

TELECOMMUNICATIONS AUTHORITY OF TRINIDAD AND TOBAGO

ANNUAL MARKET REPORT 2023

Regulating for a Sustainable Digital Society



The Telecommunications Authority of Trinidad and Tobago

5 Eighth Avenue Extension, off Twelfth Street

Barataria

Republic of Trinidad and Tobago

Tel: 1-868-675-8288

Fax: 1-868-674-1055

Website: tatt.org.tt

Email: policy@tatt.org.tt

© August 2024

Disclaimer

The information and statistics contained in this document were obtained from various sources available to the Telecommunications Authority of Trinidad and Tobago (the Authority) at the time of publication. The Authority does not give any guarantee as to the accuracy or reliability of the information and shall not be liable for any loss or damage arising out of the use or reliance on any statements made, or information contained in, this document.

Nothing in this report shall be construed as prejudicing any determination or regulatory action undertaken by the Authority in accordance with the Telecommunications Act, Chap. 47:31.

Contents

F	orewoi	rd	xii
E	xecutiv	ve Summary	xiii
1	Ove	erall Market Review	1
	1.1	Overview and Methodology	1
	1.2	Concessions Granted	2
	1.3	Review of the Telecommunications and Broadcasting Industry	3
	1.3.	1 Total Revenue Contributions by the Sectors	3
	1.3.	2 Telecommunications and Broadcasting Subscriptions	7
	1.3.	3 Subscription Penetration Rates	8
В	ox 1: F	Review of the Economy 2023	9
2	Fix	ed Voice Market Review	20
	2.1	Annual Fixed Voice Subscriptions	21
	2.2	Quarterly Fixed Voice Subscriptions	23
	2.3	Fixed Voice Penetration.	25
	2.4	Domestic Fixed Voice Traffic	26
	2.4.	1 Annual Domestic Fixed Voice Traffic in Minutes	26
	2.4.	2 Quarterly Domestic Fixed Voice Traffic in Minutes	28
	2.4.	Annual Domestic Fixed Voice Call Volumes	28
	2.5	Fixed Voice Revenues	29
	2.6	Fixed Voice Market Concentration	30
	2.7	Fixed Voice Average Revenue per User (ARPU)	32
3	Mo	bile Voice Market Review	35
	3.1	Mobile Voice Subscriptions	35
	3 1	1 Annual Mobile Voice Subscriptions	35

	3.1.	2 Quarterly Mobile Voice Subscriptions	39
	3.2	Mobile Penetration	41
	3.2.	Domestic Mobile Voice Penetration Rate	41
	3.3	Domestic Voice Traffic	43
	3.3.	Annual Domestic Mobile Voice Traffic in Minutes	43
	3.3.	2 Annual Domestic Mobile Voice Call Volumes	45
	3.3.	.3 Quarterly Domestic Mobile Voice Minutes	46
	3.3.	.4 Short Messaging Services (SMS)	47
	3.4	Mobile Voice Revenues	48
	3.4.	.1 Annual Revenues from Mobile Voice Services	48
	3.4.	.2 Quarterly Revenues from Mobile Voice Services	51
	3.5	Mobile Voice Market Concentration	52
	3.6	Average Revenue per User for Mobile Voice Services	54
4	Int	ernet Market Review	58
	4.1	Fixed Internet Subscriptions	60
	4.1.	.1 Fixed Internet Subscriptions by Customer Type	60
	4.1.	2 Residential Fixed Broadband Internet Subscriptions by Speed Tier	62
	4.1.	.3 Business Fixed Broadband Internet Subscriptions by Speed Tier	65
	4.2	Active Mobile Internet Subscriptions	66
	4.3	Internet Penetration Rates: Fixed and Mobile	69
	4.4	Fixed and Mobile Internet Revenues	71
	4.4.	.1 Total Internet Revenues	71
	4.4.	.2 Fixed Internet Revenues	72
	4.4.		
	4.5	Fixed Internet Market Concentration	77

	4.6	Average Revenue per User for Internet Services	79
5	Inte	rnational Voice Market Review	82
	5.1	International Voice Traffic (Incoming and Outgoing Minutes)	82
	5.2	International Voice Revenues	84
	5.3	International Voice Market Concentration	86
6	Bro	adcasting Market Review	90
	6.1	FTA TV Broadcasting Market	91
	6.1.	1 FTA TV Revenues	91
	6.1.	2 FTA TV Market Concentration	92
	6.2	TV Broadcasting Service via Cable Market	94
	6.2.	TV Broadcasting Service via Cable Revenues	94
	6.2.	TV Broadcasting Service via Cable Market Concentration	96
	6.3	FTA Radio Broadcasting Market	97
	6.3.	1 FTA Radio Revenues	97
	6.3.	2 FTA Radio Market Concentration	98
	6.4	Subscription TV Broadcasting Market	100
	6.4.	Subscription TV Subscriptions	100
	6.4.	2 Subscription TV Penetration	103
	6.4.	3 Subscription TV Revenues	105
	6.4.	Subscription TV Market Concentration	106
	6.4.	Subscription TV Average Revenue per User	108
A	ppendi	x I: Domestic Telecommunications and Selected Broadcasting Statistics	109
A	ppendi	x II: List of Concessionaires and Type of Concessions as at December 2023	112
A	ppendi	x III: Tariffs	118
A	ppendi	x IV: Glossary of Terms	119

List of Figures

Figure 1 Classification of markets	1
Figure 2 Gross revenues by industry, sector and market in 2023	3
Figure 3 Proportion of total industry revenues contributed by each market in 2023	4
Figure 4 Contributions by telecommunications markets from 2019 to 2023	5
Figure 5 Percentage contributions by broadcasting markets from 2019 to 2023	6
Figure 6 Proportion of subscriptions by market as at December 2023	7
Figure 7 Penetration rates by market from 2019 to 2023	8
Figure 8 Fixed voice subscriptions from 2019 to 2023	21
Figure 9 Fixed voice subscriptions, by type, for 2019 to 2023	22
Figure 10 Proportion of fixed voice subscriptions, by type, for 2023	22
Figure 11 Quarterly fixed voice subscriptions in 2023	23
Figure 12 Quarterly fixed voice subscriptions for 2022 and 2023	23
Figure 13 Percentage of Residential and Business fixed voice subscriptions, by quarter	24
Figure 14 Quarterly fixed voice subscriptions from 2019 to 2023	24
Figure 15 Fixed voice penetration rates from 2019 to 2023	25
Figure 16 Classification of domestic fixed voice traffic	26
Figure 17 Breakdown of domestic fixed voice traffic in 2023	27
Figure 18 Total domestic fixed voice traffic minutes, by type, for 2022 and 2023	27
Figure 19 Quarterly fixed voice traffic minutes for 2023	28
Figure 20 Comparison of domestic call volumes, by traffic type, for 2022 and 2023	29
Figure 21 Fixed voice revenues from 2019 to 2023	29
Figure 22 Quarterly fixed voice revenues for 2023	30
Figure 23 HHI for the fixed voice market from 2019 to 2023	31
Figure 24 Quarterly HHI for the fixed voice market in 2023	31
Figure 25 ARPU of the fixed voice market from 2019 to 2023	32
Figure 26 Number of mobile voice subscriptions from 2019 to 2023	36
Figure 27 Mobile voice prepaid and postpaid subscriptions from 2019 to 2023	37
Figure 28 Percentage of prepaid and postpaid subscriptions from 2019 to 2023	37

Figure 29 Number of mobile prepaid and postpaid subscriptions switched between 2019 an	.d
2023	38
Figure 30 Number of mobile prepaid and postpaid subscriptions switched in 2023	39
Figure 31 Quarterly mobile voice subscriptions in 2023	39
Figure 32 Quarterly mobile prepaid subscriptions for 2021 and 2022	40
Figure 33 Quarterly mobile postpaid subscriptions for 2022 and 2023	41
Figure 34 Mobile voice penetration per 100 inhabitants for 2019 to 2023	42
Figure 35 Quarterly mobile voice penetration rates per 100 inhabitants for 2023	42
Figure 36 Classification of domestic mobile voice traffic	43
Figure 37. Breakdown of domestic mobile minutes for 2023	44
Figure 38 Percentage of mobile-to-mobile and mobile-to-fixed minutes for 2023	45
Figure 39 Percentage of domestic mobile voice calls for 2023	46
Figure 40 Number of quarterly mobile voice minutes in 2023	46
Figure 41 Percentage of quarterly mobile voice minutes, by type, for 2023	47
Figure 42 Number of on-net and off-net SMS sent in 2022 and 2023	48
Figure 43 Annual revenues from mobile voice services from 2019 to 2023	49
Figure 44 Mobile voice revenues, by service type, for 2019 to 2023	50
Figure 45 Percentage breakdown of mobile voice revenues, by service type, for 2023	50
Figure 46 Quarterly revenues from mobile voice services in 2023	51
Figure 47 Quarterly mobile voice revenues, by service type, for 2023	51
Figure 48 Percentage share of revenues. by service type, for 2023	52
Figure 49 HHI for the mobile voice market from 2019 to 2023	53
Figure 50 Quarterly HHI for the mobile voice market in 2023	53
Figure 51 ARPU for mobile voice services from 2019 to 2023	54
Figure 52 ARPU for prepaid and postpaid mobile voice subscriptions from 2019 to 2023	55
Figure 53 Fixed Internet subscriptions from 2019 to 2023	60
Figure 54 Residential fixed Internet subscriptions from 2019 to 2023	61
Figure 55 Business fixed Internet subscriptions from 2019 to 2023	61
Figure 56 Number of residential broadband subscriptions, by download speed tier, from 20	19 to
2023	62

Figure 57 Percentage of residential broadband subscriptions, by download speed tier, from 2	:019
to 2023	64
Figure 58 Number of business broadband subscriptions, by download speed, from 2019 to 20	
Figure 59 Percentage of business broadband subscriptions, by download speed, from 2019 to)
2023	66
Figure 60 Prepaid and postpaid Internet subscriptions from 2019 to 2023	67
Figure 61 Comparison of prepaid and postpaid mobile Internet subscriptions for 2023	67
Figure 62 Mobile narrowband and broadband Internet subscriptions from 2019 to 2023	68
Figure 63 Proportion of mobile narrowband and broadband Internet subscriptions from 2019) to
2023	69
Figure 64 Fixed and mobile Internet penetration rates from 2019 to 2023	70
Figure 65 Fixed Internet household penetration from 2019 to 2023	71
Figure 66 Internet revenues from 2019 to 2023.	71
Figure 67 Percentage of fixed and mobile Internet revenues in 2022 and 2023	72
Figure 68 Fixed Internet revenues from 2019 to 2023	73
Figure 69 Fixed broadband Internet revenues from 2019 to 2023	73
Figure 70 Broadband Internet revenues, by type, from 2019 to 2023	74
Figure 71 Percentage of residential and business fixed broadband Internet revenues in 2023.	74
Figure 72 Mobile Internet revenues from 2019 to 2023	75
Figure 73 Mobile Internet revenues, by type, for 2019 to 2023	76
Figure 74 Percentage of prepaid and postpaid mobile Internet revenues in 2023	76
Figure 75 Fixed Internet HHI for 2019 to 2023	77
Figure 76 Quarterly HHI for the fixed Internet market in 2023	78
Figure 77 ARPU for fixed and mobile Internet services from 2019 to 2023	79
Figure 78 Incoming international voice traffic minutes from 2019 to 2023	83
Figure 79 Outgoing international voice traffic minutes from 2019 to 2023	83
Figure 80 Percentage of incoming and outgoing international voice traffic (minutes) from 20)19
to 2023	84
Figure 81 Gross revenues from international calls from 2019 to 2023	85
Figure 82 Incoming international traffic revenues from 2019 to 2023	85

Figure 83 Gross revenues from outgoing international voice traffic from 2019 to 2023	86
Figure 84 HHI for international incoming minutes in 2023	87
Figure 85 HHI for international outgoing minutes in 2023	87
Figure 86 Gross revenues for the FTA TV market from 2019 to 2023	91
Figure 87 Quarterly gross revenues for FTA TV in 2022 and 2023	92
Figure 88 Quarterly HHI for the FTA TV broadcasting market in 2023	93
Figure 89 HHI for the FTA TV broadcasting market from 2019 to 2023	93
Figure 90 Gross revenues for the broadcasting service via cable market from 2019 to 2023	95
Figure 91 Quarterly gross revenues for broadcasting service via cable in 2022 and 2023	95
Figure 92 Quarterly HHI for the TV broadcasting service via cable market in 2023	96
Figure 93 HHI for the FTA TV broadcasting market from 2019 to 2023	96
Figure 94 Gross revenues for the FTA radio broadcasting market from 2019 to 2023	97
Figure 95 Quarterly revenues for FTA radio in 2022 and 2023	98
Figure 96 HHI for the FTA radio broadcasting market for 2023	99
Figure 97 HHI for the FTA radio broadcasting market from 2019 to 2023	99
Figure 98 Number of subscription TV subscriptions from 2019 to 2023	101
Figure 99 Subscription TV subscriptions, by type of service, from 2019 to 2023	101
Figure 100 Proportion of subscription TV subscriptions, by type of service, in 2023	102
Figure 101 Number of premium package subscriptions from 2019 to 2023	103
Figure 102 Subscription TV penetration rate from 2019 to 2023	104
Figure 103 Subscription TV gross revenues from 2019 to 2023	105
Figure 104 Subscription TV revenues, by type, for 2023	106
Figure 105 Quarterly HHI for the subscription TV market in 2023	107
Figure 106 Annual HHI for the subscription TV market from 2019 to 2023	107
Figure 107 Subscription TV ARPU from 2019 to 2023	108

List of Tables

Table 1 Number of concessionaires, by market	2
Table 2 Number of subscriptions by market from 2019 to 2023	7
Table 3 Breakdown of domestic mobile minutes for 2022 and 2023	44
Table 4 Breakdown of domestic mobile voice calls for 2022 and 2023	45
Table 5 Percentage changes in mobile voice revenues from 2019 to 2023	49
Table 6 Number of concessions in the broadcasting market from 2019 to 2023	90
Table 7 List of subscription TV providers operational in 2023	100
Table 8 Growth rates in premium subscriptions from 2019 to 2023	103
Table 9 Domestic telecommunications and selected broadcasting statistics	109

2023 ANNUAL MARKET REPORT FOREWORD



Foreword

The Telecommunications Authority of Trinidad and Tobago (the Authority) celebrates 20 years of regulating the telecommunications and broadcasting sectors. The establishment of the Authority as the regulator for the two sectors initiated the liberalisation of the telecommunications markets and facilitated the introduction of additional broadcasters in the years that followed. These sectors were key to the growth of information and communications technology which plays a crucial role in national socioeconomic development and stability in this new digital era.

Pursuant to its statutory mandate, the Authority remains committed to the objects of the Telecommunications Act, Chap. 47:31 (the Act) that govern its operations, to ensure both sectors continue to advance in an orderly and systematic manner. This commitment includes promoting fair competition, protecting consumer interests, and fostering innovation in the telecommunications industry.

It is our distinct pleasure to present this 18th Annual Market Report: Telecommunications and Broadcasting Sectors 2023 (the Report).

The Authority first published the annual market report in 2006 – just two years after it had been established. The report is a comprehensive compilation of statistics on the performance of the two sectors and presents data relating to a wide range of telecommunications and broadcasting indicators, such as subscription figures, penetration rates, gross revenues and traffic volumes. Market data received from concessionaires are used by the Authority to monitor and inform regulatory policy decisions aimed at promoting the growth of these sectors. Over the decades, it has become a flagship document, greatly valued by stakeholders, investors and the public interested in market trends.

The Authority takes this opportunity, at this 20-year milestone, to especially thank all operators for their substantial input and timely submission of sector-specific information and statistics, not only for this Report but all the reports published over the last 18 years.

We truly hope this year's annual market report will be informative and inspiring to all as we continue to work towards universal and meaningful connectivity and the growth of the digital economy.

Executive Summary

This 18th Annual Market Report: Telecommunications and Broadcasting Sectors 2023 (the Report) presents and reviews statistical information on the performance and market trends observed within the telecommunications and broadcasting industry from January to December 2023.

The industry generated revenues of approximately \$5.2 billion, or US\$793 million, in gross revenues during the period under review. This is an increase of 1.3% in total revenues year over year. The telecommunications sector contributed \$4.2 billion, or 80.4% of total industry revenues, while the broadcasting sector contributed \$1.0 billion, or 19.6%.

The Internet market, which comprises both fixed and mobile Internet, generated \$2,254.6 million, accounting for the biggest share (43.0%) of total industry revenues. The mobile voice and subscription TV markets contributed \$1,037.8 million (19.2%) and \$613.8 million (11.7%), respectively, of total industry revenues.

Subscription-based services, specifically mobile voice, fixed voice, fixed Internet, mobile Internet and subscription TV, amassed approximately 3.8 million subscriptions – a 1.1% decrease. Subscriptions to mobile voice and fixed Internet services increased, while subscriptions to fixed voice, mobile Internet and subscription TV decreased.

The free-to-air (FTA) TV market earned \$43.5 million – a decrease of \$18.6 million, or 30%, from 2022. The FTA radio market earned \$112.7 million for the year – a decrease of \$3.5 million, or 3%, from the previous year. The TV broadcasting service via cable market generated \$6.5 million in 2023 – a decrease of \$0.8 million, or 10.3%, from 2022.

2023 ANNUAL MARKET REPORT

OVERVIEW OF THE MARKETS



1 Overall Market Review

1.1 Overview and Methodology

The 18th Annual Market Report: Telecommunications and Broadcasting Sectors 2023 (the Report) presents statistics relating to the performance of the telecommunications and broadcasting sectors in Trinidad and Tobago. For this Report, the telecommunications sector is classified into four markets:

- 1. Fixed voice
- 2. Mobile voice
- 3. International voice
- 4. Internet: fixed and mobile

The broadcasting sector is categorised into four markets:

- 1. Free-to-air (FTA) television (TV)
- 2. Television broadcasting service via cable
- 3. FTA radio
- 4. Subscription TV



Figure 1 Classification of markets

The information presented is based primarily on data submitted by operational concessionaires for January to December 2023. Additionally, historical data series and other information made available to the Authority at the time of publication are also used in the Report.

The data received from concessionaires are compiled, reviewed and analysed to produce statistical market indicators. These indicators measure the evolution of the telecommunications and broadcasting sectors, based on the number of subscriptions, gross revenues and traffic. The information in this Report is used by the Authority to inform and monitor policy decisions which will facilitate the orderly development of these sectors.

The Authority also publishes quarterly market updates on the telecommunications and broadcasting sectors to supplement the Report, which can be accessed from its website tatt.org.tt.

1.2 Concessions Granted

Under sections 21 and 31 of the Telecommunications Act, Chap. 47:31 (the Act), the Authority is responsible for making recommendations to the Minister with responsibility for telecommunications and broadcasting, regarding the granting and renewal of concessions to telecommunications and broadcasting operators who are authorised to operate a public telecommunications network or provide public telecommunications or public broadcasting services. It should be noted that a concessionaire may be granted more than one type of concession.

As at December 2023, 97 concessions were granted by the Authority, as shown in Table 1. A detailed list of these concessions can be found in Appendix II.

Table 1 Number of concessionaires, by market

Network Category Service Provided		Concessionaires
International	Network only	1
Telecommunications	Services only	1
	Network and services	7
Mobile Telecommunications	Mobile voice and Internet services	2
Fixed Telecommunications	Fixed telephony	7
	Fixed Internet	13
Subscription TV		11
FTA Radio Broadcasting	37	
FTA TV Broadcasting	4	
TV Broadcasting via Cable	14	

1.3 Review of the Telecommunications and Broadcasting Industry

1.3.1 Total Revenue Contributions by the Sectors

In 2023, the telecommunications and broadcasting industry generated \$5.2 billion¹, or US\$793 million², in gross revenues, which, as a proportion of the gross domestic product (GDP)³, equals 2.8%. This represents a 1.3% increase in total industry revenues compared to 2022. Figure 2 presents the industry's gross revenues by sector and market, while Figure 3 shows the percentage of revenue contributions of each market to total industry revenues.

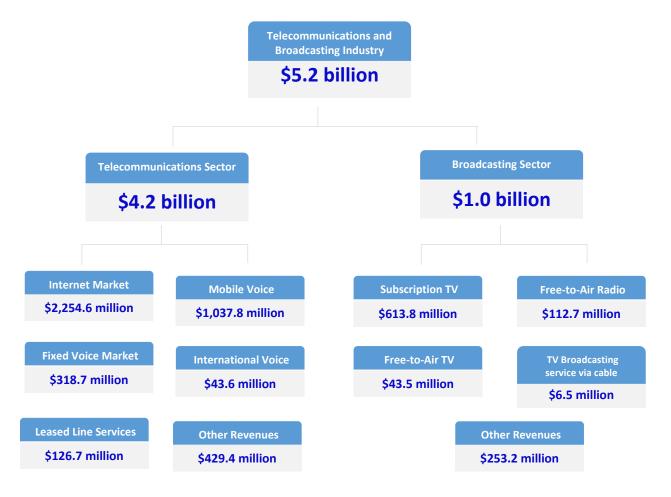


Figure 2 Gross revenues by industry, sector and market in 2023

¹ This figure includes revenues from telecommunications and broadcasting services offered to members of the public and private leased line services.

² Central Bank of Trinidad and Tobago Exchange Rate: US\$1 = TT\$6.7206

³ Forecasted GDP at current prices for calendar year 2023: 190,214.3 million (Source: Ministry of Finance, Review of the Economy 2023)

The Internet market accounted for the largest proportion of revenues, earning \$2,254.6 million (43.0%) of total industry revenues. The mobile voice market was the second highest earner, with \$1,037.8 million (19.8%) of total revenues. This was followed by other revenues⁴ and subscription TV, which generated \$682.6 million (13.0%) and \$613.8 million (11.7%), respectively. The fixed voice market⁵ was next, with \$318.7 million (6.1%), followed by the leased lines⁶ market, which accounted for \$126.7 million (2.4%). The FTA radio and FTA TV markets made industry contributions of \$112.7 million (2.2%) and \$43.5 million (0.8%), respectively. Revenues from international voice services and TV broadcasting services via cable amounted to \$43.6 million and \$6.5 million – a 0.8% and 0.1% share of total industry revenues, respectively.

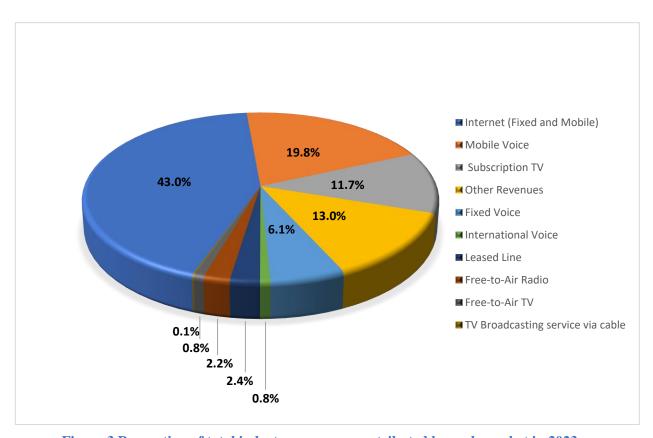


Figure 3 Proportion of total industry revenues contributed by each market in 2023

⁴ Other revenues consist of additional income from both the telecommunications and broadcasting sectors, such as those received from wholesale services, and production and airtime for local programming on subscription TV.

⁵ Fixed voice market revenues include those earned from fixed voice services, excluding international services.

⁶ Leased lines include both international and domestic circuits.

1.3.1.1 Market Revenues in the Telecommunications Sector

In 2023, the telecommunications sector generated \$4.2 billion, or 80.4%, of total industry revenues. This represents an increase in sector revenues of \$144.6 million, or 3.6%, from 2022.

The contributions, by percentage, of the various telecommunications markets to overall sector revenues for the past five years are shown in Figure 4.

