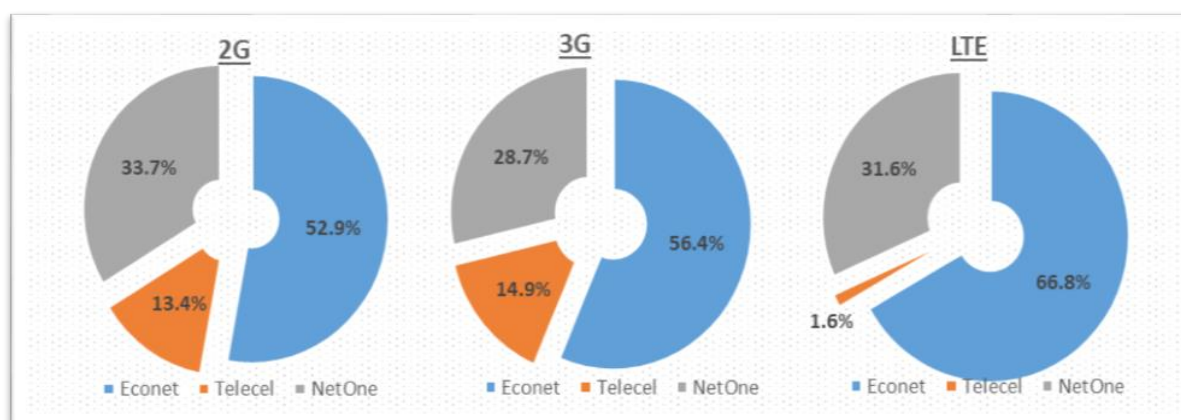
As shown above, thirty (30) 3G base stations and forty-eight (48) new LTE eNode Bs were deployed during the course of the year. On the other hand, twelve 2G base stations were upgraded to 3G hence the decline in the number of 2G base stations. Population coverages as at 31 December 2020 are shown in the table below:

Table 10: Mobile Network Population Coverage

	URBAN	RURAL	OVERALL
2G	99.85%	74.7%	93.44%
3G	99.89%	67.17%	83.94%
LTE	91.99%	1.83%	34.98%

As shown above, the country is yet to attain 100% population coverage for all technologies; rural areas still lag behind in terms of population coverage, particularly for 3G and LTE. The market share of mobile base stations was as follows:

Figure 21: Market Share of Mobile Base Stations



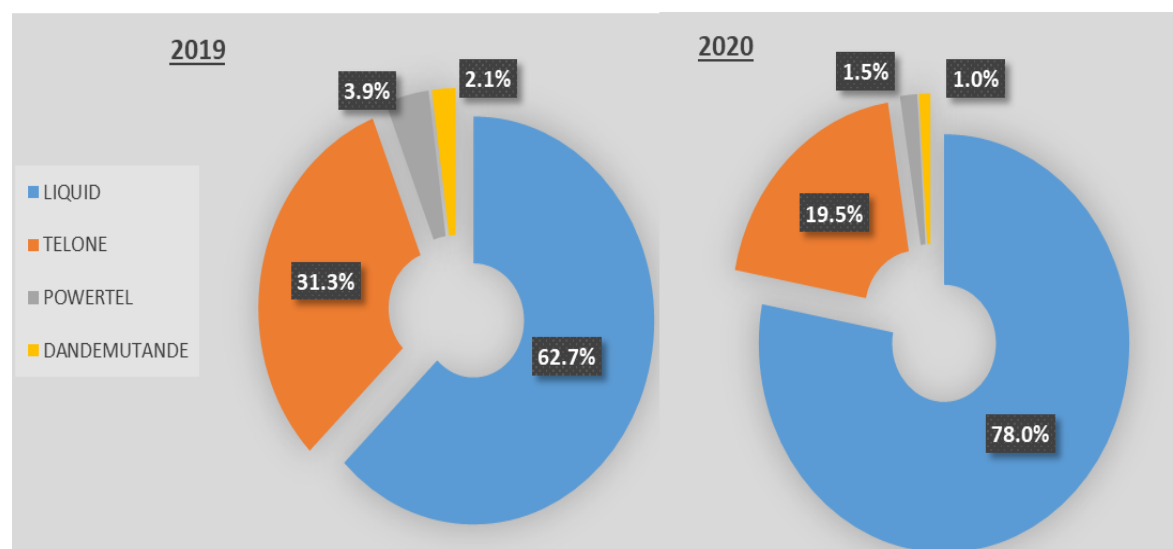
There was no major change in the market share of base stations during the course of the year. Econet had the biggest market share of 2G base stations, 3G base stations as well as LTE eNode Bs.

