Table of Contents

1. Mission Statement…….. 3
2. Vision Statement……..... 3
3. Functions ……..…… 3
4. SWOT Analysis……4
4.1 Strength……..... 4
4.2 Weakness…… 4
4.3 Opportunities…… 4
4.4 Threats……..... 4
5. Critical Issues…….. 5
6. Sector Review…….. 5
6.1 Revenue Analysis..…….…….…….…… 5
6.1.1 Revenue of the Telecom Operators……..…….. 5
6.1.2 Revenue of the NTRC & ECTEL for the period 2002 to 2008…8
6.1.3 Revenue of the Government for the period 1998 to 2008..... 8
6.1.4 Financial Performance of the NTRC 9
6.2 Projected Revenue for 2009……. 10
6.3 Capacity building in 2008..……..... 10
6.4 Regulations…….. 10
6.5 Staff ……..... 10
6.6 ECTEL ……. 11
6.7 Numbering……. 11
6.8 Spectrum Management…….. 11
6.9 Internet Access…….. 11
6.10 Policy……..... 11
6.11 Litigation……. 12
6.12 Statistics……..……... 13
6.12.1 Detailed customer statistics…… 17
6.12.2 Computer and Internet Penetration ……. 19
6.13 Licencing…… 21
6.14 Policy Recommendations…… 22
7. Broad Response Strategies …… 23
8. Result Indicators 2007 and 2008…… …… 23
9. Objectives for 2009……..…… 26
10. Annex A……...27
10.1 Technical Definitions/Terminology…….. 27
11. Annex B…… ……. 30
11.1 Audited Financial Statements 2008……30

National Telecommunications Regulatory Commission (NTRC)

Annual Report 2008

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. SWOT Analysis

4.1 Strengths

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

-Knowledgeable and experience staff is dedicated to achieving the tasks at hand.

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

4.2 Weaknesses

-Absence of fines/penalties or other mechanisms necessary to enforce most provisions of the Telecommunications Act and Regulations.

-Existence of a number of contradictions between the ECTEL Treaty, Telecom Act and Regulations.

-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 link between the ECTEL organizational structure and that of the various NTRCs.

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

4.3 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.

- Review and implementation of the new pricing control mechanism for the incumbent operator to replace the existing system that has come to an end.

- Expiration of the Interconnection Agreement between Cable & Wireless and Digicel. The new agreement will be based on cost oriented rates inline with the LRIC model developed by ECTEL. The new agreement should result in lowering of retail tariffs for some services.

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

4.4 Threats

-Continued possibility of litigation from Licencees.

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

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

5. Critical Issues.

The issue of cyber security and cyber crime continues to be a critical issue for the region and our country. Noting the issues involved it cannot be approached on an individual country basis. This issue needs to be addressed with some urgency at the OECS level with the possibility of a regional project to implement the necessary measures and facilities required to tackle the problem in systematic fashion. Our country cannot wait until something dramatic occurs to tackle this issue. Unless our institutions are proactive it is only a matter of time before we are affected in a dramatic fashion. Our country's financial systems are all computerized; our governments systems are becoming more computerized, our citizens are becoming more dependent on electronic communication to carry out every day activities. The same holds for our national telephone systems which are heavily dependent on computerized systems to function. The national electricity grid is also becoming more computerized.

All of the above systems are susceptible to disruption due to cyber security issues. Imagine waking up one morning and our phones are not working, there is no electricity, our banks cannot function. The developed countries have been addressing these issues for sometime. In a globalised and connected world which we now live in we are no longer outside the zone that cyber criminals operate. To even take it to another level a number of recent cyber attacks on some countries are not crime related but are politically motivated to destabilize the country.

An issue that has to be looked at carefully is the work to be carried out by ECTEL in developing new legislation for the telecom sector. It is imperative that this process is subject to proper consultation and that it achieves the objectives of both the policy makers and the stakeholders that would be affected by it. Developing new legislation for the Telecom/ICT sector at this time of increased convergence is not an easy task. Our new legislation should be able to fill the gaps in the regulatory process that has emerged over the last eight years, smooth out some of the regulatory hurdles and last but not least provide the framework that will be able to regulate the sector over the next ten years.

6. Sector Review

6.1 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.

6.1.1 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 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. There are no revenue amounts for Wireless Ventures St. Vincent Ltd from 2007 due to the merger with Digicel. All revenue received from Wireless Ventures St Vincent Ltd customers from that date are reported as Digicel's Revenue. For the remaining entities whose financial year are not the same as C&W and Digicel , 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 2008:

	Cable and Wireless WI Ltd (St. Vincent Business Unit)			**Cable and Wireless Caribbean Cellular St. Vincent Ltd**	**Digicel St. Vincent Ltd**	**Wireless Ventures St. Vincent Ltd**	**Kelcom Int'l**	**Caribbean Business Machines Ltd**	**Vincy Comm Ltd**	
	Inter. Revenue (EC$)	Domestic Rev (EC$	Total Revenue (EC$)	Total Revenue (EC$)	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	x	xxx,xxx	x		77,278,044
1999	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x	x, xxx,xxx	x		81,942,322
2000	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x	x, xxx,xxx	x		85,427,143
2001	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x	x, xxx,xxx	x		98,971,727
2002	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x	x, xxx,xxx	x		93,748,621
2003	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xxx,xxx	x	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, 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, xxx,xxx	x	xxxx	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	xxx,xxx	xxxxx	150,485,868
2007	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	x	x, xxx,xxx	xxx,xxx	x	158,032,662
2008	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	xx, xxx,xxx	**x**	x, xxx,xxx	xxx,xxx	**x**	151,263,326
			xxx,xxx,xxx	**xxx,xxx,xxx**	**xxx,xxx,xxx**	**xx, xxx,xxx**	**xx, xxx,xxx**	**xxx,xxx**	**xxxxx**	

Table # 1

Source: The information received on the Annual Data request forms were used for Cable & Wireless WI Ltd and Cable & Wireless Caribbean Cellular SVG Ltd, while a breakdown of revenue submitted to the NTRC for 2008 were used for Digicel.

Vincy Communication Ltd indicated that they are no longer in operation.

CBM gross revenue for 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 2006 to 2008 in relation to Karib Cable/Kelcom International are conservative estimates based on trends from the previous years.

