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National Telecommunications Regulatory Commission (NTRC)

Annual Report 2010

1. *Mission Statement*

To efficiently regulate the Telecommunications Sector in collaboration with the Eastern Caribbean Telecommunications Authority (ECTEL) and provide advice and direction to the Minister of Telecommunications on policy and regulatory issues relating to Telecommunications.

2. *Vision Statement*

To ensure that the demand for existing and future telecom services is met in order to support economic growth and diversification, by providing a suitable environment for the tourism, information and financial sectors through a liberalized and competitive telecom environment.

3. *Functions*

The NTRC in collaboration with ECTEL is responsible for carrying out a variety of functions that are associated with regulating the telecommunication sector in St. Vincent and the Grenadines. These functions are outlined in detail in the Telecommunication Act of 2001.

4. Photo of Commissioners

5. Photo of Staff Members

Back : Mishka Quashie (Office Assistant), Roscian Charles (Temporary Staff), Rohand Charles (Accountant)
Middle: Andra Keizer (Admin Assistant), Keisha Gurley(Office Assistant), Kyron Duncan (USF Administrator), Apollo Knights (Director)
Front: Nadine Hull(ICT Manager), Ashell Forde (ICT Officer), Omar Wyllie(IT Technician)

6. *SWOT Analysis*

6.1 Strengths

-The NTRC has responsibility for regulating most aspects of the telecommunications sector.

-Availability of ICT infrastructure and software to efficiently carry out our regulatory functions.

- Diversity of relevant skills and experience among current staff.

6.2 Weaknesses

-Inadequate pricing control mechanism existing for those services offered by the incumbent operator that are not exposed to sufficient competition at this time.

-Lack of a formal relationship between the ECTEL organizational structure and that of the various NTRCs.

-Absence of an appropriate funding mechanism to cover possible litigation costs.

- Lack of regulatory oversight on retail pricing and promotional activities of mobile service providers.

6.3 Opportunities

- Development of projects under the Universal Service Fund. Such projects should see direct benefits to certain communities, organizations and individuals that would have had difficulties with telecommunications access.

- New legislative regulatory framework to replace the existing Telecommunications Act. This work is being undertaken as part of the (Telecommunications & ICT) TICT project being executed by ECTEL.

- Staff is keen to participate in capacity building programmes inline with the needs of the organization.

6.4 Threats

-Continued possibility of litigation from Licencees.

-Churn of Commissioners and Staff when considering the small staff complement of the NTRC and the resources expended on developing the regulatory skills of both Commissioners and staff.

-The inability of the current fee structure to maintain an adequate funding source for the regulatory system (ECTEL and the NTRCs) in the short term.

-The issue of Cyber crime and Cyber security is a threat facing not only the NTRC but our country and the region.

7. *Critical Issues*.

Currently there are two critical areas that need to be addressed in the sector (1) Cyber Security and (2) Broadcast standards. These issues were highlighted in detail in our 2009 annual report and remains as relevant today. There is potential for assistance in these areas from the International Telecommunications Union (ITU) under there current ITU-D development programme for the period 2010-2014. Such issues however have to be addressed on a regional scale to be successful. Ideally they should be addressed at the level of Caricom but if this may not be possible ECTEL should take the lead as a matter of urgency. Additionally, both areas should be addressed in our new telecommunications regulatory framework so that our legislative provisions

would guide the actual work that would need to be done by our respective regulatory agencies.

8. *Sector Review*

8.1 Revenue Analysis

The NTRC is responsible for the collection of all fees levied under the Telecommunications Act. These include Application, Licence, Frequency Authorization, Numbering and Universal Service Fund fees.

8.1.1 Revenue of the Telecom Operators

The following table and graph illustrate the total revenues earned by providers of telecom services for the last ten years.

Note: The years in the table run from April 1 to March 31 e.g. 1998 runs from April 1 1997 to March 31 1998. This coincides with the financial years of Cable & Wireless (WI) Ltd and Digicel (SVG) Ltd. For the remaining entities whose financial years are not the same, their revenues have been apportioned to the same periods using an average monthly revenue figure calculated by dividing its total revenue for its financial year by 12.

Total Revenue earned by providers of telecommunications services 1998 to 2010:

	Cable and Wireless (SVG) Ltd			Cable and Wireless Mobile	Digicel St. Vincent Ltd	Kelcom Int'l	Caribbean Business Machines Ltd	
	Inter. Revenue (EC$)	Domestic Rev (EC$	Total Revenue (EC$)	Total Revenue (EC$)	Total Revenue (EC$)	Total Revenue (EC$)	Total Revenue (EC$)	Grand Total (EC$)
Year								
1998	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	xxx,xxx	x	77,278,044
1999	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x, xxx,xxx	x	81,942,322
2000	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x, xxx,xxx	x	85,427,143
2001	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x, xxx,xxx	x	98,971,727
2002	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x, xxx,xxx	x	93,748,621
2003	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xxx,xxx	x, xxx,xxx	x	106,681,224
2004	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x, xxx,xxx	x	143,593,160
2005	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x, xxx,xxx	x	144,743,690
2006	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x, xxx,xxx	x, xxx,xxx	152,965,819
2007	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x, xxx,xxx	x, xxx,xxx	160,767,398
2008	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x x, xxx,xxx	x, xxx,xxx	154,144,846
2009			xxx,xxx,xxx	xxx,xxx,xxx	xxx,xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	156,428,369
2010	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x, xxx,xxx	x, xxx,xxx	xxx,xxx	149,677,441
			xx, xxx,xxx	xx, xxx,xxx	x, xxx,xxx	xxx,xxx,xxx x	xxx,xxx	

Table # 1

Source: For 2010 the breakdown of revenue submitted to the NTRC were used for Digicel and Cable & Wireless (SVG) Ltd and Cable & Wireless Mobile.

CBM gross revenue for 2009 and 2010 are based on conservative estimates from the previous year while 2006 to 2008 is based on gross revenues breakdown for these years which were submitted to the NTRC. For previous years, the figures are based on Gross revenue as per audited statements. Note that the revenues outlined for 2010 in relation to Karib Cable/Kelcom International are conservative estimates based on trends from the previous years.

Mobile Revenue by Month

Legend:
- Digicel Oct 2008 - Sep 2009
- Digicel Oct 2009 - Sep 2010
- C&W Oct 2008 - Sep 2009
- C&W Oct 2009 - Sep 2010

Y-axis values: 6,000,000 / 5,000,000 / 4,000,000 / 3,000,000 / 2,000,000 / 1,000,000 / -

X-axis: Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep
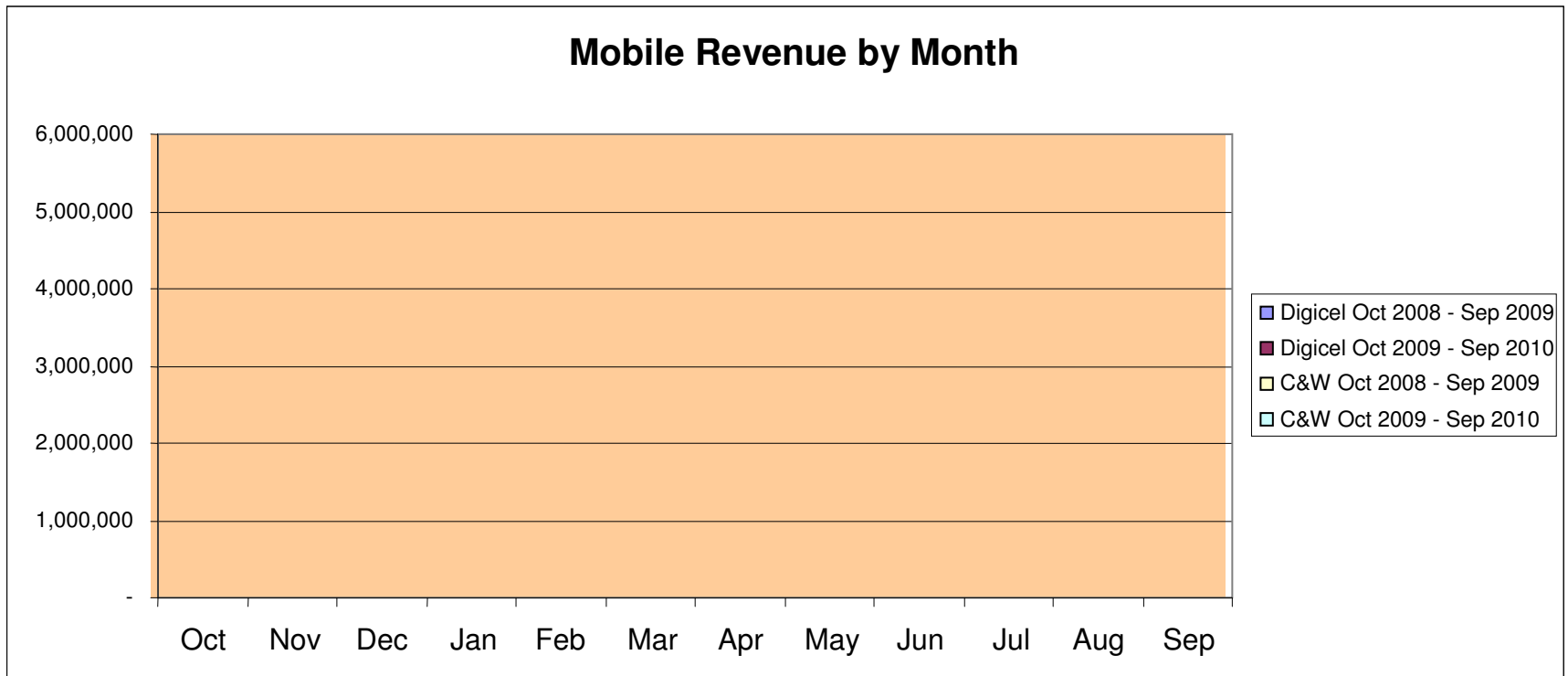
Fig # 1

Fig #1

The years in the graph run from October 1st to September 30th so 2009 runs from October 1st 2008 to September 30th 2009 and 2010 runs from October 1st 2009 to September 30th 2010. This matches with the licence year of Cable & Wireless (SVG) Ltd and Digicel (SVG) Ltd. The mobile revenue generated by the operators in 2009 and 2010 fluctuated on a monthly basis for both companies during the two years. Digicel performed better than Cable and Wireless for two years and in some cases by as much as 100%. We saw the best performance for both companies in December of each year compare to the other months. In relation to the performance of the companies by years; Digicel performed better in 2009 compared to 2010 where there was a 2% decrease in revenue in 2010 compared to 2009.

