No. 12 2016-2017

EASTERN CARIBBEAN TELECOMMUNICATIONS AUTHORITY

ANNUAL ELECTRONIC COMMUNICATIONS SECTOR REVIEW

HIGHLIGHTS

- Sector investments exceeded EC$99 Million
- Fixed Broadband Penetration increased to 20.5%
- Mobile Broadband Penetration grew to 46%

ECTEL MEMBER STATES

Commonwealth of Dominica
Grenada
The Federation of St. Christopher (St. Kitts) and Nevis
Saint Lucia
St. Vincent and the Grenadines

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Preface

The Eastern Caribbean Telecommunications Authority (ECTEL) produces this review of the electronic communications sector[1] annually. The report provides information on the performance and economic contribution of the sector, as well as information on deployment and use of electronic communications infrastructure in the ECTEL Member States.

The report presents a review of the electronic communications sector for the period April 2016 to March 2017 and tracks the performance of the sector using a number of economic and statistical indicators which include sector revenue, investment and service penetration. The main focus of the report is to present important economic and market statistics on the electronic communications sector for use by policy makers and other interested parties. The information contained in the report is based on data available as at December 31, 2017, and also includes revisions to data presented in previous reports where additional data was received.

The statistical indicators in the report are based on the International Telecommunications Union's core indicators on Information and Communications Technology (ICT) infrastructure and access. The data used to calculate the indicators was collected through the use of questionnaires to the main electronic communications service providers and from other publicly available data.

ECTEL would like to thank all the service providers, the Eastern Caribbean Central Bank (ECCB) and other institutions that provided the data required to produce this report. ECTEL would also like to express its gratitude to the National Telecommunications Regulatory Commissions (NTRCs) for coordinating the collection of the data.

[1] Electronic communications sector refers to broadcast and telecommunications.

Electronic Communications in the ECTEL Member States – Key Indicators and Sector Findings

Key Indicators

Table i: Key telecommunications service indicators in the ECTEL Member States

Indicator	2013	2014	2015	2016	2017
Revenue (EC$M)	$788	$781	$780	$802	$723
Investment (EC$M)	$90	$124	$155	$104	$99
Employment	1,202	938	945	1,006	857
Fixed voice service penetration	22.9%	22.7%	22.9%	22.5%	21.6%
Mobile service[2] penetration	128.2%	109%	111.7%	108.6%	107.1%
Fixed broadband penetration	13.5%	14.7%	16.6%	19.3%	20.5%
Mobile broadband penetration	0.2%	7.4%	40.2%	44.6%	45.5%
Local voice minutes (millions)	1,234	1,092	991	874	756
International voice minutes (millions)	103	96	82	83	72

Source: ECTEL/operators

Main Sector findings

The key findings of the review of the electronic communications sector across the ECTEL Member States for the period ended March 2017 are:

- **Sector investment was above $99 million:** Sector investment contracted for the second consecutive period since 2015. Following a 33 per cent decline in the previous period, investment in the telecommunications sector fell by a further 4 per cent to just over $99 million.

- **Fixed broadband subscription surged:** The number of fixed broadband subscriptions rose by 7 per cent to 106,000 resulting in a fixed broadband penetration rate of 20.5 per cent up from 19.3 per cent in the previous period.

- **Mobile broadband subscriptions grew:** At the end of March 2017, the number of mobile broadband subscriptions grew by 3 per cent to 236,000.

- **Call volumes from fixed and mobile networks decreased 14 per cent:** Fixed originated local calling minutes fell 19 per cent to 306 million minutes and local calling minutes from mobile networks was 10 per cent less than in the previous period. Overall, consumers generated just over 756 million local calling minutes.

[2] Mobile services include voice and messaging.

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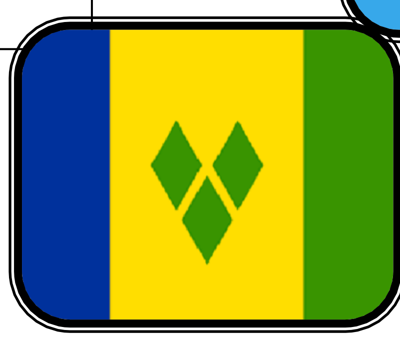
1 ECTEL MEMBER STATES

Overview

The Eastern Caribbean Central Bank (ECCB), in its 2016 Annual Economic and Financial Review, estimated that real economic activity expanded by 2.2 per cent across the Eastern Caribbean Currency Union in 2016. The growth in GDP resulted from expansions in value added in the key sectors of construction, wholesale and retail trade and hotels and restaurants. Economic activity is projected to have increased in all ECTEL Member States except Saint Lucia.

The performance of the telecommunications sector in the ECTEL Member States was at variance with the overall positive performance of the ECCU economies. Although operators continued to build out and upgrade the fixed broadband and subscriber TV networks, total investment fell by 4 per cent. Overall sector revenue decreased by 10 per cent. Employment in the sector also declined by 15 per cent.

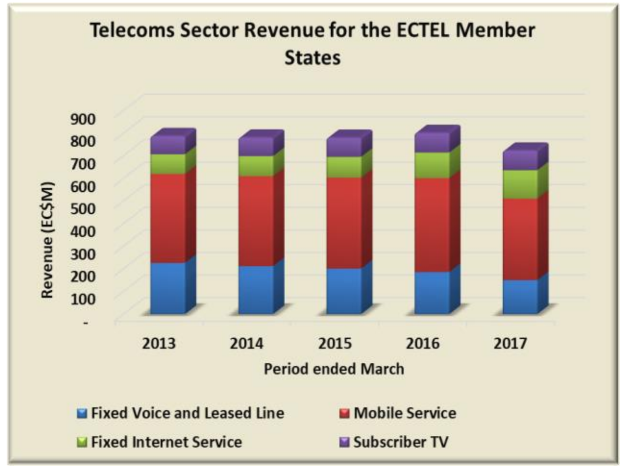


1.1 OPERATOR REPORTED REVENUE

Total revenues generated by electronic communications in the ECTEL Member States contracted by 10 per cent to $723 million at March 2017 (Figure 1.1). The contraction resulted mainly from reductions in revenues from mobile and fixed voice services. Revenues from fixed broadband services continued to rise but was insufficient to stem the overall decline in other services.

There was a slight shift in the contribution of telecoms markets to overall sector revenue. Mobile services remained the largest contributor to overall sector revenue, despite a 2 percentage point fall in market share to 50 per cent. By contrast, the contribution of fixed broadband service moved up by 3 percentage points to 17 per cent of total revenue.

Figure 1.1: Operator Reported Revenue in ECTEL Member States



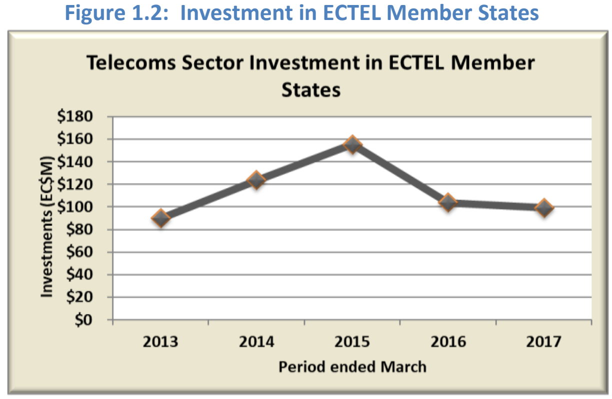
Source: ECTEL/operators

1.2 INVESTMENT

Investment spending in the telecommunications sectors in the ECTEL Member States witnessed its second consecutive decline since 2015. Capital expenditure was just above $99 million or 4 per cent lower than the previous period (Figure 1.2). Accordingly, the investment rate decreased by 1 percentage point to 14 per cent.

The major spend during the period comprised upgrades to the fixed broadband networks to support faster speeds and upgrade to the subscriber network to support IPTV deployment and CPE installations in Dominica and Grenada respectively.

Figure 1.2: Investment in ECTEL Member States



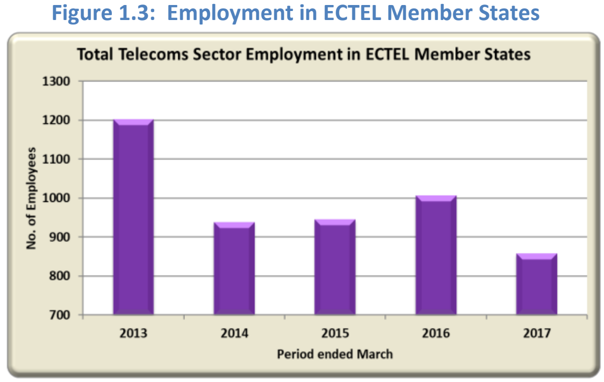
Source: ECTEL/operators

1.3 DIRECT EMPLOYMENT

Following modest increases in the past two periods, sector employment plunged by 15 per cent at March 2017 (Figure 1.3).

A total of 857 persons were employed by telecoms operators, which reflects decreases in employment in four of the five Member States.

Figure 1.3: Employment in ECTEL Member States



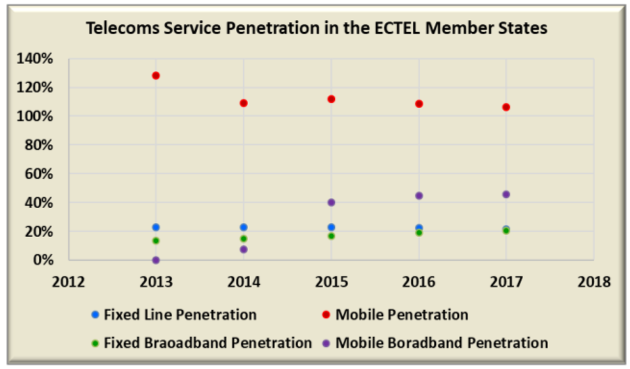
Source: ECTEL/operators

1.4 TELECOMS SERVICE PENETRATION

At March 2017:

- Fixed broadband penetration moved up 120 basis points to 20.5 per cent (Figure 1.4).
- Mobile broadband penetration reached 46 per cent.
- Mobile penetration fell to 1.07 subscriptions per inhabitant.
- Fixed line penetration was down by 1.1 per cent to 21.6 per cent.

Figure 1.4: Telecoms Service Penetration in ECTEL Member States



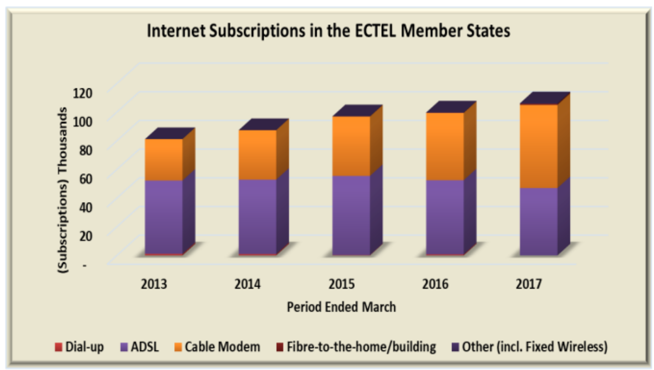
Source: ECTEL/operators

1.5 BROADBAND SERVICES

1.5.1 Fixed Broadband Service

The total number of fixed broadband lines grew by 7 per cent to approximately 106,000 during the review period (Figure 1.5). Cable broadband lines increased by 24 per cent while ADSL recorded a 9 per cent decrease. Cable and ADSL lines accounted for the majority of all fixed broadband lines at 55 per cent and 44 per cent respectively. Conversely, fibre lines accounted for only 1 per cent of fixed broadband connections. Despite this, there has been a noticeable surge in the uptake of fibre based connections in the Member States. Service providers continue to offer a basic fixed broadband package of 2mbps across the ECTEL Member States.

Figure 1.5: Fixed Broadband Subscriptions in ECTEL Member States



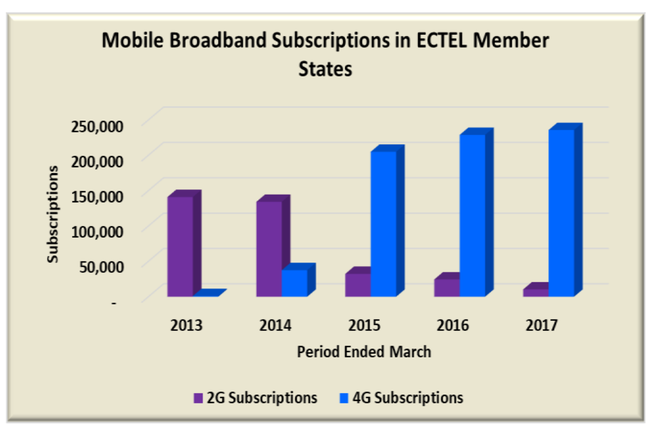
Source: ECTEL/operators

1.5.2 Mobile Broadband Service

Mobile data connections declined by 3 per cent at March 2017, reaching 246,000 (Figure 1.6). An estimated 96 per cent (236,000) of these subscriptions were mobile broadband connections. Mobile data handsets accounted for the majority of mobile broadband connections.

While the total number of 2G subscriptions decreased by 57 per cent to roughly 10,000, the number of 4G subscriptions continued to increase, up by 3 per cent to almost 236,000. Prepaid subscriptions accounted for 85 per cent of mobile broadband connections.

Figure 1.6: Mobile Broadband Subscriptions in ECTEL Member States



Source: ECTEL/operators

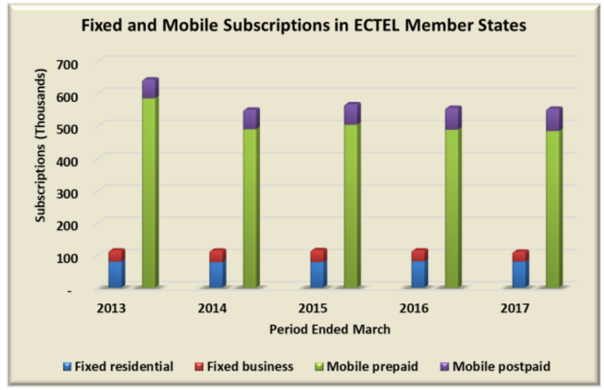
1.6 VOICE SERVICES

1.6.1 Subscriptions

The total number of active fixed lines in the ECTEL Member States fell by 3 per cent during the review period. At March 2017, there were 112, 000 fixed lines, or approximately 4,000 less than in the previous period. This comprised approximately 81,000 residential lines and 31,000 business lines (72 per cent and 28 per cent of the total respectively) (Figure 1.7).

Total subscriptions to mobile voice services declined by 1 per cent to an estimated 555,000 at March 2017. Postpaid subscriptions increased by 2 per cent while prepaid subscriptions decreased by 1 per cent. Twelve per cent of all mobile subscriptions were postpaid.