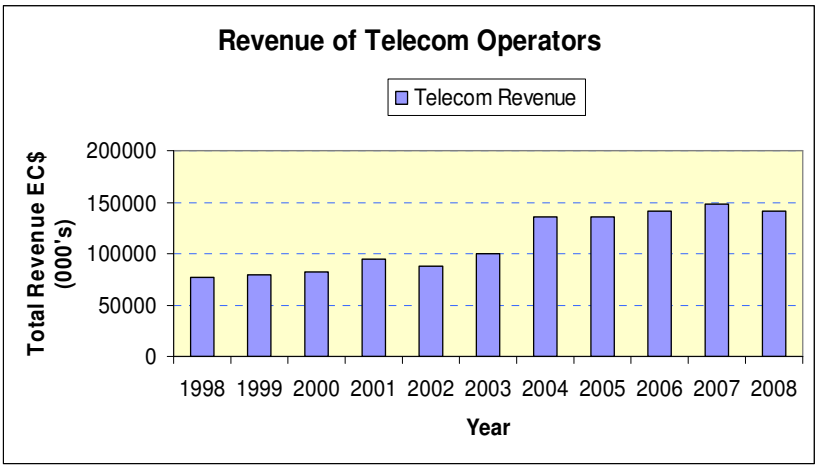


Fig:#1

There was a slight drop in the revenue generated by telecom operators in 2008. This was due to the decrease in revenue generated by C&W (Lime) for mobile and international calls.

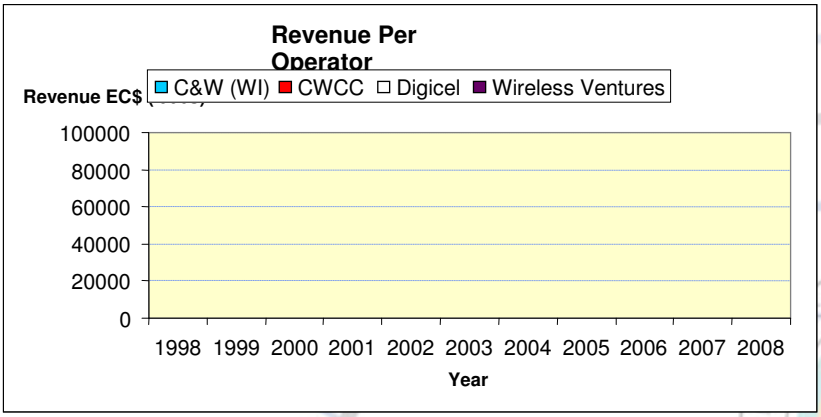


Fig #2

Mobile and International revenue for C&W dropped slightly in 2008, while Digicel mobile revenue continued to experience growth.

6.1.2 Revenue of the NTRC and ECTEL for the period 2002 to 2008

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

In 2008, there was a 42% decrease in the application fees. The reason for this is due to a decrease in applications for frequency authorization and individual license in 2008 compared to the year before.

There was a 53% increase in 2008 for frequency fees which was as a result of advance payment of 2009 frequency fees from telecommunication providers.

Table # 2

Revenue of NTRC and ECTEL 2002 to 2008				
	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%
	$178,561		**$9,924,105**	

6.1.3 Revenue received by the Government for the period 1998 to 2008

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%
		25,304,041	**29,938,372**	

Table #3

The market has seen a slight drop in revenue for license fees collected by the NTRC on behalf of the Government in 2008 compared to 2007. This is as a result of decreased revenue from C&W for mobile and International calls.

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.

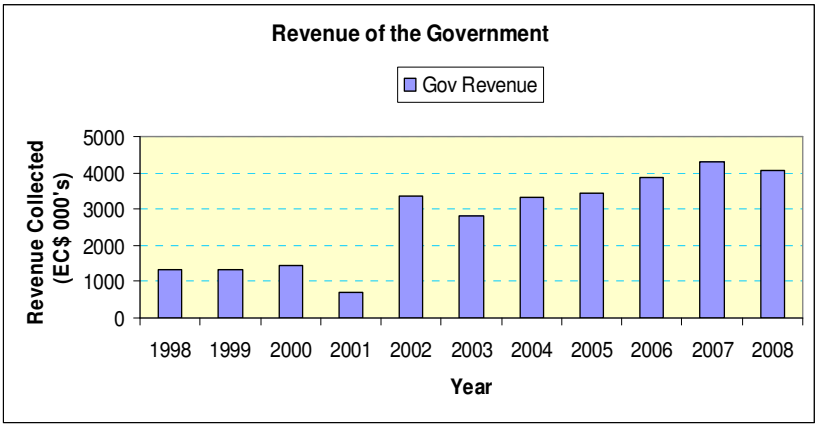


Fig #3

In 2008, license fees collected by the NTRC on behalf of the Government decreased by 6%.

This has been the first time since 2003 that the Government has experienced a decrease in revenue received.

6.1.4 Financial Performance of the NTRC

Revenue

The NTRC budgeted to receive $770,934.22 for the year ending December 31, 2008; however, only $768,902.18 was actually received giving a difference of $2,032.04 less than the budgeted amount. The main reasons for the difference have to do with the following items:

- Reimbursement from the Ministry of Telecommunications - $79,875.10 was budgeted to be received from the Ministry under the Telecom. Skills Project; however, no amounts were received during the period.

- Other Income- No amounts had been budgeted; however, the NTRC received $30,000.00 from the sale of office furniture; and $4,312.33 was received from the NIS for sickness benefit.

- Numbering Fees- No amounts were budgeted for; however, $30,745.00 was received for annual fees from Central Office and Short Codes issued during the period.

Expenditure

Recurrent

For the year ending December 31, 2008, the NTRC budgeted to spend $707,186.02 on recurrent expenditure; however, $666,344.16 was actually spent. The main reason was that some expenditure that was incurred for the period was not paid due to issues related to relocating our offices. Additionally there were some savings from the vacancy of the Accountant position for the first two quarters of the year.

Capital

No amounts had been budgeted for capital expenditure for the financial year 2008. However, $36,071.95 was spent. The reason for this had to do with the relocation of the NTRC offices in November 2008. As a result, old furniture was sold, as was previously mentioned. The amounts received from this sale were used to purchase new furniture at $22,696.95 and the remaining amount of $7303.03 from the sale went towards purchasing upgraded server equipment at a cost of $13,375.00. The additional amount of $6071.97 was sourced from the surplus revenue that was received during the period.

Conclusion

The NTRC's financial performance over the 2008 financial year was commendable as we operated within budget. At the end of the financial year 2008, a gross surplus of $66,486.07 was made. From this amount, $19,949.02 was paid out as a bonus to staff. The main reasons for this surplus have to do with the NTRC receiving Numbering Fees which were not budgeted for and invoices that were received during 2008 but which were not settled by year end. After these additional amounts which total $45,927.33 were deducted from the remaining surplus, a net surplus of $609.72 was actually made for 2008.