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There was the inverse for Cable and Wireless where they performed better in 2010 compared to 2009 where they recorded a 6% increase in their mobile revenue for 2010 compared to 2009.

8.1.2   Financial Performance of the Telecom Operators

The following graphs illustrate the financial performances of the local telecommunications providers, along with the comparison of similar providers in the United States and the United Kingdom, for the years 2005 to 2009 and that of Cable & Wireless in Barbados and Jamaica for 2009, due to the availability of data.
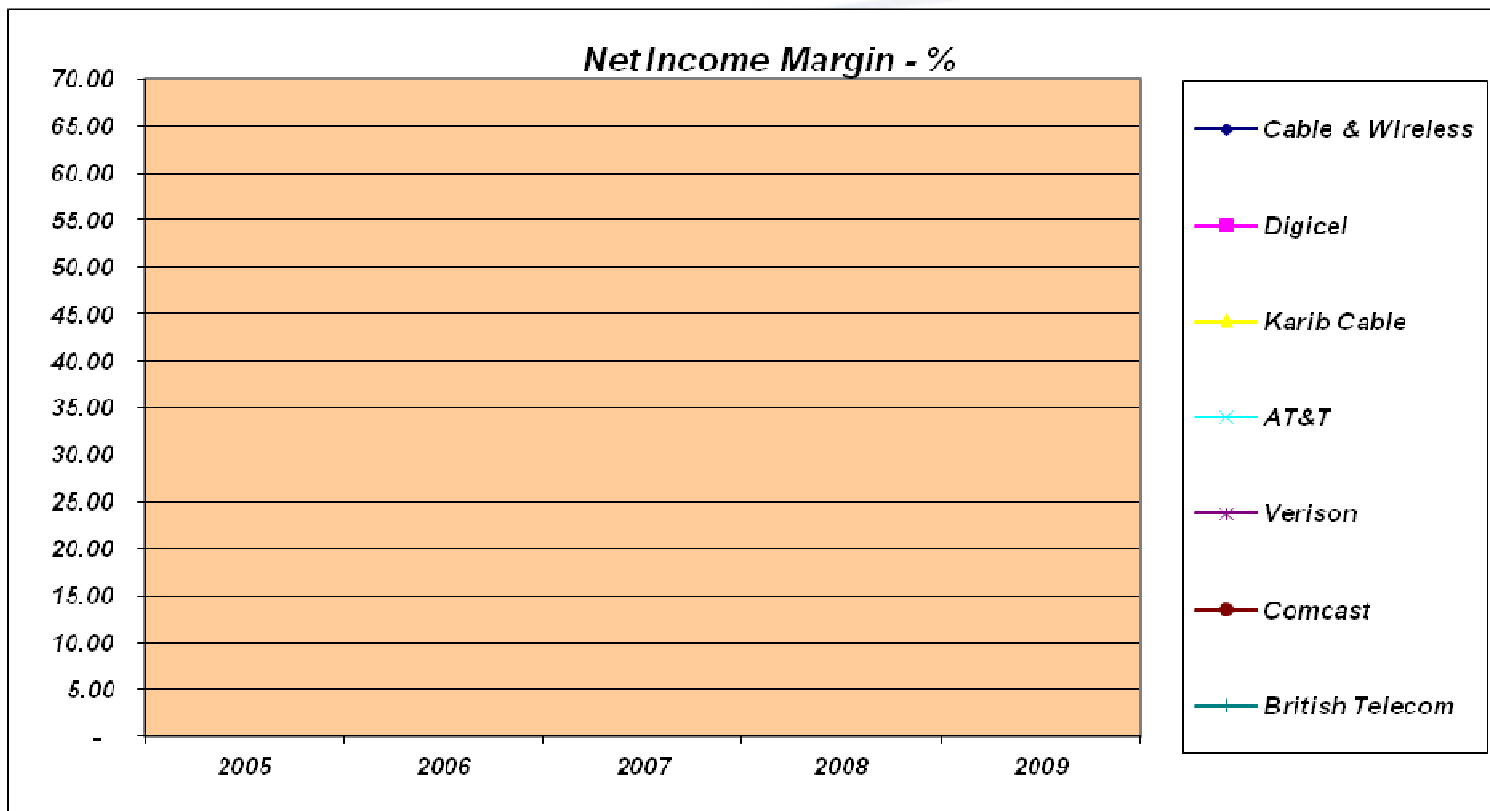

Fig 2

Fig 2

The net income margin of the providers represents the net income as a percentage of total income. All the local telecom providers performed above an average of 8% for the five year period. Karib Cable performed the best at an average of 35% for the years with a peak of 60% in 2007 due to a deferred tax release of $4,287,469.00 that was recognised in their 2007 income statement. The performance of Karib Cable however, decreased sharply in 2008, due to the return from the spike in 2007 which was due to the deferred tax release, and also due to Karib Cable tax concession ended on April 11. 2007, resulting a tax expense for 2008 of 1.09 million dollars. The further decline in 2009 was due to 20 Million Dollars of the accumulated profit which was part of the equity was paid to the shareholders and it was lent back to the company as a loan at an interest rate of 8%. This loan resulted in a charge of 1.8 Million Dollars in interest thus causing a decline in profit in that financial year. Digicel's performance was relatively stable with an average of 19% for the period. Slight declines were recorded for the period 2006 to 2008, but a moderate increase was recorded in 2009, due to a reduction in its operating expenses. In relation to Cable & Wireless, an average of 8% was recorded for the five year period with a relatively constant performance and an above average increase in 2007, due to an above average increase in revenue. Data that was gathered for Cable & Wireless in Jamaica and Barbados show a negative return for both companies in 2009; and all the international telecom providers' performances ranged from 5% to 20%, except for British Telecom, who recorded a negative return in 2009.

Return on Asset - %

Legend:
- Cable & Wireless
- Digicel
- Karib Cable
- AT&T
- Verison
- Comcast
- British Telecom

Y-axis: 30.00, 25.00, 20.00, 15.00, 10.00, 5.00, -
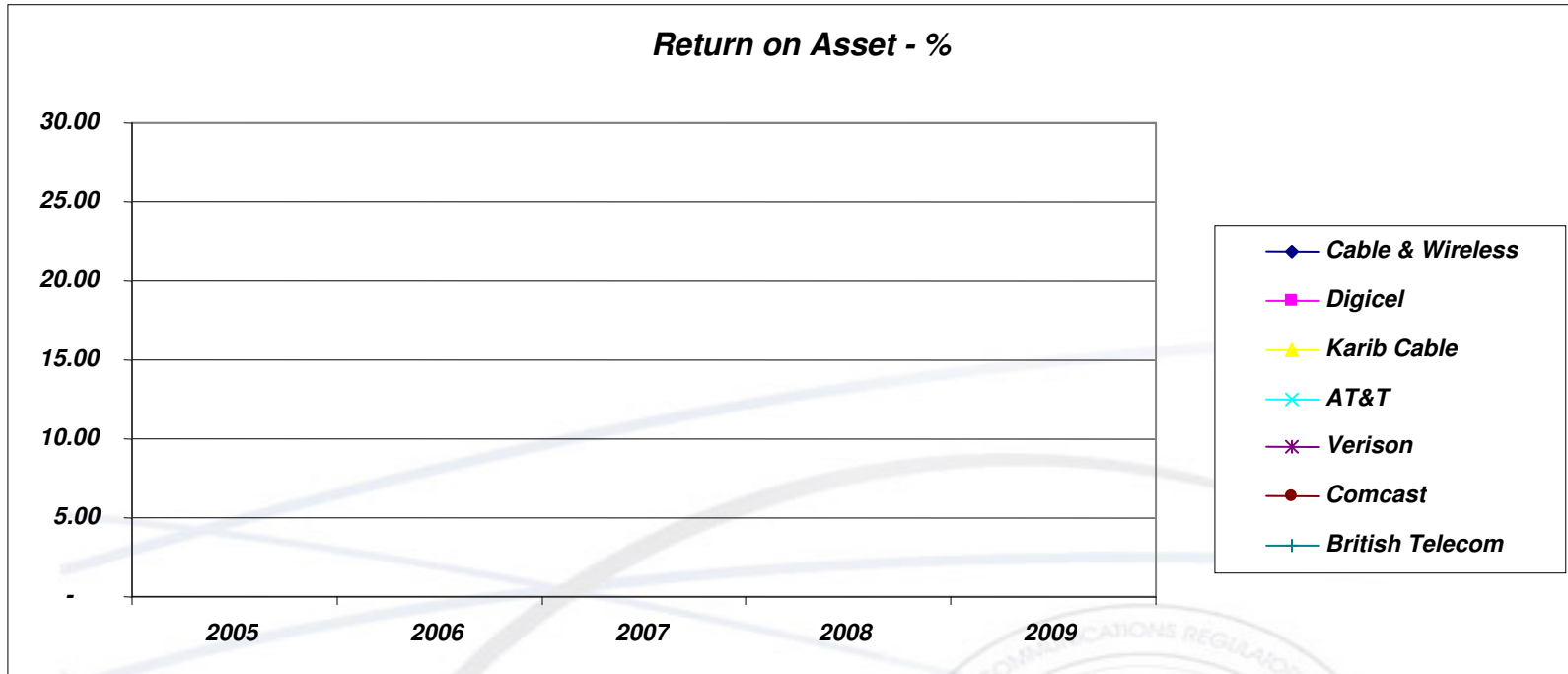
X-axis: 2005, 2006, 2007, 2008, 2009

