

ANNUAL ELECTRONIC COMMUNICATIONS SECTOR REVIEW

INCREASING ACCESS TO AFFORDABLE BROADBAND

Highlights

- Sector investment recorded at \$86 million
- Fixed broadband penetration increased to 15.9 per cent
- Overall local calling traffic exceeded 1.2 billion minutes
- Rates for fixed broadband service remained unchanged

ECTEL MEMBER STATES

Commonwealth of Dominica

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

Copyright © 2014

Published by the Eastern Caribbean Telecommunications Authority (ECTEL)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or otherwise, without permission of the Eastern Caribbean Telecommunications Authority (ECTEL).

Contact Information

Address: ECTEL

P. O. Box 1886

Vide Bouteille

Castries

Saint Lucia

Preface

The Eastern Caribbean Telecommunications Authority (ECTEL) produces this review of the electronic communications sector¹ 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 2012 to March 2013, 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 February 21, 2014, 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 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	2009	2010	2011	2012	2013
Revenue (EC\$M)	728	776	733	734	711
Investment (EC\$M)	150	101	80	83	86
Employment	1,472	1,379	1,356	1,369	1,202
Fixed voice service penetration	25.9%	25.3%	24.3%	23.9%	22.8%
Mobile service ² penetration	121.9%	125.6%	128.3%	129.5%	127.9%
Broadband penetration	12.6%	13.7%	14.4%	15.0%	15.9%
Local voice minutes (millions)	1,285	1,376	1,284	1,331	1,268
International voice minutes (millions)	125	137	141	136	114

Source: ECTEL/operators

Main Sector findings

The key finding of the review of the electronic communications sector across the ECTEL Member States for the period ended March 2013 are:

- Sector revenue contracted while investment rose by 4 per cent: Total revenue reported by licensed operators across all Member States was down an average of 3 per cent, to \$711 million. Even so, operators increased capital expenditure 4 per cent for an average investment rate of 12 per cent.
- Fixed broadband penetration increased marginally and mobile penetration dipped slightly: Total fixed broadband subscription grew 7 per cent to more than 80,500 and represented an average penetration rate of 15.9 per cent. Total mobile subscriptions remained flat and average mobile penetration was down 1 per cent.
- Fixed broadband service most affordable in St Kitts and Nevis and Grenada: Based on the results of the broadband sub-basket of the ITU 2012 ICT price basket the cost of entry-level broadband service is St Kitts and Nevis and Grenada is 2.5 per cent and 4.9 per cent of average monthly income which is below the 5 per cent target for affordability set by the broadband Commission.
- Overall local calling traffic from both fixed and mobile declined: Total outgoing local traffic fell 5 per cent to 1.29 billion minutes. Fixed call volumes were down 6 per cent, while mobile originated traffic contracted 4 per cent. Overall mobile voice usage declined to 98 minutes per subscription per month down from 102 minutes in the previous period. Sixty per cent of all local calling minutes originated from a mobile network.

_

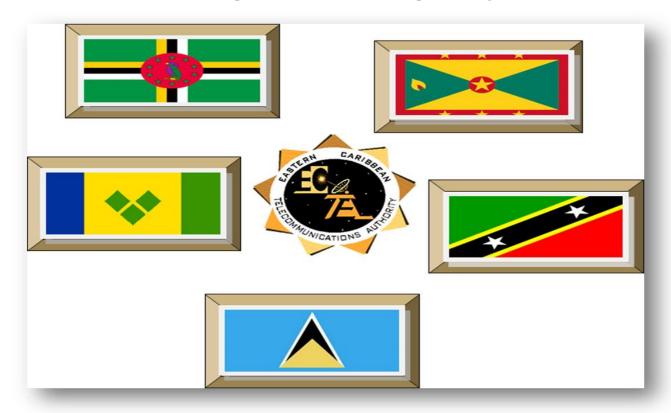
² Mobile services include voice, messaging and internet services.

Table of Contents

PR	EFACEI
	ECTRONIC COMMUNICATIONS IN THE ECTEL MEMBER STATES – KEY INDICATORS AND SECTOR
	IDINGSII
1	THE ELECTRONIC COMMUNICATIONS SECTOR - ECTEL MEMBER STATES
TE	LECOMMUNICATIONS
	OVERVIEW1
	VOICE SERVICES
	INTERNET AND BROADBAND SERVICES4
BR	COADCASTING5
2	THE ELECTRONIC COMMUNICATIONS SECTOR - DOMINICA
TE	LECOMMUNICATIONS6
	OVERVIEW6
	FIXED VOICE SERVICES9
	MOBILE SERVICES9
	INTERNET AND BROADBAND10
BR	COADCASTING
3	THE ELECTRONIC COMMUNICATIONS SECTOR - GRENADA
TE	LECOMMUNICATIONS
	OVERVIEW11
	FIXED VOICE SERVICES14
	MOBILE SERVICES14
	INTERNET AND BROADBAND SERVICES
BR	COADCASTING
4	THE ELECTRONIC COMMUNICATIONS SECTOR - ST. KITTS AND NEVIS
TE	LECOMMUNICATIONS 16
	OVERVIEW16
	FIXED VOICE SERVICES
	MOBILE SERVICES
	INTERNET AND BROADBAND SERVICES20
BR	COADCASTING
5	THE ELECTRONIC COMMUNICATIONS SECTOR - SAINT LUCIA
TE	LECOMMUNICATIONS21
	OVERVIEW21
	FIXED VOICE SERVICES 24

	MOBILE SERVICES	24
	INTERNET AND BROADBAND SERVICES	25
BR	OADCASTING	25
6	THE ELECTRONIC COMMUNICATIONS SECTOR - ST. VINCENT AND THE GRENADINES	26
TE	LECOMMUNICATIONS	26
	OVERVIEW	26
	FIXED VOICE SERVICES	29
	MOBILE SERVICES	29
	INTERNET AND BROADBAND SERVICES	30
BR	OADCASTING	30
7	Notes and Statistical Tables.	31
	7.1 Notes on Statistical Tables and Data	31
	7.2 Statistical Tables	33
8	INDIVIDUAL LICENSEES IN THE ECTEL MEMBER STATES	36

1 THE ELECTRONIC COMMUNICATIONS SECTOR – ECTEL MEMBER STATES



TELECOMMUNICATIONS

OVERVIEW

The Annual Economic and Financial Review released by the Eastern Caribbean Central Bank (ECCB) for 2012 revealed that initial data suggested that real economic activity in the Eastern Caribbean Currency Union (ECCU) contracted by 0.2 per cent in 2012. This was the fourth consecutive year of decline impacted by weak international demand for exports from the region and reduced level of public sector investment spending. This reduction attributed to a decline in value added in construction, hotels and restaurants, wholesale and retail and transportation, storage and communications sectors. All ECTEL Member States, other than St Vincent and the Grenadines, experienced reduced economic activity. In the most recent Economic Review the ECCB estimated that the economic activity in the ECCU expanded at a pace of 0.7 per cent for 2013 reversing the past trend of contractions.

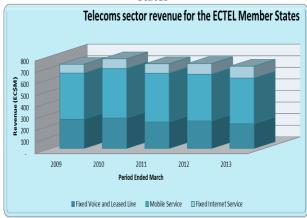
The continued weakness in the overall economy during the period under review was reflected in the subdued performance of the electronic communications sector. Total sector revenue was down 3 per cent to \$711 million and full-time employment in the sector fell 12 per cent. Total local calling volumes contracted by 5 per cent and international outgoing calling minutes decreased 16 per cent. Reversing this trend, total investments in the sector registered a modest 4 per cent gain to \$86 million.

Operator Reported Revenue

Total revenue from the telecommunications sector in the ECTEL Member States fell by 3 per cent to \$711 million (Figure 1.1). This decrease was largely due to an 11 per cent fall in fixed line revenues. Fixed broadband service which has been the bell weather of a tough economic environment grew 11 per cent. But with a revenue share of just 14 per cent this growth was not sufficient to offset the fall in revenues from both fixed line and mobile services.

The increase in revenue earned from fixed broadband service was a direct result of the increase in total fixed broadband subscriptions as the rate for broadband service has remained unchanged across the ECTEL Member States.

Figure 1.1: Telecoms sector revenue in the ECTEL Member States



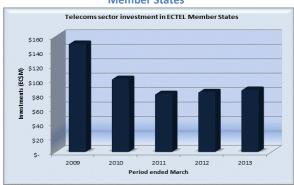
Source: ECTEL/operators

Investment

For the second consecutive year, operator spending in the electronic communications sector increased. Just over \$86 million was invested by licensed operators, \$3million more than was spent in the previous period (Figure 1.2).

A significant portion of this investment was for the deployment of a 4G mobile network on St Kitts and Nevis. In addition, providers engaged in upgrades of current mobile and broadband networks, the deployment of an underground fibre network and upgrades of cable TV networks to facilitate the switch from analogue to digital television service.