Figure 1.7: Fixed and Mobile Subscriptions in ECTEL Member States



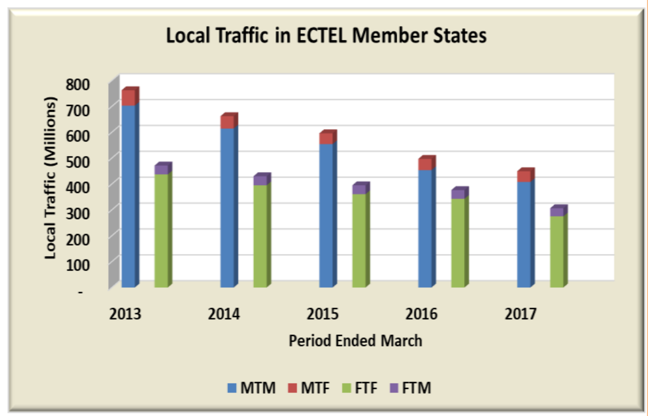
Source: ECTEL/operators

1.6.2 Network Traffic

For the fifth straight year total local outgoing call volumes dropped, declining by 14 per cent during the review period:

- Total calling minutes from the fixed and mobile networks decreased to 756 million (Figure 1.8).
- Mobile originated calling was down 10 per cent to 449 million.
- Local call traffic from the fixed network declined 19 per cent to 306 million or 228 minutes per subscription per month.
- As a proportion of total local calling minutes, mobile calls increased by 3 percentage points to 60 per cent.

Figure 1.8: Local Traffic in ECTEL Member States



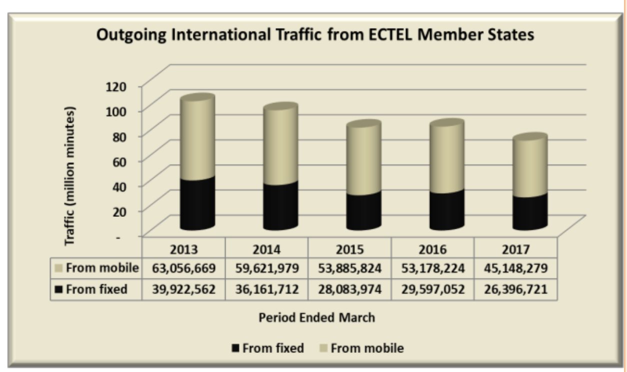
Source: ECTEL/operators

1.6.3 International Outgoing Traffic

International outgoing traffic plummeted by 14 per cent to an estimated 72 million minutes at March 2017 (Figure 1.9). Sixty three percent of these minutes was mobile network originated.

A 15 per cent drop in traffic from the mobile networks contributed to the overall decrease in international outgoing calling volumes. Outgoing traffic from the fixed network declined at rate of 11 per cent.

Figure 1.9: Outgoing International Traffic from ECTEL Member States



Source: ECTEL/operators

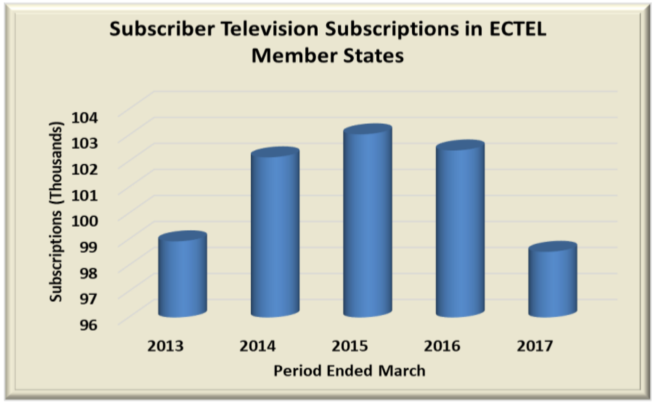
1.7 SUBSCRIBER TELEVISION

1.7.1 Subscriber Television

During the period under review, subscriber TV connections in the ECTEL Member States fell by 4 per cent to nearly 99,000 (Figure 1.10). This was a higher rate of decline than the 1 per cent recorded in the previous period.

Both digital and analogue cable TV services continue to be offered by service providers in the ECTEL Member States. During the review period, pay TV via IPTV, was available in one ECTEL Member State.

Figure 1.10: Subscriber Television Subscriptions in ECTEL Member States



Source: ECTEL/operators

2 DOMINICA

OVERVIEW

Preliminary estimates from the Eastern Caribbean Central Bank indicates that economic activity in Dominica expanded by 1.5 per cent in 2016, following a contraction of 2.5 per cent in 2015. This assessment was based on increased activity in the construction and agricultural sectors, notwithstanding subdued performances in the tourism industry and the manufacturing sector. However, the two largest sectors in the economy, wholesale and retail which accounts for 13.7 per cent of the economy and transport, storage and communications which accounts for 13.6 per cent of the economy, registered reductions of 2.5 per cent and 0.5 per cent respectively.

The consumer price index rose by 1.6 per cent, relative to the decrease of 0.5 per cent observed in 2015. The uptick in prices was mainly attributed to an increase of 4.3 per cent in the largest sub-index housing, utilities, gas and other fuels. The price indices for communication remained unchanged compared to the 0.7 per cent growth in the previous year.

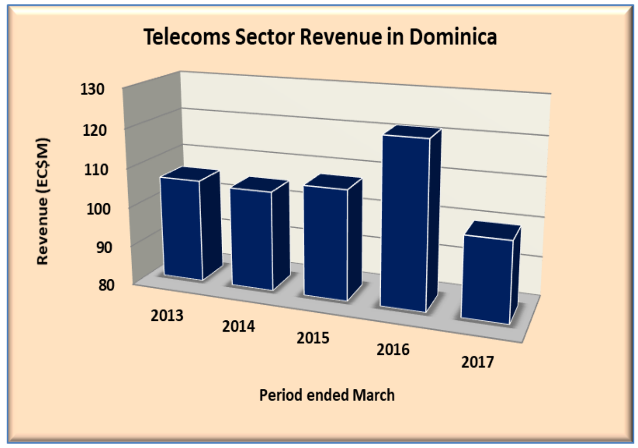
The telecommunications sector experienced a decline revenue generated by the telecommunications service providers in addition to a reduction in full time employment but an increase in investment in the sector.

2.1 OPERATOR REPORTED REVENUE

Total revenue from the electronic communications sector in Dominica declined by 18 per cent to an estimated $100 million at the end of March 2017 (Figure 2.1). This decline can be attributed to the contraction in mobile service and fixed voice which fell by 32 per cent and 12 per cent respectively. Despite the overall decrease in revenue, fixed internet service and subscriber TV grew by 9 per cent and 17 per cent respectively.

Mobile services continued to account for the largest share of total revenue, 45 per cent, while fixed voice accounted for 26 per cent and fixed internet and Subscriber TV accounted for 14 per cent each.

Figure 2.1: Operator Related Revenue in Dominica

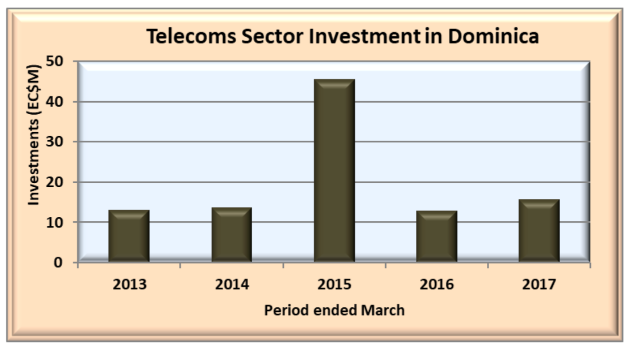


Source: ECTEL/operators

2.2 INVESTMENT

Following a substantial drop in investment in the previous year in Dominica, the end of March 2017 saw investment growing by 22 per cent (Figure 2.2). For the period under review investment total $15.7 million compared to $12.9 million in the previous year.

Figure 2.2: Investment in Dominica

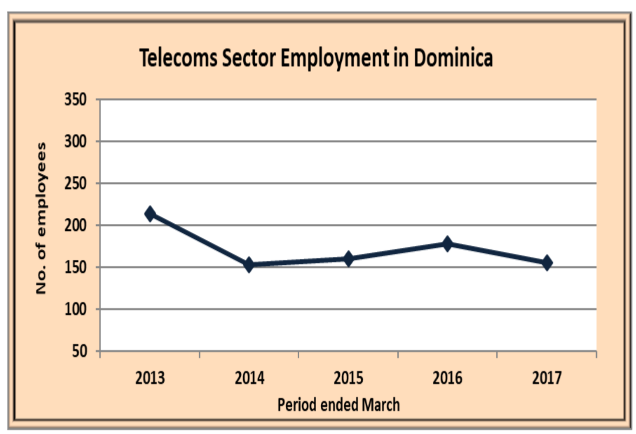


Source: ECTEL/operators

2.3 DIRECT EMPLOYMENT

Telecommunications operators, during the review period, employed approximately 155 full time employees, a 13 per cent reduction compared to the 178 employees in the previous year (Figure 2.3). Conversely, part time employees grew from 5 employees in 2016 to 25 employees in this review period. The expansion in part-time employees maybe a result of the outsourcing of services to third party contractors.

Figure 2.3: Direct Employment in Dominica



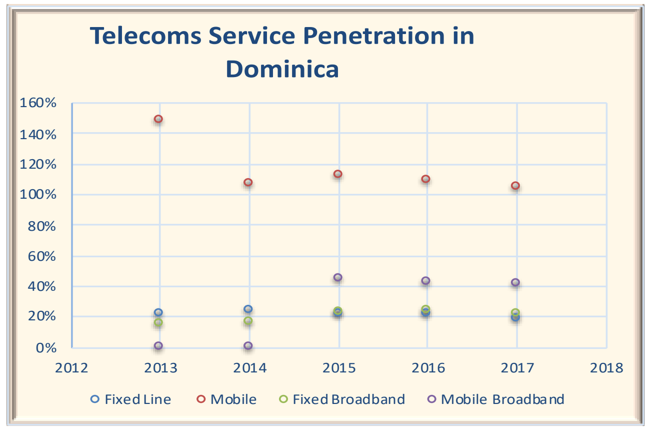
Source: ECTEL/operators

2.4 TELECOMS SERVICE PENETRATION

For the period under review:

- Fixed broadband penetration recorded a slight decline of 2 percentage points to 21 per cent (Figure 2.4);
- Mobile broadband penetration remained relatively unchanged at 42 per cent.
- Fixed line recorded a 4 percentage point fall in penetration to 18 per cent; and
- Mobile penetration rate reached 105 per cent experiencing a contraction of 3 percentage points.

Figure 2.4: Telecoms Service Penetration

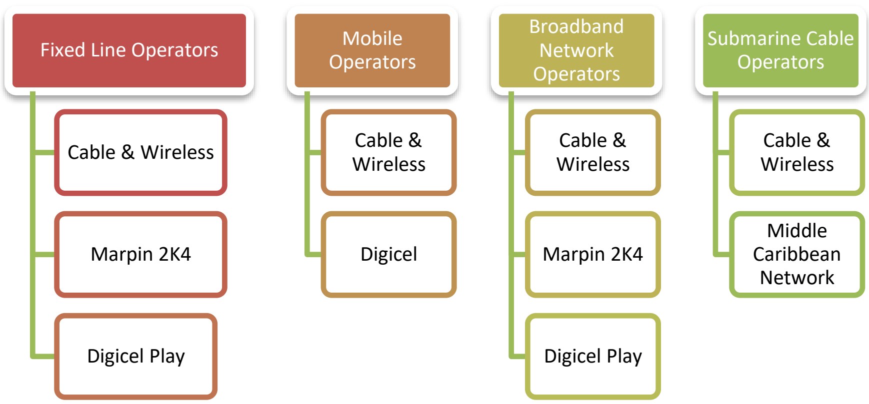


Source: ECTEL/operators

2.5 ACTIVE SERVICE PROVIDERS

In the end of March 2017, there were three (3) active telecommunication service providers in Dominica. FLOW continued to provide the market with fixed line, mobile and internet services (Figure 2.5). Marpin provided fixed lines, internet and subscriber television while Digicel offered all four (4) services.

Figure 2.5: Active Service Providers in Dominica



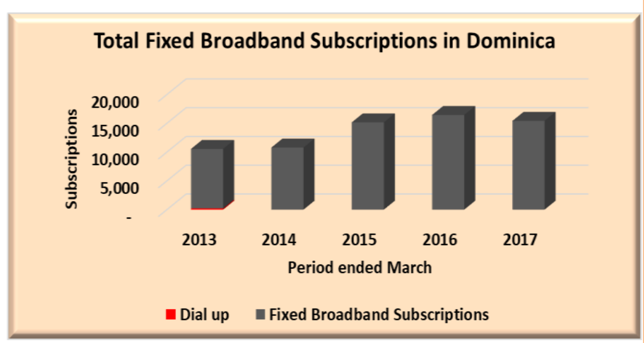
Source: ECTEL/operators

2.6 INTERNET AND BROADBAND

2.6.1 Fixed Broadband Services

Total fixed broadband subscriptions as at March 2017 decelerated by 6 per cent to 15,400 subscriptions, following a growth of 8 per cent in the previous year (Figure 2.6). Cable modem accounted for 61 per cent of total subscriptions while ADSL accounted for 39 per cent. The decrease in total subscriptions resulted in a 2 per cent reduction in the fixed broadband penetration rate for the island.

Figure 2.6: Fixed Broadband Services in Dominica

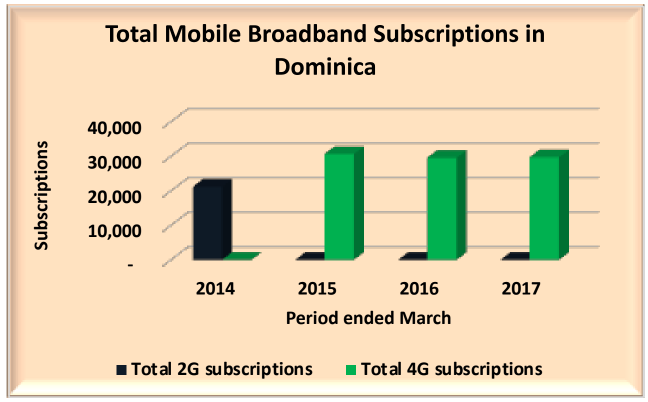


Source: ECTEL/operators

2.6.2 Mobile Broadband Services

Mobile broadband subscriptions were estimated to have expanded by a mere one per cent during the period ended March 2017 (Figure 2.7). Prepaid subscriptions accounted for 85 per cent of total subscriptions while postpaid accounted for the remaining 15 per cent. It should be noted that though both prepaid and postpaid subscriptions recorded growth prepaid subscriptions accelerated at a faster rate of 3 per cent compared to postpaid which grew by 0.2 per cent.