Fig 3

Fig 3

Return on Asset (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficiently management is using its assets to generate earnings. All the local telecom providers' performances were positive with Karib Cable out performing the other local competitors with an average of 16% per year. The performance of Karib Cable however, decreased sharply in 2008, due to the return from the spike in 2007 which was due to the deferred tax release of $4,287,469.00 that was recognised in the income The further decline in 2009 was due to 20 Million Dollars of the accumulated profit which was part of the equity was paid to the shareholders and it was lent back to the company as a loan at an interest rate of 8%. This loan resulted in a charge of 1.8 Million Dollars in interest thus causing a decline in profit in that financial year. Digicel performed relatively constant averaging 8% in 2005 to 2008 but recorded a sharp increase in 2009 due to a decrease in its operating expenses. Cable & Wireless performed at an average of 6% for the period and saw a moderate increase in 2007 due to an above average increase in revenue. However, a slight decline was recorded in 2008 and 2009 due to increase in its operating expenses. Cable & Wireless in Jamaica and Barbados recorded negative returns and in relation to the international providers, they performed at an average of 8% except for British Telecom who recorded a negative return in 2009.
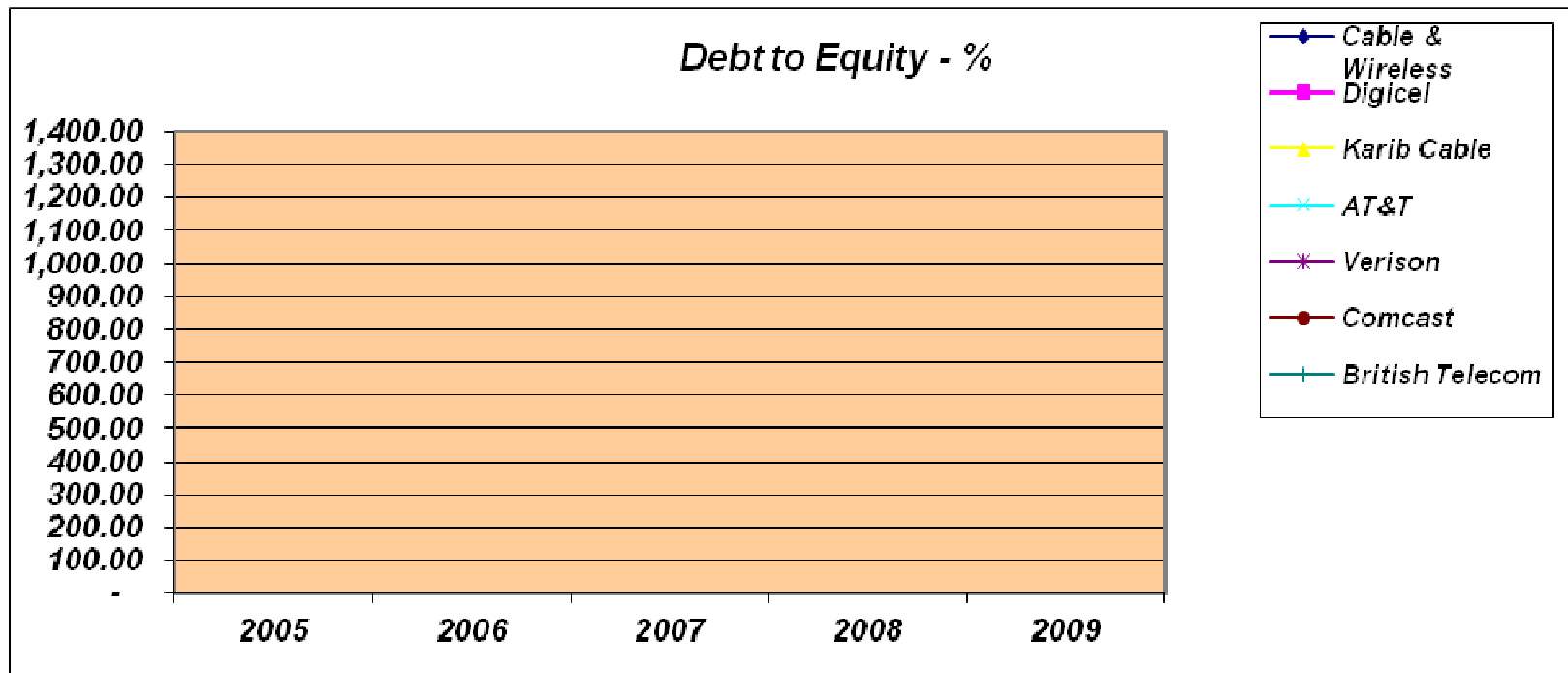
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Fig 4

Fig 4

Debt to Equity is a measure of a company's financial leverage calculated by dividing its total debts and liabilities by stockholders' equity. It indicates what proportion of equity and debt the company is using to finance its assets. Digicel recorded the highest percentage of debt to equity over the five year period; this was due to its high start up cost which was mainly financed by debt. This however decreased over the years as the debts were repaid. Karib Cable, who had a relative low debt to equity, saw a sharp increase in 2009 due to 20 Million Dollars of the accumulated profit which was part of the equity was paid to the shareholders and it was lent back to the company as a loan. This resulted in a shift of the amount from equity to debt. Cable & Wireless had a constant debt to equity of approximately 90% for 2005 to 2007 period due to little changes in debts. However, there was a slight decrease in 2008 and 2009 as a result of an increase in equity due to the additions to retained earnings. All the other international providers, except for the British Telecom, had a stable debt to equity of an average of 75%. British Telecom debt to equity fluctuated due to the movements of retained earnings. Cable & Wireless in Jamaica and Barbados had a stable debt to equity of an average of 70%.

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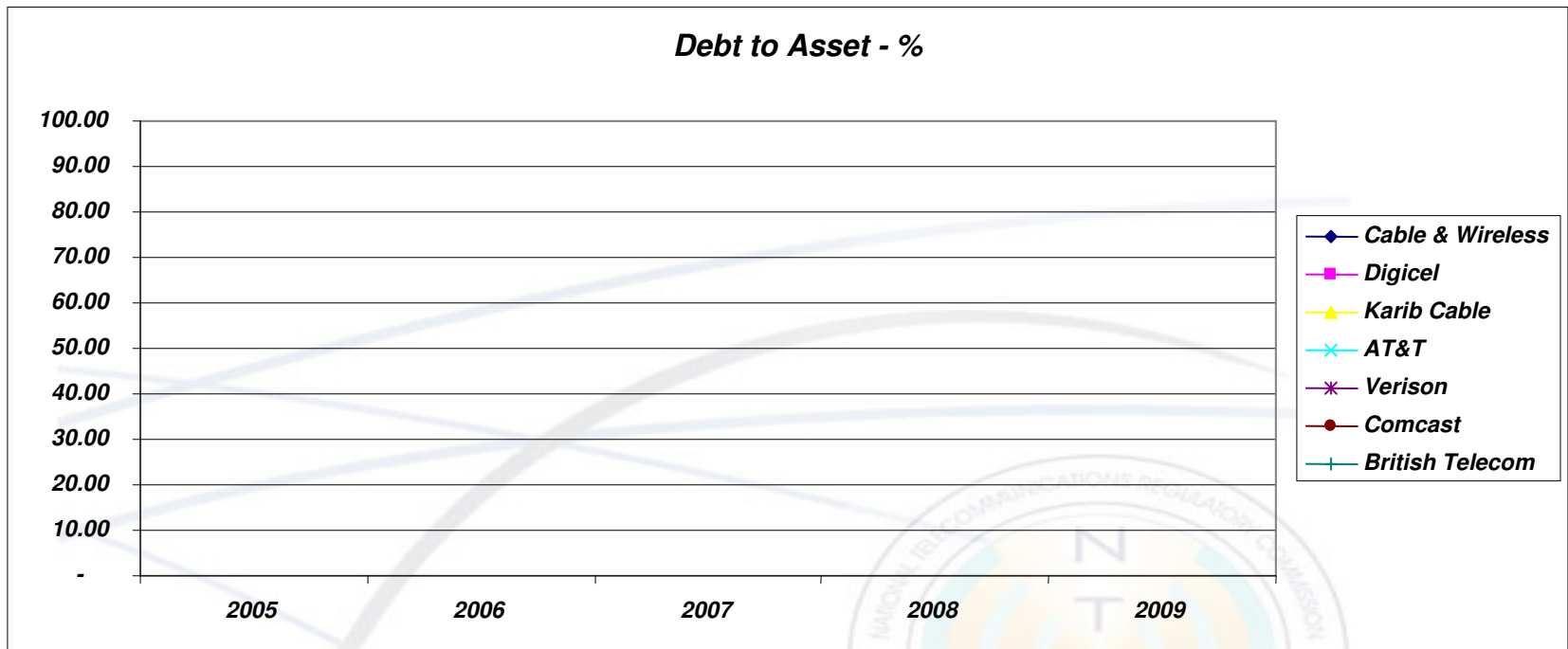
Debt to Asset - %

Fig 5

Fig 5

Debt to Asset indicates what proportions of the company's assets are being financed through debt. Karib Cable and Cable & Wireless recorded a moderate debt to assets in the initial period under review while Digicel's debt to assets was low. For Karib Cable, we saw a moderate increase due to additional borrowings to finance projects for their fixed line service and Digital TV Service. They also recorded a sharp increase due to the shift in equity to debt in 2009 of 20 Million Dollars that was accumulated profit which was part of the equity was paid to the shareholders and it was lent back to the company as a loan. Cable & Wireless had a relatively stable debt to asset throughout the period due to little changes in its debt level. The international providers, except for British Telecom, have an average debt to asset of less than 30%. British Telecom recorded an average debt to asset 75%.

Revenue per Customer - US$

Legend:
- Cable & Wireless
- Digicel
- Karib Cable
- AT&T
- Verison
- Comcast
- British Telecom

Fig 6

Fig 6

The revenue per customer represents total sales generated per customer for the year under review. Cable & Wireless performed the best in this area for the initial period for the local providers with an initial amount of US$650 per customer in 2005. However, we saw declines in the years 2007 to 2009 due to fall in revenues. Digicel and Karib Cable recorded moderate increases due to moderate increases in their revenues. The international providers saw fluctuations in their revenue per customer with declines for the period 2008 and 2009, except for British Telecom who recorded an increase. The customer data for Cable & Wireless in Barbados and Jamaica were not available to make a comparison.