The Internet market generated 53.6% of sector revenues, while the second largest share, 24.7%, came from the mobile voice market. The fixed and international voice markets contributed 7.6% and 1.0%, respectively. Leased line services accounted for 3.0%, with other revenues (telecommunications)⁷ contributing the remaining 10.2%.

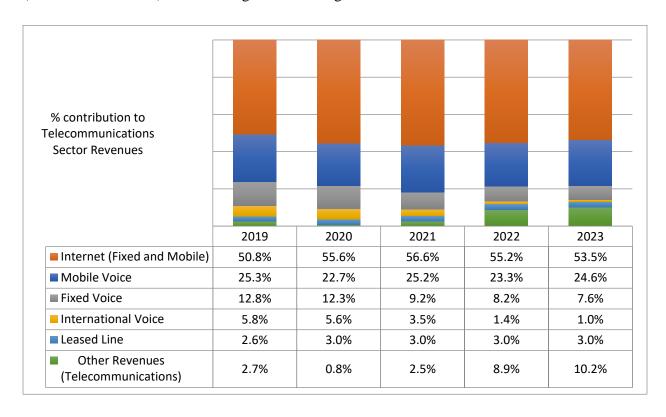


Figure 4 Contributions by telecommunications markets from 2019 to 2023

_

⁷ Other revenues earned from service providers in the telecommunications sector include other wholesale services (excluding leased lines), high-capacity wireless links and two-way radios. The increase in other revenues (telecommunications) is mainly as a result of one concessionaire's reporting on this revenue category for the first time.

1.3.1.2 Market Revenues in the Broadcasting Sector

The broadcasting sector amassed \$ 1 billion, or 19.6%, of total industry revenues. The subscription TV market earned the majority of this sector's revenues, specifically 59.6%, while other revenues accounted for 24.6%.

The FTA radio and FTA TV markets held a share of 10.9% and 4.2%, respectively. TV broadcasting service via cable contributed 0.6% to total broadcasting revenues. Figure 5 depicts the contributions, by percentage, of the individual markets to broadcasting sector revenues for 2019 to 2023.

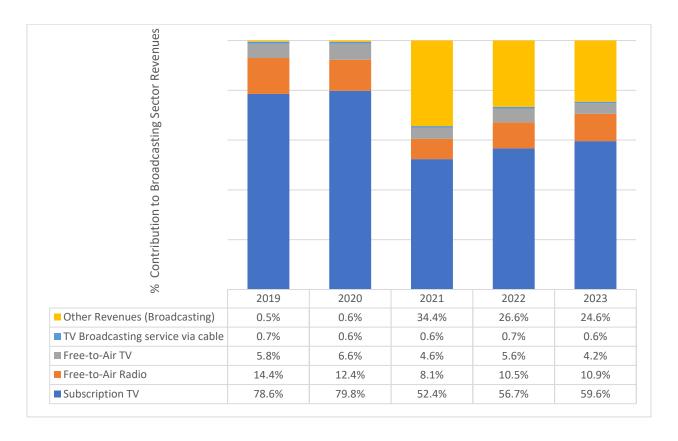


Figure 5 Percentage contributions by broadcasting markets from 2019 to 2023

6

⁸ Other revenues include revenues received from broadcasting services, such as radio rental and services, subscription TV advertising, digital signage and interactive learning.

1.3.2 Telecommunications and Broadcasting Subscriptions

In 2023, the subscription-based markets, that is, the mobile voice, fixed voice, fixed Internet, mobile Internet and subscription TV markets, collectively amassed approximately 3.8 million subscriptions. Compared to 2022, this total represents a decrease of 43,100 subscriptions, or 1.1%.

Table 2 presents the subscription figures and growth rates for the past five years, while Figure 6 shows the percentage contribution of individual markets to total industry subscriptions in 2023.

Table 2 Number of subscriptions by market from 2019 to 2023

	2019	2020	2021	2022	2023
Mobile Voice Subscriptions (millions)	2.16	1.99	2.00	2.00	2.02
Growth rate	9.7%	-7.9%	0.5%	0.1%	0.9%
Fixed Voice Subscriptions ('000s)	332.3	323.9	341.4	326.5	310.7
Growth rate	4.6%	-2.5%	5.4%	-4.4%	-4.8%
Fixed Internet Subscriptions ('000s)	339.4	376.8	369.1	389.6	404.4
Growth rate	-0.5%	11.0%	-2.0%	5.0%	3.8%
Mobile Internet Subscriptions ('000s)	653.3	770.2	819.8	859.1	808.8
Growth rate	-3.7%	17.9%	6.5%	4.8%	-5.9
Subscription TV Subscriptions ('000s)	249.8	242.4	237.8	226.8	216.7
Growth rate	6.4%	-3.0%	-1.9%	-4.6%	-4.5%
Total Subscriptions (millions)	3.74	3.70	3.77	3.78	3.76
Growth rate	5.5%	-1.1%	1.9%	0.5%	-1.1%

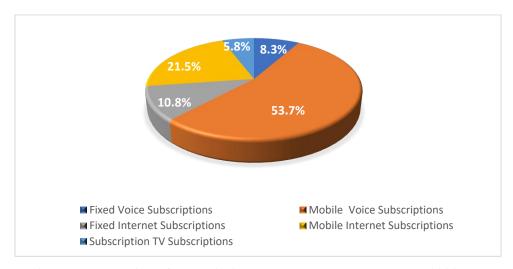


Figure 6 Proportion of subscriptions by market as at December 2023

There were 2.02 million mobile voice subscriptions in 2023, which accounted for 53.7% of all industry subscriptions. Mobile Internet remained the second most subscribed service, with 808,800 subscriptions, or 21.5%. This was followed by the fixed Internet market, which had 404,400 subscriptions, representing a share of 10.8%. The fixed voice market garnered 310,700 subscriptions, or 8.3%, while subscription TV contributed 216,700 subscriptions or 5.8% of total industry subscriptions.

1.3.3 Subscription Penetration Rates

The penetration rates of all subscription-based markets for the last five years are shown in Figure 7. In 2023, the mobile voice and fixed Internet penetration levels increased. Fixed Internet penetration rose from 27.3% in 2022 to 29.6%.

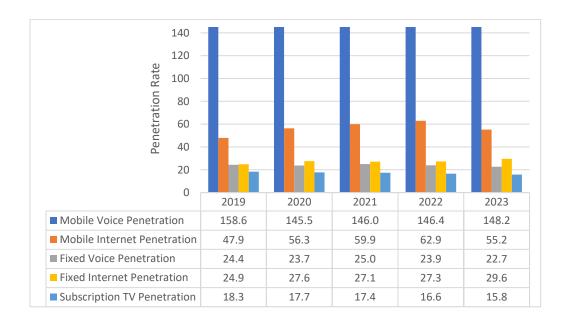


Figure 7 Penetration rates by market from 2019 to 2023

The penetration rate for the mobile voice market also increased, from 146.4 in 2022 to 148.2 in 2023. On the other hand, the levels for fixed voice, mobile Internet and subscription TV fell. The fixed voice rate was 22.7 – a decrease of 1.2 points; the mobile Internet rate declined to 55.2%; and subscription TV dropped to 15.8%.

Box 1: Review of the Economy in 2023

1. Global Growth

In 2023, the global economy demonstrated resilience amidst the persistent challenges faced due to ongoing geopolitical tensions (the Russia-Ukraine war and Israel-Palestine conflict); disruptions in the energy and food markets; high government debt; and rising inflation, which led to continuous monetary policy tightening measures that subsequently eased in the fourth quarter (IMF Blog 2024). These challenges constrained demand in several countries. However, global growth remained positive, albeit slightly lower than the previous year. According to the International Monetary Fund (IMF) in its World Economic Outlook (WEO) April 2024, global growth in 2023 was estimated at 3.2%, down from 3.5% in 2022 and also lower than the average growth of 3.8% observed during the pre-pandemic period (2000–2019).

Regionally, the growth projection for advanced economies (AEs) was estimated at 1.6% - a decrease from 2.6% recorded the previous year. In contrast, real GDP for the emerging market and developing economies (EMDEs) was forecasted to be greater than the GDP of AEs, growing by 4.3% - up from 4.1% a year prior. In Latin America and the Caribbean (LAC), positive growth was projected at 2.3%, although this was lower than the 4.2% registered in 2022. The most significant growth was anticipated in emerging and developing Asia (EDA), at 5.6%, up from 4.4% recorded in 2022.

2. The Domestic Economy

a) Economic Activity

Data from the Central Statistical Office (CSO) for the first three quarters of 2023 indicates that real GDP growth for the period January to September 2023 decreased marginally by 0.03% year-on-year, with the non-energy sector's growth registering 2.3% and the energy sector contracting by 5.3%. This decline was mainly on account of the slowdown in economic activity in the energy sector in the third quarter of 2023. Specifically, the Central Bank of Trinidad and Tobago (CBTT), in its Economic Bulletin January 2024, indicates that economic activity in the non-energy sector remained robust in the third quarter of 2023, attributed to increases in consumer demand and business activity in the wholesale and retail trade (excluding energy), transportation and storage, and the construction subsectors. Conversely, the energy sector remained constrained as production

⁹ According to the CSO, GDP (constant prices) for the period January to September 2023 was valued at TT\$107.7 billion, with the non-energy sector registering at TT\$76.6 billion and the energy sector at TT\$31.2 billion.

fell in the third quarter due to contractions in upstream activity and production shortfalls in natural gas, which also resulted in disruptions to the refining and petrochemicals subsectors.

However, for the full year of 2023, real GDP was projected to grow at an estimated 2.7% (up from 1.5% in 2022), with the non-energy sector's growth estimated at 3% (down from 5.8% in 2022), and the energy sector contracting by an estimated 0.6% (down from 0.0% in 2022). In addition, notable expansions continue to be observed in the food and beverage manufacturing subsector (31.7% in 2022 and an estimated 10.5% in 2023); the transport and storage services subsector (27.5% in 2022 and an estimated 4% in 2023); and the construction subsector (4.3% in 2022 and an estimated 0.03% in 2023) (Ministry of Finance 2023).

Furthermore, revenue growth in the telecommunications and broadcasting industry followed a similar trajectory to the overall growth trend in the economy, with revenues from both sectors growing by 1.2% in 2023, registering approximately TT\$5.2 billion in total revenues that year.

b) Inflation

Inflation in 2023 eased from the levels recorded in 2022, although remaining relatively high when compared to the levels recorded prior to 2020 (pre-pandemic). Specifically, headline inflation was reported at 4.6% in 2023, down from 5.8% in 2022. The CBTT noted that, in the second half of 2023, inflationary conditions began to ease, with headline inflation in December 2023 (end of period) at 0.7% – considerably lower than the 4.7% reported in July 2023. Notably, the communications industry's inflation¹⁰ was reported at 1.7% in 2023, down from 2.4% in 2022.

c) Population, Labour Force and Unemployment

In 2023, Trinidad and Tobago's population stood at 1,367,510, which was slightly higher than the 2022 figure of 1,365,805. The labour force grew from 594,500 in 2022 to 602,800 in 2023, representing an increase of 1.4%. The "number of persons with a job" grew by 2.4% – from 565,300 persons employed in 2022 to 578,900 persons employed in 2023. Hence, the participation rate of the labour force rose marginally to 55.6%, from 55% the year before. The sectors that employed persons in 2023 were community, social and personal services (216,300 persons), followed by wholesale and retail trade, and restaurants and hotels (117,100) and construction (69,800). The unemployment rate declined from 4.9% in 2022 to 4% in 2023, which aligns with the growth observed in the domestic economy.

-

¹⁰ The communications industry's inflation refers to inflation postal services, telephone and telefax equipment and services collectively.

d) External Accounts – Balance of Payments, Foreign Reserves, Import Cover, Foreign Exchange and Merchandise Trade

Trinidad and Tobago's balance of payments recorded consecutive deficits for the last three years, valued at US\$218.1 million at the end of the third quarter of 2023. The country's net official reserves stood at US\$6,257.9 million in 2023, representing an 8.4% decline from the level observed in the previous year. This level of reserves allows for 7.8 months of import cover, compared to 8.6 months that was recorded at the end of 2022.

In terms of the country's merchandise trade, provisional data from the CSO indicate that, in 2023, total merchandise exports were valued at TT\$52.4 billion and total merchandise imports at TT\$60.1 billion. The output from the energy sector continued to dominate exports and included methanol, anhydrous ammonia, crude petroleum, liquefied natural gas and urea. The top exported non-energy products were ferrous products from iron ore reduction, pre-cooked cereals, aerated waters, cigarettes and non-alcoholic beverages. The top imported products were diesel oil, motor spirit, iron ores and concentrates, vehicles and medicaments. The main trading partners remained largely concentrated in markets such as North, South and Central America, the Caribbean and Europe.

e) Government Fiscal Operations

Government revenue for fiscal year 2022/2023 amounted to TT\$53.8 billion, with revenue from taxes accounting for 77% of the total revenue earned for the period. Government expenditure amounted to TT\$57.2 billion with recurrent expenditure (transfers and subsidies, wages and salaries, goods and services and interest payments) accounting for 94% of total expenditure. Therefore, the fiscal deficit was valued at TT\$3.4 billion, representing 1.8% of nominal GDP. This compares to the surplus of TT\$1.3 billion that was realised in the previous fiscal year (2021/2022). The fiscal deficit of TT\$3.4 billion was financed through a combination of net external financing of TT\$321.8 million and net domestic financing of TT\$3.1 billion (Ministry of Finance 2023). As at September 2023, general government debt as a percentage of GDP was recorded at 72% (Central Bank of Trinidad and Tobago 2024).

Table 1 Summary of key economic indicators, 2019 to 2023

Economic Indicators	2019	2020	2021	2022	2023
Domestic					
Real GDP growth (constant 2012 prices, % Δ) 11	0.4	-9.1	-1.0	1.5	2.7 ^f
Energy sector (constant 2012 price % Δ) ¹²	-1.6	-13.1	-3.2	0.0	-0.6 ^f
Non-energy sector (constant price $\% \Delta$) ¹³	2.0	-8.2	-1.1	5.8	3.0^{f}
GDP (constant prices, TT\$ million) 14	164,661.5	149,713.7	148,160.5	150,356.6	154,346.2 ^f
GDP (current prices, TT\$ million) 15	160,588.6	140,474.0	165,559.6	202,984.9	190,214.3 ^f
Headline inflation (%) (year average) 16	1.0	0.6	2.1	5.8	4.6
Communications inflation (%) (year average) 17	0.4%	-0.2%	0.2%	2.4%	1.7%
Food inflation (%) (year average) 18	0.6	2.8	4.4	10.4	7.7
Core inflation (%) (year average) 19	1.1	0.1	1.5	4.7	3.9
Population (000s) ²⁰	1,364.0	1,366.7	1,367.6	1,365.8	1,367.5
Labour force (000s) ²¹	617.3	603.8	592.1	594.5	602.8
Unemployment rate (%) ²²	4.3	5.7	5.4	4.9	4.0
External Sector					
Current account balance (% of GDP) ²³	4.3	-6.5	11.0	17.9	11.3*

¹¹ Ministry of Finance, Review of the Economy 2023 & CSO - https://cso.gov.tt/subjects/national-accounts/

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ CBTT Data Centre - https://www.central-bank.org.tt/statistics/data-centre/prices-annual

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ CSO - https://cso.gov.tt/subjects/population-and-vital-statistics/population/

²¹ CBTT Data Centre - https://www.central-bank.org.tt/statistics/data-centre/labour-force-annual

²² Ibid.

²³ CBTT, Economic Bulletin 2024: January 2024, Volume XXVI No. 1

Economic Indicators	2019	2020	2021	2022	2023
Overall balance of payments (US\$ million) ²⁴	-646.1	24.8	-74.2	-47.2	-218.1**
Net official reserves (US\$ million) ²⁵	6,929.0	6,953.8	6,879.6	6,832.4	6,257.9
Import cover (months) ²⁶	7.7	8.5	8.4	8.6	7.8
Merchandise exports (TT\$ million) ²⁷	48,576.0	37,261.6	58,260.1	89,733.1	52,367.6
Merchandise imports (TT\$ million) ²⁸	42,766.5	32,907.3	38,891.9	42,080.1	60,136.3
Exchange rate (TT\$ per US\$) ²⁹	6.7800	6.7803	6.7811	6.7777	6.7789
Fiscal Operations					
Central government's total revenue (TT\$ million) (fiscal) 30	46,748.6	34,368.9	37,266.5	54,607.0	53,819.3
Central government's total expenditure (TT\$ million) (fiscal) 31	50,777.5	51,059.0	49,617.3	53,274.0	57,230.8
Central government's overall fiscal balance (TT\$ million) (fiscal) 32	-4,028.9	-16,689.9	-12,350.7	1,332.9	-3,411.5
International Credit Ratings					
Moody's Ratings ³³	Ba1	Ba1	Ba2	Ba2	Ba2
S&P Global ³⁴	BBB/ A-	BBB-/	BBB-/A-	BBB-/A-3	BBB-/A-3
	2	A3	3		
CariCRIS ³⁵	CariAA+/	CariAA+/	CariAA/	CariAA/	CariAA/
	ttAAA	ttAAA	ttAAA	ttAAA	ttAAA

f - forecast

^{*}for the period January to September 2023

^{**} for quarter 3 2023

²⁴ CBTT, Economic Bulletin 2024: January 2024, Volume XXVI No. 1 & CBTT Data Centre

²⁵ CBTT, Economic Bulletin 2024: January 2024, Volume XXVI No. 1

²⁶ Ibid.

²⁷ CSO - https://cso.gov.tt/subjects/international-trade/

²⁸ Ibid.

²⁹ CBTT Data Centre - https://www.central-bank.org.tt/statistics/data-centre/exchange-rates-annual

³⁰ CBTT Data Centre - https://www.central-bank.org.tt/statistics/data-centre/public-finance-fiscal

³¹ CBTT Data Centre - https://www.central-bank.org.tt/statistics/data-centre/public-finance-fiscal

³² Ibid.

³³ MOF, Review of the Economy 2023 - https://www.finance.gov.tt/2023/10/02/review-of-the-economy-2023/

³⁴ MOF, Review of the Economy 2023 - https://www.finance.gov.tt/2023/10/02/review-of-the-economy-2023/

³⁵ Ibid.

3. Regional Economic Comparison – CARICOM Member States

According to the IMF's Regional Economic Outlook (April 2024), economic activity in the Caribbean remained strong on account of recovery in the tourism industry and declining debt ratios (while still significant). However, growth in the region is decelerating as most countries continue to recover. In 2023, real GDP growth in the Caribbean was reported at 8.3% (down from 14% in 2022). The growth (3.5%) of tourism-dependent countries was smaller than the growth of non-tourism-dependent countries (11.2%), with Guyana (a non-tourism dependent country) leading the performance of the Caribbean region overall.

On a country-specific level, real GDP growth varied across CARICOM³⁶ countries but remained positive, with the exception of Haiti. Figure 1 highlights the comparison of real GDP growth for the period 2021 to 2023 (IMF 2024). The largest growth was observed for Guyana, at 33%, mainly on account of that economy's oil boom. Guyana has been reported to have recorded the highest real growth in the world for the last two years. In addition, selected countries in the Eastern Caribbean Currency Union (ECCU) also registered higher growth when compared to the other countries in the CARICOM regional bloc, that is, St. Vincent and the Grenadines (6.2%), Antigua and Barbuda (5.9%), Grenada (4.8%) and Dominica (4.7%). Collectively, real GDP growth in the ECCU was recorded at 4.8% (down from 10% the previous year). In Jamaica, real GDP growth was recorded at 2.2% and, according to the World Bank, that growth was driven by net exports from a record expansion in tourism and mining, while agriculture declined due to an extended drought. In Barbados, real GDP growth was recorded at 4.4%, driven by tourism activity and increased private sector investments.

-

³⁶ CARICOM stands for the Caribbean Community and Common Market and includes Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

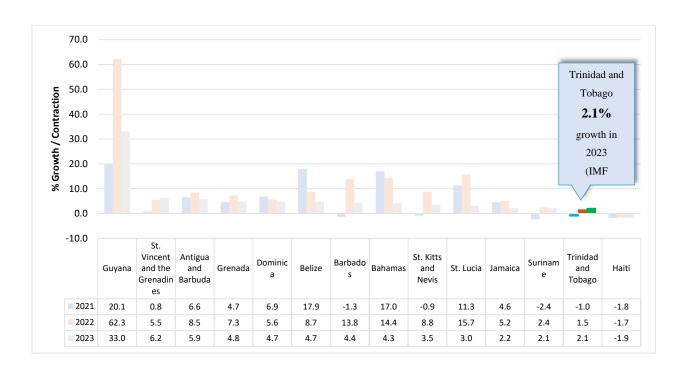


Figure 1 Real GDP growth in CARICOM member states (2021 to 2023)³⁷

In terms of inflation, most countries in the regional bloc registered smaller increases in consumer prices, as inflation continued on a downward path. Collectively, inflation in tourism-dependent countries was 4.5% and in non-tourism-dependent countries it was 11.4%. On the country level, the highest inflation was observed in Suriname (51.6%), Haiti (44.1%), Jamaica (6.5%), Antigua and Barbuda (5.1%) and Barbados (5%). Notably, Grenada registered the lowest level of inflation in CARICOM for 2023 at 3% (IMF 2024).

4. Economic Outlook 2024 and the Domestic Telecommunications and Broadcasting Industry

In 2024, the global economy will be challenged with successfully navigating the ongoing geopolitical tensions which have resulted in heightened uncertainty in the energy market and increased trade disruptions due to escalating disturbances in the Red Sea trade route. Despite the volatility in the global economy, the World Bank predicted that average oil prices and metal prices will decrease in 2024, and food prices will soften, although remaining elevated. In addition, the IMF has forecast a tightening of fiscal policies by governments to curb high debt, with anticipated higher taxes and reduced spending. However, global inflation is predicted to decline to 5.9% in 2024 and 4.5% in 2025. As a result, the IMF, in its WEO April 2024, has projected that global growth will remain stable, at 3.2%, in 2024 and 2025.

15

³⁷ Data sourced from the IMF's World Economic Outlook Database, April 2024

Against this backdrop, Trinidad and Tobago's economy is expected to continue on a path of steady recovery, propelled by the non-energy sector. This is premised on robust consumer demand and increased business activity, which was observed through the growth in the financial system credit. Specifically, the CBTT, in its Monetary Policy Announcement March 2024, highlighted that, in January 2024 (year on year), the financial system credit grew by 7.9%, driven by commercial (11.5%) and consumer/personal (9.8%) loans. Reductions in the unemployment rate add to the increasing demand, as more consumer spending power increases. In addition, headline inflation is expected to remain below 1% monthly (last recorded at 0.5% in April 2024), although this position may be affected by supply chain issues if tensions in the Red Sea and the drought in the Panama Canal³⁸ progress, impacting domestic imports. Notably, the energy sector is expected to be challenged by the slowdown in production and the uncertainty in global energy markets.

With respect to the telecommunications and broadcasting industry, there has been significant transformations over the years, driven by regulatory shifts (the move towards market liberalisation), digitalisation and rapid technological advancements (from 2G to 3G, 4G LTE and 5G, the Internet of Things (IoT), artificial intelligence, etc.) and evolving trends in consumer demand (from declining demand for traditional voice services-only to increasing demand for Internet-based applications). These trends are expected to continue shaping the domestic industry in 2024. In addition, domestic economic conditions, such as inter alia, the constrained availability of foreign exchange, alongside the surge in consumer demand for higher network speeds and increased data consumption (which have been largely fueled by the proliferation of over-the-top services), have also influenced the market's trajectory and has contributed to ongoing tariff increases observed across several sub-markets such as mobile voice services, Internet (fixed broadband and mobile data), subscription television, and bundled services. Simultaneously, operators, on account of these evolving dynamics, have provided expanded service terms, increased speed, limited and unlimited data plan options (in both the fixed and mobile markets), and zero-rated fixed voice plans, and have also provided customised services for vulnerable consumer groups including the elderly population.

