



Annual Market Analysis 2023-2024

Electronic Communications Sector

Date: 29 August 2025

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INTRODUCTION AND METHODOLOGY

Under the Electronic Communications Act 2011, the Regulatory Authority of Bermuda (“RA”) is tasked with “supervising, monitoring and regulating the electronic communications sector”. This includes “the promotion of effective and sustainable competition, investment and innovation, the management of scarce resources utilized by the sector and the protection of the rights of consumers”.

In the RA Work Plan for fiscal 2022-2023, the RA announced that it would conduct an annual market analysis in the Electronic Communications (“EC”) sector and publish market data from the sectoral providers. This report covers the 2023 and 2024 calendar years and is based on data submitted by the sectoral providers¹. Data is additionally sourced from EC sectoral providers’ quarterly financial reports to the RA and from the Bermuda Government Department of Statistics.

This report also contains data from 2019 – 2022².

The RA would like to thank all sectoral providers for their contributions to this report.

¹ The accuracy of the market data provided by the sectoral providers and used in this report is the sole responsibility of the sectoral providers.

² Data from 2020-2022 reflects measures taken by the Bermuda Government to reduce the impact of the Covid 19 virus. Usage of EC services was affected by increased home working, technology solutions that enabled continued communication such as internet-based meetings, fewer travellers both inbound and outbound, and the resumption of office work (return to normalcy).

OVERVIEW OF THE ELECTRONIC COMMUNICATIONS SECTOR FOR PERIOD 2019 – 2024

A high-level snapshot of the economic contribution of the EC sector to the Bermuda economy is shown over the next page, followed by an overview of EC consumers.







Contribution		2020	2021	2022	2023	2024
	Total revenue (\$M)	183.36	184.54	190	199.71	200.21
	Total contribution to tax (Government, Handsets, Spectrum & Regulatory) (\$M)	19.88	19.84	20.73	21.28	21.35
	Total staff employed (full time staff equivalents)	333	302	334	347	307
	Total capital investment (\$M)	11.54	12.25	17.63	26.02	24.05
	Total broadband subscriptions	37,733	36,021	31,145	31,601	32,858
	Total mobile phone subscriptions	58,124	58,490	59,731	60,752	62,488

FIGURE 1: CONTRIBUTION TO BERMUDA'S ECONOMY (2020-2024)

RESIDENTIAL CUSTOMER SNAPSHOT

Average monthly spend for mobile postpaid (\$)				
2020	2021	2022	2023	2024
96.07	84.24	82.34	81.71	73.44

Average monthly spend per user for mobile prepaid (\$)				
2020	2021	2022	2023	2024
46.48	62.42	68.40	62.85	61.60



Average monthly spend for broadband (\$)				
2020	2021	2022	2023	2024
124.42	119.74	119.84	121.49	123.32

Average broadband subscription speed (Mbps)				
2020	2021	2022	2023	2024
121.18	134.98	228.63	289.87	293.55

Average monthly spend for fixed voice (\$)				
2020	2021	2022	2023	2024
33.61	35.02	27.25	36.23	36.05

Average monthly spend for Subscription TV (\$)				
2020	2021	2022	2023	2024
97.59	139.37	123.91	124.41	133.61

FIGURE 2: RESIDENTIAL CUSTOMER SNAPSHOT (2020-2024)

EXECUTIVE SUMMARY

The EC sector in Bermuda had a total of 19 Integrated Communications Operating Licences (ICOL), 1 Communications Operating Licence (COL) and one Submarine Communications Operating Licence (SubCOL) in place at the end of December 2024³. Of the 19 ICOL holders, 3 are currently inactive. This leaves a total of 15 active sectoral providers in the Bermuda market that were solicited to provide information for this analysis.

In the Market Review of the Electronic Communications Sector (September 2020), it was noted that there were “competition concerns in 7 of the 15 markets across four of the six services: broadband, mobile, fixed voice and business connectivity”. Two entities (One Communications and Digicel) were identified as having Significant Market Power (SMP) in one or more of these categories⁴.

It should be noted that the next Market Review of the Electronic Communications Sector is required to be concluded on or before 1 September 2025 and will be published almost contemporaneously with this Market Analysis.

Overall economic impact of the Electronic Communications sector

In 2024, the EC sector (including fixed, mobile, broadband, and business connectivity):

- generated \$200.21 in relevant revenue, a 0.25% increase from 2023.
- contributed a total of \$18.05M in direct Government fees including Government Administration Fees, handset fees and spectrum fees.
- contributed \$3.3M to the RA in Regulatory Administration Fees, up 0.25% from 2023.
- employed 307 staff, a 11.5% decrease from 347 in 2023.
- made capital investments in EC infrastructure and assets of \$24.05M, a 8% decrease from \$26.02M in 2023.

In 2023, the EC sector (including fixed, mobile, broadband, and business connectivity):

- generated \$199.71M in relevant revenue, a 5% increase from 2022.
- contributed a total of \$17.98M in direct Government fees including Government Administration Fees, handset fees and spectrum fees.
- contributed \$3.3M to the RA in Regulatory Administration Fees, up 5% from 2022.
- employed 347 staff, a 4% increase from 334 in 2022.
- made capital investments in EC infrastructure and assets of \$26.02M, a 48% increase from 2022.

³ Annex 1 to this document contains a list of EC sectoral providers as of 31st December 2024. A summary of current licences is also maintained on the RA website at [Authorisation Register \(ra.bm\)](https://www.ra.bm)

⁴ Annex 2 to this document contains a summary of the relevant markets and SMP operators from the 2020 Market Review of the Electronic Communications sector.

ECONOMIC IMPACT OF THE ELECTRONIC COMMUNICATIONS SECTOR

This section of the report presents additional data on the EC sector in Bermuda in 2023 and 2024. Where possible, the report also presents information about prior years⁵ to illustrate any applicable trends in the sector.

Total Revenue

Total revenue for the EC sector in Bermuda (including fixed, mobile, internet, leased lines, and subscription television) was \$200.21M in 2024, an increase of 0.25% over the same period in 2023.

Calendar Year	Total Relevant Revenue (\$M)	Year on Year Change
2016	194.74	1.73%
2017	199.55	2.47%
2018	198.17	-0.69%
2019	199.10	0.47%
2020	183.36	-7.91%
2021	184.54	0.64%
2022	190.00	2.96%
2023	199.71	5.11%
2024	200.21	0.25%

TABLE 1: TOTAL EC SECTOR REVENUE (2016-2024)

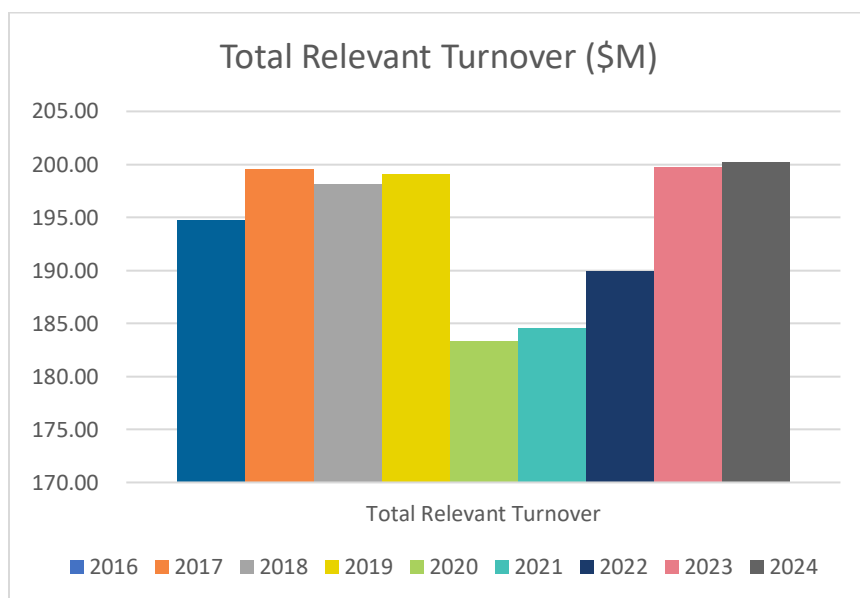


FIGURE 3: TOTAL EC SECTOR REVENUE (2016-2024)

⁵ There were some calculation errors for prior years that have been corrected in this report.

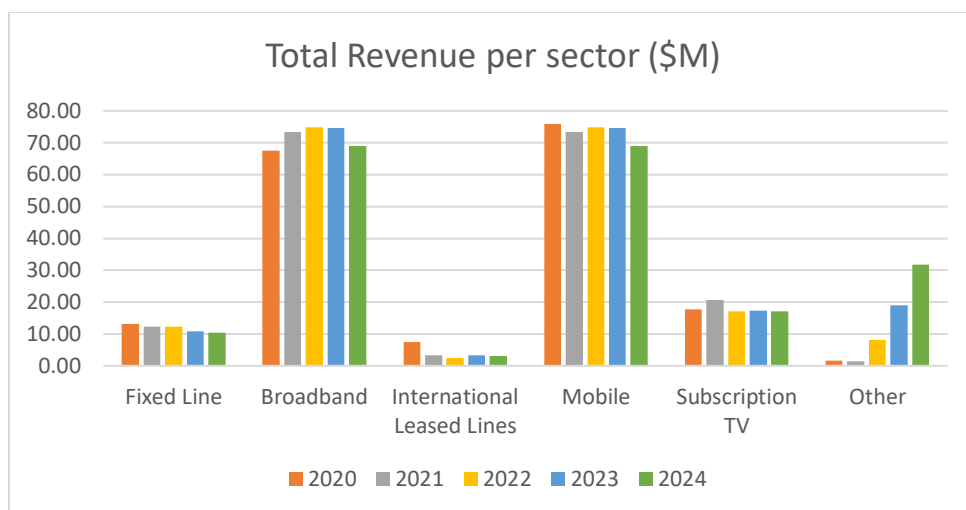


FIGURE 4: EC SECTOR REVENUE PER MARKET SEGMENT (2020-2024)

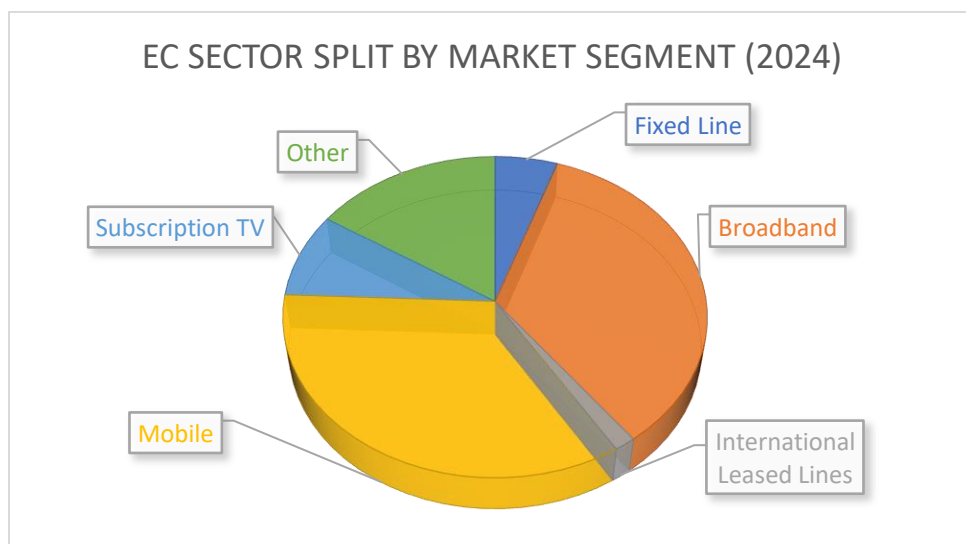


FIGURE 5: EC SECTOR SPLIT BY MARKET SEGMENT BASED ON REVENUE (2024)

Market Segment	2019	2020	2021	2022	2023	2024
Fixed Line	7%	7%	7%	6%	5%	5%
Broadband	37%	37%	40%	39%	37%	34%
International Leased Lines	4%	4%	2%	1%	2%	2%
Mobile	37%	41%	40%	39%	37%	34%
Subscription TV	10%	10%	11%	9%	9%	9%
Other	5%	1%	1%	4%	10%	16%

TABLE 2: EC SECTOR BY MAJOR PRODUCT (2020-2024)

Overall Market Share

Overall Market Share for the EC sector in Bermuda (including fixed, mobile, internet, leased lines, and subscription television) is split between the EC sectoral providers as indicated below.

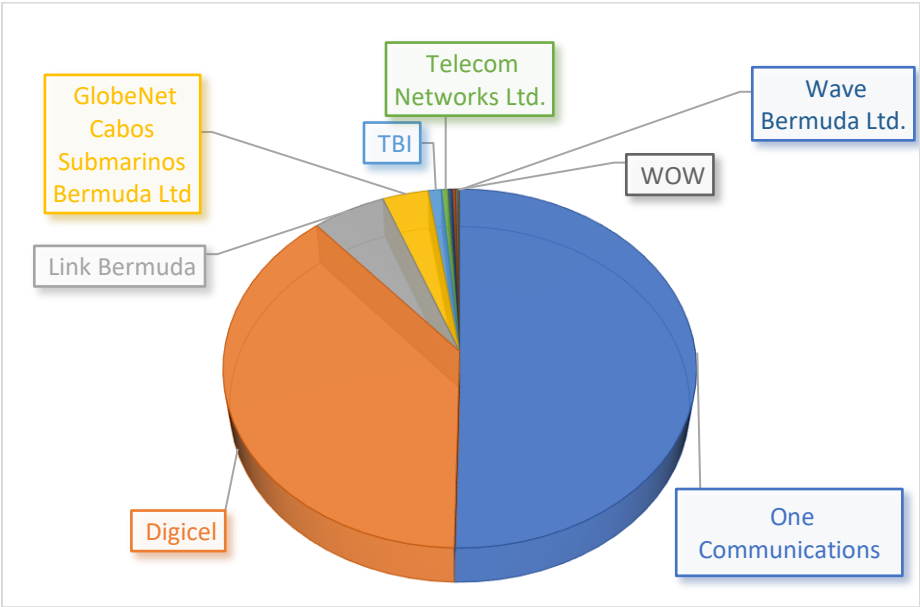


FIGURE 6: MARKET SHARE BY REVENUE (2024)

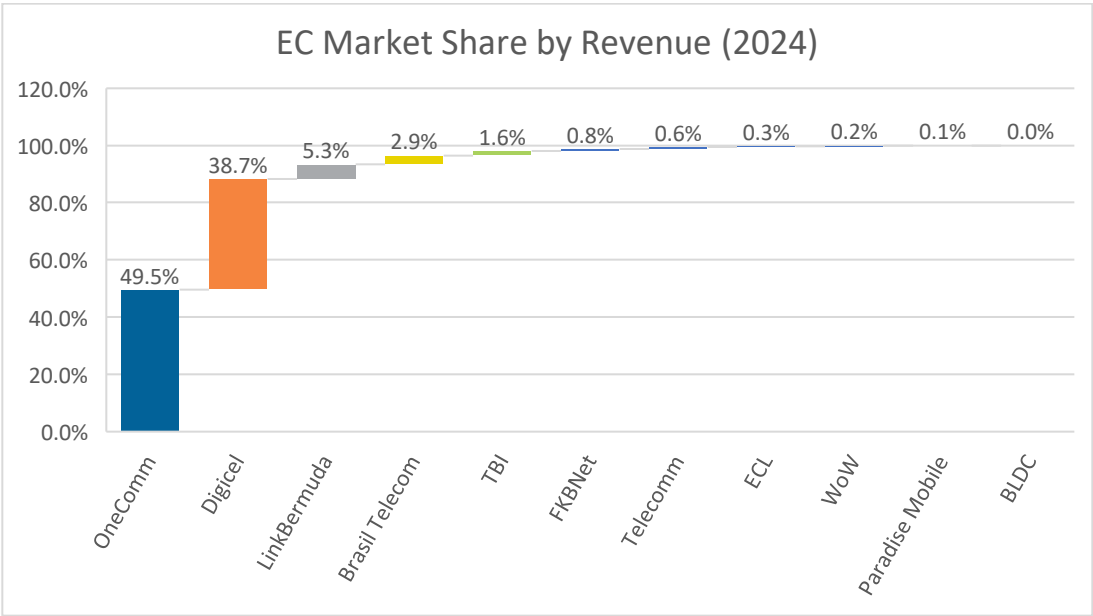


FIGURE 7: EC MARKET SHARE BY REVENUE (2024)

Employment

Figure 11 shows the number of full-time equivalent staff employed in the EC sector from 2020 - 2024. At the end of 2024, 307 individuals were employed in the EC Sector, a 11.5% decrease from 347 in 2023.