Figure 2.7: Mobile Broadband Services in Dominica



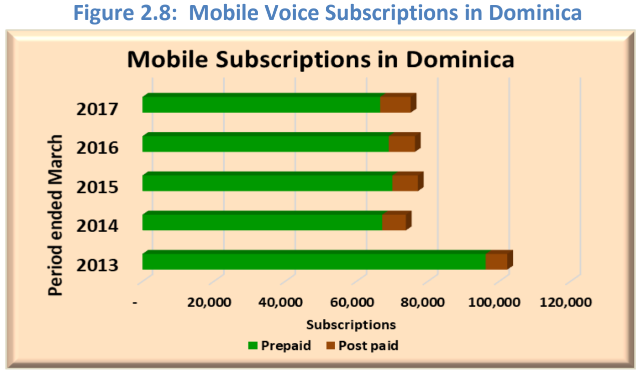
Source: ECTEL/operators

2.7 MOBILE VOICE SERVICES

2.7.1 Mobile Voice Subscriptions

At the end of March 2017 subscriptions to mobile voice services fell slightly by 2 per cent to 75,000 subscriptions (Figure 2.8). This reduction can be attributed to the 3 per cent drop in prepaid mobile subscriptions which, despite the decline, still accounted for the majority of subscriptions, 89 per cent. Consistent with the previous years' trend, postpaid subscriptions grew by 16 per cent or by 1,200 subscriptions. Notwithstanding this increase, postpaid subscriptions accounted for 11 per cent of total subscriptions, one per cent more than the previous year.

Figure 2.8: Mobile Voice Subscriptions in Dominica



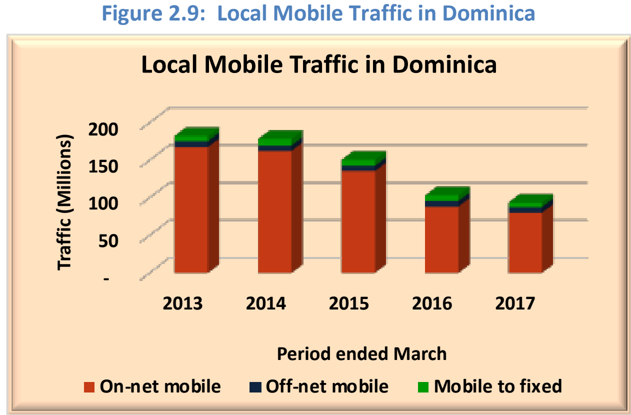
Source: ECTEL/operators

2.7.2 Mobile Traffic Volumes

Local mobile traffic in Dominica for the review period declined by 9 per cent to approximately 94 million minutes (Figure 2.9). On net calls, off net calls and calls to fixed networks declined by 9 per cent, 1 per cent and 21 per cent respectively. Mobile to mobile calling accounted for the largest share, 86 per cent, of all local mobile traffic.

Outgoing international minutes that originated from the mobile networks contracted by 20 per cent to 7.8 million minutes compared to 9.8 million the year before.

Figure 2.9: Local Mobile Traffic in Dominica



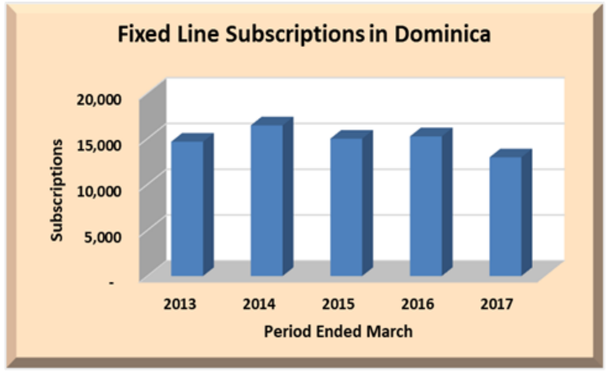
Source: ECTEL/operators

2.8 FIXED VOICE SERVICES

2.8.1 Fixed Voice Subscriptions

In Dominica, fixed line subscriptions were estimated at 12,960 at the end of March 2017, a decline of 15 per cent compared to 15,250 the previous year (Figure 2.10). Both residential and business subscriptions fell by 5 per cent and 33 per cent respectively. The proportion of residential to business subscriptions was 72 per cent to 28 per cent.

Figure 2.10: Fixed Voice Subscriptions in Dominica



Source: ECTEL/operators

2.8.2 Fixed Traffic Volumes

Consistent with the declining trend exhibited for the last five years calls originating from the fixed networks in Dominica continued to decline during the period under review (Table 2.1). Total calls originating from the fixed networks were 16.8 million minutes compared to 18.8 million minutes in the previous year, an 11 per cent movement.

International outgoing calls from fixed networks accounted for approximately 33 per cent of total outgoing international calls. Operators reported 3.4 million international outgoing minutes originating from fixed networks, a 25 per cent reduction when compared to the 4.5 million minutes last year.

Table 2.1: Fixed Traffic Volumes in Dominica
(million minutes)

	Fixed to Fixed	Fixed to Mobile	Fixed to International
2013	19	4	2.8
2014	16	4	4.2
2015	12	4	4.7
2016	10	4	4.5
2017	9	5	3.4

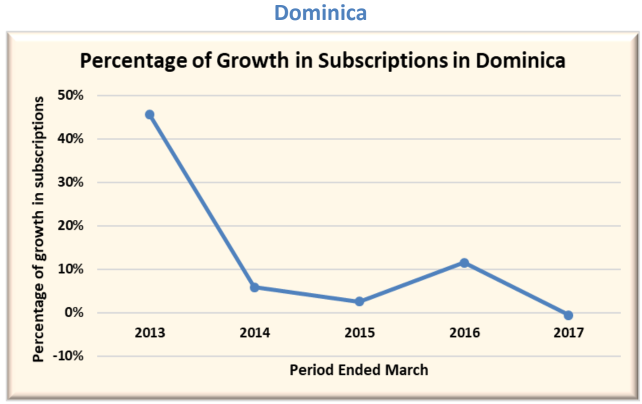
Source: ECTEL/operators

2.9 SUBSCRIBER TELEVISION

2.9.1 Subscriber Television

In Dominica, the total number of connections to Subscriber Television was approximately 17,530 subscriptions, 0.6 per cent lower than subscriptions in 2016 (Figure 2.11). This service is provided by two out of the four telecommunications providers operating on the island.

Figure 2.11: Basic Subscriber Television Growth Rate in Dominica



Source: ECTEL/operators

3 GRENADA

OVERVIEW

According to the Eastern Caribbean Central Bank, in 2016, the Grenadian economy was estimated to have grown by 1.7 per cent following growth of 5.2 per cent in 2015. The economy recorded strong performances in tourism and construction, with positive spin off effects in auxiliary sectors such as transport, storage and communications, as well as, wholesale and retail trade. Overall economic activity was tempered by a decline in the agriculture sector. Consumer price inflation decelerated to 0.9 per cent during 2016, from 1.1 per cent in 2015. Most sub-indices registered increases, with notable increases in the sub-indices for education (6.2 per cent) and communication (5.7 per cent) as a result of higher costs for pre-primary and primary education and telephone services.

The electronic communications sector experienced a mixed performance for the year under review. Despite recording a 14 per cent reduction in revenue generated by the telecommunications service providers, capital investment in the sector expanded by 11 per cent to $20.5 million.

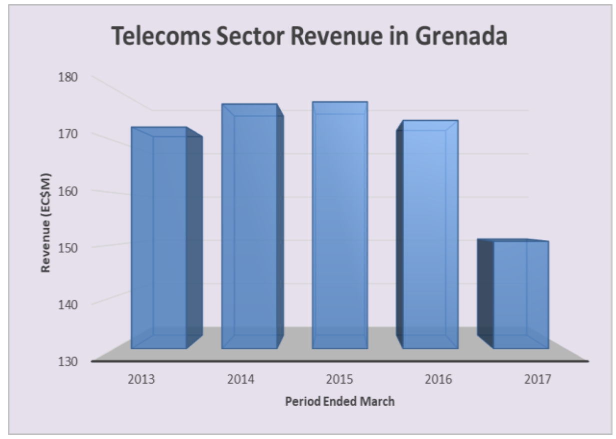
Grenada

3.1 OPERATOR REPORTED REVENUE

Grenada's electronic communications-sector generated an estimated $150.6 million in revenue during the period ended March 2017, a 13 per cent decrease when compared to the previous year (Figure 3.1). This reduction was as a result of across the board decreases in revenue from all major telecommunications services, most notably mobile services which experienced a 17 per cent decline despite accounting for half the share of total revenue for the sector.

For the review period, fixed voice services revenue continued its declining trend experiencing a reduction of 17 per cent. Fixed internet services contributed 14 per cent to total revenue but declined by 5 per cent while subscriber television declined by 3 per cent when compared to the previous year.

Figure 3.1: Operator Related Revenue in Grenada

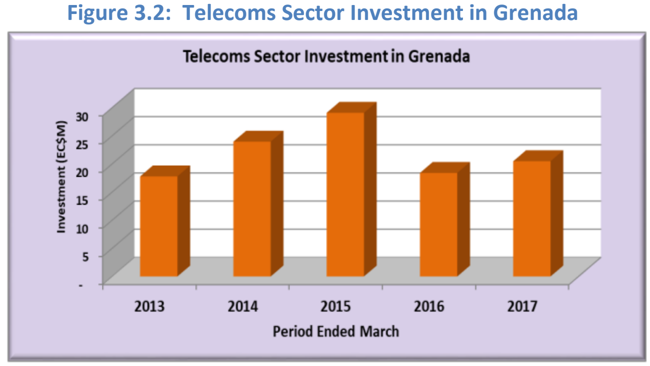


Source: ECTEL/operators

3.2 INVESTMENT

Telecommunications providers in Grenada invested approximately $20.5 million, an 11 per cent increase over the $18.4 million invested in the previous year (Figure 3.2). During the review period the providers invested in the maintenance and upgrade of their fixed, mobile and broadband networks. More specifically, investments centered on IPTV deployment, customer premise equipment installations and preparation in support of the launch of 4G-LTE by mobile service providers.

Figure 3.2: Telecoms Sector Investment in Grenada

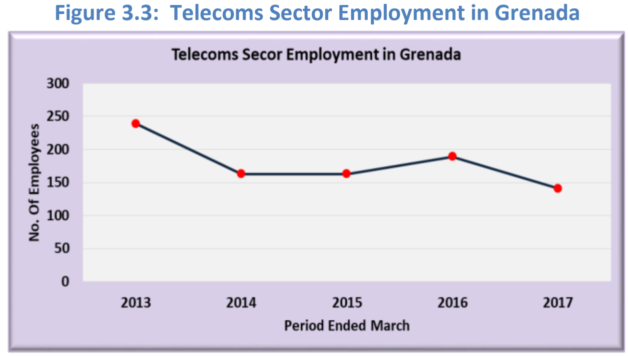


Source: ECTEL/operators

3.3 DIRECT EMPLOYMENT

Full time employment in the electronic communications sector in Grenada declined by 25 per cent moving from 189 in 2016 to 141 in 2017 (Figure 3.3). In 2016, employment in the sector recorded an increase after a consecutive 3-year decline as a result of a new entrant in the market. This period's decrease may be attributed to the impact of the merger of two of the major service providers which resulted in a decrease human resource.

Figure 3.3: Telecoms Sector Employment in Grenada



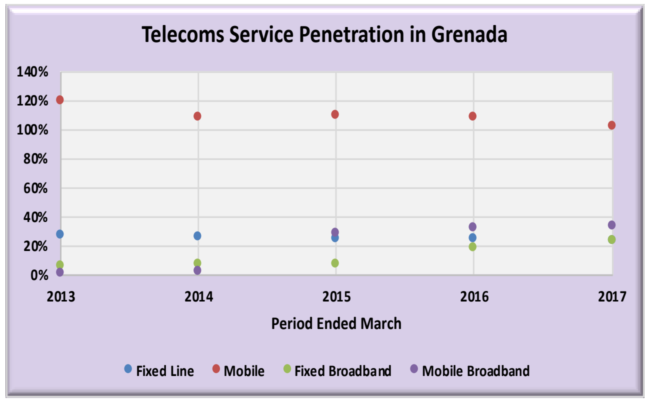
Source: ECTEL/operators

3.4 TELECOMS SERVICE PENETRATION

For the period under review the various penetration rates were realized for Grenada:

- There was a 15 per cent surge in fixed broadband penetration to 23 per cent as a result of the 22 per cent growth in subscriptions (Figure 3.4).
- Mobile broadband penetration remained stable at 33 per cent.
- Mobile penetration contracted 6 percentage points moving from 108 per cent to 2016 to 102 per cent.
- Fixed voice penetration fell by one percentage point moving from 24 per cent in 2016 to 23 per cent in 2017 due to a fall in the number of subscriptions by 3 per cent.

Figure 3.4: Telecoms Service Penetration in Grenada



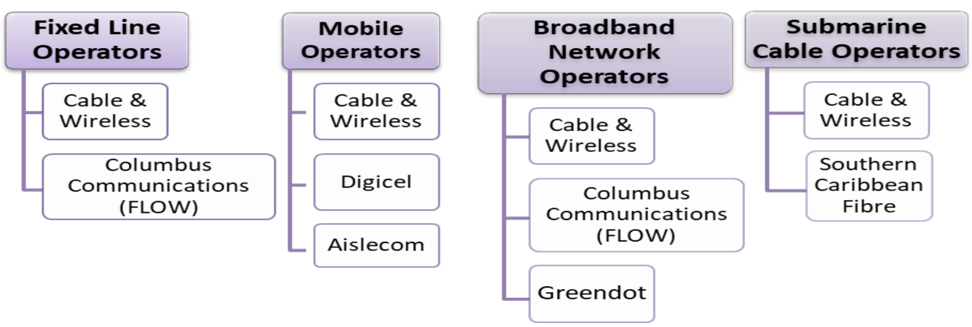
Source: ECTEL/operators

3.5 ACTIVE SERVICE PROVIDERS

At the end of the financial period March 2017, there was a total of six (6) active telecommunications providers in Grenada with the introduction of Green Dot Limited in 2016 (Figure 3.5).

Green Dot Limited is a Communications Service Provider that offers wireless communication services such as digital cable TV and high-speed internet service to the public of Grenada.

