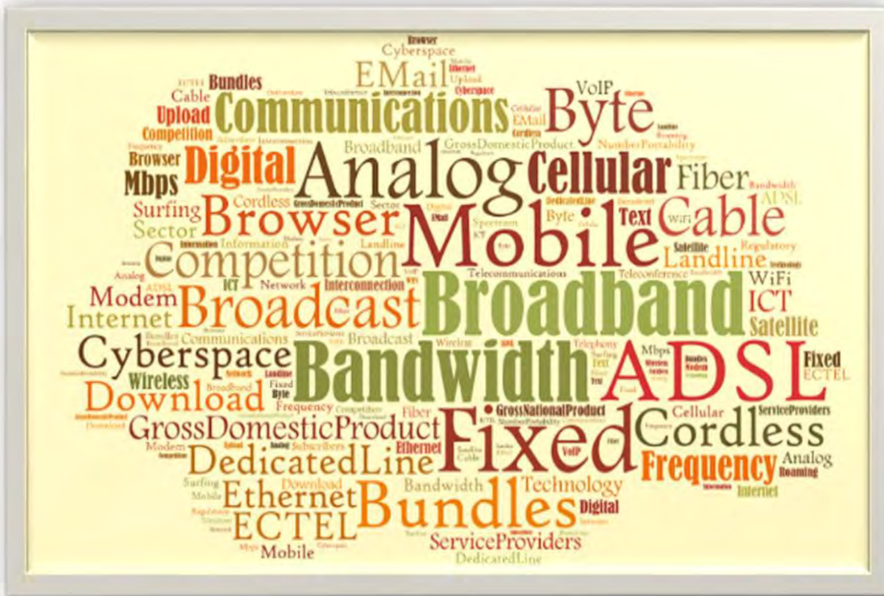
No. 10 2014 - 2015

ANNUAL ELECTRONIC COMMUNICATIONS SECTOR REVIEW



HIGHLIGHTS

- Sector investments exceeded $150 million
- Mobile broadband penetration reached 40%
- Fixed broadband penetration increased to 19%
- More than 1 billion local calling minutes recorded

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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Contact Information

Address:	ECTEL P. O. Box 1886 Vide Bouteille Castries Saint Lucia
Telephone:	(758) 458 1701/1702
Fax:	(758) 458 1698
Email:	ectel@ectel.int
Website:	www.ectel.int

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 2014 to March 2015, 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 May 31, 2016, 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	2011	2012	2013	2014	2015
Revenue (EC$M)	$805	$802	$777	$778	$779
Investment (EC$M)	$80	$83	$90	$121	$157
Employment	1,356	1,369	1,202	938	945
Fixed voice service penetration	24.6%	24.2%	23.1%	23.0%	24.5%
Mobile service[2] penetration	129.9%	131.3%	129.6%	110.1	112.7%
Fixed broadband penetration	14.6%	15.2%	16.3%	17.4%	19.2%
Mobile broadband penetration	-	-	0.2%	7.5%	40.6%
Local voice minutes (millions)	1,284	1,331	1,319	1,187	1066
International voice minutes (millions)	141	132	103	96	82

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 2015 are:

- **Sector investment exceeded $150 million:** For the second year running sector investment recorded double digit growth. Following the 35 per cent rise in the previous period, investment in the telecommunications sector surged a further 29 per cent to $157 million. This was again driven by infrastructure upgrades for the launch of 4G/HSPA+ mobile broadband series in the Member States.

- **Fixed broadband subscription growth accelerated:** The number of fixed broadband subscriptions rose 11 per cent to 97,000 resulting in a fixed broadband penetration rate of 19.2 per cent up from 17.2 per cent in the previous period.

- **4G/HSPA+ mobile broadband service available in all ECTEL Member States:** At the end of March 2015, mobile broadband via HSPA+ technology was finally available in all ECTEL Member States. As consumers in the Member States migrated from 2G to 4G service, the number the mobile broadband subscriptions grew by more than 400 per cent to 205, 000.

- **Call volumes from fixed and mobile networks fell 10 per cent:** Fixed originated local calling minutes fell 9 per cent to 497 million minutes and local calling minutes from mobile networks was 11 per cent less than in the previous period. Overall consumer generated just over 1 billion local calling minutes.

[2] Mobile services include voice and messaging.

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1 THE ELECTRONIC COMMUNICATIONS SECTOR – ECTEL MEMBER STATES

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OVERVIEW

Real economic activity was estimated to have expanded by 1.3 per cent across the Eastern Caribbean Currency Union in 2014. This was according to the Eastern Caribbean Central Bank (ECCB) in its 2014 Annual Economic and Financial Review. Overall GDP growth was spurred on by value added increases in a number of sectors including hotels and restaurants, agriculture and transport, storage and communications. Three out of the five ECTEL Member States experienced positive real economic growth while there were contractions in Saint Lucia and St. Vincent and the Grenadines.

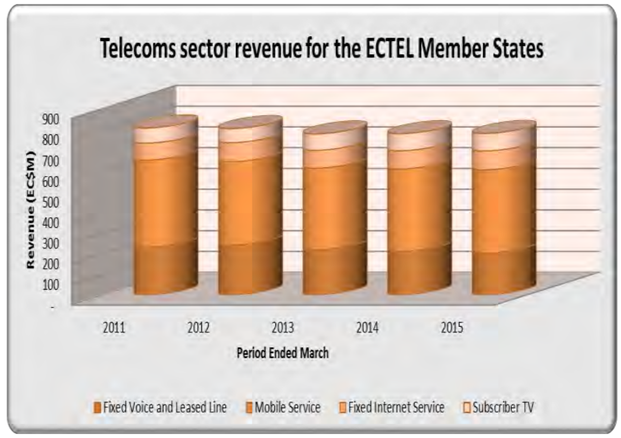
The telecommunicates sector in the ECTEL Member States recorded positive results and saw a significant 29 per cent increase in investment to just over $157 million. This represented a 20 per cent investment rate. This increase in investment was driven by the continued build out and upgrade of mobile networks as telecommunications service providers completed the launch of 4G/HSPA+ technology to support the provision of mobile broadband service across all the ECTEL Member States. In line with this service expansion, for the review period, mobile broadband subscriptions grew more than 400 per cent and overall penetration was recorded at 40 per cent.

Operator Reported Revenue

Telecoms services in the ECTEL Member States generated $779 million during the review period (figure 1.1). This was in line with sector revenue in the previous period. Total sector revenue remained unchanged as modest increases in revenue from fixed internet and subscriber TV services were offset by a decline in revenue from fixed telecoms services.

There was little change in the contribution of telecoms markets to overall sector revenue. Mobile services remained the main contributor with a 52 per cent share, while the contribution of fixed internet service to total revenue moved up 1 percentage point to 12 per cent.

Figure 1.1: Telecoms sector revenue in the ECTEL Member States



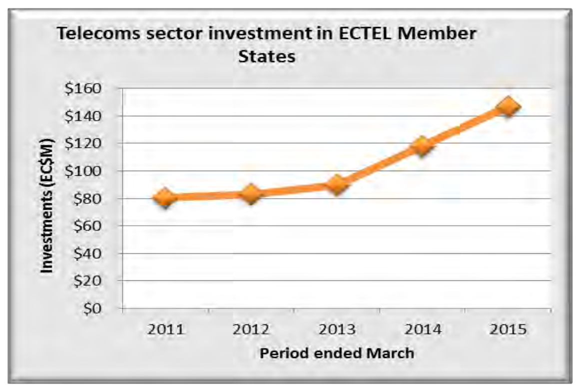
Source: ECTEL/operators

Investment

Telecommunication sector investments in the ECTEL Member States experienced significant growth for the second straight year. In the review period, spending reached just over $157 million, a 29 per cent rise over the previous period (figure 1.2). This resulted in a 4 percentage point increase in the investment rate to 20 per cent.

The overall rise in investment was driven by significant investments in Dominica and St. Kitts and Nevis as operators continued the upgrades to mobile 4G/HSPA+ networks as well as upgrades to fixed broadband networks to support faster speeds.

Figure 1.2: Telecoms sector investment in the ECTEL Member States



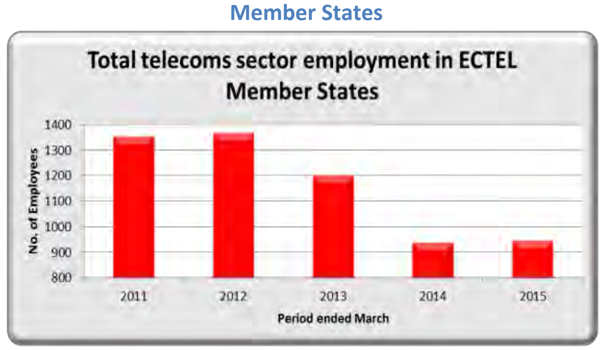
Source: ECTEL/operators

Direct Employment

Following 22 per cent contraction in the number of persons employed full time in the telecoms sector, there was a 1 per cent increase in sector employment (figure 1.3).

At March 2015, there were 945 persons employed by telecoms operators. This increase in sector employment was driven by growth in sector employment in Dominica and St. Vincent and the Grenadines.

Figure 1.3: Telecoms sector employment in the ECTEL Member States



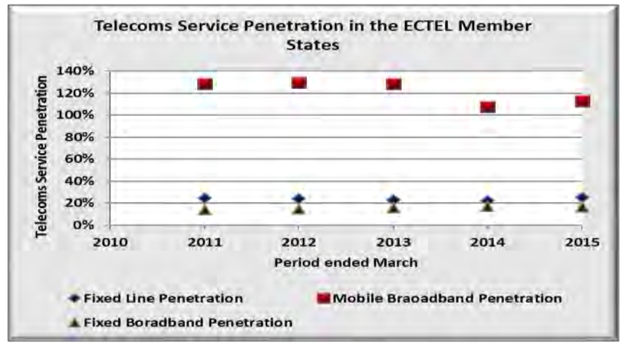
Source: ECTEL/operators

Telecoms Service Penetration

During the review period:

- Fixed broadband penetration moved up 180 basis points to 19.2 per cent (Figure 1.4).
- Mobile penetration rebounded from the dramatic decline in the previous period to 1.12 subscriptions per inhabitant.
- The number of fixed lines in service was up by just 1.3 per cent and fixed line penetration remained flat at 23 per cent.
- Mobile broadband service was available across all member States and mobile broadband penetration was recorded at 40 per cent.

Figure 1.4: Telecoms service penetration in the ECTEL Member States



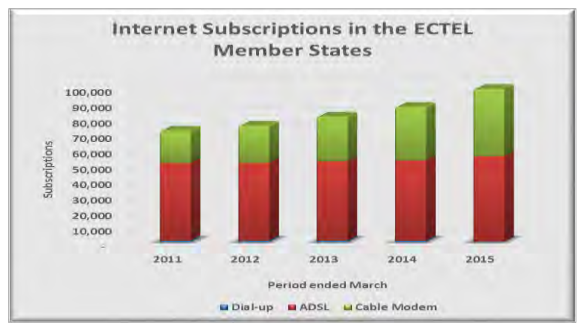
Source: ECTEL/operators

INTERNET AND BROADBAND SERVICES

Fixed Broadband Internet Service

By the end of March 2015 there were 97,000 fixed internet subscriptions representing an 11 per cent increase over 2014 (figure 1.5). Of this 0.03 per cent were dial-up. Cable broadband lines rose 20% while ADSL recorded a 6 per cent increase. To date less than 1 per cent of broadband connections are fibre-based. ADSL (57 per cent) and cable modem (42 per cent) remain the prevailing broadband technologies in the Member State. Across the Member States, entry level broadband speed is currently 2mbps that is expected to increase in the near future as providers introduce superfast broadband service

Figure 1.5: Fixed internet subscriptions in the ECTEL Member States



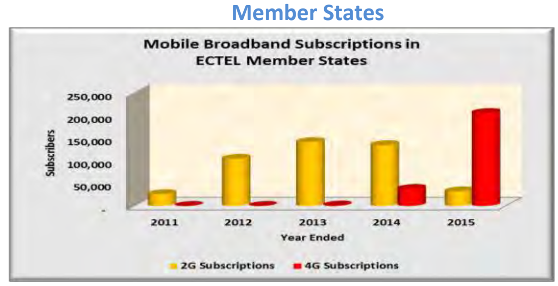
Source: ECTEL/operators

Mobile Broadband Internet Service

Mobile broadband via 4G/HSPA+ was finally available in all ECTEL Member States by March 2015. The total number of mobile data connections increased 38 per cent to 238,000 (figure 1.6). Of these an estimated 86 per cent (205,000) were mobile broadband connections. Mobile data handsets accounted for the majority of mobile broadband connections.

During the review period mobile broadband subscriptions expanded by more than 400 per cent as customers migrated from 2G to 4G mobile service as well as new customers taking up the service due to growing smartphone uptake. Eighty-six per cent of mobile broadband connections are prepaid subscriptions.

Figure 1.6: Mobile internet subscriptions in the ECTEL Member States



Source: ECTEL/operators

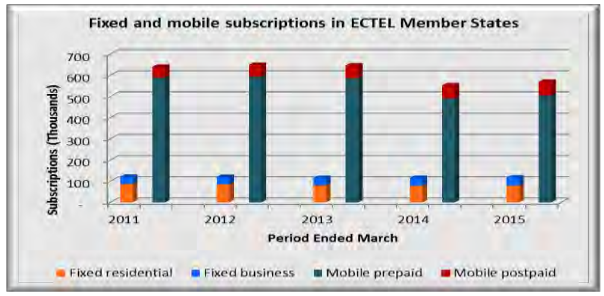
VOICE SERVICES

Subscriptions

There has been little change in the number of fixed lines in service in the ECTEL Member States during the review period. At March 2015 there were 116, 000 fixed lines, roughly 1,000 more than in the previous period. Sixty-eight percent were business lines (figure 1.7).

At March 2015 there were 569,000 mobile subscriptions, 3 per cent more than in the previous period. Both prepaid and postpaid subscriptions recorded increases over the previous period.

Figure 1.7: Fixed and mobile subscriptions in the ECTEL Member States



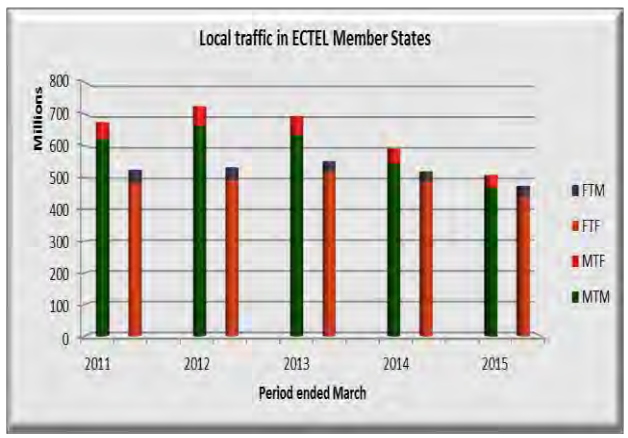
Source: ECTEL/operators

Network Traffic

Total local call volumes fell 10 per cent during the review period compared to 6 per cent previously:

- Total fixed and mobile originated local call volumes fell to 1.07 billion minutes (figure 1.8).
- Local calling from a mobile phone generated 11 per cent less traffic, this contraction was slower than the 13 per cent recorded previously.
- Fixed originated traffic declined 9 per cent to 479 million minutes or 342 minutes per subscription per month.
- The proportion of local calling minutes that were mobile originated was 55 per cent down from 56 per cent in the prior period.

Figure 1.8: Local traffic in the ECTEL Member States



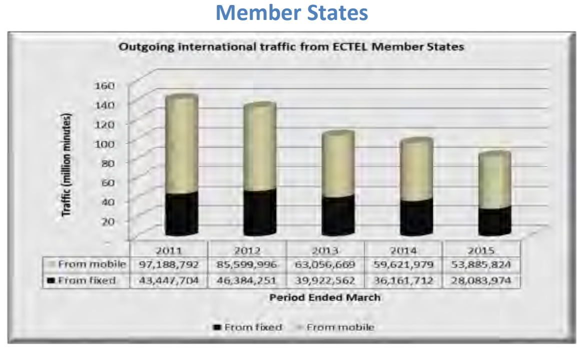
Source: ECTEL/operators

International Outgoing Traffic

At March 2015 consumer had generated 14 per cent less international outgoing traffic than in the previous period (figure 1.9). Of the 82 million outgoing international minutes from the ECTEL Member States 66 per cent was mobile network originated.