Figure 1.2: Telecoms sector investment in the ECTEL Member States



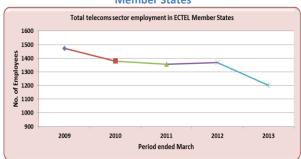
Source: ECTEL/operators

Direct Employment

The number of people employed full-time by electronic communications operators declined 13 per cent during the review period (Figure 1.3). This was the most significant reduction in the sectors full-time work force in the past five years.

This fall in sector employment affect all the ECTEL Member States with three Member State experiencing double digit fall in employment.

Figure 1.3: Telecoms sector employment in the ECTEL Member States



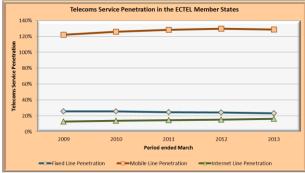
Telecoms Service Penetration

At the end of the period under review there were: More than 80,500 fixed broadband subscriptions, 7 per cent more than in the previous period. Average broadband penetration increased 90 basis points to 15.9 per cent (Figure 1.4).

650,000 total mobile subscriptions, unchanged from the previous period. Mobile penetration held firm at 1.29 subscriptions per inhabitant.

115,200 fixed line subscriptions, 4 per cent less than in the previous period. Average fixed line penetration fell 110 basis points to 22.8 per cent.

Figure 1.4: Telecoms service penetration in the ECTEL Member States



Source: ECTEL/operators

VOICE SERVICES

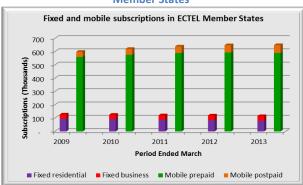
Subscriptions

The total number of fixed lines in the ECTEL Member States declined, falling 3 per cent, as the 6 per cent drop in residential fixed lines was offset by a 1 per cent rise in business lines. At the end of the review period there were roughly 115, 200 fixed lines in service, of this 70 per cent served residential customers (Figure 1.5). This reduction in residential fixed lines may be due to the increased decoupling of fixed voice from broadband services.

Amid signs of market saturation, the growth rate for mobile subscriptions slowed to 0.1 per cent. Just over 649, 000 mobile subscriptions were recorded at the end of March 2013. There appears to be the start of a shift from prepaid to postpaid service plans as the number of postpaid subscriptions grew 7 per cent while prepaid subscriptions, which accounted for 90

per cent of subscriptions fell 1 per cent. The offer of new fixed price postpaid packages may have contributed to the apparent start of this shift.

Figure 1.5: Fixed and mobile subscriptions in the ECTEL Member States



Source: ECTEL/operators

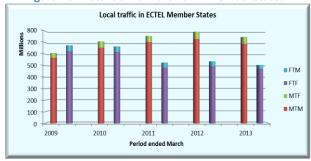
Local Traffic

Traffic volumes decreased for all types of local customer traffic during the review period:

- Total local traffic, fixed and mobile combined, fell 5 per cent to 1.27 billion minutes.
- Mobile on-net call volumes contracted 4 per cent and represented half of all local traffic.
- Fixed on-net calling also declined, falling 5 per cent to 470 million minutes.
- Mobile to fixed calling which had been on the rise in the past two periods was down 6 per cent of 60 million minutes (Figure 1.6).
- SMS was estimated to have fallen some 22 per cent.

The growing popularity of free messaging applications is likely to have had some impact on local call volumes.

Figure 1.6: Local traffic in the ECTEL Member States

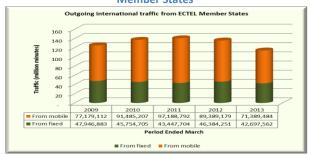


International Outgoing Traffic

Total outgoing international traffic from the ECTEL Member States followed the downward trend of local traffic and contracted for the second year. Consumers used 22 million fewer outgoing international calling minutes than in the previous period (Figure 1.7).

Mobile network originated call volumes led the decline, falling 20 per cent. Even so, mobile network originated calls accounted for an estimated 63 per cent of all outgoing international calling minutes.

Figure 1.7: Outgoing international traffic from ECTEL
Member States



Source: ECTEL/operators

INTERNET AND BROADBAND SERVICES

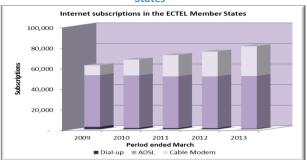
Fixed Internet Subscriptions

During the period under review the fixed broadband market continued to enjoy a healthy growth rate. At the end of March 2013 there were more than 80,000 broadband subscriptions in the ECTEL Member States (Figure 1.8). This was 7 per cent more that in the previous period. Virtually all fixed internet subscriptions are broadband subscriptions. There were less than 500 dial-up subscriptions at March 2013.

Broadband services are available via ADSL or cable modem. At March 2013, just less than 40 per cent of fixed broadband subscriptions were cable modem subscriptions. Across the ECTEL Member States, LIME offers ADSL broadband connections. Cable modem

service is offered by five providers across the Member States

Figure 1.8: Internet subscriptions in the ECTEL Member States



Source: ECTEL/operators

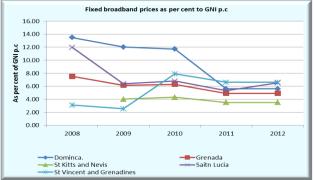
Fixed Broadband as a per cent of GNI per capita in the ECTEL Member States

On an annual basis, the International Telecommunications Union (ITU) presents the results of the ICT Price Basket (IPB), with the objectives of measuring the cost and affordability of key ICT services, including fixed broadband service. For the period 2009 to 2012 the broadband sub-basket revealed that in most of the ECTEL Member States the cost of fixed broadband as a per cent of GNI p.c. has decline steadily indicating that the service has become more affordable over that period (Figure 1.9).

At the end of 2012, for two Member States, Grenada and St Kitts and Nevis, the price of fixed broadband service was less than 5 per cent of average monthly income. The Broadband Commission has set an affordability target for broadband service of less than 5

per cent of average monthly income by 2015. Two of the ECTEL Member states are ahead of the target.

Figure 1.9: Fixed Broadband prices in ECTEL Member States



Source: ITU

Mobile Internet Service

Data only mobile internet service was not available to customers during the review period. Prepaid and postpaid mobile voice customers could access 2.5 G data services via their standard subscription or by

purchasing a bolt-on mobile internet service. ECTEL estimated that roughly 140,000 mobile internet plans were associated with mobile voice subscriptions at the end of March 2013.

BROADCASTING

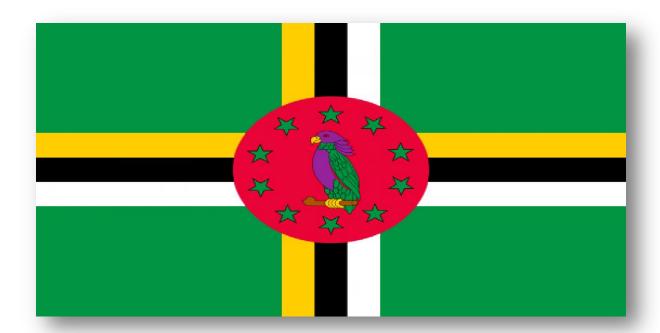
Subscriber Television

Across the ECTEL Member States multi-channel subscriber TV is largely provided via cable TV networks. During period under review eight cable TV operators provided service to the Member States. Total revenue generated from the provision of cable TV service was estimated to have increased 9 per cent to more than \$75 million and cable TV subscriptions were estimated at 98,000. Increasing cable TV service is being bundled with fixed

broadband and fixed voice services.

Most cable TV operators offer both digital and analogue service, only one operator indicated that its service was 100 per cent digital. During the review period a number of providers indicated that network upgrades were undertaken to facilitate the transition from analogue to digital service.

2 THE ELECTRONIC COMMUNICATIONS SECTOR DOMINICA



TELECOMMUNICATIONS

OVERVIEW

After two years of marginal growth, the ECCB's preliminary estimates pointed to a 0.5 per cent contraction in real GDP growth for Dominica in 2012. This reversal was the result of negative growth in a number of key economic sectors including construction, agriculture and wholesale and retail trade. Even so, buoyed by growth in communications, value added from the transport, storage and communications sector recorded a marginal 0.1 per cent increase. Communications added 6.61 per cent to gross valued added up from 6.56 in 2011.

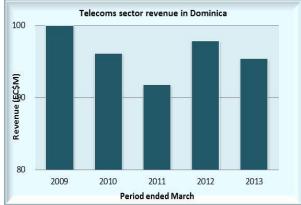
Despite the contraction in the overall economy, activity in the electronic communications sector produced some positive results. Investment in the sector was estimated to have increased by 10 per cent as operators continued network upgrades. The ICT price basket index for 2012 fell by 0.3 points due to lower rates for mobile cellular services. However, overall sector revenue fell 3 per cent reversing some of the gains of the previous period.