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Profit per Customer - US$

Legend:
- Cable & Wireless
- Digicel
- Karib Cable
- AT&T
- Verison Communication Inc.
- Comcast
- British Telecom

Y-axis: 300.00, 275.00, 250.00, 225.00, 200.00, 175.00, 150.00, 125.00, 100.00, 75.00, 50.00, 25.00, -

X-axis: 2005, 2006, 2007, 2008, 2009

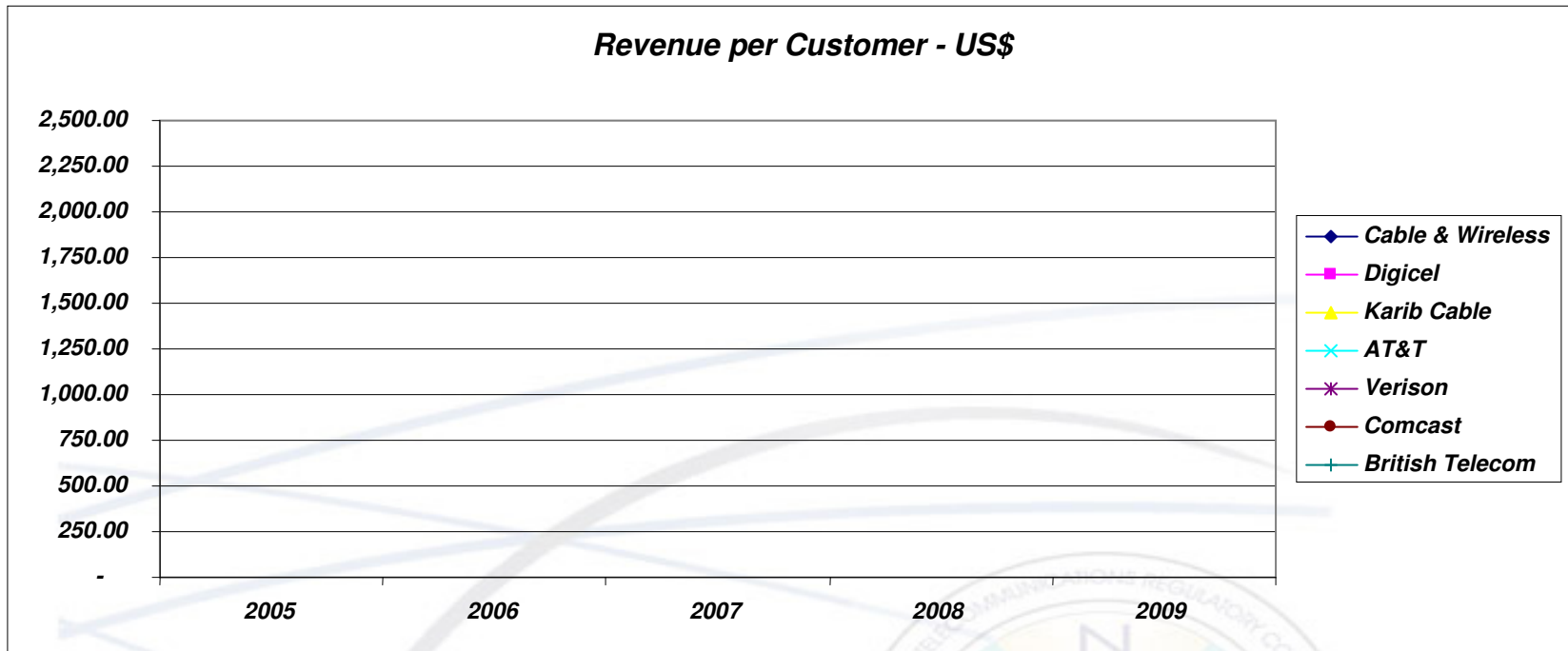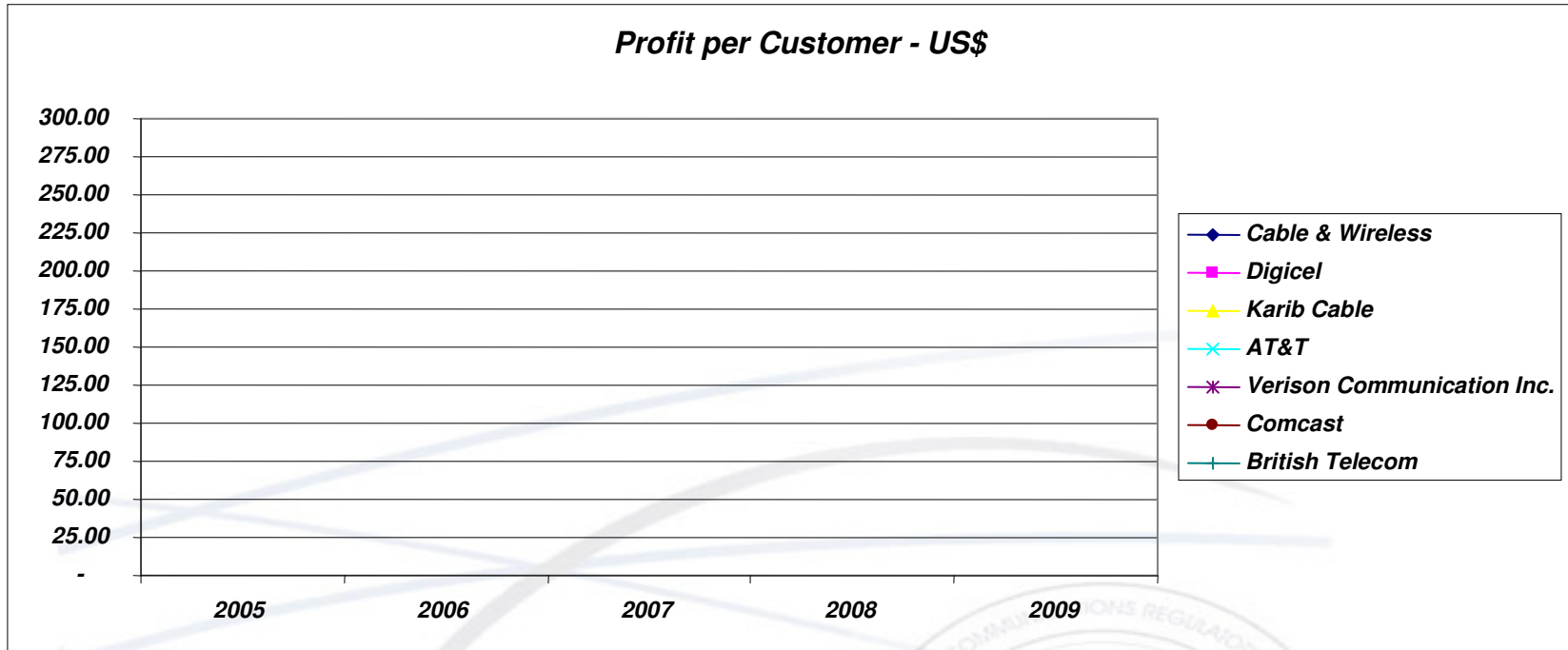Fig 7

Fig 7

The profit per customer represents total profit generated per customer for the year under review. Digicel performed the best in this area for the five year period with an increase in 2009 due to increases in revenue and a fall in operating expenses in 2009. Cable & Wireless and Karib Cable recorded moderate increases in the initial years but fell in the later years. The fall for Cable & Wireless was due to a fall in revenue for Cable & Wireless. In relation to Karib Cable the expenses increased due to 20 Million Dollars that was accumulated profit which was part of the equity was paid to the shareholders and it was lent back to the company as a loan at an interest rate of 8%. This loan resulted in a charge of 1.8 Million Dollars in interest thus causing a decline in profit in that financial year. The international providers saw fluctuations in their profit per customer with declines in 2008 and 2009. British Telecom recorded a negative net income in 2009 and the customer data for Cable & Wireless in Barbados and Jamaica were not available to make a comparison.

Total Telecom Revenue

Revenue (EC $)

| 180,000,000
| 160,000,000
| 140,000,000
| 120,000,000
| 100,000,000
| 80,000,000 — Total Revenue
| 60,000,000
| 40,000,000
| 20,000,000
| 0

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010
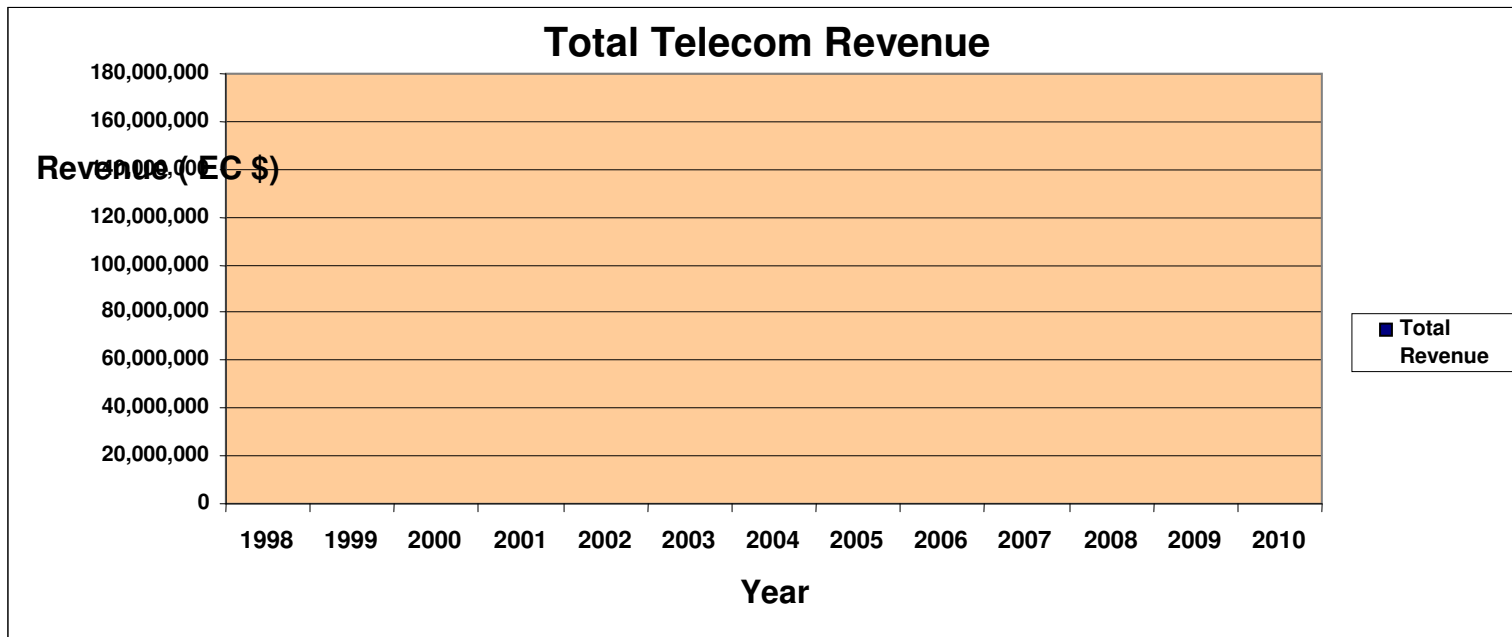
Year

Fig # 8

Fig# 8

The revenue generated by the telecom operators in 2010 decreased by a small margin. This was due to a decrease in Cable and Wireless International and Domestic revenue. However there was a slight increase in their mobile revenue. There was a small increase in Digicel and Karib Cable revenue.

8.1.3 Revenue of the NTRC and ECTEL for the period 2002 to 2010

Frequency fees are shared between the National Telecommunication Regulatory Commission (NTRC) and the Eastern Caribbean Telecommunication Authority (ECTEL).

In 2010, there was an increase in the application fees. The reason for this is due to an increase in applications for frequency authorization and short codes in 2010 compared to the year before.