Figure 3.5: Active Service Providers in Grenada



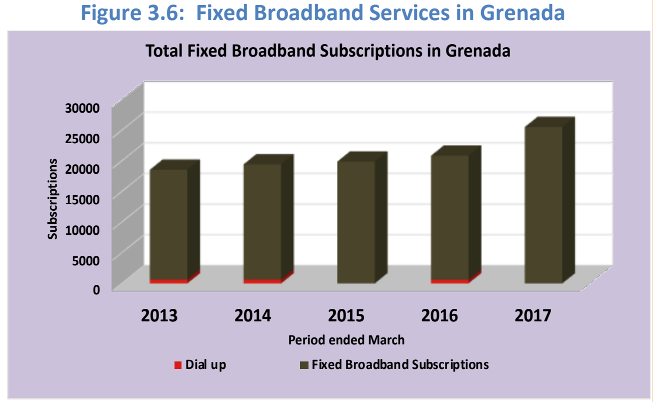
Source: ECTEL/operators

3.6 INTERNET AND BROADBAND

3.6.1 Fixed Broadband Services

At March 2017, there were an estimated 26,000 fixed broadband connections in Grenada, a significant increase of 22 per cent when compared to 21,000 subscriptions in 2016 (Figure 3.6). This represented a major growth when compared to the modest average growth rate of 4 per cent over the last four years. As a result of this the penetration rate grew by 5 percentage points to 23 per cent.

Figure 3.6: Fixed Broadband Services in Grenada



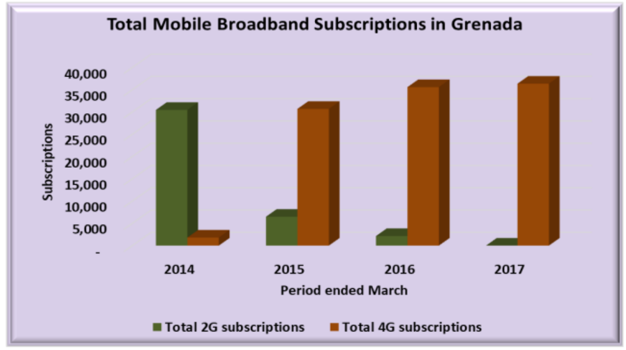
Source: ECTEL/operators

Grenada

3.6.2 Mobile Broadband Services

There were an estimated 36,500 mobile broadband subscriptions in Grenada as at March 2017, 2 per cent higher than the previous year's subscriptions (Figure 3.7). Eighty-eight per cent of all mobile broadband subscriptions were prepaid.

Figure 3.7: Mobile Broadband Services in Grenada



Source: ECTEL/operators

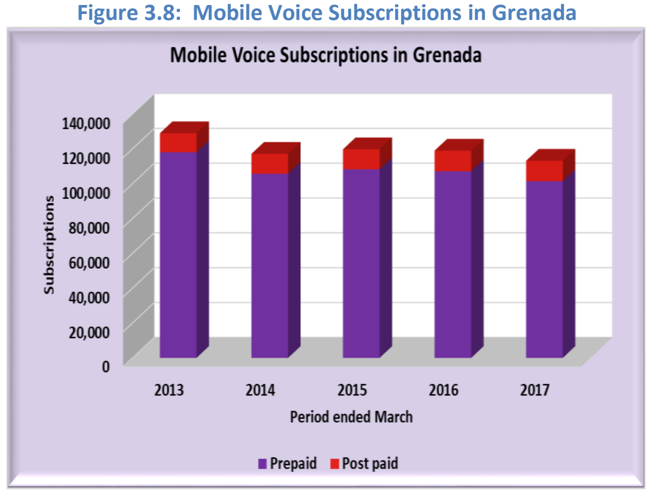
3.7 MOBILE VOICE SERVICES

3.7.1 Mobile Voice Subscriptions

Mobile subscriptions in Grenada totaled 113,000 at the end of the review period compared to 119,000 in the previous period experiencing a contraction of 5 per cent (Figure 3.8). Prepaid subscriptions accounted for the majority, 90 per cent, of total subscriptions. Prepaid subscriptions also recorded a reduction of 5 per cent when compared to the previous review period.

Postpaid subscriptions registered a slight increase of 1 per cent or 115 subscriptions when compared to the prior review period.

Figure 3.8: Mobile Voice Subscriptions in Grenada



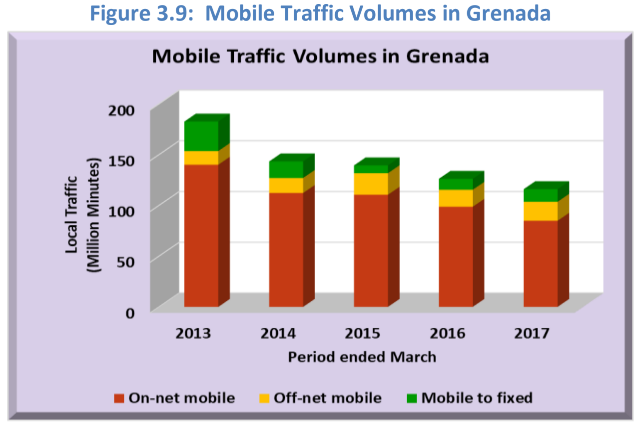
Source: ECTEL/operators

3.7.2 Mobile Traffic Volumes

Local mobile traffic during the review period was 116 million minutes, falling by 8 per cent from the previous year (Figure 3.9). On-net mobile traffic accounted 73 per cent of total traffic; off-net mobile 16 per cent and mobile to fixed traffic for 11 per cent.

The decline in overall mobile traffic was led by a 14 per cent drop in on-net minutes. However, off-net mobile and mobile to fixed calling minutes recorded growth of 16 per cent and 11 per cent respectively.

Figure 3.9: Mobile Traffic Volumes in Grenada



Source: ECTEL/operators

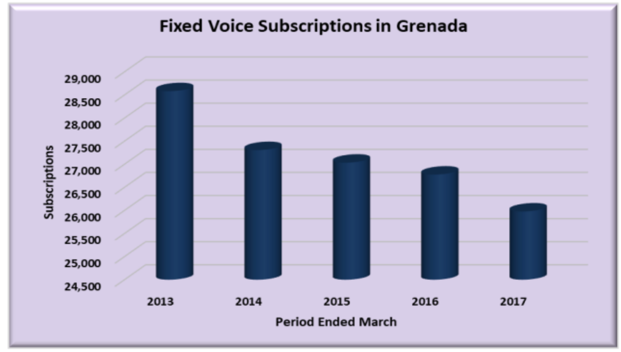
3.8 FIXED VOICE SERVICES

3.8.1 Fixed Voice Subscriptions

At the end of March 2017, there were an estimated 25,900 fixed line subscriptions down from 26,700 in the previous year (Figure 3.10). This 3 per cent reduction continued the overall downward trend in fixed voice subscriptions in the past 5 years.

Overall, fixed voice penetration in Grenada was recorded at 23 per cent, a 1 per cent decrease from the previous year.

Figure 3.10: Fixed Voice Subscriptions in Grenada



Source: ECTEL/operators

3.8.2 Fixed Traffic Volumes

At the end of the financial year ended March 2017, consumers in Grenada utilized approximately 120 million fixed network originated minutes, a 28 per cent decline when compared to the previous year consistent with the previous years' trend (Table 3.1). The average monthly usage per subscriber was 385 minutes compared to 517 minutes in the previous year.

On net fixed to fixed local calls, off net local fixed calls and fixed to mobile calls volumes declined by 25 per cent, 27 per cent and 34 per cent respectively during the review period.

Table 3.1: Fixed Traffic Volumes in Grenada

Fixed Traffic Volume in Grenada (million minutes)					
	2013	**2014**	**2015**	**2016**	**2017**
Fixed to Fixed	219	188	163	156	113
Fixed to Mobile	8	9	10	10	7
Fixed to International	14	14	7	7	8

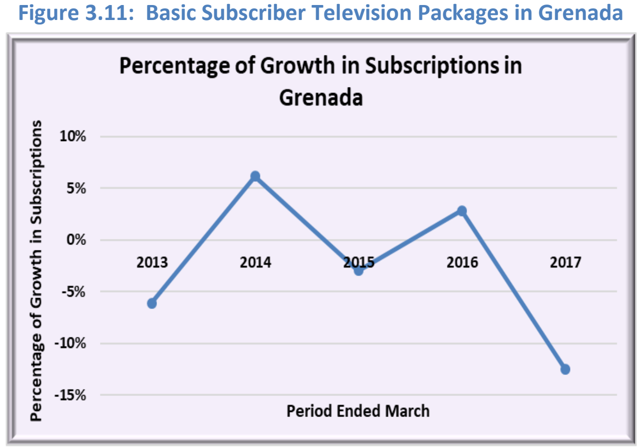
Source: ECTEL/operators

3.9 SUBSCRIBER TELEVISION

3.9.1 Subscriber Television

Subscriber TV operators, for the period under review, reported a 2 per cent decline in revenue when compared to the previous review period. In line with this the number of subscriptions declined by 12 per cent by the end of March 2017 (Figure 3.11).

Figure 3.11: Basic Subscriber Television Packages in Grenada



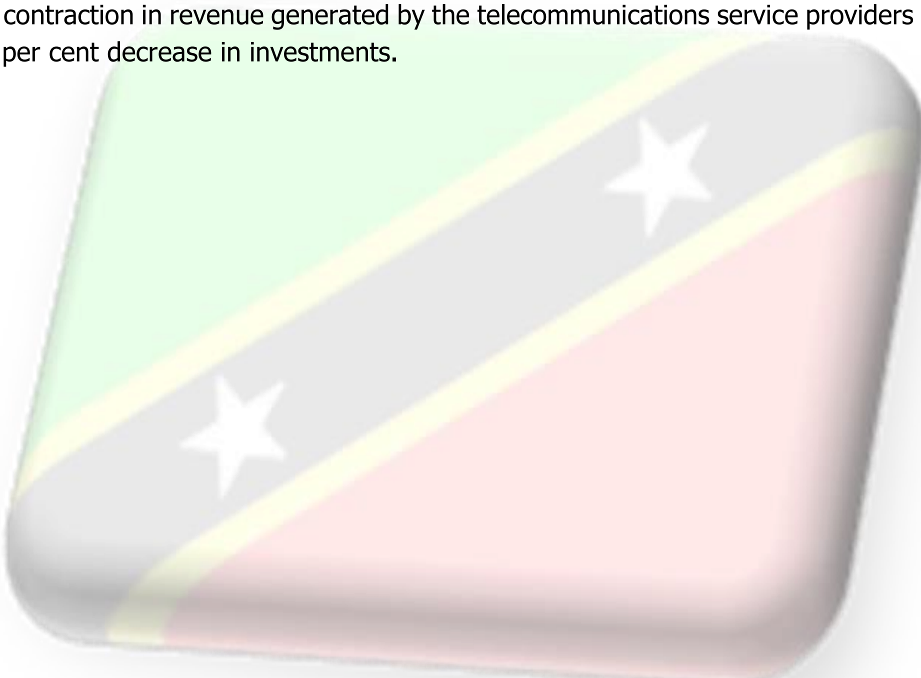
Source: ECTEL/operators

4 St. Kitts and Nevis

OVERVIEW

According to the Eastern Caribbean Central Bank, economic activity in St. Kitts and Nevis in 2016 expanded albeit at a decelerated rate compared with the performance in 2015. Real GDP was estimated to have risen by 2.8 per cent in 2016, compared with an expansion of 4.9 per cent in the previous year. The economic performance reflected moderate expansions in the major economic drivers, namely construction and the hotels and restaurants sectors with spillover effects on the wholesale and retail trade; transport, storage and communications and financial intermediation sectors. The consumer price index remained virtually unchanged declining less than 0.1 per cent in 2016 in contrast to a decrease of 2.4 per cent in 2015.

Notwithstanding, the positive performance of the economy, the electronic communications sector experienced a contraction in revenue generated by the telecommunications service providers by 5 per cent, as well as, 48 per cent decrease in investments.

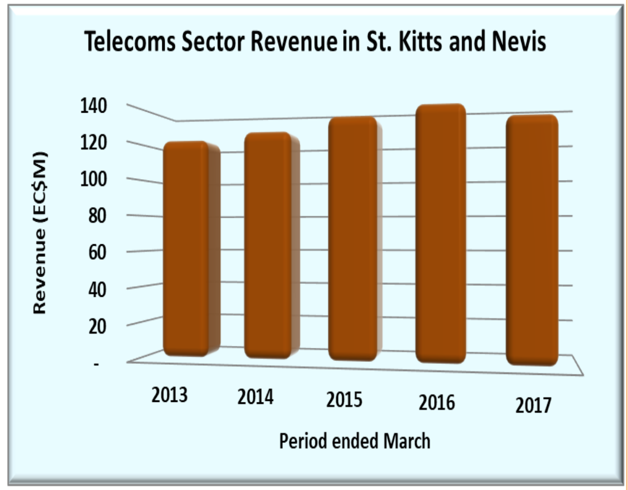


4.1 OPERATOR REPORTED REVENUE

At March 2017, telecommunications operators in St. Kitts and Nevis reported revenues of approximately $133 million, 5 per cent less than the previous period (Figure 4.1). Contributing to this decline was the reduction in revenue from fixed voice and mobile services. It should be noted however, that fixed internet service and subscriber TV segments recorded positive revenue growth of 23 per cent and 2 per cent respectively.

Similar to previous years mobile services accounted for the largest share of revenue contributing 49 per cent to overall revenue. This was followed by fixed broadband whose total share grew from 16 per cent to 21 per cent. Fixed voice contributed 19 per cent and subscriber TV 12 per cent to overall revenue.

Figure 4.1: Operator Related Revenue in St. Kitts and Nevis

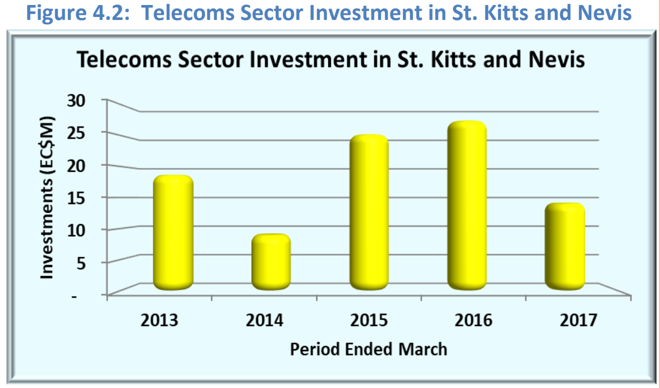


Source: ECTEL/operators

4.2 INVESTMENT

Telecommunications operators for the past two years invested heavily in the sector in an effort to upgrade mobile networks (Figure 4.2). This year following two years of consecutive growth, investment in the sector declined significantly by 48 per cent. However, capital was expended for continued upgrade of fixed, mobile and broadband services for the Federation.