Looking ahead, the telecommunications and broadcasting industry is expected to continue on its current trajectory. The demand for Internet services is projected to sustain its upward momentum, as consumers increase their uptake of Internet-based applications. In anticipation of the trends in the market, several operators have announced plans to upgrade their networks in the near future (Daily Express 2024). It is expected that these upgrades will help meet the increasing demands of consumers and enhance the industry's overall products and services.

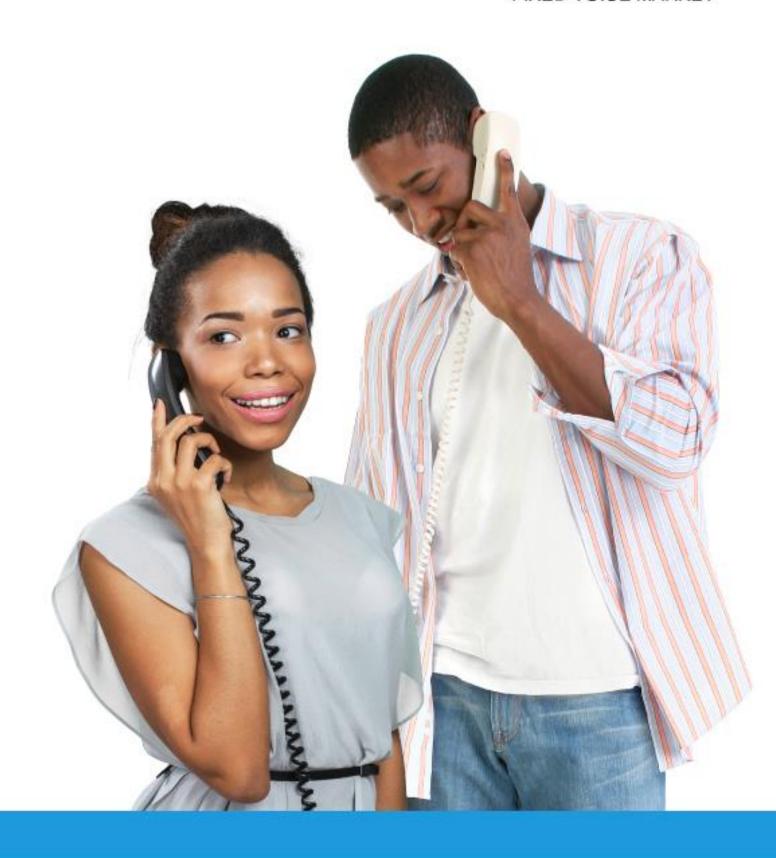
³⁸ The United Nations Conference on Trade and Development (UNCTAD) in February 2024 highlighted that freight costs on the popular Shanghai to Europe route have surged by over 250% since early November 2023 and are up by 165% between China and the US East Coast on account of the Red Sea and Panama Canal disruptions (Global Trade Review 2024).

References

- Central Bank of Trinidad and Tobago. n.d. *Data Centre*. https://www.central-bank.org.tt/statistics/data-centre.
- Central Bank of Trinidad and Tobago. 2024. "Economic Bulletin January 2024 Volume XXVI No. 1." https://www.central-bank.org.tt/sites/default/files/page-file-uploads/economic-bulletin-january2024-20240416_0.pdf.
- —. 2024. "Monetary Policy Announcement." 28 March. https://www.central-bank.org.tt/sites/default/files/latest-news/monetary-policy-announcement-march-2024.pdf.
- Central Statistical Office. n.d. National Accounts. https://cso.gov.tt/.
- CNBC. 2023. *This is the world's fastest-growing economy, and it could grow an 'explosive' 100%*. September. https://www.cnbc.com/2023/09/27/worlds-fastest-growing-economy-guyana-could-grow-100percent-in-5-years.html.
- Daily Express. 2024. *TSTT to invest \$160m in network upgrade*. April. https://trinidadexpress.com/business/local/tstt-to-invest-160m-in-network-upgrade/article_1571dd80-f3b9-11ee-950d-7388dbe9f28b.html.
- Global Trade Review. 2024. *UN: Red Sea and Panama Canal disruptions causing global trade upheaval*. March. https://www.gtreview.com/news/global/un-red-sea-and-panama-canal-disruptions-causing-global-trade-upheaval/.
- IMF Blog. 2024. *Global Economy Remains Resilient Despite Uneven Growth, Challenges Ahead.*April. https://www.imf.org/en/Blogs/Articles/2024/04/16/global-economy-remains-resilient-despite-uneven-growth-challenges-ahead.
- IMF. 2024. *WEO Database*. https://www.imf.org/en/Publications/WEO/weo-database/2024/April.
- International Monetary Fund. 2024. "Regional Economic Outlook for the Western Hemisphere, April 2024." https://www.imf.org/en/Publications/REO/WH/Issues/2024/04/19/regional-economic-outlook-western-hemisphere-april-2024.
- International Monetary Fund. April 2024. "World Economic Outlook." https://www.imf.org/en/Publications/WEO/Issues/2024/04/16/world-economic-outlook-april-2024.
- Ministry of Finance. 2023. "Review of the Economy." https://www.finance.gov.tt/wp-content/uploads/2023/10/ROE-2023-WEB.pdf.
- Telecommunications Authority of Trinidad and Tobago. 2022. "Annual Market Report." https://tatt.org.tt/market-information/annual-market-reports/.
- The World Bank. January 2024. *Global Economic Prospects*. The World Bank. https://openknowledge.worldbank.org/server/api/core/bitstreams/7fe97e0a-52c5-4655-9207-c176eb9fb66a/content.
- —. 2024. *The World Bank in Jamaica*. 15 April. https://www.worldbank.org/en/country/jamaica/overview.

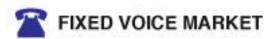
2023 ANNUAL MARKET REPORT

FIXED VOICE MARKET



Key Indicators for the Fixed Voice Market

GROWTH 2022-2023









\$318.7 M FIXED VOICE MARKET REVENUE

> 4.2% decrease from 2022

2 Fixed Voice Market Review

As at December 2023, there were 18 operators authorised by the Authority to provide domestic fixed telecommunications services to the public, over wired and wireless facilities. In 2023, the following seven operators offered domestic fixed voice services:

- 1. Amplia Communications Limited
- 2. Columbus Communications Trinidad Limited (FLOW)
- 3. Digicel (Trinidad & Tobago) Limited
- 4. Lisa Communications Limited
- 5. Prism Services (Trinidad) Limited³⁹
- 6. Open Telecom Limited
- 7. Telecommunications Services of Trinidad and Tobago Limited (TSTT)

TSTT offered fixed voice services through its public switched telephone network and is migrating customers from its legacy copper network to either its fixed wireless network or the network of its fully owned subsidiary Amplia Communications Limited.

Columbus Communications Trinidad Limited offered fixed voice services primarily via its Hybrid Fibre-Coaxial Network, and Amplia Communications Limited and Digicel (Trinidad & Tobago) Limited provided fixed voice services using their Gigabit Passive Optic Networks (GPON).

Open Telecom Limited and Lisa Communications Limited offered fixed voice services via their fixed wireless networks.

20

³⁹ Prism Services (Trinidad) Limited provides fixed voice services to business customers only.

2.1 Annual Fixed Voice Subscriptions

Figure 8 illustrates the trend in fixed voice subscriptions from 2019 to 2023. There were 310,700 subscriptions in 2023 - a 4.8% decrease from 2022.

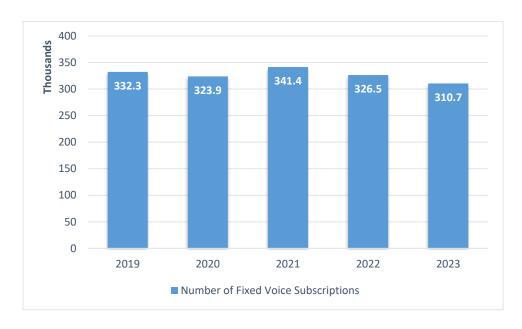


Figure 8 Fixed voice subscriptions from 2019 to 2023

In Figure 9, the fixed voice market is categorised into residential and business subscriptions from 2019 to 2023 (inclusive of companies subscribing to system services, e.g., PBX trunks). In 2023, there were 272,400 residential subscriptions and 38,300 business subscriptions. Compared to 2022, residential subscriptions decreased by 10,800, or 3.8%. Business subscriptions also decreased in 2023, recording 5,000 fewer subscriptions – an 11.5% decrease from the previous year.

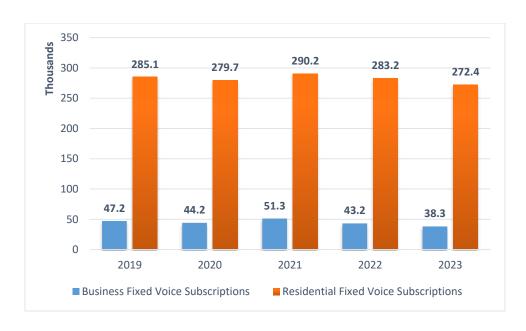


Figure 9 Fixed voice subscriptions, by type, for 2019 to 2023

As depicted in Figure 10, residential fixed voice subscriptions accounted for 87.78% of the total market, with the remaining 12.3% coming from the business sector.

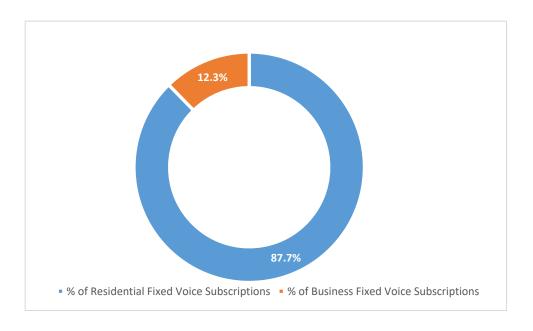


Figure 10 Proportion of fixed voice subscriptions, by type, for 2023

2.2 Quarterly Fixed Voice Subscriptions

The number of fixed voice subscriptions peaked in the first quarter of 2023, with 325,100, and declined consistently across the remaining quarters, as highlighted in Figure 11.

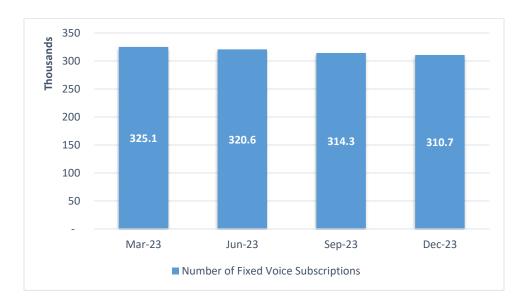


Figure 11 Quarterly fixed voice subscriptions in 2023

A comparison of quarterly fixed voice subscriptions for 2022 and 2023 is shown in Figure 12. All quarters of 2023 recorded fewer subscriptions when compared to the corresponding periods of 2022, with 13,000 fewer subscriptions, on average, per quarter.

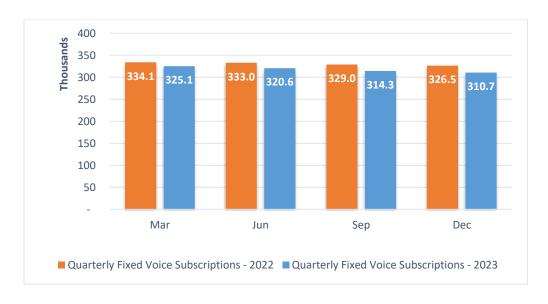


Figure 12 Quarterly fixed voice subscriptions for 2022 and 2023

Residential and business fixed voice subscriptions remained relatively stable throughout 2023, as the percentage breakdown in Figure 13 shows.

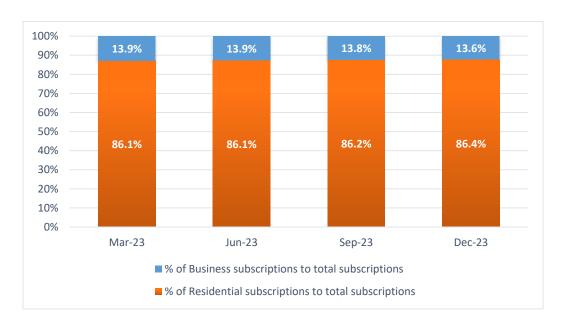


Figure 13 Percentage of Residential and Business fixed voice subscriptions, by quarter

As reflected in Figure 14, the total number of fixed voice subscriptions remained stable from 2019 to 2020. Thereafter, there was a sharp increase in the first quarter of 2021, which was then followed by a gradual decrease throughout the remaining quarters of 2021, 2022 and all of 2023.

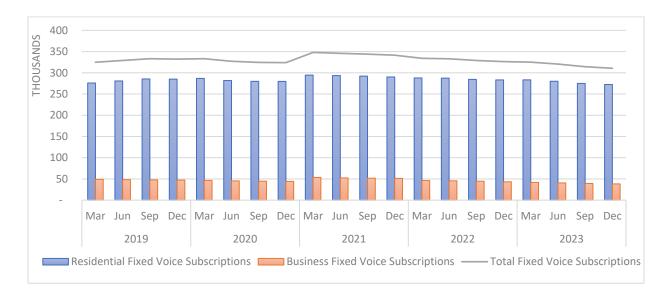


Figure 14 Quarterly fixed voice subscriptions from 2019 to 2023

2.3 Fixed Voice Penetration

Fixed voice penetration⁴⁰, the standard metric recognised by the International Telecommunication Union (ITU)⁴¹ for measuring the adoption of fixed voice services, is defined as the number of fixed voice subscriptions per 100 inhabitants of the population. The penetration rates from 2019 to 2023 are presented in Figure 15.

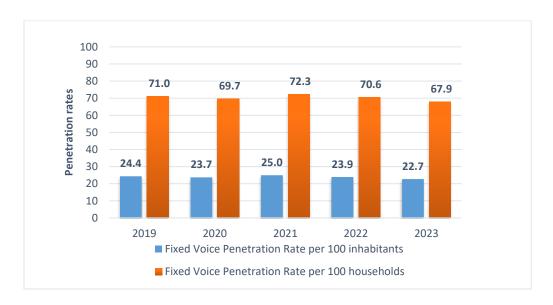


Figure 15 Fixed voice penetration rates from 2019 to 2023

With 310,700 subscriptions and a population of approximately 1.37 million persons, the fixed voice penetration rate was calculated to be 22.7 as at December 2023. This indicates that there were approximately 23 fixed voice subscriptions to every 100 persons in Trinidad and Tobago.

Fixed household penetration⁴² was also calculated, to assess the number of households with fixed voice telephone services. This was determined to be 67.9 and indicates that, out of every 100 households, approximately 68 subscribed to fixed voice services.

Across the period 2019 to 2023, the average penetration rate per 100 inhabitants was 24, while the average penetration rate per 100 households was 70.

⁴⁰ Fixed voice penetration is calculated using the number of residential fixed voice subscriptions, divided by the total population, multiplied by 100. The total population figure used is based on the CSO's 2024 mid-year population estimate.

⁴¹ ITU is a specialised agency of the United Nations, responsible for all matters relating to information and communications technology (ICT).

⁴² Fixed voice household penetration is calculated similarly to fixed voice penetration but the number of households in the country is used.

2.4 Domestic Fixed Voice Traffic

Domestic fixed voice traffic refers to the number of domestic minutes or calls originating on local fixed networks. This traffic can be classified into several types, as seen in Figure 16.

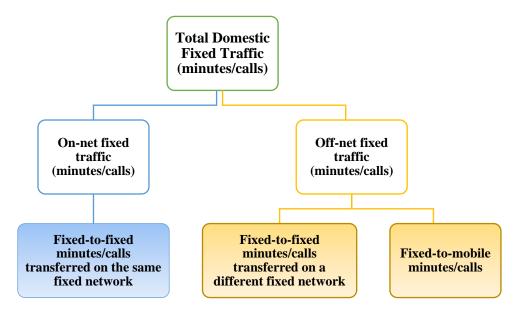


Figure 16 Classification of domestic fixed voice traffic

2.4.1 Annual Domestic Fixed Voice Traffic in Minutes

In 2023, there were approximately 285.5 million minutes generated in fixed voice traffic – a decrease of 21.1% from 2022. Of that total, 101.1 million minutes were on-net⁴³ while 184.4 million were off-net⁴⁴, as illustrated in Figure 17. Fixed-to-fixed minutes transferred on a different network (off-net) amounted to 16.6 million, while 167.8 million minutes was recorded for fixed-to-mobile. In 2023, on-net traffic accounted for 35.4%, dropping from 39.4% recorded in 2022. Off-net traffic represented 64.6%, comprising fixed-to-mobile minutes (58.8%) and fixed-to-fixed minutes (5.8%), as shown in Figure 18.

⁴³ On-net fixed traffic refers to traffic originating on a service provider's fixed network and terminating on the same fixed network.

⁴⁴ Off-net fixed traffic refers to traffic originating on a service provider's fixed network and terminating on another network (intra and inter service provider). For example, a call originating on TSTT's fixed network and terminating on bmobile's, Digicel's or Flow's network will be included in these minutes.

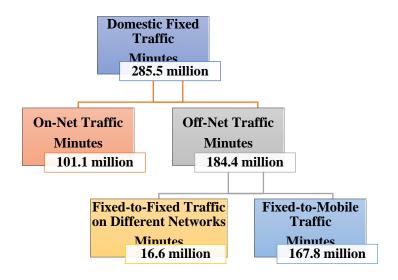


Figure 17 Breakdown of domestic fixed voice traffic in 2023

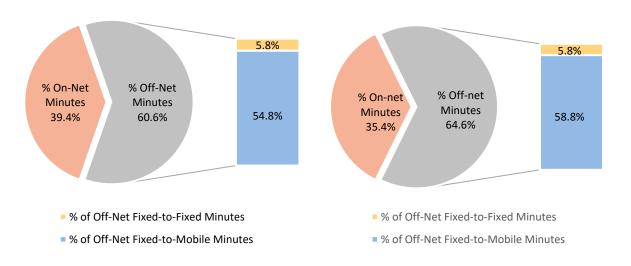


Figure 18 Total domestic fixed voice traffic minutes, by type, for 2022 and 2023

2.4.2 Quarterly Domestic Fixed Voice Traffic in Minutes

As indicated in Figure 19, the number of fixed minutes consistently declined in each quarter of 2023, averaging approximately 73 million per quarter. Total fixed minutes dropped from 82.1 million in the first quarter to 58.8 million in the fourth quarter. Both off-net and on-net minutes decreased, with off-net falling from 51.6 million in the first quarter to 39.1 million in the fourth, and on-net from 30.4 million to 19.7 million during the same period. Despite the overall decrease in both types of fixed minutes, the ratio of on-net to off-net minutes remained relatively stable across each quarter.

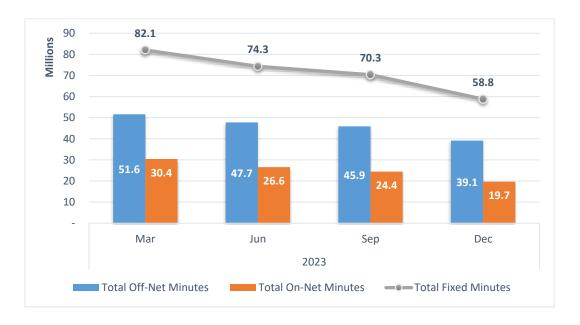


Figure 19 Quarterly fixed voice traffic minutes for 2023

2.4.3 Annual Domestic Fixed Voice Call Volumes

Figure 20 gives a comparison of domestic call volumes by traffic type for the past two years. Domestic voice calls fell to 104.4 million in 2022 – a decrease of 16.7% from the 125.3 million calls in 2022.

In 2023, total on-net calls accounted for 34.3 million (27.6%) of total fixed voice calls and total off-net calls accounted for 78.7 million (75.4%). On-net calls decreased by 25.3% from the previous year, while the number of off-net calls dropped by 13.5%.

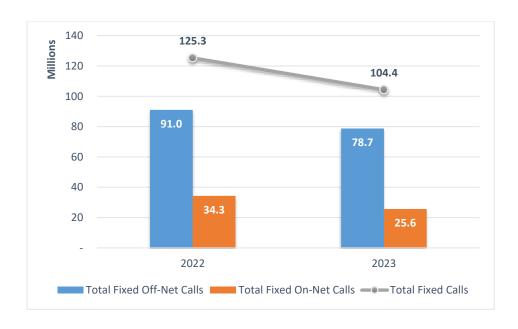


Figure 20 Comparison of domestic call volumes, by traffic type, for 2022 and 2023

2.5 Fixed Voice Revenues

Figure 21 portrays the steady decline in gross revenues of the fixed voice market over the past five years. The market amassed \$318.7 million in 2023 – a reduction of \$14 million, or 4.2%, from 2022.

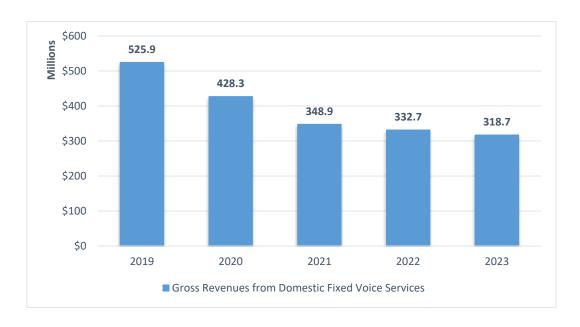


Figure 21 Fixed voice revenues from 2019 to 2023

The 2023 quarterly fixed voice revenues are shown in Figure 22. Revenues in the first quarter amounted to \$85.2 million and gradually declined in each quarter, recording \$77 million in the fourth quarter.

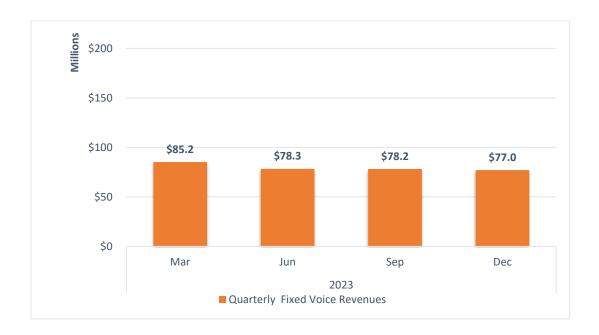


Figure 22 Quarterly fixed voice revenues for 2023

2.6 Fixed Voice Market Concentration

The Herfindahl-Hirschman Index (HHI) is a tool which measures the concentration of firms within a market, and ranges from 0 to 10,000. It is calculated as the sum of the squares of the market share⁴⁵ of all firms within that market.

Figure 23 shows an overall downward trend in the HHI values for the fixed voice market from 2019 to 2023. The HHI dropped from 3,677 in 2019 to 3,462 in 2020, followed by a slight increase to 3,541 in 2021. Subsequently, it decreased again to 3,377 in 2022 and continued to decline further to 3,271 in 2023.

30

⁴⁵ The market share for the fixed voice market is based on the number of subscriptions.

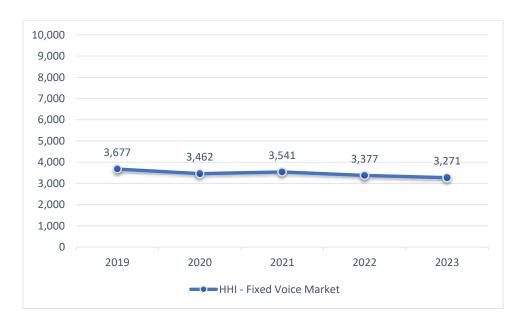


Figure 23 HHI for the fixed voice market from 2019 to 2023

Figure 24 shows that the first quarter of 2023 recorded an HHI of 3,316, which decreased by the second quarter to 3,299. The level of concentration continued to decline across the third and fourth quarters.



Figure 24 Quarterly HHI for the fixed voice market in 2023

2.7 Fixed Voice Average Revenue per User (ARPU)

ARPU is a measure of the average revenue generated by a subscriber and is calculated as total revenues divided by the total number of fixed voice subscriptions.