Revenue of NTRC and ECTEL 2002 to 2010				
	NTRC Application fees	Percent increase	NTRC & ECTEL Frequency Fees	Percent increase
'02	$107,036		$607,600	
'03	$5,100	-95%	$1,366,604	125%
'04	$8,800	73%	$1,577,400	15%
'05	$10,300	17%	$1,539,669	-2%
'06	$11,275	9%	$1,681,560	9%
'07	$22,725	101%	$1,245,183	-25%
'08	$13,325	-42%	$1,906,089	53%
'09	$13,225	-7%	1,487,390	-21%
10	$23,846	80%	1,392,962	-7%
	215,632		12,804,457	

Table #2

There was a 7 % decrease in 2010 for frequency fees which was as a result of prepayments in 2008 for frequency fees from telecommunication providers.

8.1.4 Licence fees received by the Government for the period 1998 to 2010

Note: Calendar year was the period used in this table

Government of St. Vincent and the Grenadines				
	Royalties	License Fees	Total	Percent Increase
'98	1,303,189	15,001	1,318,190	
'99	1,286,342	31,119	1,317,461	0%
'00	1,450,800	43,529	1,449,329	13%
'01	639,000	61,143	700,143	-53%
'02	0	3,365,391	3,365,391	381%
'03	0	2,803,927	2,803,927	-17%
'04	0	3,329,145	3,329,145	19%
'05	0	3,421,159	3,421,159	3%
'06	0	3,850,955	3,850,955	5%
07	0	4,301,521	4,301,521	11%
'08	0	4,081,151	4,081,151	-6%
09	0	4,065,706	4,065,706	-4%
10	0	4,034,096	4,034,096	-1%
		33,403,843	38,038,174	

Table #3

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The market has seen a slight drop in revenue for license fees collected by the NTRC on behalf of the Government in 2010 compared to 2009. This is as a result of fall in revenue for the two main Telecom Providers; Digicel and Cable & Wireless since the licence fees for these providers are 3% of revenue, a fall in revenue results in a fall in licence fees.

Before the enactment of the Telecom Act 2001, fees paid by Cable & Wireless to the Government were called Royalties. After that date, the companies are required to pay an annual licence fee that is 3% of gross annual revenue.
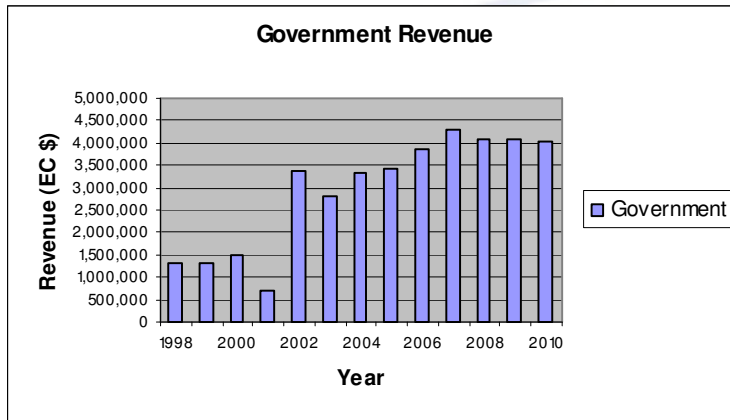
Government Revenue

Fig #9

In 2010, license fees collected by the NTRC on behalf of the Government decreased by 1% compared to 4% in the previous year. The 2010 decline is due to a fall in revenue collect by the two major providers; Digicel and Cable & Wireless.

8.1.5 Financial Performance of the NTRC

Revenue

The NTRC budgeted to receive $880,636.79 for the year ending December 31, 2010; however, $1,049,307.46 was actually received giving a difference of $168,670.67, more than the budgeted amount. The main reasons for the difference have to do with the following items:

- Interest Revenue- The amount of $5,500 had been budgeted; however, the NTRC received $8,421.39 on its savings accounts.

- Application Fee- The amount for Application fees exceeded its budgeted amount by $13,846.86. The amount Budgeted was $10,000.00 and the amount of $23,846.86 was collected.

- Photocopy & Printing – The Commission provides this cost base service to students as part of its free internet access program to students at its office. The amount budgeted to be collected for 2010 was $5,000.00 and the actual amount received was $7,343.19 which created a surplus of $2,343.19.

- Numbering Fees- The amount of $31,320.00 was budgeted to be collected during the year. However, $76,235.83 was received for annual fees from Central Office and Short Codes issued during the period.

- Reimbursement from USF- The amount of $28,126.04 was budgeted to be collected during the year. However, $30,825.06 was received for the USF. The surplus of $2,699.02 was due to additional expenses that incurred during the financial year.

- Other Income – The amount budgeted for Other Income was 46,916.79 and the actual amount collected was $110,752.88 creating a surplus of $63,836.09. The surplus is due to; reimbursement from ECTEL of $17,649.72, reimbursement from the Ministry of Telecommunication of $8,247.72, proceeds from the sale of vehicle for $35,000.00 and sickness and maternity benefit of $2,938.40.

Expenditure

Recurrent

For the year ending December 31, 2010, the NTRC budgeted to spend $809,285.57 on recurrent expenditure; however, $836,024.09 was actually spent. The main reasons are that additional amounts were spent on Training for Staff members and NTRC embarked on an Advertisement and Public Relation Campaign to sensitise the public about the NTRC, the dispute regulations and the quarterly mobile rates.

Capital

The amount of $89,567.77 had been budgeted for capital expenditure for the financial year 2010. However, $98,324.42 was spent. This difference is due to the replacement of furniture and a Computer.

Conclusion

The NTRC's financial performance over the 2010 financial year was good. Although we exceeded our budgeted expenditure for the year, this was compensated for by the surplus revenue that was collected. At the end of the 2010 financial year, a gross surplus of $103,171.45 was recorded, from this amount; $22,895.11 was paid out under its performance compensation program to staff. This resulted in a net surplus of $80,276.34.

8.2 Projected Revenue for 2011:

For the fiscal year 2011, the NTRC has projected to collect $1,407,337 in revenue from frequency fees. This is an increase of 1% compare to the projected amount of $1,389,385.00 in 2010. This slight increase in projection for 2011 compared to that of 2010 is due to new frequency assignments that were assigned and billed during the 2010 year and which are expected to be collected during 2011.

8.3 Capacity building in 2010:

The NTRC continued to expose its staff and Commissioners to relevant courses and seminars that would benefit the organization both in the short and long term taking into account the limited resources available. The particular areas covered during 2010 were as follows:

- Next Generation Network Training (TRMC)
- Regulatory Master Class (TRMC)
- Workshop on the Implementation of Universal Service in ECTEL member states (ECTEL)
- ACP MTS Programme: Sensitizatation workshop on WTO Services Negotiations (Joachim & Associates)
- Human Resource Management course (BIMAP)
- Sun Surfs Solar Ac Seminar (Sun Surfs Solar Energy)
- Transition from Analogue to Digital Broadcasting for Countries in the Caribbean Region (CTU & ITU)
- Peachtree training (ECTEL)
- Deployment of ICT for the Next Billion People (USTTI)
- Spectrum Management Workshop (ECTEL)
- Occupational Health & Safety Workshop (NIS)
- Microsoft excel and outlook training (In House)

8.4 Regulations: No new Telecommunications regulations were gazetted during 2010.

8.5 Staff: The NTRC continues to see some turnover in its staff. The IT Technician resigned from his position in January 2010. This post was replaced with that of an ICT Officer which was filled in April 2010.

8.6 Policy Development: New draft legislation was developed by ECTEL in 2010 in collaboration with the NTRC and other stakeholders to replace the existing Telecommunications Act of 2001. St. Vincent and Grenadines was chosen as the first country to host a National Public consultation on this regionally harmonized draft bill. This event took place in November 2010. A finalized draft is expected to be completed in 2011 that can be taken to Parliament to be enacted. This new piece of legislation is expected to address those issues that have arisen in the sector over the last 10 years as a result of the rapid change in technology and will also strengthen the regulatory oversight of ECTEL and the NTRC on the sector.

8.7 Numbering: - . The main issue in relation to numbering is that of number portability especially with the recent launch of a fixed line competitor in the market and an existing mature mobile market. It is difficult for new entrants to attract existing customers without number portability as existing customers would not want to change their numbers if they decide to change their service provider. The issue was discussed at length at the 2010 ECTEL/NTRC forum held in St.Kitts and Nevis. The regulatory issues surrounding the use of short codes needs to be addressed as the demand for these codes have increased over the last year.

8.8 Spectrum Management: - The NTRC monitoring vehicle is still not fully functional. This situation is somewhat being addressed with the procurement of mobile handheld units by ECTEL in 2010. The mobile unit will be especially important on visits to the southern Grenadines.

8.9 Internet Access: The growth in subscribers over the last year is similar to past years. While we would project similar growth in 2011 we anticipate easier access to a larger group of users via the number of community access projects being implemented by the Universal Service

Fund taken in conjunction with the increase number of laptops/netbooks that will made available to students by the Government under its one netbook per student initiative project and EU schools project.

8.10 Public Consultation: The NTRC worked closely with ECTEL in the development of a number of draft policy and technical documents. These were in the following areas:

- **Price Cap Plan**
- **Regional Radio Spectrum Plan Review Proposal**
- **Draft Telecommunications Amateur Radio Regulations**
- **Draft Telecommunications Retail Tariff Regulations**

The consultations were carried out in various formats.

8.11 Telephone Rates: The NTRC implemented a new Price Cap Plan in 2010 that will govern the regulation of certain fixed line services provided by LIME over the next three years. This plan is similar to Price Cap Plans (PCPs) implemented in other ECTEL states over the past year. One of the main benefits of this new plan is a reduction in the cost of fixed to mobile calls from 71 cents to 54 cents per minute VAT exclusive. This rate will be further reduced in October 2011 to 40 cents. In total this will be a reduction of 44% over an 18 month period and benefit a number consumers especially the business sector.

8.12 Public Awareness: The NTRC held a number of community discussions in various rural areas of the country in 2010 with the objective of informing consumers of the role of the NTRC as well as to seek feedback on the issues that are of concern to residents across our nation. These events coincided with television and radio ads. This initiative will be an ongoing one.