Operator Reported Revenue

Total revenue generated by the telecoms operators in Dominica declined by 3 per cent to an estimated \$95 million at the end of March 2013 (Figure 2.1). This was driven by a 7 per cent reduction in revenues of mobile services. Although there were increases in revenues from fixed voice and fixed internet services of 4 per cent and 1 per cent respectively, these increases were not sufficient to offset the drop in revenues from mobile services.

Mobile services still contributed over 50 per cent of total telecoms revenue; down 2 percentage points from the previous period. Revenue contribution from fixed voice went up 3 percentage points to 34 per cent, and that of fixed internet rose by one percentage point to 15 per cent.

Figure 2.1: Telecoms sector revenue in Dominica



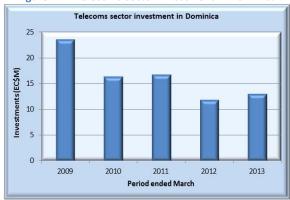
Source: ECTEL/operators

Investment

The telecoms service providers invested approximately \$13 million into the sector for the period ended March 2013 (Figure 2.2). This was a 10 per cent increase compared to the previous period, and represented an estimated investment rate of 14 per cent up from 12 per cent in the previous period.

During the period under review, providers focused on significant upgrades to their networks. In particular, cable TV operators invested in upgrades to allow for the switch to digital TV, and mobile operators upgraded to improve coverage and data capabilities.

Figure 2.2: Telecoms sector investment in Dominica



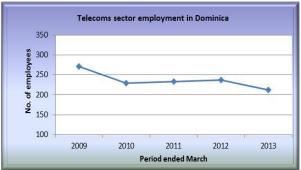
Source: ECTEL/operator

Direct Employment

The total number of persons in full-time employment in the telecommunications sector in Dominica declined by 10 per cent to 213 persons at the end of March 2013 (Figure 2.3). This decrease reversed the trend of slow but steady increases for the last two years.

The drop in full-time employment was accompanied by an increase in part-time employment. An estimated 7 per cent of persons working in the sector were employed part-time.

Figure 2.3: Telecoms sector employment in Dominica



Telecoms Service Penetration

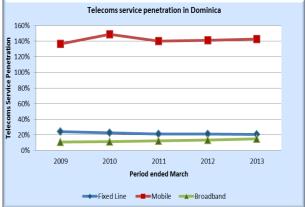
At the end of March 2013 telecoms service penetration in Dominica was as follow:

Fixed broadband subscription grew 11 per cent and resulted in a penetration rate of 14.7 per cent (Figure 2.4).

Mobile penetration increased 2 percentage points to 143 per cent in line with a 2 per cent increase in overall mobile subscriptions.

Fixed line service penetration fell 100 basis points to 20 per cent.

Figure 2.4: Telecoms service penetration in Dominica



Source: ECTEL/operators

ICT Price Basket

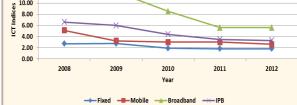
The prices of all the key ICT services declined over the period 2008 to 2012, resulting in a 50 per cent reduction in the ICT price basket for Dominica. This indicates an increase in affordability of these key ICT services during the period.

The price of fixed broadband fell 58 per cent over the period to 5.6 per cent of GNI per capita (Figure 2.5). However, it is still above the ITU's target of 5 per cent of average monthly GNI p.c.

ITU Price Basket for Dominica

ITU Price Basket for Dominica

14.00
12.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.00
10.0



Source: ITU

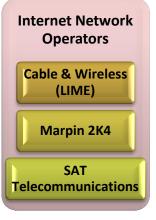
Active Services Providers

There were no changes in the number of active service providers operating in Dominica during the review period (Figure 2.6).

Figure 2.6: Telecoms Operators in Dominica









FIXED VOICE SERVICES

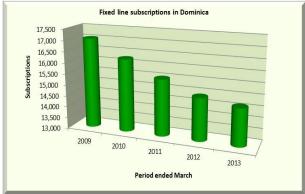
Subscriptions

At the end of March 2013, there were an estimated 14,600 fixed line subscriptions; a 2 per cent drop compared to the previous period (Figure 2.7). This follows four consecutive years of falling fixed line subscriptions.

The overall decrease in subscriptions was the result of a reduction in the number of residential subscriptions. The number of business lines remained relatively flat.

Residential subscription's share of total fixed line subscriptions fell two percentage points to 65 per cent.

Figure 2.7 Fixed line subscriptions in Dominica



Source: ECTEL/operators

Fixed Traffic Volumes

During the review period, the number of fixed network originated minutes remained flat at approximately 23 million on the island of Dominica (Table 2.1). Local fixed to fixed calling minutes increased by one percentage point, while local fixed to mobile calling saw a 4 per cent reduction. Fixed to mobile calling share of local fixed volume held firm at 18 per cent.

International outgoing minutes originating from fixed network remained flat at 3 million minutes during the period under review and accounted for 20 per cent of total outgoing international minutes.

Table 2.1: Local fixed traffic volume in Dominica

Fixed traffic volume in Dominica (million minutes)					
	Fixed to Fixed	Fixed to Mobile	Total		
2009	27	5	32		
2010	25	5	30		
2011	21	4	25		
2012	19	4	23		
2013	19	4	23		

Source: ECTEL/operators

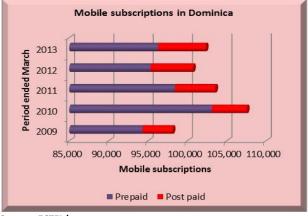
MOBILE SERVICES

Subscriptions

Reversing the past two years of decline, at the end of March 2013, the total number of mobile subscriptions increased and was recorded at approximately 102,300 subscriptions (Figure 2.8). This was a 2 per cent improvement over the previous period. This was led by increases in both prepaid and postpaid mobile subscriptions of 1 per cent and 12 per cent respectively.

Postpaid subscription growth continues to outpace that of prepaid subscription growth possibly spurred by the uptake in mobile data packages. Even so prepaid subscriptions accounted for 94 per cent of total mobile subscriptions on Dominica

Figure 2.8: Mobile subscriptions in Dominica



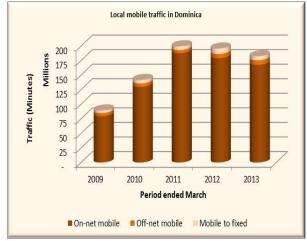
Mobile Traffic Volumes

On the island of Dominica, local mobile traffic declined by 7 per cent to roughly 182 million minutes, during the review period (Figure 2.9). Although mobile offnet minutes increased by 12 per cent, the declines in both local on-net minutes and mobile to fixed line minutes resulted in a drop in total local mobile traffic volumes. Mobile to mobile calling commanded a 96 per cent share of all local mobile traffic during the period.

After tumbling 52 per cent in the previous period, the number of outgoing international minutes that originated from mobile networks in Dominica increased by 21 per cent to 14 million minutes.

As a result, 80 per cent of all international outgoing minutes originated from mobile networks.

Figure 2.9: Local mobile traffic in Dominica



Source: ECTEL/operators

INTERNET AND BROADBAND

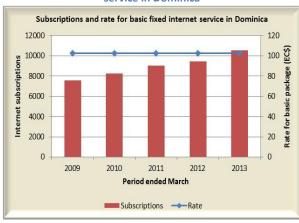
Fixed and Mobile Internet Services

Growth in the number of fixed broadband subscriptions in Dominica continued at a steady pace. At March 2013, the number of fixed internet subscriptions in Dominica stood at over 10,500; 11 per cent more than in the previous period (Figure 2.10). Although most fixed internet subscriptions are for broadband service, 2 per cent of subscribers still access the internet via a dial up connection.

The rate of fixed broadband service has remained relatively stable in the past five years and represented 5.6 per cent of average monthly GNI, 60 basis points higher than the ITU's target of 5 per cent.

For the review period, it was estimated that more than 20,000 mobile data packages were purchased by mobile voice customers as a bolt-on service. This means that roughly 20 per cent of mobile subscriptions included a data package.

Figure 2.10: Subscriptions and rate for basic fixed internet service in Dominica



Source: ECTEL/operators

BROADCASTING

Subscriber Television

Marpin 2K4 and Sat Telecommunications are the providers of subscriber TV service in Dominica. Both provide cable TV service and the rates for the most basic packages offered are outlined in table 2.2.

Table 2.2: Subscriber TV basic packages in Dominica

Operator	Monthly Rate	Total channels	Local Channels
Marpin 2K4	\$50	52	2
SAT Telecoms	\$20	11	3

3 THE ELECTRONIC COMMUNICATIONS SECTOR GRENADA



TELECOMMUNICATIONS

OVERVIEW

The ECCB estimated that in 2012, economic activity on Grenada slowed, and real GDP growth fell 0.5 per cent as weakness in the tourism and transport, storage and communications sector led an overall decline in economic activity. On the positive side, value added by agriculture and manufacturing rose 6 and 0.3 per cent respectively and gross value added by telecommunications and ICT was recorded at 5.63 per cent up from 5.46 per cent in 2011.