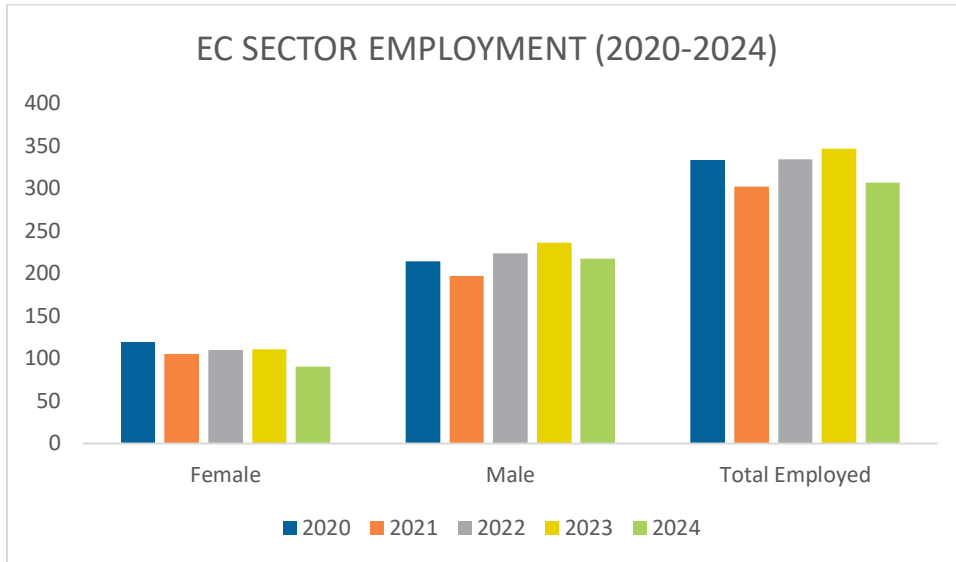


FIGURE 8: EMPLOYMENT IN THE EC SECTOR (2020-2024)

Taxation contributions

The EC sector contributes to the Bermuda Government in the form of:

- direct licence fees (sometimes referred to as Government Authorization Fees) which are assessed as a percentage of relevant revenue based on the licence type. This percentage has been set as 3.5% for the majority of the reporting period;
- mobile handset fees based on the number of active handsets in use per month. This fee is set as \$12 per month per mobile service⁶; and
- spectrum fees based on sectoral providers' use of specified high demand spectrum.

The following charts illustrate the total fees provided to the Bermuda Government over the last four years. The EC sector contributed a total of \$18.053M in 2024 which was a 0.38% increase over \$17.99M in 2023. In 2023, the contribution was \$17.99M which was a 2.22% increase over \$17.59M in 2022.

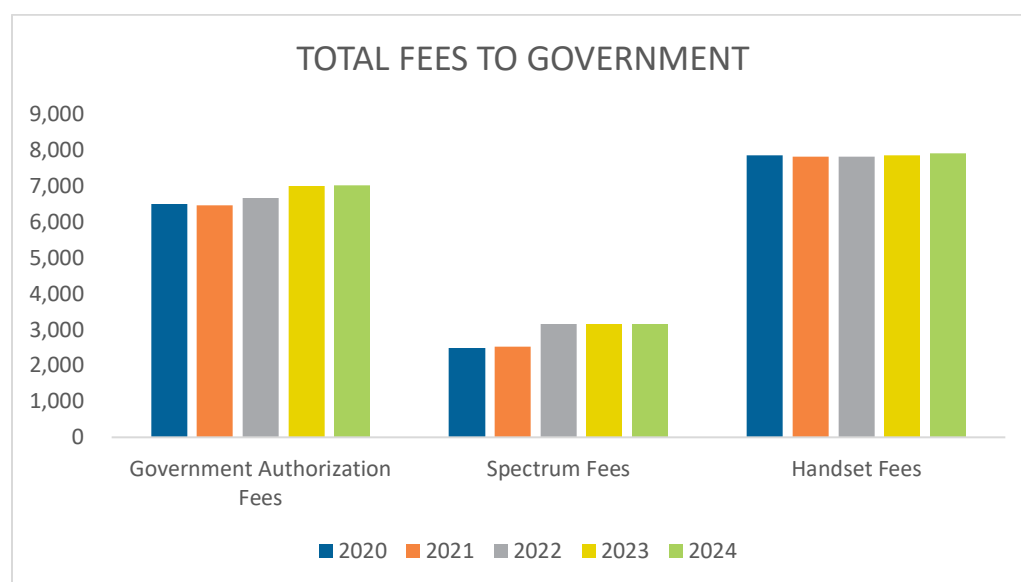


FIGURE 9: TOTAL CONTRIBUTION TO GOVERNMENT ('000s) (2020-2024)

⁶ This fee has changed to \$6 per month as of 1 July 2025

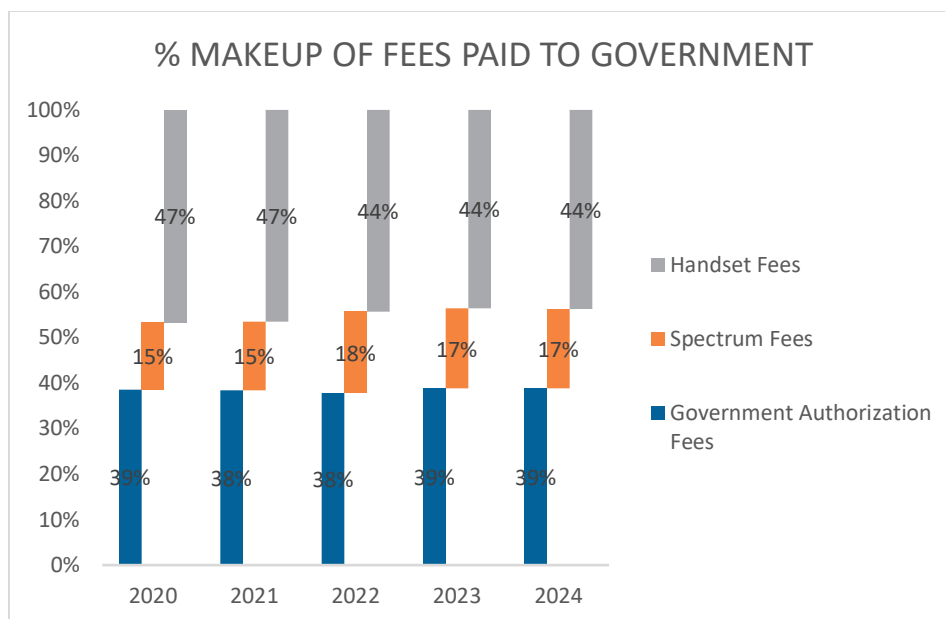


FIGURE 10: % MAKEUP OF CONTRIBUTION TO GOVERNMENT (2020-2024)

In addition to fees paid to the Bermuda Government, the EC sector also contributes funding for the RA itself in the form of EC Regulatory Authority Fees. These fees are also assessed as a percentage of revenue based on the licence type. This percentage has been set as 1.65% for the majority of the reporting period.

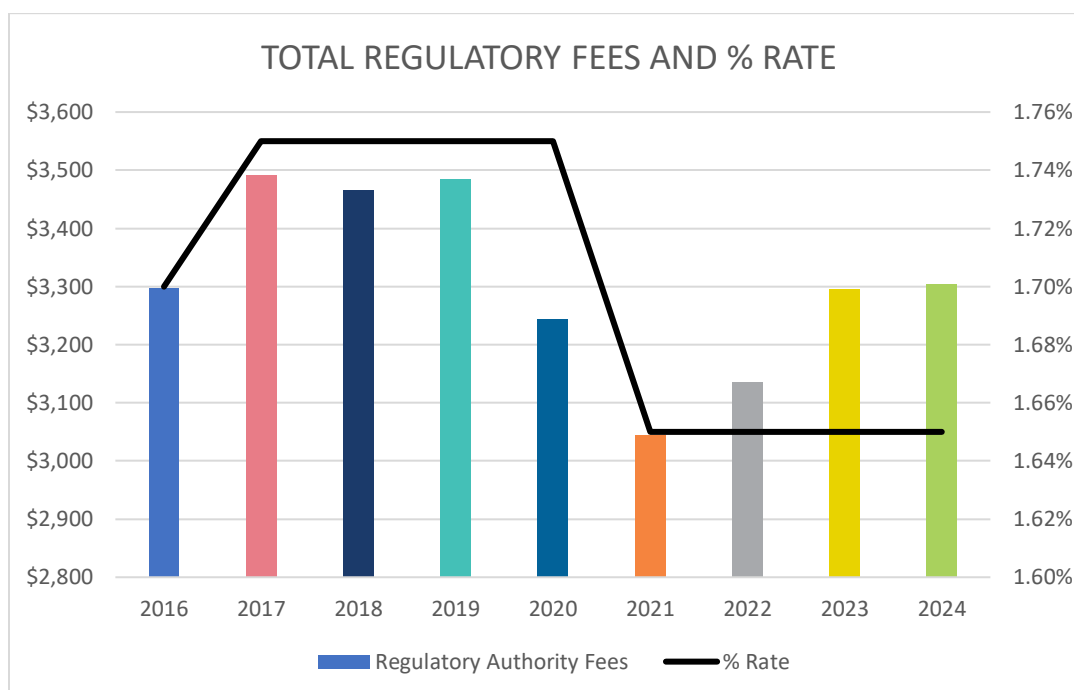


FIGURE 11: EC REGULATORY AUTHORITY FEES (2016-2024)

Capital Investment

Capital investment expenditure in the EC sector in 2024 was \$24.05M, a decrease of 8% from \$26.02M in 2023. In 2023, capital expenditure was \$26.02M, an increase of 43% from \$18.1M in 2022. The increase in 2023 was primarily driven by capital investment from a new ICOL.

	2019	2020	2021	2022	2023	2024
Capital Investment (\$M)	17.79	12.05	11.73	18.13	26.02	24.05

TABLE 3: CAPITAL INVESTMENT IN THE EC SECTOR (2020-2024)

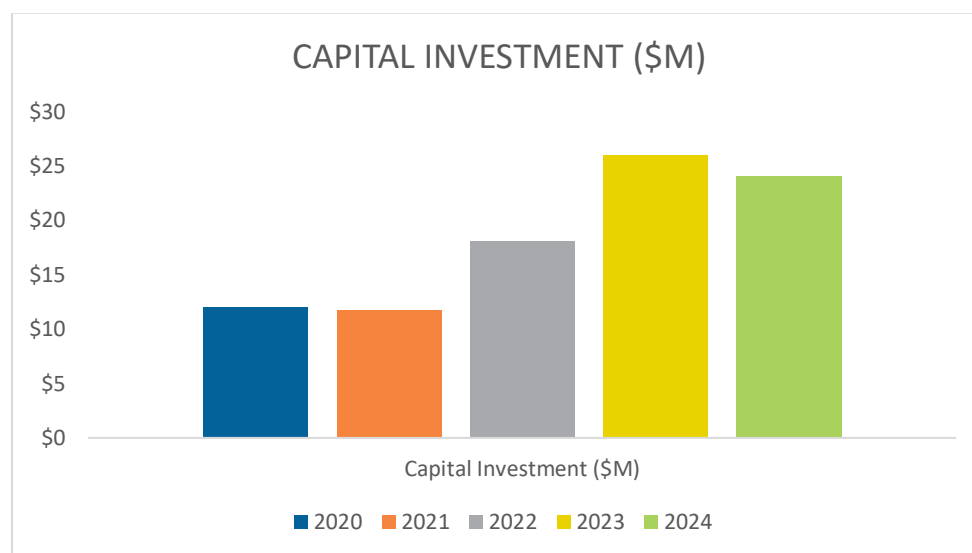


FIGURE 12: CAPITAL INVESTMENT (2020-2024)

FIXED NETWORK (TELEPHONY) MARKET

The fixed network market is characterized by consumer equipment that is in a fixed geographic location and used to make/receive voice calls, send/receive faxes and to support broadband services. Information on broadband is contained in later sections of this report.

The fixed line market contributed approximately 5% of the overall EC market revenue in 2023 and 2024. The proportion of revenue was 6.4% of the overall EC market revenue in 2022.

Total number of lines and subscriptions

The chart below shows the total number of fixed line subscriptions during the period 2020 – 2024.

- The total number of fixed line subscriptions in 2024 was 148,605.
- There were 11,000 total residential subscriptions in 2024, a decrease of 8% from 11,936 in 2023.
- There were 137,605 total commercial subscriptions in 2024, an increase of 18% from 117,099 in 2023. There was a very large increase in one sectoral provider's commercial subscription count between 2022 and 2023 (an increase of over 100,000 subscriptions). This is under investigation with the sectoral provider.