Overall decrease in international outgoing calling volumes was driven by a 22 per cent contraction in traffic originated from fixed networks. Mobile originated network declined at a slightly slower rate of 10 per cent.

Figure 1.9: Outgoing international traffic from ECTEL Member States



Source: ECTEL/operators

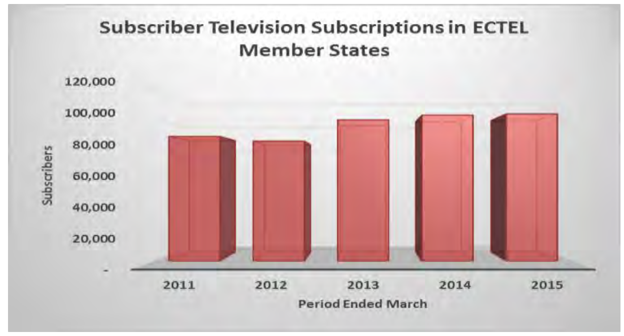
SUBSCRIBER TELEVISION

Subscriber Television

For the period under review, the total number of connections to subscriber TV in the ECTEL Member States grew by 1 per cent to an estimated 103,000 (figure 1.10). This was a slower rate of growth that the 3 per cent recorded in the previous period.

Subscriber TV operators offer both digital and analogue cable TV service; to date only one operator has indicated that its service was 100 per cent digital. During the review period, pay TV via IPTV, was not available in the ECTEL Member States.

Figure 1.10: Subscriber Television Subscriptions in ECTEL Member States



Source: ECTEL/operators

2 THE ELECTRONIC COMMUNICATIONS SECTOR DOMINICA

OVERVIEW

Preliminary estimates from the ECCB indicated that the economy of Dominica appeared to have strengthened in 2014. Real GDP is estimated to have risen to 3.7 per cent in 2014, up from 2.0 per cent in 2013. Underpinning this stronger performance was improvements in key sectors such as construction, fishing, wholesale and retail trade and hotels and restaurant. Despite the positive performance, declines were recorded in agriculture and transport, storage and communications sectors. Activity in the transport, storage and communications sector fell by 1.6 per cent with Communications adding 5.91 per cent to the economy, down from 6.18 in 2013.

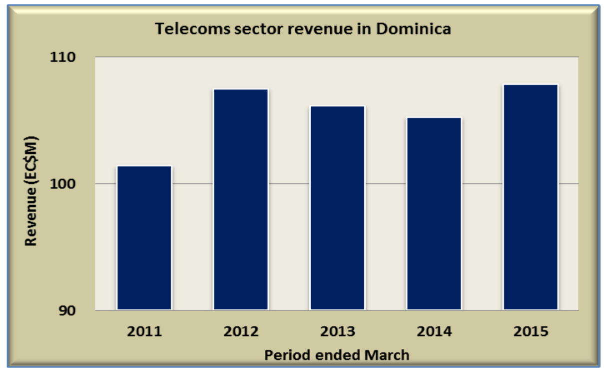
Reflecting the improvement in the wider economy, activity in the telecommunication sector also improved as evidenced by the 2 per cent rise in overall sector revenue for the period. In addition, sector investment rebounded and recorded a 10 year high of 234 per cent as investors completed the roll out of High Speed Broadband/4G and undertook regular maintenance of the existing network. Employment in the sector also increased by 5 per cent.

Operator Reported Revenue

Total revenues generated by the telecoms sector in Dominica rose by 2 percent to roughly $108 million or 8 per cent of GDP during the review period (figure 2.1). This resulted predominantly from an 8 per cent surge in revenues from subscriber TV and a 4 per cent increase in mobile service revenues. Revenues from fixed voice fell by 1 per cent. Sector revenue has recorded an average increase of 2 per cent over the past five years.

Mobile services continue to be the leading source of revenue contributing 49 per cent to total sector revenue, an increase of 1 percentage point over last year. Subscriber TV's contribution was up by 1 percentage point to 11 per cent, while the contribution of fixed internet services remained flat during the review period.

Figure 2.1: Telecoms sector revenue in Dominica

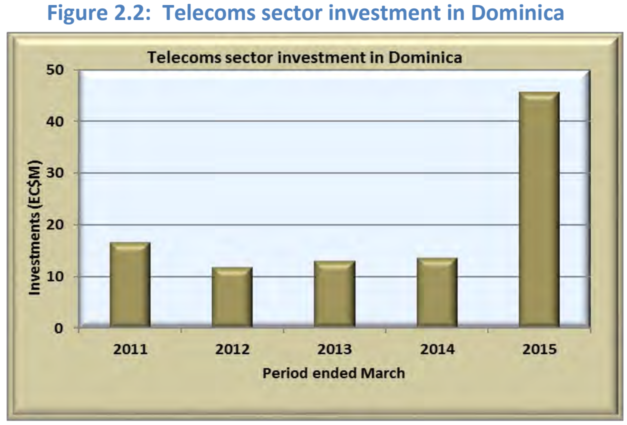


Source: ECTEL/operators

Investment

Despite the year-on-year fluctuation in the past four years, total investment reached a 10 year high of $45 million or 3 per cent of GDP during the review period (figure 2.2). This is in contrast to the 11 percent reduction seen in the previous period. Of the total amount, approximately 62 per cent was spent completing the deployment of an HFC network in support of high speed Broadband access. Telecom operators also spent $14 million to undertake upgrades and expansions to the mobile network to facilitate the rollout of 4G and for regular maintenance of the 2G network.

Figure 2.2: Telecoms sector investment in Dominica



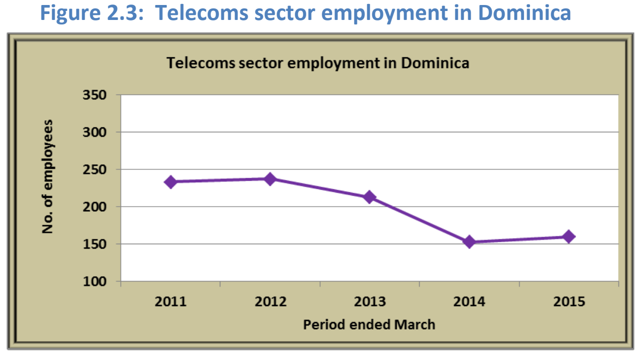
Source: ECTEL/operators

Direct Employment

At the end of March 2015, telecom operators employed 160 persons (figure 2.3). This was 5 per cent more than the number employed in the previous period.

Full time employment has however been on the decline over the past five years despite the surges seen in 2012 and 2015.

Figure 2.3: Telecoms sector employment in Dominica



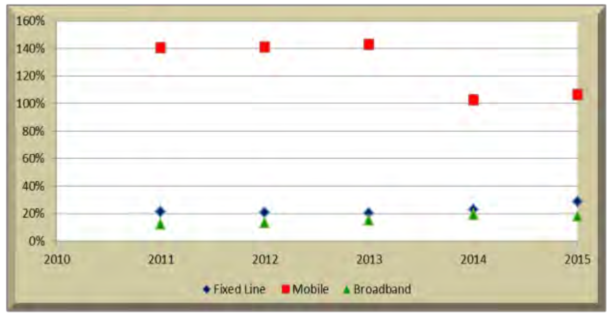
Source: ECTEL/operators

Telecoms Service Penetration

For the period under review:

- fixed broadband penetration moved up nearly 6 percentage points to a high of 21 per cent;
- fixed line recorded a 2 percentage point fall in penetration to 21 per cent (figure 2.4);
- the mobile penetration rate reached 107 per cent having experienced a growth of 4 percentage points; and
- Mobile broadband penetration was recorded at 42 per cent.

Figure 2.4: Telecoms service penetration in Dominica

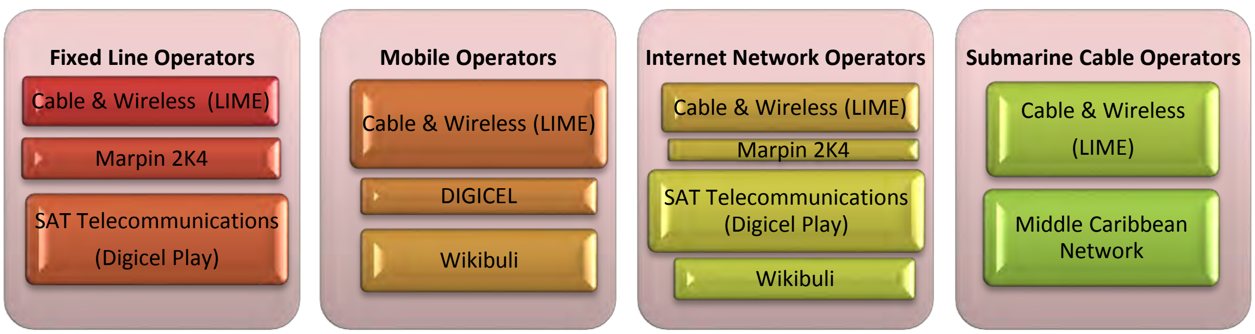


Source: ECTEL/operators

Active Service Providers

There were four active telecommunications service providers on Dominica during the period under review (figure 2.5). LIME continued to provide fixed line, mobile, internet and submarine cable services; Marpin 2K4 offers fixed line, internet and cable TV services; with the acquisition of SAT Telecommunications and Middle Caribbean Network Digicel now offers all four services. New entrant Wikibuli offers mobile and fixed broadband service.

Figure 2.5: Telecoms Operators in Dominica



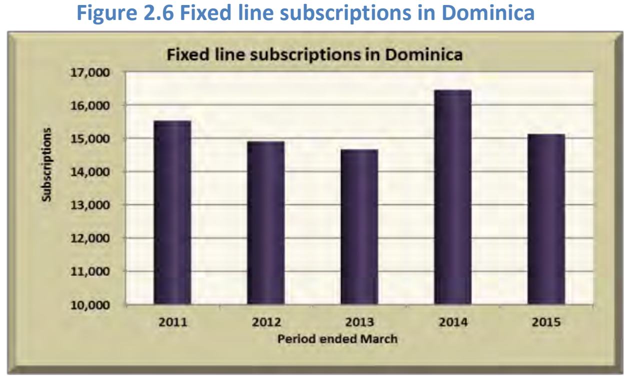
Source: ECTEL/NTRC

FIXED VOICE SERVICES

Subscriptions

A projected 15,123 fixed lines were in operation at the end of March 2015 (figure 2.6). This represents a decline of 8 per cent over the previous period. This continued the generally slow downward trend seen in fixed line subscriptions in past 5 years. The further contraction in subscriptions is attributed to reductions in the number of residential and business subscriptions. However, the fall in business subscriptions generally lags that of residential subscriptions.

Figure 2.6 Fixed line subscriptions in Dominica



Source: ECTEL/operators

Fixed Traffic Volumes

For the year ended March 2015, an estimated 16 million local calling minutes originated from the fixed network, a reduction of 23 per cent from the previous year (table 2.1). There was a continual decline in local fixed traffic volume from 2011 to 2015. Fixed to fixed calls dropped by 26 per cent, while local fixed to mobile calling experienced a 10 per cent decrease. Fixed to mobile calling have seen an average decline of 2 per cent from 2011 to 2015.

International outgoing calls from the fixed networks made up 36 per cent of total outgoing international calls, up from 25 per cent in the previous period. The increase in share resulted from an 8 per cent rise in outgoing international calls from the fixed network.

Table 2.1: Fixed traffic volume in Dominica

(million minutes)

	Fixed to Fixed	Fixed to Mobile	Fixed to International
2011	21	4	3.1
2012	19	4	2.8
2013	19	4	2.8
2014	16	4	4.2
2015	12	4	4.7

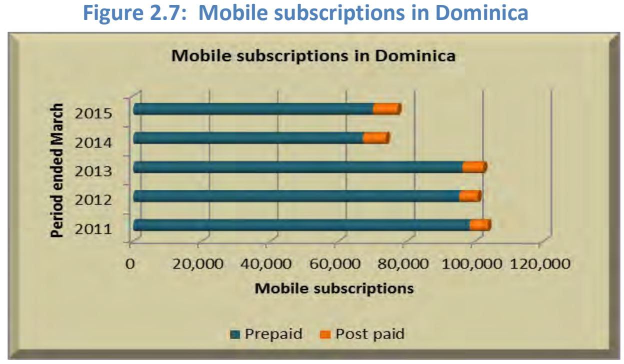
Source: ECTEL/operators

MOBILE VOICE SERVICES

Subscriptions

Subscriptions to mobile voice services grew by 5 per cent to 77,200 at the end of March 2015 (figure 2.7). Prepaid mobile voice subscriptions continue to constitute the majority of the mobile voice accounting for 91 per cent of total subscriptions. This category of subscriptions witnessed a growth of 4 per cent from the previous period. Postpaid subscriptions recorded a faster growth rate of 8 per cent and accounted for 9 per cent of total mobile subscriptions.

Figure 2.7: Mobile subscriptions in Dominica



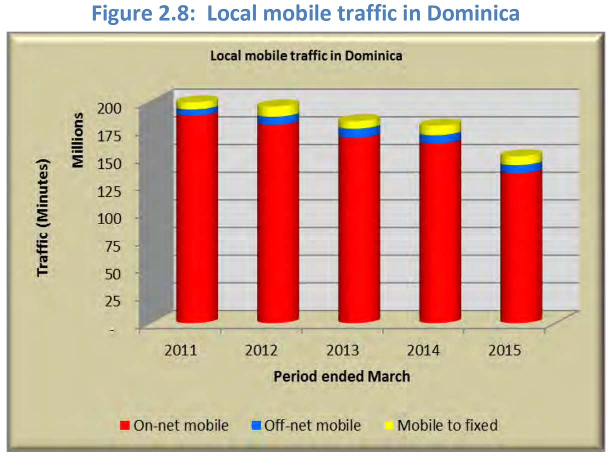
Source: ECTEL/operators

Mobile Traffic Volumes

Local mobile traffic volumes have recorded a notable decrease from 2011 to 2015. Down by 16 per cent from the previous period, mobile traffic volumes stood at approximately 151 million at March 2015, resulting from reductions in all categories of traffic (figure 2.8). Local mobile-to-mobile calling recorded the most significant decline, 16 per cent.

A 33 per cent decrease in mobile originated outgoing international minutes was recorded at March 2015 to 8 million minutes. Cumulatively, this category of international outgoing traffic has recorded a 53 decline over the past five years.

Figure 2.8: Local mobile traffic in Dominica



Source: ECTEL/operators

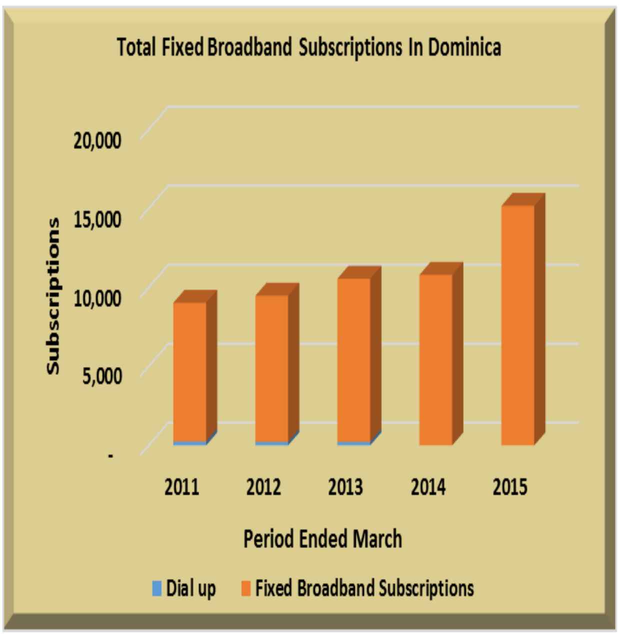
INTERNET AND BROADBAND

Fixed and Mobile Broadband Services

Fixed Broadband Services

At March 2015 there was an appreciable 40 per cent jump in total broadband subscriptions to more than 15,000 (figure 2.9). This was driven by the change of ownership and subsequent upgrade of one of the three broadband networks on the island. This considerable subscription growth resulted in a 6 percentage point rise in fixed broadband penetration rate to 21 per cent.