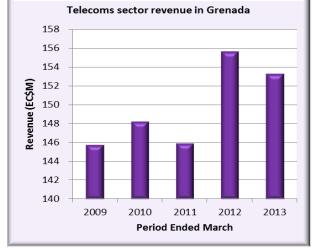
The performance of the telecommunications sector was also generally muted. Revenue generated by telecoms operators was 2 per cent less than in the previous period, and the sector lost 10 per cent of its full-time employees. On the positive side, sector investment was 6 per more than in the previous period and was recorded at 17 million. Downward pressure on mobile cellular service resulted in the overall ICT price basket index falling 0.1 point.

Operator Reported Revenue

Total revenue generated by the telecoms operators in Grenada declined by 2 per cent to \$153 million at the end of March 2013 (Figure 3.1). This was the result of a reduction in revenue from mobile and fixed voice services of 4 per cent and 3 per cent respectively. In contrast, revenue from fixed internet services increased by 16 per cent during the period but this was not sufficient to offset the declines in the other markets.

Mobile services contributed just over half of the sector's revenue at 51 per cent; down one percentage point from the previous period. Revenue contribution from fixed voice to the sector was down 60 basis points to 37.4 per cent. The growth area of fixed internet contributed 11 per cent to the sector revenues.

Figure 3.1: Telecoms sector revenue in Grenada



Source: ECTEL/operators

Investment

The period ended March 2013, saw a 6 per cent increase in investment by the telecoms providers to roughly \$17 million (Figure 3.2). Again the providers focused on the maintenance, upgrade and expansions of their existing telecoms networks including the expansion of a 3G network.

The investment rate was recorded at 11 per cent, 1 per cent better than in the previous period.

Figure 3.2: Telecoms sector investment in Grenada



Source: ECTEL/operators

Direct Employment

For the period under review, there was a decline in the number of full-time employees in the telecoms sector in Grenada. At March 2013, there were nearly 240 persons employed full-time within the sector; a 10 per cent reduction from the previous period (Figure 3.3).

The sector also provided part-time employment for a number of persons. Roughly 3 per cent of sector employees worked part-time.

Figure 3.3: Telecoms sector employment in Grenada



Telecoms Service Penetration

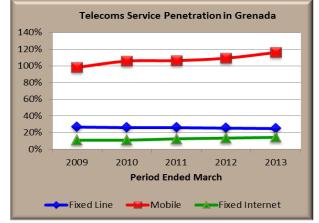
At the end of the review period telecoms service penetration in Grenada was as follows:

Fixed broadband subscription grew 12 per cent and resulted in a penetration rate of 16.7 per cent the second highest in the Member States (Figure 3.4).

Mobile penetration increased 1 percentage points to 124 per cent as a result of a 2 per cent increase in overall mobile subscriptions.

Total fixed line service subscription rose 3 per cent and resulted in a 1 per cent increase in fixed line penetration to 27 per cent.

Figure 3.4: Telecoms service penetration in Grenada

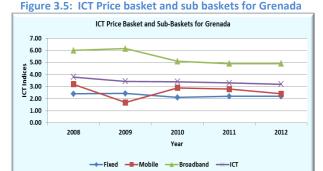


Source: ECTEL/operators

ICT Price Basket

The cost of fixed telephony and fixed broadband services declined over the period 2008 to 2012, resulting in a 23 per cent reduction in the ICT price basket for Grenada. This indicates an increase in affordability of these key ICT services during the period. However, the price of mobile cellular saw an increase of 26 per cent during the same period.

Most notably, the price of fixed broadband fell by 35 per cent and is now below the target of 5 per cent of average monthly GNI p.c. set by the ITU (Figure 3.5).

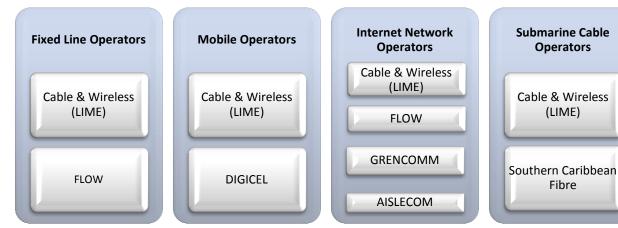


Source: ITU

Active Services Providers

There were no changes in the number of active service providers operating in Grenada during the review period (Figure 3.6).

Figure 3.6: Telecoms operators in Grenada



Source: ECTEL/NTRC

FIXED VOICE SERVICES

Subscriptions

At the end of March 2013, there were an estimated 28,585 fixed line subscribers in Grenada, a 3 per cent rise over the previous period (Figure 3.7). This growth in subscriptions was fuelled by increases in subscriptions from both residential and business customers.

The update of broadband service has likely contributed to this uptake in fixed line subscriptions following two years of decline. Eight out of ten fixed line subscriptions were for residential use.

Figure 3.7: Fixed line subscriptions Grenada

Fixed line subscriptions in Grenada

28,600
28,400
28,200
28,200
27,800
27,400
27,400
2009
2010
2011
2012
2013

Period ended March

Source: ECTEL/operators

Fixed Traffic Volumes

During the review period, consumers used approximately 225 million fixed network originated minutes on the island of Grenada (Table 3.1). This represented an 8 per cent reduction over the previous period.

Local fixed to fixed on-net calling minutes, which accounted for 96 per cent of local minutes, contracted by 8 per cent, while fixed to mobile minutes remained relatively flat.

In contrast to local calling minutes, international traffic from fixed lines increased 36 per cent during the

review period to almost 14 million minutes. This was consistent with the CAGR of 37 per cent for the past three periods.

Table 3.1: Fixed traffic volume in Grenada

Fixed Traffic Volume in Grenada (million minutes)						
	2009	2010	2011	2012	2013	
Fixed to Fixed	304	306	213	235	216	
Fixed to Mobile	8	7	8	8	8	
Total	312	313	222	244	225	

Source: ECTEL/operators

MOBILE SERVICES

Subscriptions

At the end of March 2013, the total number of mobile subscriptions continued to increase, recording approximately 133,000, a 2 per cent improvement over the previous period (Figure 3.8). This increase was attributed to the 1 per cent increase in prepaid subscriptions and the 7 per cent increase in postpaid subscriptions. Growth of postpaid subscriptions has outpaced that of prepaid subscriptions in the last three periods, however prepaid subscriptions still accounted for 91 per cent of all mobile subscriptions in Grenada.

Figure 3.8: Mobile subscriptions in Grenada

Mobile subscriptions in Grenada

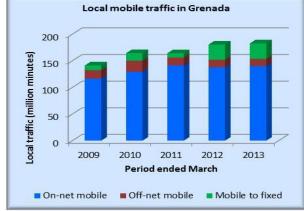


Mobile Traffic Volumes

For the period ended March 2013, local mobile traffic on the island of Grenada increased by 1 per cent to roughly 183 million minutes (Figure 3.9). Mobile onnet minutes had a modest increase of 2 per cent. Mobile to fixed calling volume also increased 2 per cent. However, there was a decline of 5 per cent in mobile off-net minutes during the period.

Local calling minutes from mobile networks increased its share of total local traffic by 2 percentage points to 45 per cent during the period. Average mobile minutes per subscription per month declined slightly from 115 in the last period to 114 minutes in the current period.

Figure 3.9: Local mobile traffic in Grenada



Source: ECTEL/operators

INTERNET AND BROADBAND SERVICES

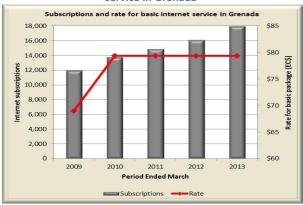
Fixed and Mobile Internet Services

The number of fixed broadband connections in Grenada grew 12 per cent to just fewer than 18,000 by the end of March 2013 (figure 3.10). This was an acceleration in growth from the 8 per cent recorded in the previous period. The overall increase was fuelled by uptake of both ADSL and cable modem services.

The rate for fixed broadband services has remained stable in the past three periods and was recorded at 4.9 per cent of average monthly GNI, below the ITU target of 5 per cent.

In excess of 20,500 mobile data packages were associated with mobile voice subscriptions. At least 15 per cent of mobile voice subscribers also purchased a bolt-on data package.

Figure 3.10: Subscriptions and rate for basic fixed internet service in Grenada



Source: ECTEL/operators

BROADCASTING

Subscriber Television

Subscriber TV service is provided by Columbus Communications (FLOW) in Grenada. FLOW offers cable TV service, and 75 per cent of its subscriptions are digital. The most basic package offered to customers is an analogue service (Table 3.2).