Type of Subscription	2020	2021	2022	2023	2024
Residential Subscriptions	17,276	15,698	14,702	11,936	11,000
Commercial Subscriptions	11,496	12,962	13,864	117,099	137,605
Total	28,772	28,660	28,566	129,035	148,605

TABLE 4: FIXED LINE SUBSCRIPTIONS (2020-2024)

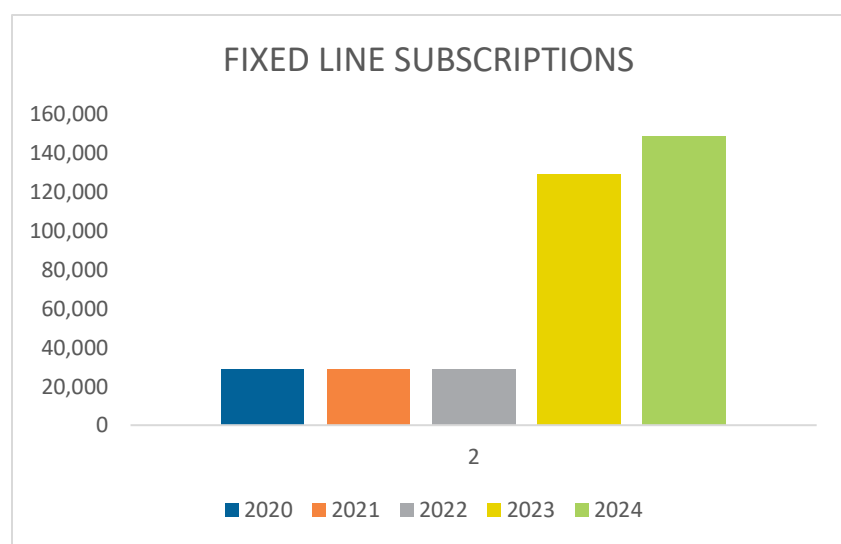


FIGURE 13: TOTAL NUMBER OF FIXED LINE SUBSCRIPTIONS (2020-2024)

Market Share

The EC sector has 4 sectoral providers that participated in the provision of fixed network services 2019 - 2022. The market share split is illustrated below.

The Digicel group (including the Bermuda Telephone Company) has approximately 70% of the fixed market as of 31st December 2022⁷. FKBNet did not submit 2021 or 2022 figures.

Sectoral Provider	2020	2021	2022	2023	2024
OneComm	16.43%	24.57%	27.81%	7.02%	6.57%
Digicel	79.58%	72.22%	69.49%	14.36%	11.92%
Link	3.37%	3.06%	2.70%	0.54%	0.39%
TBI	0.14%	0.15%	0.00%	78.01%	81.04%
FKBNet	0.47%	0.00%	0.00%	0.07%	0.08%

TABLE 5: FIXED MARKET SHARE BY PROVIDER (2020-2024)

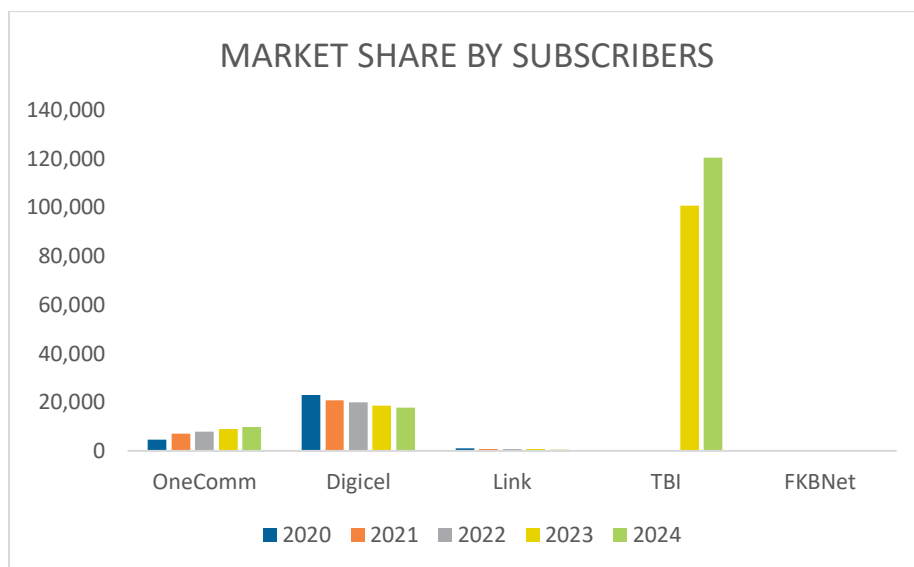


FIGURE 14: FIXED LINE MARKET SHARE BY NUMBER OF SUBSCRIBERS (2020-2024)

⁷ Calculated by number of subscribers

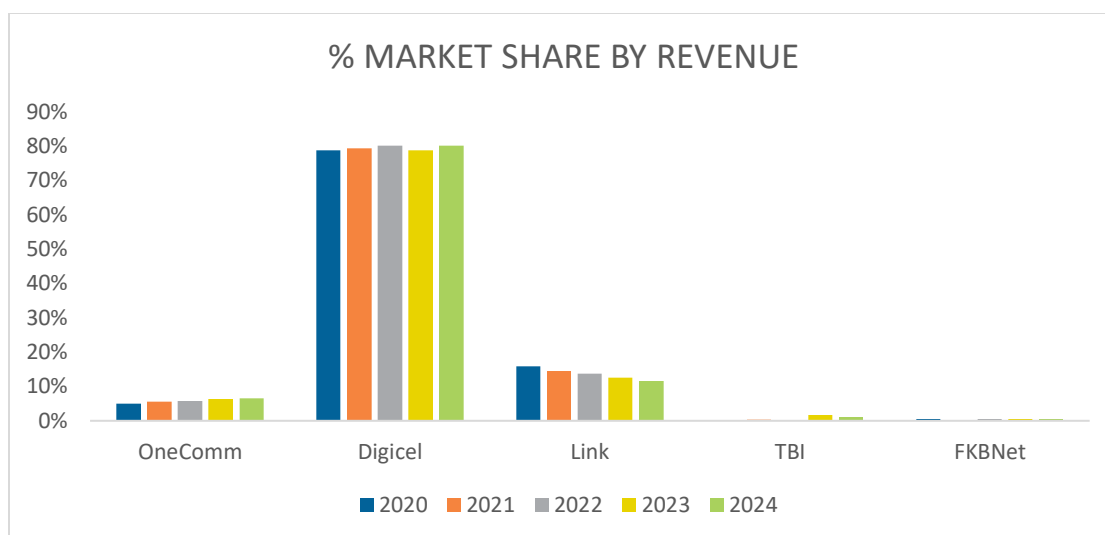


FIGURE 15: % FIXED LINE MARKET SHARE BY REVENUE (2020-2024)

Fixed telephone minutes

The volume of voice traffic associated with the fixed line market decreased 2% from 2023 to 2024. There are large anomalies in the reporting data that remain to be explained by the sectoral parties involved, particularly with the substantial increase in minutes after 2022.

Fixed Telephone Traffic in Minutes	2020	2021	2022	2023	2024
Total Minutes	35,440,639	32,176,501	27,509,945	77,419,968	76,225,085

TABLE 6: VOLUME OF VOICE TRAFFIC (2020-2024)

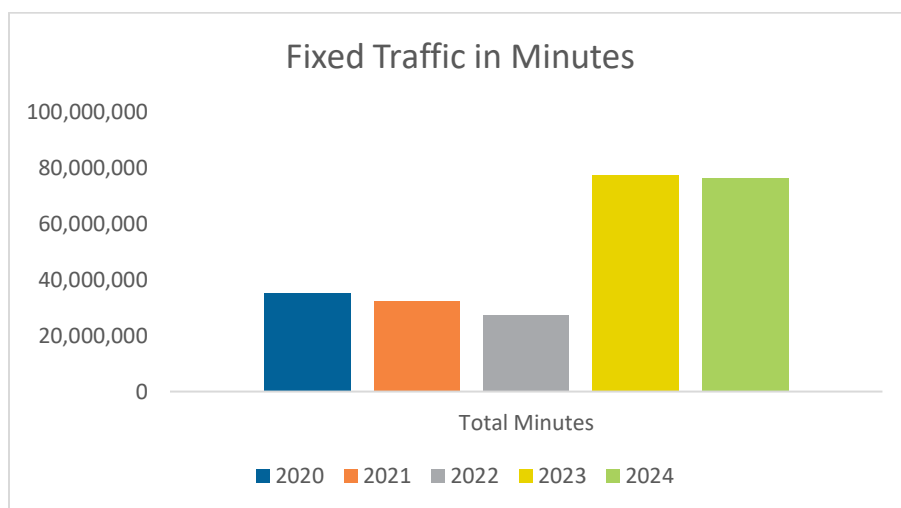


FIGURE 16: FIXED TELEPHONE TRAFFIC IN MINUTES (2020-2024)

Penetration rates

The residential fixed line market penetration rate for Bermuda⁸ decreased 8% from 11,936 in 2023 to 11,000 in 2024. There was a previous decline of 19% from 14,702 in 2022 to 11,936 in 2023.

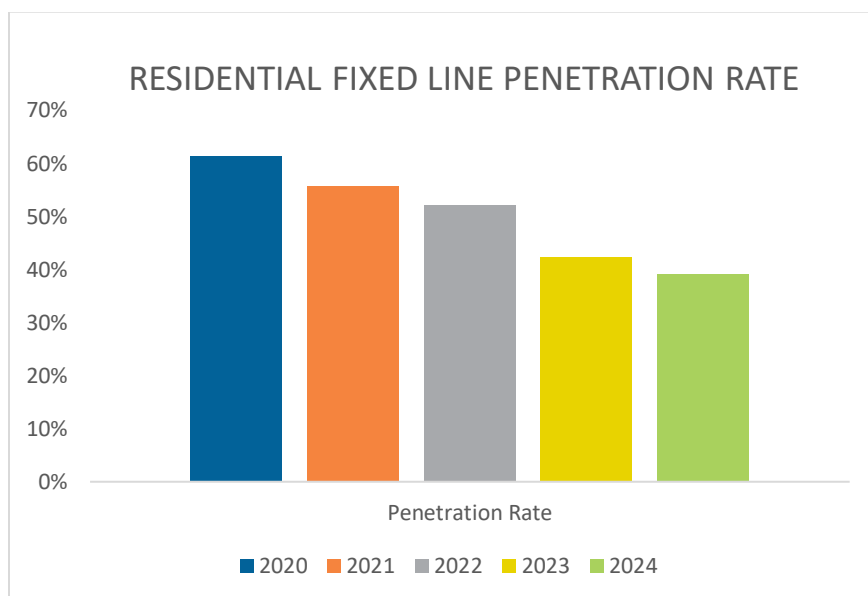


FIGURE 17: FIXED LINE RESIDENTIAL PENETRATION RATE (2020-2024)

Revenues

Total fixed line revenue decreased 3% from \$10.7M in 2023 to \$10.45M in 2024. There was a decline of 13% from \$12.32M in 2022 to \$10.7M in 2023.

	2020	2021	2022	2023	2024
Fixed Line Total Revenue (000's)	13,101	12,385	12,320	10,722	10,447

TABLE 7: TOTAL FIXED LINE REVENUE (2020-2024)

⁸ Using the Bermuda Government Department of Statistics 2016 Census – Total number of Dwelling Units was 28,192

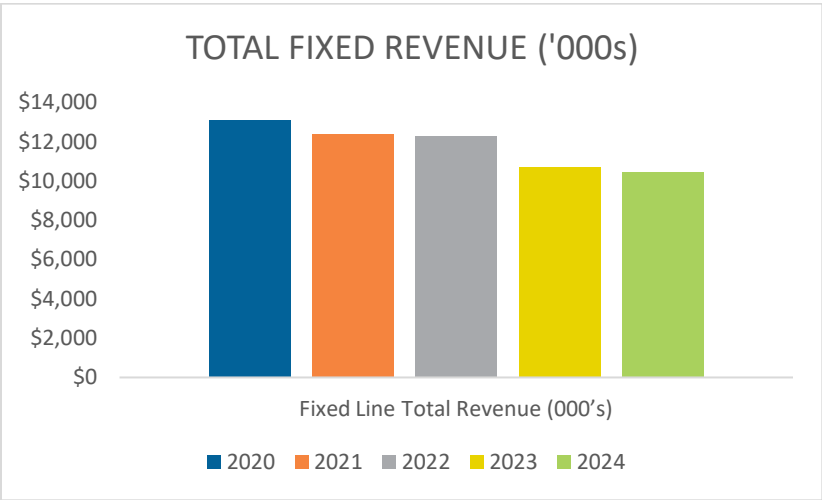


FIGURE 18: FIXED LINE TOTAL REVENUE ('000s) (2020-2024)

The fixed line market share by revenue is presented below:

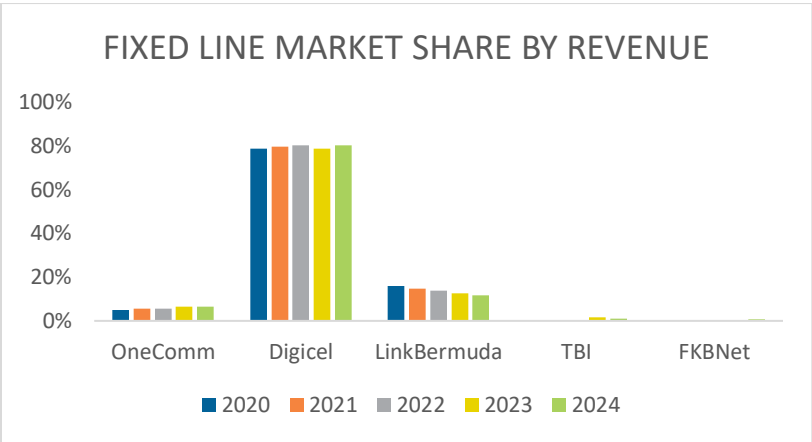


FIGURE 19: FIXED LINE MARKET SHARE BY REVENUE (2020-2024)

Average revenue per Residential user

Average revenue per residential subscriber per month decreased 1% from \$36.23 in 2023 to \$36.05 in 2024. 2023 saw an increase of 33% from \$27.25 in 2022 to \$36.23 in 2023.