Figure 2.9: Fixed Broadband Subscriptions in Dominica

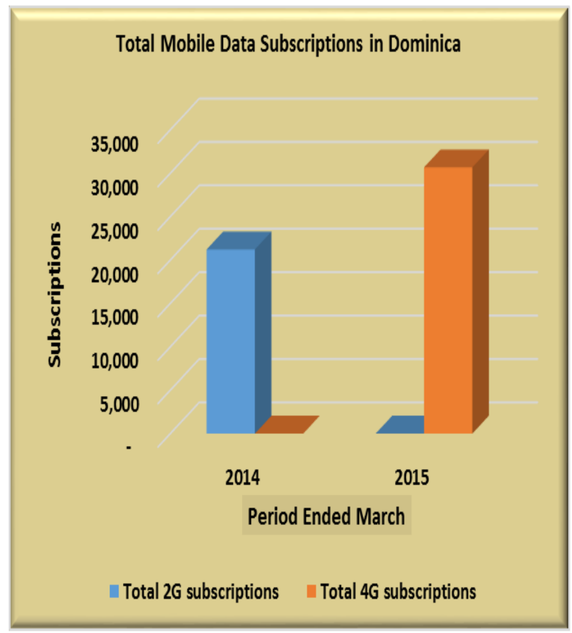


Source: ECTEL/operators

Mobile Broadband Services

During the review period, mobile broadband was available to customers in Dominica for the first time as both mobile operators launched HSPA+ service. There was a relatively rapid uptake of the service and at March 2015, mobile broadband penetration was estimated at 42 per cent (figure 2.10). The service is largely prepaid with only 10 per cent of subscriptions being postpaid.

Figure 2.10: Mobile Data Subscriptions in Dominica



Source: ECTEL/operators

SUBSCRIBER TELEVISION

Subscriber Television

In Dominica at the end of March 2015, subscriber TV is provided by two operators-Marpin 2K4 and Digicel Play (table 2.2). The market is relatively mature; market revenue for the provision of subscriber TV service was relatively flat even as operators reported a 3 per cent increase in subscriptions.

Table 2.2: Subscriber TV basic packages in Dominica

Operator	*Monthly Rate*	*Total channels*	*Local Channels*
Marpin 2K4	$50	52	2
Digicel Play	$20	11	3

Source: ECTEL/operators

3 THE ELECTRONIC COMMUNICATIONS SECTOR GRENADA

OVERVIEW

Economic activity in Grenada is estimated to have expanded by 6.48 per cent in 2014, following an upturn of 3.2 per cent in 2013. This expansion reflects strong growth in the agriculture and the hotel and restaurant sectors. Marginal growth was also experienced in the manufacturing, transport, storage and communications and the real estate sectors. The communications sub-component of the transport, storage and communications category recorded a gross value added of 5.8 per cent in 2014, a modest increase of 0.1 per cent from 2013.

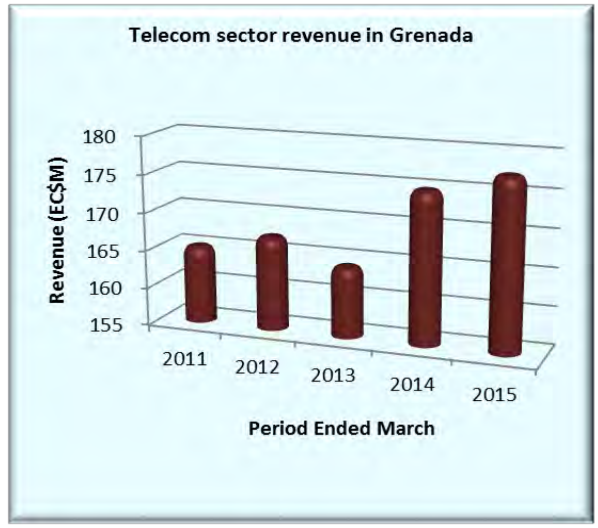
The performance of the telecommunications sector remained fairly steady from 2013. Revenue generated by telecoms operators rose by 1 per cent to 177 million while sector investment experienced a 21 per cent surge to 29 million. There were, however, no losses in full time employment.

Operator Reported Revenue

The Telecommunication Sector of Grenada generated an estimated $177 million or an equivalent of 7 per cent of GDP, an increase of 1 per cent relative to the previous year (figure 3.1). Mobile services accounted for the highest revenue share at 50 per cent, an increase of 2 percentage points over 2014. Fixed voice services contributed 29 per cent, a decrease of 2 percentage points. Fixed internet services and subscriber TV services made contributions of 10 and 11 per cent respectively.

For the review period, fixed internet services revenue recorded the fasted growth rate of 8 per cent, this was followed by a 7 per cent rise in revenue from mobile services. In contrast, fixed voice services and subscriber TV Services recorded decreases of 4 and 10 per cent respectively.

Figure 3.1: Telecoms sector revenue in Grenada

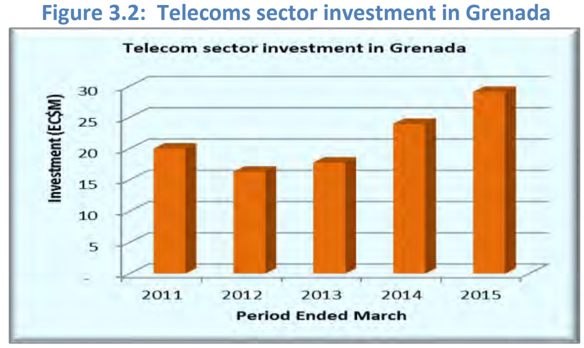


Source: ECTEL/operators

Investment

Investment in the telecommunications sector in Grenada has been on an upward trajectory in the past three years. After a 35 per cent increase in 2014, sector investment recorded a further 21 per cent increase and stood at 29 million or approximately 1 per cent of GDP during the period under review (figure 3.2). Of this, 91 per cent represented capital outlay by mobile operators to undertake upgrades to network infrastructure to support the launch of 4G/HSPA+ mobile broadband services.

Figure 3.2: Telecoms sector investment in Grenada



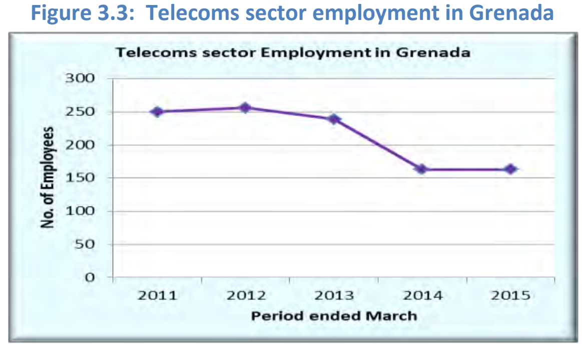
Source: ECTEL/operators

Direct Employment

Full time employment in the telecoms sector in Grenada recorded 3 years of consecutive decline from 2012 to 2014 (figure 3.3).

This trend has halted as for the period under review the number of persons employed full time in the sector remained unchanged over the previous period.

Figure 3.3: Telecoms sector employment in Grenada



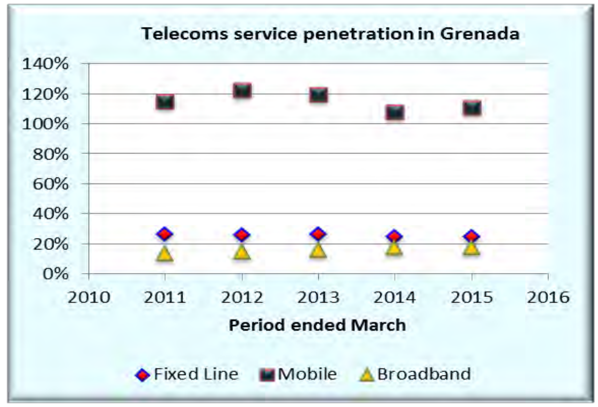
Source: ECTEL/operators

Telecoms Service Penetration

As at March 2015:

- Fixed internet penetration was recorded at 18 per cent, remaining flat over the previous period (figure 3.4). This follows a 1 percentage point increase in the previous period;
- Fixed voice penetration was also unchanged at 25 per cent;
- mobile penetration rose 2 percentage points and was recorded at 1.11 subscriptions per person in Grenada; and
- mobile broadband penetration was 26 percent.

Figure 3.4: Telecoms service penetration in Grenada

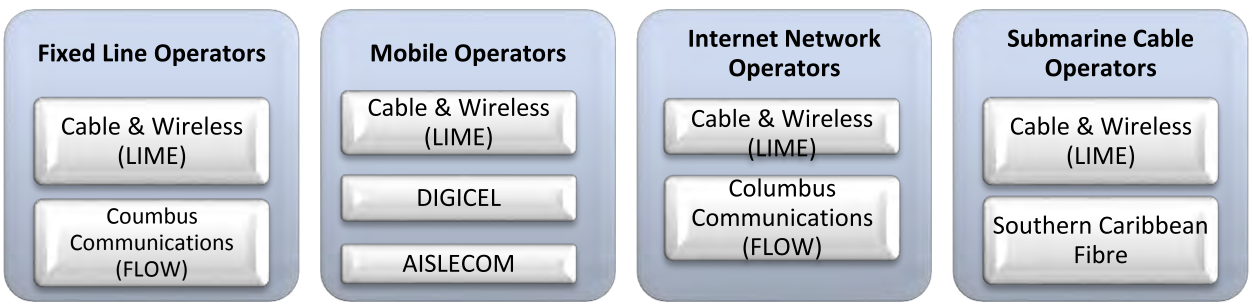


Source: ECTEL/operators

Active Services Providers

There was a significant change in the telecommunications sector during the review period. The parent companies of Cable & Wireless and Columbus Communications announced that they had merged. Even so, there were no immediate changes to the number of active operators in the sector at March 2015 (figure3.5).

Figure 3.5: Telecoms operators in Grenada



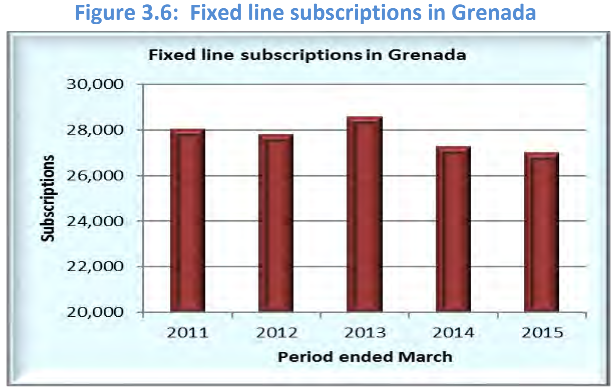
Source: ECTEL/NTRC

FIXED VOICE SERVICES

Subscriptions

Of the reported 27,000 fixed voice subscriptions, 76 per cent were residential subscriptions (figure 3.6). In the reporting period, the number of residential fixed voice subscriptions fell 1 per cent following a 10 per cent decline in the previous period. In contrast, fixed voice business subscriptions held firm after a nearly 20 percent rise in the prior period. Overall fixed line penetration was unchanged at 25 per cent.

Figure 3.6: Fixed line subscriptions in Grenada



Source: ECTEL/operators

Fixed Traffic Volumes

There were 180 million local fixed traffic minutes recorded at March 2015, a 12 per cent decline over the previous period (table 3.1). Local fixed traffic volumes have steadily contracted over the past 3 years. Average monthly usage per subscriber was 133 minutes, 13 per cent less than in the previous period.

Overall local fixed to fixed local traffic declined during the review period. Even so, on-net fixed to fixed calling retained its position as the largest contributor (92 per cent) to local fixed calling volumes. In contrast fixed to mobile call volumes were 4 per cent more than in the preceding period, continuing the trend of increases seen over the last 2 years.

International outgoing traffic from fixed lines accounted for 43 per cent of total outgoing international calls; an almost 19 per cent fall in market share from the previous period.

Table 3.1: Fixed traffic volume in Grenada

Fixed Traffic Volume in Grenada (million minutes)					
	2011	2012	2013	2014	2015
Fixed to Fixed	213	235	219	188	163
Fixed to Mobile	8	8	8	9	10
Fixed to International	7	10	14	14	7

Source: ECTEL/operators

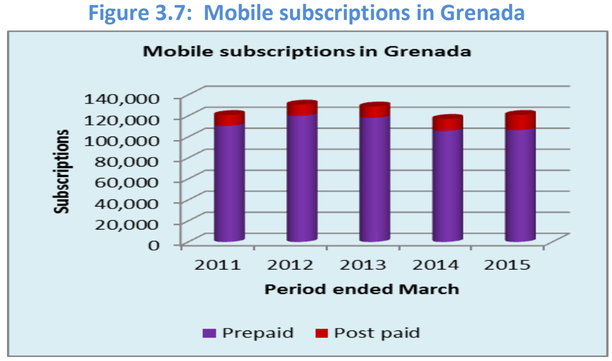
MOBILE VOICE SERVICES

Subscriptions

Mobile voice subscriptions totaled 112,000 at the end of March 2015, 2 per cent more than in the previous period (Figure 3.7). Prepaid subscriptions recorded a modest increase of per cent, and accounted for approximately 90 per cent of total subscriptions.

There was a slowdown in the growth of postpaid subscriptions, which registered a 1 per cent rise compared to the 5 per cent growth recorded in the previous period. Overall mobile penetration was up 2 percentage points to 110 per cent.

Figure 3.7: Mobile subscriptions in Grenada



Source: ECTEL/operators

Mobile Traffic Volumes

During the review period, total local mobile traffic contracted 3 per cent to approximately 139 million minutes (figure 3.8). Down by 3 per cent, on-net mobile traffic accounted for approximately 79 per cent of total local mobile traffic. Mobile to fixed traffic was estimated to have recorded a more dramatic 53 per cent reduction and accounted for 6 per cent of total mobile traffic.

Local calling minutes from mobile networks as a share of total local traffic saw a drop of 8 percentage points to 45 per cent. On the other hand, mobile originated outgoing international calling minutes increased by 5 per cent and accounted for 57 per cent of total international outgoing calling minutes.

Figure 3.8: Local mobile traffic in Grenada

Source: ECTEL/operators

INTERNET AND BROADBAND SERVICES

Fixed Internet Services

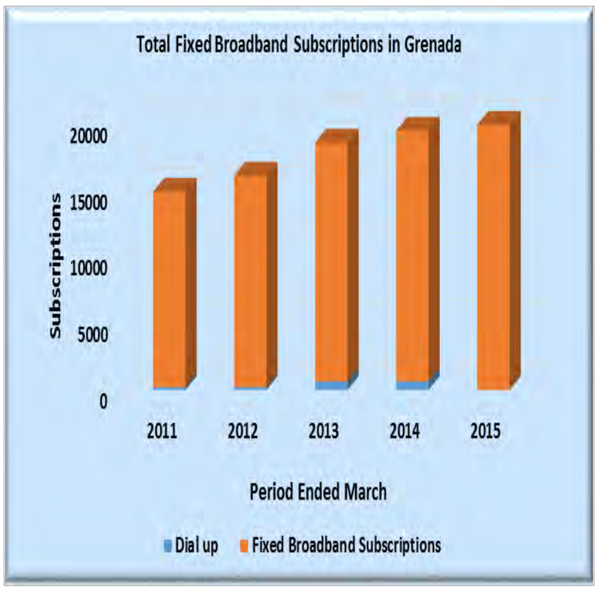
Fixed Broadband Services

It is estimated that fixed broadband connections in Grenada rose by 2 per cent to approximately 20,000 by the end of March 2015 (figure 3.9). This represented a slowdown in the rate of growth of fixed broadband subscriptions which increased 5 per cent in the previous period. The result of this modest increase in subscriptions was the fixed broadband penetration remained relatively flat at 18 per cent.