On average, each subscription to fixed voice services generated \$999 in 2023. This represents a reduction of \$6, or 0.6%, from the 2022 ARPU. Given the gradual decline in fixed voice revenues over the past five years, the ARPU has trended similarly, as shown in Figure 25.

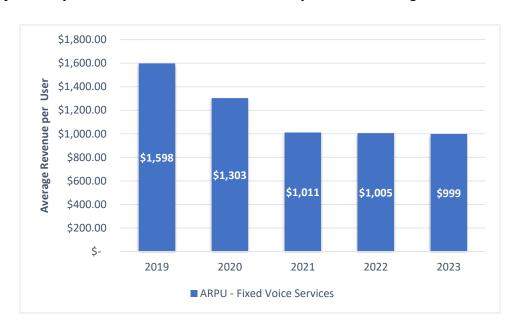


Figure 25 ARPU of the fixed voice market from 2019 to 2023

2023 ANNUAL MARKET REPORT

MOBILE VOICE MARKET



GROWTH 2022-2023





MOBILE VOICE PENETRATION 148 per 100 inhabitants



2.02 M SUBSCRIPTIONS of 0.9% from 2022

25.0% Postpaid Subscriptions



75.0% Prepaid Subscriptions





3 Mobile Voice Market Review

For the period January to December 2023, mobile voice and Short Messaging Service (SMS) services were offered by the following two authorised mobile service providers:

- 1. Telecommunications Services of Trinidad and Tobago Limited (bmobile)
- 2. Digicel (Trinidad & Tobago) Limited

These operators currently use the following technologies for the provision of mobile voice services in Trinidad and Tobago:

I. Global System for Mobile communication (GSM)

GSM networks continue to be phased out as the primary network for voice services, and their use is focussed on machine-to-machine and point-of-sale systems, in conjunction with GSM data enhancements, GPRS and EDGE in rural areas.

II. Universal Mobile Telecommunications Service (UMTS)

UMTS networks are currently deployed for voice services, in conjunction with UMTS data enhancements, HSPA and HSPA+.

This section presents an overview of the mobile voice market in Trinidad and Tobago, which was compiled using data submitted by the two mobile operators.

3.1 Mobile Voice Subscriptions

3.1.1 Annual Mobile Voice Subscriptions

Figure 26 shows the trend in mobile voice subscriptions for the last five years. The number of subscriptions increased from 2 million in 2022 to 2.02 million in 2023. Over the past five years, the number of subscriptions remained relatively stable, averaging 2 million each year.

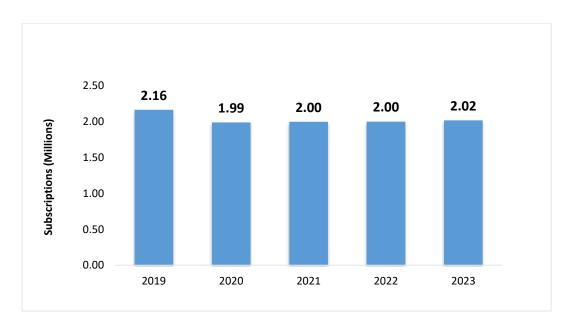


Figure 26 Number of mobile voice subscriptions from 2019 to 2023

Mobile voice subscriptions are classified into two categories: prepaid and postpaid. Prepaid customers purchase credit prior to use of the service, while postpaid customers enter into a contractual billing agreement with their respective service provider. In 2023, there were approximately 1.51 million prepaid subscriptions and 0.50 million postpaid subscriptions. Prepaid subscriptions increased by 600, or 0.04%, from the previous year, while postpaid rose by 17,700, or 3.6%. Figure 27 shows the trend of prepaid and postpaid mobile voice subscriptions for the period 2019 to 2023.

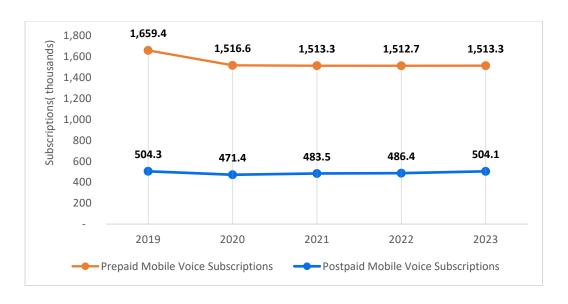


Figure 27 Mobile voice prepaid and postpaid subscriptions from 2019 to 2023

As Figure 28 depicts, prepaid subscriptions in 2023 accounted for 75% of total mobile voice subscriptions – a decrease from 75.7% in 2022. The percentage of postpaid subscriptions increased only slightly, from 24.3% in 2022 to 25.0% in 2023.

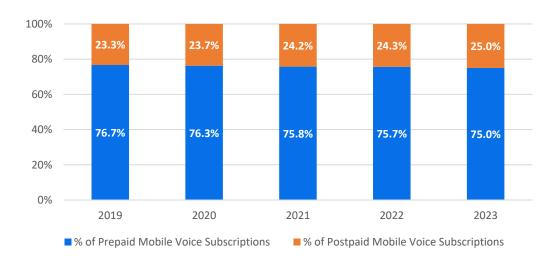


Figure 28 Percentage of prepaid and postpaid subscriptions from 2019 to 2023

The switching patterns for prepaid and postpaid service options from 2019 to 2023 are shown in Figure 29.

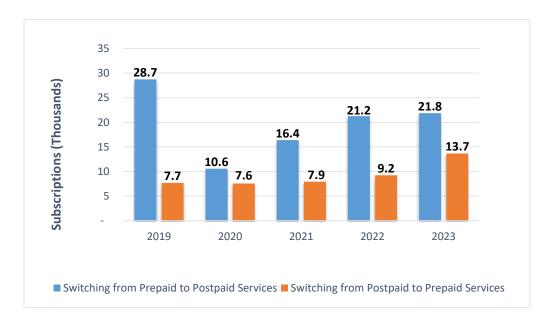


Figure 29 Number of mobile prepaid and postpaid subscriptions switched between 2019 and 2023

A greater number of mobile voice subscription plans were switched from prepaid to postpaid than from postpaid to prepaid during the last five years. In 2023, the number of subscriptions switched from prepaid to postpaid increased by 600, or 2.8% from 2022, to record 21,800 subscriptions. The number of subscriptions switched from postpaid to prepaid also increased year-on-year in 2023, by 4,500, or 47.9%.

Figure 30 shows the quarterly trend in the switching patterns for prepaid and postpaid services during 2023. The number of subscriptions switched from prepaid to postpaid was relatively stable, averaging 5,500 per quarter. Subscriptions converted from postpaid to prepaid varied during 2023, ranging from a minimum of 1,900 subscriptions in the first quarter to a maximum of 4,400 subscriptions in the third quarter.

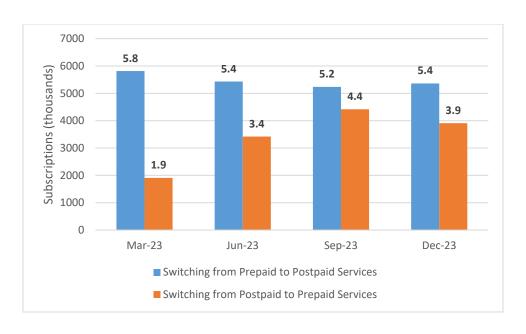


Figure 30 Number of mobile prepaid and postpaid subscriptions switched in 2023

3.1.2 Quarterly Mobile Voice Subscriptions

Figure 31 shows the quarterly trend in mobile voice subscriptions for 2023.

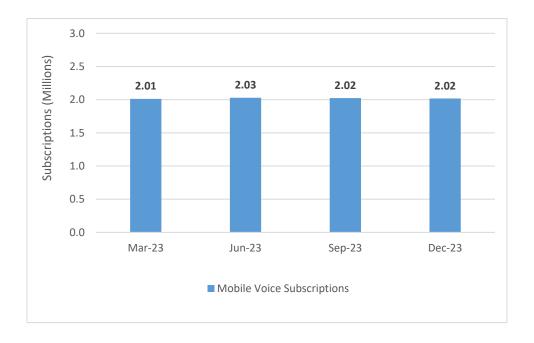


Figure 31 Quarterly mobile voice subscriptions in 2023

Mobile voice subscriptions were relatively stable throughout 2023, averaging 2 million each quarter.

The quarterly trends comparing the 2022 and 2023 prepaid and postpaid mobile subscriptions are illustrated in Figures 32 and 33, respectively.

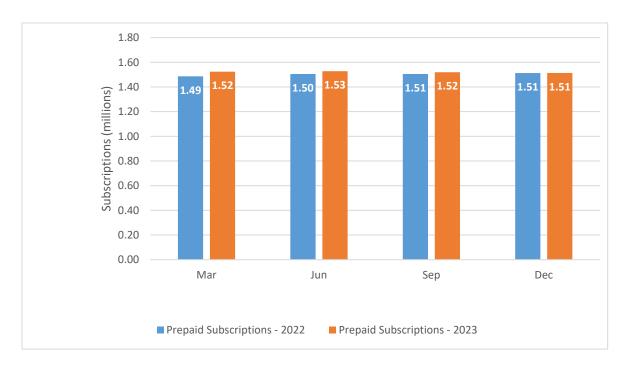


Figure 32 Quarterly mobile prepaid subscriptions for 2021 and 2022

In 2023, prepaid subscriptions totalled 1.52 million in the first quarter and remained relatively the same for the remaining quarters of 2023. Compared to 2022, there was minimal variation in mobile prepaid voice subscriptions in each corresponding period of 2023.

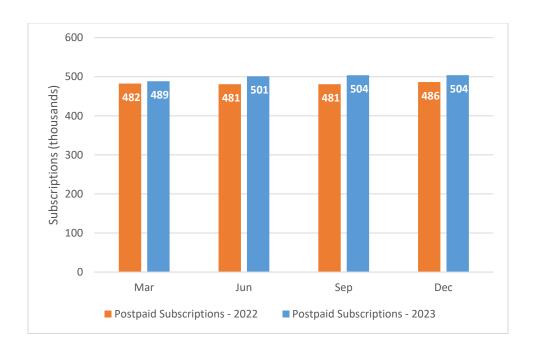


Figure 33 Quarterly mobile postpaid subscriptions for 2022 and 2023

In the first quarter of 2023, there were 489,000 postpaid subscriptions recorded. This figure increased in the second and third quarters, reaching 501,000 and 504,000 subscriptions, respectively. Postpaid subscriptions remained the same in the fourth quarter. All quarters of 2023 had a greater number of postpaid subscriptions compared to the same periods in 2023.

3.2 Mobile Penetration

3.2.1 Domestic Mobile Voice Penetration Rate

Figure 34 presents the mobile voice penetration rates per 100 inhabitants⁴⁶ for the period 2019 to 2023.

⁴⁶ Mobile voice penetration rate per 100 inhabitants is calculated as the number of mobile subscriptions divided by the total population, multiplied by 100.

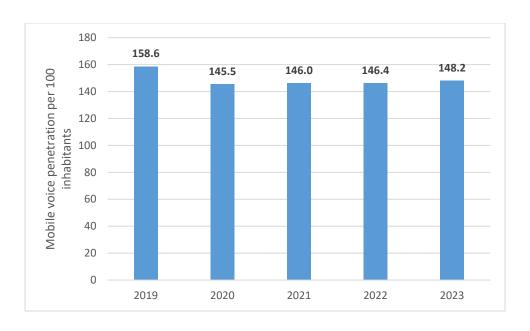


Figure 34 Mobile voice penetration per 100 inhabitants for 2019 to 2023

The mobile voice penetration rate decreased from 158.6 in 2019 to 145.5 in 2020. There was a marginal increase to 146.0 in 2021. The rate rose gradually during 2021 to 2023, to 146.4 in 2022 and further to 148.2 in 2023.

Figure 35 presents the quarterly trend in mobile voice penetration for 2023.

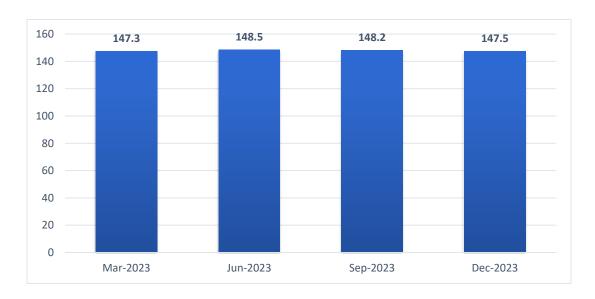


Figure 35 Quarterly mobile voice penetration rates per 100 inhabitants for 2023

The mobile voice penetration rate remained relatively consistent over the quarters, averaging 148 per 100 inhabitants each quarter.

3.3 Domestic Voice Traffic

There are several categories of domestic mobile voice traffic, as shown in Figure 36. They represent the types of calls made by consumers and, hence, the minutes originated and terminated on the domestic mobile networks.

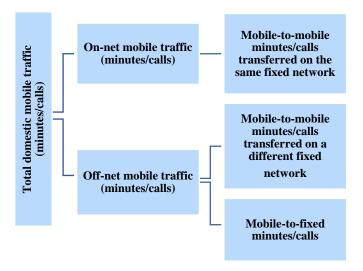


Figure 36 Classification of domestic mobile voice traffic

In 2023, the total number of mobile phone calls made by consumers decreased by 9.5% from the previous year, to record approximately 1.95 billion. The number of minutes generated from these calls was approximately 2.81 billion – a decrease of 12.2% from 2022.

3.3.1 Annual Domestic Mobile Voice Traffic in Minutes

Figure 37 shows a breakdown of domestic mobile minutes for 2023, while Table 3 gives a comparison of domestic mobile voice minutes for 2022 and 2023.

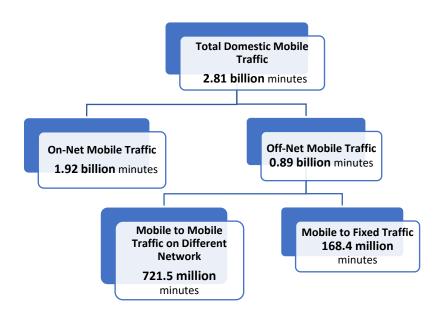


Figure 37. Breakdown of domestic mobile minutes for 2023

The 2.81 billion minutes of domestic traffic for 2023 are the summation of both on-net and offnet⁴⁷ minutes, which amounted to 1.92 billion and 0.89 billion, respectively. Compared with 2022, the number of mobile on-net minutes for 2023 decreased by 13.9%, while the number of off-net minutes decreased by 8.2%.

The 0.89 billion off-net minutes comprised 721.5 million mobile-to-mobile minutes transferred on a different mobile network and 168.4 million mobile-to-fixed minutes. From 2022 to 2023, mobile-to-mobile off-net minutes decreased by 45.2 million, or 5.9%, while mobile-to-fixed off-net minutes decreased by 32.4 million, or 16.1%.

Table 3 Breakdown of domestic mobile minutes for 2022 and 2023

	2022	2023	Difference	Percentage change
On-net mobile traffic minutes (billions)	2.23	1.92	-0.31	-13.9%
Off-net mobile traffic minutes (billions)	0.97	0.89	-0.08	-8.2%
Mobile-to-mobile traffic minutes on different networks (millions)	766.7	721.5	-45.2	-5.9%
Mobile-to-fixed traffic minutes (millions)	200.8	168.4	-32.4	-16.1%
Total domestic mobile traffic minutes (billions)	3.20	2.81	-0.39	-12.2%

⁴⁷ Off-net mobile traffic refers to traffic originating on a service provider's mobile network and terminating on another network, e.g., a call originating on Digicel's network and terminating on TSTT's.

Figure 38 shows the percentage of mobile-to-mobile and mobile-to-fixed minutes for 2023. Mobile-to-mobile minutes accounted for 94.0% of all domestic mobile minutes, while mobile-to-fixed minutes amounted to 6.0%.

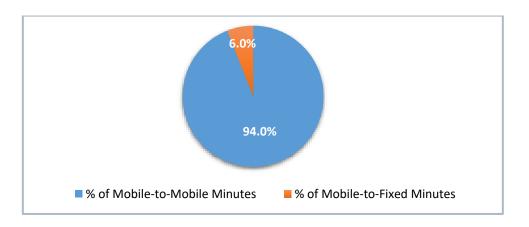


Figure 38 Percentage of mobile-to-mobile and mobile-to-fixed minutes for 2023

3.3.2 Annual Domestic Mobile Voice Call Volumes

In 2023, there was a total of 1.95 billion domestic mobile voice calls – a decrease of 9.5% from the previous year. A total of 1.31 billion on-net calls and 633.6 million off-net calls was recorded, representing declines of 10.3% and 7.7%, respectively, from 2022.

Table 4 gives a comparison of domestic mobile voice calls for 2022 and 2023, while Figure 39 highlights the percentage of on-net and off-net calls for 2023.

Table 4 Breakdown of domestic mobile voice calls for 2022 and 2023

	2022	2023	Difference	Percentage change
On-net mobile traffic calls (billions)	1.46	1.31	-0.15	-10.3%
Off-net mobile traffic calls (millions)	686.41	633.6	-52.81	-7.7%
Mobile-to-mobile calls (millions)	583.65	546.8	-36.85	-6.3%
Mobile-to-fixed traffic calls (millions)	102.76	86.80	-15.96	-15.5%
Total domestic mobile voice calls (billions)	2.15	1.95	-0.20	-9.3%

From January to December 2023, there were 1.31 billion on-net calls, representing approximately 67.5% of all mobile voice calls. The remaining 32.5%, or 633.6 million calls, were off-net, which

are sub-divided into mobile-to-mobile and mobile-to-fixed off-net calls. There were 86.8 million mobile-to-fixed off-net calls in 2023, making up 4.5% of all domestic mobile calls, and 546.8 million mobile-to-mobile off-net calls – a share of 28.1%.

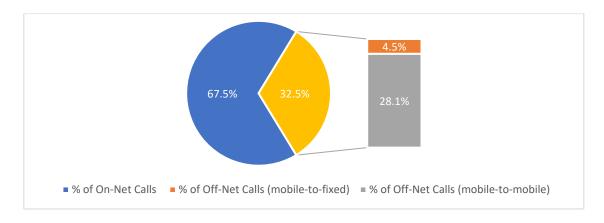


Figure 39 Percentage of domestic mobile voice calls for 2023

3.3.3 Quarterly Domestic Mobile Voice Minutes

The number of minutes recorded for each quarter of 2023 is presented in Figure 40. The first quarter registered 736.6 million minutes which fell to 685 million in the second quarter. Total mobile voice minutes increased in the third quarter, to reach 699.9 million but decreased again in the fourth quarter to 688.8 million.

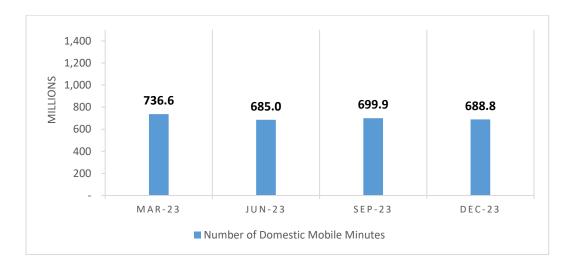


Figure 40 Number of quarterly mobile voice minutes in 2023

Figure 41 portrays the percentage of quarterly mobile voice minutes by type for 2023. Mobile-to-mobile minutes were the largest share of total mobile minutes, accounting for approximately 94%

for each quarter of 2023. During 2023, the ratio of mobile-to-mobile minutes to mobile-to-fixed minutes remained the same.

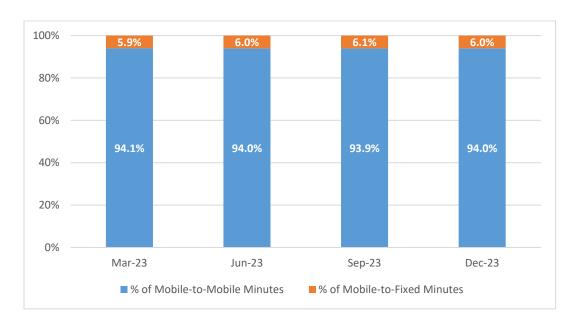


Figure 41 Percentage of quarterly mobile voice minutes, by type, for 2023

3.3.4 Short Messaging Services (SMS)

Figure 42 shows that, from 2022 to 2023, there was a reduction in the total number of SMS sent – from 102.4 million to 92.9 million – representing a 19.1% decrease. SMS were categorised as either on-net or off-net, with 2023 figures of 59.3 million and 23.6 million, respectively. From 2022 to 2023, on-net SMS dropped by 20.1% and off-net by 16.6%.

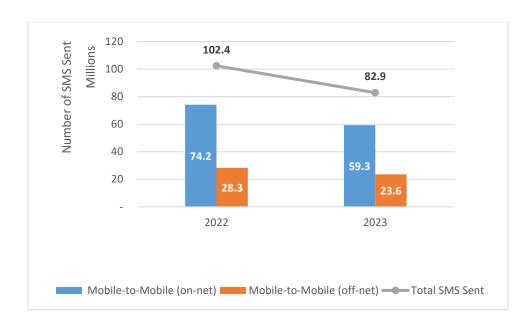


Figure 42 Number of on-net and off-net SMS sent in 2022 and 2023

3.4 Mobile Voice Revenues

3.4.1 Annual Revenues from Mobile Voice Services⁴⁸

Figure 43 outlines the annual trend in mobile voice revenues⁴⁹ from 2019 to 2023. Mobile voice services generated revenues of \$1,037.8 million – an increase of \$89.7 million, or 9.5%, from 2022.

⁴⁸ These revenues exclude mobile Internet revenues, which are reported on in section 4, Internet Market Review.

⁴⁹ Mobile voice revenues comprise revenues from mobile voice, SMS services and other mobile services, such as equipment sales, SIM card sales and administrative charges.

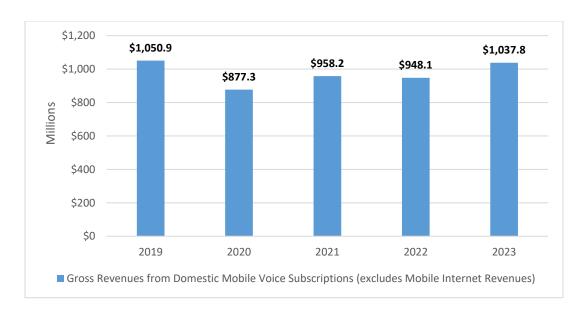


Figure 43 Annual revenues from mobile voice services from 2019 to 2023

Table 5 highlights the percentage changes in mobile revenues from 2019 to 2023. In both 2019 and 2020, there were decreases of 12.4% and 16.5%, respectively, in comparison to the preceding year. In the subsequent year, 2021, there was a noteworthy positive percentage change of 9.2% in mobile revenues. In 2022, there was a marginal decrease of 1.1%, which was followed by a 9.5% increase in 2023.

Table 5 Percentage changes in mobile voice revenues from 2019 to 2023

Year	Percentage Change (from previous year)
2019	-12.4%
2020	-16.5%
2021	9.2%
2022	-1.1%
2023	9.5%

Mobile voice revenues comprise earnings from prepaid, postpaid and other mobile services. Figure 44 compares revenues earned by service type for the past five years, while Figure 45 depicts the percentage share of mobile voice revenues by service type for 2023.

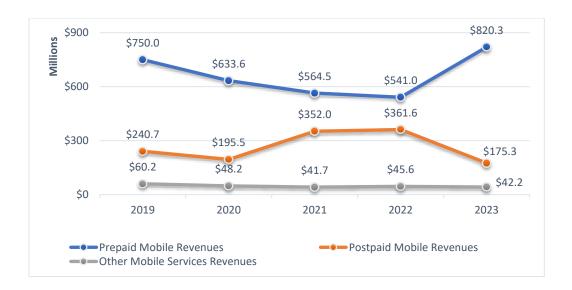


Figure 44 Mobile voice revenues, by service type, for 2019 to 2023

In 2023, prepaid services produced \$820.3 million in revenue, while postpaid generated \$175.3 million, representing 79% and 16.1% of gross revenues, respectively. Revenues from other mobile services amounted to \$42.2 million, or 4.1% of total revenues.