8.13 Universal Service Fund: Following the tendering of three initial projects under the Universal Service Fund (USF) the NTRC was able to successfully enter into a contract with LIME to provision project 1. A summary of the three projects are as follows:

Project 1
- Wireless Internet Access (indoor and outdoor) at 12 Learning Resource Centers. This access to the Internet will be available free to the public and in the case of the outdoor access on a 24 hrs basis for persons possessing their own wireless device.
- Wireless Internet access and computers at three community centers located at Orange Hill, Coulls Hill and Redemption Sharpes, the Salvation Army headquarters in Kingstown and the two Golden Years activity centers at Byrea and Buccament.
- Wireless Internet access at the following nine rural schools.
  1. Fancy Government School
  2. Owia Government School
  3. Paget Farm Government School
  4. Mayreau Government School
  5. Clifton Union Island- Government School
  6. Rose Hall Government School

7. Petit Bordel Secondary School
8. Troumaca Government School
9. Spring Village School

This project should be completed by April 2011. It should be noted that this is the first Universal Service Fund project to be commenced anywhere in the OECS and fits in with our Government's Education policy and the one laptop per student initiative.

Project 2

The NTRC held negotiations to finalize a contract for the second project that will cater for the installation of payphones along the main highways and wireless Internet access at all 14 recently completed Tourism recreation sites. This project will be implemented in 2011

Project 3

The third project that was tendered in 2010 dealing with improved Maritime VHF coverage did not produce a responsive tender and will be retendered in the first quarter of 2011 after being reconfigured.

8.14 Digital Cable TV: Karib Cable migrated from its analog network to a digital one during 2010 that facilitates the provision of more television channels and enhanced services to consumers. This process has not been an easy one and a number of consumer issues have arisen. The NTRC has been trying its best to handle these issues in the interest of all stakeholders given the limited regulatory oversight allowed for under the existing framework.

8.15 Next Generation Network: Cable & Wireless (LIME) completed its migration from its legacy circuit switched network to its Next Generation Network (NGN) in the third quarter of 2010. This milestone was a historical one as St.Vincent and the Grenadines became the first sovereign nation to fully migrate to an NGN. This was not an easy project to implement but was accomplished by a team of all local personnel from LIME.

One of the significant achievements of this new network is the ability to make Internet access available at the flick of a switch to any fixed line customer of the company. The network will also allow for the deployment of new services that will benefit the competitive market of our state in the short term.

8.16 Statistics: The NTRC continued in 2010 with the provisioning of statistical data from the Telecommunications sector to a number of local, regional and international entities. The following graphs depict some of the more relevant information on the sector. Also note that for Graphs 1 through 4 the rate increases reflected in 2007 are due to the implementation of the value added tax (VAT) by the Government in May of 2007.

Fixed Line Rates to the USA
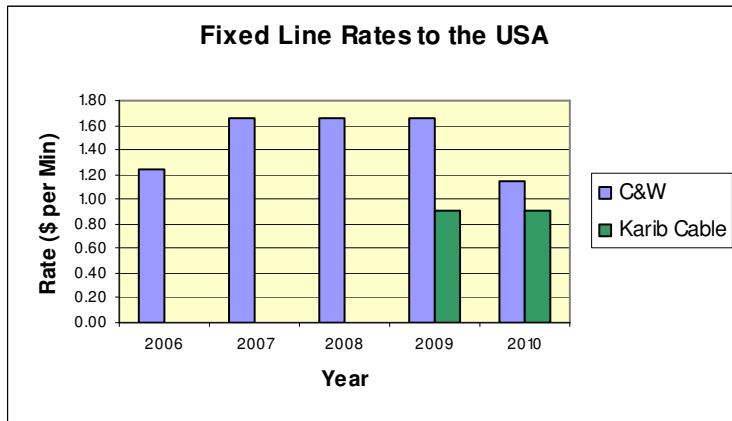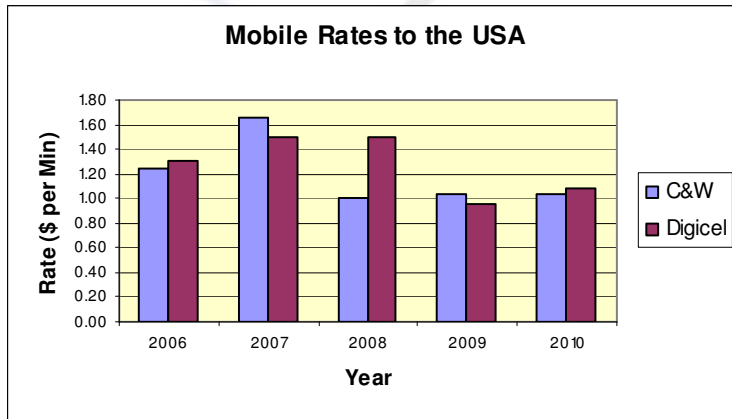

Graph #1

Graph # 1

The rates depicted in Graph 1 are not regulated. There was no competition in the fixed line market until Karib Cable entered the market in 2009.

Mobile Rates to the USA

Graph #2

Graph # 2

The rates depicted in Graph 2 are also not regulated. In 2009 the rates reached the lowest ever recorded to under $1.00 EC per minute during peak time.

22

Domestic Rates
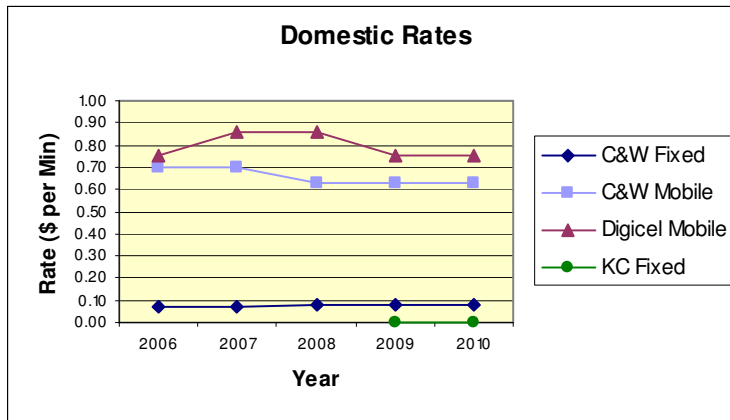
Graph #3

Graph #4

Graphs #3 and #4

The domestic rates in Graph 3 are the daytime rates for calls made to customers on the same network.

The international rates in Graph 4 are the daytime rates for calls to the USA for all providers.

These graphs show that while fixed line and mobile rates are basically on par for international call, there is a large discrepancy between fixed line and mobile rates for domestic calls.

23
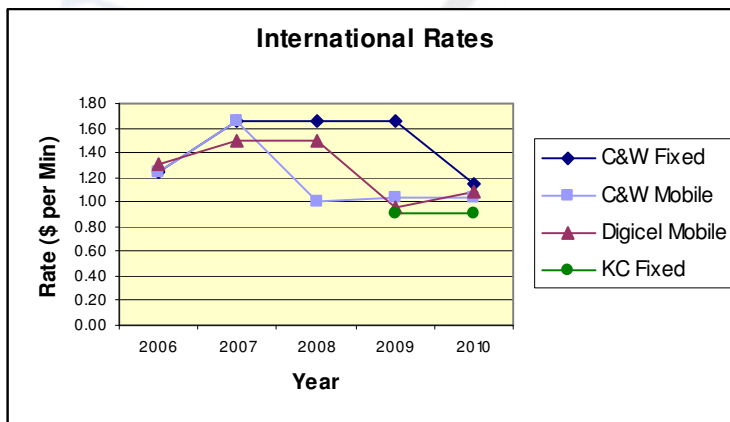
C&W Fixed Line to Mobile
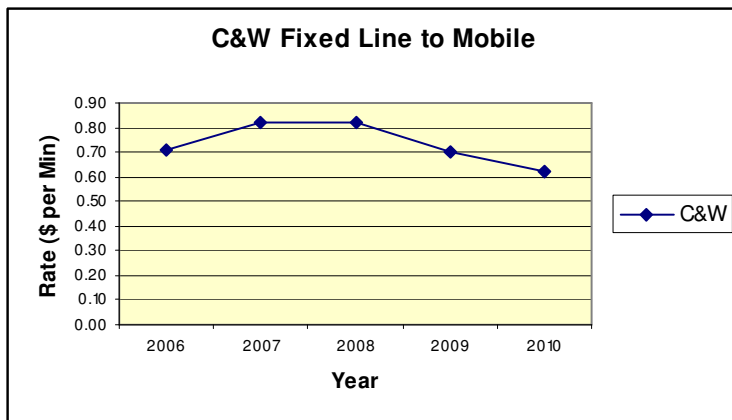
Graph #5

In 2009 the fixed to mobile rate depicted in Graph #5 was influenced by the interconnection agreement between Cable & Wireless and Digicel. This has resulted in a reduction in rates for Cable & Wireless fixed line to mobile. This rate continues to fall in 2010.

Mobile Subscribers
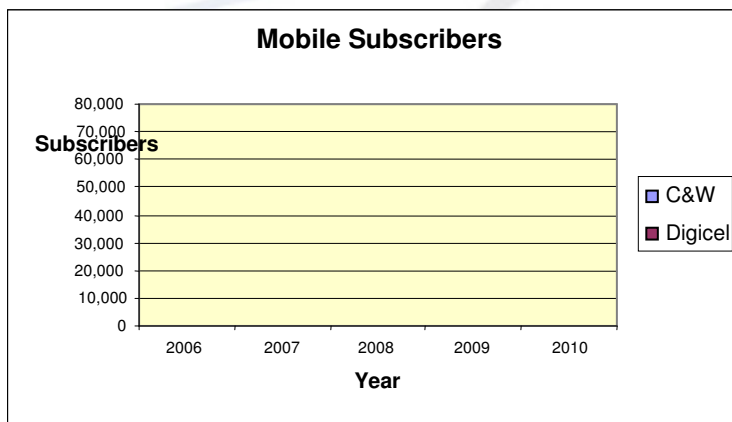
Graph #6

The number of mobile customers for 2009 has increased slightly in 2010. Digicel continues to enjoy a small percentage in market share over Cable & Wireless.

24

Fixed Line Subscribers

Subscribers

25,000

20,000

15,000

10,000

5,000

0

2006   2007   2008   2009   2010

Year

☐ C&W
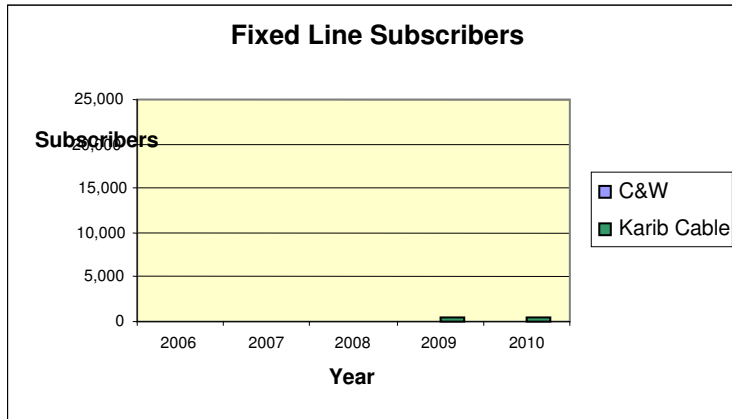
☐ Karib Cable

Graph #7

Graph #7

Graph #7 shows a slight decrease in fixed line subscribers in 2010. Karib Cable has not seen a significant increase in market share.