Mobile Broadband Services

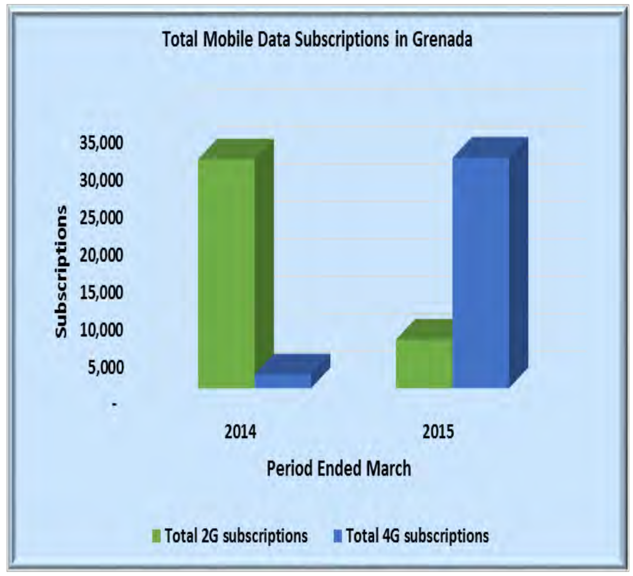
Mobile broadband via HSPA+ was launched in Grenada during the review period. Prior to this launch, mobile internet was available via EDGE and EVDO technology. At March 2015, mobile broadband penetration was estimated at 26 per cent (figure 3.10). Eighty-seven per cent of subscriptions were prepaid. Mobile broadband is largely available via handset based subscriptions.

Figure 3.9: Fixed Broadband Subscriptions in Grenada



Source: ECTEL/operators

Figure 3.10: Mobile Data Subscriptions in Grenada



Source: ECTEL/operators

SUBSCRIBER TELEVISION

Subscriber Television

The market for subscriber TV is relatively mature. A 3 per cent decrease in subscriptions was recorded during the review period (table 3.2). Digital subscriptions accounted for almost 94 per cent of all subscription, up from 75 per cent previously.

Table 3.2: Subscriber TV basic packages in Grenada

Operator		*Monthly Rate*	*Total Channels*	*Local Channels*
Columbus Communi-cations (FLOW	Analogue	$43.47	40	6
	Digital	$69.99	44	5

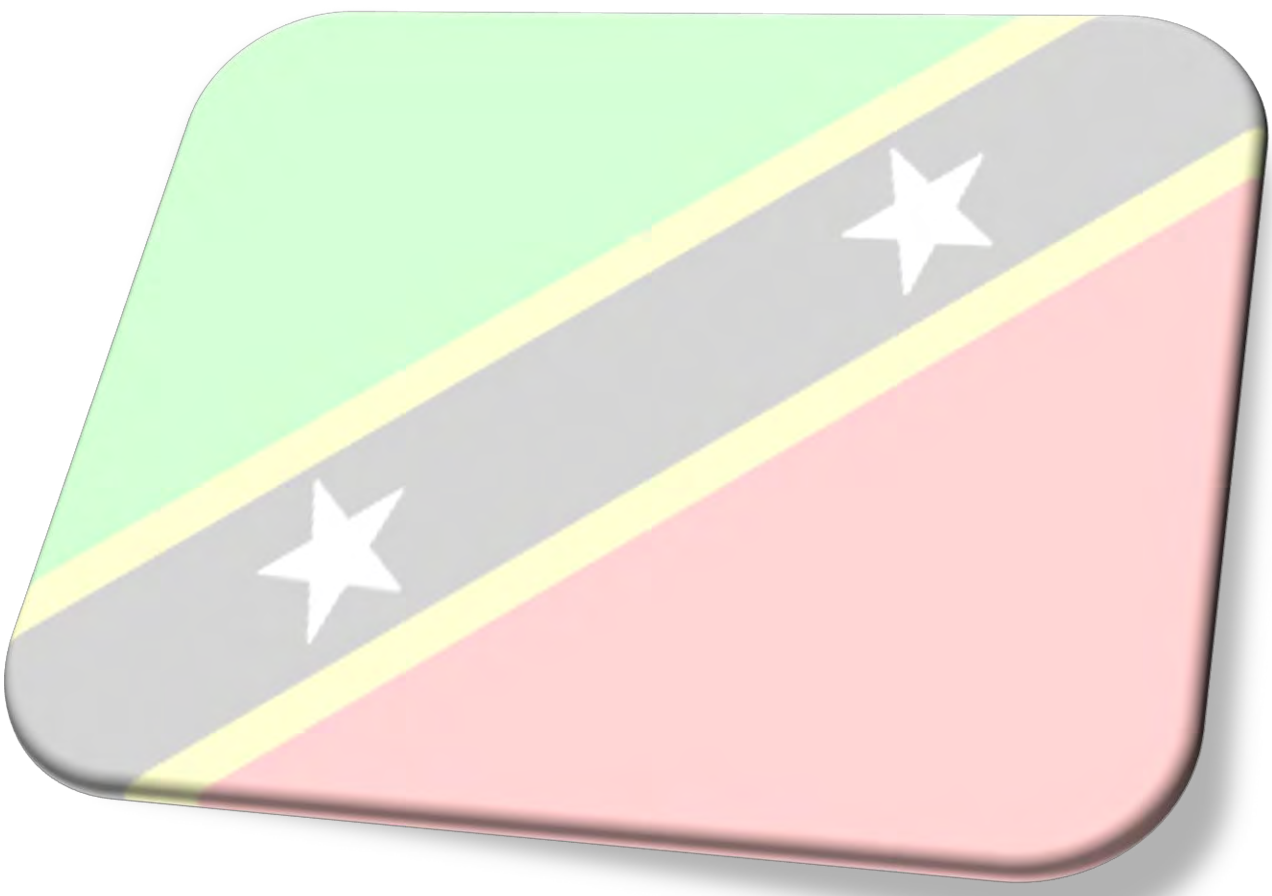
Source: ECTEL/operators

4 THE ELECTRONIC COMMUNICATIONS SECTOR ST. KITTS AND NEVIS

OVERVIEW

Preliminary estimates from the ECCB indicated that economic activity on St. Kitts and Nevis experienced a relative slowdown from 6.6 per cent in 2013 to 5.1 per cent in 2014. This slowdown in economy activity was largely due to declines in agriculture, manufacturing and the real estate sectors. Gains were made in the construction, hotel and restaurant as well as the transport, storage and communications sectors. However, the contribution of the communications sub component of the transport, storage and communications sector to overall economic activity fell recording a gross value added of 6.15 per cent in 2014, down from 6.27 per cent in 2013.

Notwithstanding the relative slowdown in economic activity, the performance of the telecommunications sector remained buoyant. Sector revenue rose by 6 per cent to 133 million and telecoms operators invested 313 per cent more than the previous year (26 million) to upgrade both the mobile and fixed networks. On the other hand, full time employment continued on its downward trajectory having fallen by 2 per cent in the review period.

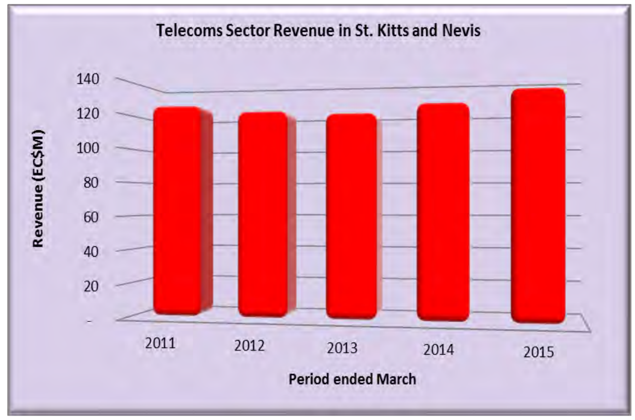


Operator Reported Revenue

At March 2015 operator reported revenues from the telecoms sector was$ 133 million, six per cent more that in the previous period (figure 4.1). This growth was driven by a 12 per cent rise in revenue from fixed broadband services; all segments of the sector recorded positive revenue growth.

Mobile services retained share leadership and contributed 49 per cent to sector revenue. The growth in fixed broadband revenue resulted in a one percentage point increase in revenue share to 15 per cent. Fixed voice maintained its contribution at 25 per cent which meant that subscriber TV lost one percentage point to record an 11 per cent revenue share.

Figure 4.1: Telecoms sector revenue in St. Kitts and Nevis



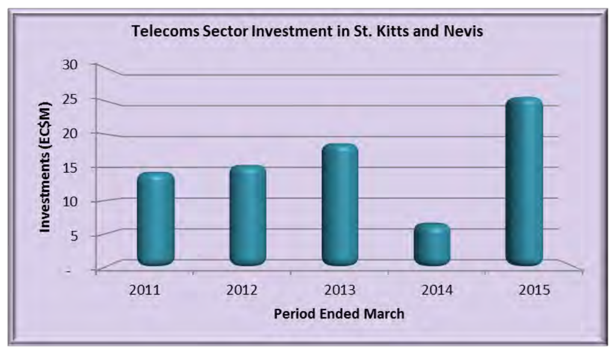
Source: ECTEL/operators

Investment

Following a 66 per cent decrease in investment in the prior period, telecom operators invested more than $26 million during the review period (figure 4.2). This was 313 per cent jump in sector investment. A majority of this investment was for the continued upgrade of the mobile network to provide mobile broadband service to customers.

Telecoms operators also invested in upgrading the fixed network infrastructure to support faster fixed broadband speeds.

Figure 4.2: Telecoms sector investment in St. Kitts and Nevis



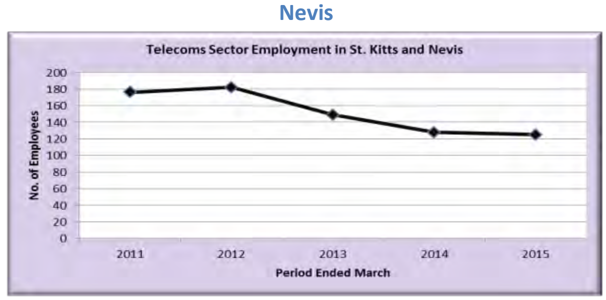
Source: ECTEL/operators

Direct Employment

The number person in full-time employment in the telecommunications sector on the Federation of St. Kitts and Nevis declined 2 per cent (figure 4.3). This decline was much slower than the 14 per cent recorded in the previous period.

There was also a 30 per cent reduction in part-time employees who represent 8 per cent of total direct sector employment.

Figure 4.3: Telecoms sector employment in St. Kitts and Nevis



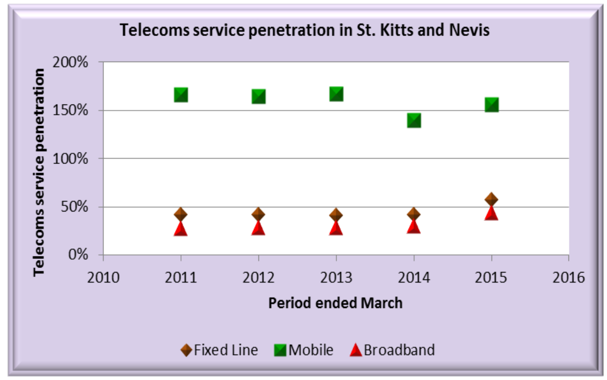
Source: ECTEL/operators

Telecoms Service Penetration

For the period under review:

- There was a 5 per cent surge in fixed broadband penetration to 35 per cent. This is the highest service penetration in the ECTEL Member States (figure 4.4).
- Mobile penetration rate rebounded to 156 per cent following a contraction in the previous period.
- Fixed voice penetration remained unchanged at 42 per cent.
- Mobile broadband penetration was recorded at 81 per cent.

Figure 4.4: Telecoms service penetration in St. Kitts and Nevis

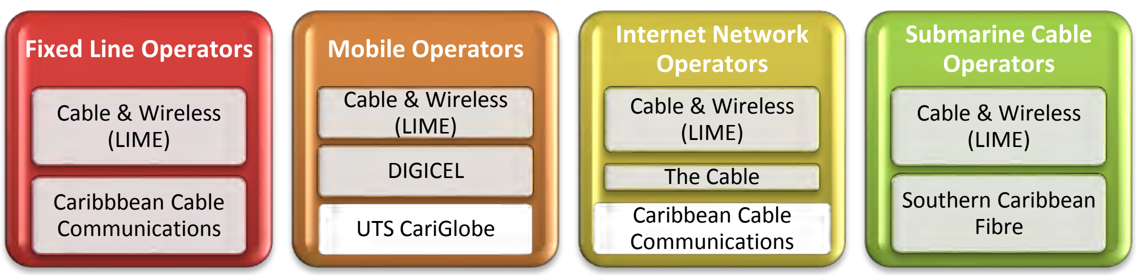


Source: ECTEL/operator

Active Services Providers

During the period under review, the number of licensees was unchanged but the number of active operators on St. Kitts and Nevis was reduced from six to four as Digicel acquired Caribbean Cable Communications and Southern Caribbean Fibre (figure 4.5).

Figure 4.5: Telecoms operators in St. Kitts and Nevis



Source: ECTEL/operators

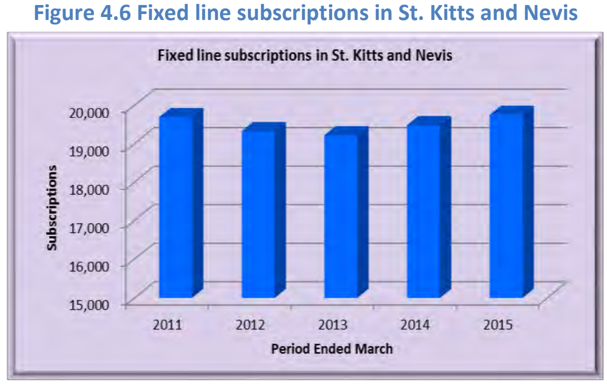
FIXED VOICE SERVICES

Subscriptions

There was a 1 per cent rise in the number of fixed line subscriptions in St. Kitts and Nevis during the review period. The total subscription was recorded at 19,700, roughly 300 more than in the previous year (figure 4.6).

This small increase follows a similar rise in fixed subscriptions in the previous period. The continued growth of fixed broadband subscription may contribute to this uptake in fixed line subscriptions.

Figure 4.6 Fixed line subscriptions in St. Kitts and Nevis



Source: ECTEL/operators

Fixed Traffic Volumes

Total number of local fixed calling minutes was 130 million, a 7 per cent drop from the previous period (table 4.1). On-net calling minutes represented 97 per cent of total local fixed traffic and contracted by 10 million minutes during the review period. In contrast, fixed to mobile traffic remained flat over the previous period.

International outgoing minutes from the fixed network fell a further 6 per cent during the review period to 7.5 million minutes. This was in line with the contraction experienced in the previous period. Forty-five per cent of all outgoing international minutes originated from the fixed network.

Table 4.1: Fixed traffic volume on St. Kitts and Nevis

Fixed Traffic Volume in St. Kitts & Nevis (million minutes)					
	2011	2012	2013	2014	2015
Fixed to Fixed	41	46	126	136	126
Fixed to Mobile	3	4	4	4	4
Fixed to International	13	17	8	8	8

Source: ECTEL/operators

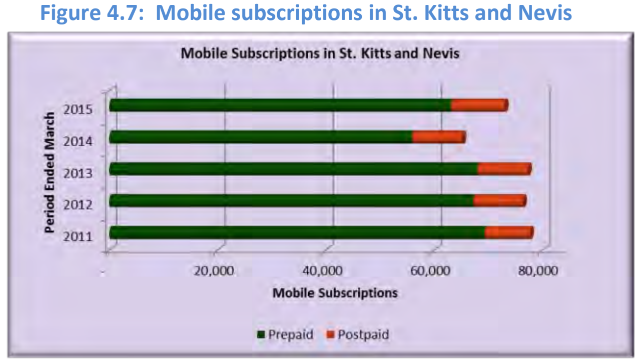
MOBILE VOICE SERVICES

Subscriptions

At March 2015, there were 73,000 mobile subscriptions in St. Kitts and Nevis (figure 4.7). This was an increase of 11 per cent over the previous period. Of the total number of mobile subscriptions 87 per cent were prepaid, 1 percentage point gain over last period.