In 2023, postpaid revenue decreased by 51.5% while prepaid revenue increased by 51.6%. Other mobile service revenues decreased by 7.49%.

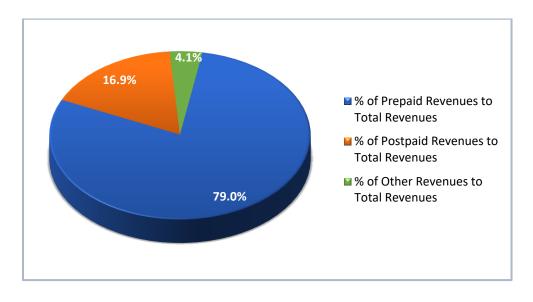


Figure 45 Percentage breakdown of mobile voice revenues, by service type, for 2023

3.4.2 Quarterly Revenues from Mobile Voice Services

Figure 46 illustrates the quarterly trend in mobile voice revenues for 2023. The first quarter recorded revenues of \$272.5 million. Revenues decreased in the second quarter then increased in the third quarter before dropping in the fourth quarter to record \$254.6 million.

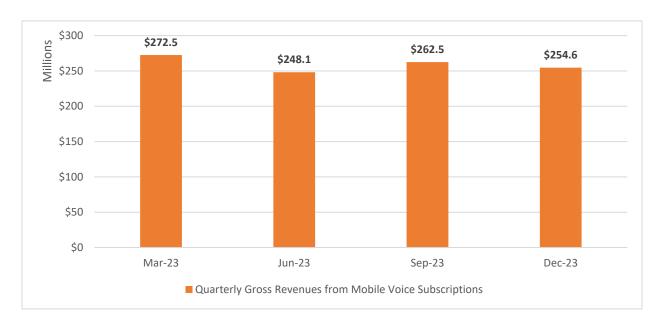


Figure 46 Quarterly revenues from mobile voice services in 2023

Figure 47 gives a breakdown of quarterly revenues by service type for 2023.

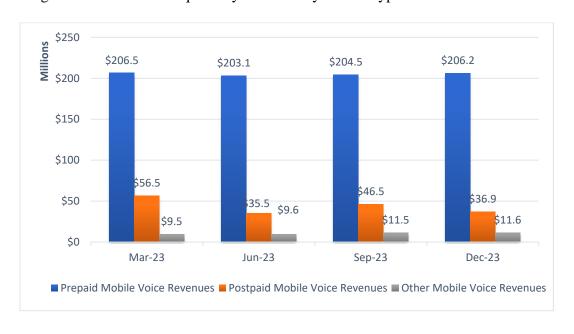


Figure 47 Quarterly mobile voice revenues, by service type, for 2023

Prepaid revenues fell from \$206.5 million in the first quarter to \$203.1 million in the second quarter. Revenues increased in the third quarter to \$204.5 million and increased further in the fourth to \$206.2 million. Postpaid revenues peaked in the first quarter, at \$56.5 million – the largest quarterly figure of the year. Revenues decreased in each subsequent quarter in 2023, ending the year with \$36.9 million in the fourth quarter. Revenues from other mobile services were stable in the first two quarters and increased minimally in the third and fourth.

Figure 48 compares the percentage share of revenues earned in 2023 by service type. Prepaid revenues accounted for the largest share of mobile voice revenues, with an average of 79.1%. Postpaid revenues averaged 16.8% per quarter, while the "other" mobile services category held an average share of 4.1%.

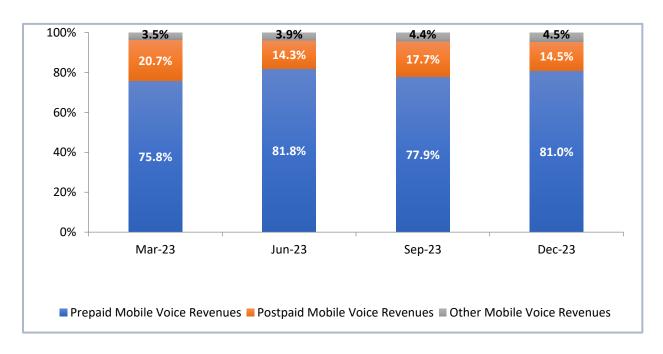


Figure 48 Percentage share of revenues. by service type, for 2023

3.5 Mobile Voice Market Concentration

Figure 49 depicts the level of concentration in the domestic mobile voice market using the HHI⁵⁰ for the period 2019 to 2023.

There were consecutive increases in the HHI across 2019 and 2020, followed by a decline to 5,146 in 2021. In 2023, the HHI was 5,218 – an increase of 0.4% from the previous year.

⁵⁰ The number of mobile subscriptions was used to determine the market share of the service providers.

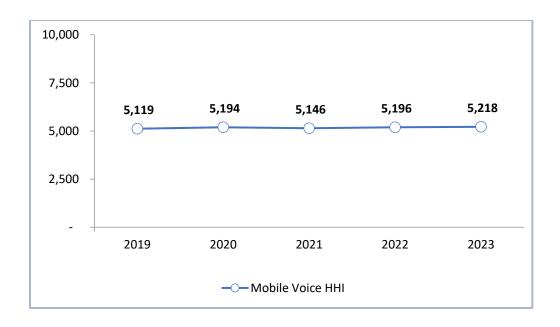


Figure 49 HHI for the mobile voice market from 2019 to 2023

The quarterly trend in the HHI for the mobile voice market for 2023 is depicted in Figure 50. The first quarter had an HHI of 5,203, which increased consistently across all quarters, to end the year at 5,018.

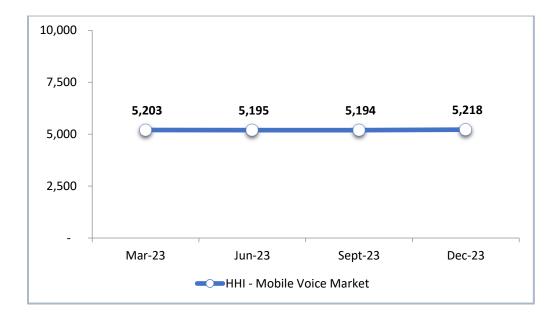


Figure 50 Quarterly HHI for the mobile voice market in 2023

3.6 Average Revenue per User for Mobile Voice Services

The ARPU for mobile voice services increased by 8.5% from the previous year, registering \$514 in 2023. This indicates that the average expenditure per subscriber of mobile voice services decreased by \$40 from 2022. Figure 51 shows the trend in the mobile service ARPU for the past five years.

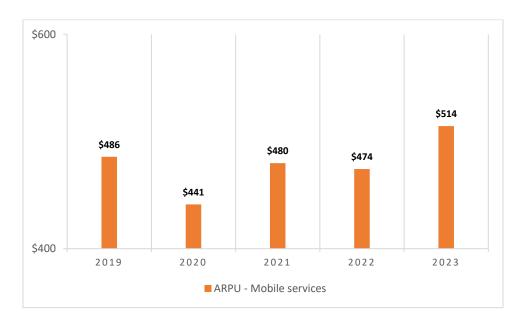


Figure 51 ARPU for mobile voice services from 2019 to 2023

Figure 52 presents a comparison of the ARPU for both prepaid and postpaid mobile services for the period 2019 to 2023.

Over the last five years, the ARPU for prepaid subscriptions decreased from 2019 to 2022, then increased by 51.6%, recording \$348 in 2023. The postpaid ARPU for 2023 dropped by \$396, or 53.2%, relative to 2022.

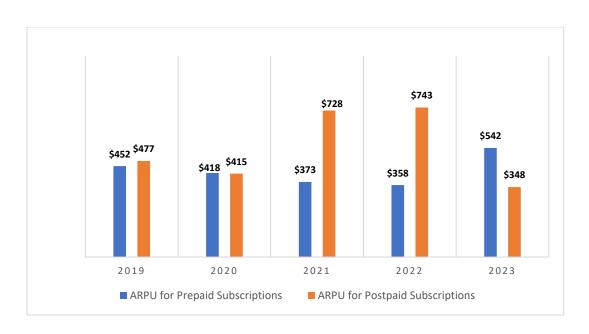
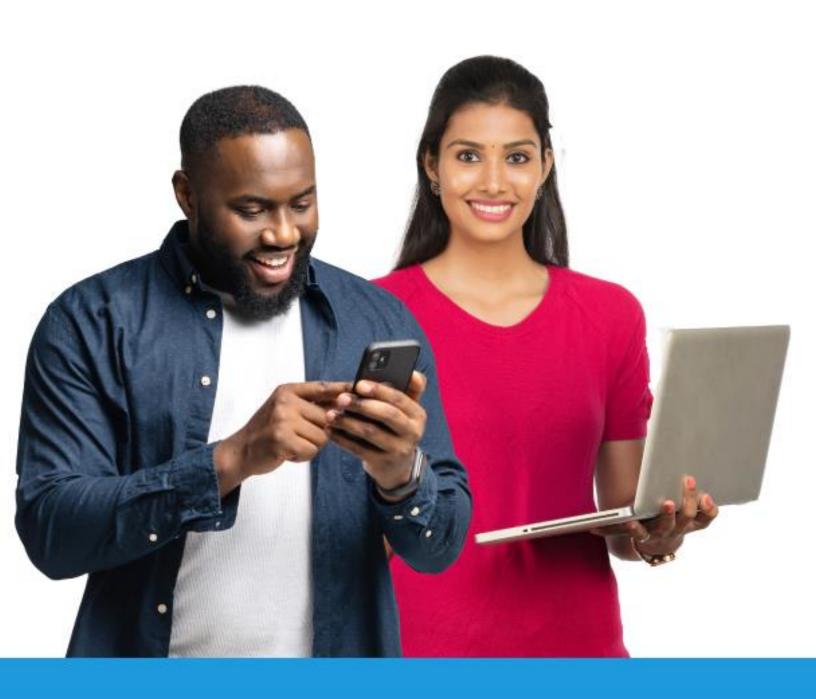


Figure 52 ARPU for prepaid and postpaid mobile voice subscriptions from 2019 to 2023

2023 ANNUAL MARKET REPORT INTERNET MARKET



GROWTH 2022-2023



MOBILE INTERNET REVENUES

\$1,004.1 Million

of 1.5% over 2022



INTERNET PENETRATION 55.2 per 100 inhabitants



FIXED INTERNET REVENUES

\$1,250.5 Million of 0.3% over 2022



404,400 SUBSCRIPTIONS of 3.8% over 2022

29.6 per 100 inhabitants

0.5% increase from 2022

\$2,254.6
INTERNET MARKET REVENUES

4 Internet Market Review

This review of Trinidad and Tobago's Internet market for 2023 examines the delivery of Internet services over domestic fixed (wired and wireless) and mobile public telecommunications networks.

The country has 18 authorised fixed domestic telecommunications service concessionaires, 13 of whom provided fixed Internet services in 2023, as follows:

- 1. Air Link Communications Limited
- 2. Amplia Communications Limited
- 3. Columbus Communications Trinidad Limited (FLOW)
- 4. Digicel (Trinidad & Tobago) Limited
- 5. Green Dot Limited
- 6. Lisa Communications Limited
- 7. Novo Communications Limited
- 8. Open Telecom Limited⁵¹
- 9. PBS Technologies (Trinidad) Limited [formerly Massy Technologies (Infocom) Trinidad Limited]
- 10. RVR International Limited
- 11. Starlink Internet Services Trinidad and Tobago Limited
- 12. Telecommunications Services of Trinidad and Tobago Limited (TSTT)
- 13. Wired Technologies Limited

These operators use a mix of technologies to provide fixed wired and wireless broadband Internet services to the public. Fixed wired broadband Internet services employ ADSL2+ over copper cables, DOCSIS 3.0 technology using Hybrid Fibre Coaxial Networks, as well as a mix of Fibre to the Business (FTTB), Metro-Ethernet or Fibre to the Home (FTTH) topologies, using GPON access networks. Fixed wireless broadband Internet operators employ technologies such as

⁵¹ Open Telecom had not supplied data at the time of publication.

WiMAX and LTE technologies to support services demanding higher speeds on the access network.

One fixed operator, TSTT, indicated that it is phasing out the use of twisted pair copper cables for the provision of fixed broadband Internet and fixed telephony services. Its fixed wireless network will replace the existing copper access network in the provision of these services.

Two mobile operators were authorised to provide domestic mobile telecommunications services, including the provision of mobile Internet services:

- 1. Telecommunications Services of Trinidad and Tobago Limited (bmobile)
- 2. Digicel (Trinidad & Tobago) Limited

Mobile Internet operators offered customers mobile broadband Internet services utilising Evolved High-Speed Packet Access (HSPA+), Long Term Evolution (LTE) as well as Long Term Evolution Advanced (LTE-A). LTE is the main technology employed for the provision of mobile broadband Internet services, with HSPA+ utilised in areas not covered by LTE. Mobile Internet services via 2.5G technology, i.e., Enhanced Data rates for GSM Evolution (EDGE), were also offered in rural areas not yet covered by the 3G and 4G technologies during this reporting period.

4.1 Fixed Internet Subscriptions

Figure 53 illustrates the annual trend in subscriptions to fixed Internet services. Following an increase in 2022, fixed Internet subscriptions rose by 14,700, or 3.8%, to record 404,400 in 2023.

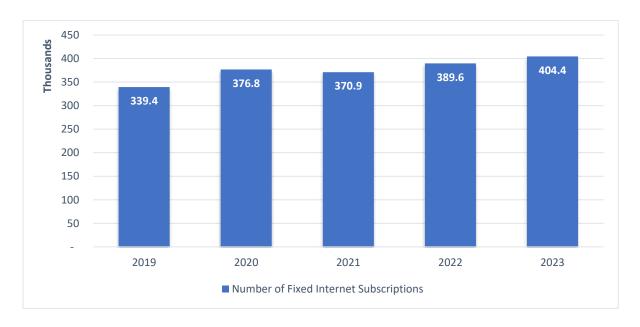


Figure 53 Fixed Internet subscriptions from 2019 to 2023

4.1.1 Fixed Internet Subscriptions by Customer Type

Fixed Internet subscriptions can be classified as either residential or business. Both categories registered increases in 2023. As Figure 54 reveals, the number of residential subscriptions amounted to 383,500 – an increase of 13,400, or 3.6%, from 2022.

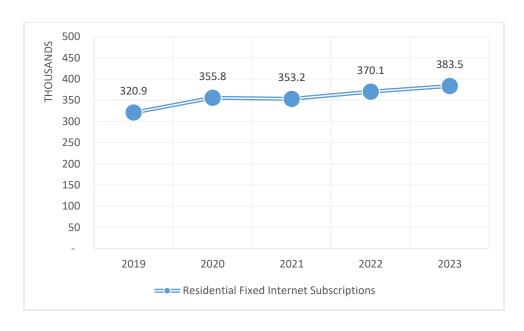


Figure 54 Residential fixed Internet subscriptions from 2019 to 2023

There were 20,800 business Internet subscriptions, as shown in Figure 55, reflecting an increase of 1,400 subscriptions, or 7%, from 2022.

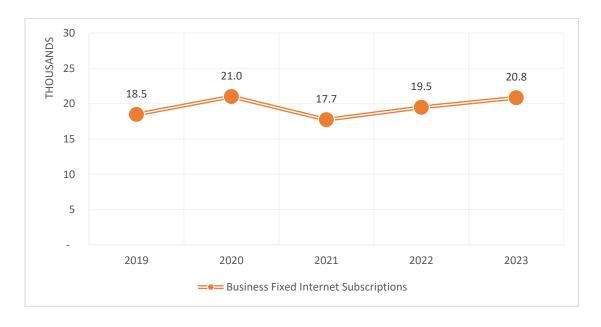


Figure 55 Business fixed Internet subscriptions from 2019 to 2023

4.1.2 Residential Fixed Broadband Internet Subscriptions by Speed Tier

The Internet speeds⁵² that residential broadband customers subscribed to in 2023 ranged from 256 kbit/s to 1 Gbit/s. Figure 56 shows the number of residential fixed broadband subscriptions by the following speed tiers:

- i. 256 kbit/s to less than 2 Mbit/s
- ii. 2 Mbit/s to less than 10 Mbit/s
- iii. 10 Mbit/s to less than 30 Mbit/s
- iv. 30 Mbit/s to less than 100 Mbit/s
- v. equal to or above 100 Mbit/s

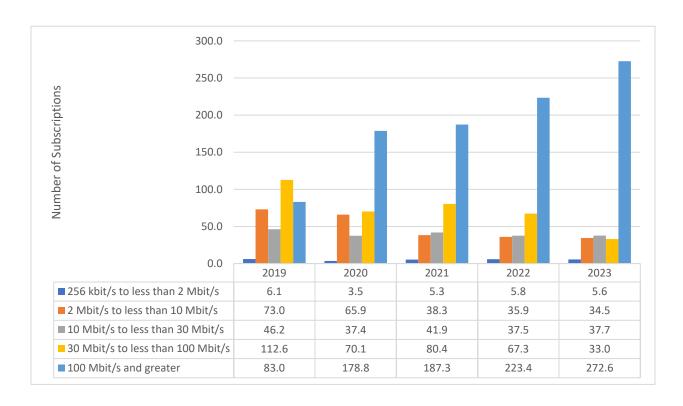


Figure 56 Number of residential broadband subscriptions, by download speed tier, from 2019 to 2023

The *equal to or above 100 Mbit/s* category was the most popular choice among residential customers, with 272,600 subscriptions. Subscriptions in this category increased by 49,200, or 22.2%, from 2022.

_

⁵² Refers to advertised speeds by service providers

The 30 Mbit/s to less than 100 Mbit/s category was the second most subscribed to speed tier, with 33,000 subscriptions, which was a decrease of 51% from 2022.

There were 37,700 subscriptions to the 10 Mbit/s to less than 30 Mbit/s – an increase of 200, or 0.5%, from the previous year.

The 2 Mbit/s to less than 10 Mbit/s tier declined by 4% from 2022, to record 35,700 subscriptions.

The number of subscriptions to the 256 kbit/s to less than 2 Mbit/s category decreased by 200, or 4.5%, from 2022, and remained the least subscribed tier, with 5,600 subscriptions as consumers opt for higher speeds.

The proportion of residential subscriptions by download speed for the 2019 to 2023 period is shown in Figure 57.

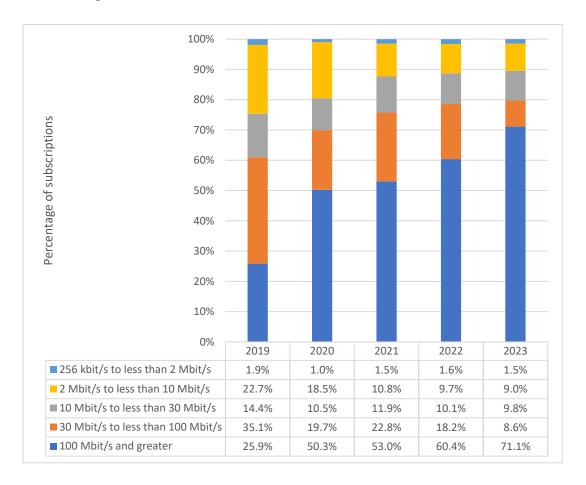


Figure 57 Percentage of residential broadband subscriptions, by download speed tier, from 2019 to 2023

In 2023, the equal to or above 100 Mbit/s category was the largest, at 71.1%.

The percentage of subscriptions in the 30 Mbit/s to less than 100 Mbit/s decreased from 18.2% in 2022 to 8.6% in 2023.

The 2 Mbit/s to less than 10 Mbit/s and 10 Mbit/s to less than 30 Mbit/s speed tiers held shares of 9.8% and 9%, respectively.

The 256 kbit/s to less than 2 Mbit/s tier retained its position of having the smallest share of the residential broadband Internet market, with 1.5%.

4.1.3 Business Fixed Broadband Internet Subscriptions by Speed Tier

Figure 58 indicates that the *equal to or above 100 Mbit/s* tier was, as with the residential subscriptions, the most subscribed to speed tier by businesses. The number of subscriptions rose to 12,100 – an increase of 1,900, or 18.8%, from 2022.

Subscriptions to the 30 Mbit/s to less than 100 Mbit/s category decreased by 500, or 6.6%, to register a total of 7,200 in 2023.

In comparison to 2022, subscriptions to all other speed categories remained relatively unchanged in 2023.

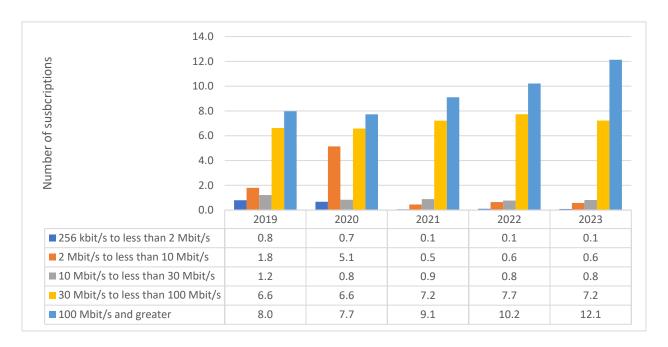


Figure 58 Number of business broadband subscriptions, by download speed, from 2019 to 2023

With regard to proportions, the *equal to or above 100 Mbit/s* tier was the largest, with 58.2%.

The 30 Mbit/s to less than 100 Mbit/s category held a share of 34.7%, while 256 kbit/s to less than 2 Mbit/s had the smallest proportion, at 0.4%.

These results are shown in Figure 59 and highlight the evolution of business broadband subscriptions by speed tier across the last five years.

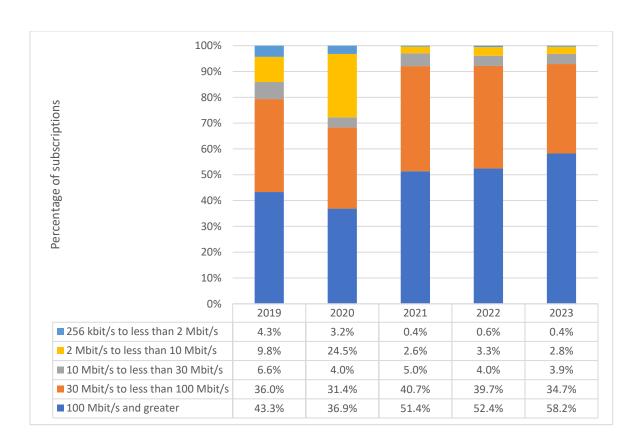


Figure 59 Percentage of business broadband subscriptions, by download speed, from 2019 to 2023

4.2 Active Mobile Internet Subscriptions

In 2023, there were 2.02 million mobile voice subscriptions, with approximately 1.7 million enabled to access mobile Internet services. Of these 1.7 million, there were 808,800 active mobile Internet subscriptions⁵³ as at December 2023 – a decrease of 5.9% from 2022. There were 507,800 active prepaid mobile Internet subscriptions and 301,000 active postpaid mobile Internet subscriptions.

_

⁵³ "Active mobile Internet subscriptions" refers to subscribers who have used mobile Internet service within the last three months.

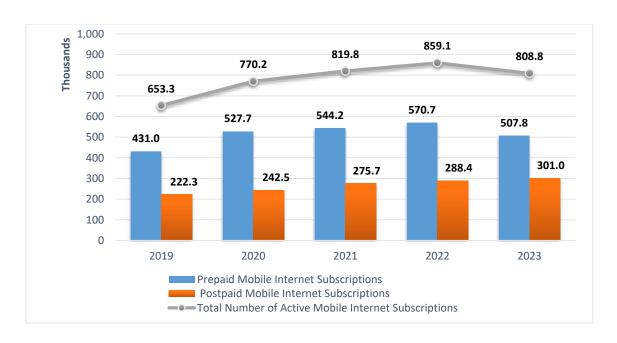


Figure 60 Prepaid and postpaid Internet subscriptions from 2019 to 2023

Figure 61 compares prepaid and postpaid subscriptions by service type, classified as either "mobile voice only" users or "mobile voice and mobile Internet" users. As reported in section 3.1.1, there were 1.51 million prepaid and 504,100 postpaid mobile voice subscriptions recorded in 2023. Of the 1.51 million prepaid subscribers, 66.4% used both mobile voice and Internet services, while the remaining 33.6% used only mobile voice. Of the 504,100 postpaid mobile subscribers, 59.7% used both mobile voice and Internet, while 40.3% only used mobile voice.