Table 3.2: Subscriber TV basic packages in Grenada

Operator	Monthly	Total	Local
	Rate	channels	Channels
Analogue	\$43.47	40	6
Digital	\$69.99	44	5

4 THE ELECTRONIC COMMUNICATIONS SECTOR ST. KITTS AND NEVIS



TELECOMMUNICATIONS

OVERVIEW

The ECCB estimated that economic activity on St Kitts and Nevis declined by 0.9 per cent 2012 which was slower than the 1.8 per cent decline in 2011. Contractions in value added from the construction, and wholesale and retail and the agricultural sectors all contributed to this overall decline. Negative performance in the transport sub component resulted in a 1.6 per cent fall in value added by the transport, storage and communications sector. However, gross value added by the communications sub component was unchanged at 6.69 per cent.

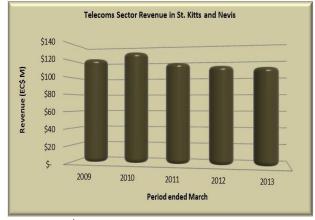
The overall size of the telecommunications sector in St Kitts and Nevis contracted by 2 per cent, led by a fall in revenue from fixed line services. Direct employment also decreased, as there were roughly 40 less full-time employees in the sector. Sector investments provided positive results as licensed operators increased their capital expenditure network upgrades on by 21 per cent.

Operator Reported Revenue

The total revenue generated by the telecommunications sector in St. Kitts and Nevis declined by 2 per cent to \$110 million, compared to \$112 million at the end of March 2012 (Figure 4.1). This drop in revenue was solely due to the 12 per cent reduction in revenues from fixed voice and leased circuits.

The contribution of mobile services to sector revenue saw a modest 1 per cent increase over the previous year to 55 per cent, whilst fixed internet service saw its contribution increase by a percentage point to 17 per cent. As a result of its continued decline, the contribution of fixed voice and leased circuits to sector revenue has now fallen to 28 per cent.

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



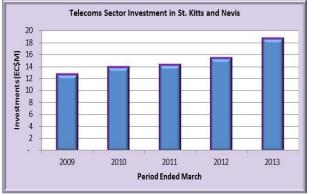
Source: ECTEL/operators

Investment

The period ended March 2013, saw a 21 per cent increase in investment over the last period (Figure 4.2). This significant increase in investment to \$19 million from \$15 million was occasioned by the deployment of a 4G network by one provider and the upgrade of cable networks to allow for the transition to digital service.

The overall investment rate was recorded at 17 per cent during the review period compared to an average rate of 12 per cent in the last three periods.

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



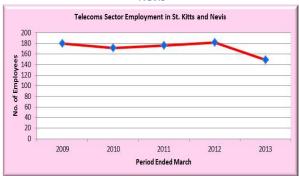
Source: ECTEL/operators

Direct Employment

The job numbers in the telecommunications sector on the Federation of St. Kitts and Nevis declined sharply by 18 per cent during the review period (Figure 4.3).

This 18 per cent reduction follows four periods of relatively stable sector employment and may highlight the providers' challenges in responding to the changing telecoms environment.

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



Telecoms Service Penetration

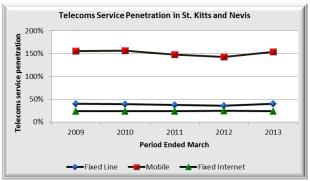
Telecoms service penetration on St Kitts and Nevis at March 2013:

Fixed broadband subscription grew 2 per cent and resulted in a penetration rate of 25 per cent the highest in the Member States (Figure 4.4).

A one per cent growth in total mobile subscription led to a 2 percentage point increase in the mobile penetration rate to 145 per cent.

Fixed line service penetration remained flat at 36 per cent.

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



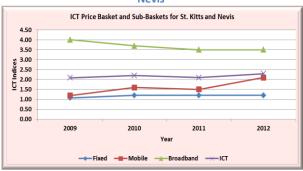
Source: ECTEL/operators

ICT Price Basket

Whereas the prices for a basket of fixed telephony and mobile services have increased over the period 2009 to 2012, the price of fixed broadband has fallen during the same period.

The price of broadband which saw a 13 per cent decline during the period has become more affordable on the islands of St. Kitts and Nevis and the recorded 3.5 per cent of GNI per capita is well below the target set by ITU (Figure 4.5).

Figure 4.5: ICT Price basket and sub baskets for St. Kitts and Nevis



Source: ITU

Active Services Providers

The number of service providers offering telecommunications services on St Kitts and Nevis remained unchanged during the period under review (Figure 4.6).

Figure 4.6: Telecoms operators in St. Kitts and Nevis









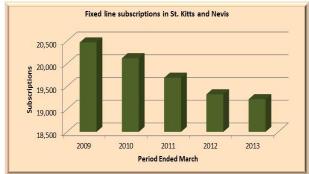
FIXED VOICE SERVICES

Subscriptions

The number of fixed lines in service has declined every year for the last four years. The number of fixed line subscriptions for the period ended March 2013, were 19,200, which represented a 1 per cent decrease from the previous year (Figure 4.7).

The decline was a result of decreases in both residential and business subscriptions, which both fell by 1 per cent. Residential subscriptions still accounted for roughly 60 per cent of all fixed line subscription.

Figure 4.7 Fixed line subscriptions in St. Kitts and Nevis



Source: ECTEL/operators

Fixed Traffic Volumes

During the review period, consumers used approximately 47 million fixed network originated minutes on the island of St. Kitts and Nevis, representing a 5 per cent reduction over the previous period (Table 4.1).

Local fixed to fixed minutes which now accounted for 91 per cent of local minutes contracted by 7 per cent over the last period while fixed to mobile calling minutes remained flat.

After four periods of volatility, international traffic from fixed lines experienced a significant 49 per cent contraction and accounted for only 48 per cent of outgoing international minutes.

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

Fixed Traffic Volume in St. Kitts & Nevis					
	(million n	ninutes)		
	2009	2010	2011	2012	2013
Fixed to Fixed	58	54	41	45	43
Fixed to Mobile	6	5	3	4	4
Total	64	59	44	50	47

Source: ECTEL/operators

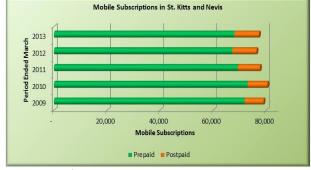
MOBILE SERVICES

Subscriptions

The mobile sector recorded a 1 per cent increase in the total number of subscriptions to roughly 77,000, following two consecutive years of decline (Figure 4.8).

This modest increase was pushed by increases in prepaid and postpaid subscriptions by 1 per cent and 2 per cent respectively. Similar to the previous period, postpaid mobile subscriptions in this period accounted for 12 per cent of total mobile subscriptions.

Figure 4.8: Mobile subscriptions in St. Kitts and Nevis



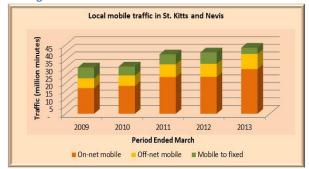
Mobile Traffic Volumes

The period ended March 2013, saw a 8 per cent increase in local mobile calling volumes in St. Kitts and Nevis as over 43 million local call minutes originated from its mobile networks (Figure 4.9).

This overall increase in volumes resulted from increases in on-net (21 per cent) and off-net (16 per cent) calling. However, there was a nearly 50 per cent reduction in mobile to fixed call volumes which accounts for just 9 per cent of local call volumes.

In contrast to local calling, international outgoing calls from mobile networks recorded a 36 per cent decline to roughly 14 million minutes. Even so it still accounted for the majority, 62 per cent, of total outgoing international minutes.

Figure 4.9: Local mobile traffic in St. Kitts and Nevis



Source: ECTEL/operators

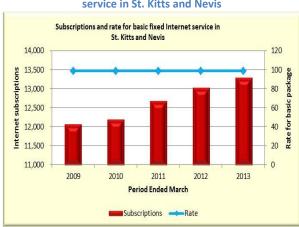
INTERNET AND BROADBAND SERVICES

Fixed and Mobile Internet Services

At the end of March 2013, the number of fixed broadband subscriptions in St. Kitts and Nevis grew by 2 per cent over the previous year to almost 13,300 subscriptions (Figure 4.10). This represented a service penetration rate of 24 per cent. This was pushed by the increases in subscriptions to both ADSL and cable modem services. Even so the rate for basic fixed broadband has remained unchanged since 2008 and represented 3.5 per cent of average monthly GNI, well below the ITU's affordability target of 5 per cent.

Data only mobile plans were not available in St Kitts and Nevis during the review period. Mobile internet service plans were associated with 30 per cent of mobile subscriptions, an increase of 45 per cent for the review period.

Figure 4.10: Subscriptions and rate for basic fixed internet service in St. Kitts and Nevis



Source: ECTEL/operators

BROADCASTING

Subscriber Television

There were two subscriber TV operators on St. Kitts and Nevis, both offering cable TV services. The Cable offers service on St. Kitts and Caribbean Cable Communications offers service on Nevis.