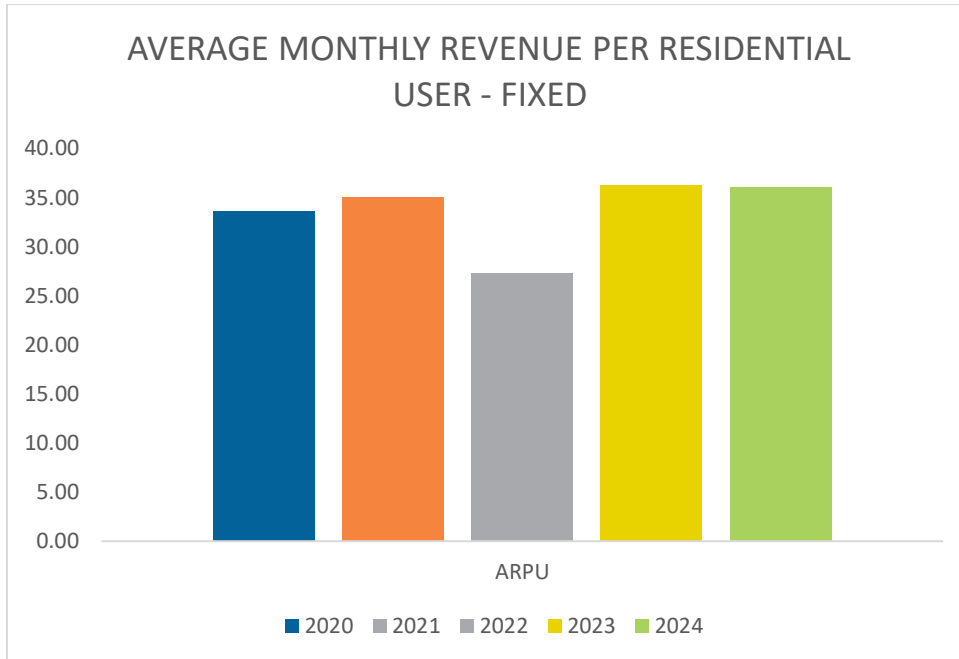


FIGURE 20: FIXED LINE AVERAGE MONTHLY REVENUE PER RESIDENTIAL USER (2020-2024)

BROADBAND MARKET

Broadband services are defined in the Market Review as being an internet service or connection generally defined as being “always on”, providing a bandwidth greater than narrowband. Narrowband services include services provided over the Public Switched Telecommunications Network (PSTN) or Integrated Services for Digital Network (ISDN).

The broadband market made up 34.5% of the overall EC market revenue in 2024, an 8% increase from 2023. In 2023 it made up 37.4% of the overall EC market revenue, a 5% decrease from 39.4 in 2022. The majority of this change resulted from a reclassification of direct internet access services away from broadband.

Total number of subscriptions

The number of fixed broadband subscribers⁹ increased by 4% in 2024 to 32,858 from 31,601 in 2023.

	2020	2021	2022	2023	2024
Total	37,733	36,021	31,145	31,601	32,858

TABLE 8: TOTAL NUMBER OF BROADBAND SUBSCRIBERS (2020-2024)

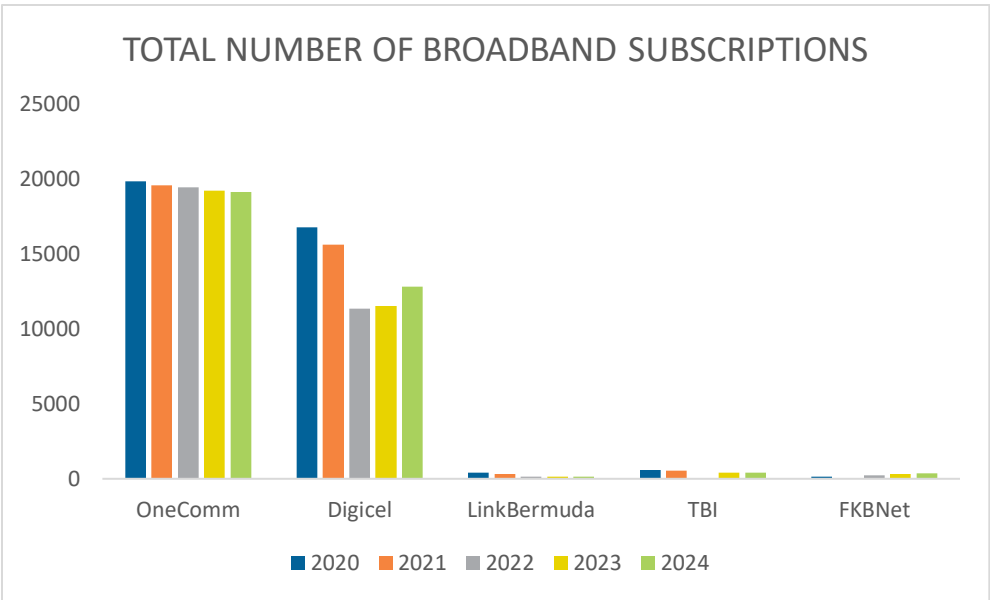


FIGURE 21: BROADBAND TOTAL NUMBER OF SUBSCRIPTIONS PER EC PROVIDER (2020-2024)

⁹ The total number of broadband subscribers has been recalculated and there have been some corrections to prior year numbers.

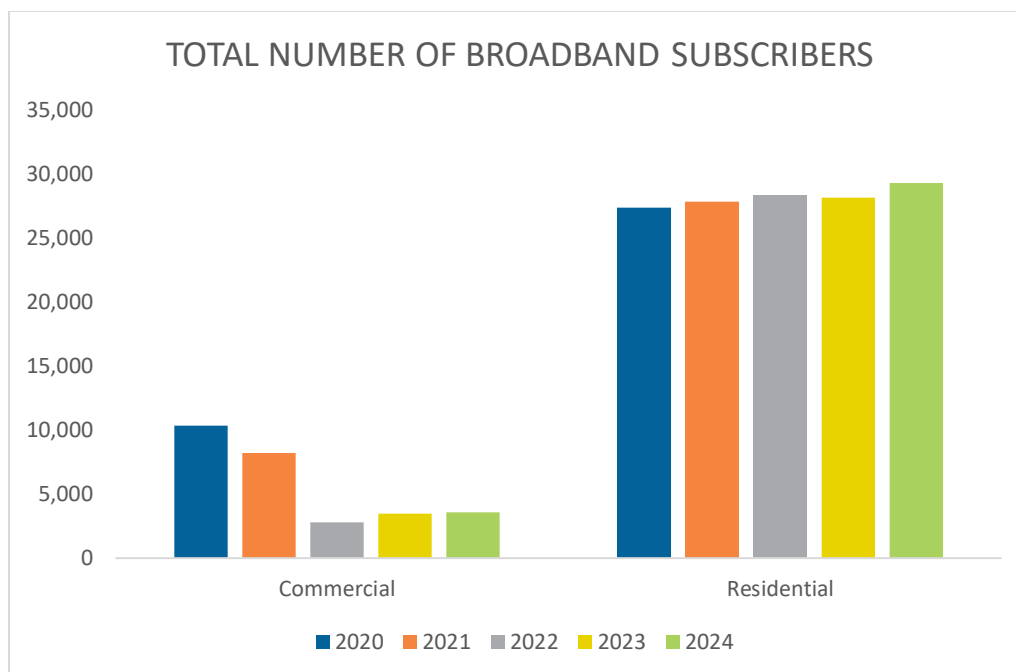


FIGURE 22: BROADBAND RESIDENTIAL/COMMERCIAL SPLIT BY SUBSCRIPTIONS (2020-2024)

Penetration rates

The fixed residential broadband penetration rates for Bermuda¹⁰ was 104% in 2024 which was a 4% increase over 100% penetration in 2023.

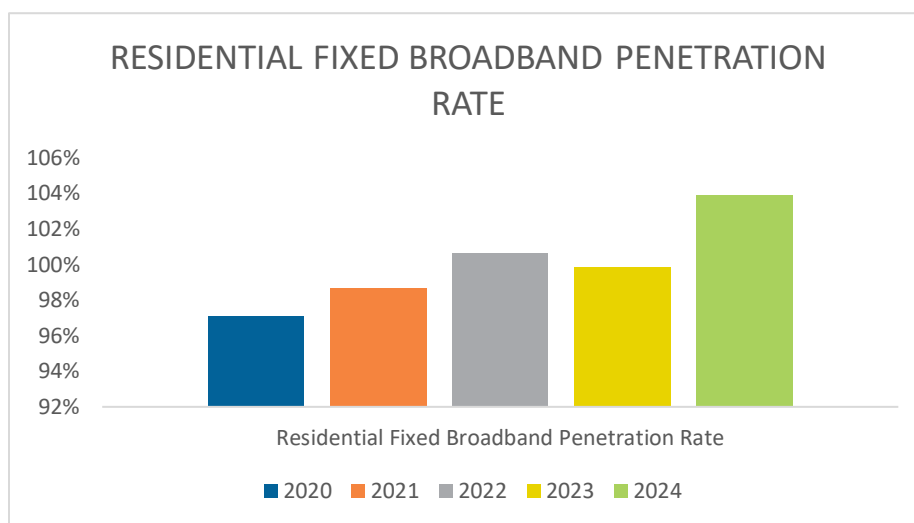


FIGURE 23: FIXED BROADBAND RESIDENTIAL PENETRATION RATE (2020-2024)

¹⁰ Using the Bermuda Government Department of Statistics 2016 Census – Total number of Dwelling Units was 28,192

Market Share by subscription

The broadband market in 2024 was dominated by One Communications (58.22%) and Digicel (39.00%). The remaining market was split between Link (0.40%), TBI (1.23%) and FKBNNet (1.14%).

Market Share %	2020	2021	2022	2023	2024
OneComm	52.56%	54.33%	62.37%	60.87%	58.22%
Digicel	44.43%	43.35%	36.36%	36.48%	39.00%
Link	1.06%	0.83%	0.46%	0.44%	0.40%
TBI	1.53%	1.49%	0.00%	1.28%	1.23%
FKB	0.43%	0.00%	0.81%	0.94%	1.14%

TABLE 9: BROADBAND MARKET SHARE BY SUBSCRIPTION (2020-2024)

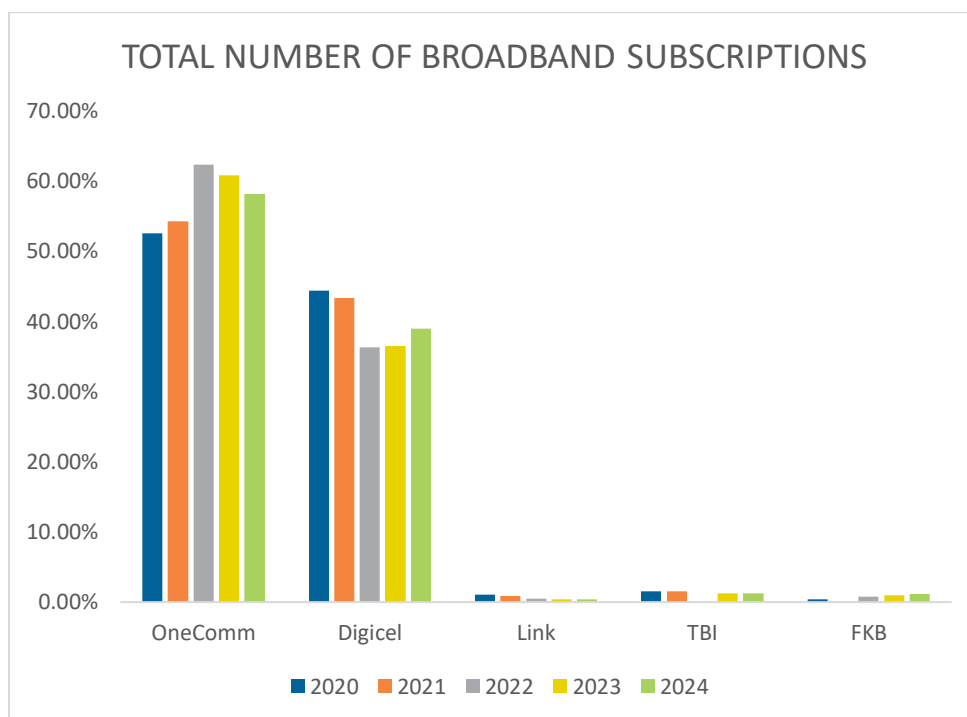


FIGURE 24: BROADBAND MARKET SHARE BY SUBSCRIPTION (2020-2024)

Average Broadband Speed by Subscription

With technological advances, the average broadband speed based on subscription has steadily increased from 2020 through 2024. The median average broadband speed based on subscription was 293.55 Mbps in 2024 which was an increase of 1% over 289.87 Mbps in 2023. In contract, the median speed in 2023 was 289.87 Mbps which was a 27% increase over 228.63 Mbps in 2022.

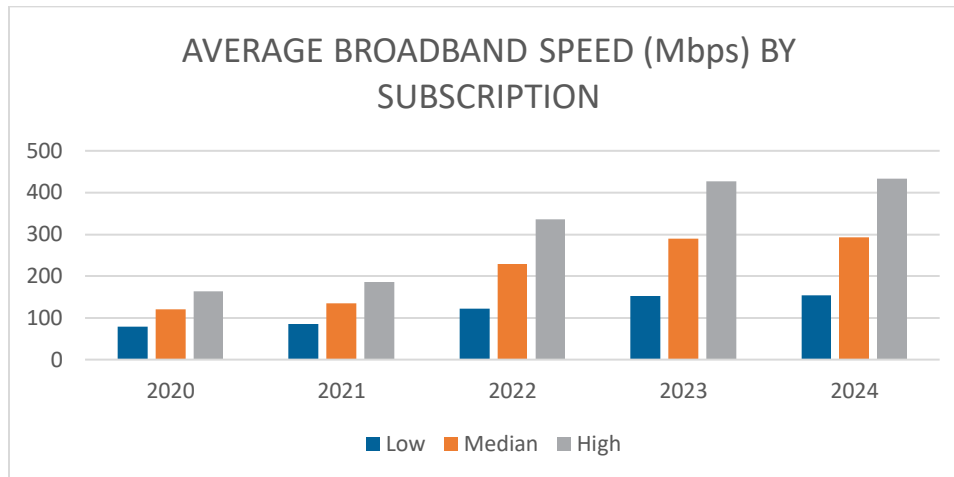


FIGURE 25: BROADBAND AVERAGE SUBSCRIPTION SPEED (2020-2024)

Average Broadband Performance as measured by the Worldwide Broadband Speed League

Measuring internet broadband performance requires a very large set of independent tests. BestBroadbandDeals.co.uk collated and analysed over 1.5 billion speed tests¹¹ ending 30 June 2024 to reveal broadband speeds in 229 counties. The following depicts Bermuda's mean download speed and Bermuda's world rank.