6.2 Projected Revenue for 2009:

For the fiscal year 2009, the NTRC has projected to collect $1,389,385.00 in revenue from frequency fees. This is a decline of 22% percent compare to the projected amount of $1,790,000 in 2008. This decline in projection for 2009 compared to that of 2008 was due an amendment to the Fees regulation S.R.O # 3 of 2007. This amendment S.R.O # 10 of 2008 significantly reduced the frequency fees for the cable TV relay links for Karib Cable (between Edinboro and Bequia, Union Island and Canouan) and CCA Ltd (between Canouan Beach Hotel and Raffles Resort). The fees were reduced from $12,000.00 and $7,000.00 per frequency respectively to $1,000.00. Also Cable & Wireless relinquished some of it frequencies for its network due to advances in technology which negated the need for services such as its paging and land mobile services.

Application fees also showed decreases in 2008 over 2007. This is an area that is hard to project since one cannot clearly project how many new applicants for licences will be received during the year.

6.3 Capacity building in 2008:

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 2008 were as follows:

- Quality Customer Service(ECTEL);
- 24th International training program on Utility Regulation and Strategy (PURC).
- Annual Ministerial Strategic briefing Seminar (CTU).
- Application process for assignment of numbers (ECTEL).
- Financial Management & Records keeping seminar (CED).
- Annual Conference and Exhibition (CANTO).
- Multi Protocol Label Switching (MPLS) technology and application workshop (ITU).
- Supervisory Management Techniques (CED)

6.4 Regulations: The following regulations were Gazetted in 2008:

- Telecommunications (USF) Regulations S.R.O. #45 of 2008.
- Telecommunications (Fees Amendment) Regulations S.R.O # 10 of 2008.
- Telecommunications (Numbering) Regulations S.R.O # 11 of 2008.
- Telecommunications (Interconnection) Regulations S.R.O # 60 of 2008.

6.5 Staff: The NTRC continues to experience some turnover in staff positions which affects the smooth running of the organization. The Accountant position which became vacant at the end of 2007 was not filled until June 2008. The NTRC created and filled the post of the Universal Service Fund Administrator in November 2008 as required by the USF regulations.

6.6 ECTEL: The NTRC continues to provide the necessary support to ECTEL as required by the ECTEL Treaty. However, there continue to be issues that exist and which have to be resolved so as to reap the benefits of a harmonized regulatory regime in the contracting states.

6.7 Numbering: - The Numbering regulations were enacted during the year. Following this development the necessary administrative systems required to properly manage the numbering process in the country were implemented and the collection of numbering fees commenced.

6.8 Spectrum Management: - Weekly monitoring of the spectrum is being done. The NTRC was not able to facilitate the spectrum interference training as planned during 2008. However, all the necessary arrangements have been sorted out and the training will take place in February 2009 in collaboration with the other NTRCs and ECTEL.

The NTRC sought quotations on mobile monitoring equipment to assist with its day to day work of monitoring the spectrum specifically those spectrum bands that are outside those that our present equipment is designed to handle. However, the cost of the mobile unit was outside what the NTRC could afford on its own budget. Noting this and having discussed the issue with ECTEL it was agreed that ECTEL will purchase similar units for all NTRCs during the 2009 period.

6.9 Internet Access: This issue continues to be one of utmost importance for the further development of our country. While we have seen some improvement in the numbers of customers having access to the Internet mainly via their mobile phones the penetration figures for Broadband access is still too low.

The NTRC will have this area as one of its priority areas to be addressed under the Universal Service Fund (USF).

6.10 Policy Development/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:

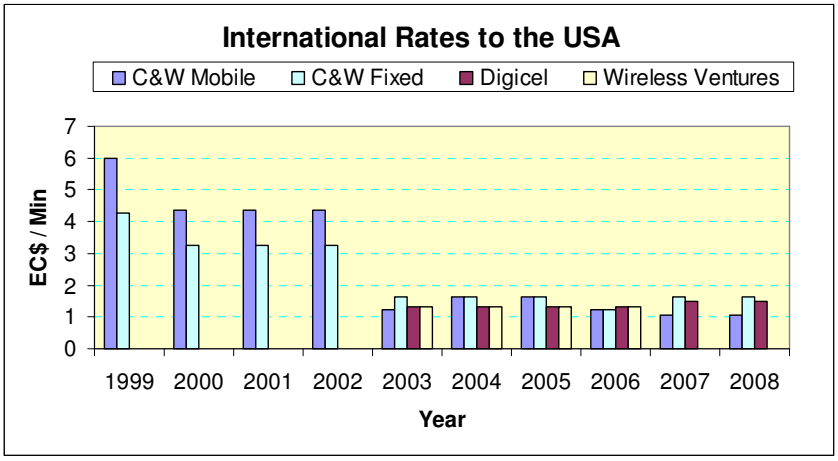
- **Access Deficit Regime**
- **Use of the 700 MHz Band**
- **Conduct of Public Hearings Regulations**
- **Interconnection Regulations**
- **Licensing of Radio Amateurs**
- **Universal Service Guidelines**

The consultations were carried out in various formats.

6.10 Litigation: The NTRC was not involved in any litigation during 2008.

6.11 Universal Service Fund: One of the major objectives dealt with by the NTRC in 2008 was establishing the Universal Service Fund (USF). This involved getting the necessary regulatory instruments enacted by the Government which included the Universal Service Fund Order and the Universal Service Regulations. Thereafter a USF administrator was employed and the collection of fees commenced. All necessary administrative arrangements to get the fund up and running also commenced in 2008. It should be noted that the NTRC was the first in the region to have its USF functioning.

6.12 Statistics The NTRC continued in 2008 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.

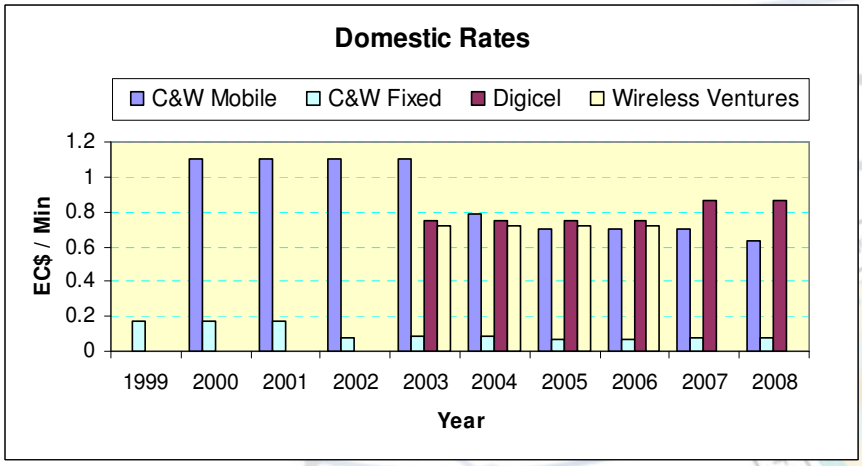


Graph 1

The rates depicted in Graph 1 are not regulated.