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

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

Operator	Montly Rate	Total Channels	Local Channels
The Cable	\$37	17	2
Caribbean Cable Communications	\$50	12	2

5 THE ELECTRONIC COMMUNICATIONS SECTOR SAINT LUCIA



TELECOMMUNICATIONS

OVERVIEW

The Eastern Caribbean Central Bank estimated that Saint Lucia's economy decline by 1.2 per cent in 2012. This was due to negative results in a number of major economic sectors including the construction and tourism sectors. The declines in these major sectors more than offset expansions in the manufacturing and agricultural sector.

The telecommunications sector was not immune to the overall negative performance. Total sector revenue fell 5 per cent led by a contraction in the revenue earned from fixed line services which more than offset growth in the revenue generated from fixed broadband service. With the completion of a major network upgrade project, there was 20 per cent pull back in sector investment. As a result the sector's contribution to gross value added fell and was recorded at 5.96 per cent.

Operator Reported Revenue

Total revenue from the telecommunications sector in Saint Lucia declined 5 per cent to \$227 million, at the end of March 2013 (Figure 5.1). This decline was primarily attributed to the contraction in revenues from fixed voice services.

Revenue from mobile services remained almost flat for the period and although there was a 20 per cent increase in revenues from fixed internet services, it was not sufficient to offset the decline in revenue from fixed voice services.

Figure 5.1: Telecoms sector revenue in Saint Lucia



Source: ECTEL/operators

Investment

After the sizable investments in the previous period, for the period ended March 2013, capital expenditure by telecommunications service providers in Saint Lucia fell by 22 per cent to an estimated \$23 million (Figure 5.2).

The significant drop in investments resulted as most of the preparation works undertaken by the providers in the previous period to upgrade their mobile networks for the launch of 4G mobile broadband service were been completed. One provider officially launched its 4G mobile data network during the review period.

Figure 5.2: Telecoms sector investment in Saint Lucia



Source: ECTEL/operators

Direct Employment

The trend of decline in the number of employees working full-time in the telecommunications sector in Saint Lucia continued this period falling by 16 per cent to 425 persons (Figure 5.3).

As the number of full-time employees has declined, the number of persons offered part-time or sub-contracted work appears to be on the rise. During the review period, an estimated 8 per cent of the workforce in the telecoms sector worked part-time.

Figure 5.3: Telecoms sector employment in Saint Lucia



Telecoms Service Penetration

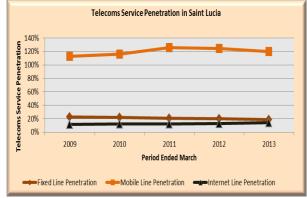
At the end of the review period telecoms service penetration in Saint Lucia was as follow

Fixed broadband subscription grew 11 per cent and resulted in a penetration rate of 14.6 per cent (Figure 5.4).

Mobile penetration fell 4 percentage points to 125 per cent as a result of a 2 per cent decline in overall mobile subscriptions.

Total fixed line service subscription dropped 4 per cent and resulted in a 1 per cent fall in fixed line penetration to 20 per cent.

Figure 5.4: Telecoms service penetration in Saint Lucia



Source: ECTEL/operators

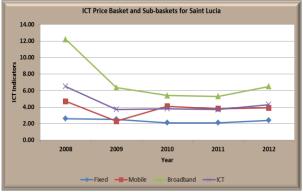
ICT Price Basket

The prices for most key ICT services declined over the period 2008 to 2012, resulting in a 24 per cent reduction in the ICT price basket for Saint Lucia. This indicates an increase in affordability of most ICT services during the period (Figure 5.5).

Most significantly, the price index for fixed broadband fell 47 per cent over the period to 6.5 per cent of GNI per capita. This is still above the ITU's target of 5 per cent of average monthly income.

At the end of 2012, there was a small uptake in the price indices for ICT services in Saint Lucia owing to the introduction of the value added tax to all services.

Figure 5.5: ICT Price Basket and Sub-Baskets for Saint Lucia



Source: ITU

Active Services Providers

During the period under review, there was one change to the number of active operators in the telecommunication sector in Saint Lucia. Spectra became the third internet service provider in the market, together with Cable & Wireless (LIME) and Karib Cable (Figure 5.6).

Figure 5.6: Telecoms operators in Saint Lucia

Fixed Line Operators

Cable & Wireless
(LIME)

Karib Cable

Mobile Operators

Cable & Wireless
(LIME)

DIGICEL

Internet Network
Operators

Cable & Wireless
(LIME)

Karib Cable

Spectra

Submarine Cable
Operators

Cable & Wireless
(LIME)

Southern
Caribbean Fibre

FIXED VOICE SERVICES

Subscriptions

There were approximately 33,500 fixed line subscriptions in Saint Lucia at the end of March 2013, representing a 4 per cent reduction over the previous period (Figure 5.7).

The decline was a result of decreases in both residential and business subscriptions, which fell 5 per cent and 2 per cent respectively. Residential subscriptions still accounted for 67 per cent of all fixed line subscription falling by one percentage point over the previous period.

Figure 5.7: Fixed line subscriptions in Saint Lucia



Source: ECTEL/operators

Fixed Traffic Volumes

During the review period, consumers used approximately 143 million fixed network originated minutes on the island of Saint Lucia representing a 3 per cent reduction over the previous period (Table 5.1). During the previous three years, the average yearly reduction was 7 per cent.

Local fixed to fixed minutes which accounted for 92 per cent of local minutes contracted by 2 per cent over the last period while fixed to mobile calling minutes contracted by 14 per cent.

International traffic from fixed lines decreased 17 per cent during the review period to fewer than 7 million minutes.

Table 5.1: Fixed traffic volume in Saint Lucia (million minutes)

		,	
	Fixed to Fixed	Fixed to Mobile	Total
2009	166	17	183
2010	156	16	173
2011	141	17	158
2012	133	14	147
2013	131	12	143

Source: ECTEL/operators

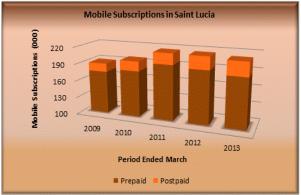
MOBILE SERVICES

Subscriptions

At the end of March 2013, the total number of mobile subscriptions continued to decline, recording approximately 212,000, a 2 per cent reduction over the previous period. This contraction was attributed to the 3 per cent reduction in pre-paid subscriptions, which represents 88 per cent of all mobile subscriptions.

As seen in previous periods, postpaid mobile subscriptions continued to grow steadily, recording an 8 per cent increase in the period under review to approximately 212,000 subscriptions. However this increase was not sufficient to offset the decrease in prepaid subscriptions likely from customers giving up the second SIM card (Figure 5.8).

Figure 5.8: Mobile subscriptions in Saint Lucia



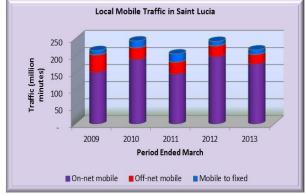
Mobile Traffic Volumes

For the period ended March 2013, local mobile traffic on the island of Saint Lucia contracted by 10 per cent to roughly 217 million minutes (Figure 5.9).

Mobile on-net calling recorded an estimated 11 per cent reduction, but maintained its market share at 81 per cent. Mobile off-net calling also saw a 12 per cent decline in the number of minutes to roughly 27 million minutes. Only mobile to fixed calling saw an increase of 3 per cent. For the period under review, 8.1 out of every 10 mobile call minutes remained on-net.

Total international minutes from mobile networks were estimated at 18 million minutes, 7 per cent more than the previous period.

Figure 5.9: Local mobile traffic in Saint Lucia



Source: ECTEL/operators

INTERNET AND BROADBAND SERVICES

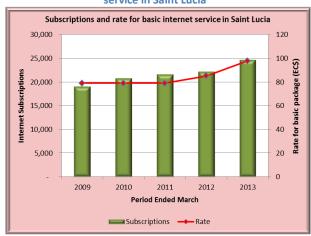
Fixed and Mobile Internet Service

For the period ended March 2013, growth in the number of fixed internet subscriptions in Saint Lucia was 11 per cent over the previous year. There were almost 25,000 subscriptions with a service penetration rate of 14.6 per cent (Figure 5.10).

Mobile internet service plans were associated with 28 per cent of mobile subscriptions, an increase of 72 per cent for the review period. Of the persons accessing this service, 82 per cent were customers with a prepaid subscription, an increase over the previous period by 2 percentage points.

Since the review period one provider has launched its 4G mobile data service but information on subscription to this service was not available at the time of this report.