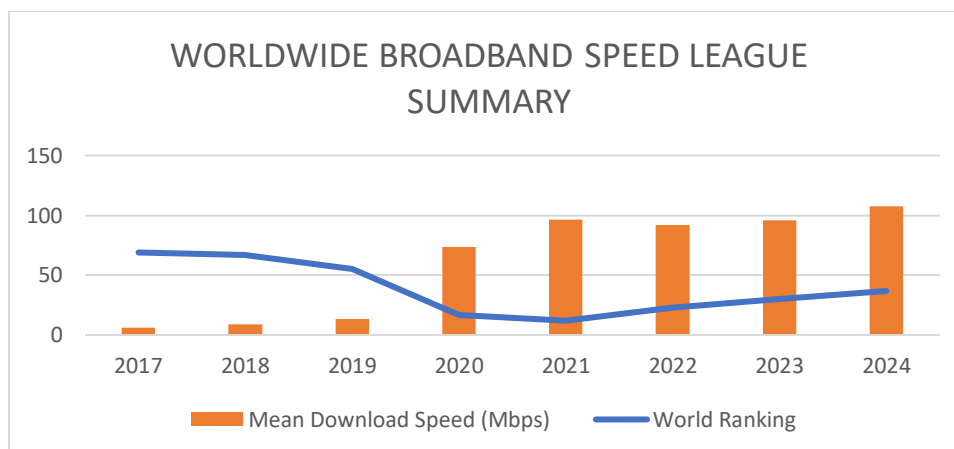


FIGURE 26: WORLDWIDE BROADBAND SPEED LEAGUE SUMMARY (2017-2024)

¹¹ <https://bestbroadbanddeals.co.uk/broadband/speed/worldwide-speed-league/>

Revenues

In 2024 total broadband revenues increased 6% to \$71.72M from \$67.94M in 2023. In 2023, total broadband revenues declined by 3% to \$67.94M from \$70.01M in 2022.

	2020	2021	2022	2023	2024
Total Revenue (\$M)	67.59	65.75	70.01	67.94	71.72

TABLE 10: TOTAL BROADBAND REVENUES (2020-2024)

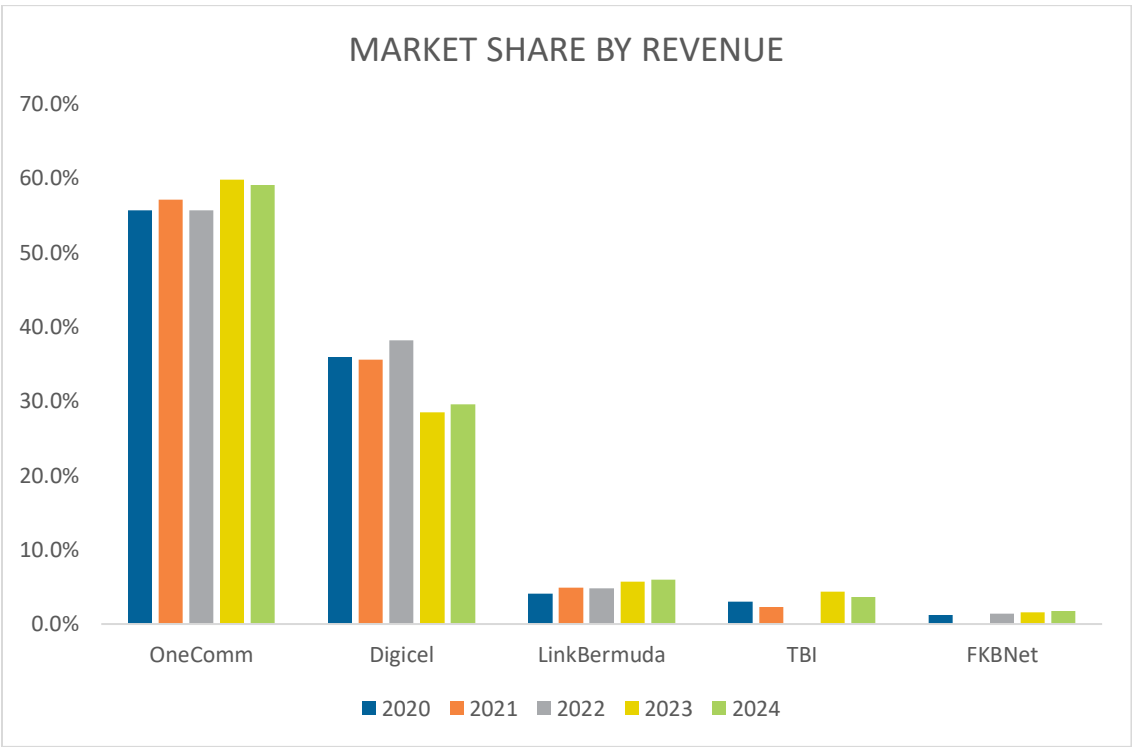


FIGURE 27: BROADBAND MARKET SHARE BY REVENUE (2020-2024)

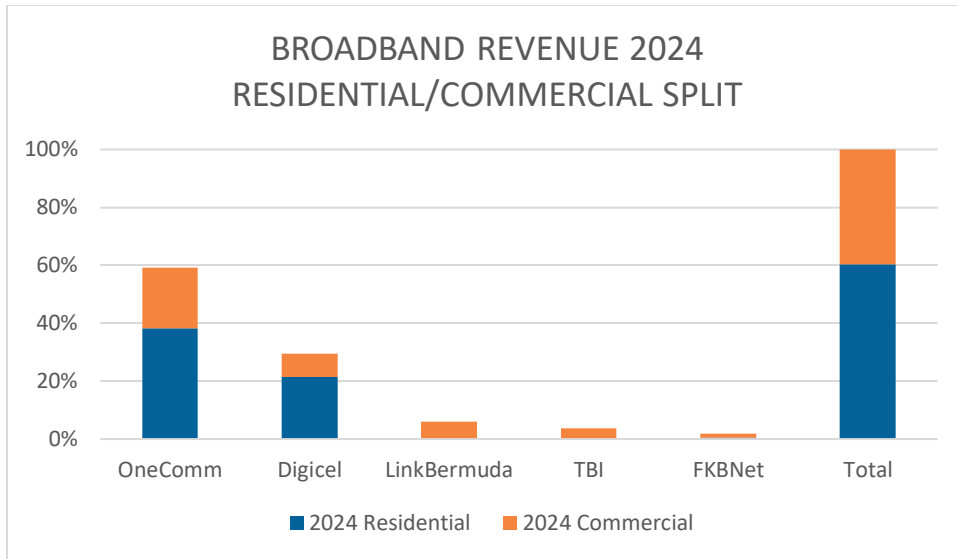


FIGURE 28: BROADBAND RESIDENTIAL/COMMERCIAL SPLIT BY REVENUE FOR 2024

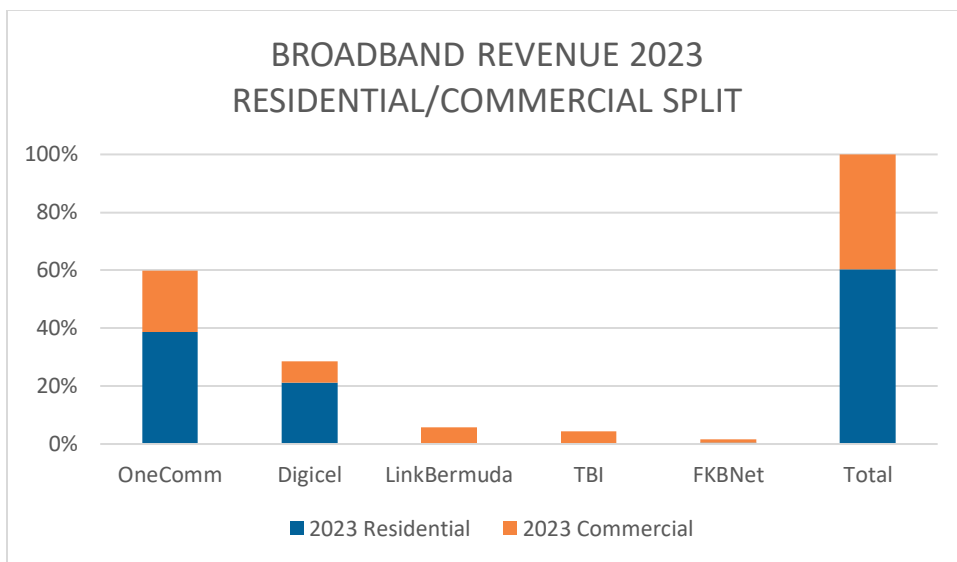


FIGURE 29: BROADBAND RESIDENTIAL/COMMERCIAL SPLIT BY REVENUE FOR 2023

Average Revenue per user

The average monthly revenue per residential fixed broadband subscriber in 2024 was \$123.32 which was a 2% increase over \$121.49 in 2023. The average monthly revenue per residential fixed broadband subscriber in 2023 was \$121.49 which was a 1% increase over \$119.84 in 2022.

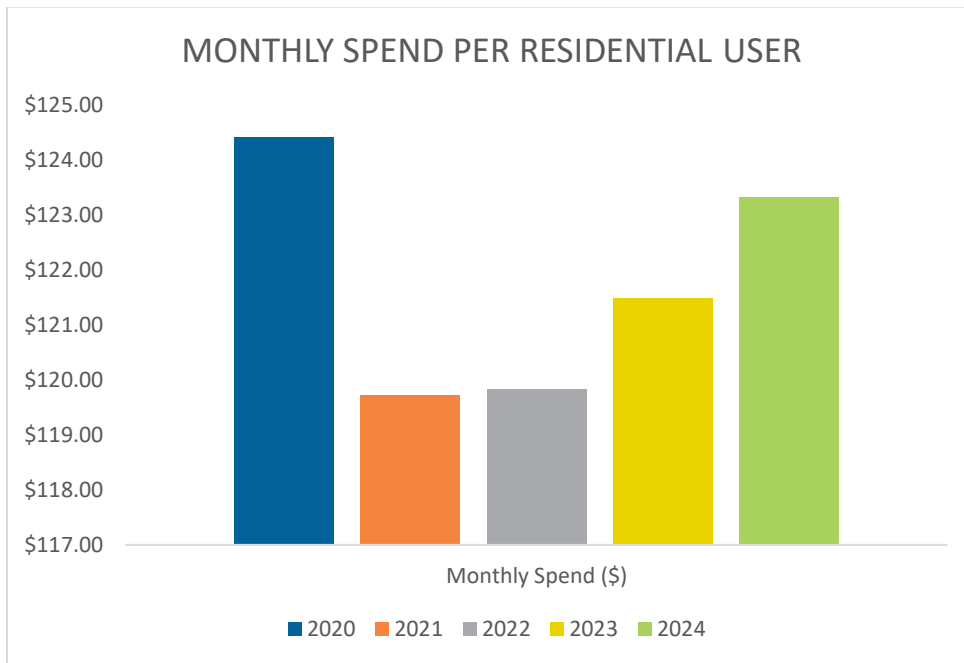


FIGURE 30: FIXED BROADBAND AVERAGE MONTHLY SPEND PER RESIDENTIAL USER (2020-2024)

LEASED LINE MARKET

Revenues

The leased line market declined by 4% from \$5,973 in 2023 to \$5,707 in 2024.

Data for One Communications was classified as international in 2020; it was reclassified and captured in the domestic leased line markets in 2021.

	2020	2021	2022	2023	2024
OneComm	3,443	2,734	2,756	2,648	2,699
Link	2,792	2,563	2,545	2,310	2,246
TBI	1,200	646	0	1,015	762

TABLE 11: MARKET SHARE BY REVENUE '000s (2020-2024)

Market Share by Revenue

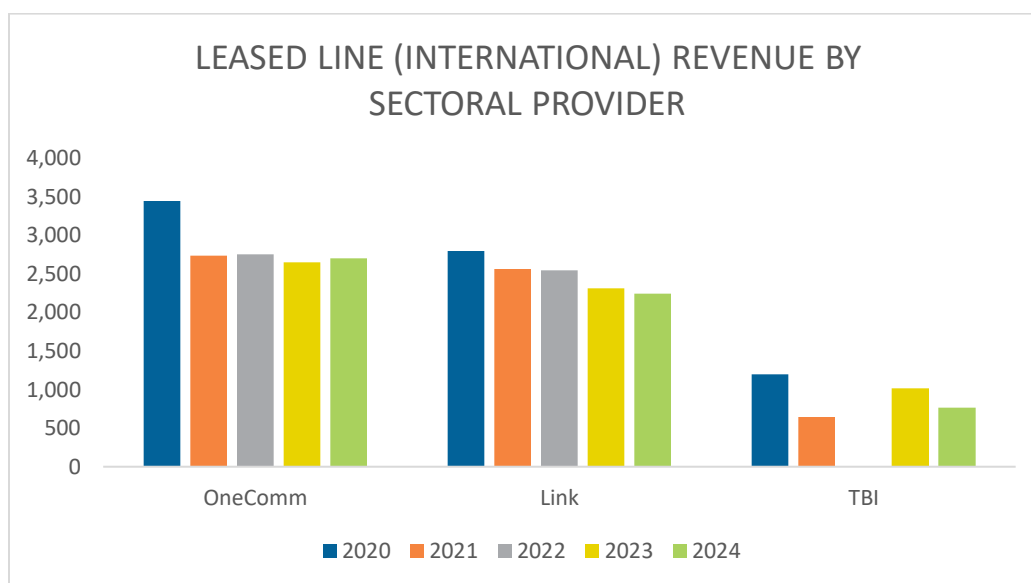


FIGURE 31: LEASED LINE MARKET SHARE BY REVENUE '000s (2020-2024)

MOBILE MARKET

The mobile sector represented 34% of EC sector revenue in 2024, a decrease of 3% from 37% in 2023.

Total number of mobile subscriptions

The total number of mobile subscriptions in 2024 was 62668 – a 3% increase from 60,741 in 2023. This represents approximately 99 subscriptions per 100 inhabitants¹².

The subscriber base was split into residential and commercial subscriptions. The residential subscriptions increased 3% and commercial subscriptions by 3% from 2023 to 2024.