Figure 4.2: Telecoms Sector Investment in St. Kitts and Nevis

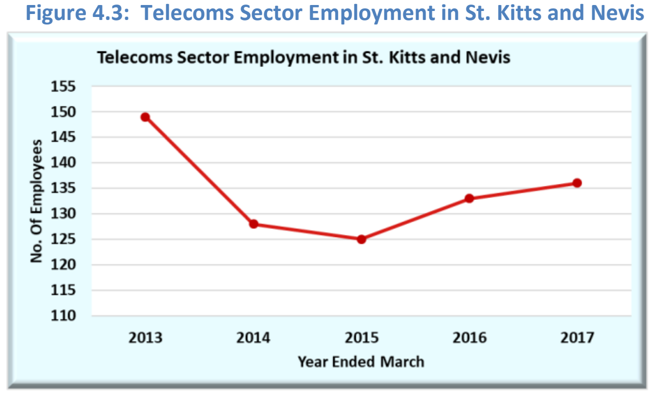


Source: ECTEL/operators

4.3 DIRECT EMPLOYMENT

It was estimated that the total number of persons in full-time employment in the electronic communications sector in St. Kitts and Nevis increased slightly by 2 per cent when compared to the previous review period (Figure 4.3). There were no part-time employees recorded during the review period.

Figure 4.3: Telecoms Sector Employment in St. Kitts and Nevis



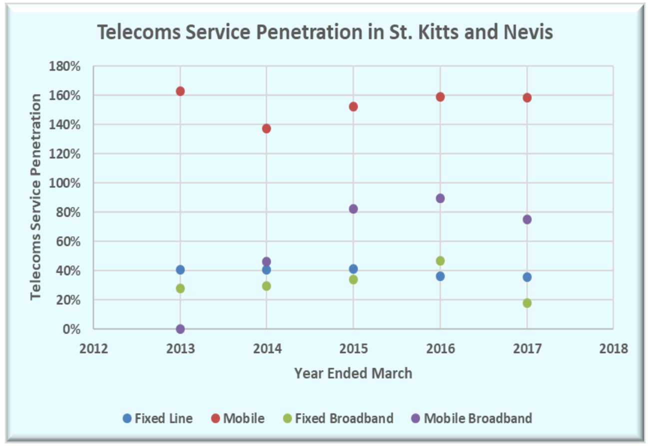
Source: ECTEL/operators

4.4 TELECOMS SERVICE PENETRATION

The penetration rates for the period under review:

- Fixed broadband penetration for St. Kitts and Nevis remained relatively unchanged at approximately 29 per cent, similar to the previous year (Figure 4.4).
- Mobile broadband penetration for the island was 75 per cent, 14 per cent lower than the 89 per cent which was realized in the 2016 financial period.
- Mobile penetration rate was estimated at 159 per cent similar to the penetration rate in the previous year.
- Fixed voice penetration remained unchanged at 36 per cent when compared to the same period in 2016.

Figure 4.4: Telecoms Service Penetration in St. Kitts and Nevis

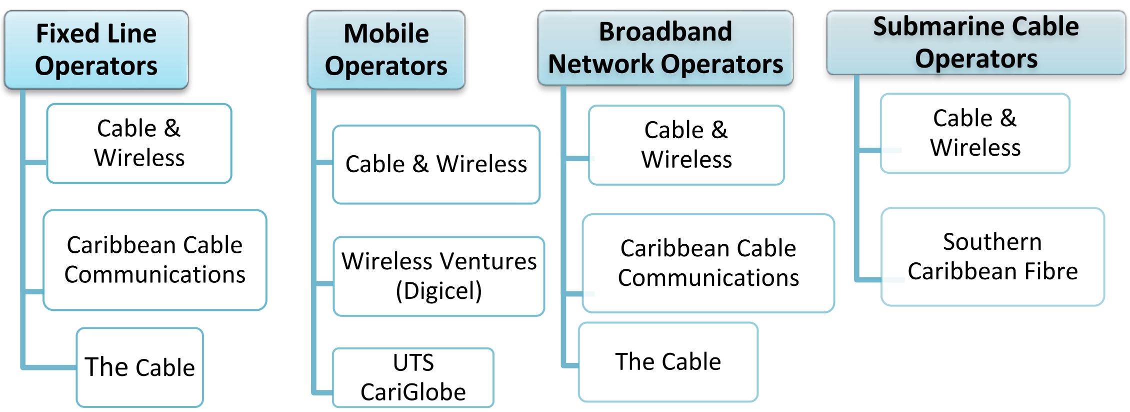


Source: ECTEL/operators

4.5 ACTIVE SERVICE PROVIDERS

The number of active licensed operators similar to previous years remained unchanged with four providers providing fixed voice, mobile, broadband, subscriber TV and submarine cable services to the island (Figure 4.5).

Figure 4.5: Active Service Providers in St. Kitts and Nevis



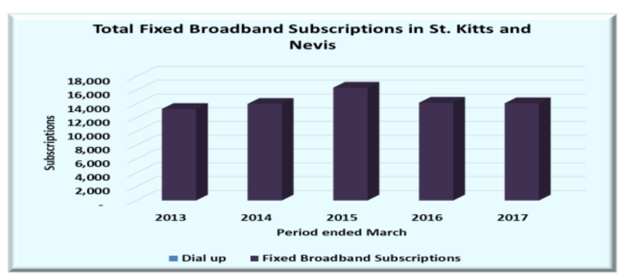
Source: ECTEL/operators

4.6 INTERNET AND BROADBAND

4.6.1 Fixed Broadband Services

It is estimated that fixed broadband connections in the Federation rose moderately by 2 per cent to approximately 14,400 subscriptions by the end of March 2017 (Figure 4.6). The increase in cable modem and ADSL subscriptions by 3 per cent and 1 per cent respectively contributed to this growth during the period.

Figure 4.6: Total Fixed Broadband Subscriptions in St. Kitts and Nevis

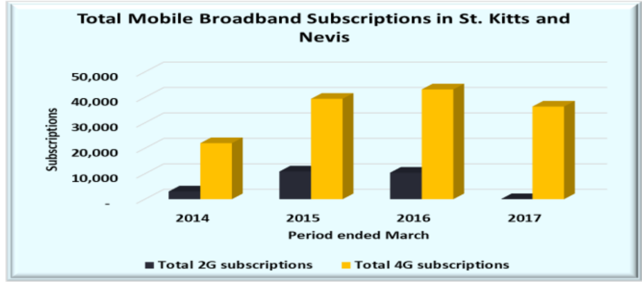


Source: ECTEL/operators

4.6.2 Mobile Broadband Services

For the period ended March 2017, there were an estimated 36,400 mobile broadband subscriptions in St. Kitts and Nevis, a 13 per cent contraction when compared to the previous financial period (Figure 4.7). Prepaid subscriptions accounted for 83 per cent of total subscriptions. This unexpected contraction in St. Kitts and Nevis is in contrast with the modest growth in the other ECTEL Member States.

Figure 4.7: Total Mobile Broadband Subscriptions in St. Kitts and Nevis



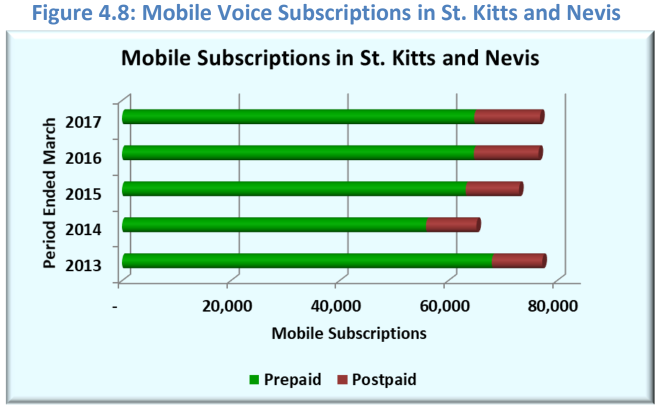
Source: ECTEL/operators

4.7 MOBILE VOICE SERVICES

4.7.1 Mobile Voice Subscriptions

Mobile voice subscriptions as at March 2017 totaled 76,800, 0.4 per cent higher than in the previous period (Figure 4.8). Of the total number of subscriptions 84 per cent were prepaid, the same percentage as the previous period. Both prepaid and postpaid subscriptions grew slightly by 0.1 per cent and 0.4 per cent respectively.

Figure 4.8: Mobile Voice Subscriptions in St. Kitts and Nevis

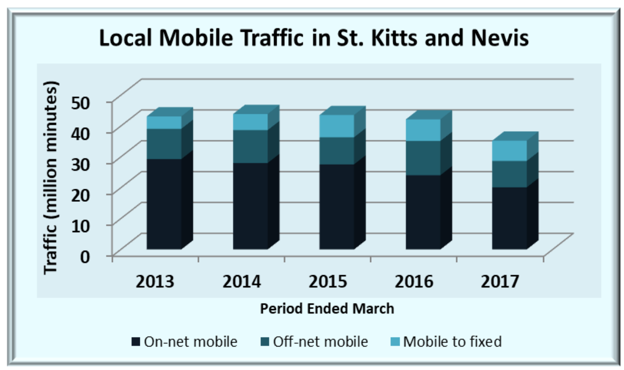


Source: ECTEL/operators

4.7.2 Mobile Traffic Volumes

Local traffic from mobile networks declined by an estimated 16 per cent to approximately 35 million minutes despite the increase in the number of subscriptions (Figure 4.9). On-net mobile traffic fell by 16 per cent and accounted for 57 per cent of the total mobile traffic while off-net mobile traffic similarly declined by 23 per cent and accounted for 24 per cent of overall traffic. Mobile to fixed traffic recorded a 6 per cent reduction and accounted for 19 per cent of total mobile traffic.

Figure 4.9: Local Mobile Traffic Volumes in St. Kitts and Nevis



Source: ECTEL/operators

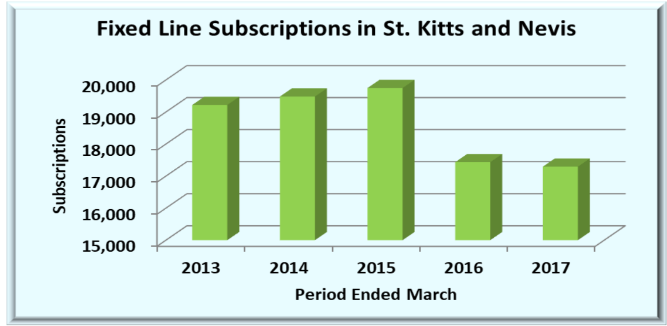
Mobile originated outgoing international calling minutes from St. Kitts and Nevis also declined by 32 per cent and accounted for 60 per cent of total international outgoing calling minutes during the review period.

4.8 FIXED VOICE SERVICES

4.8.1 Fixed Voice Subscriptions

Fixed line subscriptions in Saint Kitts and Nevis declined slightly by 1 per cent when compared to the previous review period. Total fixed voice subscriptions at March 2017 was reported at 17,000 Overall fixed line penetration remained relatively unchanged at 36 per cent.

Figure 4.10: Fixed Voice Subscriptions in St. Kitts and Nevis



Source: ECTEL/operators

4.8.2 Fixed Traffic Volumes

The total number of local fixed calling minutes during the review period was estimated at 21 million minutes, a 51 per cent reduction when compared to the previous period (Table 4.1). On-net calling which contracted by 56 per cent and accounted for 84 per cent of total local fixed traffic. Fixed-to-mobile traffic recorded a decrease of 6 per cent and accounted for 16 per cent of total traffic.

Forty per cent of all outgoing international minutes originated from the fixed network. International outgoing minutes from the fixed network, following the declining trend of previous years, fell by 23 per cent when compared the previous period.

Table 4.1: Fixed Traffic Volumes in St. Kitts and Nevis

Fixed Traffic Volume in St. Kitts and Nevis (million minutes)

	2013	2014	2015	2016	2017
Fixed to Fixed	41	41	41	39	17
Fixed to Mobile	4	4	3	4	3
Fixed to International	8	8	8	8	6

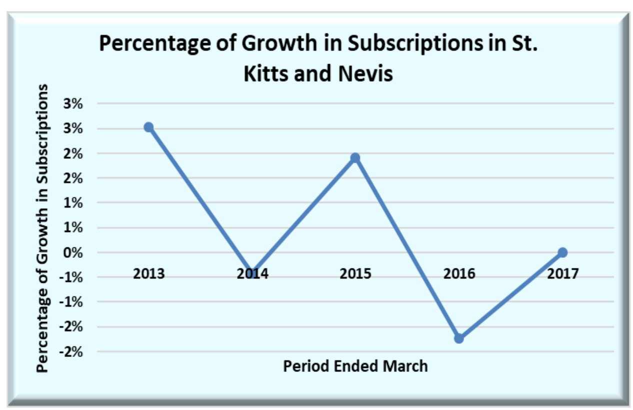
Source: ECTEL/operators

4.9 SUBSCRIBER TELEVISION

4.9.1 Subscriber Television

During the period under review, the total subscriptions to for Subscriber TV was estimated to have remained relatively flat at 21,000 subscriptions (Figure 4.11).

Figure 4.11: Basic Subscriber Television Packages in St. Kitts and Nevis



Source: ECTEL/operators

5 Saint Lucia

OVERVIEW

The Eastern Caribbean Central Bank reported that economic activity in Saint Lucia was estimated to have slowed in 2016, with real output falling by 0.7, compared with growth of 1.3 in 2015. The decline in real GDP reflected weak performance in the hotels and restaurant and transport, storage and communications sectors. Value added in the transport, storage and communications sector decreased by 6.6 per cent, following a 5.6 per cent increase in the previous year. The sector's contribution to overall economic activity remained stable at 18.5 per cent. The communications sub-component declined in 2016 with negative growth of 4.8 per cent in contrast with positive growth of 8.8 in 2015. Its contribution to overall economic activity also declined to 8.0 in 2016 from 8.5 in 2015.

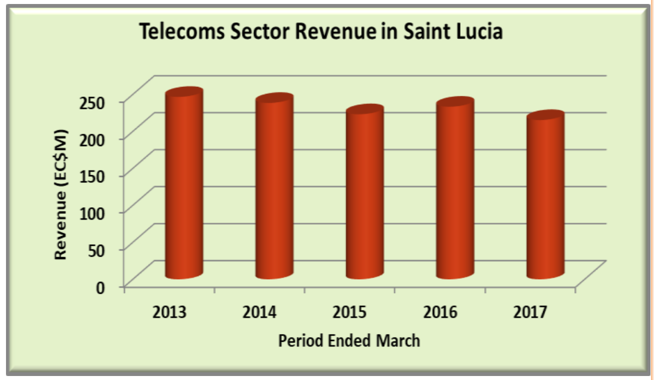
The performance of the electronic communications sector was relatively mixed during the review period. Although subscriptions to both fixed and mobile broadband services were marginally higher than the prior period, subscriptions to other services including fixed voice and subscriber TV narrowed. Total sector investment was up by 10 per cent while sector revenue and employment contracted by 8 per cent and 15 per cent respectively.

5.1 OPERATOR REPORTED REVENUE

Total revenue from the electronic communications sector of Saint Lucia was down by 8 per cent to $215 million at March 2017 (Figure 5.1). Declines were recorded in all segments of sector revenue except fixed internet service.

Mobile services remained the dominant contributor accounting for 52 per cent of sector revenue. The growth in fixed broadband revenue persisted for the second straight year resulting in a 19 per cent market share, an increase of three percentage points over the previous period. Subscriber TV maintained an 11 per cent market share while fixed voice's share fell by four percentage points to 18 per cent.