Reversing the trend of the past three periods, growth in prepaid subscriptions (12 per cent) outpaced that of postpaid subscriptions which grew 6 per cent and accounted for 14 per cent of total mobile subscriptions.

Figure 4.7: Mobile subscriptions in St. Kitts and Nevis



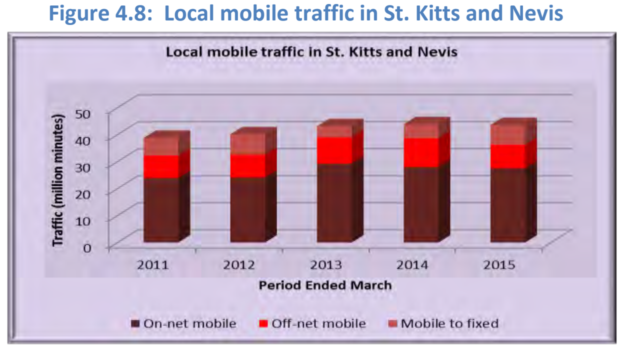
Source: ECTEL/operators

Mobile Traffic Volumes

Local traffic form the mobile network fell 1 per cent during the review period (figure 4.8). This was led by an 18 per cent contraction in off-net mobile calling volumes. Mobile to fixed calling grew a further 38, after a 30 per cent rise last period and accounted for 17 per cent of local mobile calling minutes.

The number of outgoing international minutes from mobile phones was 9 million minutes, 15 per cent less than in the previous period. This was 55 per cent of all outgoing international calling minutes from St. Kitts and Nevis.

Figure 4.8: Local mobile traffic in St. Kitts and Nevis



Source: ECTEL/operators

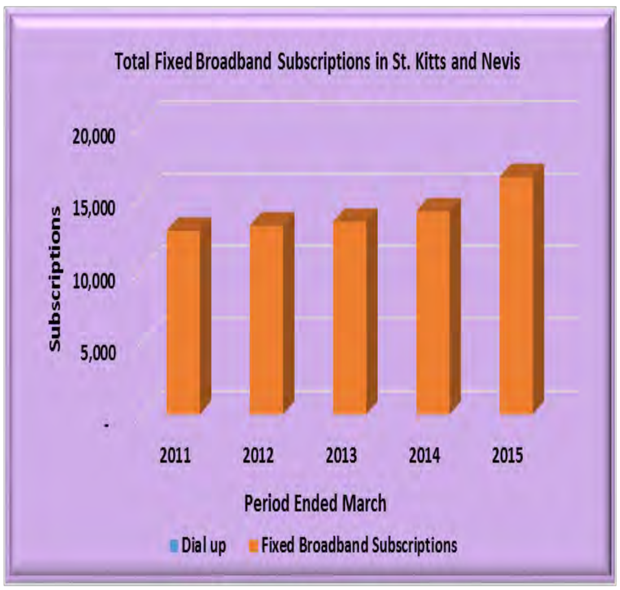
INTERNET AND BROADBAND SERVICES

Fixed and Mobile Internet Services

Fixed Internet Service

At March 2015 there were more than 16,000 fixed broadband subscriptions in St. Kitts and Nevis (figure 4.9). This was a 17 per cent increase over the previous period. Cable modem subscriptions were largely responsible for the overall growth in fixed broadband subscriptions during the review period.

Figure 4.9: Fixed Broadband Subscriptions in St. Kitts and Nevis

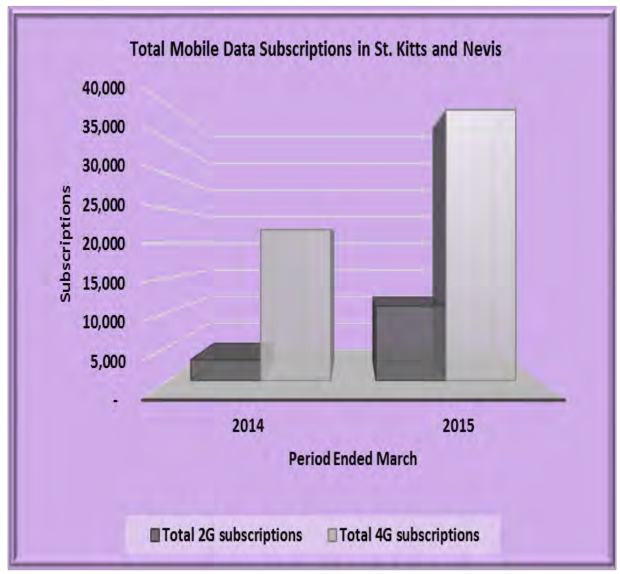


Source: ECTEL/operators

Mobile Internet Service

There were an estimated 50,000 mobile internet subscriptions in St. Kitts and Nevis at March 2015 (figure 4.10). Of this, over 78 per cent were mobile broadband subscriptions. Total mobile broadband subscriptions rose 79 per cent during the review period; 87 per cent of subscription were prepaid.

Figure 4.10: Mobile Data Subscriptions in St. Kitts and Nevis



Source: ECTEL/operators

SUBSCRIBER TELEVISION

Subscriber Television

During the review period, subscriber TV was offered via cable TV in St. Kitts and Nevis. At March 2015, total subscriptions to cable TV rose an estimated 2 per cent to over 21,000.

The rates for basic cable TV service are outlined in table 4.2.

Table 4.2: Basic cable TV packages in St. Kitts and Nevis

Operator	*Monthly Rate*	*Total Channels*	*Local Channels*
The Cable	$37	17	2
Caribbean Cable Communications	$111.15	80	2

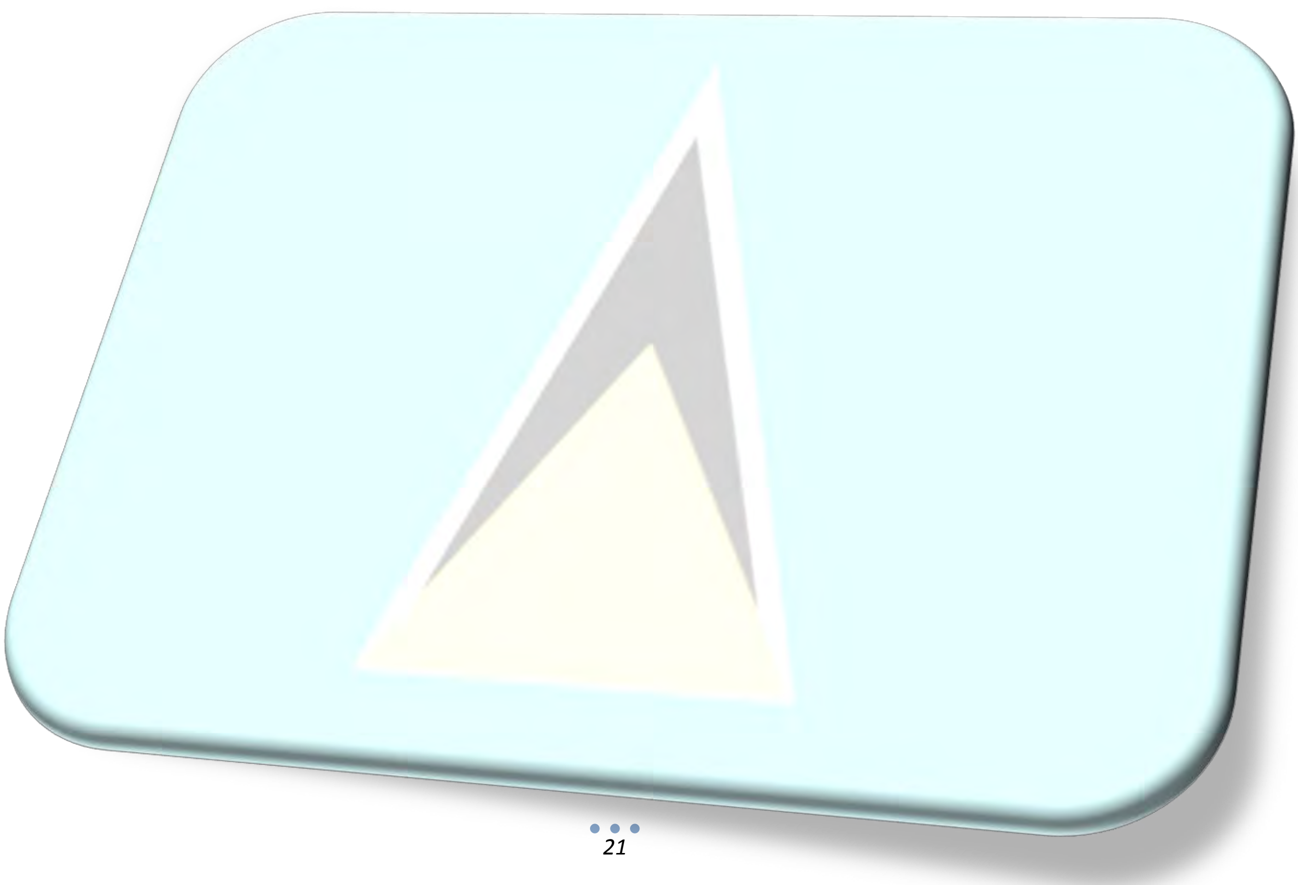
Source: ECTEL/operators

5 THE ELECTRONIC COMMUNICATIONS SECTOR SAINT LUCIA

OVERVIEW

Saint Lucia's economy is estimated to have declined by 0.6 per cent, which represented a slower rate of decline than the 2.1 recorded in 2014. This slowdown in economic activity reflects negative growth in some of the major economic sectors including construction, wholesale and retail trade and agriculture. Despite the positive performance in the transport, storage and communications sector, a gross value added of 5.75 per cent was recorded in communication in 2014, compared to the 5.78 registered in 2013, a mere decline of 0.1 per cent.

Commensurate with the performance of the economy, the telecommunication sector remained fairly subdued during the review period. The major service areas; fixed line, mobile voice and fixed broadband continued to trend downward resulting in a 6 per cent decrease in total revenue relative to the period ended March 2014. Total sector investment also experienced a drastic decline of 38 per cent and sector employment decreased by 2 per cent.



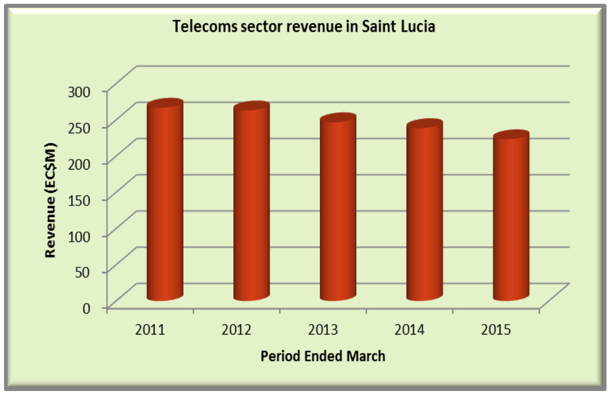
Operator Reported Revenue

Total revenue from telecommunications operators declined 6 per cent to $223 million or 6 per cent of GDP at the end of March 2015, continuing on the downward trajectory observed by the cumulative decrease of 10 per cent in the past three years (figure 5.1).

Revenue from fixed voice services experienced a significant drop of 15 per cent. Mobile and fixed internet services also each reported decreases of 5 per cent but there was an increase of 8 per cent from subscriber TV services.

Mobile services remain the dominant contributor to total revenue at 54 per cent, despite a 5 per cent fall from the previous period. As a share of total revenue, fixed voice services fell by 2 percentage points to 24 per cent. The share of revenue from fixed internet services remained flat while that for and subscriber TV rose by 1 percentage point.

Figure 5.1: Telecoms sector revenue in Saint Lucia



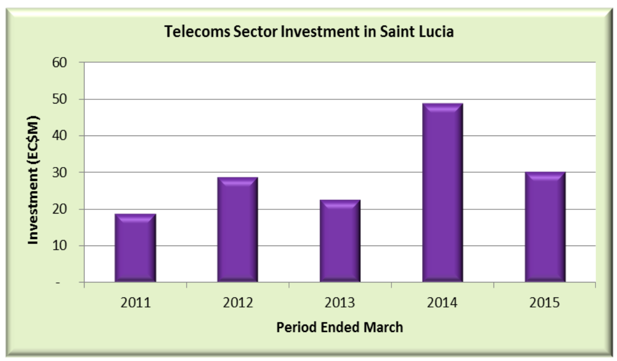
Source: ECTEL/operators

Investment

Investment by telecoms operators in Saint Lucia fell 38 per cent to $30 million or 1 per cent of GDP (figure 5.2). This was 18 million less than in the previous period. Telecoms investment has fluctuated considerably during the past five years, registering a 22 drop in 2013 then rising by more than 100 per cent in 2014.

For the review period, operators invested predominantly (56 per cent of total investment) in the upgrade of the mobile network. Approximately 31 per cent was invested in the internet network and 11 per cent invested in subscriber TV networks.

Figure 5.2: Telecoms sector investment in Saint Lucia

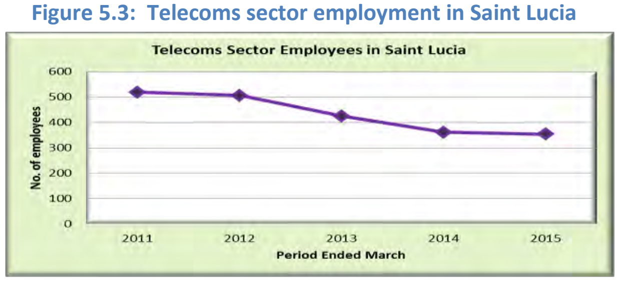


Source: ECTEL/operators

Direct Employment

A total number of persons employed full time in the telecommunications sector in Saint Lucia fell by 2 per cent (figure 5.3). This represents a slower level of decline than the 15 per cent experienced in the previous period, and the cumulative decrease of 9 per cent experienced over the past five years.

Figure 5.3: Telecoms sector employment in Saint Lucia



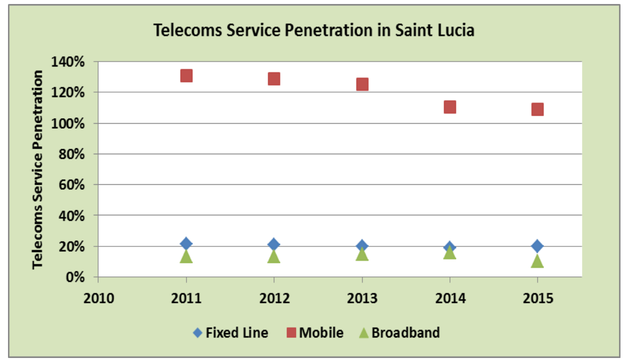
Source: ECTEL/operators

Telecoms Service Penetration

During the review period service penetration growth was subdued:

- Fixed broadband penetration remained unchanged at 17 per cent.
- Mobile penetration rate was also relatively flat at 109 per cent.
- Fixed voice penetration was up 1 percentage point to 20 per cent (Figure 5.4).
- Mobile broadband penetration was 36 per cent

Figure 5.4: Telecoms service penetration in Saint Lucia

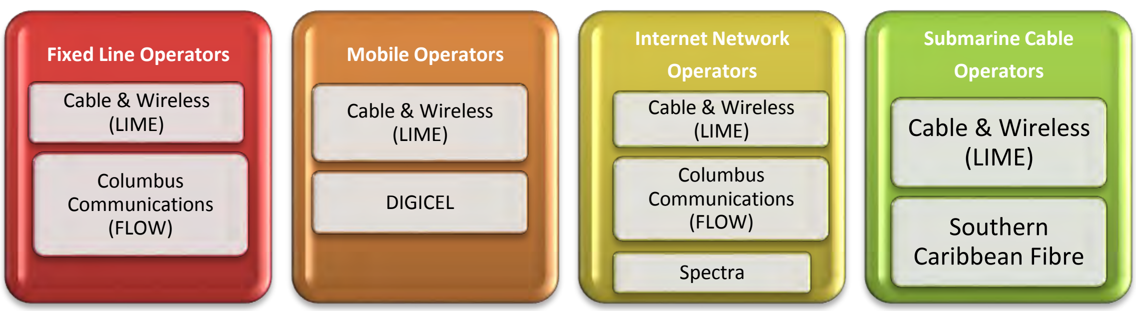


Source: ECTEL/operators

Active Services Providers

There was a significant change in the telecommunications sector during the review period. The parent companies of Cable & Wireless and Columbus Communications announced that they had merged. Even so, there were no immediate changes to the number of active operators in the sector at March 2015 (figure 5.5).