Subscriber Type	2020	2021	2022	2023	2024
Residential	46785	46504	47165	47810	49382
Commercial	11339	11986	12548	12931	13286
Total	58124	58490	59713	60741	62668

TABLE 12: TOTAL NUMBER OF MOBILE SUBSCRIPTIONS (2020-2024)

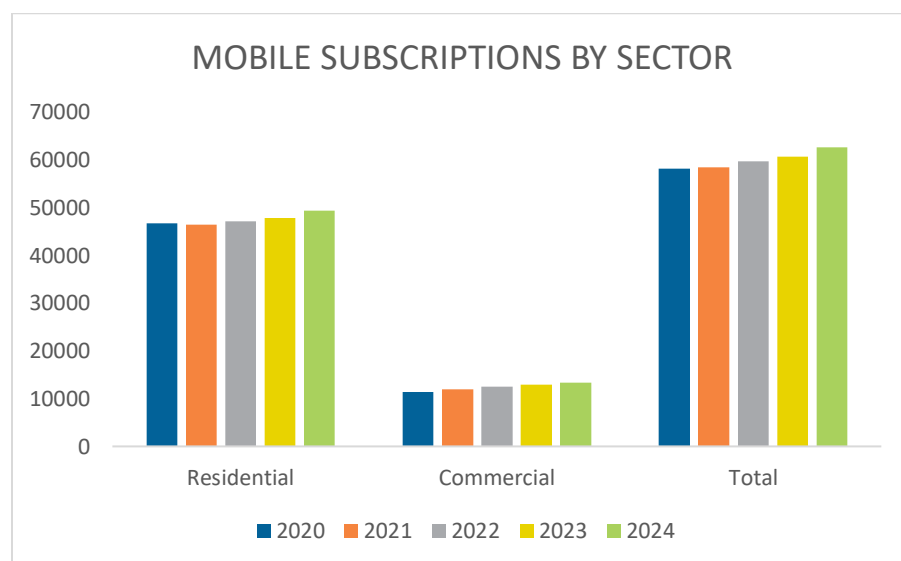


FIGURE 32: MOBILE SUBSCRIPTIONS SPLIT BY RESIDENTIAL/COMMERCIAL (2020-2024)

¹² Using the Bermuda Government Department of Statistics 2024 Census – Total inhabitants was 63,356

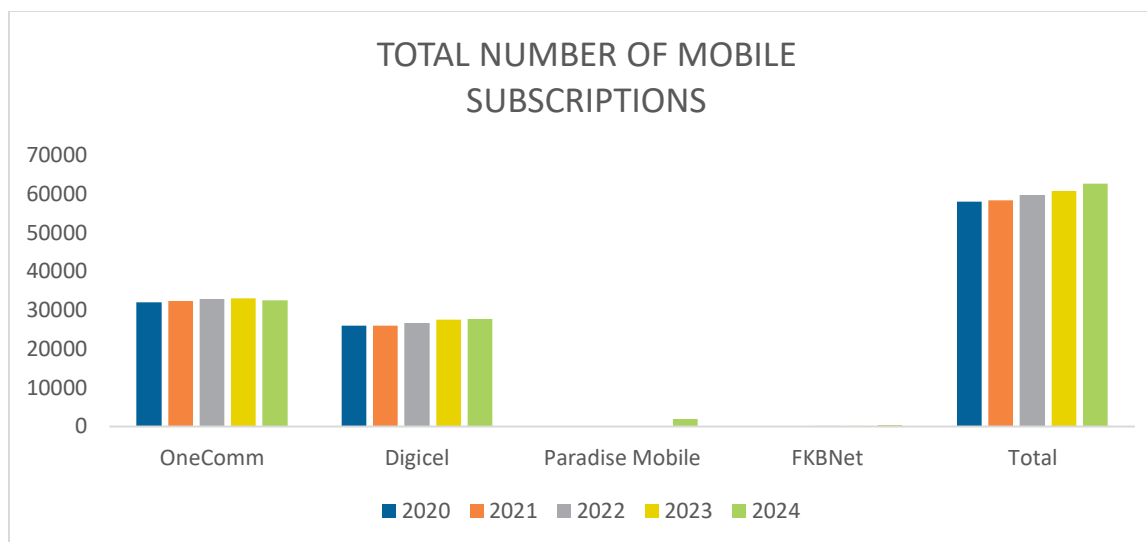


FIGURE 33: MOBILE SUBSCRIPTIONS BY SECTORAL PARTICIPANT (2020-2024)

Market Share by subscription

For the period under review, there were only two active sectoral providers in this market. In 2024, One Communications and Digicel held 52% and 44% of the market¹³, respectively.

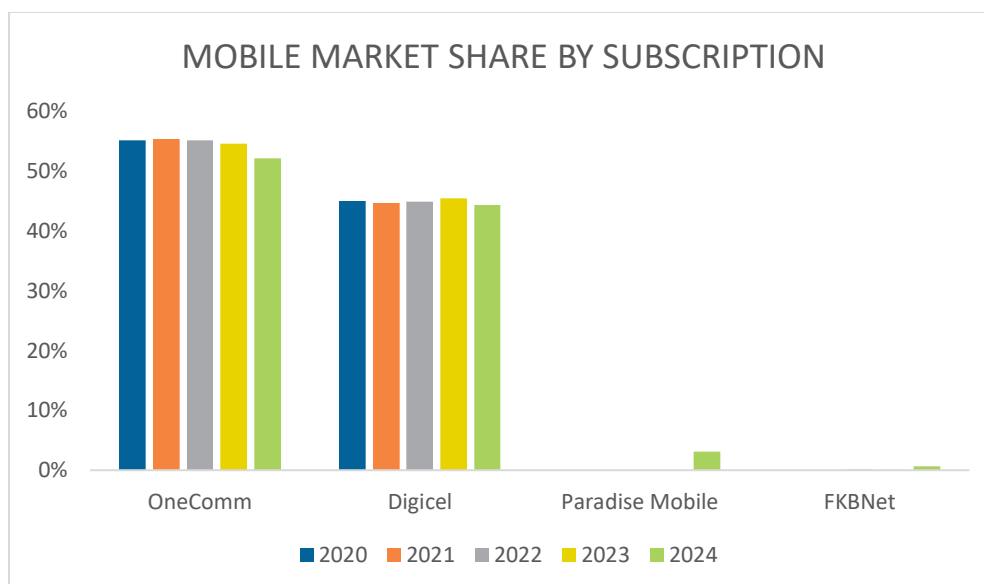


FIGURE 34: MOBILE MARKET SHARE BY SUBSCRIPTION % (2020-2024)

¹³ Calculated by number of subscribers

Roaming

Revenue from roaming services decreased by 9% from \$7.84M in 2023 to \$7.11M in 2024. Roaming encompasses Bermuda residents travelling abroad and overseas visitors roaming in Bermuda.

Revenue Source (\$M)	2020	2021	2022	2023	2024
Data Roaming	3.05	2.16	6.49	7.22	6.39
Voice Roaming	0.37	0.15	1.09	0.62	0.72
Total	3.42	2.31	7.58	7.84	7.11

TABLE 13: ROAMING REVENUES (2020-2024)

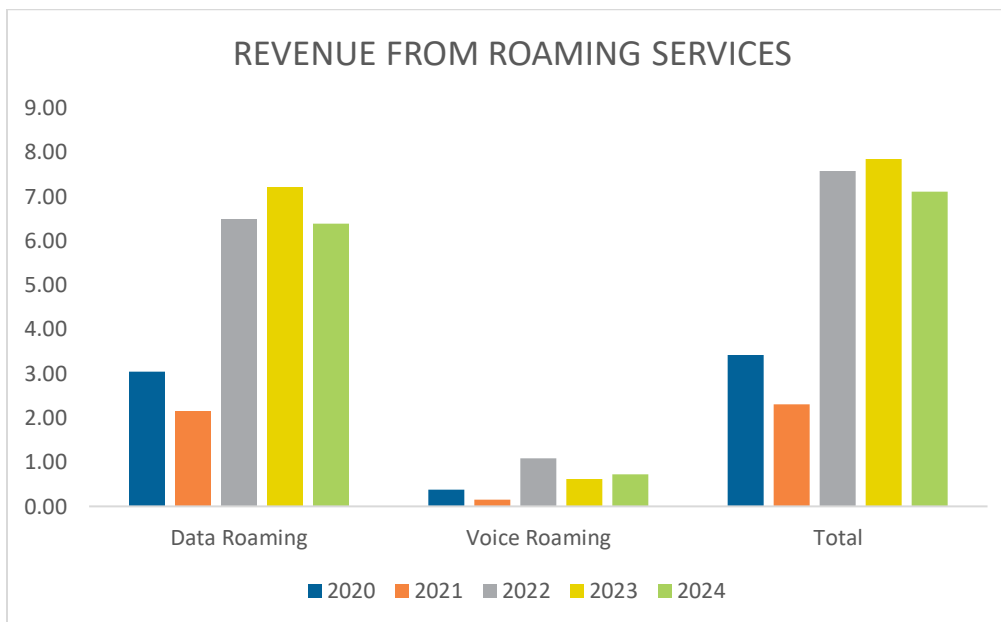


FIGURE 35: MOBILE REVENUE (\$M) FROM ROAMING SERVICES (2020-2024)

Revenues

Total revenue from mobile networks in 2024 was \$69.01M – a 7% decrease from \$74.6M in 2023.

Revenue (\$M)	2020	2021	2022	2023	2024
Commercial	16.56	16.71	17.42	17.12	14.90
Residential	59.34	56.71	57.46	57.48	54.10
Total	75.90	73.42	74.89	74.60	69.01

TABLE 14: TOTAL REVENUE FROM MOBILE NETWORKS (2020-2024)

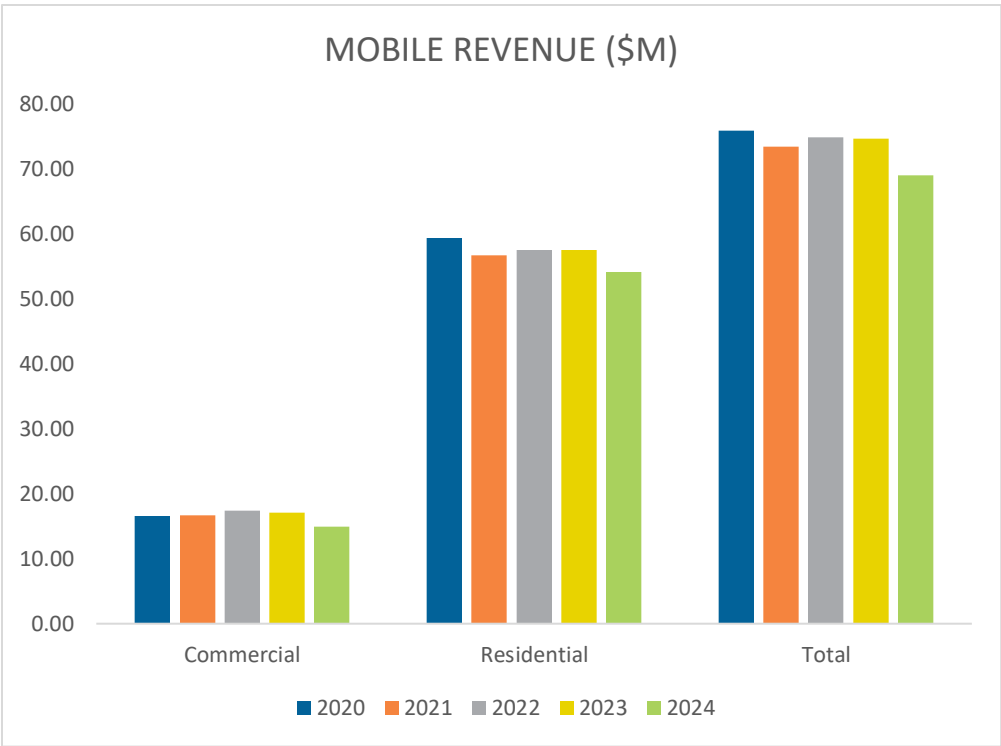


FIGURE 36: MOBILE RESIDENTIAL/COMMERCIAL SPLIT BY REVENUE (2020-2024)

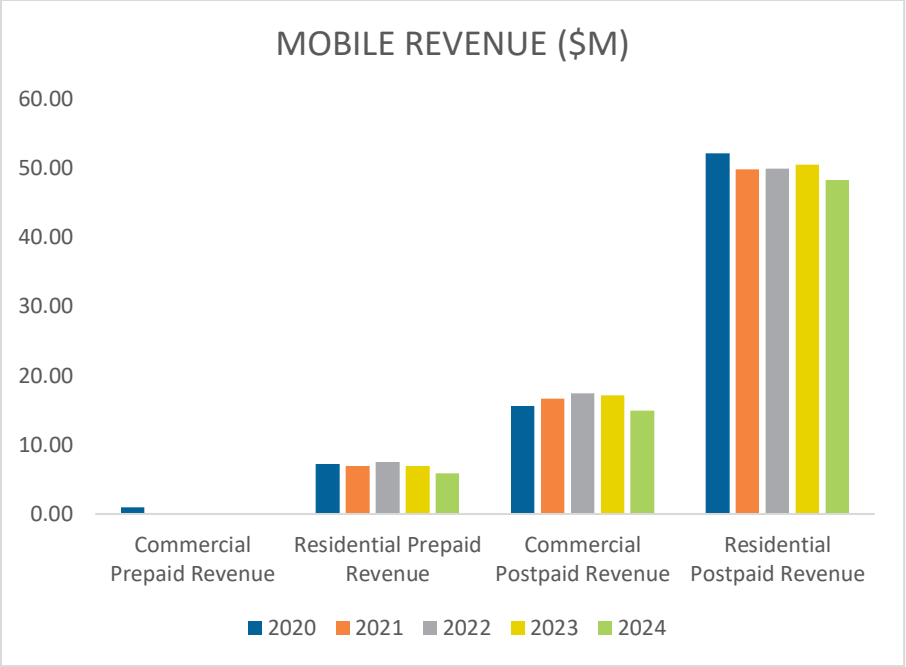


FIGURE 37: MOBILE RESIDENTIAL/COMMERCIAL REVENUE SPLIT BY PRE AND POST PAID (2020-2024)

Average revenue per user

The average monthly revenue per prepaid residential subscriber saw a 2% decrease from \$62.85 in 2023 to \$61.60 in 2024. Average monthly revenue per postpaid residential mobile subscriber decreased 10% from \$81.70 in 2023 to \$73.44 in 2024.

Residential ARPU (\$)	2020	2021	2022	2023	2024
Prepaid	46.48	62.42	68.40	62.85	61.60
Postpaid	96.07	84.24	82.34	81.71	73.44

TABLE 15: AVERAGE MONTHLY REVENUE PER RESIDENTIAL PRE AND POST-PAID USERS (2020-2024)

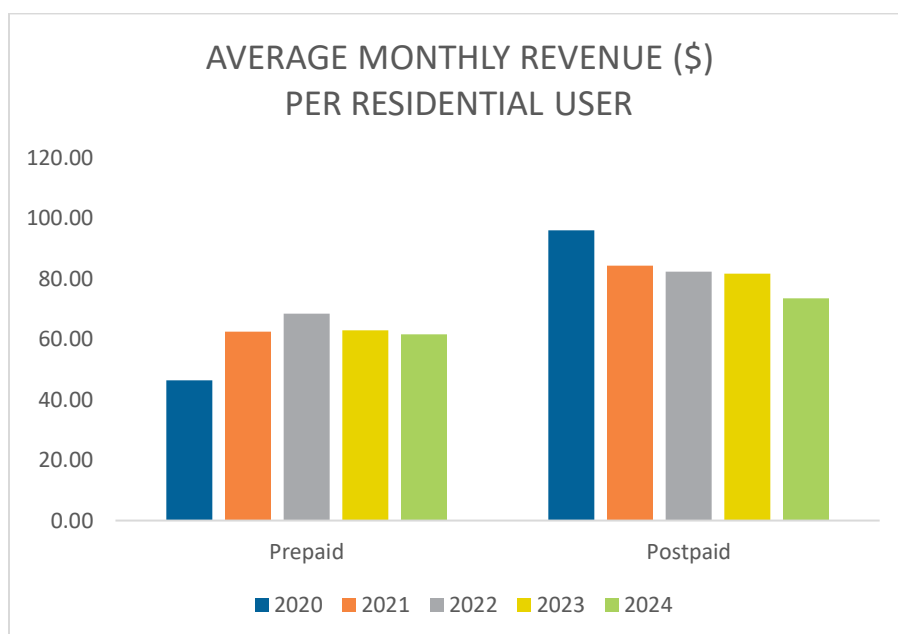


FIGURE 38: MOBILE AVERAGE MONTHLY REVENUE PER RESIDENTIAL PRE AND POST-PAID USERS (2020-2024)

SUBSCRIPTION TV

The subscription TV market made up 8.51% of the total EC market (by revenue) in 2024. This represents a decline of 2% from 2021.