6. INTERNATIONAL INTERNET BANDWIDTH

Equipped international incoming Internet bandwidth increased by 161.1% to reach 333,416Mbps in 2020 from 127,715Mbps recorded in 2019. Demand for data and internet

services rose during the year due to the increased adoption of e-learning and telecommuting. To meet this demand, Internet Access Providers had to increase their bandwidth capacities. An annual comparison of the market share of equipped international internet bandwidth is shown in Figure 22 below:

Figure 22: 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 huge expansion of 176,920Mbps during the course of 2020.

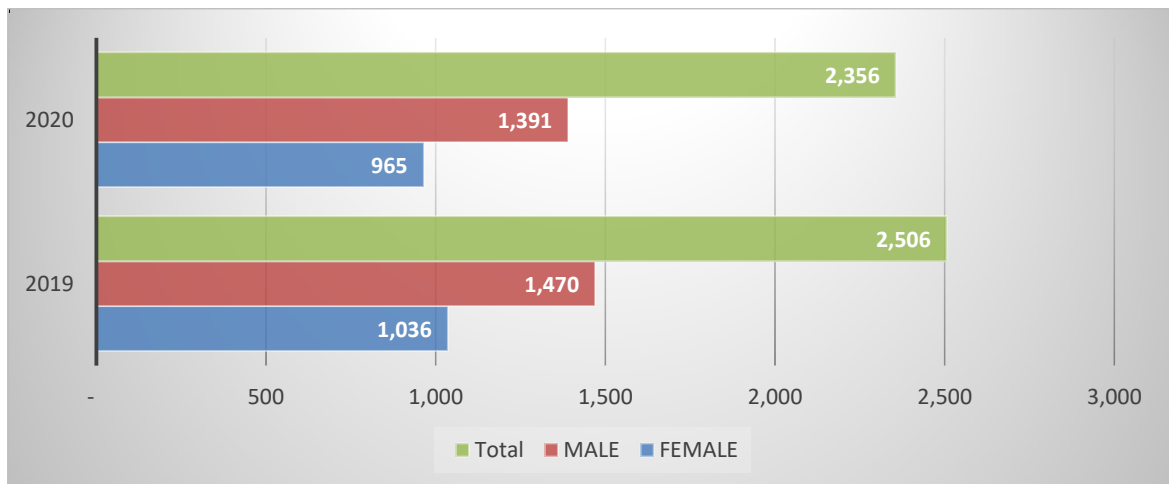
7. EMPLOYMENT

The total number of people employed on a full time basis in the postal and telecommunications sector in as at 31 December 2020 was 5,847. This represents a 6.2% decline from 6,209 full time employees recorded as at 31 December 2019. The following are details on number of employees broken down by subsector and by gender:

7.1 Mobile Network Operators

The total number of people employed by the mobile networks on a full time basis declined by 6% to reach 2,356 in 2020 from 2,506 recorded in 2019. The total number of mobile network employees is broken down by gender in Figure 23 below:

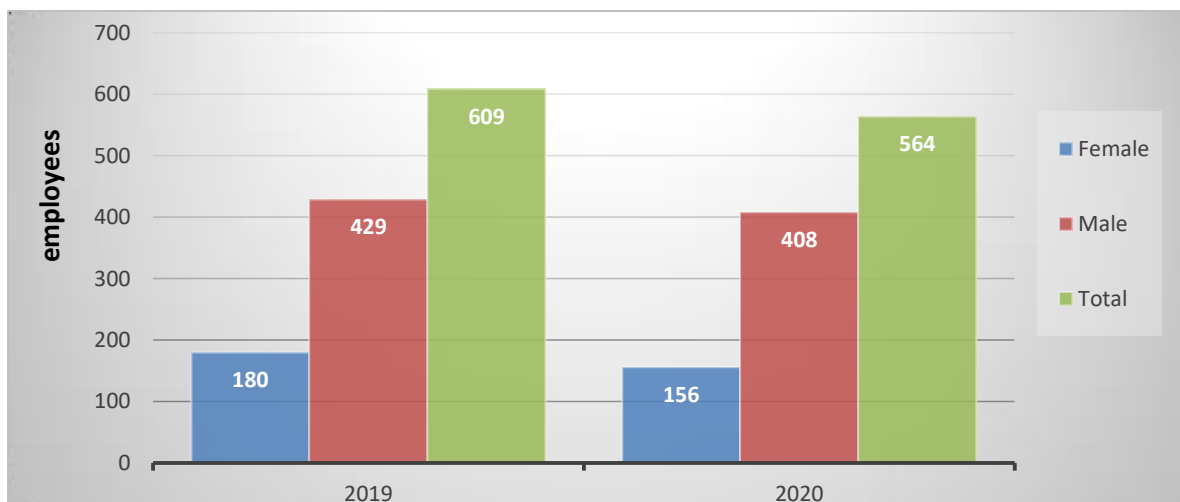
Figure 23: Employment by Mobile Operators



7.2 Internet Access Providers

As at 31 December 2020, Internet Access Providers employed a total of 564 people on a full time basis. This represents a 7.4% decline from 633 full time employees recorded as at 31 December 2019. The employees are broken down by gender in Figure 24 below:

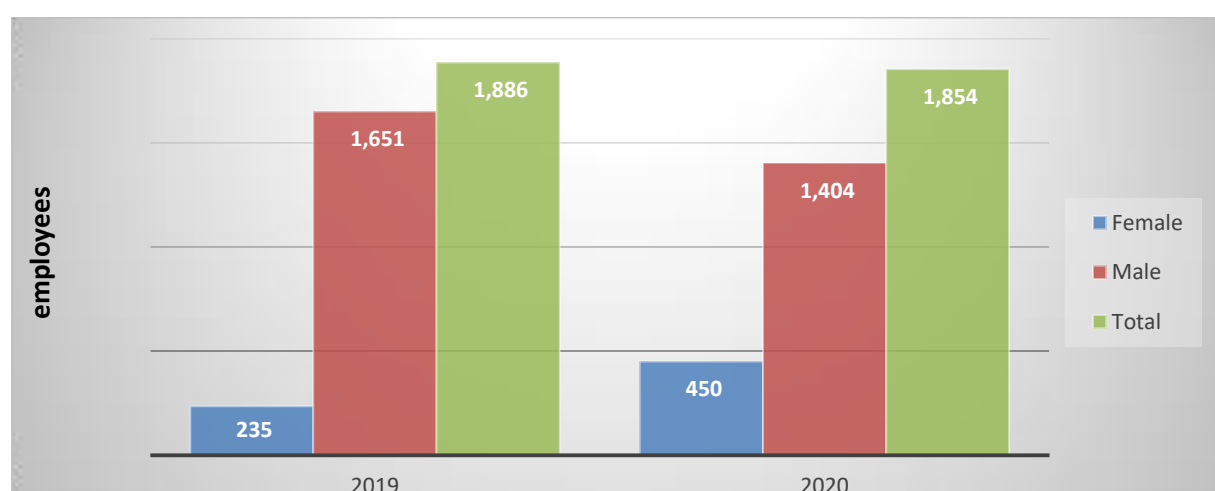
Figure 24: Employment by Internet Access Providers



7.3 Fixed Network

The total number of people employed by the fixed network on a full time basis declined by 1.7% to reach 1,864 in 2020 from 1,886 recorded in 2019. The annual comparison is shown in Figure 25 below.