Note the steep drop in C&W's rates after competition started in 2003.

No rates are included for Wireless Ventures since the company has merged with Digicel since 2007.

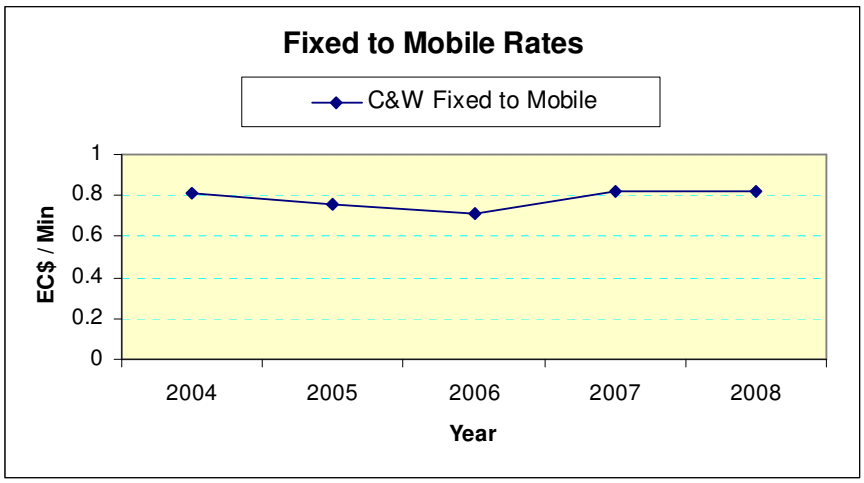


The domestic rates in Graph 2 are the daytime rates for calls made to customers on the same network.

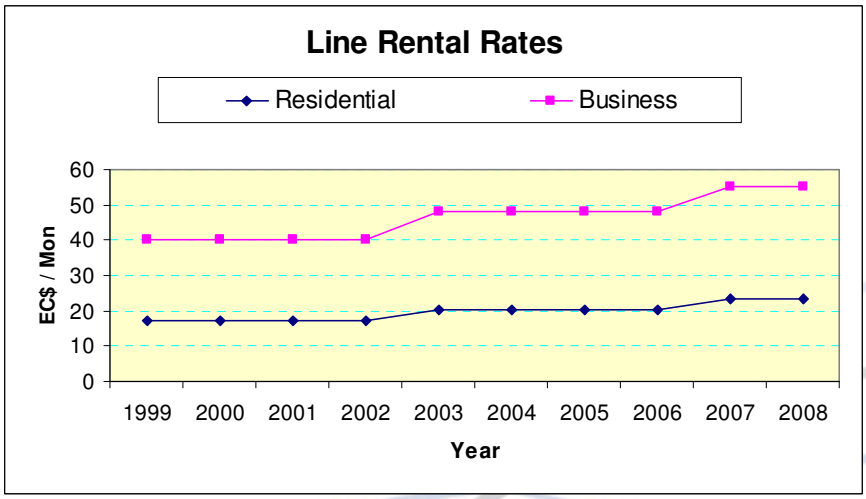
The C&W's fixed line rate from 1999 to 2001 was EC$0.17 for 2 minutes; however the customer also paid EC$0.17 for a 1 minute call.

The 2005 to 2009 C&W Fixed rates are set by the Price Cap Regime (it however must be noted that the Price Cap Plan was scheduled to be renewed in 2008 but this was extended to 2009). An important point to note from the above graph is the large difference between the domestic rates on the mobile networks to that of C&W fixed network. This is far different from what exist with the international rates on C&W fixed and mobile network. Additionally, Cable and Wireless mobile rates between 2007 and 2008 are noticeably reduced from the average rates that consumers (from all networks) were accustomed to paying in the years 2005 to 2007.

Graph 3

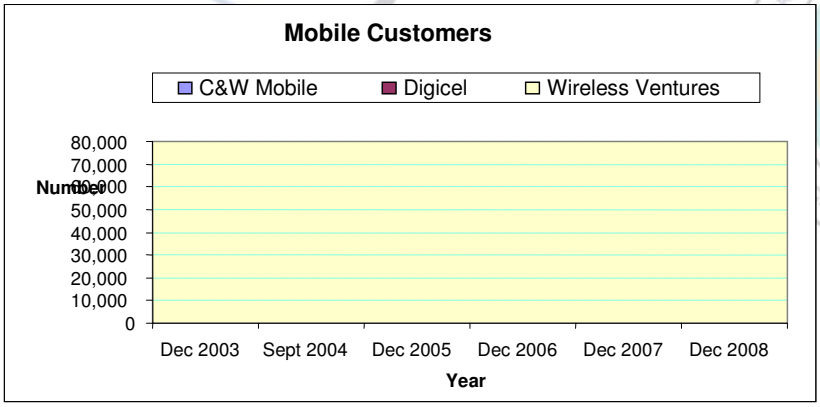


The 2005 to 2008 fixed to mobile rate in Graph 3 is the rate prescribed by the Price Cap regime.



For the years 2006 – 2008 the line rental rates include 80 free minutes of fixed to fixed call time (nights and weekends per month). In 2005 the line rental rate included 60 free minutes of fixed to fixed calling on nights and weekends per month.

Graph 4



Graph 5 shows a drop in the number of mobile customers between 2003 and 2004, but is likely to be a result of improper data being submitted. Since then the number of customers for both operators has been on the rise.

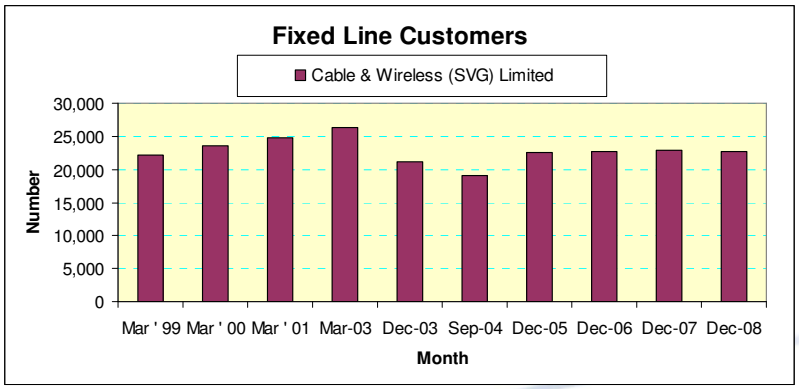
Graph 5

The data submitted for 2003 (the year that competition started) possibly reflected the number of handsets sold and not the number of customers being active on the network for a specific time period.