Revenue

Total revenue from subscription TV in 2024 was \$17.04M which was a decrease of 0.8% from \$17.18M in 2023.

Revenue (\$M)	2020	2021	2022	2023	2024
Total	17.62	21.91	17.19	17.18	17.04

TABLE 16: SUBSCRIPTION TV REVENUE (2020-2024)

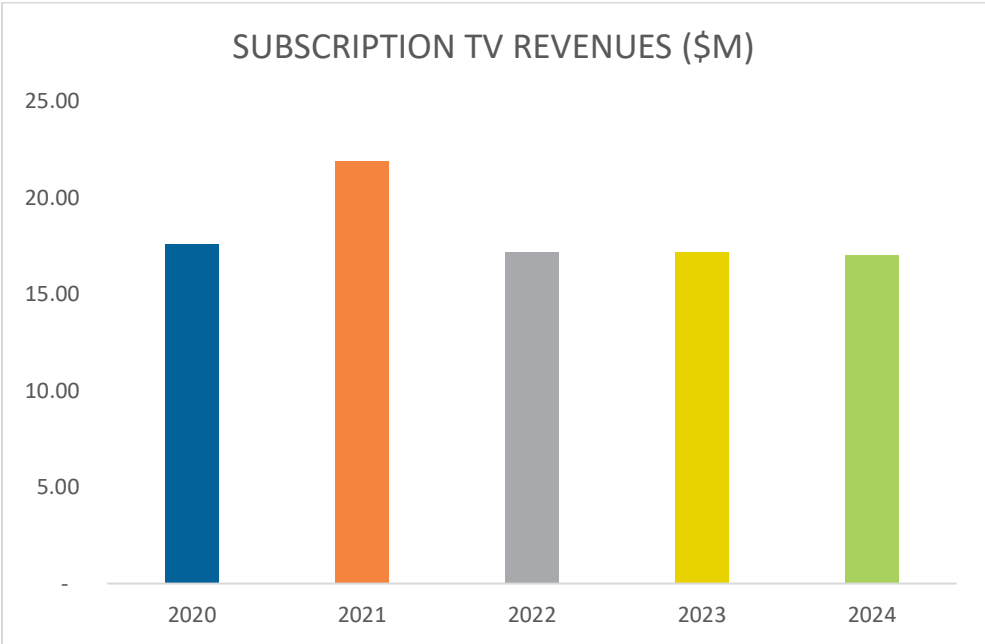


FIGURE 39: SUBSCRIPTION TV REVENUES (2020-2024)

Subscriptions

The total number of TV subscriptions decreased 8% from 11,506 in 2023 to 10,627 in 2024.

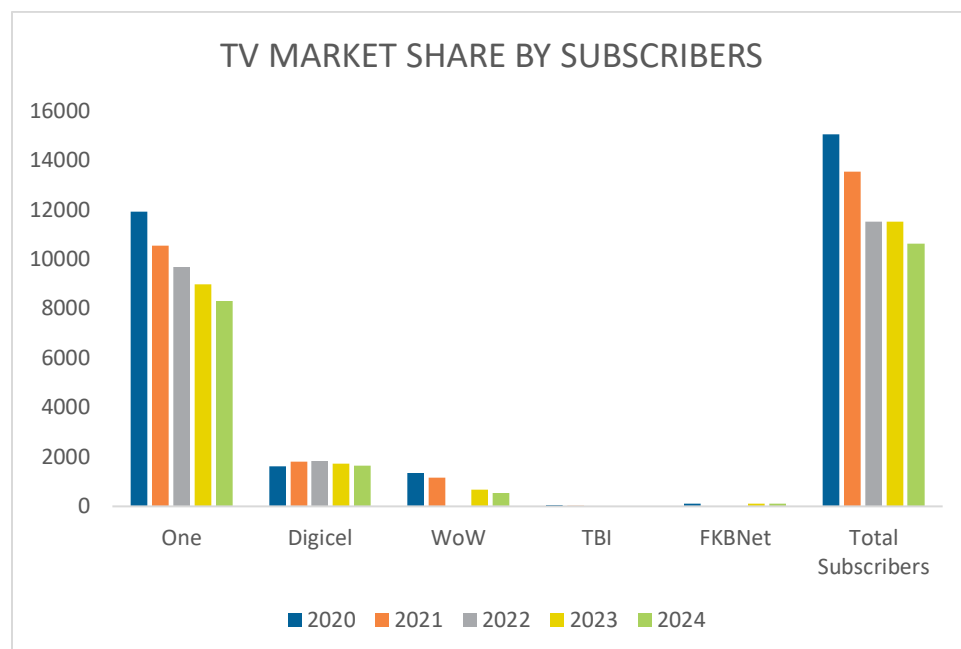


FIGURE 40: SUBSCRIPTION TV SUBSCRIPTIONS (2020-2024)

Market Share

For the period under review, there were five sectoral providers in this market. One Communications and Digicel represent 78% and 16% of the market share respectively in 2024. This represents a 1% change from 2023 with One Communications at 78% and Digicel at 15% of the market.

ICOL	2020	2021	2022	2023	2024
One	79%	78%	84%	78%	78%
Digicel	11%	13%	16%	15%	16%
WoW	9%	9%	0%	6%	5%
TBI	0%	0%	0%	0%	0%
FKB	1%	0%	0%	1%	1%

TABLE 17: SUBSCRIPTION TV MARKET SHARE (2020-2024)

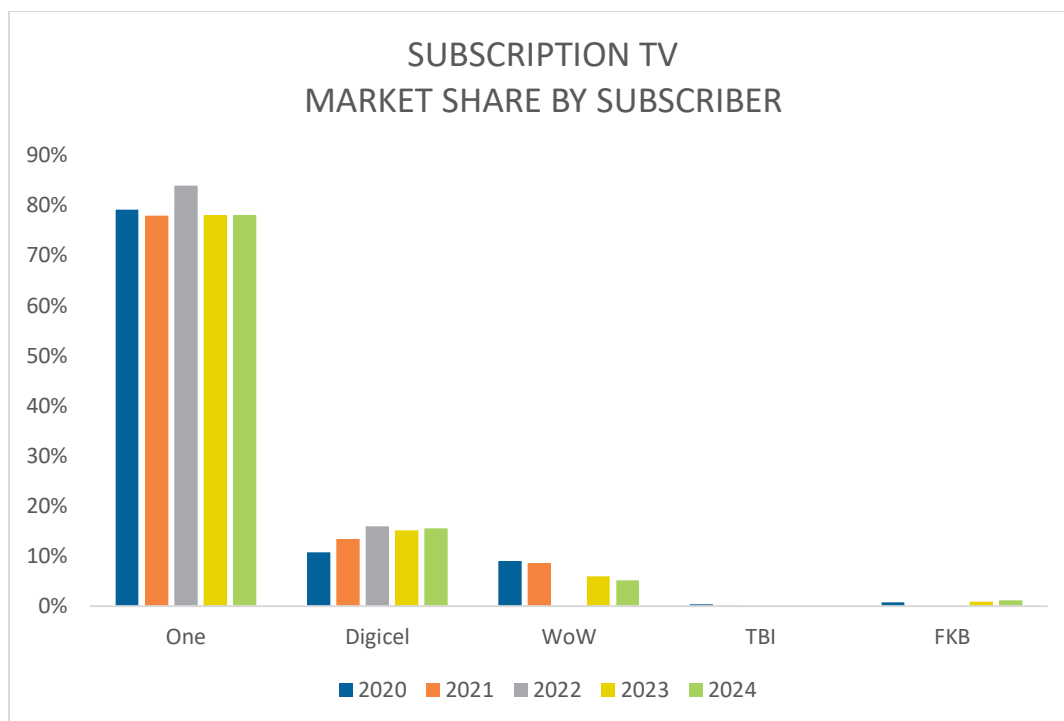


FIGURE 41: SUBSCRIPTION TV MARKET SHARE BY SUBSCRIBER (2020-2024)

Average revenue per user

The average monthly revenue per user increased 7% from \$124.41 in 2023 to \$133.61 in 2024.

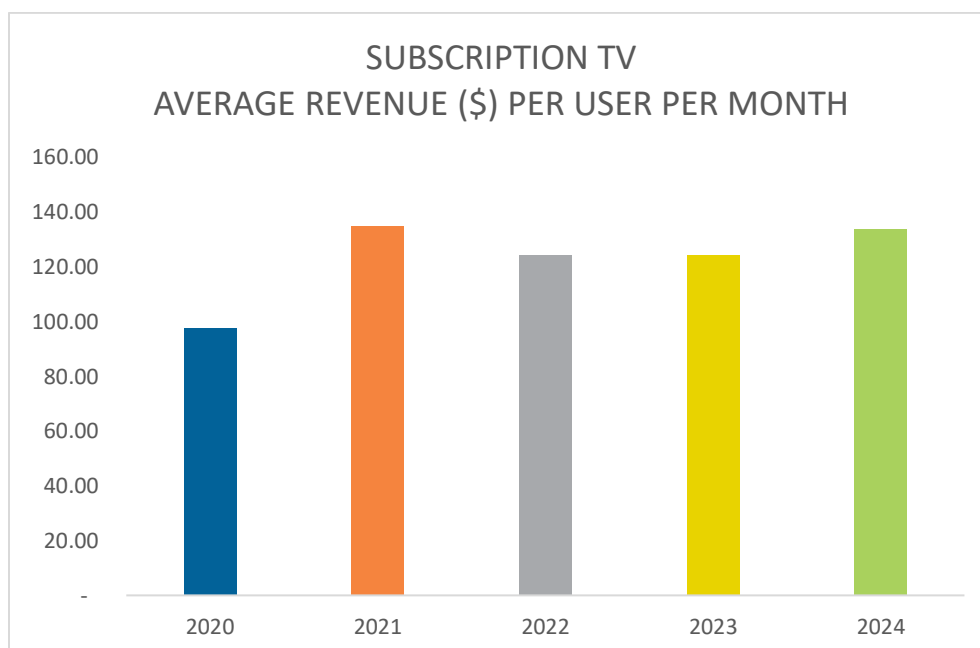


FIGURE 42: SUBSCRIPTION TV AVERAGE MONTHLY REVENUE PER USER (2020-2024)

LOCAL NUMBER PORTABILITY

Local number portability is the ability for residential and business telephone subscribers to retain their existing telephone numbers when switching from one telephone or mobile carrier to another. Local number portability was introduced to Bermuda in 2014.

Porting Statistics:

Year	Total	Successful	Refused	Timed out	Cancelled A	Cancelled B	Not finalised	Other incomplete
2016	2633	1661	568	0	0	393	9	2
2017	2133	1148	610	227	1	142	4	1
2018	3426	2303	721	312	0	69	21	0
2019	4285	2794	796	550	1	51	92	1
2020	2647	1670	629	204	0	99	44	1
2021	1654	1102	345	8	19	44	91	45
2022	3446	2507	545	286	33	29	0	46
2023	5047	4002	579	291	91	54	0	30
2024	6591	5247	770	412	59	57	0	46
Total	37027	25594	6802	2290	205	1696	266	174

TABLE 18: LOCAL NUMBER PORTABILITY PORTING STATISTICS (2016-2024)

Notes:

1. The “Recipient” network operator is the entity that a subscriber contracts with to provide their telephone service after “porting” or migrating away from their existing service provider (also referred to as the “Donor” network operator).
2. The Block network operator is the original network provider that “owns” the number range that the subscriber’s telephone number falls under.
3. Successful means that the whole process has been completed.
4. Cancelled A means that the transaction was cancelled by the Recipient network operator before a response was received from the Donor network operator.
5. Cancelled B means that the transaction was cancelled by the Recipient network operator after the initial response from the Donor network operator but before the final Instruction was sent.
6. Not finalised means that the Instruction has been sent and the ported number added to the list of ported numbers but the Donor and/or Block operators have not finalised the process.

There were 6591 porting requests in 2024, up 31% from 2023. Of the requests in 2024, 80% were successful. The remainder were either refused (9%), timed out (6%) or cancelled/other (2%). There were 5047 porting requests in 2023, up 46% from 2022. Of the requests in 2023, 79% were successful. The remainder were either refused (11%), timed out (6%) or cancelled/other (4%).