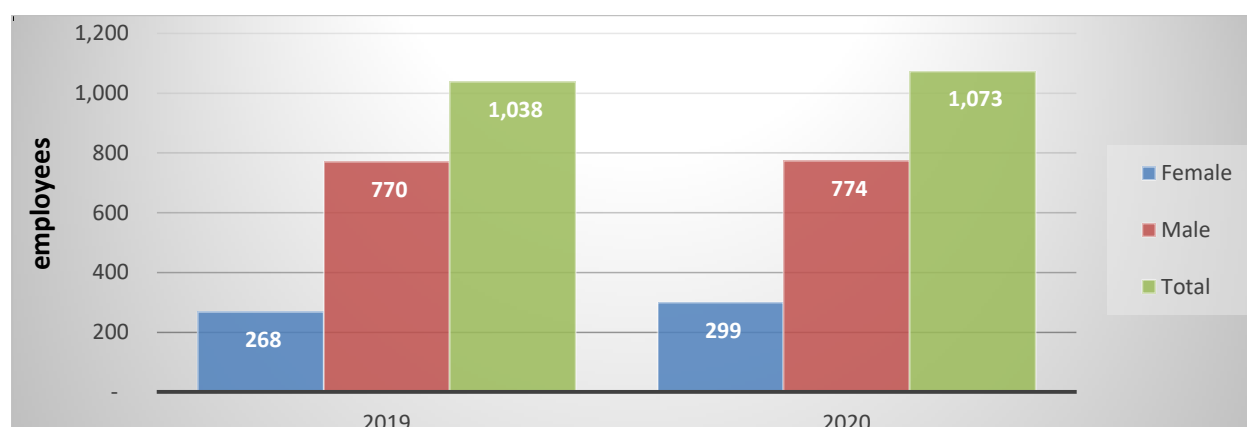
Figure 25: Employment by the fixed network



9.3 Postal & Courier

Unlike the telecommunications sector that recorded a decline in the number of employees, there was an overall increase in the number of full time employees employed by postal and courier operators as shown in Figure 26 below:

Figure 26: Postal & Courier employees



8. OUTLOOK

The COVID-19 pandemic negatively affected various sectors posing economic hardship for consumers, businesses and communities across the globe. The telecommunications sector was not an exception. Like most essential sectors, the industry found itself on the frontline, using all of its capacity to deliver connectivity to homes, businesses and governments, to keep nations afloat as the pandemic raged on. IP networks in particular, have come to play a life-

saving role in this pandemic, enabling simple data communications to transfer critical information, provide media and entertainment content, connect remote endpoints, and enable financial transactions, enterprise operations, government administration, healthcare and communications.

The COVID-19 will not go away so soon but its spread will decrease owing to ongoing vaccinations across the globe and at national level. Hence, prospects for economic recovery are bright especially given the expectation of a maize bumper harvest. This will boost agro-based production, which has not been the case for a long time. The anticipated increase in economic activity will create more employment opportunities and increase disposable incomes, which will help boost aggregate demand.

Resultantly, we are likely to witness a surge in demand for communication services, in particular data and courier volumes as consumers adapt to the new normal of life. Hence, digitalisation is likely to be scaled up, with operators repositioning themselves by upgrading and automating their networks to enhance agility to deliver new services/ applications to meet fast changing and versatile consumer demands. Coverage only, will no longer be a key strategic factor, hence we may see operators investing more in faster broadband technologies such as 4G and probably, 5G. Given the demand in broadband, and the competition in its provision, there will be renewed focus on customers' needs by taking a more refined approach to customer engagement.

Notably, the COVID-19 pandemic has exposed the extent of exclusion and deepened pre-existing inequalities in access to digital services. The broadband gap between the urban and rural areas is more evident and is an obstacle towards the implementation of programs such as e learning at national level. Accordingly, we are likely to witness increased efforts towards accelerating the speed of connecting underserved areas. Closing this access gap will be of critical importance in 2021.