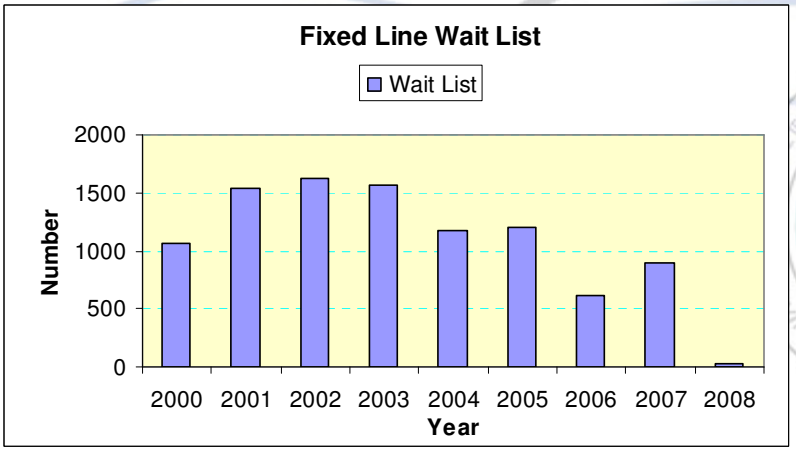
The major drop in numbers was in the figures submitted by Digicel. Noting that there was not an increase in the numbers of the other providers over the same period, it could be safe to say that the drop was not as a result of customers changing providers.

In 2007, Cable and Wireless reported more customers than Digicel for the first time since the liberalization. This is perhaps due to the reduced cost of mobile-to-mobile calls which Cable and Wireless implemented during the same period; this trend continued in 2008.

Graph 6



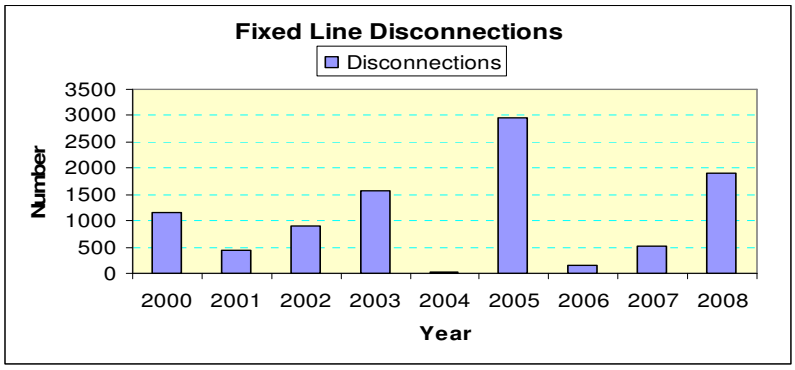
Graph 6 shows the number of connected fixed line customers from March, 1999 to December 2008.



Graph 7 shows the number of persons on C&W's waiting list for fixed line telephones.

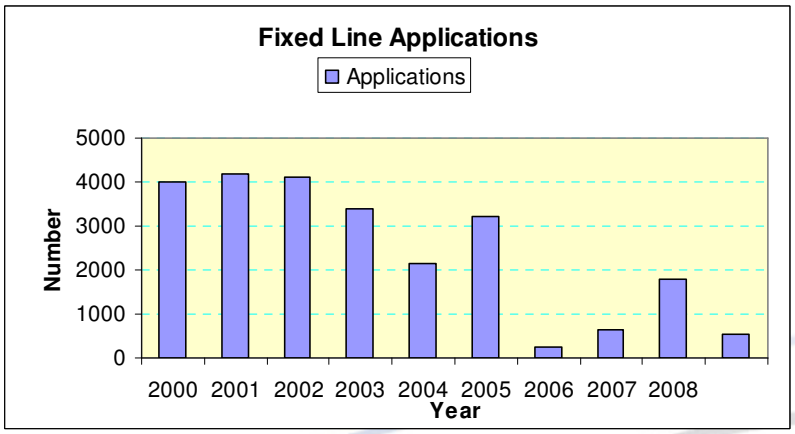
Graph 7

It should be noted that persons on the waiting list are not just located in rural and undeveloped areas but in suburban areas that are well developed. The reason for being on the waiting list in suburban areas is due to limited line plant capacity.



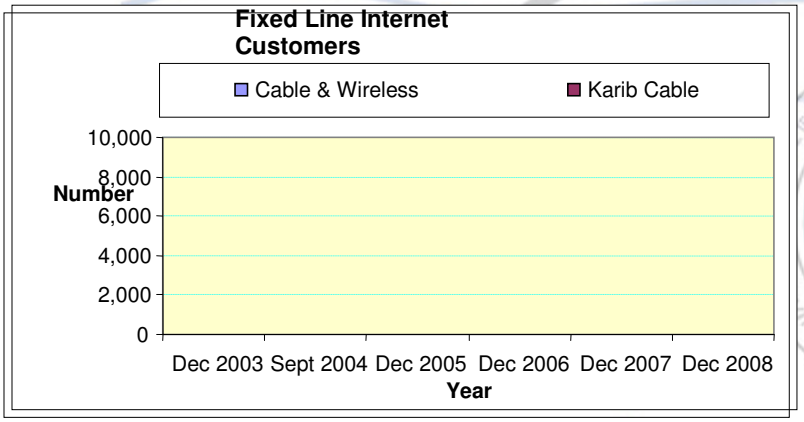
Graph 8

Graph 8 shows the number of fixed line customers disconnected during each year between 2000 and 2008.



Graph 9

Graph 9 shows the number of applications made for fixed line service.