Fixed Line Disconnections

Disconnections

3500				
3000				
2500				
2000				
1500				
1000				
500				
0				
2006	2007	2008	2009	2010

Year

☐ C&W
☐ Karib Cable
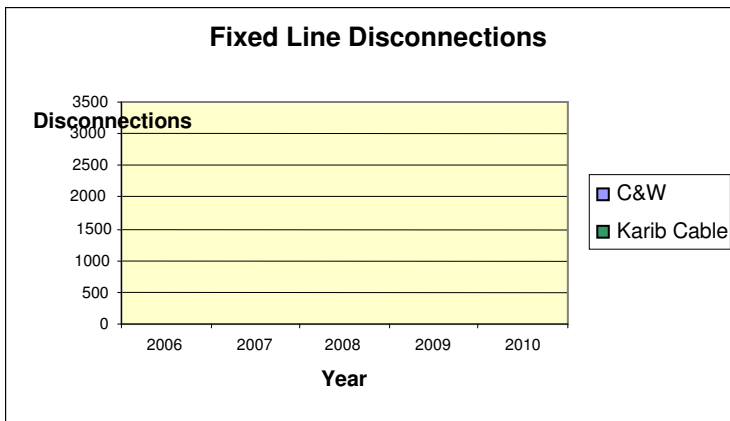
Graph #8

Graph #8 shows the number of fixed line customers disconnected during each year between 2006 and 2010. There was a sharp increase in Cable & Wireless disconnections to 2010.

Fixed Line Applications

Applications

2000				
1800				
1600				
1400				
1200				
1000				
800				
600				
400				
200				
0				
2006	2007	2008	2009	2010

Year

☐ C&W
☐ Karib Cable
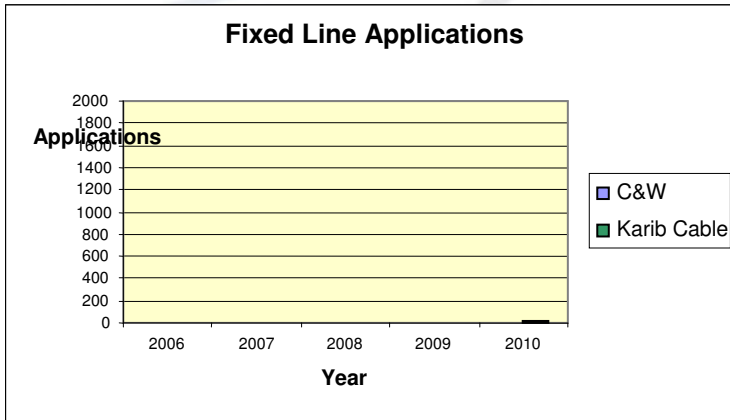
Graph #9

Graph #9 shows that while Cable & Wireless experienced a significant increase in persons applying for fixed line telephone service, Karib Cable saw a decrease in applications for the same.

Graph #9

Broadband Internet Subscribers
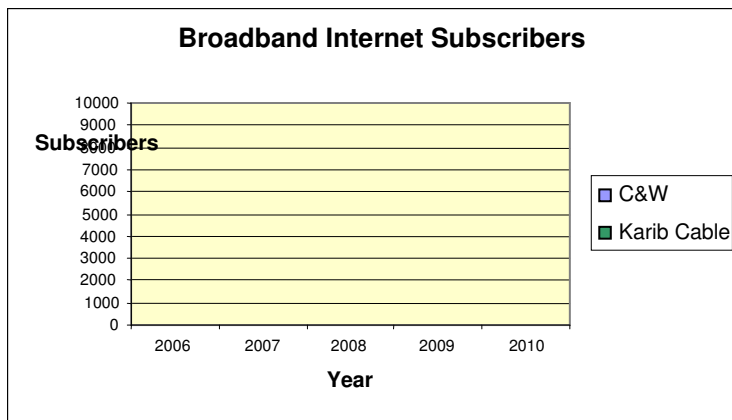
Graph #10

Graph #10 shows the number of broadband internet customers by provider. Both Cable and Wireless and Karib Cable have experienced a steady increase in its internet customers over the past five years.

Graph #10
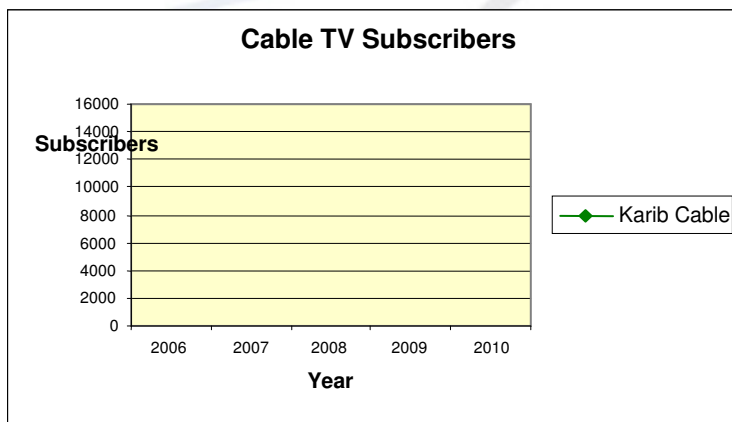
Cable TV Subscribers

Graph #11

Graph 11 shows that Karib Cable continues to enjoy a steady increase in Cable TV subscribers despite the difficulties encounters while switching over to their new digital service.

Graph #11

27

8.16.1 Detailed Customer Statistics (as supplied by providers)

		2006	2007	2008	2009	2010
Cable & Wireless (SVG) Ltd						
Fixed line Customers						
	Residential	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
	Business	xxxx	xxxx	xxxx	xxxx	xxxx
	Total	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**
Internet Customers						
	Dialup	xxxx	xxxx	xxxx	xxxx	xxxx
	ISDN	xxxx	xxxx	xxxx	xxx	xxx
	ADSL	xx	x	xx	x	x
	Total	**xxxx**	**xxxx**	**xxxx**	**xxxx**	**xxxx**
Mobile Customers						
	Post paid	xxx	xxxx	xxxx	xxxx	xxxx
	Prepaid	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
	Total	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**
Digicel						
Mobile Customers						
	Post paid	xxx	xxx	xxx	xxx	xxx
	Prepaid	xxxx	xxxx	xxxx	xxxx	xxxx
	Total	**xxxx**	**xxxx**	**xxxx**	**xxxx**	**xxxx**
	Data (pre & post paid)	**xxxx**	**xxxx**	**xxxx**	**xxxx**	
Karib Cable						
Cable TV customers			**xxxx**	xxxxx	xxxxx	xxxxx
Internet customers			**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**
					xxxx	**xxxx**
Fixed Line						

Table 4

	08		09		10	
Individual type licenses	New	Renew	New	Renew	New	Renew
Fixed Public	0	N/A	0	N/A	1	N/A
Internet Networks	1	N/A	0	N/A	0	N/A
Subscriber Television	0	N/A	0	N/A	2	N/A
Int'l Simple Voice Resale	0	N/A	0	N/A	1	N/A
Mobile Cellular	0	N/A	0	N/A	0	N/A
Public Radio paging	0	N/A	0	N/A	0	N/A
Submarine cable	0	N/A	0	N/A	0	N/A
Class type licenses						
Private network/services	0	N/A	0	N/A	1	N/A
Internet services	0	N/A	0	N/A	0	N/A
Radio Broadcast	1	N/A	0	N/A	8	N/A
Community radio	2	N/A	1	N/A	0	N/A
Television Broadcast	0	N/A	0	N/A	0	N/A
Maritime mobile	1	31	1	23	0	19
Land mobile	1	334	1	275	3	212
Aeronautical radio	0	0	1	0	0	0
Aircraft station	0	15	3	18	1	16
Amateur Radio station	11	15	29	23	36	36
Citizen Band radio	2	3	0	0	0	5
Family Radio Band	1	1	4	0	2	1
Ship Station	45	136	61	112	28	131
Miscellaneous						
CPE Dealers reg. fee	0	15	18	12	18	17
Exam Fees for Rad. Oper.	1	N/A	0	N/A	0	N/A
Type Approval fee	0	N/A	0	N/A		N/A
Ship station Operators	29	32	24	16	25	32
Aircraft Station Operators	0	0	0	0	0	0

Table 5

8.17 Licensing

The NTRC continued to facilitate the application process for new licenses under the Telecommunications Act. Individual type applications were forwarded to ECTEL to be evaluated while Class type applications were evaluated by the NTRC. The NTRC also evaluated and made recommendations to the Minister on a number of frequency applications.

Table 5 outlines the number of licences issued from 2008 to 2010. In recognition of the fact that not all issued licences are new licences but may be renewals of existing licences issued in a previous year. Table 6 outlines the new licences and the existing licences renewed for the period 2008- 2010.

8.18   Policy Recommendations:

The following need to be examined in the policy framework of the Government, at the local, regional and International level.

Cyber Security- This threat needs a regional approach noting the resources needed and the complexity of the problem. Such an initiative can be facilitated with possible assistance from the USA noting the potential threat to their country and the role the Caribbean can play in minimizing such a threat if the member states of the region are properly prepared. More details on this very important issue were outlined in our 2009 Annual Report.

Regulatory focus for convergence – Our Country has to move from our current approach of just regulating networks and some services offered over these networks. We have to move to regulating what goes on these networks and not just the "content", etc but more so the applications that are allowed to or not allowed to operate on these networks. More details on this issue are in our 2009 Annual Report.

ICT Opportunities- Further to the opportunities that were outlined in our 2009 Annual Report and which were specifically identified within software development the NTRC would like to add a new area for closer examination going forward and which is directly linked to the issue of Cyber security. As a country we have to see where we can identify opportunities that can position ourselves/our country ahead of other countries and other global players. An area that will see a lot of attention in the near to medium term is security for mobile networks/applications and devices. As the trend in mobile devices move to more smarter devices with greater access speeds the threats we have seen to personal/corporate computers and networks over the last two decades will be greater and more complicated with the increase in more smarter and faster mobile devices in the near and medium term.