Figure 5.5: Telecoms operators in Saint Lucia



Source: ECTEL/operators

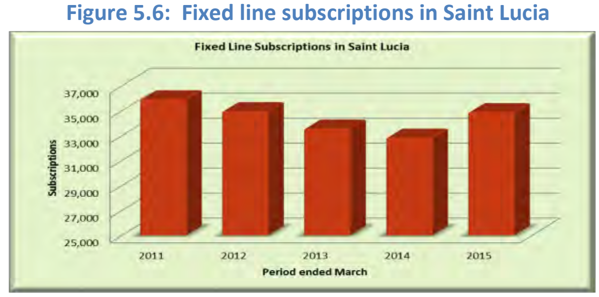
FIXED VOICE SERVICES

Subscriptions

Fixed line subscriptions reached approximately 35,000 at the end of March 2015 (figure 5.6). This represented a 6 per cent increase over the last period. Prior to this marginal improvement, the number of fixed lines declined on average by 3 per cent for the four-year period preceding March 2015.

Residential and business subscriptions both rose by 3 per cent and 12 percent respectively. Notwithstanding the jump in business subscriptions, residential subscriptions still accounted for the majority (66 per cent) of all fixed line subscriptions.

Figure 5.6: Fixed line subscriptions in Saint Lucia



Source: ECTEL/operators

Fixed Traffic Volumes

Local fixed call volumes stood at 135 million minutes for the period under review (table 5.1). Down by 1 per cent from March 2014, local fixed call volumes continue to show a steady decline in the past five years.

Of the 135 million fixed call minutes, fixed to fixed minutes was the majority, accounting for 9.2 of every 10 fixed call minutes. Even so, there was no significant growth in fixed to fixed traffic. Conversely, fixed to mobile calling experienced an 8 per cent fall relative to the previous year.

Approximately 21 per cent of all outgoing international calls originated from the fixed network during the period under review. Overall outgoing international minutes from the fixed network fell 13 per cent to an estimated 5 million minutes continuing the downward trend of the past five years.

Table 5.1: Fixed traffic volume in Saint Lucia

(million minutes)

	Fixed to Fixed	Fixed to Mobile	Fixed to International
2011	141	16	16
2012	133	14	8
2013	131	12	7
2014	125	12	6
2015	125	11	5

Source: ECTEL/operators

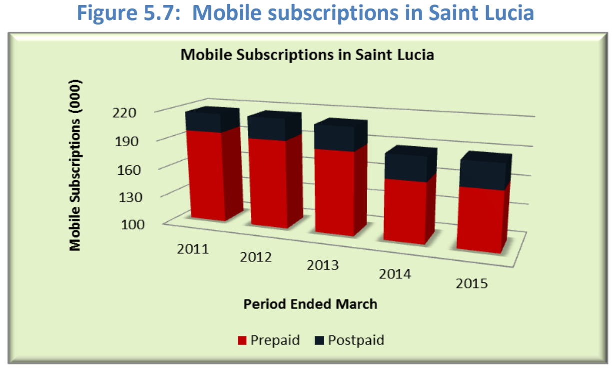
MOBILE VOICE SERVICES

Subscriptions

The total number of subscriptions to mobile voice services remained steady at roughly 188 thousand during the review period (figure 5.7). This is in contrast to the 11 per cent drop in subscriptions recorded in the preceding period.

As in the past five years, prepaid mobile subscriptions accounted for more than 86 per cent of total subscriptions. However, growth in postpaid subscriptions has outpaced that of prepaid subscription in the past four years.

Figure 5.7: Mobile subscriptions in Saint Lucia



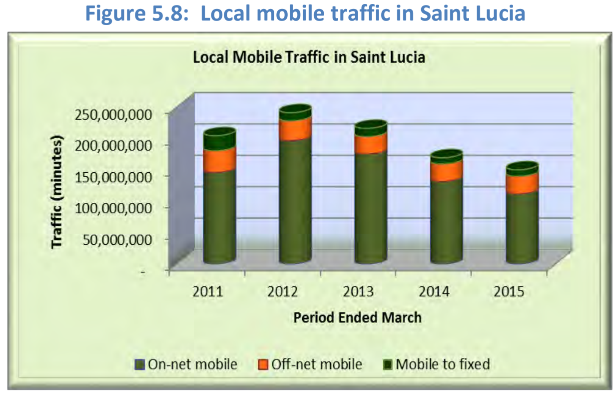
Source: ECTEL/operators

Mobile Traffic Volumes

At March 2015, a total of 150 million local calling minutes were used in Saint Lucia (figure 5.8). This was 11 per cent fewer than in the previous period. On-net mobile calling was down 15 percent while mobile to fixed calling rose 5 per cent.

Minutes from the mobile network accounted for 79 per cent of outgoing international minutes from Saint Lucia. Mobile originated international call volumes remained relatively flat at 19 million minutes.

Figure 5.8: Local mobile traffic in Saint Lucia



Source: ECTEL/operators

INTERNET AND BROADBAND SERVICES

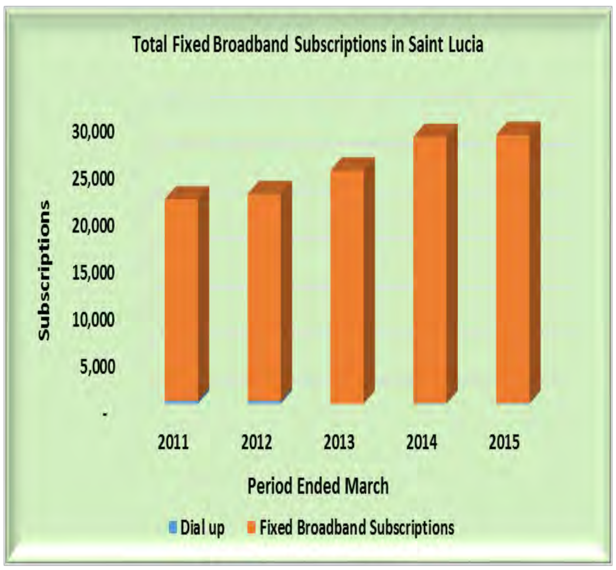
Fixed and Mobile Internet Service

Fixed Internet Services

Following a robust 14 per cent rise for the period ended March 2014, fixed broadband connections grew a modest 1 per cent during the review period (figure 5.9). As a result, fixed internet penetration remained flat at 17 per cent.

Of the fixed internet subscriptions only 0.25 per cent represented dial-up service.

Figure 5.9: Fixed Broadband Subscriptions in Saint Lucia

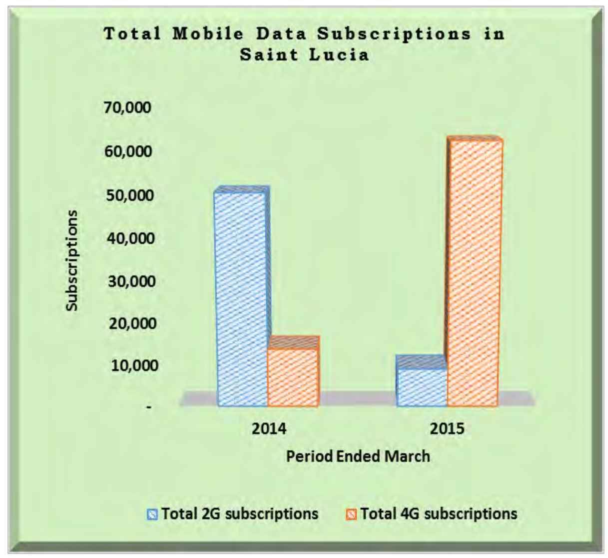


Source: ECTEL/operators

Mobile Internet Services

At March 2015 mobile broadband was available from both mobile operators in Saint Lucia. The total number of mobile internet subscriptions was 17,000, 11 per cent more than in the previous period (figure 5.10). Of the mobile internet subscription, 87 per cent were mobile broadband subscriptions up from 21 per cent in the prior period. Mobile broadband subscription grew more than 300 per cent as customers migrated from 2G to 4G service.

Figure 5.10: Mobile Data Subscriptions in Saint Lucia



Source: ECTEL/operators

SUBSCRIBER TELEVISION

Subscriber Television

During the review period, there were two subscriber TV operators. Both operators provided digital and analogue cable TV services. The rate of cable TV subscription has increased at a decreasing rate since 2012 and 4 per cent decrease was registered at the end of March 2015.

The rates for basic cable TV service in Saint Lucia are presented in table 5.2.

Table 5.2: Basic cable TV packages in Saint Lucia

Operator	Monthly Rate	Total Channels	Local Channels
LIME	$69.50	110	11
Columbus Communications (FLOW)	$80.49	101	9

Source: ECTEL/operators

6 THE ELECTRONIC COMMUNICATIONS SECTOR ST. VINCENT AND THE GRENADINES

OVERVIEW

Economic activity in St. Vincent is estimated to have experienced positive growth of 0.2 per cent in 2014. This represented a deterioration from the 2.3 witnessed in 2013 and may have been fueled by declines in the construction and hotel and retail sectors. Improvements were however noted in sectors such as agriculture, wholesale and retail and in the manufacturing sectors. The performance of the transport, storage and communications declined, however gross value added by the communications sub component remained constant at 3.70 percent.

The performance of the telecommunications sector remained relatively mixed. Telecoms operators generated a 3 per cent increase in revenue and sector employment rose by 8 per cent. However, the sector recorded a 12 per cent contraction in investment to 25 million.

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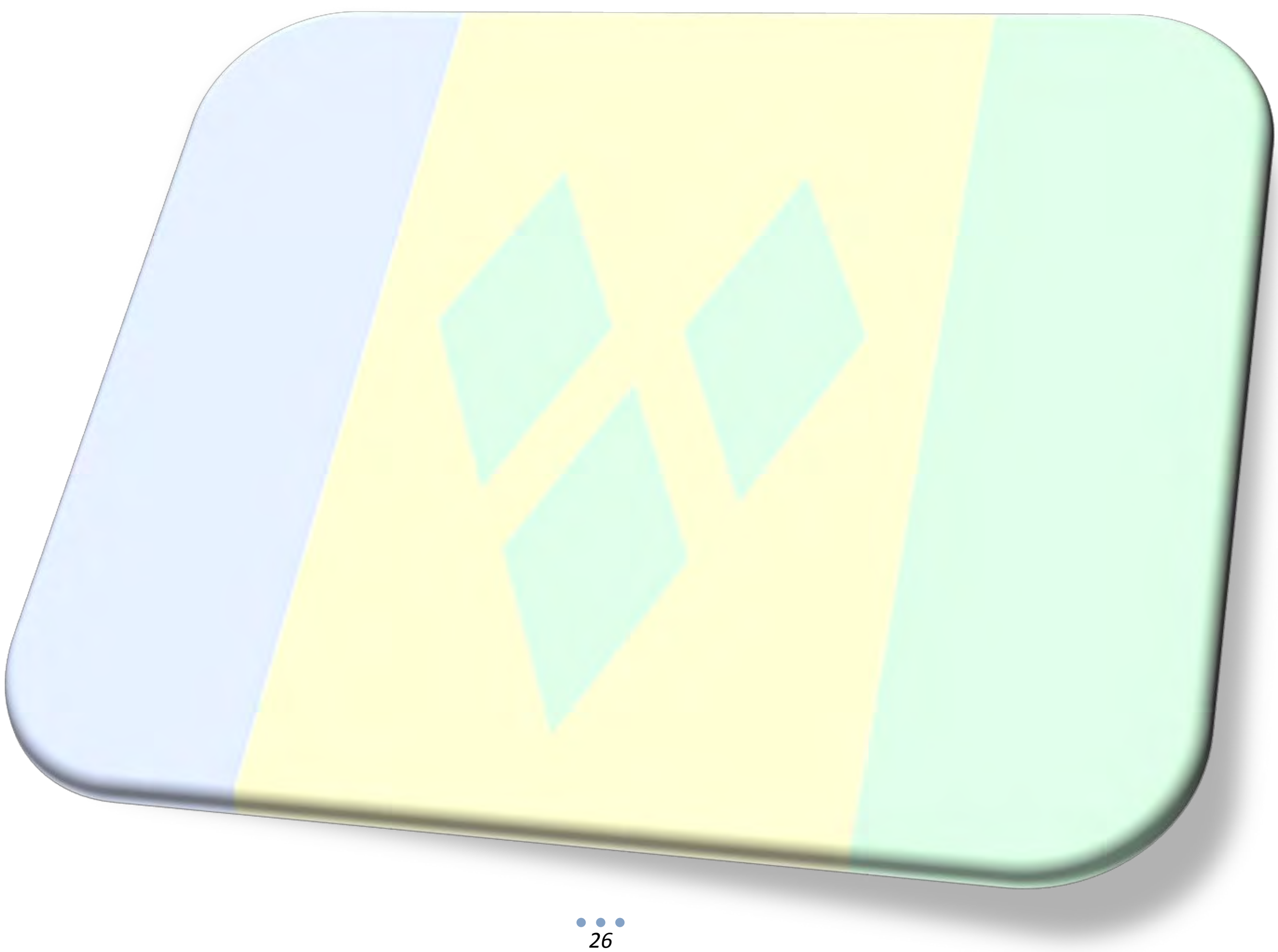
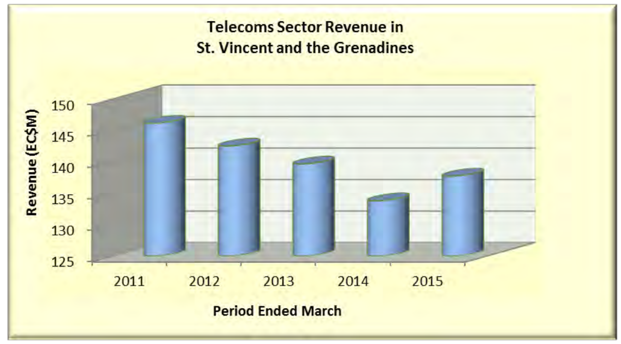


Operator Reported Revenue

At the end of March 2015, the total revenue generated from the telecommunications sector on St. Vincent and the Grenadines increased by 3 per cent to over $138 million (figure 6.1). All market segments contributed positively to total sector revenue growth.

The revenue from fixed internet service grew by 7 per cent and contributed to 11 per cent of the total sector revenue. Revenue from mobile voice services remained relatively flat during the period and accounted for 55 per cent of sector revenue while ten per cent of sector revenue was generated by subscriber TV service.