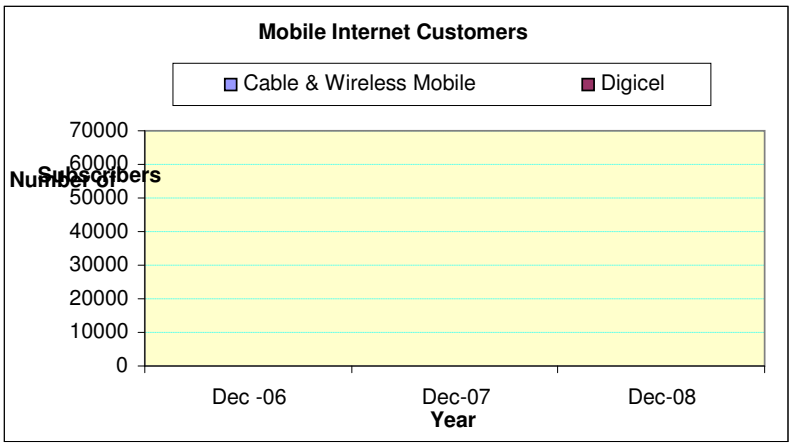
Graph 10

Graph 10 shows the number of fixed line internet customers by provider.

The number of mobile internet customers has greatly outweighed these figures (see notes below).

Cable and Wireless has experienced marked increases in its internet customers over the past three years, possibly due to new promotions and the demand for such services.

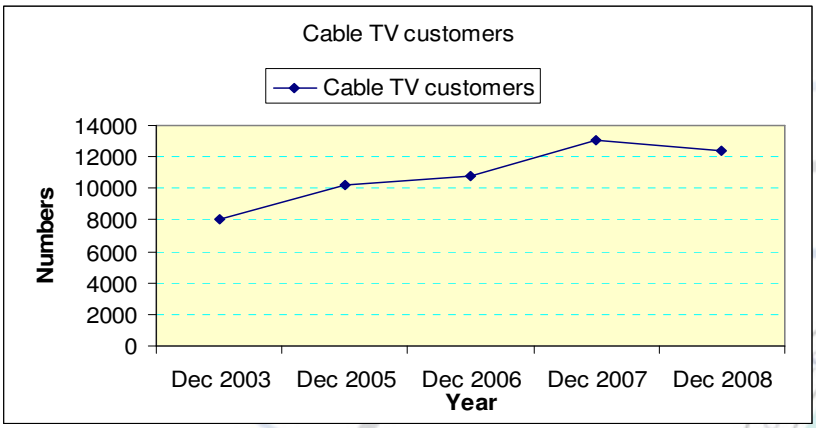
Karib Cable completed an upgrade of its network and speeds in 2007 however their customer base for this service remains low in 2008.



Graph 11

Note: The number of mobile internet customers for Cable and Wireless as at December 2007 and 2008 are estimated.

As of December 2008, the trend of an increasing number of mobile internet customers (customers with internet access capabilities such as GPRS, Wi-Fi and Edge) continue as predicted with an increase from the estimated 90,000 customers in December 2007 to 121,000 in 2008.



Graph 12

Graph 12 shows the number of Cable TV customers.

It is unclear what is responsible for the small decline in Cable TV customers between Dec 07 and Dec 08.

6.12.1 Detailed Customer Statistics (as supplied by providers)

Cable & Wireless (SVG) Limited(LIME)		**Dec '03**	**Sept '04**	**Dec '05**	**Dec '06**	**Dec '07**	**Dec ' 08**
Fixed line Customers							
	Residential	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
	Business	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
	Total	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**
Internet Customers							
	Dialup	xxxx	xxxx	xxxx	xxx	xxx	xxxx
	ISDN	xx	x	xx	x	x	xx
	ADSL	xx	x	xxxx	xxxx	6785	xx
	Total	**xxxx**	**xxxx**	**xxxx**	**xxxx**	**7,315**	**xxxx**
Cable & Wireless(LIME) Mobile							
Mobile Customers							
	Post paid	xxx	xxxx	xxxx	xxxx	xxxx	xxx
	Prepaid	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
	Total	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**
	Data - Post Paid				xxx		
	Data - Prepaid				xxxx		
					xxxx		
Digicel							
Mobile Customers							
	Post paid	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
	Prepaid	40,083	xxxxx	xxxxx	xxxxx	xxxxx	40,083
	Total	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**	**xxxxx**
	Data (pre & post)				**xxxx**	**xxxx**	
Wireless Ventures(AT&T)							
Mobile Customers							
	Post paid	xxx	xxx	xxx	NA		xxx

	Prepaid	xxxx	xxxx	**xxxx**	**NA**		xxxx
	Total	**xxxx**	**xxxx**	**xxxx**			**xxxx**
Karib Cable							
Cable TV customers		xxxx		xxxx		xxxxx	xxxx
Internet customers		xxx		xxx		xxxx	xxx
		xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx

Table 4

Please note that with respect to Cable and Wireless post and pre paid data services, as of 2007 the customers' ability to access the data services is dependent on the capabilities of the phone and there is no need to have Cable and Wireless activate the service. This contrasts with Digicel where the customer needs to go and have the mobile phone activated. Therefore the number of customers using Digicel's data services is much easier to determine; as a result the Commission has not received any data with regards to mobile data services from Cable and Wireless since December 2006.

6.12.2 Computer and Internet penetration

Table 5 has been extracted from the 2001 census information prepared by the Central Planning Division of the Ministry of Finance. The table shows the percentage of computers and Internet connections per total number of households in each of the identified census divisions.

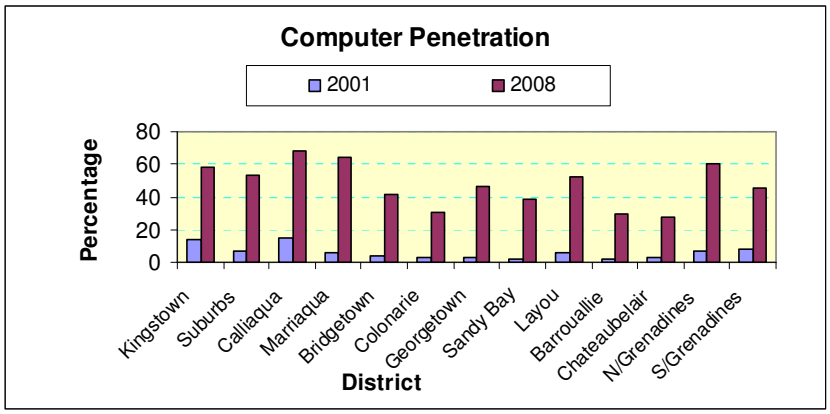
Table 6 shows similar data extracted from a recent island-wide survey conducted by the Commission. This information forms an integral part of our Universal Service Fund Operating plan.