This is a great opportunity for us as a country to start putting in place training programs and incentives to develop the necessary skill sets among our citizens that can provide the necessary services for this area of the

ICT market. Those who are ahead of the curve will reap the most reward. We cannot play catch up in this area as we have been doing in all other areas of ICT skill development. We can be a global leader in this area within four years if the right programmes and incentives are implemented within the next year

9. *Broad Response Strategies*

As the Telecom Sector continues to function within a liberalized environment, the NTRC in collaboration with ECTEL has to respond to the requirements of a competitive sector so as to protect the interests of both the providers and the consumers and facilitate a relevant regulatory framework that will cater for the increased rate of change in sector.

The NTRC has to operate within the harmonized framework of the ECTEL Treaty and the Telecommunications Act of 2001. Most of its objectives cannot be accomplished on its own due to the mandate given to ECTEL on certain issues.

Recognizing the limitations outlined above, the NTRC would seek to continue to work closely with ECTEL, the Ministry of TSTI and relevant stakeholders so as to ensure that the revised regulatory framework for the telecom sector and other related legislation are capable of addressing the issues that currently exist and those that are envisioned.

10. Result Indicators 2010

1. **Complete Public Awareness program started in 2008 relating to the Dispute Resolution Process available through the NTRC to handle complaints/disputes of consumers and service providers.**

    The NTRC held four (4) community discussions, developed and aired Ads on the television and radio in 2010.

2. **Seek to Licence SVG Broadcasting Corporation Television Service under the Telecommunications Act of 2001.**

    Discussions were held with the company and the necessary application forms have been submitted by them to be licenced under the Telecommunications Act. The necessary licence and Frequency Authorisation will be issued to SVG Broadcasting Corporation in 2011.

3. **Seek to settle matter relating to the disputed licenses fees from Cable and Wireless covering the period April to September 2001.**

    This matter was not addressed in 2010 due to the unavailability of resources and time. It will be addressed in 2011.

4. **Complete study documenting the location of all transmitters/towers in St. Vincent and the Grenadines and the possible changes/implications that could occur**

within the next five years taking into consideration the entry of new entrants and technology into the market.

This study will be completed in 2011. All locations were documented and are up to date as of 2010.

5. **Seek to establish an annual forum for NTRC Directors.**

    The Commission approved the formation of such a forum in 2010. Plans are to hold the first forum in 2011.

6. **Work with ECTEL in arranging a regional training workshop on the Peachtree Accounting application.**

    A regional training workshop on Peachtree was held in St. Kitts & Nevis in 2010.

7. **Seek new avenues for communication with NTRC stakeholders (NTRC short code, Face book etc.).**

    The NTRC held discussions with LIME for establishing the use of a short code for its use. The NTRC has also started using Youtube for posting its video ads online and has established a Facebook account.

8. **Seek to expand services and information of the NTRC that is available on the NTRC website.**

    The NTRC expanded the type and quantity of information on its website substantially in 2010.

9. *Establish an electronic log for Interference complaints.*

Electronic log was established.

10. *Establish an online registry of telecom equipment that is approved for use in St. Vincent and the Grenadines.*

This was completed in 2010

11. *Develop component of database to keep track of telecom equipment that were cleared via the NTRC.*

This was implemented in 2010

12. *Review the NTRC IT systems and processes with the objective of improving them for efficiency and security.*

This work was started in 2010 and will be completed in 2011.

13. *Hold two stakeholder meetings with the objective of identifying needs that could be addressed by our regulatory system.*

Held one meeting with Broadcasters in 2010 but was not able to hold another for the amateur operators. The amateur operators meeting will be held in 2011.

14. *Develop NTRC handbook to document rules/policies of the institution, etc.*

This handbook was developed in 2010.

15. *Seek to implement the three projects identified by the Universal Service Fund (USF) in 2009.*

There were delays in implementing these three projects in 2010. Only one project commenced in 2010 but the others are on track for implementation in 2011. The main delay was due to finalising legal issues with the project contract document noting that these are the first projects of their kind in the OECS.

16. *Identify additional projects to be financed by the Universal Service Fund (USF) taking in consideration the priority areas of the fund as outline in the 2010 Operating plan.*

Additional projects were identified in 2010 as follows:

- The Outfitting of 45 medical clinics throughout the country with computers and internet connectivity to enhance the Health Information System which was recently implemented by the Government of St. Vincent and the Grenadines.
- The outfitting of five community outreach centers with computers and internet connections being ran by the Center for Enterprise Development (CED)
- Outfit the Rose Hall Community Center with computers and internet connections.
- Outfit the community Center in Clare Valley with internet connectivity and computers.
- Outfit the George McIntosh Building with wireless Internet Access.
- Outfit the hard court in Edinboro with a wireless internet antenna to provide service to persons in the area.

17. *Worked with ECTEL and other stakeholders in ensuring that the new Telecommunications Bill addresses the relevant issues in the sector for the medium term.*

This has been a difficult task as a number of issues that have been identified by the NTRC in 2010 were not addressed in the revised bill that was circulated for public comments in November 2010. The NTRC will try other avenues in 2011 to try to accomplish this task.

18. *Approved a new Price Cap Plan (PCP) to replace the existing PCP.*

A new Price Cap Plan was implemented in August 2010 that will run for three years.

19. *Seek to have the issue of broadcasting content addressed via some form of regulatory framework.*

The NTRC has raised this issue both at the local and regional levels. It is also identified as one of our critical issues in our 2010 annual report.

20. *Implement an internal training program to further enhance the management skills of the NTRC staff.*

The NTRC has purchased a number of managerial books and other related reading material and have used these in building the managerial skills of its staff in a structured internal training program.

11. <u>Major Objectives for 2011</u>

1. **Seek to complete the Licencing of SVG Broadcasting Corporation Television Service under the Telecommunications Act of 2001.**

2. **Seek to settle matter relating to the disputed licenses fees from Cable and Wireless covering the period April to September 2001.**

3. **Complete study documenting the location of all transmitters/towers in St. Vincent and the Grenadines and the possible changes/implications that could occur within the next five years taking into consideration the entry of new entrants and technology into the market.**

4. **Migrate all existing Excel format financial reports of the NTRC to automated reports via the Peachtree Accounting System.**

5. **Review the NTRC IT systems and processes with the objective of improving them for efficiency and security.**

6. **Integrate existing standalone databases of the NTRC into one database.**

7. **Continue the implementation of the three projects identified by the Universal Service Fund (USF) in 2009 and those identified in 2010.**

8. **Work with ECTEL and other stakeholders in ensuring that the new Telecommunications Bill addresses the relevant issues in the sector for the medium term.**

9. **Seek to have the issue of broadcasting content addressed via some form of regulatory framework.**

10. **Research Equipment needed to measure RF radiation levels.**

11. **Source Training for Broadcasters especially in the area of antenna patterns and installations.**

12. **Develop Brochures and Posters for the NTRC dispute resolution process.**

13. **Conduct a public awareness programme for the NTRC.**

14. **Increase the interactivity functions of the NTRC website.**

12.   Annex A

12.1   *Technical Definitions/Terminology*

CANTO: -   *"Caribbean Association of National Telecommunication
Organizations"*

CANTO provides a platform for all Caribbean telecommunications operators to speak with one voice to policy makers, regulators and other stakeholders in the   sector in influencing the creation of a favourable business environment for all stakeholders.

CIDA:-   *"Canadian International Development Agency"*

CIDA supports sustainable development in developing countries in order to reduce poverty and to contribute to a more secure, equitable and prosperous world.

CITEL:-   *"Inter-American Telecommunication Commission"*

CITEL is an entity of the Organization of American States, it is the main forum in the hemisphere in which the governments and the private sector meet to coordinate regional efforts to develop the Global Information Society. CITEL endeavours to make telecommunications a catalyst for the dynamic development of the Americas by working with governments and the private sector.

CTO:-   *"Commonwealth Telecommunications Organization"*

The (CTO) is a partnership between Commonwealth governments and telecommunications businesses to promote ICT in the interests of consumers, businesses and social and economic development. It's Program for Development and Training (PDT) is a unique program of training and expert assistance in every aspect of telecommunications for Commonwealth developing countries.

CTU: -   *"Caribbean Telecommunications Union"*

CTU is the major Telecommunications policy organ in the Region, directed by Inter-Governmental specialized action under a special Agreement establishing the Union.

Frequency: -   *"The rate of a repetitive event. The standard unit for frequency is the hertz (Hz), defined as the number of events or cycles per second. The frequency of electrical signals is often measured in multiples of hertz, including kilohertz (kHz), megahertz (MHz), or gigahertz (GHz)."*

GMDSS: -   *"Global Maritime Distress and Safety System"*
The GMDSS provides for automatic distress alerting and locating in cases where a radio operator doesn't have time to send an SOS or MAYDAY call.

ITU: -   *"International Telecommunication Union"*

ITU works closely with all standards organizations to form an international uniform standards system for communication.

Land Mobile: *" A mobile service between base stations and land mobile stations, or between land mobile stations."*

Maritime Mobile: - *"A mobile service between coast station and ship stations, or between ship stations, or between associated on-board communication stations; survival craft stations, and emergency position- Indicating radio beacon stations may also participate in this service."*

MMSI: - *"Maritime Mobile Service Identity"*

MMSI are formed of a series of nine digits which are transmitted over the radio path in order to uniquely identify ship stations, ship earth stations, coast stations, coast earth stations, and group calls. These identities are formed in such a way that the identity or part thereof can be used by telephone and telex customers connected to the general telecommunications network principally to call ships automatically.

Radio frequency spectrum: - *"that part of the electromagnetic Spectrum used for communications; includes frequencies used for AM- FM radio and cellular phones and television etc"*

Ship Station: - *"A Mobile station in the maritime mobile service Located on board a vessel which is not permanently moored, other than a survival craft station."*

Spectrum: - *"(Electromagnetic Spectrum) is an ordered array of the components of an emission or wave. Sound, Radio Frequency Spectrum, Infra Red, Visible Light, Ultraviolet Rays, X-Ray etc are all part of the Electromagnetic Spectrum in that order."*

Stations:- *"One or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radio communication service, or the radio astronomy service.*

Telecommunications:- *"Any transmission, emission or reception of signs, signals, writings, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems.*

Universal Service: -   *"universal service" includes the provision of –*
   (A) Public voice telephony;
   (B) Internet access;
   (C) Telecommunications services to schools,
    hospitals and similar institutions and the disabled
   and physically challenged; or
   (D) Other service by which people access efficient,
   affordable and modern telecommunications.

USAID:-   *"The US Agency for International Development"*

13. <u>Annex B</u>

13.1 <u>*Audited Financial Statements 2010*</u>