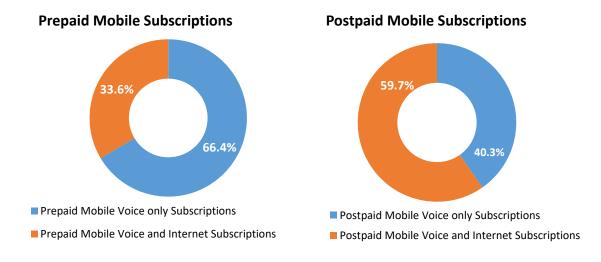


Figure 61 Comparison of prepaid and postpaid mobile Internet subscriptions for 2023

In 2022, there were approximately 791,400 mobile broadband Internet subscriptions and 17,500 mobile narrowband Internet subscriptions, as depicted in Figure 62.

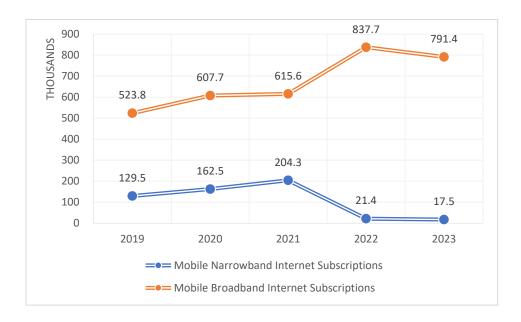


Figure 62 Mobile narrowband and broadband Internet subscriptions from 2019 to 2023

Compared to 2022, mobile broadband figures fell by 46,300 subscriptions, or 5.5%, while narrowband registered 18,500 fewer subscriptions – an 18.5% decrease. As Figure 63 illustrates, the proportion of mobile broadband Internet subscriptions was 97.8% while the percentage of mobile narrowband Internet subscriptions was 2.2% in 2023.

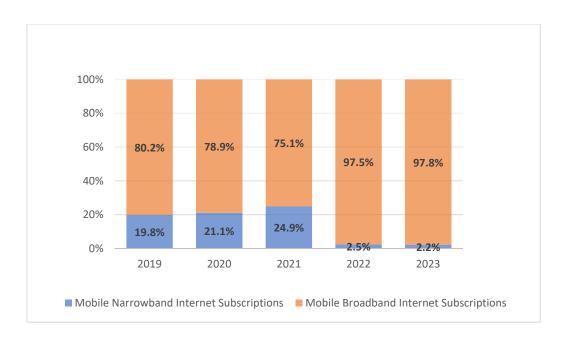


Figure 63 Proportion of mobile narrowband and broadband Internet subscriptions from 2019 to 2023

4.3 Internet Penetration Rates: Fixed and Mobile

Figure 64 shows the fixed Internet and mobile Internet penetration rates for the period 2019 to 2023.

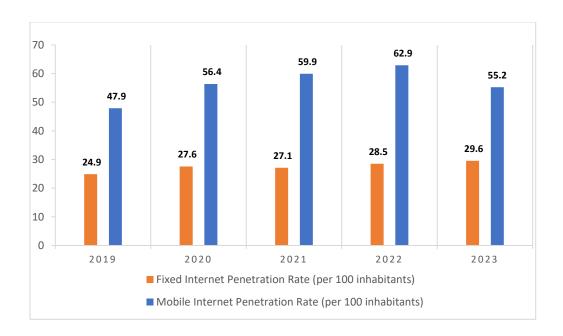


Figure 64 Fixed and mobile Internet penetration rates from 2019 to 2023

The fixed Internet penetration rate per 100 inhabitants for 2023 stood at 29.6, indicating that 30 out of every 100 individuals had a fixed Internet subscription. The mobile Internet penetration rate decreased from 62.9 in 2022 to 55.2, suggesting that approximately 55 out of every 100 persons used mobile Internet services in 2023.

Internet household penetration⁵⁴ is used as a key indicator to estimate the percentage of households with a fixed Internet subscription.

As can be seen in Figure 65, 96 out of every 100 households subscribed to a fixed Internet service in 2023 – the highest rate within the last five years.

70

⁵⁴ Internet household penetration is calculated as the number of residential fixed Internet subscriptions divided by the total number of households, multiplied by 100.

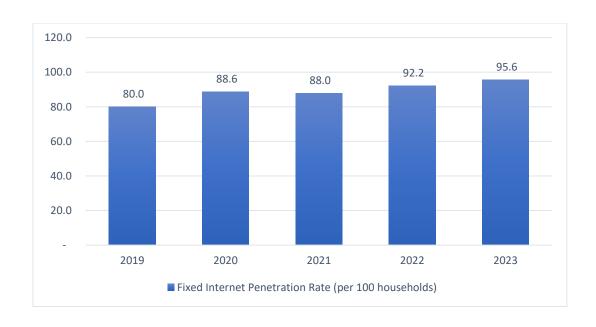


Figure 65 Fixed Internet household penetration from 2019 to 2023

4.4 Fixed and Mobile Internet Revenues

4.4.1 Total Internet Revenues

As illustrated in Figure 66, the combined revenues of fixed and mobile Internet in 2023 totalled \$2,254.6 million. This represents an increase of \$11.0 million, or 0.5%, from 2022.

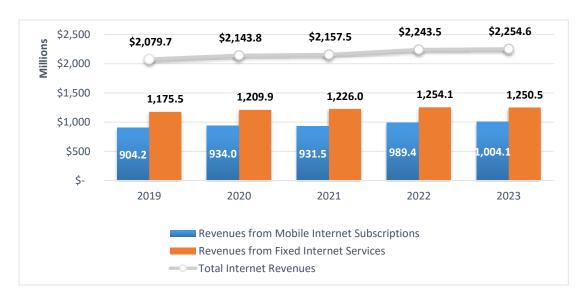


Figure 66 Internet revenues from 2019 to 2023

Figure 67 shows that, in 2023, the proportions of fixed and mobile Internet revenues were 55.5% and 44.5%, respectively.

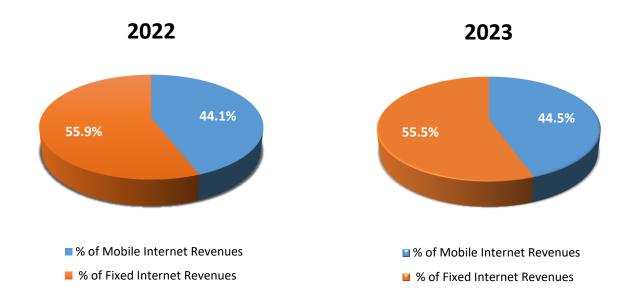


Figure 67 Percentage of fixed and mobile Internet revenues in 2022 and 2023

4.4.2 Fixed Internet Revenues

Fixed Internet revenues earned in 2023 amounted to \$1,250.5 million⁵⁵, reflecting a decrease of \$3.63 million, or 0.3%. Figure 68 illustrates the general upward trend of revenues derived from fixed Internet over the last five years, despite the minor decrease in 2023.

⁵⁵ Fixed Internet revenues include revenues from both fixed narrowband and broadband Internet.

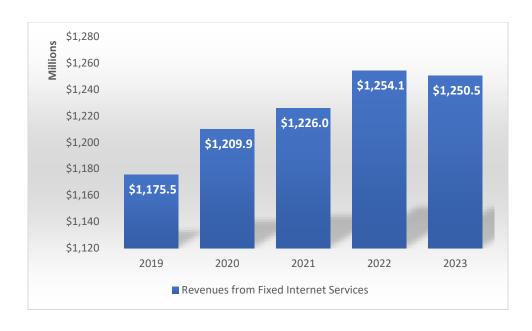


Figure 68 Fixed Internet revenues from 2019 to 2023

As depicted in Figure 69, fixed Internet revenues earned from broadband Internet totalled \$1,241.5 million – \$2.9 million less than in 2022.

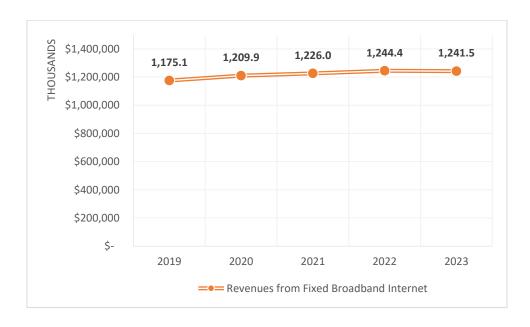


Figure 69 Fixed broadband Internet revenues from 2019 to 2023

Fixed broadband Internet revenues can also be categorised into residential and business revenues, as highlighted in Figure 70. Residential fixed broadband Internet revenues declined by \$16.6

million, or 1.9%, from 2022, recording \$875.9 million in 2023. However, revenues from business fixed broadband grew by \$13.8 million, or 3.9%, in 2023 from the previous year.

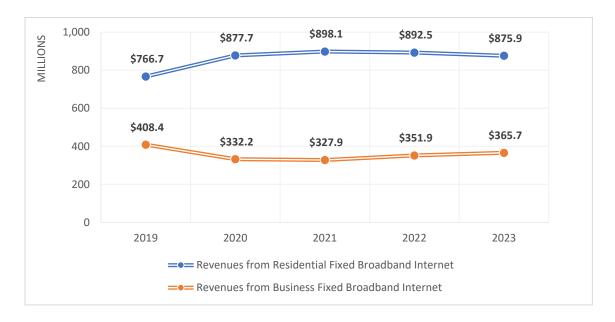


Figure 70 Broadband Internet revenues, by type, from 2019 to 2023

Residential broadband subscriptions contributed 70.5% of total fixed broadband revenues, with business broadband holding the remaining share of 29.5%.

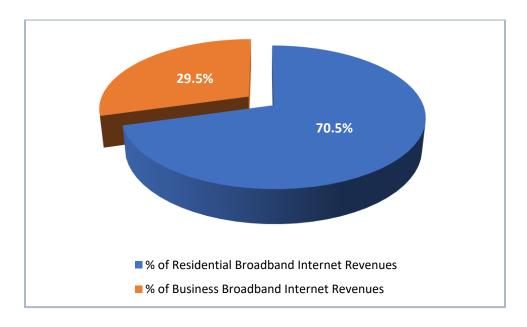


Figure 71 Percentage of residential and business fixed broadband Internet revenues in 2023

4.4.3 Mobile Internet Revenues

Mobile Internet subscriptions remained a significant source of revenue in the Internet market. Figure 72 depicts the trend of mobile Internet revenues over the past five years, with 2023 recording \$1,004.1 million. This marked an increase of \$14.7 million, or 1.5%, from 2022.

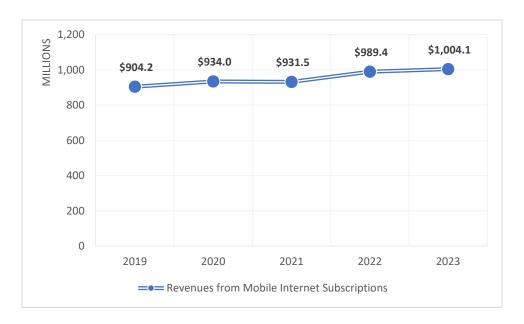


Figure 72 Mobile Internet revenues from 2019 to 2023

Figure 73 presents the revenues generated from prepaid and postpaid mobile Internet subscriptions for the previous five years. In 2023, postpaid revenues increased while prepaid decreased. Postpaid amassed \$730.1 million – an increase of \$54.8 million, or 8.1%, from 2022. Prepaid revenues amounted to \$273.9 million – a decrease of \$40.2 million, or 12.8%, from 2022.

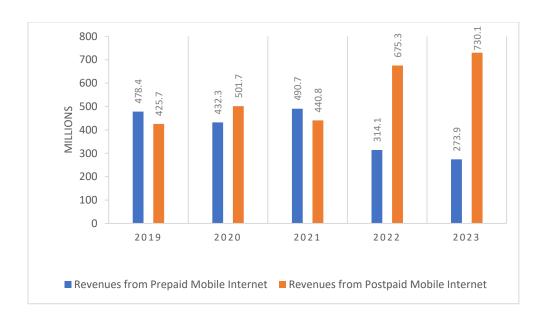


Figure 73 Mobile Internet revenues, by type, for 2019 to 2023

As seen in Figure 74, prepaid services accounted for 72.7% of mobile Internet revenues, while postpaid services contributed 27.3%.

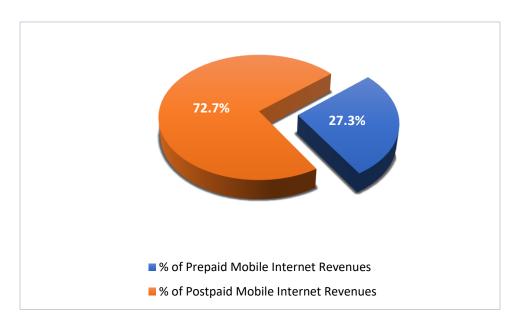


Figure 74 Percentage of prepaid and postpaid mobile Internet revenues in 2023

4.5 **Fixed Internet Market Concentration**

The Authority used the HHI to gauge the level of concentration in the fixed Internet market⁵⁶ for 2023. As depicted in Figure 75, there was an overall downward trend in the HHI over the past five years, with one increase observed in 2021. Concentration levels decreased to 2,608 by the end of 2023 - a fall of 7.4% from the previous year.

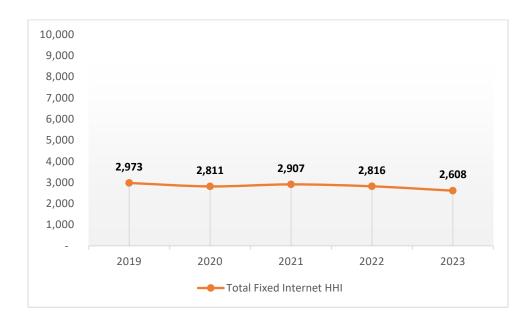


Figure 75 Fixed Internet HHI for 2019 to 2023

There was a continuous decline in the HHI across each quarter of 2023, as illustrated in Figure 76. The first quarter registered an HHI of 2,754, with the final quarter recording 2,608.

⁵⁶ Market share based on the number subscriptions was used in the calculation of the HHI.

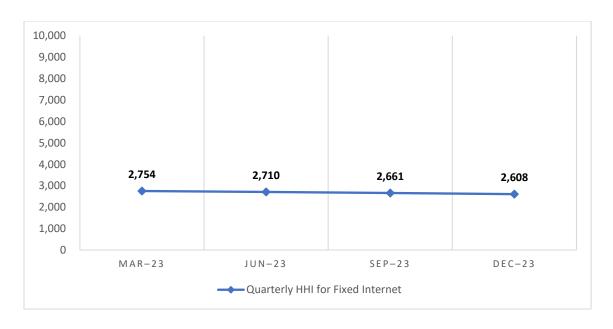


Figure 76 Quarterly HHI for the fixed Internet market in 2023

4.6 Average Revenue per User for Internet Services

In 2023, the fixed Internet ARPU⁵⁷ decreased by \$126.4, or 3.9%, compared to the previous year, with each subscription generating an average of \$3,092. The ARPU for mobile Internet⁵⁸ grew from \$1,152 in 2022 to \$1,241 in 2023 – an increase of \$89.7, or 7.8%.

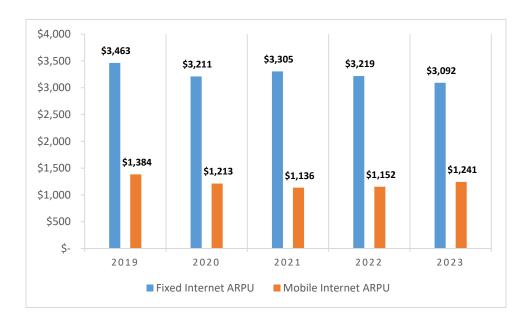


Figure 77 ARPU for fixed and mobile Internet services from 2019 to 2023

⁵⁷ The ARPU for fixed Internet services is measured by the average revenue generated by one fixed Internet subscription. It is calculated as the total annual revenues from fixed Internet subscriptions divided by the total number of fixed Internet subscriptions.

⁵⁸ The ARPU for mobile Internet services is calculated as the total annual revenues from active prepaid and postpaid mobile subscriptions divided by the total number of mobile prepaid and postpaid subscriptions.

2023 ANNUAL MARKET REPORT INTERNATIONAL VOICE MARKET





INCOMING INTERNATIONAL
REVENUES
\$20.5 Million
of 25.1% over 2022

34.6 Million Minutes of 21.5% over 2022



OUTGOING INTERNATIONAL
REVENUES
\$23.1 Million
of 18.8% over 2022



\$43.7 M
INTERNATIONAL VOICE MARKET REVENUE

21.9%
decrease over
2022

5 International Voice Market Review

In 2023, there were nine international telecommunications concessionaires. Seven were authorised to provide international telecommunications networks and services, one to provide international voice services only, and one operator was authorised to operate a public international telecommunications network only. These operators were:

- 1. Amplia Communications Limited
- 2. Columbus Networks International (Trinidad) Limited (FLOW)
- 3. Digicel (Trinidad & Tobago) Limited
- 4. Green Dot Limited
- 5. Lisa Communications Limited
- 6. NOVO Communications Limited (Service only)
- 7. Open Telecom Limited⁵⁹
- 8. Southern Caribbean Fibre (network only)
- 9. Telecommunications Services of Trinidad and Tobago Limited

5.1 International Voice Traffic (Incoming and Outgoing Minutes)

For 2023, the number of minutes generated from incoming international calls was 34.6 million. This is a decrease of 9.5 million minutes, or 21.5%, from 2022. International outgoing traffic minutes fell to 40.5 million – a contraction of 31.9 million minutes, or 21.3%, from the previous year.

Figures 78 and 79 show the number of international voice minutes from incoming and outgoing calls, respectively.

-

⁵⁹ Open Telecom Ltd. had not supplied data at the time of publication.

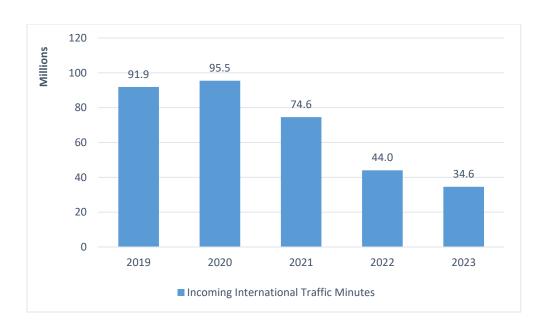


Figure 78 Incoming international voice traffic minutes from 2019 to 2023

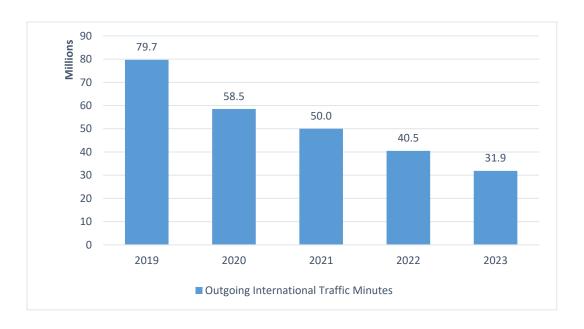


Figure 79 Outgoing international voice traffic minutes from 2019 to 2023

The proportion of incoming and outgoing traffic over the past five years is depicted in Figure 80.

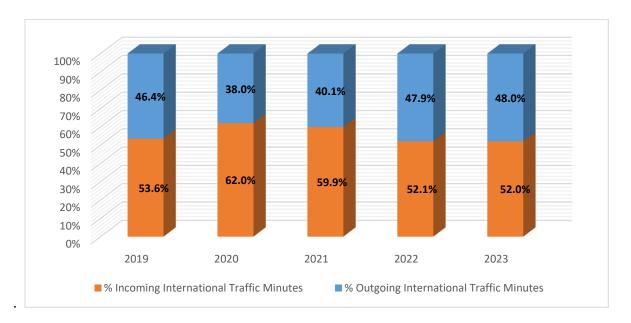


Figure 80 Percentage of incoming and outgoing international voice traffic (minutes) from 2019 to 2023

In 2023, minutes generated by incoming calls accounted for 52.0% of all international minutes, decreasing from 52.1% recorded in 2022. The share of outgoing international traffic minutes rose from 47.9% in 2022 to 48.0% in 2023.

5.2 International Voice Revenues

The trend in gross revenues generated by the international voice market between 2019 and 2023 is shown in Figure 81. The decreasing trend in revenues within this market continued, with \$43.7 million being recorded in 2023, which was a decrease of \$12.2 million, or 21.9%, from 2022.

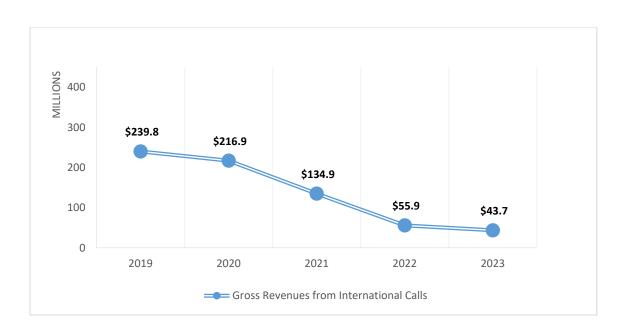


Figure 81 Gross revenues from international calls from 2019 to 2023

Incoming international traffic revenues for the past five years are presented in Figure 82. During this period, revenues were highest in 2020, at \$172.3 million, before falling to \$93.8 million in 2021 and then to \$27.4 million in 2022. Revenues decreased further in 2023, recorded at \$20.5 million in 2023.



Figure 82 Incoming international traffic revenues from 2019 to 2023

Figure 83 shows the outgoing international voice traffic revenues for the past five years. During this period, revenues were highest in 2019, at \$86.5 million, before falling to \$44.6 million in 2020. This was followed by consecutive declines in 2021 and 2022 to \$41.1 million and \$28.4 million, respectively. Revenues decreased further in 2023 to record \$23.1 million, a contraction of \$5.3 million, or 18.8%, from 2022.

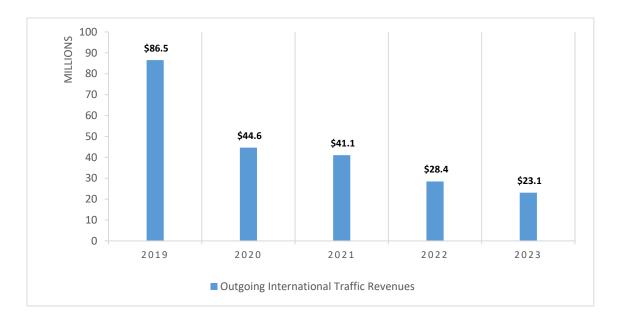


Figure 83 Gross revenues from outgoing international voice traffic from 2019 to 2023

5.3 International Voice Market Concentration

Market concentration for the international voice market is calculated using the number of international incoming and outgoing minutes. As seen in Figure 84, in 2023, the HHI for incoming minutes decreased from the first quarter to the second quarter, before rising in the third. The HHI for incoming minutes was 2,853 at the end of 2023.



Figure 84 HHI for international incoming minutes in 2023

The HHI for the outgoing minutes market fluctuated in 2023. The first quarter recorded an HHI of 4,585, which decreased to 4,369 in the second quarter. The HHI value then increased to 4,489 in the third quarter, before rising to 4,610 in the final quarter.