Figure 5.1: Telecoms sector revenue in Saint Lucia



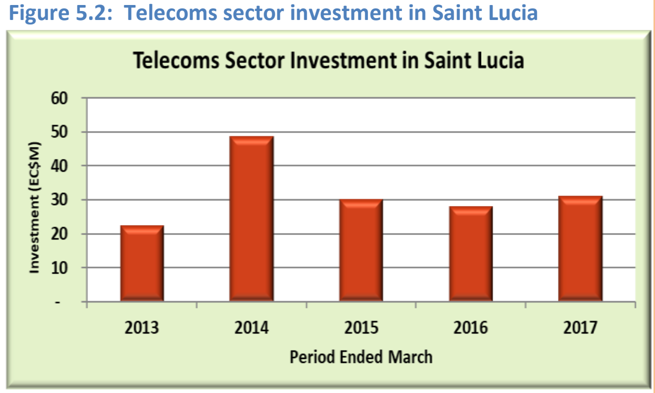
Source: ECTEL/operators

5.2 INVESTMENT

The fluctuation in investment continued with telecommunication service operators investing 10 per cent more or approximately $31 million at March 2017 (Figure 5.2).

The major spend included upgrades to the mobile network (46 per cent) and upgrades to subscriber TV networks to facilitate migration of customers from the analog to digital network (28 per cent).

Figure 5.2: Telecoms sector investment in Saint Lucia

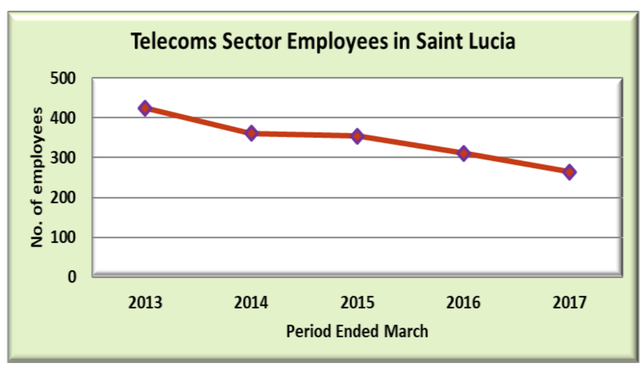


Source: ECTEL/operators

5.3 DIRECT EMPLOYMENT

Total employment in the electronic communications sector in Saint Lucia dipped by 15 per cent to 264 at March 2017 (Figure 5.3). This represents a continuous but gradual decline in telecoms employment for the past five years.

Figure 5.3: Telecoms sector employment in Saint Lucia



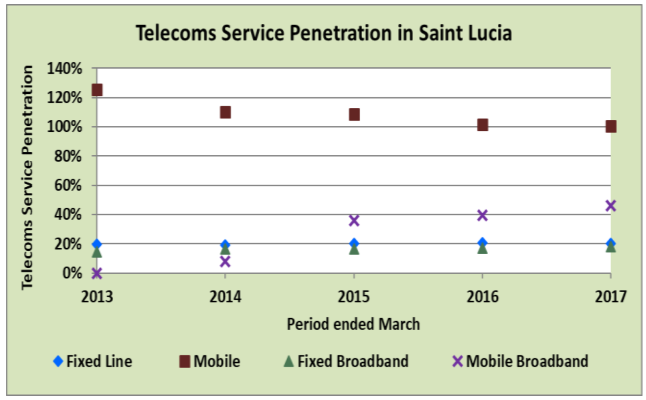
Source: ECTEL/operators

5.4 TELECOMS SERVICE PENETRATION

For the period under review:

- Fixed broadband penetration increased by one percentage point to 18 per cent (Figure 5.4).
- Mobile broadband penetration was 46 per cent, a 6 percentage point gain.
- Mobile penetration fell from 1.01 to 1.0 subscriptions per inhabitant.
- Fixed voice penetration remained constant from the previous period.

Figure 5.4: Telecoms Service Penetration in Saint Lucia

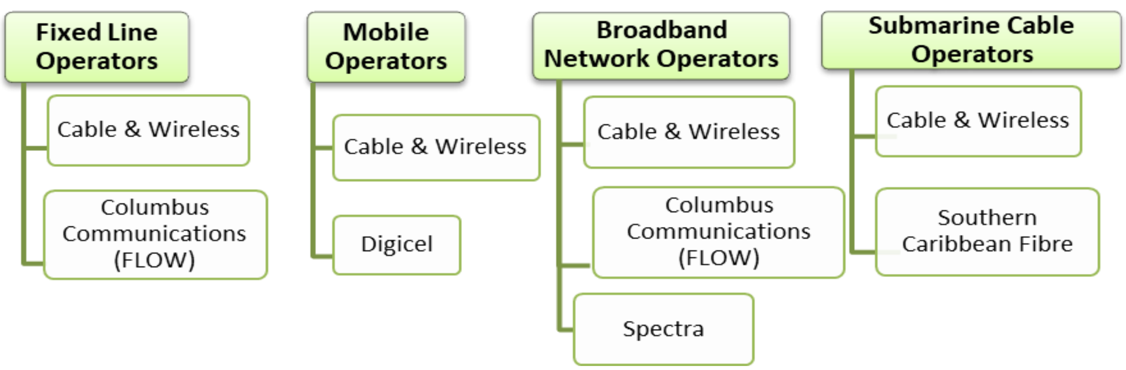


Source: ECTEL/operators

5.5 ACTIVE SERVICE PROVIDERS

There were no significant changes in the number of active operators in the electronic communications sector since the announcement of the merger of the parent companies of Cable & Wireless and Columbus Communications in 2015 (Figure 5.5).

Figure 5.5: Active Service Providers in Saint Lucia



Source: ECTEL/operators

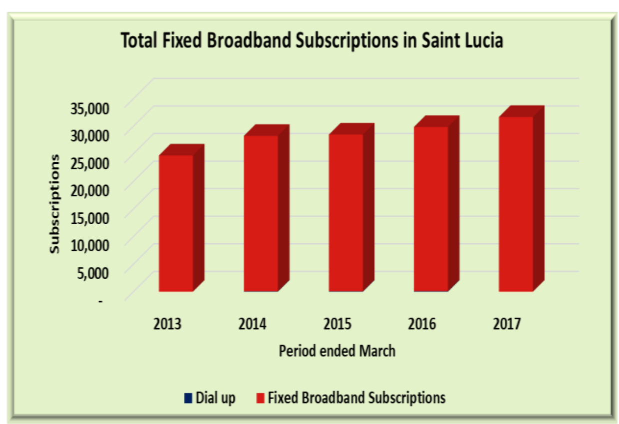
5.6 INTERNET AND BROADBAND

5.6.1 Fixed Broadband Services

Fixed broadband connections grew by 7 per cent to nearly 32,000 during the review period (Figure 5.6). As a result, fixed broadband penetration increased by one percentage point to 18 per cent.

Cable mobile connections has surpassed ADSL for the fourth straight year, representing 60 per cent of total fixed broadband subscriptions.

Figure 5.6: Fixed Broadband Services in Saint Lucia

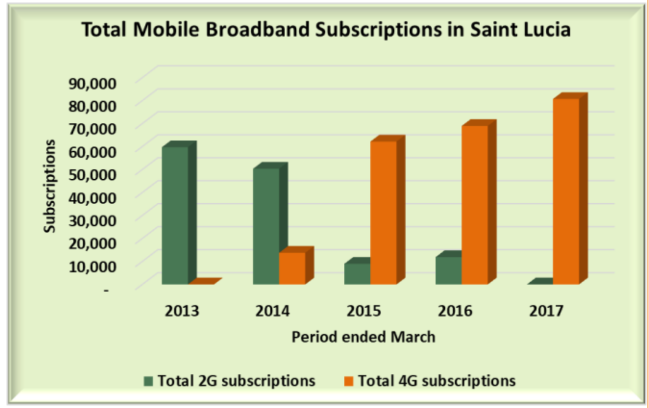


Source: ECTEL/operators

5.6.2 Mobile Broadband Services

Mobile broadband subscriptions have risen steadily since 2014 (Figure 5.7). At March 2017, mobile broadband subscriptions was 17 per cent higher than the previous period reaching almost 81,000. Of the mobile broadband subscriptions, 81 per cent were prepaid data connections.

Figure 5.7: Mobile Broadband Services in Saint Lucia



Source: ECTEL/operators

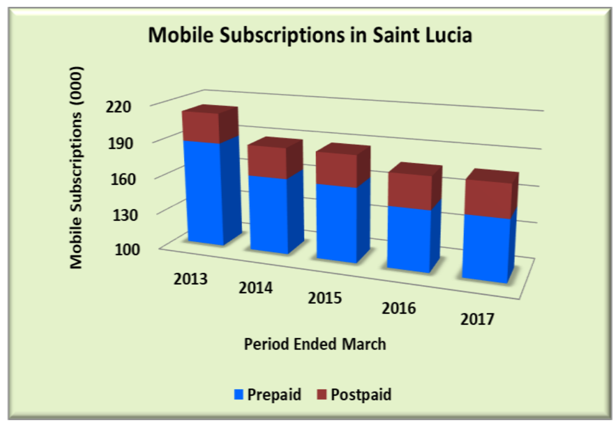
5.7 MOBILE VOICE SERVICES

5.7.1 Mobile Voice Subscriptions

After three years of decline, the total number of subscriptions to mobile voice services remained stable at 177,000 at March 2017 (Figure 5.8).

Prepaid mobile subscriptions retained share leadership and accounted for 85 per cent of total subscriptions. However, growth in postpaid subscriptions has outpaced that of prepaid subscription in the past five years.

Figure 5.8: Mobile Voice Subscriptions in Saint Lucia



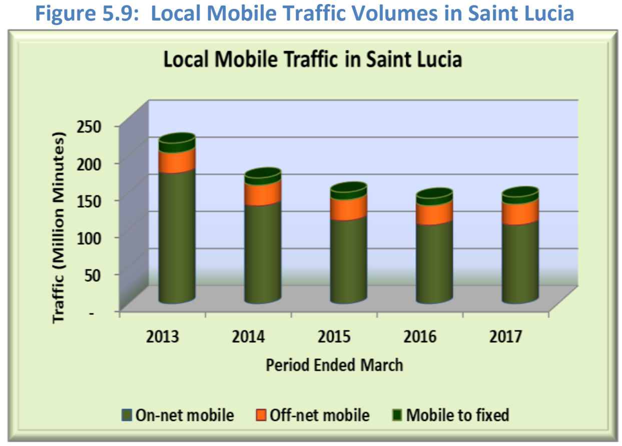
Source: ECTEL/operators

5.7.2 Mobile Traffic Volumes

Local calling minutes from the mobile network increased by one per cent to over 144 million minutes during the review period (Figure 5.9). On-net mobile calling was up by one per cent while off-net calling rose by five per cent.

Minutes from the mobile network accounted for 79 per cent of outgoing international minutes from Saint Lucia. Mobile originated international call volumes increased by 6 per cent to approximately 15 million minutes, reversing the trend of the previous three years.

Figure 5.9: Local Mobile Traffic Volumes in Saint Lucia



Source: ECTEL/operators

Saint Lucia

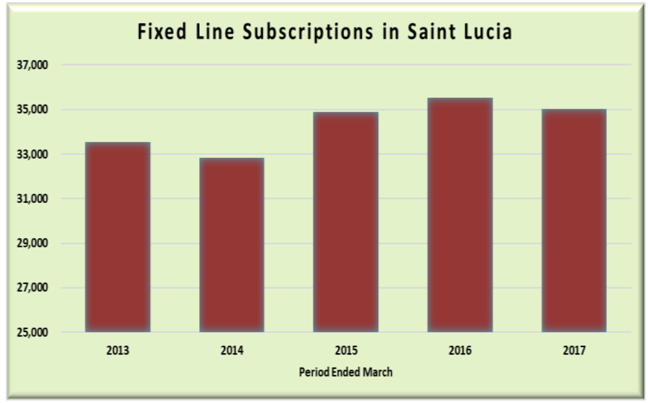
5.8 FIXED VOICE SERVICES

5.8.1 Fixed Voice Subscriptions

Total subscriptions to the fixed voice network recorded a modest decrease of 1 per cent to 35,000 for the review period (Figure 5.10).

Residential and business subscriptions fell by 1 per cent and 3 percent respectively. Residential subscriptions accounted for 70 per cent of total fixed voice connections.

Figure 5.10: Fixed Voice Subscriptions in Saint Lucia



Source: ECTEL/operators

5.8.2 Fixed Traffic Volumes

The decline in local fixed call volumes continued for the fifth straight year (Table 5.1). At March 2017, local fixed traffic was down by one percent to approximately 131 million minutes.

Approximately 9.3 out of every 10 fixed call minutes terminated on the fixed network. On-net calls remained steady from the previous period whereas off-net calling registered a one per cent fall.

Nearly 23 per cent of all outgoing international calls originated from the fixed network during the period under review. Outgoing international minutes from the fixed network contracted by 22 per cent to an estimated 4 million minutes.

Table 5.1: Fixed Traffic Volumes in Saint Lucia

Fixed Traffic Volume in Grenada (million minutes)					
	2013	2014	2015	2016	2017
Fixed to Fixed	131	125	125	122	122
Fixed to Mobile	12	12	11	10	9
Fixed to International	7	6	5	5	4

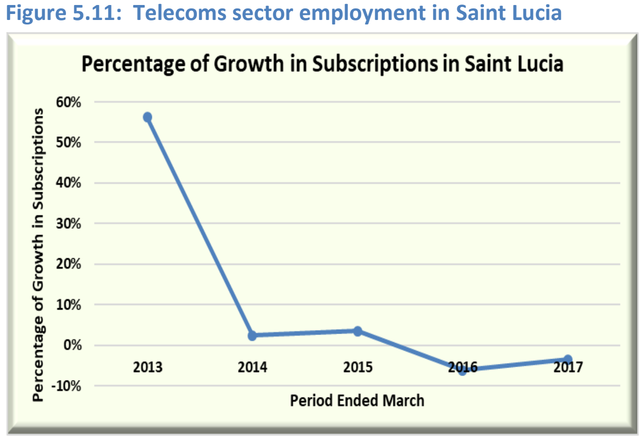
Source: ECTEL/operators

5.9 SUBSCRIBER TELEVISION

5.9.1 Subscriber Television

During the period under review, both digital and analogue Subscriber TV services were available in Saint Lucia (Figure 5.11). Subscriber TV connections appeared to have decreased by 4 per cent.