Figure 5.10: Subscriptions and rate for basic fixed internet service in Saint Lucia



Source: ECTEL/operators

BROADCASTING

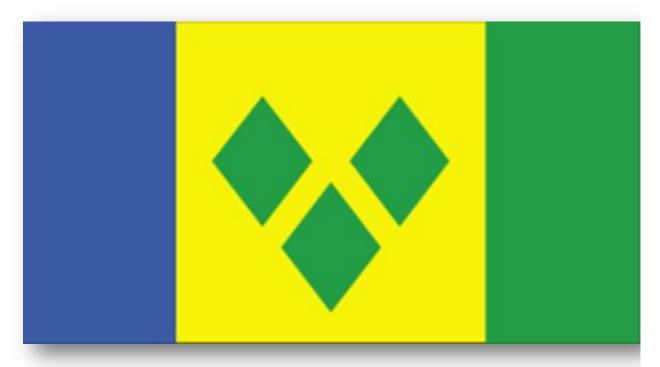
Subscriber Television

There were three providers of subscriber TV service in Saint Lucia during the review period. Two providers offer both analogue and digital cable TV service and one provider offers digital wireless TV service. The basic package offered by two operators is 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
Karib Cable	\$80.49	101	9

6 THE ELECTRONIC COMMUNICATIONS SECTOR St. VINCENT AND THE GRENADINES



TELECOMMUNICATIONS

OVERVIEW

Information received from the Eastern Caribbean Central Bank (ECCB) suggests that St. Vincent and the Grenadines was the only ECTEL Member State to experience real GDP growth in2012. Initial estimates were that the economy expended by 1.5 per propelled by growth in the tourism, agricultural, retail and wholesale and transport, storage and communications sector.

The performance of the telecommunications sector was generally subdued. Revenue generated by telecoms operators was down 3 per cent on the previous period, and the sector lost 6 per cent of its full-time employees. There was some good news as sector investment was 36 per more than in the previous period and was recorded at 14 million.

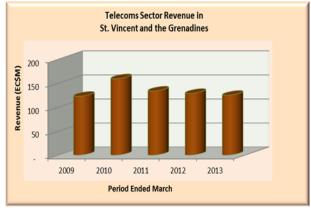
Operator Reported Revenue

Total operator revenue generated from the telecommunications sector on the islands of St. Vincent and the Grenadines declined 3 per cent to just over \$126 million at the end of March 2013 (Figure 6.1). This reduction comes on the heels of a cumulative 20 per cent reduction during the two previous years.

During the review period, revenue from fixed internet service rose 5 per cent but there was a decline in fixed voice and mobile services of 6 per cent and 3 per cent respectively.

Fixed broadband share of total revenue increased 2 percentage points as a result, and now stands at 15 per cent. Mobile services share of total revenue held firm at 60 per cent.

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



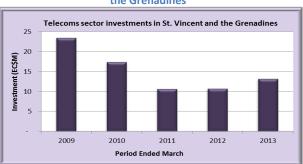
Source: ECTEL/operators

Investment

Total investment in the electronic and communications sector on St. Vincent and the Grenadines rose 36 per cent to an estimated \$14.6 million at the end of March 2013 (Figure 6.2).

This significant increase in investments during the period was as a result of the deployment of an underground fiber system in the Kingstown area, as well as continued upgrade and maintenance of the mobile and broadband infrastructure.

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



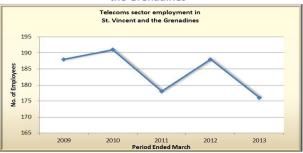
Source: ECTEL/operators

Direct Employment

The number of full-time employed persons in the telecoms sector of St. Vincent and the Grenadines stood at 176 persons, a 6 per cent decline over the previous year (Figure 6.3). This reversal in employment came following the 6 per cent increase in the period ended March 2012.

Over the last five years the sector has experienced volatility in the number of full-time employees from year to year.

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



Telecoms Service Penetration

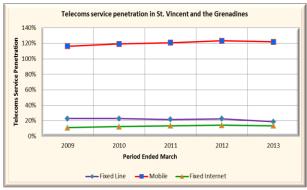
On St Vincent and the Grenadines, at the end of March 2013:

Fixed broadband subscription contracted 3 per cent and resulted in a penetration rate of 13.6 per cent (Figure 6.4).

Mobile penetration fell 1 percentage point to 121 per cent in line with a 0.01 per cent reduction in the overall number of mobile subscriptions.

Total fixed line service subscription fell 16 per cent and resulted in a 3 per cent decline in fixed line penetration to 19 per cent, the lowest in the Member States.

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



Source: ECTEL/operators

ICT Price Basket

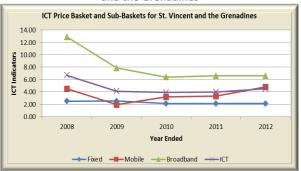
The International Telecommunications Union (ITU) has been presenting annually the results of the ICT Price Basket (IPB) with the objectives of measuring the cost and affordability of key ICT services; fixed telephony, mobile cellular (voice and SMS) and fixed broadband. All prices are recorded as a percentage of GNI per capita.

The price indices of the key ICT services declined over the period 2008 to 2012, except for that of mobile cellular service (Figure 6.5). This indicates a general increase in affordability of both fixed voice and broadband services.

From 2008 to 2013, the price of fixed broadband has fallen 49 per cent to 6.6 per cent of GNI per capita.

However, it is still above the ITU's target of 5 per cent of average monthly income.

Figure 6.5: ICT Price Basket and Sub-Baskets for St Vincent and the Grenadines



Source: ITU

Active Services Providers

At the end of March 2013, there were no changes to the active service providers in St. Vincent and the Grenadines. There was still a total of four major telecommunications service providers on the islands and there were two service providers each offering major telecoms services (Figure 6.6).

Figure 6.6: Telecoms operators in St. Vincent and the Grenadines

Submarine Cable Fixed Line Operators **Mobile Operators Operators Operators** Cable & Wireless Cable & Wireless Cable & Wireless Cable & Wireless (LIME) (LIME) (LIME) (LIME) Southern Karib Cable DIGICEL Karib Cable Caribbean Fibre

FIXED VOICE SERVICES

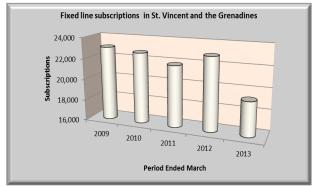
Subscriptions

As at March 2013, there were 19,253 fixed lines providing voice service on St. Vincent and the Grenadines; 16 per cent fewer than the previous period (Figure 6.7).

This reduction in total fixed lines in service resulted from a 23 per cent reduction in the number of lines serving residential customers, even though there was a 10 per cent increase in the number of fixed lines serving businesses.

Cable & Wireless (LIME) boasts a 100 per cent NGN for fixed lines serving both residential and business customers.

Figure 6.7: Fixed line subscriptions in St. Vincent and the Grenadines



Source: ECTEL/operators

Fixed Traffic Volumes

During the review period, local fixed voice call volumes recorded a decline of 7 per cent to 68 million minutes, compared to a 5 per cent reduction the previous period (Table 6.1).

All the classes of local calling saw a reduction in call volumes. Fixed to fixed calling, which accounted for 91 per cent of the local fixed traffic declined by 2 per cent, whilst fixed to mobile calling minutes declined by 40 per cent.

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	Total			
2009	71	13	84			
2010	78	12	90			
2011	66	11	77			
2012	63	10	73			
2013	62	6	68			

Source: ECTEL/operators

MOBILE SERVICES

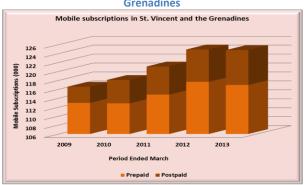
Subscriptions

During the review period, growth in the overall number of mobile subscriptions remained flat at roughly 125,000 subscriptions (Figure 6.8).

There was a 1 per cent decline in prepaid subscriptions; a decline for the first time in almost a decade, supporting sentiments that this segment of the market is somewhat saturated.

Growth in postpaid subscriptions continued in the positive, recording an 8 per cent increase over the previous period and increasing its market share by 40 basis points to 6.2 per cent.

Figure 6.8: Mobile subscriptions in St. Vincent and the Grenadines

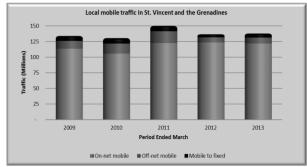


Mobile Traffic Volumes

Mobile originated local traffic was up 1 per cent to 138 million minutes at the end of March 2013 (Figure 6.9). This increase was caused by both an increase in cross network traffic of 17 per cent and an increase from mobile to fixed lines of 30 per cent.

However, on-net traffic, which accounts for 88 per cent of all local mobile traffic, had a slight decrease of 1 per cent during the review period.

Figure 6.9: Local mobile traffic in St. Vincent and the Grenadines



Source: ECTEL/operators

INTERNET AND BROADBAND SERVICES

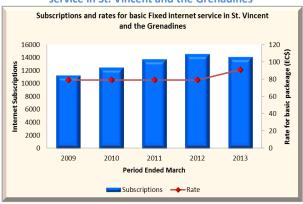
Fixed and Mobile Internet Services

The number of fixed broadband connections fell 3 per cent to just over 14,000 at the end of March 2013 (Figure 6.10). This was the first contraction in this service and follows an average cumulative growth of 9 per cent over the last three periods.