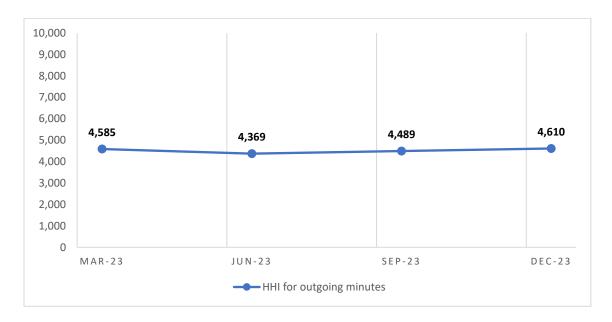


Figure 85 HHI for international outgoing minutes in 2023

2023 ANNUAL MARKET REPORT BROADCASTING MARKET



Key Indicators for the Broadcasting Market

GROWTH 2022-2023





SUBSCRIPTION TV PENETRATION
15.8 per 100 inhabitants
54.0 per 100 households





BROADCASTING MARKET







TV BROADCASTING SERVICE VIA CABLE REVENUES

\$6.5 Million of 10.3% over 2022

6 Broadcasting Market Review

The broadcasting market is classified based on the following categories:

- 1. FTA television (TV)
- 2. TV broadcasting services via cable
- 3. FTA radio
- 4. Subscription TV

Operators are granted a concession to provide broadcasting services to any one of the following geographic regions:

- I. National Trinidad and Tobago
- II. Major territorial Trinidad only
- III. Minor territorial Tobago only
- IV. Niche specific geographic area

Table 6 lists the number of concessions granted in the last five years for the provision of public broadcasting services.

Table 6 Number of concessions in the broadcasting market from 2019 to 2023

Type of Concession	Year				
	2019	2020	2021	2022	2023
FTA Television	5	5	5	5	4
National	4	4	4	4	4
Major territorial	1	1	1	1	0
Subscription Television	13	13	13	12	11
National	7	8	8	8	7
Major territorial	1	1	1	1	1
Niche	4	3	3	2	2
Minor territorial	1	1	1	1	1
TV Broadcasting via Cable	14	14	15	14	14
National	14	14	15	14	14
Major territorial	0	0	0	0	0
FTA Radio	36	37	36	37	37
National	29	30	28	29	29
Major territorial	5	5	5	5	5
Minor/niche territorial	2	2	3	3	3
Total	68	69	69	68	66

6.1 FTA TV Broadcasting Market

In 2023, the market for FTA TV broadcasting services was served by the following concessionaires:

- 1. CCN Television Limited (CCN TV6)
- 2. Guardian Media Limited (CNC3)
- 3. Parliament of the Republic of Trinidad and Tobago
- 4. TTT Limited

6.1.1 FTA TV Revenues

The FTA TV market generated \$43.5 million in 2023 – a decrease of \$18.6 million, or 30%, from 2022.

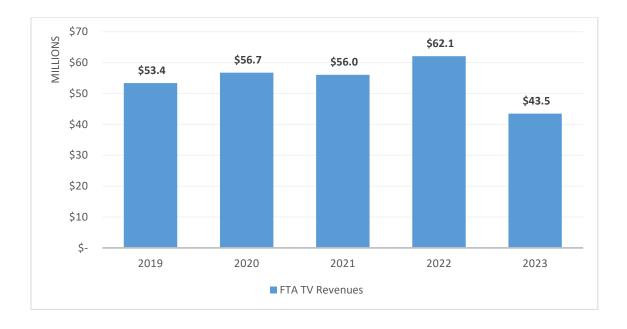


Figure 86 Gross revenues for the FTA TV market from 2019 to 2023

Figure 87 compares the quarterly gross revenues generated in the FTA TV market between 2022 and 2023. Revenues for the first two quarters of 2023 were comparable to the revenues of the corresponding quarters of 2022. Revenues increased from the second quarter to the third quarter of 2023 but were less than the amount reported in the third quarter of 2022. The FTA TV market generated \$13.1 million in the third quarter of 2023 - 1.8 million less than the third quarter revenues for 2022. Revenues decreased in the fourth quarter of 2023 to \$11.1 million -57% lower than the corresponding period of 2022.

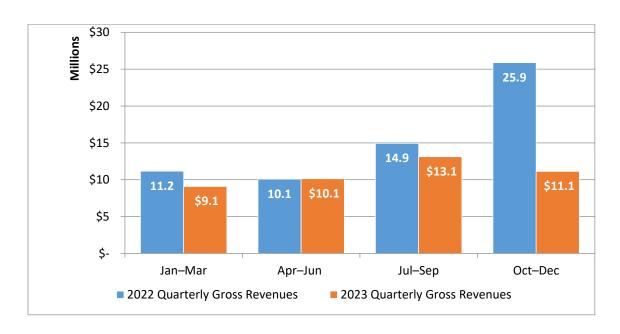


Figure 87 Quarterly gross revenues for FTA TV in 2022 and 2023

6.1.2 FTA TV Market Concentration

The level of concentration in the FTA TV broadcasting market was calculated using the HHI, based on the revenues earned within the market.

As shown in Figure 88, the HHI increased overall during 2023, with a decrease observed in the second quarter. The first quarter registered a value of 4,411 which dropped to 4,204 in the second quarter. There was an increase in the third quarter to 4,551 and to 4,675 in the fourth quarter.

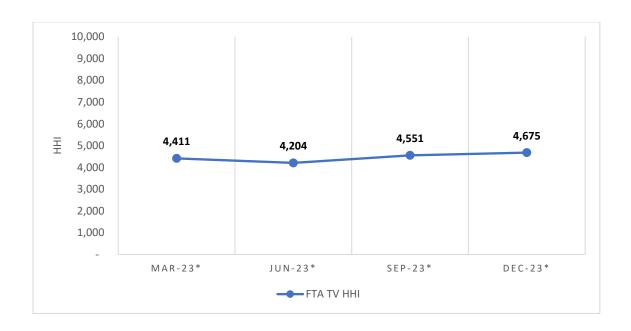


Figure 88 Quarterly HHI for the FTA TV broadcasting market in 2023

Figure 89 depicts the annual HHI trend for 2019 to 2023. During this period, the HHI fluctuated, with the highest HHI value recorded at the end of 2022.

For 2023, the monthly average HHI was 4,247, while the 2022 average was 4,499.

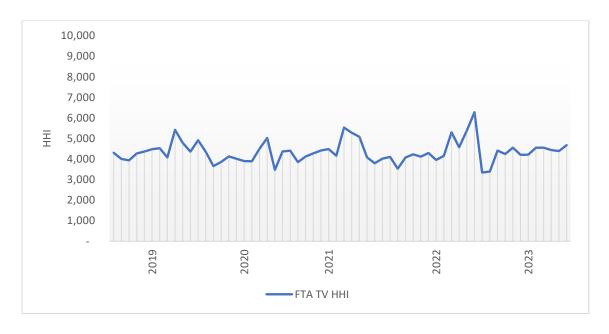


Figure 89 HHI for the FTA TV broadcasting market from 2019 to 2023

6.2 TV Broadcasting Service via Cable Market

The following 14 concessionaires were authorised to provide TV broadcasting services via cable:

- 1. Central Broadcasting Services Ltd. (Jaagriti TV)
- 2. Darut Tarbiyah (TIN)
- 3. Gayelle Limited
- 4. Guardian Media Limited
- 5. IBN Communications Company Limited (IBN)
- 6. Liming Monkey (WESN The Content Capital)
- 7. Living Water Community (Trinity TV)
- 8. Presbyterian Church of Trinidad and Tobago
- 9. Q Network Limited
- 10. Sankyha Television Limited
- 11. Synergy Entertainment Network
- 12. SWAHA Media Limited (IETV)
- 13. Twenty-Four Seven News and Sports Limited
- 14. WI Sports (TTEN)

However, in the period under review, Guardian Media Limited, Presbyterian Church of Trinidad and Tobago, and Q Network had not provided TV broadcasting services via cable to the public.

6.2.1 TV Broadcasting Service via Cable Revenues

The TV broadcasting service via cable market generated \$6.5 million in 2023 – a decrease of \$0.8 million, or 10.3%, from 2022.

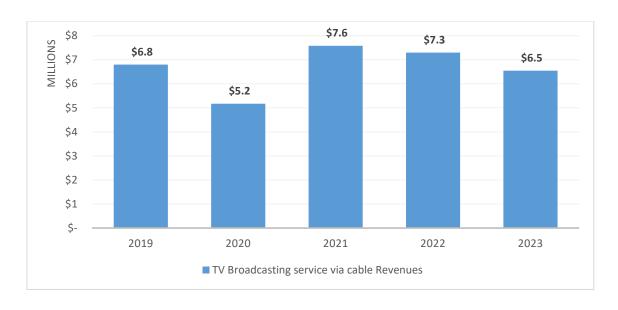


Figure 90 Gross revenues for the broadcasting service via cable market from 2019 to 2023

Figure 91 compares the quarterly gross revenues generated in the TV broadcasting service via cable market between 2022 and 2023. Revenues fluctuated during 2023, decreasing from \$1.8 million in the first quarter to \$1.3 million in the second. Revenues increased in the third quarter to \$1.8 million and then decreased in the fourth to \$1.6 million. Compared to 2022, revenues generated were less for each quarter of 2023.



Figure 91 Quarterly gross revenues for broadcasting service via cable in 2022 and 2023

6.2.2 TV Broadcasting Service via Cable Market Concentration

The level of concentration in the TV broadcasting service via cable market was calculated using the HHI, based on the revenues earned within the market in 2023. As shown in Figure 92, the HHI decreased from 2,164 in the first quarter to 1,523 in the second. It increased in the third quarter to 3,707 and then decreased to 1,513 in the fourth.

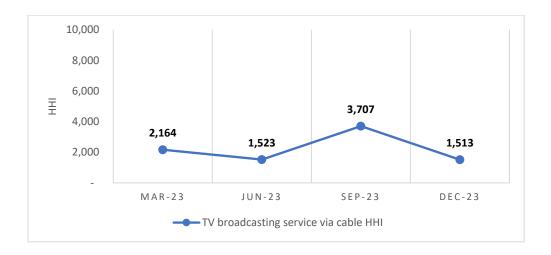


Figure 92 Quarterly HHI for the TV broadcasting service via cable market in 2023

Figure 93 depicts the trend in the HHI for the period 2019 to 2023. During these years, the HHI fluctuated between 1,500 and 5,700. For 2023, the monthly average was 2,172, while the 2022 average was 1,954.

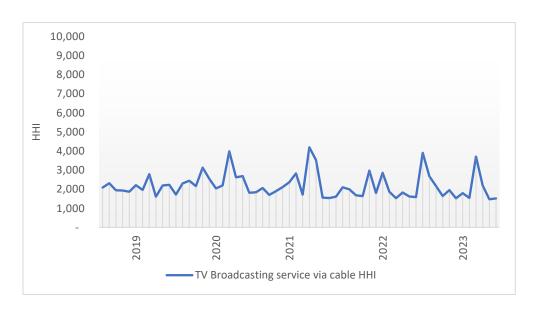


Figure 93 HHI for the FTA TV broadcasting market from 2019 to 2023

6.3 FTA Radio Broadcasting Market

In 2023, the FTA radio broadcasting market comprised 37 radio stations (see Appendix II for a detailed listing). It should be noted that some concessionaires (owners) hold more than one concession and, as a result, operate more than one radio station.

6.3.1 FTA Radio Revenues

Figure 94 illustrates the falling gross revenues in this market from 2019 to 2023, with an increase in revenues in 2022. The market contracted in 2023, earning \$112.7 million for the year - a decrease of \$3.5 million, or 3%, from 2022.



Figure 94 Gross revenues for the FTA radio broadcasting market from 2019 to 2023

Figure 95 highlights the quarterly gross revenues earned in the FTA radio broadcasting market in 2022 and 2023.

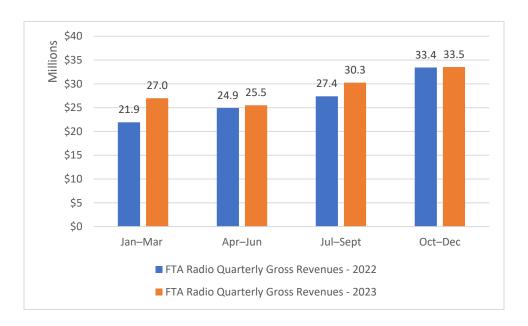


Figure 95 Quarterly revenues for FTA radio in 2022 and 2023

The first quarter of 2023 generated \$27.0 million in revenues, which decreased to \$25.5 million in the second quarter. Revenues rose to \$30.3 million in the third quarter, then climbed further, to record \$33.5 million in the final quarter. In comparing both years, the highest variance in revenue was in the first quarter, with an increase of \$5.1 million, or 23.3%, in 2023 compared to 2022.

6.3.2 FTA Radio Market Concentration

Using revenue data, the HHI for the FTA radio market was calculated based on both the number of concessions (radio stations) and the number of concessionaires (owners) in the market.

Figure 96 gives an illustration of the quarterly trends in HHI for both concessionaires and concessions. With respect to HHI by concessionaires, index values increased from the first quarter to the third. The first quarter registered a value of 1,227 – the lowest for the year – which increased to 1,387 and 1,460 in the second and third quarters, respectively. HHI values in the final quarter decreased to 1,318.

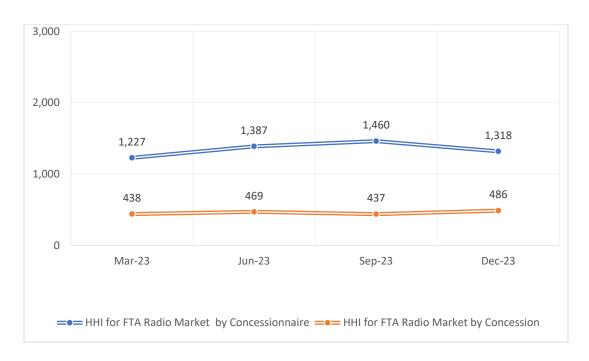


Figure 96 HHI for the FTA radio broadcasting market for 2023

In 2023, the average monthly HHI by concessionaire was 1,373, while the average monthly HHI by concession was 486.

As Figure 97 shows, the HHI based on concessions was relatively stable from 2019 to 2023, while the HHI based on concessionaires had more pronounced variations over the same period.

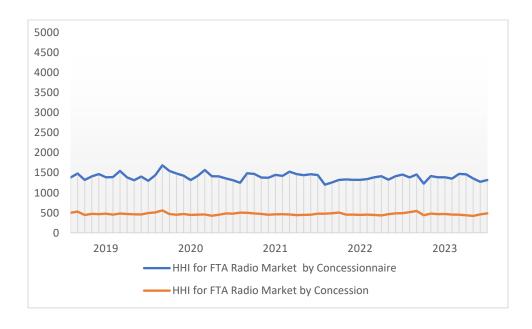


Figure 97 HHI for the FTA radio broadcasting market from 2019 to 2023

6.4 Subscription TV Broadcasting Market

As at December 2023, the subscription TV market comprised 11 authorised service providers, all of whom were operational during the review period. These entities provided services to subscribers within their respective authorised coverage areas. Table 7 lists each service provider, the type of service used to deliver subscription TV services, and their authorised coverage areas.

Table 7 List of subscription TV providers operational in 2023

Name of Provider	Type of Service	Authorised Coverage Area
Amplia Communications Limited	Digital subscription TV (wired)	
Columbus Communications Trinidad Limited	Digital subscription TV (wired)	
Digicel (Trinidad & Tobago) Limited	Digital subscription TV (wired)	
DirecTV Trinidad Limited	Digital subscription TV (satellite)	National – Trinidad and
Green Dot Limited	Digital subscription TV (wireless terrestrial)	Tobago
RVR International Limited	Digital subscription TV (wired)	
Telecommunications Services of Trinidad and Tobago Limited (TSTT)	Digital subscription TV (wired)	
Galavant Networks Limited	Analogue subscription TV (wired)	Major territorial - Trinidad
Air Link Communications Limited	Digital subscription TV (wired)	Niche – Princes Town and environs
Wired Technologies Limited (previously Santa Flora Cable Network Ltd)	Digital subscription TV (wired)	Niche – Santa Flora and environs
Trico Industries Limited	Analogue and digital subscription TV (wired)	Minor territorial - Tobago

6.4.1 Subscription TV Subscriptions

Service providers in the subscription TV market offer their customers different basic packages. Customers subscribed to a basic package of their choice have the option to purchase additional or premium packages.

As shown in Figure 98, the number of subscription TV subscriptions decreased by 10,100, or 4.5%, from 2022, to record 216,700.

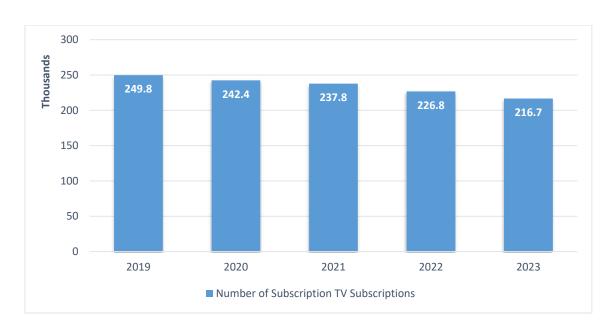


Figure 98 Number of subscription TV subscriptions from 2019 to 2023

A comparison of subscription TV subscriptions by type of service for the period 2019 to 2023 is presented in Figure 99. In 2023, there were 1,900 subscriptions using analogue technologies - a contraction of 35.3% compared to 2022. The number of digital subscriptions dipped by 4.1%, from 223,700 in 2022 to 214,600 in 2023.

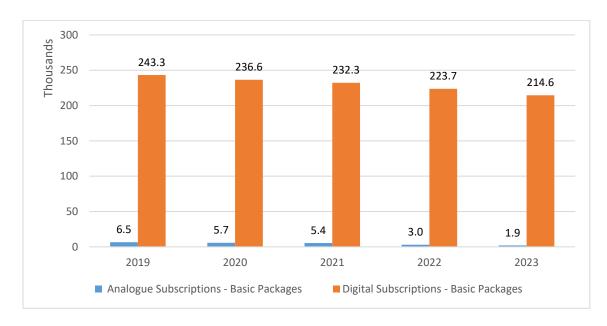


Figure 99 Subscription TV subscriptions, by type of service, from 2019 to 2023

The proportion of subscriptions by type of service is depicted in Figure 100. In 2023, 99.1% of all subscription TV subscriptions were digital, while the remaining 0.9% were analogue.

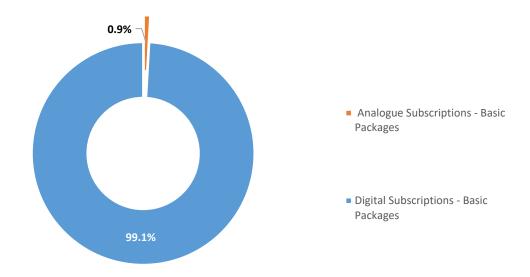


Figure 100 Proportion of subscription TV subscriptions, by type of service, in 2023

6.4.1.1 Premium Package Subscriptions

Premium channels are additional channels, or a group of channels, offered by subscription TV service providers, which consumers may subscribe to, alongside their basic package. It should be noted that consumers can subscribe to more than one premium package. Figure 101 presents the number of premium package subscriptions from 2019 to 2023.

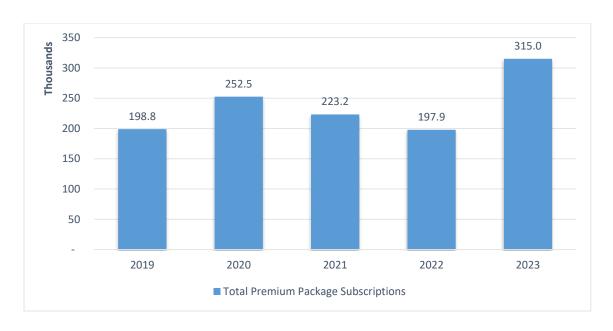


Figure 101 Number of premium package subscriptions from 2019 to 2023

At the end of 2023, the total number of premium package subscriptions stood at 315,000. This is an increase of 117.1 subscriptions, or 59.2%, from the preceding year.

Table 8 shows the annual percentage changes in premium subscriptions from 2019 to 2023.

Table 8 Growth rates in premium subscriptions from 2019 to 2023

Year-on-Year	Change in Premium Subscriptions	Year-on-Year Rate of Growth (%)
2019	45,679	29.8%
2020	53,670	27.0%
2021	-29,296	-11.6%
2022	-25,337	-11.4%
2023	117,131	59.2%

6.4.2 Subscription TV Penetration

The penetration rate for subscription TV services is calculated by dividing the number of subscription TV subscriptions by the population size and multiplying by 100. In 2023, the penetration rate per 100 inhabitants was 15.8, which means that an estimated 16 out of every 100 persons had a subscription.

The subscription TV household penetration rate (depicted in Figure 102), defined as the number of subscriptions per 100 households, was determined to be 54 in 2023. The interpretation is that, for every 100 households, 54 had a subscription.

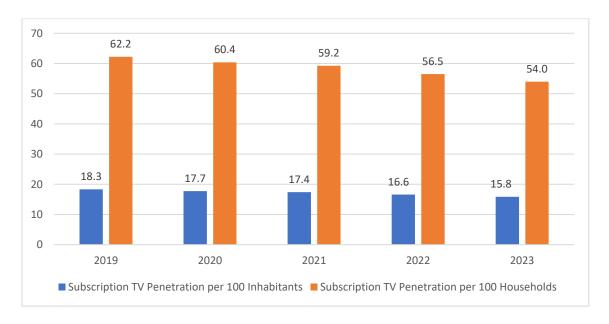


Figure 102 Subscription TV penetration rate from 2019 to 2023

The figure shows the penetration rates for the past five years. For 2023, the penetration rate per 100 inhabitants and the penetration rate per 100 households were lower than the 2022 rates. The average penetration rate per 100 inhabitants for the five years was 17.2, whereas the average penetration rate per 100 households was 58.5.

6.4.3 Subscription TV Revenues

Gross revenues⁶⁰ generated in the subscription TV market include providers' earnings from the provision of services using both analogue and digital technologies. Figure 103 shows that, in 2023, the subscription TV market earned \$613.8 million. This represents a decrease of \$15.8 million, or 2.5%, from the previous year.

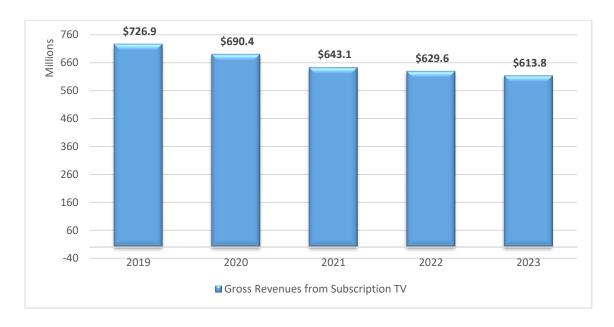


Figure 103 Subscription TV gross revenues from 2019 to 2023

Most of the revenues generated in the subscription TV market were derived from digital technologies, as seen in Figure 104. Digital subscription TV revenues accounted for \$606.1 million, or 98.8%, of total revenues. The remaining 1.2% of revenues were acquired through analogue subscription TV services and amounted to \$7.6 million.

_

⁶⁰ Revenues include income generated from connection, reconnection, installation and usage.

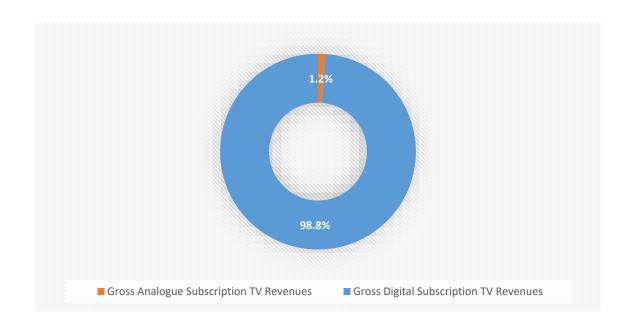


Figure 104 Subscription TV revenues, by type, for 2023

6.4.4 Subscription TV Market Concentration

The HHI, which estimates the level of concentration within the market, is calculated as the sum of the squares of the market share⁶¹ of all service providers in the market.