Figure 6.1: Telecoms sector revenue in St. Vincent and the Grenadines



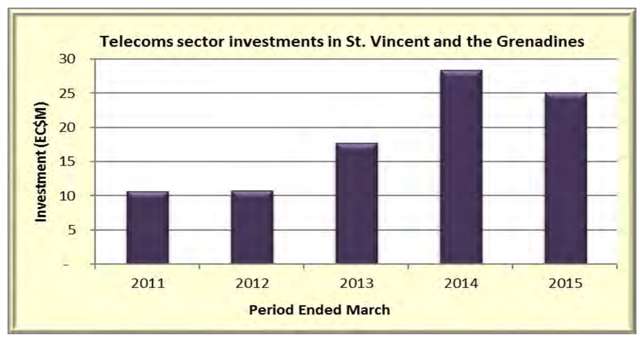
Source: ECTEL/operators

Investment

Following two years of significant growth, the total investment in telecommunications on St. Vincent and the Grenadines decreased by 12 per cent to approximately $25 million for the period to March 2015 (figure 6.2).

The significant pullback in investment was not unexpected as providers completed their upgrades to both mobile and fixed network infrastructure to facilitate broadband internet access.

Figure 6.2: Telecoms sector investment in St. Vincent and the Grenadines



Source: ECTEL/operator

Direct Employment

As of the end of March 2015, the total number of full-time employees of telecommunications operators in St. Vincent and the Grenadines was 143 (figure 6.3). This was an 8 per cent increase compared to 2013 and 2014 where there were declines of 6.4 per cent and 24 per cent respectively.

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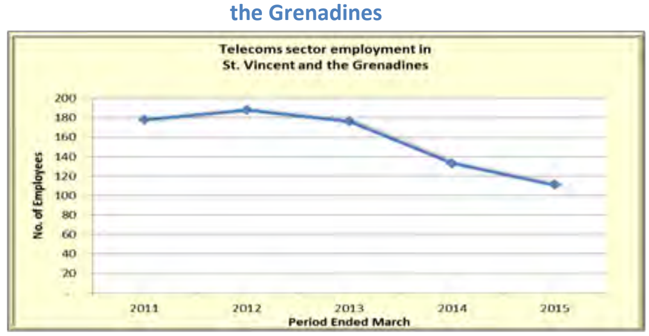
Figure 6.3: Telecoms sector employment in St. Vincent and the Grenadines



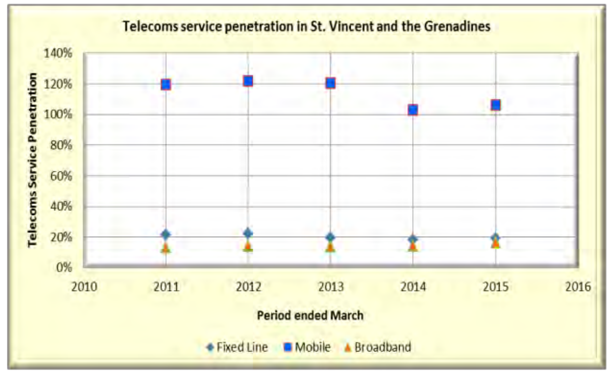
Source: ECTEL/operator

Telecoms Service Penetration

At the end of March 2015, there was slight increase of in the penetration rate of each of the telecommunications services:

- Fixed broadband penetration increased by 2 percentage points to 16 per cent from 14.4 percent in the previous reporting period (figure 6.4).
- Mobile penetration was recorded at 106 per cent, three percentage points higher than in 2014.
- Fixed voice penetration was 1 percentage point higher at 19 per cent
- Mobile broadband penetration was recorded at 40 per cent.

Figure 6.4: Telecoms service penetration in St. Vincent and the Grenadines

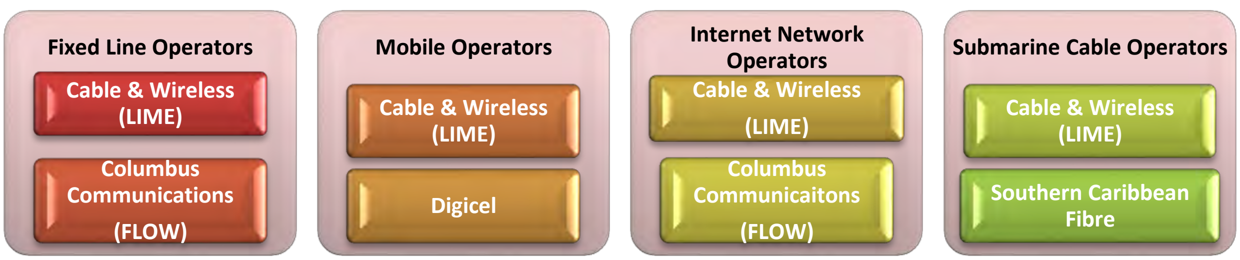


Source: ECTEL/operators

Active Services Providers

There was a significant change in the telecommunications sector during the review period. The parent companies of Cable & Wireless and Columbus Communications announced that they had merged. Even so, there were no immediate changes to the number of active operators in the sector at March 2015 (figure 6.5).

Figure 6.5: Telecoms Operators in St. Vincent and the Grenadines



Source: ECTEL/operators

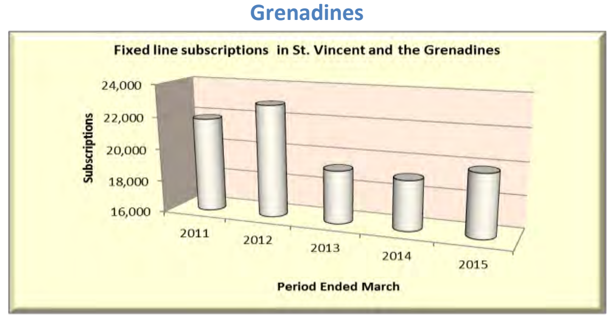
FIXED VOICE SERVICES

Subscriptions

In St. Vincent and the Grenadines as at March 2015, the total number of fixed line subscriptions increased by 4 per cent to approximately 20,000 (figure 6.6).

This overall increase in total fixed lines subscription resulted from a 5 per cent rise in residential customers and a 3 per cent growth in the number of business subscriptions. The ratio of residential to business fixed line subscriptions has been relatively constant at 7.3:2.7 in the past three reporting periods

Figure 6.6: Fixed line subscriptions in St. Vincent and the Grenadines



Source: ECTEL/operators

Fixed Traffic Volumes

Local fixed traffic volumes declined 16 per cent from to 26 million minutes in this reporting period (table 6.1).

A 21 per cent reduction in fixed to fixed call volumes was the main reason for the decline in local fixed traffic volumes. Fixed to fixed traffic accounted for 75 per cent of local fixed traffic. The overall drop in local fixed traffic was partially offset by a 2 per cent increase in fixed to mobile calling minutes.

As at March 2015, international outgoing traffic from fixed lines declined by 3 per cent to 4 million minutes.

Table 6.1: Fixed traffic volume in St. Vincent and the Grenadines

Fixed Traffic Volume in St. Vincent and the Grenadines (million minutes)			
	Fixed to Fixed	**Fixed to Mobile**	**Fixed to International**
2011	66	11	4
2012	63	10	9
2013	27	6	8
2014	25	6	4
2015	20	6	4

Source: ECTEL/operators

MOBILE VOICE SERVICES

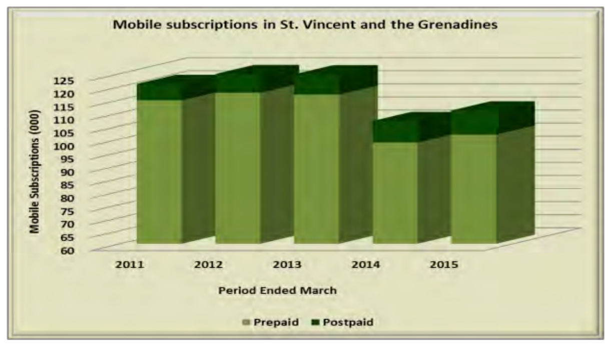
Subscriptions

Total mobile subscriptions increased by 4 per cent to just over 110,000 at the end of the period March 2015 (figure 6.7).

Of the 110,000 mobile subscriptions, 92 per cent were prepaid subscriptions and at the end of the reporting period prepaid subscriptions had increased by 3 per cent.

Growth in postpaid subscription has continued to outpace that of prepaid subscriptions. This reporting period recorded a 12 per cent growth in postpaid subscriptions.

Figure 6.7: Mobile subscriptions in St. Vincent and the Grenadines



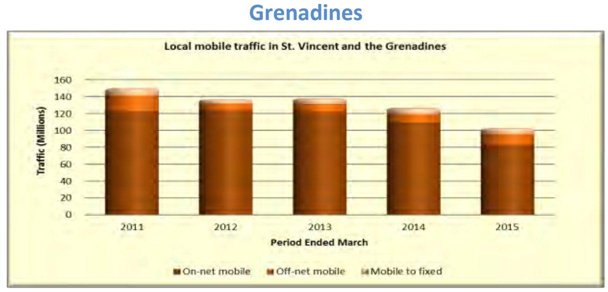
Source: ECTEL/operators

Mobile Traffic Volumes

Local mobile traffic declined by 19 per cent to 103 million minutes at the end of March 2015 (figure 6.8). The significant drop (24 per cent) in on-net traffic of 24 per cent contributed to this decline. Mobile to fixed traffic also contracted 12 per cent. In contrast, fixed to mobile traffic, which accounts for 13 per cent of overall traffic, rose 27 per cent.

International outgoing minutes from mobile networks fell 6 per cent to 8 million minutes. This was the third straight year of decline in outgoing international calling from mobile phones.

Figure 6.8: Local mobile traffic in St. Vincent and the Grenadines



Source: ECTEL/operators

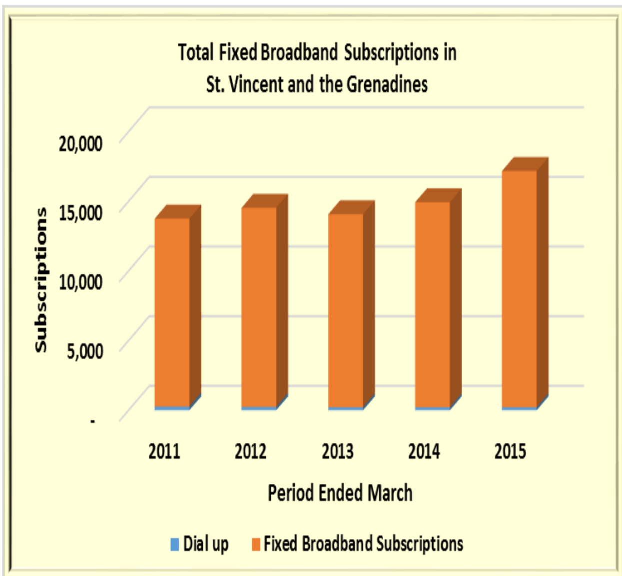
INTERNET AND BROADBAND SERVICES

Fixed and Mobile Internet Services

Fixed Internet Services

For the year in review, the number of fixed broadband connections increased by 15 per cent to over 17,000 subscriptions (figure 6.9). This followed a 6 per cent rise during the previous period. The overall growth was due to the uptake of both ADSL and cable modem broadband services.

Figure 6.9: Fixed Broadband Subscriptions in St. Vincent and the Grenadines

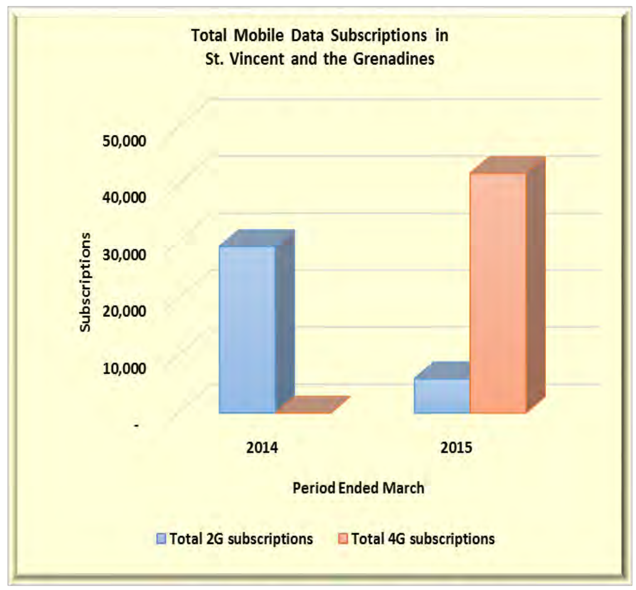


Source: ECTEL/operators

Mobile Internet Services

Mobile broadband service was finally available to customers in St. Vincent and the Grenadines in 2015. At March 2015 there were 48,000 mobile internet subscriptions, 87 per cent of which were mobile broadband subscriptions (figure 6.10). Eleven per cent of mobile broadband subscription had a postpaid plan.

Figure 6.10: Mobile Data Subscriptions in St. Vincent and the Grenadines



Source: ECTEL/operators

SUBSCRIBER TELEVISION

Subscriber Television

The lone subscriber cable TV provider in St. Vincent and the Grenadines is Columbus Communications (FLOW) which offers only digital cable TV service (table 6.2). At the end of 2015, the operator reported a 4 per cent decrease in the total number of cable TV subscriptions.

Table 6.2: Basic cable TV package in St. Vincent and the Grenadines

Operator	Monthly Rate	Total Channels	Local Channels
Columbus Communications (FLOW)	$74.75	80	14

Source: ECTEL/operators

7 Notes and Statistical Tables

7.1 Notes on Statistical Tables and Data

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 internet, 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.

7.2 Statistical Tables

Selected telecommunications indicators – All ECTEL Member States

	2011	2012	2013	2014	2015
Provider Revenues (EC$M)	$805	$802	$777	$778	$779
Investment (EC$M)	$80	$83	$90	$121	$157
Employment	1,356	1,369	1,202	938	945
Fixed line Penetration	24.6%	24.2%	23.1%	23.0%	23.1%
Mobile penetration	129.9%	131.3%	129.6%	110.1%	112.7%
Fixed broadband penetration	14.6%	15.2%	16.3%	17.4%	19.2%
Mobile broadband penetration	-	-	0.2%	7.5%	40.6%
Local fixed traffic (million minutes)	527	537	557	525	479
Local mobile traffic (million minutes)	757	794	762	662	587
International incoming traffic (million minutes)	216	191	204	177	162
International outgoing traffic (million minutes)	141	132	103	96	82

Source: ECTEL/operators

Selected telecommunications indicators - Dominica

	2011	2012	2013	2014	2015
Provider Revenues (EC$M)	$101	$108	$106	$105	$108
Investment (EC$M)	$17	$12	$13	$14	$46
Employment	233	237	213	153	160
Fixed line penetration	21%	21%	20%	23%	21%
Mobile penetration	140%	141%	143%	103%	107%
Fixed broadband penetration	12.2%	13.3%	14.7%	15.0%	20.9%
Mobile broadband penetration	-	-	0.0%	0.0%	42.4%
Local fixed traffic (million minutes)	26	23	23	21	16
Local mobile traffic (million minutes)	199	196	182	178	151
International incoming traffic (million minutes)	27	23	33	25	22
International outgoing traffic (million minutes)	24	12	14	17	13

Source: ECTEL/operators

Selected telecommunications indicators - Grenada

	2011	*2012*	*2013*	*2014*	*2015*
Provider Revenues (EC$M)	$165	$167	$164	$175	$177
Investment (EC$M)	$20	$16	$18	$24	$29
Employment	250	256	239	163	163
Fixed line penetration	27%	26%	27%	25%	25%
Mobile penetration	115%	123%	120%	108%	110%
Fixed broadband penetration	14.2%	15.1%	17.2%	18.0%	18.3%
Mobile broadband penetration	-	-	0.9%	1.7%	28.2%
Local fixed traffic (million minutes)	222	244	228	197	172
Local mobile traffic (million minutes)	164	180	183	143	139
International incoming traffic (million minutes)	77	76	77	65	64
International outgoing traffic (million minutes)	26	27	26	23	16