There were no changes to the pricing or speeds of the most basic broadband packages offered by providers in St Vincent and the Grenadines during the review period.

During the review period, more than 17,000 mobile data packages were purchased by mobile voice customers; a 7 per cent reduction over the previous period.

Figure 6.10: Subscriptions and rate for basic fixed internet service in St. Vincent and the Grenadines



Source: ECTEL/operators

BROADCASTING

Subscriber Television

Karib Cable was the sole provider of subscriber television service in St Vincent and the Grenadines during the review period. Karib Cable offers digital cable TV service to 100 per cent of its subscribers. The rate for the most basic package offed to customers is presented in table 6.2.

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

Operator	Monthly Rate	Total Channels	Local Channels
Karib Cable	\$74.75	80	14

Source: ECTEL/NTRC

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 telecommunications services.
- 3. Fixed line penetration is obtained by dividing the number of fixed line subscribers by the population and multiplying by 100.
- 4. Mobile penetration is obtained by dividing the number of cellular subscribers by the population and multiplying by 100.
- 5. Internet penetration is obtained by dividing the number of Internet subscribers by the population and multiplying by 100.
- 6. 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.
- 7. Residential fixed line access charge is the recurring fixed charge for subscribing to a fixed line service.
- 8. Telecommunications investment is the expenditure associated with acquiring ownership of plant and property used for telecommunications services and includes land and buildings.

- 9. Employment refers to the total number of staff employed by a telecommunications provider. This does not include sub-contract staff.
- 10. The data for populations are the mid-year estimates from the Eastern Caribbean Central Bank.
- 11. 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.
- 12. Rates for services were obtained from company websites and are peak rates except where stated otherwise.

7.2 Statistical Tables

Selected telecommunications indicators – All ECTEL Member States

	2009	2010	2011	2012	2013
Provider Revenues (EC\$M)	\$728	\$776	\$732	\$735	\$711
Investment (EC\$M)	\$150	\$99	\$81	\$83	\$86
Employment	1,472	1,379	1,346	1,369	1,194
Fixed line Penetration	26%	25%	24%	24%	23%
Mobile Penetration	122%	126%	128%	130%	129%
Broadband Penetration	12.6%	13.7%	14.4%	15.0%	15.9%
Local fixed traffic (million minutes)	676	666	527	537	506
Local mobile traffic (million minutes)	609	710	757	794	762
International incoming traffic (million minutes)	245	227	216	192	203
International outgoing traffic (million minutes)	125	137	141	136	114

Source: ECTEL/operators

Selected telecommunications indicators - Dominica

	2009	2010	2011	2012	2013
Provider Revenues (EC\$M)	\$100	\$96	\$92	\$98	\$95
Investment (EC\$M)	\$24	\$16	\$17	\$12	\$13
Employment	271	229	233	237	213
Fixed line Penetration	24%	22%	21%	21%	20%
Mobile Penetration	137%	149%	140%	141%	143%
Broadband Penetration	10.6%	11.4%	12.2%	13.3%	14.7%
Local fixed traffic (million minutes)	32	30	26	23	23
Local mobile traffic (million minutes)	89	142	199	196	182
International incoming traffic (million minutes)	24	33	27	23	32
International outgoing traffic (million minutes)	19	21	24	12	14

Selected telecommunications indicators - Grenada

	2009	2010	2011	2012	2013
Provider Revenues (EC\$M)	\$145	\$148	\$146	\$156	\$153
Investment (EC\$M)	\$37	\$18	\$20	\$18	\$17
Employment	267	268	240	256	231
Fixed line Penetration	27%	27%	27%	26%	27%
Mobile Penetration	110%	111%	115%	123%	120%
Broadband Penetration	11.4%	13.1%	14.2%	15.1%	16.7%
Local fixed traffic (million minutes)	312	313	222	244	225
Local mobile traffic (million minutes)	141	164	164	180	183
International incoming traffic (million minutes)	61	52	77	76	77
International outgoing traffic (million minutes)	21	33	26	31	33

Source: ECTEL/operators

Selected telecommunications indicators – St. Kitts and Nevis

	2009	2010	2011	2012	2013
Provider Revenues (EC\$M)	\$122	\$129	\$116	\$112	\$110
Investment (EC\$M)	\$13	\$14	\$14	\$15	\$19
Employment	180	171	176	175	149
Fixed line Penetration	40%	39%	37%	36%	36%
Mobile Penetration	154%	155%	148%	143%	145%
Broadband Penetration	23.5%	23.5%	24.1%	24.4%	25.0%
Local fixed traffic (million minutes)	65	60	45	50	47
Local mobile traffic (million minutes)	30	31	39	40	43
International incoming traffic (million minutes)	41	43	18	18	18
International outgoing traffic (million minutes)	26	33	34	39	23

Selected telecommunications indicators – Saint Lucia

	2009	2010	2011	2012	2013
Provider Revenue (EC\$M)	\$238	\$243	\$245	\$240	\$227
Investment (EC\$M)	\$54	\$36	\$19	\$29	\$23
Employment	566	520	519	506	425
Fixed line Penetration	24%	23%	22%	21%	20%
Mobile Penetration	116%	120%	131%	129%	125%
Broadband Penetration	11.7%	12.6%	13.1%	13.3%	14.6%
Local fixed traffic (million minutes)	183	173	158	147	143
Local mobile traffic (million minutes)	215	243	204	241	217
International incoming traffic (million minutes)	67	51	51	43	36
International outgoing traffic (million minutes)	40	34	36	25	25

Source: ECTEL/operators

Selected telecommunications indicators – St. Vincent and the Grenadines

	2009	2010	2011	2012	2013
Revenues (EC\$M)	\$123	\$159	\$134	\$130	\$126
Investment (EC\$M)	\$23	\$17	\$11	\$11	\$15
Employment	188	191	178	188	176
Fixed line Penetration	23%	23%	22%	22%	19%
Mobile Penetration	118%	118%	119%	122%	121%
Broadband Penetration	11.4%	12.5%	13.6%	14.2%	13.6%
Local fixed traffic (million minutes)	84	91	77	73	68
Local mobile traffic (million minutes)	134	130	150	137	138
International incoming traffic (million minutes)	52	49	44	31	39
International outgoing traffic (million minutes)	18	17	20	30	20

8 Individual Licensees in the ECTEL Member States

Table 8: Active Telecoms Service Operators in the ECTEL Member States at March 2012

Licence	Fixed Public	Public Mobile	Internet Network	Submarine
	Network	Telecoms	and Services	Cable
Dominica	Cable & Wireless (LIME)	Cable & Wireless (LIME)	Cable & Wireless (LIME)	Middle Caribbean
	(LIIVIE)	(LIIVIE)	(LIIVIE)	Network
	Marpin 2K4 Ltd	Digicel	Marpin 2K4 Ltd	Cable & Wireless
	Sat		Sat	(LIME)
	Telecommunications		Telecommunications	
Grenada	Cable & Wireless	Cable & Wireless	Cable & Wireless	Cable & Wireless
	(LIME)	(LIME)	(LIME)	(LIME)
	Columbus	Digicel	Columbus	Southern
	Communications (FLOW)		Communications (FLOW)	Caribbean Fiber
	(12000)		(1 LOW)	
			Grencomm	
			Aislecom	
St Kitts and	Cable & Wireless	Cable & Wireless	Cable & Wireless	Cable & Wireless
Nevis	(LIME)	(LIME)	(LIME)	(LIME)
	The Cable	UTS-CariGlobe	The Cable	Southern
				Caribbean Fiber
	Caribbean Cable	Wireless Ventures	Caribbean Cable	
	Communications	(Digicel)	Communications	
Saint Lucia	Cable & Wireless (LIME)	Cable & Wireless (LIME)	Cable & Wireless(LIME)	Antilles Crossing
	(LIIVIE)	(LIIVIE)	Karib Cable	Cable & Wireless
	Karib Cable	Digicel	Name Cable	(LIME)
			Tele (St Lucia) Inc	,
				Southern
				Caribbean Fiber
St Vincent	Cable & Wireless	Cable & Wireless	Cable & Wireless	Cable & Wireless
and the Grenadines	(LIME)	(LIME)	(LIME)	(LIME)
Grenadines	Karib Cable	Digicel	Karib Cable	Southern
		8.22.		Caribbean Fiber

Source: ECTEL/NTRCs

EASTERN CARIBBEAN TELECOMMUNICATIONS AUTHORITY

ECTEL Mission Statement

"To create a fully liberalized telecommunications environment by promoting competition amongst service providers for the delivery of efficient and affordable telecommunications services to the people of the ECTEL Member States, by implementing applicable laws, treaties and agreement through fair transparent and Independent processes."

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* 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.

This page was intentionally left Blank



EASTERN CARIBBEAN TELECOMMUNICATIONS AUTHORITY Annual Electronic Communications Sector Review 2012-2013 www.ectel.int