The first quarter of 2023 registered an index score of 3,348. The level of concentration increased in the second quarter to 3,355, then decreased to 3,304 in the third. The HHI fell further to 3,284 in the final quarter – the lowest for the year.

106

_

⁶¹ The number of basic package subscriptions was used to determine the market share of the service providers.

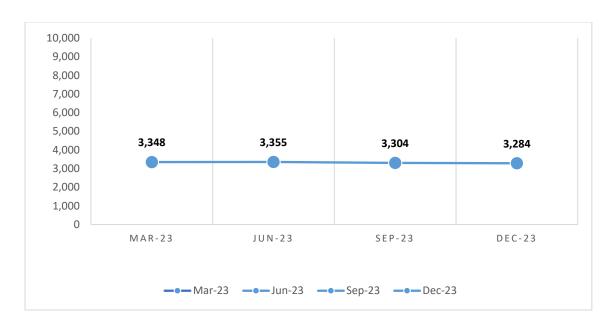


Figure 105 Quarterly HHI for the subscription TV market in 2023

As shown in Figure 106, the HHI for the subscription TV market was relatively stable over the past five years. The HHI for 2023 was 3,284, which is a decrease of 59 points, or 1.7%, from 2022.

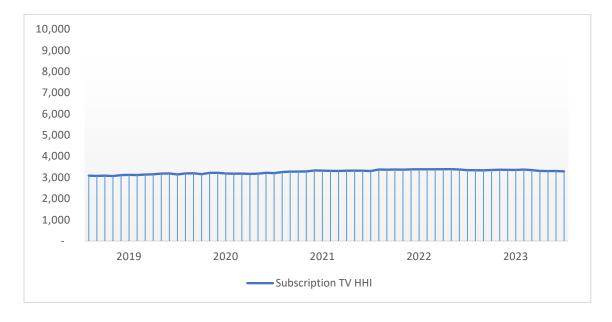


Figure 106 Annual HHI for the subscription TV market from 2019 to 2023

6.4.5 Subscription TV Average Revenue per User

The ARPU is calculated by dividing gross revenues by the number of monthly subscriptions. In 2023, the subscription TV ARPU was \$2,773 – an increase of \$46 per user from the previous year. This marked a 1.7% rise in the average revenues generated by each subscription.

Figure 107 shows that the subscription TV ARPU decreased from 2019 to 2021. The ARPU subsequently recorded consecutive years of increases in 2022 and 2023.

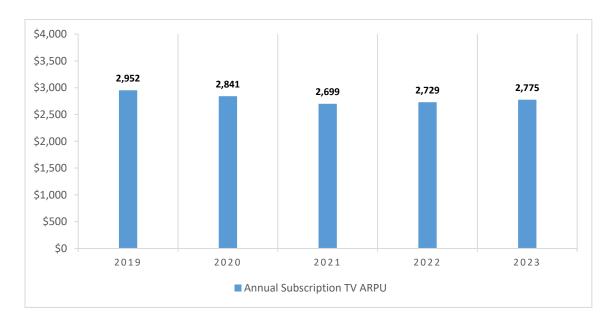


Figure 107 Subscription TV ARPU from 2019 to 2023

Appendix I. Domestic Telecommunications and Selected Broadcasting Statistics

Table 9 Domestic telecommunications and selected broadcasting statistics

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Population (millions)	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
General	Telecommuni cations and Broadcasting revenues (US\$ million)	713.1	737.0	834	864.4	881.5	876.7	836.0	771.8	832.1	740.7	697.1	741.7	772.0	793
.	Total telephone subscriptions ('000s)	2,187.6	2,117.7	2,169.8	2,235.2	2,270.4	2,393.2	2,471.6	2,349.3	2,290.3	2,496.0	2,311.9	2,338.3	2325.5	2,328.1
	Total telephone penetration	167.2	160.7	163.8	168.7	171.4	180.7	186.6	177.3	172.9	183.0	169.2	171.0	170.3	170.2
	Fixed voice subscriptions ('000s)	293.3	291.5	286.1	291.3	289.8	269.8	305.7	318.7	317.7	332.3	323.9	341.4	326.5	310.7
	Fixed voice penetration	22.3	22.0	21.6	21.7	21.7	20.0	22.6	23.5	23.4	24.4	23.7	25.0	23.9	22.7
Fixed Voice	Fixed voice household penetration	67.5	67.1	55.3	56.2	56.6	52.5	62.1	66.3	66.7	71.0	69.7	72.3	70.6	67.9
Fixe	Average revenue per user (ARPU) US\$	411.5	417.3	430.5	413.1	410.7	424.2	402.4	359.0	272.4	235.6	214.1	149.1	148.3	148.7
	Fixed voice subscription growth (%)	-3.3	-0.6	-1.9	1.6	-0.7	-6.3	13.3	4.2	-0.3	4.6	-2.5	5.4	-4.4	-4.8

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Mobile subscriptions ('000s)	1,894 .2	1,826.2	1,883.7	1,943.9	1980.6	2,123.4	2,165.8	2,031	1,972.6	2,163.7	1,988.0	1,996.8	1,999.0	2,017.4
]je	Mobile penetration	143.8	138.6	142.2	146.4	149.1	157.3	160.0	150.0	145.1	158.6	145.5	146.0	146.4	148.2
Mobile	Average revenue per user (ARPU) US\$	164.0	173.0	188.0	189.0	174.5	147.1	136.8	113.0	89.0	70.7	65.1	70.7	69.9	76.5
	Mobile subscription growth (%)	2.6	-3.6	3.1	3.2	1.9	7.2	2.0	-6.2	-2.9	9.7	-7.9	0.5	0.001	0.9
	Total Internet subscriptions ⁶² ('000s)	309.9	325.2	646.7	682.3	820.1	925.2	1001.7	1031.6	1,017.9	992.7	1,147.0	1,190.7	1248.7	1,213.2
	Fixed Internet subscriptions ⁶³ ('000s)	171.1	192.0	224.2	231.7	249.6	279.8	294.4	327.0	341.3	339.4	376.8	370.9	389.6	404.4
Internet	Mobile Internet subscriptions ⁶⁴ ('000s)	138.8	133.2	422.565	450.6	570.5	645.4	707.3	704.6	678.6	653.3	770.2	819.8	859.1	808.8
Inte	Fixed broadband subscriptions ⁶⁶ ('000s)	162.9	187.9	221.3	229.6	248.1	278.5	294.3	326.8	341.1	339.3	376.8	370.9	373.4	404.4

⁶² Total Internet subscriptions are the sum of fixed Internet subscriptions and mobile postpaid Internet subscriptions.

⁶³ Fixed Internet subscriptions are the total number of subscriptions with fixed wired or fixed wireless Internet access.

⁶⁴ Mobile Internet subscriptions in 2010 and 2011 included postpaid mobile customers who subscribe to monthly Internet airtime and who are billed accordingly.

⁶⁵ Mobile Internet subscriptions from 2012 onwards include prepaid and postpaid mobile Internet users.

⁶⁶ Fixed broadband subscriptions are the number of Internet subscriptions with access to download speeds of 256 kbit/s or higher.

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Fixed Internet penetration	13.0	14.6	16.9	17.4	18.7	21.1	21.7	24.2	25.1	24.9	27.6	27.1	28.5	29.6
	Mobile Internet penetration	10.5	10.1	31.9	33.9	43.0	47.8	52.2	52.0	49.9	47.9	56.3	59.9	62.9	55.2
	Fixed Internet household penetration	49.6	52.8	52.1	54.2	58.3	65.4	69.3	76.9	80.8	79.9	88.6	88.0	92.2	95.6
	Average revenue per user (ARPU) US\$ for fixed Internet	409.9	431.9	422.8	442.5	448.6	430.3	470.5	417.5	492.7	510.8	475.0	487.5	495.4	460.1
	Fixed Internet subscription growth (%)	18.0	12.2	16.7	3.3	7.8	12.1	5.2	11.1	4.4	-0.5	11.0	-2.0	0.7	3.8
[raffic	International: outgoing minutes (millions)	282.9	274.5	263.5	277.9	268.3	247.2	170.9	125.2	125.9	79.7	58.5	50.0	40.5	31.9
International Traffic	International: incoming minutes (millions)	358.5	256.2	245.7	234.8	234.1	199.2	202.7	192.9	127.1	91.9	95.5	74.6	44.0	34.6
Inte	Inbound/outbou nd int'l traffic ratio	1.3	0.93	0.93	0.84	0.87	0.81	1.2	1.5	0.99	1.2	1.6	1.6	1.1	0.9
	Subscription TV subscriptions ('000s)	178.9	187.8	198.7	209.3	228.8	232.8	248.4	246.7	234.7	249.8	242.4	237.8	226.8	216.7
TV	Subscription TV penetration	13.6	14.1	14.8	15.8	17.2	17.2	18.3	18.2	17.3	18.3	17.7	17.4	16.6	15.8
Subscription TV	Subscription TV household penetration	52.1	54.0	48.2	52.1	57.0	58.0	61.9	61.5	58.5	62.2	60.4	59.2	56.5	54.0
Sabs	Average revenue per user (ARPU) US\$	431.2	468.6	505.5	520.8	493.2	497.7	486.8	425.2	427.5	435.4	418.9	397.3	401.3	412.6
	Subscription TV subscription growth	-0.4	5.0	5.8	5.3	9.3	1.7	6.7	-0.6	-4.9	6.4	-3.0	-1.9	-4.6	216.7

Appendix II. List of Concessionaires and Type of Concessions as at December 2023

CONCESSIONAIRE	NETWORK AND/ OR SERVICE	TERRITORY	ТҮРЕ	TERM	DATE OF GRANT	EXPIRY DATE	FREQUENCY/ SPECTRUM
	FI)	KED TELECOM	MUNICAT	TIONS			
Air Link Communications	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired)	Niche - Princes Town and Environs	Type 2	10 Years	1 May 2020	30 April 2030	N/A
Amplia Communications Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired)	National	Type 2	10 Years	1 December 2019	30 November 2029	N/A
Columbus Communications Trinidad Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired)	National	Type 2	10 Years	5 January 2016	4 January 2026	N/A
Digicel (Trinidad and Tobago) Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired)	National	Type 2	10 Years	3 October 2014	2 October 2024	N/A
Green Dot Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wireless)	National	Type 2	10 Years	1 October 2017	30 September 2027	N/A
Independent Cable Network of Trinidad & Tobago Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired)	Major Territorial	Type 2	10 Years	1 November 2016	31 October 2026	N/A
Lisa Communications Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wireless)	National	Type 2	10 Years	1 May 2020	30 April 2030	N/A
Mora's Weather Network	Public Domestic Telecommunications Services via a Public Domestic Fixed (Wireless) Telecommunications Network	Niche - Lopinot	Type 2	10 Years	10 April 2019	9 April 2029	N/A
Neptune Communications (Trinidad and Tobago) Limited	Public Domestic Fixed Wireless (via satellite) Telecommunications Network and Public Domestic Fixed Telecommunications Services	National	Type 2	10 Years	31 July 2023	30 July 2033	N/A
NOVO Communications Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired)	National	Type 2	10 Years	4 February 2020	3 February 2030	N/A

Open Telecom Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wireless)	National	Type 2	10 Years	1 May 2020	30 April 2030	N/A
PBS Technologies (Trinidad) Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wireless)	National	Type 2	10 Years	1 May 2020	30 April 2030	N/A
Prism Services (Trinidad) Limited	Public Domestic Fixed Telecommunications Services	National	Type 4	10 years	29 July 2023	28 July 2033	N/A
RVR International Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired)	National	Type 2	10 Years	28 May 2014	27 May 2024	N/A
Starlink Internet Services Trinidad and Tobago Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (via Satellite)	National	Type 2	10 Years	17 May 2023	16 May 2033	N/A
Telecommunications Services of Trinidad and Tobago Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired and Wireless)	National	Type 2	10 Years	31 December 2015	30 December 2025	N/A
TRICO Industries Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network	Minor Territorial	Type 2	10 Years	1 September 2016	31 August 2026	N/A
Wired Technologies Limited	Public Domestic Fixed Telecommunications Services via a Public Domestic Fixed Telecommunications Network (Wired)	Niche - Santa Flora and Environs	Type 2	10 years	15 May 2014	14 May 2024	N/A
	МО	BILE TELECON	MMUNICA	TIONS			
Digicel Trinidad and Tobago Limited	Public Domestic Mobile Telecommunications Services over a Public Domestic Mobile Telecommunications Network	National	Type 2	10 Years	31 December 2015	30 December 2025	N/A
Telecommunications Services of Trinidad and Tobago Limited	Public Domestic Mobile Telecommunications Services over a Public Domestic Mobile Telecommunications Network	National	Type 2	10 Years	31 December 2015	30 December 2025	N/A
INTERNATIONAL TELECOMMUNICATIONS							
Amplia Communications Limited	Public International Telecommunications Services via a Public International Telecommunications Network	N/A	Type 2	10 Years	4 April 2016	3 April 2026	N/A

Columbus Networks International (Trinidad) Limited	Public International Telecommunications Services via a Public International Telecommunications Network	N/A	Type 2	10 Years	16 February 2017	15 February 2027	N/A
Digicel Trinidad and Tobago Limited	Public International Telecommunications Services via a Public International Telecommunications Network	N/A	Type 2	10 Years	31 December 2015	30 December 2025	N/A
Green Dot Limited	Public International Telecommunications Services via a Public International Telecommunications Network	N/A	Type 2	10 Years	1 October 2017	30 September 2027	N/A
Lisa Communications Limited	Public International Telecommunications Services via a Public International Telecommunications Network	N/A	Type 2	10 Years	1 September 2016	31 August 2026	N/A
Neptune Communications (Trinidad and Tobago) Limited	Public International Telecommunications Network	N/A	Type 1	10 Years	31 July 2023	30 July 2033	N/A
NOVO Communications Limited	Public International Telecommunications Services	N/A	Type 4	10 Years	4 February 2020	3 February 2030	N/A
Open Telecom Limited	Public International Telecommunications Services via a Public International Telecommunications Network	N/A	Type 2	10 Years	5 January 2016	4 January 2026	N/A
Southern Caribbean Fibre Limited	Public International Telecommunications Network	N/A	Type 1	10 Years	17 August 2016	16 August 2026	N/A
Telecommunications Services of Trinidad and Tobago Limited	Public International Telecommunications Services via a Public International Telecommunications Network	N/A	Type 2	10 Years	31 December 2015	30 December 2025	N/A
	SUBSCRI	PTION TELEVI	SION BRO	ADCASTIN	iG		
Air Link Communications	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	Niche - Princes Town and Environs	Type 5	10 Years	1 May 2020	30 April 2030	N/A
Amplia Communications Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	24 August 2014	23 August 2024	N/A
Columbus Communications Trinidad Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	5 January 2016	4 January 2026	N/A
Digicel Trinidad and Tobago Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	18 March 2015	17 March 2025	N/A
DirecTV Trinidad Limited	Subscription Broadcasting Service (direct from Satellite only)	National	Type 5	10 Years	28 February 2016	27 February 2026	N/A
Green Dot Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	11 July 2018	10 July 2028	N/A
Galavant Networks Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	Major Territorial	Type 5	10 Years	1 November 2016	31 October 2026	N/A
RVR International Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	28 May 2014	27 May 2024	N/A

Telecommunications Services of Trinidad and Tobago Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	31 December 2015	30 December 2025	N/A
TRICO Industries Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	Minor Territorial	Type 5	10 Years	1 September 2016	31 August 2026	N/A
Wired Technologies Limited	Subscription Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	Niche - Santa Flora and Environs	Type 5	10 years	15 May 2014	14 May 2024	N/A
	FREE-TC	-AIR TELEVIS	ION BROA	DCASTIN	G		
C.C.N. Television Limited	Broadcasting Services (Free to Air Television)	National	Type 5	10 Years	1 March 2016	28 February 2026	VHF 6, UHF 18, 19
Guardian Media Limited	Broadcasting Services (Free to Air Television)	National	Type 5	10 Years	14 April 2018	13 April 2028	VHF 12, UHF 14, 22
Parliament of the Republic of Trinidad and Tobago	Broadcasting Services (Free to Air Television)	National	Type 5	10 Years	23 October 2018	22 October 2028	VHF 11, UHF 26, 29
TTT Limited	Broadcasting Services (Free to Air Television)	National	Type 5	10 Years	23 February 2016	22 February 2026	VHF 9, 13 UHF 20
	FREE-	TO-AIR RADIO	O BROAD	CASTING			
British Broadcasting Corporation	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	15 June 2017	14 June 2027	98.7FM
Central Broadcasting Services Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	21 September 2016	20 September 2026	102.7 FM
Central Radio FM90 Limited	Broadcasting Services (Free to Air FM)	Major Territorial	Type 5	10 Years	23 February 2016	22 February 2026	90.5 FM
Family Focus Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	98.1 FM
Gem Radio Five Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	93.5 FM
Gem Radio Five Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	95.5 FM
Gem Radio Five Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	107.1 FM
Gem Radio Five Limited	Broadcasting Services (Free to Air FM)	Major Territorial	Type 5	10 Years	23 February 2016	22 February 2026	92.3 FM
Gem Radio Five Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	96.7 FM
Guardian Media Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	95.1 FM
Guardian Media Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	105.1 FM
Guardian Media Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	106.1 FM
Guardian Media Limited	Broadcasting Services (Free to Air FM)	Major Territorial	Type 5	10 Years	23 February 2016	22 February 2026	106.5 FM
Guardian Media Limited	Broadcasting Services (Free to Air FM)	Major Territorial	Type 5	10 Years	23 February 2016	22 February 2026	100.5 FM

Guardian Media Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	99.5 FM
Heritage Communications Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	101.7 FM
Kaisoca Productions Limited	Broadcasting Services (Free to Air FM)	Minor Territorial	Type 5	10 Years	23 February 2016	22 February 2026	92.7 FM
KMP Music Group Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2019	22 February 2029	90.1 FM
Parliament of the Republic of Trinidad and Tobago	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	1 March 2017	28 February 2027	105.5 FM
PBCT Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	104.7 FM
Radio News Network	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	104.1 FM
Radio Vision Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	102.3 FM
Scorch Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	11 November 2022	10 November 2032	101.1FM
Superior Infinite Productions Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	94.1 FM
Telemedia Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	97.1 FM
Toco Multicultural Foundation for Integrated Development	Broadcasting Services (Free to Air FM)	Minor Territorial/Niche - Toco and environs	Type 5	10 Years	1 March 2016	28 February 2026	106.7 FM
Trico Industries Limited	Broadcasting Services (Free to Air FM)	Minor Territorial	Type 5	10 Years	10 October 2022	9 October 2032	89.5 FM
Trinibashment Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	91.9 FM
Trinidad and Tobago Radio Network Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	96.1 FM
Trinidad and Tobago Radio Network Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	107.7 FM
Trinidad and Tobago Radio Network Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	94.7 FM
TTT Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	91.1 FM
TTT Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	99.1 FM
TTT Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	100.1 FM
United Cinemas Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	103.5 FM
Upward Trend Entertainment Limited	Broadcasting Services (Free to Air FM)	National	Type 5	10 Years	23 February 2016	22 February 2026	97.5 FM
Winfield Aleong Broadcasting Company Limited	Broadcasting Services (Free to Air FM)	Major Territorial	Type 5	10 Years	23 February 2016	22 February 2026	103.1 FM

	TELEVISION	I BROADCAST	TING SERV	ICE VIA CA	ABLE		
Central Broadcasting Services Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	18 March 2023	17 March 2033	N/A
Darut Tarbiyah	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	7 May 2023	6 May 2033	N/A
Gayelle Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	21 February 2019	20 February 2029	N/A
Guardian Media Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	11 March 2019	10 March 2029	N/A
IBN Communications Company Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	11 October 2022	10 October 2032	N/A
Liming Monkey	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	21 February 2019	20 February 2029	N/A
Living Water Community	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	7 May 2023	6 May 2033	N/A
Presbyterian Church of Trinidad and Tobago	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	4 February 2022	3 February 2032	N/A
Q Network Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	19 March 2021	18 March 2031	N/A
Sankhya Television Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	7 May 2023	6 May 2033	N/A
Synergy Entertainment Network Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	21 February 2019	20 February 2029	N/A
SWAHA Media Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	23 February 2016	22 February 2026	N/A
Twenty Four Seven News and Sports Limited	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	21 February 2019	20 February 2029	N/A
WI Sports	Broadcasting Service (over a Public Domestic Fixed Telecom. Network only)	National	Type 5	10 Years	21 February 2019	20 February 2029	N/A

Appendix III. Tariffs

Information on service providers' tariffs can be found on the following websites:

- 1. Airlink Communications: http://airlinktt.net/
- 2. Amplia Communications Limited: https://amplia.co.tt/
- 3. bmobile: https://bmobile.co.tt/
- 4. Columbus Communications Trinidad Limited: https://discoverflow.co/trinidad/
- 5. Digicel (Trinidad & Tobago) Limited: https://www.digicelgroup.com/tt/en.html
- 6. DirecTV Trinidad Limited: http://www.directvcaribbean.com/tt/
- 7. Green Dot Limited: http://www.gd.tt/
- 8. Galavant NetworksLimited: http://www.icntt.com/
- 9. Lisa Communications Limited: https://www.lisacommunications.com/
- 10. NOVO Communications Limited: https://novocommunications.net/
- 11. Novo Communications Limited: https://novocommunications.net/
- 12. PBS Technologies (Trinidad): https://www.pbstechgroup.com/
- 13. RVR International Limited: https://rvrnetworks.com/
- 14. Starlink Internet Services of Trinidad and Tobago: https://www.starlink.com/tt
- 15. Trico Industries Limited: https://tricott.com/
- 16. Wired Technologies Limited: https://www.wiredtechtt.com/

Appendix IV. Glossary of Terms

The following definitions are included to assist readers of this Report:

Terms	Definitions
Average revenue per user	A measure of the average revenue generated by one subscriber
Broadband	Internet speeds ≥ 256 kbits/s
Concession	A legal instrument granted by the Minister responsible for telecommunications and broadcasting to authorise the operation of a public telecommunications network and/or the provision of any public telecommunications service or broadcasting service
Free-to-air (FTA)	Relates to television and radio services, broadcast in clear (unencrypted) form on standard public or commercial networks, for which viewers do not have to subscribe
Gross domestic product (GDP)	A measure of the total value of all goods and services produced in a given country in a given time period, usually a year, excluding net property income from abroad
Herfindahl-Hirschman Index	A tool that measures the concentration of firms within a particular market. It is computed as the sum of the squares of the market share of all firms in the market
Interconnection	The linking of public telecommunications networks and public telecommunications services, to allow the users of one provider of a public telecommunications service to communicate with the users of another provider of a public telecommunications service, and to access the services provided by such other provider

International settlement rate
The share of the accounting rate paid by the public

telecommunications operator in another country to cover the costs of carrying the originating public telecommunications

operator's traffic on its network

Licence A legal instrument granted by the Authority to authorise the

operation or use of any radiocommunications service or any radio-transmitting equipment, including that on board any ship, aircraft or other vessel in the territorial waters or airspace of

Trinidad and Tobago

Mobile voice subscription Refers to an activated (prepaid or postpaid) SIM card that

enables the user to make and/or receive a call.

Narrowband Internet speeds < 256 kbits/s

Off-net traffic Refers to traffic originating on a service provider's network and

terminating on another network

On-net traffic Refers to traffic originating on a service provider's network and

terminating on the same network

Subscription TV Refers to terrestrial multichannel TV services, such as cable

TV, Internet protocol television (IPTV), digital terrestrial TV (DTT) and direct-to-home (DTH) satellite antenna multichannel TV, receiving broadcasting directly from

satellites

Penetration rate Defined as the number of persons per 100 inhabitants who

subscribe to telecommunications and/or broadcasting services



Telecommunications and Broadcasting Sectors **Annual Market Report 2023**

HTTPS://TATT.ORG.TT