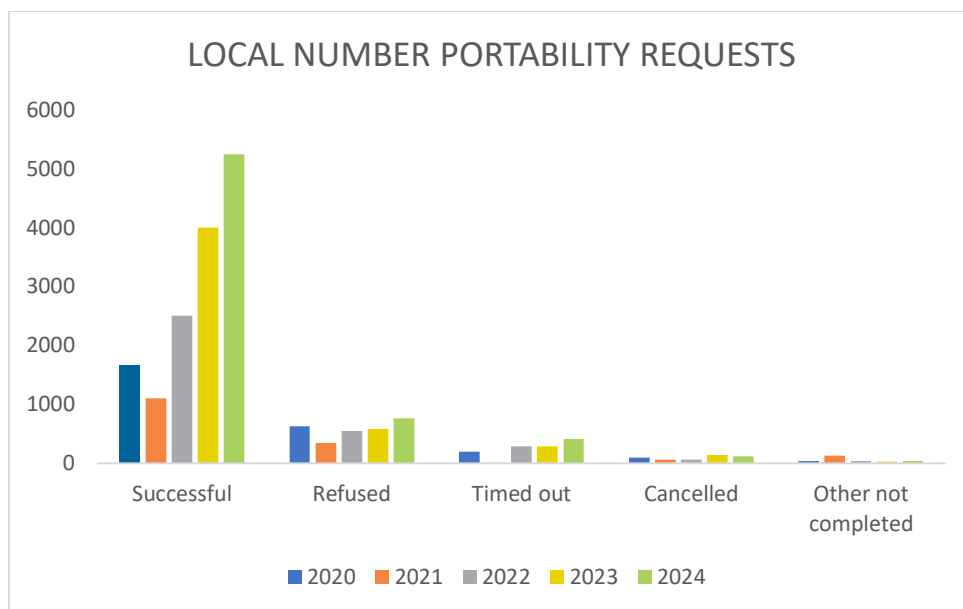


FIGURE 43: LOCAL NUMBER PORTABILITY REQUESTS (2020 – 2024)

Net Ports by Operator (Ports In minus Ports Outs)

Year	B-Mobile	CellOne	Digicel	BTC	Fort Knox	Horizon	Logic	Paradise	LinkBermuda	Telebermuda
2016	0	-14	98	-363	100	0	110	0	20	49
2017	0	-319	313	-116	18	0	10	0	85	9
2018	0	184	567	-898	41	0	43	0	54	9
2019	0	394	514	-1235	56	0	278	0	-14	7
2020	0	361	-256	-428	67	0	224	0	19	13
2021	0	181	-42	-370	59	0	165	0	6	1
2022	0	65	508	-1002	127	33	227	0	8	34
2023	0	-164	2503	-2795	99	-21	320	0	-21	79
2024	1	-335	2403	-3313	225	0	268	707	7	37
Total	1	18	6961	-10720	832	12	1628	707	180	381

TABLE 19: LOCAL NUMBER PORTABILITY PORTS PER EC PROVIDER (2016-2024)

Average time to port:

The average time to complete a successful port in 2024 was 2.7 days which was a 56% decrease from 6.1 days in 2023 and 34% less than 4.1 days in 2022. The typical¹⁴ target porting time is 2 days.

Year	Days to Authorisation Response	Days to Instruction	Days to Completion
2016	0.9	2.5	3.8
2017	0.7	2.6	3.8
2018	0.7	2	5.2
2019	0.7	2	6
2020	0.9	2.3	3.9
2021	0.9	3.5	4.9
2022	0.8	2.3	4.1
2023	0.8	1.4	6.1
2024	0.6	1.2	2.7

TABLE 20: LOCAL NUMBER PORTABILITY AVERAGE TIME TO PORT (2016-2024)

Refusal reasons:

The following table shows the incidence of the different refusal reasons that are permitted.

Year	Total reasons	Number of Account Number wrong	Number of Payments overdue	Numbers not active on donor	Internet service not active on this number	Subscriber already suspended	Pre-pay / post-pay is incorrect	Refusal requested by Recipient	Number blocked as lost or stolen
2016	626	144	264	108	66	6	38	0	0
2017	678	166	247	163	72	2	25	2	1
2018	766	240	318	132	14	4	28	30	0
2019	849	258	392	128	0	7	44	18	2
2020	705	169	303	124	0	19	68	18	4
2021	380	144	90	81	0	0	30	35	0
2022	592	218	188	116	1	0	62	6	1
2023	593	186	200	116	0	0	70	20	0
2024	836	317	208	195	0	0	85	31	0

TABLE 21: LOCAL NUMBER PORTABILITY REFUSAL REASONS (2016-2024)

¹⁴ Typical would be where all the documentation is in order, no new line installation is needed and there are no outstanding bills owed by the customer at the donor sectoral provider.

OFF-ISLAND CONNECTIVITY

Bermuda is fortunate to have a total of 5 submarine fibre optic cables with diverse landing points in Bermuda. These cables connect Bermuda to the USA (New Jersey), the British Virgin Islands (Tortola) and Brazil. Two of the links are part of a larger ring topology system that can automatically protect traffic in the event of a single segment failure.

These cables have all been in place for over a decade and have more than sufficient capacity for Bermuda's immediate and medium-term connectivity requirements.

In 2023, Google also announced that it would be developing a new transatlantic subsea cable system to connect Portugal, Bermuda, and the United States. This submarine cable system has been named "Nuvem". It is not expected to commence operation until 2027-2028.

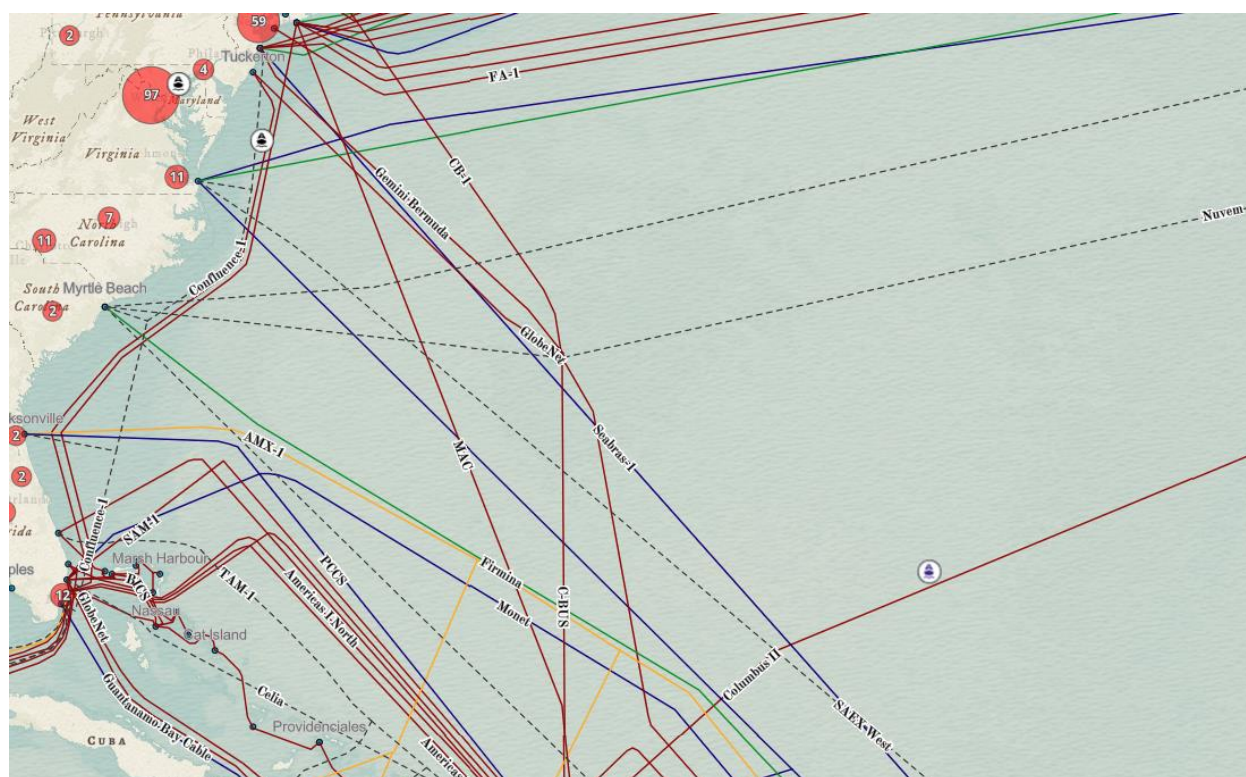


FIGURE 44: SUBMARINE CABLE MAP 2024 (COURTESY OF SUBTELFORUM.COM)

Cable systems connected to Bermuda

Globenet Cable System

The Globenet Cable System is a 23,500 km ring cable system with landing points in the United States (Boca Raton, Florida and Tuckerton, New Jersey), Bermuda (Annie's Bay, St. George's), Colombia, Brazil, and Venezuela.

The Globenet cable system has been in service since 2000/2001.

Challenger CB-1

The Challenger Cable System (also known as CB-1) has landing points in the United States (Charlestown, Rhode Island) and Bermuda (Devonshire Bay, Devonshire).

In 2024, the CB-1 cable was connected by means of a branching unit to the SeaBRAS-1 cable. All traffic from Bermuda to the US is now routed via SeaBRAS-1. The CB-1 link to Charlestown, Rhode Island is no longer in service.

Caribbean – US Cable System (CBUS)

Segment 1: Gemini Bermuda-US

Segment 1 of the CBUS Cable has landing points in the United States (Manasquan, New Jersey) and Bermuda (Devonshire Bay, Devonshire).

Segment 1 has been in service since 2007.

Segment 2: CBUS Bermuda - BVI

Segment 2 of the CBUS Cable has landing points in the British Virgin Islands (Tortola) and Bermuda (Devonshire Bay, Devonshire).

Segment 2 has been in service since 2009.

Cable system capacities and utilization

The following table and graph illustrate that Bermuda is currently well served by submarine cable connectivity and can provide substantially more bandwidth if needed.

Description	Capacity in Terabytes As at 31 December				
	2020	2021	2022	2023	2024
Total System Design Capacity	63	63	64	64	69
Total Activated Capacity (includes Bermuda terminating capacity)	17.43	17.43	17.55	17.55	18.97
% utilized	27%	27%	27%	27%	27%
Total capacity activated and terminating in Bermuda	0.27	0.27	0.246	0.246	0.166

TABLE 22: SUBMARINE CABLE CONNECTIVITY - CABLE CAPACITY (2020-2024)

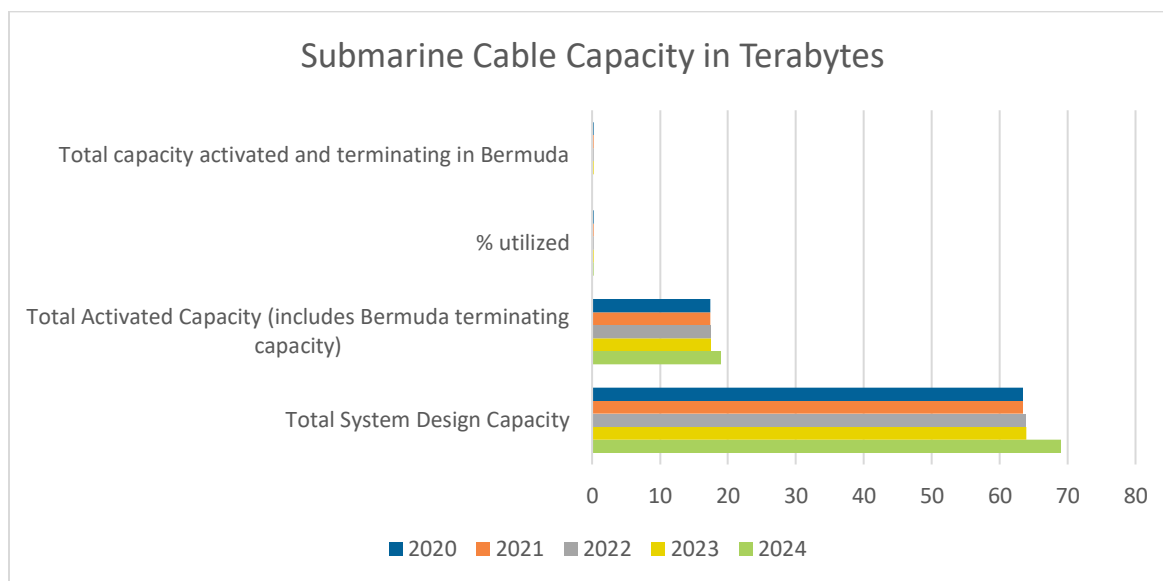


FIGURE 45: SUBMARINE CABLE CAPACITY IN TERABYTES (2020-2024)

ANNEX 1: ELECTRONIC COMMUNICATIONS SECTORAL PROVIDERS AS OF 31 DEC 2024

Authorisation Holders	Parent Organization (if applicable)	Type of Licence
Bermuda Digital Broadband Ltd.	One Communications Ltd.	ICOL
Bermuda Cablevision Ltd.	One Communications Ltd	ICOL
Bermuda Telephone Company Limited	Digicel	ICOL
Bermuda Digital Communications Limited	One Communications Ltd	ICOL
Bermuda Land Development Company Ltd.		ICOL
Globenet Cabos Submarinos Bermuda Ltd.		ICOL
Cable Co. Ltd.	One Communications Ltd	ICOL
Deltronics Limited		ICOL
Digital Mobile Television Limited		ICOL
Electronic Communications Limited		ICOL
FKB Net Ltd.		ICOL
iTech (Bermuda) Limited trading as Bmobile		ICOL
Logic Communications Ltd.	One Communications Ltd.	ICOL
LinkBermuda Ltd.		ICOL
Paradise Mobile Ltd.		ICOL
TeleBermuda International Ltd.	East End Group	ICOL
TeleCommunications (Bermuda & West Indies) Ltd.	Digicel	ICOL
TeleCommunications Network Ltd.	East End Group	ICOL
WOW Ltd.	East End Group	ICOL
Quovadis Service Ltd.		COL
Cable & Wireless Network Services		SubCOL
Key		
ICOL	Integrated Communications Operating Licence	
COL	Communications Operating Licence	
SubCOL	Submarine Cable Operating Licence	

ANNEX 2: RELEVANT MARKETS AND SMP OPERATORS – MARKET REVIEW SEPT 2020

The following information has been reproduced from the Market Review of the Electronic Communications Sector, Final Report, Decision & Order: 1 September 2020¹⁵

Service type	Market #	Relevant markets	SMP operator(s)
Broadband	1	Retail provision of fixed broadband Internet connectivity, provided over any technology, and for any speed, on an island wide basis	OneComm and Digicel Group
	2	Wholesale provision of fixed broadband Internet connectivity, provided over any technology, and for any speed, on an island wide basis	OneComm and Digicel Group
Mobile	3	The island wide provision of retail mobile services (voice, text and data)	OneComm and Digicel Group
	4	The island wide provision of wholesale mobile access	OneComm and Digicel Group
Fixed voice	5	The island wide provision of retail fixed voice services (i.e. voice call origination from a fixed location)	Digicel Group
Subscription television	6	The island wide provision of retail subscription television services	-
Business connectivity	7	Retail low-speed leased lines in the City of Hamilton (25 Mbps and below)	-
	8	Retail low-speed leased lines outside of the City of Hamilton (25 Mbps and below)	-
	9	Wholesale low-speed leased lines in the City of Hamilton (25 Mbps and below)	-
	10	Wholesale low-speed leased lines outside of the City of Hamilton (25 Mbps and below)	-
	11	Retail high-speed leased lines in the City of Hamilton (above 25 Mbps)	-
	12	Retail high-speed leased lines outside of the City of Hamilton (above 25 Mbps)	Digicel Group
	13	Wholesale high-speed leased lines in the City of Hamilton (above 25 Mbps)	-
	14	Wholesale high-speed leased lines outside of the City of Hamilton (above 25 Mbps)	Digicel Group
Off-island connectivity	15	The provision of off-island connectivity (i.e. international data transmission)	-

¹⁵ https://www.ra.bm/documents/2020-09-01_market-review-of-the-electronic-communications-sector-final-report-decision-and-order/?wpdmdl=15146&refresh=61d86283893531641570947