Census Division	No. of House Holds	Computers		Internet Connection	
		No.	%	No.	%
Kingstown	3983	553	14%	345	9%
Suburbs	3378	252	7%	135	4%
Calliaqua	6562	955	15%	687	10%
Marriaqua	2206	128	6%	82	4%
Bridgetown	1849	77	4%	43	2%
Colonarie	1993	62	3%	22	1%
Georgetown	1921	52	3%	28	1%
Sandy Bay	622	10	2%	0	0%
Layou	1861	110	6%	60	3%
Barrouallie	1577	39	2%	19	1%
Chateaubelair	1603	49	3%	27	2%
N/Grenadines	1721	127	7%	83	5%
S/Grenadines	1242	103	8%	52	4%
Total	**30518**	**2517**		**1583**	

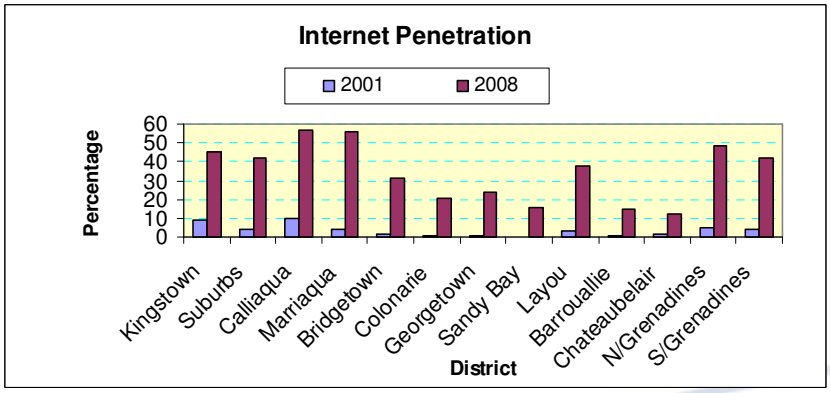
Table 5

Census Division	No. of House Holds	Computers		Internet Connection	
		#	%	#	%
Kingstown	228	133	58.3%	103	45.2%
Suburbs	172	91	52.9%	72	41.9%
Calliaqua	228	155	68.0%	129	56.6%
Marriaqua	186	119	64.0%	104	55.9%
Bridgetown	152	63	41.5%	47	30.9%
Colonarie	150	46	30.7%	31	20.7%
Georgetown	67	31	46.3%	16	23.9%
Sandy Bay	150	58	38.7%	23	15.3%
Layou	215	113	52.6%	81	37.7%
Barrouallie	193	58	30.1%	28	14.5%
Chateaubelair	263	74	28.1%	33	12.5%
N/Grenadines	350	210	60.00%	170	48.6%
S/Grenadines	364	167	45.88%	153	42.0%
Totals	**2718**	**1318**		**990**	

Table 6



Graph13



Graph 14

Table 5 and 6 (previous page) highlights the percentage of computers and internet connections for each census division. The tables show that computer and internet penetration for Saint Vincent and the Grenadines has increased considerably over all districts. Despite the overall increases, Calliaqua remains the district with both the highest computer and internet penetration with Marriaqua taking over Kingstown as the District with the second highest internet and computer penetration.

Graphs 13 and 14 highlight the differences in internet and computer penetration in the years 2001 and 2008.

	06	07		08	
Individual type licenses		New	Renew	New	Renew
Fixed Public	1	1	N/A	0	N/A
Internet Networks	0	1	N/A	1	N/A
Subscriber Television	0	0	N/A	0	N/A
Int'l Simple Voice Resale	0	0	N/A	0	N/A
Mobile Cellular	0	1	N/A	0	N/A
Public Radio paging	0	0	N/A	0	N/A
Submarine cable	1	0	N/A	0	N/A
Class type licenses					
Private network/services	0	2	N/A	0	N/A
Internet services	1	1	N/A	0	N/A
Radio Broadcast	0	0	N/A	1	N/A
Community radio	1	1	N/A	2	N/A
Television Broadcast	0	0	N/A	0	N/A
Maritime mobile	3	4	30	1	31
Land mobile	3	2	451	1	334
Aeronautical radio	0	0	0	0	0
Aircraft station	1	1	15	0	15
Amateur Radio station	8	13	6	11	15
Citizen Band radio	0	0	3	2	3
Family Radio Band	0	0	0	1	1
Ship Station	125	49	228	45	136
Miscellaneous					
CPE Dealers reg. fee	18	0	10	0	15
Exam Fees for Rad. Oper.	0	2	N/A	1	N/A
Type Approval fee	8	0	N/A	0	N/A
Ship station Operators	15	25	32	29	32
Aircraft Station Operators	0	0	0	0	0

Table #7

6.13 Licensing:

The NTRC continued to facilitate the application process for new licenses under the Telecommunications Act. Individual type applications are 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 7 outlines the number of licences issued from 2006 to 2008. 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 7 outlines the new licences and the existing licences renewed in the year 2007 and 2008.

6.14 Policy Recommendations:

Most of the NTRC policy recommendations from our 2007 report are still applicable at this time and we wish to outline two additional regulatory issues that should be addressed within the relevant policy framework of the Government, both at the local and regional level.

- There is a need to broaden the scope of the regulatory oversight provided by the Telecommunications Act of 2001 and which should be addressed in the new telecommunications legislation being developed by ECTEL. There are certain regulatory issues particularly related to Broadcasting (content and programming) that are not being addressed by any legislation at this time. Noting the continued convergence of the ICT sector it would not be prudent to establish a separate Act and institution to provide the required regulatory oversight needed in this area. A number of countries already have one regulatory agency handling these matters.

- The penetration rate of Internet access and computers have grown over the last 6 years since the market has been liberalized. Not withstanding this growth the penetration rates are still well below that of developed countries and there is also a marked difference of the penetration rates between various communities in our country. At this point in time our country do not have a problem with the infrastructure to deliver the service not being available or not being available in some communities. We have passed this hurdle over the last 6 years. What exist at this point in time are two hurdles. One being the monthly cost of access being prohibitive for some while the other being the cost of obtaining a computer. This last hurdle is the main constraint to bringing the levels of penetration to that of the developed world.

  In this modern era persons can no longer function effectively and efficiently without a broadband connection to the Internet. It is especially a critical issue with our students having taken into consideration the current position of Universal Access to Secondary Education. All our students specifically those at the secondary and tertiary levels need universal access to the Internet at schools, communities, libraries and most importantly at home. To do justice to their assignments/homework they need access to relevant information on a daily basis. While our schools are mostly equipped with computers and access to the Internet most students still do most of their assignments at home. Those who have access at home (30% of households) will eventually do better at school than those who do not have access at home (70% of the households).