Figure 5.11: Telecoms sector employment in Saint Lucia



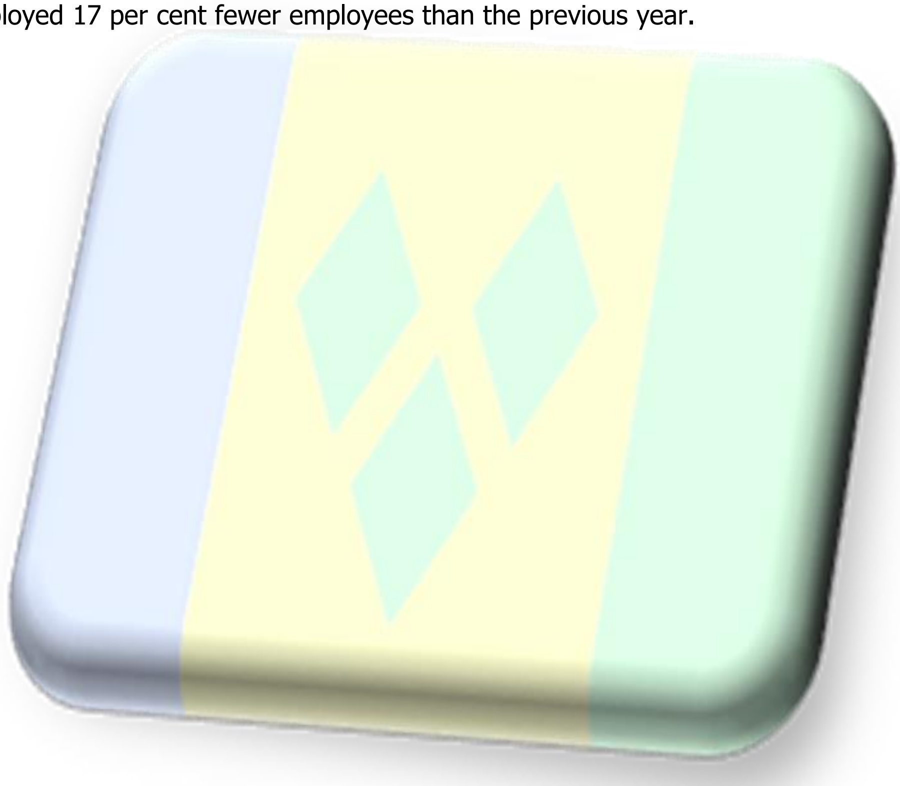
Source: ECTEL/operators

6 St. Vincent and the Grenadines

OVERVIEW

Provisional estimates from the Eastern Caribbean Central Bank (ECCB) indicated that the economy of St. Vincent and the Grenadines expanded at a rate of 2.9 per cent in 2016, up from the 0.6 per cent in 2015. The acceleration in economic activity was main attributable to expansions in all major economic sectors. Following a contraction of 2.1 per cent in 2015, the transport, storage and communications sector recorded growth of 0.9 per cent in 2016. The sector contributed 14.0 per cent to overall economic activity. The communications sub-component also grew by 2.9 per cent, rebounding from a decline of 6.5 per cent in 2015. The sector's contribution to gross value added was up by 0.07 from 3.4 per cent in 2015.

The performance of the telecommunications sector remained relatively mixed. Investment in the sector was up by 6 per cent to $18 million. Telecoms operators, however, generated 6 per cent less in revenue and employed 17 per cent fewer employees than the previous year.



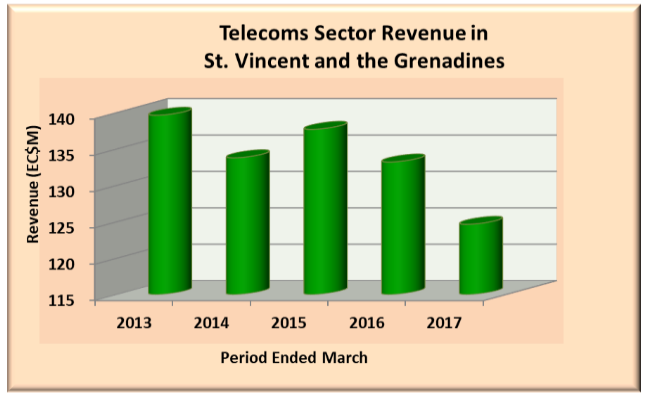
6.1 OPERATOR RELATED REVENUE

Total revenue generated by the electronic communications sector in St. Vincent and the Grenadines registered its second consecutive year-on-year decline since 2014, falling by 6 per cent to an estimated $125 million at March 2017 (Figure 6.1). Revenue from fixed internet and subscriber TV services increased while decreases were recorded in mobile and fixed voice services.

Mobile services continued to be the leading source of sector revenue, accounting for 50 per cent of total revenue. Revenue from fixed voice contributed 21 per cent making it the second largest contributor to total sector revenue.

Fixed internet service revenue followed closely behind with a 17 per cent contribution whilst subscriber TV services revenue accounted for 12 per cent of total sector revenue.

Figure 6.1: Telecoms Sector Revenue in St. Vincent and the Grenadines



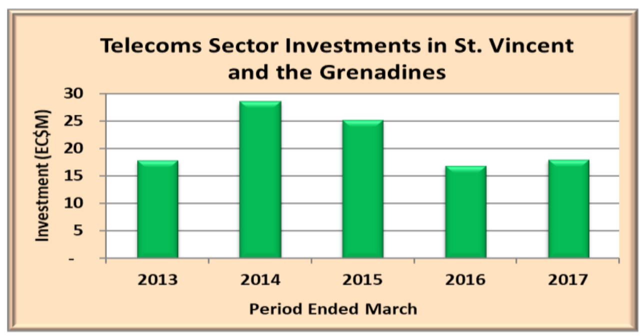
Source: ECTEL/operators

6.2 INVESTMENT

During the period under review, total investment in electronic communications in St. Vincent and the Grenadines was estimated to have risen by 6 per cent to $18 million (Figure 6.2). This increase stemmed the double-digit declines of the past two reporting periods.

The growth in investment was associated with major upgrades to both mobile and fixed internet network infrastructure. Enhancements to the fixed and subscriber TV networks accounted for a significant share of total investment but were much lower at 19 per cent and 28 per cent respectively relative to the previous period.

Figure 6.2: Telecoms Sector Investment in St. Vincent and the Grenadines

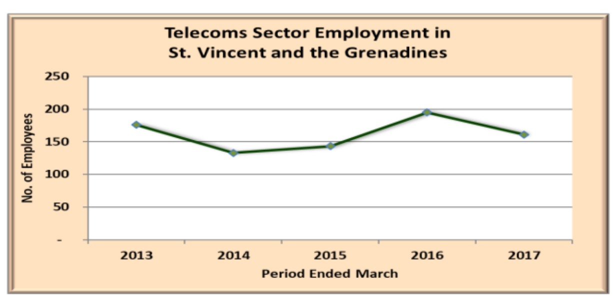


Source: ECTEL/operators

6.3 DIRECT EMPLOYMENT

The total number of full-time employees of telecommunications operators in St. Vincent and the Grenadines was 17 per cent lower at 161 at March 2017 (Figure 6.3). Although employment in the sector has fluctuated in the past five years, this contraction represents a reversal of the 36 per cent gain made in 2016.

Figure 6.3: Telecoms sector employment in St. Vincent and the Grenadines



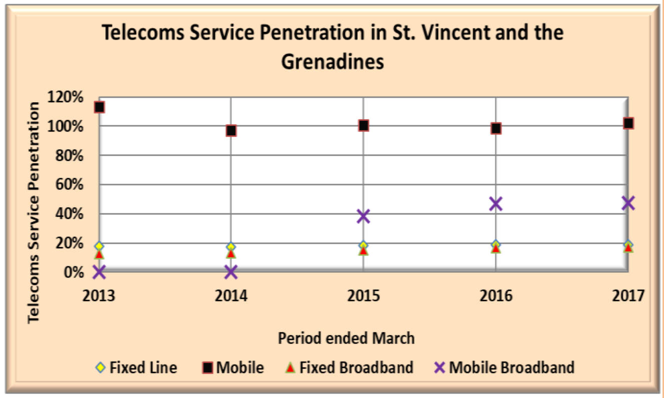
Source: ECTEL/operators

6.4 TELECOMS SERVICE PENETRATION

During the period under review:

- Fixed broadband penetration increased by one percentage point to 18 per cent from 17 percent in the previous reporting period (Figure 6.4).
- Mobile broadband penetration was recorded at 48 per cent.
- Mobile penetration was recorded at 102 per cent, three percentage points higher than in 2016.
- Fixed voice penetration remained the same at 19 per cent.

Figure 6.4: Telecoms Service Penetration in St. Vincent and the Grenadines

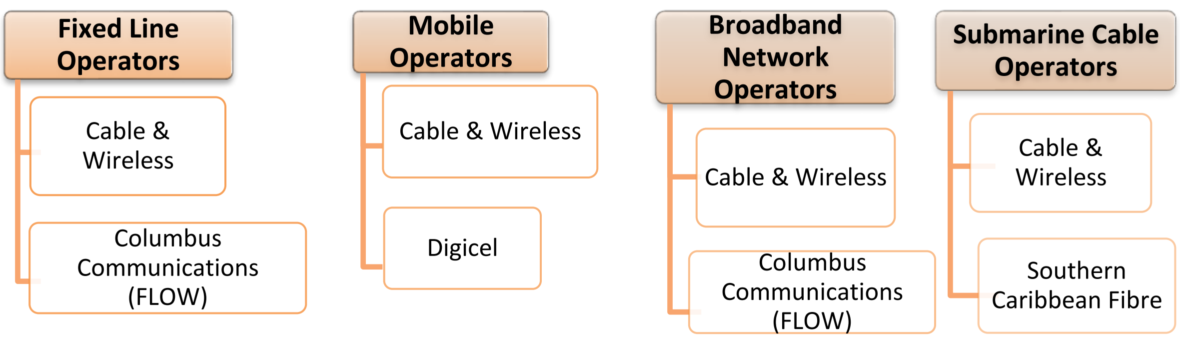


Source: ECTEL/operators

6.5 ACTIVE SERVICE PROVIDERS

In 2016, the number of Subscriber TV operators in St. Vincent and the Grenadines increased to two (2) with the launch of Direct TV services by Silvakast (Figure 6.5). The composition of the electronic communications market however remained relatively similar in 2017 with no changes in the number of active players.

Figure 6.5: Active Service Providers in St. Vincent and the Grenadines



Source: ECTEL/operators

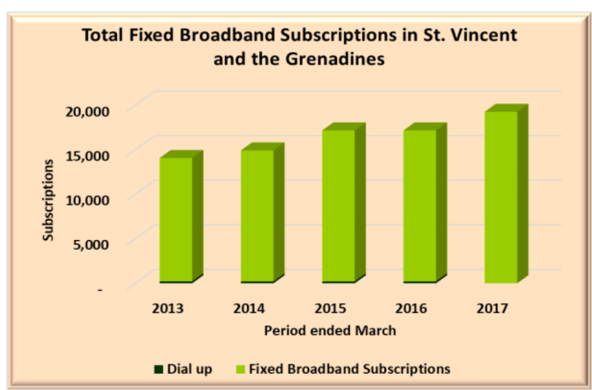
6.6 INTERNET AND BROADBAND

6.6.1 Fixed Broadband Services

For the period under review, the number of fixed broadband connections increased by 5 per cent to over 19,000 subscriptions (Figure 6.6). Paralleling this growth was a 46 per cent increase in the uptake of cable modem broadband services while ADSL broadband service remained on a downward trajectory. A rise in the uptake of broadband service with speeds greater than 10 Mbps was also observed in the review period.

In general, fixed broadband subscriptions have been on the rise in the past five years. At March 2017, entry level fixed broadband packages were available at a price of XCD99.00 per month.

Figure 6.6: Fixed Broadband Services in St. Vincent and the Grenadines

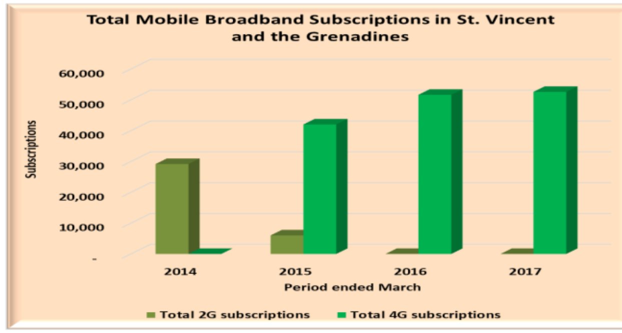


Source: ECTEL/operators

6.6.2 Mobile Broadband Services

At March 2017, there were 53,000 mobile broadband subscriptions in St. Vincent and the Grenadines, 2 per cent more than in the previous period (Figure 6.7). Ninety per cent of these connections were prepaid subscriptions. Ten per cent of mobile broadband subscribers had a postpaid plan.

Figure 6.7: Mobile Broadband Services in St. Vincent and the Grenadines



Source: ECTEL/operators

6.7 MOBILE VOICE SERVICES

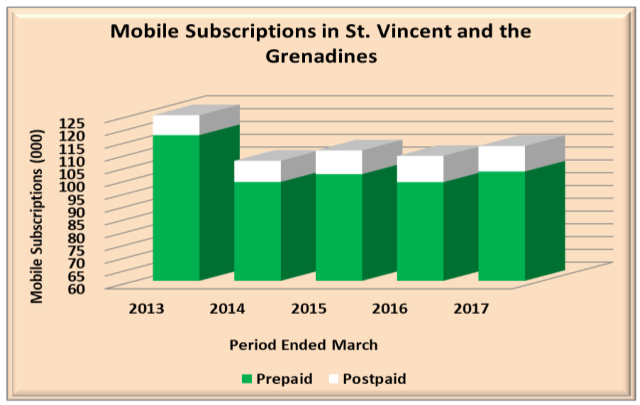
6.7.1 Mobile Voice Subscriptions

At March 2017, subscriptions to mobile voice services totaled 113,000, up by 4 per cent from the previous period (Figure 6.8).

Of the 113,000 subscriptions, more than 90 per cent were prepaid. Prepaid mobile voice subscriptions have varied over the past five years but was 4 per cent higher at March 2017.

Mitigating the overall growth was a 3 per cent decline in postpaid voice subscriptions. This decline tempered the otherwise positive performance of postpaid subscriptions in the past five years.

Figure 6.8: Mobile Voice Subscriptions in St. Vincent and the Grenadines



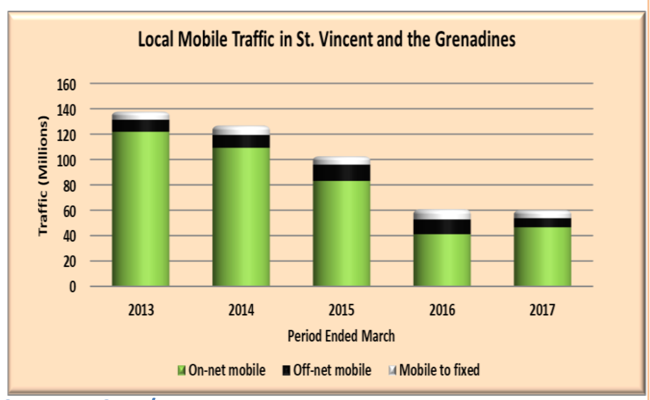
Source: ECTEL/operators

6.7.2 Mobile Traffic Volumes

Local mobile traffic declined by 28 per cent to 60 million minutes at March 2017 (Figure 6.9). This resulted from significant drops in both on-net (28 per cent) and off-net (48 per cent) traffic volumes.