Source: ECTEL/operators

Selected telecommunications indicators – St. Kitts and Nevis

	2011	*2012*	*2013*	*2014*	*2015*
Provider Revenues (EC$M)	$126	$122	$120	$125	$133
Investment (EC$M)	$14	$15	$19	$6	$27
Employment	176	182	149	128	125
Fixed line penetration	42%	42%	41%	42%	42%
Mobile penetration	166%	165%	167%	141%	156%
Fixed broadband penetration	27.2%	28.1%	28.6%	30.1%	34.9%
Mobile broadband penetration	-	-	0.0%	47.2%	84.1%
Local fixed traffic (million minutes)	45	50	130	139	129
Local mobile traffic (million minutes)	39	40	43	44	44
International incoming traffic (million minutes)	18	18	19	18	18
International outgoing traffic (million minutes)	34	39	21	19	17

Source: ECTEL/operators

Selected telecommunications indicators – Saint Lucia

	2011	2012	2013	2014	2015
Provider Revenue (EC$M)	$267	$263	$247	$238	$223
Investment (EC$M)	$19	$29	$23	$49	$30
Employment	519	506	425	361	354
Fixed line penetration	22%	21%	20%	19%	20%
Mobile penetration	131%	129%	125%	110%	109%
Fixed broadband penetration	13.1%	13.3%	14.6%	16.6%	16.5%
Mobile broadband penetration	-	-	0.0%	8.1%	36.0%
Local fixed traffic (million minutes)	158	147	143	137	136
Local mobile traffic (million minutes)	205	241	217	170	150
International incoming traffic (million minutes)	51	43	36	30	35
International outgoing traffic (million minutes)	36	25	25	18	24

Source: ECTEL/operators

Selected telecommunications indicators – St. Vincent and the Grenadines

	2011	2012	2013	2014	2015
Revenues (EC$M)	$146	$142	$140	$134	$138
Investment (EC$M)	$11	$11	$18	$28	$25
Employment	178	188	176	133	143
Fixed line penetration	22%	22%	19%	18%	19%
Mobile penetration	119%	122%	121%	103%	106%
Fixed broadband penetration	13.6%	14.2%	13.6%	14.4%	16.4%
Mobile broadband penetration	-	-	0.0%	0.0%	40.2%
Local fixed traffic (million minutes)	77	73	33	31	26
Local mobile traffic (million minutes)	150	137	138	127	103
International incoming traffic (million minutes)	44	31	39	40	49
International outgoing traffic (million minutes)	20	30	17	13	12

Source: ECTEL/operators

8 Individual Licensees in the ECTEL Member States

Table 8: Active Telecoms Service Operators in the ECTEL Member States at March 2015

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

Source: ECTEL/NTRCs

Annex A

ICT Development Index (IDI) for ECTEL Member States for period 2010 to 2015

Introduction

In its Measuring the Information Society Report for 2015 (MIS 2015) the ITU released information of the performance of 167 countries in its ICT Development Index (IDI). The ITU indicates that the IDI is a composite index combining eleven indicators into one benchmark that can be used to monitor and compare developments in ICT between countries over time. The MIS 2015 provided both global and regional analysis of the performance of the countries presented in the report.

In the case of the ECTEL Member States performance of the five-year period, 2010 to 2015 was generally mixed. All Member States recorded increases in the overall global IDI values but decreases in the global IDI ranking. This was largely because while overall IDI values have increased for all Member States, this increase has not kept pace with global IDI growth resulting in the Member States losing ground relative to other countries. The slow deployment and uptake in mobile broadband service, as well as a downward revision in mobile penetration rates due to a change in accounting by on provider, were significant contributing factors in the lackluster performance of the Member States for the period under review. The recent pick-up in mobile broadband subscriptions across the Member States should result in improved performance in the next IDI reporting. The performance of each Member State is presented below.

Dominica

Over the five-year period from 2010 to 2015, Dominica's overall global IDI ranking fell from 66th to 79th. Nevertheless, there was fluctuation during that period. There was a decreasing trend from 2010 to 2013 where the overall global IDI rank fell from 66th in 2010 to 83rd in 2013. The global ranking rebounded to 79th in 2015. Despite the fall in ranking the overall global IDI values gradually increased from 4.56 in 2010 to 5.12 in 2015. A positive change, (0.88), in the usage sub-index, contributed the most to this increase in value. Over the same period, there was an overall increase in the access sub-index value of 0.52 from 5.49 in 2010 to 6.01 in 2015 while the skill sub-index remained unchanged. Although its global IDI ranking decreased in value, Dominica's IDI ranking in the Americas increased from 18th to 15th for the period 2013 to 2015.

Grenada

Overall Grenada's Global IDI ranking decreased from 64th to 83rd over the five-year period from 2010 to 2015. An analysis of the data illustrated a continuous pattern of decline during that period. The global IDI ranking fell continuously from 64th in 2010, to 83rd in 2015. However, the overall global IDI values gradually increased from 4.67 in 2010 to in 2015. This indicates that the growth in global IDI value for Grenada did not keep pace with the global growth in the IDI. A positive change in usage sub-index contributed the most to the overall increase in global IDI value (0.61). The access sub-index contributed of 0.33 points moving from 5.81 in 2010 to 6.14 in 2015 while the skill sub-index contributed the least and remained constant over the five-year period. Overall the global IDI value increased 0.38 of a point from 4.67 in 2010 to 5.05 in 2015. It should be noted that while Grenada's global IDI ranking decreased its IDI ranking in the Americas increased from 13th to 16th for the period 2013 to 2015 recording positive movement against its peer's in the Americas.

St. Kitts and Nevis

From 2010 to 2015 the IDI global ranking for St. Kitts and Nevis recorded a significantly decline from 43rd in 2010 to 63rd in 2015. This was the result of relatively slow growth in the component sub-indices. There was a decreasing trend whereby from 2010 to 2015, the overall global IDI rank fell continuously from 43rd in 2010, 52nd in 2012, 54th in 2013 and declined to 63rd in 2015. Although the global IDI ranking for St Kitts and Nevis registered a decline, the overall global IDI values gradually increased from 5.80 in 2010 to 5.92 in 2015. This means the growth in IDI values for St Kitts and Nevis was outpaced a number of other countries. The increase in global IDI values resulted from a positive change in the access and skill sub-indices which both increased by 0.16 of a point while the usage sub-index increased 0.06 of a point. St. Kitts and Nevis' IDI ranking in the Americas also decreased from 5th to 10th for the period 2013 to 2015 indicating that it underperformed its peers in the Americas during the three-year period. The underperformance was driven by a decline in the usage sub-index.

Saint Lucia

Saint Lucia's overall IDI global ranking dropped from 70th to 86th exhibiting a decreasing trend from 2010 to 2015. In particular, between 2013 and 2015, the IDI global rank then fell by 7 places to 86th. This was the direct result of a contraction in the access sub-index. However, over the same period, the overall global IDI values gradually increased from 4.39 in 2010 to 4.98 in 2015. The positive change in the usage sub-index, (1.46 points), was the main contributor to the increase in Saint Lucia's global IDI value. Over the same period, the access sub-index moved up from 5.44 to 5.55 while there was a negative change in skill sub-index of -0.18 of a point. These movements resulted in an overall increase in the global IDI values of 0.59 from 4.39 in 2010 to 4.98 in 2015. The increase in global IDI value coupled with the falling IDI ranking indicates that for the review period, Saint Lucia's IDI growth did not keep pace with overall global IDI growth. Saint Lucia's region IDI performance was also anaemic as its IDI ranking in the Americas decreased from 13th in 2012 to 18th in 2015 indicating that it also did not keep pace with its peers in the region.

St. Vincent and the Grenadines

The global IDI ranking for St. Vincent and the Grenadines moved down from 63rd in 2010 to 68th in 2015 but there was a fluctuating pattern during the five-year period. From 2010 to 2011, the global IDI ranking increased from 63rd to 59th but this was followed by a decrease in 2012 to 69th. Finally, between 2013 and 2015 the IDI ranking moved up from 72nd to 68th. This was the result of positive moves in the access and usage sub-index rankings. There was less volatility in the IDI value; the overall global IDI values rose consistently from 4.69 in 2010, 4.71 in 2011, 5.04 in 2012, 5.17 in 2013 to 5.69 in 2015. Positive changes in usage sub-index (1.94) contributed the most to this increase in value. The access sub-index also grew to 6.76 in 2015 from 6.19 in 2010 (1.94). In contrast, the skill sub-index remained unchanged and therefore contributed the least to the growth in the IDI value. Overall the global IDI value increased a full point from 4.69 in 2010 to 5.69 in 2015. St. Vincent and the Grenadines' performance fell just short of its peers in the Americas as over the review period its IDI ranking in the Americas dropped one place from 10th in 2012 to 11th in 2015.

Annex B

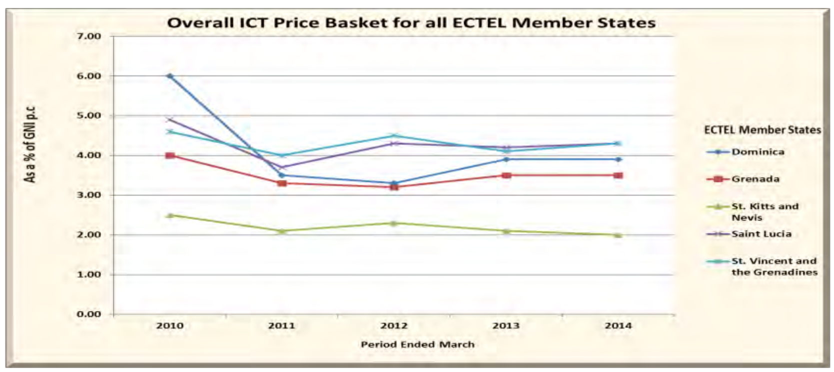
ICT Price Basket for ECTEL Member States

The International Telecommunications Union (ITU) has developed an ICT price basket to track affordability of ICT services in countries around the world. In its annual publication *Measuring the Information Society*, ITU publishes the ICT price basket values for a number of countries including the ECTEL Member States. The ITU also publishes sub-baskets for fixed broadband, fixed voice and mobile services which form part of the overall ICT price basket.

With the rise of mobile broadband service around the world the ITU publication has recently included prices for handset and computer based mobile broadband packages, though these prices have not yet been incorporated into the overall ICT price basket.

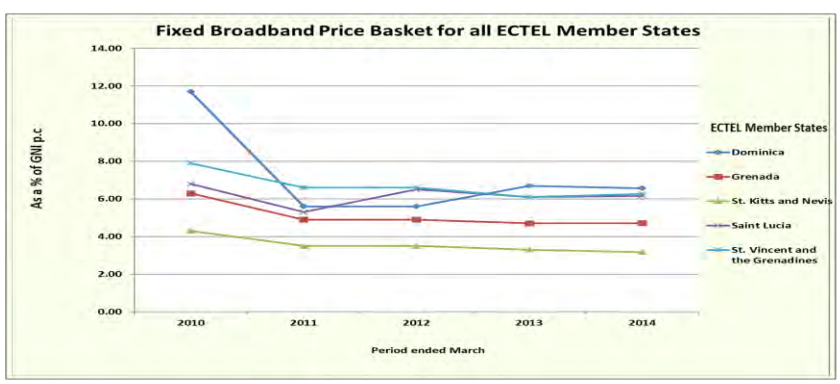
This annex presents an analysis of the performance of the ECTEL Member States in terms of affordability of ICT services for the period 2010 to 2014.

Overall ICT Price Basket



Based on the ITU ICT price basket data there was an overall fall in the price of ICT over the 2010 to 2014 period. Although Dominica has the highest price index for ICT services, the price has decreased most (2.1 points) over the review period. Grenada's ICT price has decreased by -0.5. Likewise, St. Kitts and Nevis has consistently had the lowest ICT price index and experienced a decrease in the price of 0.5 points. Over the review period The ICT price indices for Grenada, Saint Lucia and St. Vincent and the Grenadines decreased by 0.5, 0.6 and 0.3 point respectively.

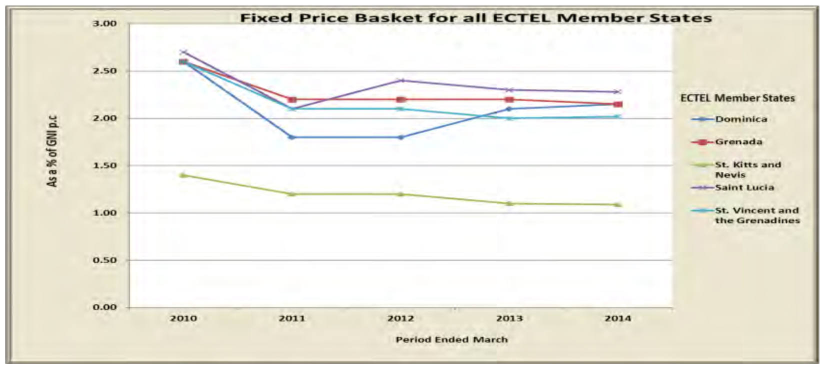
Fixed Broadband Price Basket



The fixed broadband price basket presents entry level broadband prices as a percent of Gross National Income per capita (GNI pc). The United Nation's Broadband Commission has set a target for affordable entry level broadband at 5% of GNI pc. To date in the ECTEL Member States, only St Kitts and Nevis and Grenada have met the United Nation Broadband Commission's target for affordable entry level fixed broadband.

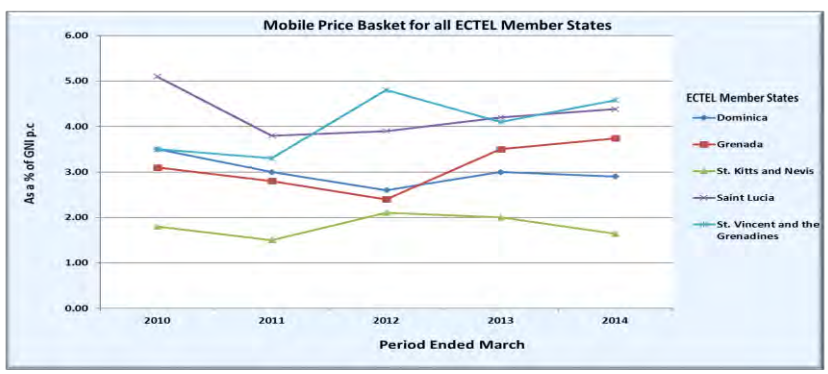
For all ECTEL Member States, there was an overall decrease in the price of fixed broadband over the 2010 to 2014 period. Dominica has the highest price index for fixed broadband (6.57% of GNI pc), even so the price index has fallen significantly (5.13 points) during the review period. This was the largest decrease in the price of fixed broadband in the ECTEL Member States. Grenada's fixed broadband price index has decreased by 1.59 points to 4.71% of GNI pc by 2014. St. Kitts and Nevis has consistently had the lowest fixed broadband price index (3.17% of GNI pc) among the ECTEL Member States. St. Kitts experienced a decrease in the price index of 1.13 point over the review period. Saint. Lucia's broadband price index decreased the least by 0.64 points to 6.61% of GNI pc and St. Vincent and the Grenadines recorded a decrease of 1.64 to 6.26% of GNI pc.

Fixed Price Basket for all Member States



Across all the ECTEL Member States the fixed price sub-baskets appear to have decreased over the 2010-2014 period. Dominica and Grenada's fixed price decreased by 0.45 points. St. Kitts and Nevis had the lowest fixed price sub-basket value. The island's prices declined the least by 0.31 points. Saint Lucia has the highest prices in comparison to other Member States. The island experienced a decrease of 0.42 points and St. Vincent and the Grenadines experienced the largest decrease in the fixed price sub-basket with a change of -0.58.

Mobile Price Basket for all Member States



With the exception of Grenada and St. Vincent and the Grenadines, the ECTEL Member States generally experienced a decrease in mobile prices over the period 2010 to 2014. Dominica's mobile price decreased by 0.6 points and St. Kitts and Nevis which has the lowest mobile price index decreased by 0.16 point and Saint Lucia's by 0.72. In the case of Grenada and St Vincent and the Grenadines, the mobile price index increased. The mobile price index for Grenada increased by 0.64. St. Vincent and the Grenadines had the highest increase in the mobile price index of 1.08.

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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EASTERN CARIBBEAN TELECOMMUNICATIONS AUTHORITY

Annual Electronic Communications Sector Review 2014-2015

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