  While the NTRC has plans to address this issue via the Universal Service Fund it cannot do it alone due regulatory and financial constraints. As such the Government should try to make some strategic and practical interventions through the central Government, Statutory entities and also via partnerships with the private sector to try to make the cost of obtaining a computer more affordable to our citizens.

7. 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.

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 do the following in response to the critical issues that need to be addressed:

- Seek to have our policy makers bring the issue of cyber security and crime to the regional agenda of the OECS.

- Continue to work closely with the consultants engaged in the different components of the ECTEL TICT project so as to ensure that the revised regulatory framework is capable of addressing the critical issues that currently exist and those that are envisioned. Our NTRC will continue to provide feedback on draft policies being developed through our new telecommunications legislation. These policies will then be manifested in a new regulatory framework for the Telecommunications sector by 2010.

8. Result Indicators 2007 and 2008

1. **Start facilitating the requirements of the Universal Service Fund as soon as the Universal Service Fund Order and Regulations are implemented.** The USF Order and regulations were developed and gazetted. A USF Administrator was appointed and work commenced on facilitating the requirements of the USF Order and Regulations. The NTRC commenced collections of USF fees as required by the USF Order.

2. **Have Telecom providers begin complying with the provisions of the Dispute Resolution regulations as it relates to customer complaints**: The relevant systems to accommodate the provisions of dispute resolution regulations were implemented at the providers and the NTRC. The providers currently file monthly reports with the NTRC in relation to customer complaints/disputes.

3. **Facilitate the relocation of the NTRC offices to the new NIS Building:** The NTRC offices were relocated in November 2008. The relocation was able to be done with no disruption of our services to the public.

4. **Establish the Universal Service Fund Guidelines:** The USF guidelines were developed and approved by the Commissioners in January 2009.

5. **Increase the public awareness of the NTRC in coordination with the dispute resolution services now available:** A local consultant was hired to facilitate the public awareness program relating to the dispute process. A work programme was

developed but was only partially implemented due to problems that developed with the consultant. The NTRC had a formal media conference to launch the dispute process. This was done in conjunction with the three main providers. The other items on the work programme will be implemented in 2009.

6. **Ensure that the regulatory needs of St. Vincent and the Grenadines are met under the revised ECTEL Treaty and Telecommunications Act being executed under the TICT project:** The NTRC has participated in a number of consultations, meetings and workshops related to the work being done in revising the Treaty and Act.

7. **Facilitate the early implementation of new draft regulations by liaising with the ECTEL, Ministry of Telecom and the Ministry of Legal Affairs:** All draft regulations recommended by ECTEL during 2008 were gazetted.

8. **Develop new systems or revise existing systems to improve the productivity and efficiency of the NTRC and its service:** A specialized database was developed to handle all complaints filed under the provisions of the Dispute resolution regulations. This work will continue in 2009.

9. **Start identifying potential projects that could be funded from the Universal Service Fund.** One preliminary project that was identified was to expand to Maritime VHF coverage for St. Vincent and the Grenadines noting the safety, security and Tourism implications of such coverage for the country.

10. **Pursue cooperation with the Ministry of Telecommunications on the issue of further developing the ccTLD country code for St. Vincent and the Grenadines:** Further discussions to those that were held in 2007 took place via the medium of the National ICT forum. It was outlined that the Ministry has entered into another five year contract with the Canadian company Affilias to manage the .vc domain.

11. **Re License SVG broadcasting under the Telecommunications Act of 2001 in relation to their Television broadcasting operations.** This task was not completed in 2008. The NTRC will try to have it completed in 2009.

12. **Prepare and publish a procedural manual covering all functions currently carried out by the NTRC:** The NTRC was not able to do any further work on this manual in 2008 due to constraints on resources available. However, it will be a priority issue to complete it in 2009.

13. **Seek to settle matter relating to the disputed licences fees from Cable & Wireless covering the period April to September 2001.** This matter was not addressed in 2008. The NTRC will work on it in 2009.

14. **Conduct a study to document 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 task is 80% completed and would be completed in 2009.

15. **Redesign and deploy an updated NTRC website with the objective of having more information more easily available to interested parties locally, regionally and internationally.** The NTRC was not able to complete this task in 2008 due to technical issues with hosting the new site on the existing host server located at ECTEL. A solution to the issue would be found in 2009.

16. **Seek to have a harmonized approach developed on the following issues that might require regulatory intervention to be effectively addressed**:

- Directory Services for telecommunications services other than fixed line.
- Expiration timeframes for Sim cards and prepaid minutes.
- Assignment of numbers to customers outside jurisdiction of issue.
- Facilitation of in country roaming.
- Levels of radiation from telecom transmitters.
- Carrier selection option available to customers.
- Licence Revenue verification mechanisms.

The above issues have been discussed with ECTEL and the consultants working on the TICT project.

9. Objectives for 2009

1. Continue with the implementation of the Universal Service Fund with specific emphasis on developing the 2009 Operating Plan.

2. Work with Stakeholders in developing potential projects to be funded under the Universal Service Fund.

3. Continue with the implementation of the Dispute Resolution work programme.

4. Facilitate the hosting of a regional training workshop on Spectrum monitoring techniques for NTRC staff.

5. Have a new Interconnection Agreement implemented based on cost oriented rates to replace the existing agreement between C&W and Digicel that expired in 2008.

6. Have a new Price Cap regime implemented on the incumbent operator Cable & Wireless (Lime) to replace the existing regime that expires in December 2009.

7. Facilitate the hosting of the 10th ECTEL/NTRC Forum in July 2009.

8. Seek to have NTRC regulatory initiatives incorporated in the new Telecommunications Bill.

9. Improve the ease of doing business with the NTRC.

10. Seek to integrate the access systems for the various databases used by the NTRC. Such integration would improve the productivity of our administrative division.

11. Develop an IT Disaster plan for the NTRC.

12. Source and install an Amateur Radio station for NTRC.

13. Seek to reduce quantity of paper printed and used by the NTRC. Such measures will reduce the filing requirements of the NTRC as well as reduce operational costs.

14. Develop a number of ICT related articles on topics that are of interest to the general public and which would also be used as a public awareness tool of the NTRC.

15. Develop a monthly ICT research paper. This paper would be circulated to staff of the NTRC and other targeted stakeholders. The objective of this paper would be to keep persons informed of current developments in specific IT areas and their possible implications to the regulatory system.

10. # Annex A

10.1 ## *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 favorable 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 endeavors 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 specialised 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"*

11. # Annex B

11.1 ## Audited Financial Statements 2008


NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
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ST.VINCENT AND THE GRENADINES