International outgoing minutes from mobile networks fell by 2 per cent to 8 million minutes. This represents the fifth year of decline in mobile originated international outgoing calls.

Figure 6.9: Telecoms sector employment in St. Vincent and the Grenadines



Source: ECTEL/operators

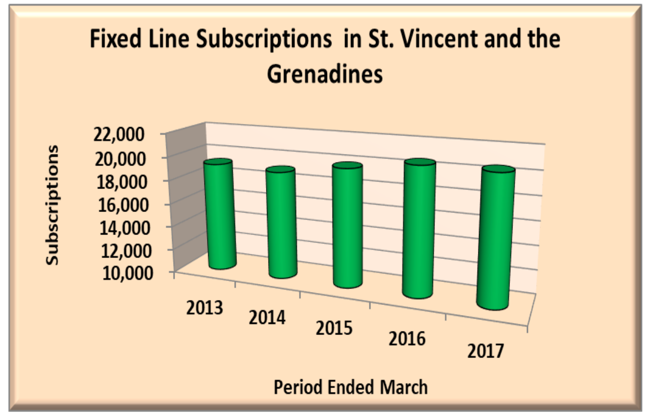
6.8 FIXED VOICE SERVICES

6.8.1 Fixed Voice Subscriptions

Total subscriptions to fixed voice services in St. Vincent and the Grenadines remained unchanged at approximately 21,000 at March 2017 (Figure 6.10).

Subscriptions to both residential and business fixed voice services were also broadly unaltered during the review period. The ratio of residential to business fixed line subscriptions has however changed to 8:2 from 2016.

Figure6.10: Fixed Voice Subscriptions in ECTEL Member States



Source: ECTEL/operators

6.8.2 Fixed Traffic Volumes

The contraction in local fixed traffic volumes persisted for the fifth consecutive year, recording a 2 per cent decrease to approximately 21 million minutes at March 2017 (Table 6.1). Subscribers used an average of 87 minutes during this period.

The slowdown was mainly attributable to a 14 per cent reduction in on-net calling volumes. The fall was however tempered by a 28 per cent increase in off-net calling volume.

Forty per cent of all international outgoing calls originated from the fixed network. Despite a 24 per cent increase in 2016, an estimated 5 million or 2 per cent less international incoming calls were terminated on the fixed network during the period under review.

Table 6.1: Fixed Traffic Volumes in St Vincent and the Grenadines

Fixed Traffic Volume in Grenada (million minutes)

	2013	2014	2015	2016	2017
Fixed to Fixed	27	25	20	16	14
Fixed to Mobile	6	6	6	6	8
Fixed to International	8	4	4	5	5

Source: ECTEL/operators

6.9 SUBSCRIBER TELEVISION

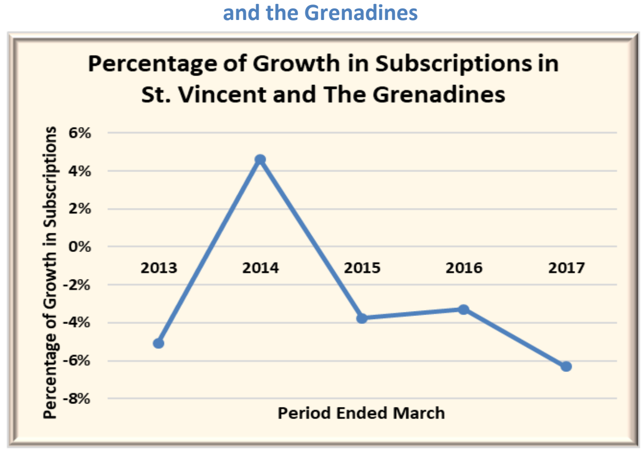
6.9.1 Subscriber Television

The number of subscriber TV operators in St. Vincent and the Grenadines increased to two (2) with the launch of Direct TV services by Silvakast in 2016 (Figure 6.11).

Even so ~~A~~ at March 2017, the number of cable TV subscription decreased by 6 per cent. This resulted predominantly from a 59 per cent decline in Digital TV subscriptions.

There has been a noticeable shift from digital TV subscriptions to IPTV subscriptions in the past two years.

Figure 6.11: Basic Subscriber Television Packages in St. Vincent and the Grenadines



Source: ECTEL/operators

7 Notes and Statistical Tables

1. All figures have been rounded to the nearest million, thousand, and whole number or to the second decimal place.
   - -- denotes 'nil'
   - 0.0 denotes 'negligible'
   - n.a. denotes 'not available'
   - ** denotes 'not applicable'

   All dollar amounts are in Eastern Caribbean dollars (EC$). Where it was necessary to convert from another currency to Eastern Caribbean dollars the following exchange rates were used:
   US$1 = EC$2.70

   The telecommunications statistics in this report are subject to revision from time to time to ensure accuracy. Some data in this report was restated from previous Sector Reviews to reflect updated information.

2. Telecommunications revenues are the revenues received from providing mobile cellular, fixed broadband, subscriber TV and fixed voice and other telecommunications services.

3. Fixed line penetration is obtained by dividing the number of fixed line subscriptions by the population and multiplying by 100.

4. Mobile penetration is obtained by dividing the number of cellular subscriptions by the population and multiplying by 100.

5. Fixed broadband penetration is obtained by dividing the number of fixed broadband subscriptions by the population and multiplying by 100.

6. Mobile broadband penetration is obtained by dividing the number of mobile broadband subscriptions by the population and multiplying by 100.

7. Outgoing international traffic is the total telephone traffic measured in minutes that originated from a fixed or mobile phone in the specified state with a destination outside the state.

8. Residential fixed line access charge is the recurring fixed charge for subscribing to a fixed line service.

9. Telecommunications investment is the expenditure associated with acquiring ownership of plant and property used for telecommunications services and includes land and buildings.

10. Employment refers to the total number of staff employed by a telecommunications provider. This does not include sub-contract staff.

11. The data for populations are the mid-year estimates from the Eastern Caribbean Central Bank (ECCB).

12. Gross Domestic Product (GDP), Gross National Income (GNI) and other economic indicators are from the National Accounts and Economic and Financial Review reports produced by the Eastern Caribbean Central Bank.

13. Rates for services were obtained from company websites and are vat inclusive and peak rates except where stated otherwise.

8 Statistical Tables

Selected telecommunications indicators – All ECTEL Member States

	2013	2014	2015	2016	2017
Provider Revenues (EC$M)	$788	$781	$780	$802	$723
Investment (EC$M)	$90	$124	$155	$104	$99
Employment	1,202	938	945	1,006	857
Fixed line Penetration	22.9%	22.7%	22.9%	22.5%	21.6%
Mobile penetration	128.2%	109%	111.7%	108.6%	107.1%
Fixed broadband penetration	13.5%	14.7%	16.6%	19.3%	20.5%
Mobile broadband penetration	0.2%	7.4%	40.2%	44.6%	45.5%
Local fixed traffic (million minutes)	471	430	395	376	306
Local mobile traffic (million minutes)	762	662	596	497	449
International incoming traffic (million minutes)	204	177	188	61	N/A
International outgoing traffic (million minutes)	103	96	82	83	72

Source: ECTEL/operators

Selected telecommunications indicators - Dominica

	2013	2014	2015	2016	2017
Provider Revenues (EC$M)	$106	$105	$108	$122	$100
Investment (EC$M)	$13	$14	$46	$13	$16
Employment	213	153	160	178	155
Fixed line penetration	21%	24%	22%	22%	18%
Mobile penetration	148%	107%	112%	108%	105%
Fixed broadband penetration	15.0%	15.6%	21.9%	23.3%	21.4%
Mobile broadband penetration	0.0%	0.0%	44.3%	41.9%	41.3%
Local fixed traffic (million minutes)	23	21	16	14	13
Local mobile traffic (million minutes)	182	178	158	103	94
International incoming traffic (million minutes)	33	25	22	18	9
International outgoing traffic (million minutes)	14	17	13	14	11

Source: ECTEL/operators

Selected telecommunications indicators - Grenada

	2013	2014	2015	2016	2017
Provider Revenues (EC$M)	$173	$177	$177	$174	$150
Investment (EC$M)	$18	$24	$29	$18	$20
Employment	239	163	163	189	141
Fixed line penetration	27%	25%	25%	24%	23%
Mobile penetration	120%	108%	110%	108%	102%
Fixed broadband penetration	5.2%	6.3%	6.9%	18.4%	23.0%
Mobile broadband penetration	0.9%	1.7%	28.1%	32.3%	32.8%
Local fixed traffic (million minutes)	228	197	172	166	120
Local mobile traffic (million minutes)	183	143	141	126	116
International incoming traffic (million minutes)	77	65	64	9	8
International outgoing traffic (million minutes)	26	23	16	16	14

Source: ECTEL/operators

Selected telecommunications indicators – St. Kitts and Nevis

	2013	2014	2015	2016	2017
Provider Revenues (EC$M)	$122	$127	$134	$140	$133
Investment (EC$M)	$19	$9	$25	$27	$14
Employment	149	128	125	133	136
Fixed line penetration	40%	41%	41%	36%	36%
Mobile penetration	163%	137%	152%	159%	159%
Fixed broadband penetration	28.0%	29.3%	34.1%	29.4%	29.7%
Mobile broadband penetration	0.0%	46.1%	82.1%	89.4%	75.0%
Local fixed traffic (million minutes)	44	45	45	43	21
Local mobile traffic (million minutes)	43	44	44	42	35
International incoming traffic (million minutes)	19	18	18	7	N/A
International outgoing traffic (million minutes)	25	25	24	19	19

Source: ECTEL/operators

Selected telecommunications indicators – Saint Lucia

	2013	2014	2015	2016	2017
Provider Revenue (EC$M)	$247	$238	$223	$233	$215
Investment (EC$M)	$23	$49	$30	$28	$31
Employment	425	361	354	311	264
Fixed line penetration	20%	19%	20%	20%	20%
Mobile penetration	125%	110%	109%	101%	100%
Fixed broadband penetration	14.6%	16.5%	16.5%	17.1%	18.1%
Mobile broadband penetration	0.0%	8.1%	36.0%	39.6%	45.8%
Local fixed traffic (million minutes)	143	137	135	131	131
Local mobile traffic (million minutes)	217	170	150	142	144
International incoming traffic (million minutes)	36	30	35	9	7
International outgoing traffic (million minutes)	25	25	24	19	19

Source: ECTEL/operators

Selected telecommunications indicators – St. Vincent and the Grenadines

	2013	2014	2015	2016	2017
Revenues (EC$M)	$140	$134	$140	$133	$125
Investment (EC$M)	$18	$28	$25	$17	$18
Employment	176	133	143	195	161
Fixed line penetration	17%	17%	18%	19%	19%
Mobile penetration	113%	97%	101%	99%	102%
Fixed broadband penetration	12.6%	13.4%	15.4%	16.7%	17.5%
Mobile broadband penetration	0.0%	0.0%	38.1%	46.8%	47.7%
Local fixed traffic (million minutes)	33	31	26	22	21
Local mobile traffic (million minutes)	138	127	103	83	60
International incoming traffic (million minutes)	39	40	49	17	N/A
International outgoing traffic (million minutes)	17	13	12	13	13

Source: ECTEL/operators

9 Individual Licensees in the ECTEL Member States

Table 8: Active Telecoms Service Operators in the ECTEL Member States at March 2017

Licence	Fixed Public Network	Public Mobile Telecoms	Broadband Network and Services	Subscriber TV	Submarine Cable
Dominica	Cable & Wireless Marpin 2K4 Ltd. SAT Telecommunications (Digicel Play)	Cable & Wireless Digicel	Cable & Wireless Marpin 2K4 Ltd. SAT Telecommunications (Digicel Play)	Marpin 2K4 Ltd. Digicel Play	Cable & Wireless Middle Caribbean Network
Grenada	Cable & Wireless Columbus Communications (FLOW)	Cable & Wireless Digicel Aislecom	Cable & Wireless Grencomm Columbus Communications (FLOW)	Columbus Communications (FLOW)	Cable & Wireless Southern Caribbean Fiber
St. Kitts and Nevis	Cable & Wireless The Cable Caribbean Cable Communications	Cable & Wireless UTS-CariGlobe Wireless Ventures (Digicel)	Cable & Wireless The Cable Caribbean Cable Communications	The Cable Caribbean Cable Communications	Cable & Wireless Southern Caribbean Fiber
Saint Lucia	Cable & Wireless Columbus Communications (FLOW)	Cable & Wireless Digicel	Cable & Wireless Columbus Communications (FLOW)	Cable & Wireless Columbus Communications (FLOW)	Cable & Wireless Antilles Crossing Southern Caribbean Fiber
St. Vincent and the Grenadines	Cable & Wireless Columbus Communications (FLOW)	Cable & Wireless Digicel	Cable & Wireless Columbus Communications (FLOW)	Cable & Wireless Columbus Communications (FLOW) SilverKast	Cable & Wireless Southern Caribbean Fiber

Source: ECTEL/NTRCs

EASTERN CARIBBEAN TELECOMMUNICATIONS AUTHORITY

ECTEL Mission Statement

"To provide transformative regulatory leadership which results in a competitive and innovative electronic communications sector."

The Eastern Caribbean Telecommunications Authority (ECTEL) was established on 04 May 2000 by Treaty signed in St. George's, Grenada, by the Governments of five Eastern Caribbean States — Commonwealth of Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines.

ECTEL is the regulatory body for telecommunications in its Member States. It is made up of three components - A Council of Ministers, a regional directorate and a National Telecommunications Regulatory Commission (NTRC) in each Member State.

The ***Council of Ministers*** is made up of the Ministers responsible for Telecommunications in the ECTEL states, and the Director General of the OECS as an ex-officio member. Responsibilities include giving directives to the Board of Directors on matters arising out of the Treaty and ensuring that the Board is responsive to the needs of the Member States in the implementation of telecommunications policy.

The ***Board of Directors*** comprises one member and an alternate from each Member State and the Managing Director of ECTEL as an ex-officio member. Responsibilities include making recommendations to the Council on any matter relating to telecommunications and establishing rules and procedures consistent with the Treaty for the management and operation of the ECTEL Directorate.

The NTRCs – National Telecommunications Regulatory Commissions – are the Telecommunications regulators at the national level in each Member State. They are responsible for the processing of applications and advising the Minister on the award of licences.

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