

TABLE OF CONTENTS

Content

1.	Mission Statement.....	1
2.	Vision Statement.....	1
3.	Organisational Structure.....	2
4.	Functions	3
5.	SWOT Analysis.....	3
	5.1 Strength.....	3
	5.2 Weakness.....	4
	5.3 Opportunities.....	5
	5.4 Threats.....	5
6.	Critical Issues.....	6
7.	Sector Review.....	7
	7.1 Revenue Analysis.....	7
	7.1.1 Revenue of the Telecom Operators.....	7
	7.1.2 Revenue of the NTRC &ECTEL for the period 2002 to 2005...	11
	7.1.3 Revenue of the Government for the period 1998 to 2005.....	12
	7.1.4 Effect of Interconnection changes on the Licence Fee Payments...	13
	7.1.5 Impact of Mobile call tax on the Telecom Sector/Government	14
	7.1.6 Gross domestic product (GDP) Telecom Sector.....	17
	7.2 Projected Revenue for 2006.....	22
	7.3 Capacity building in 2005.....	28
	7.4 Regulations.....	31
	7.5 Staff	31
	7.6 ECTEL	31
	7.7 Numbering.....	31
	7.8 Spectrum Management.....	31
	7.9 Policy	32
	7.10 Litigation.....	32
	7.11 ICT.....	32
	7.12 Statistics.....	33
	7.13 Registered Ships.....	44
	7.14 Public Consultation	45
	7.15 Licencing.....	45
8.	Broad Response Strategies	46
9.	Result Indicators 2004 and 2005	48
10.	Objectives 2006.....	50
11.	Annex A.....	51
	11.1 Technical Definitions/Terminology.....	51
12.	Annex B	54
	12.1 Geographic penetration of certain telecommunications and services	
	location of certain public service institutions	54
13.	Annex C.....	77
	13.1 Audited Financial Statements 2004.....	77

National Telecommunications Regulatory Commission (NTRC)

Annual Report 2005

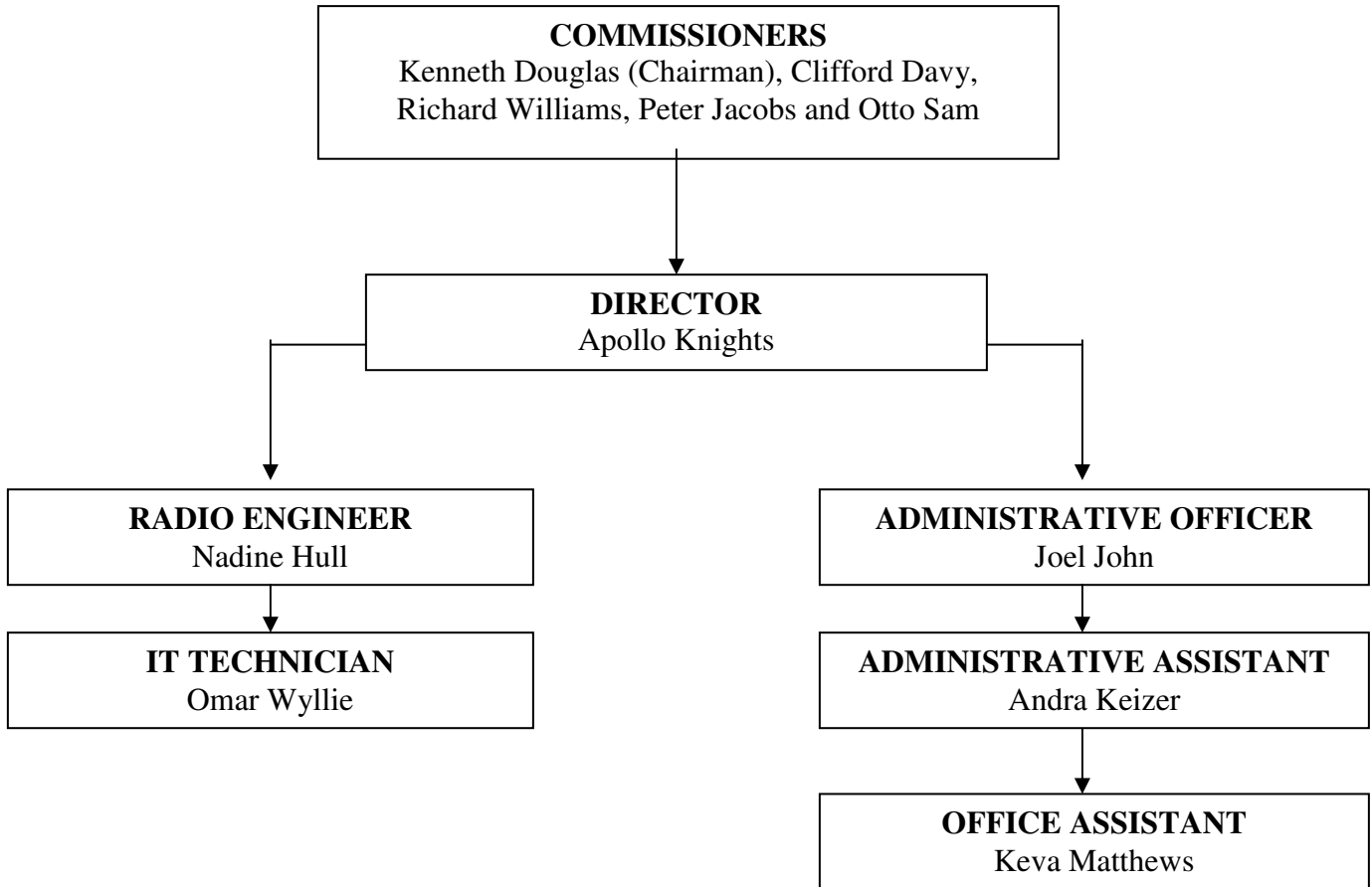
1. Mission Statement

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 telecommunications 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 telecommunications environment.

3. Organizational Structure



4. **Functions:** The NTRC in collaboration with ECTEL is responsible for carrying a variety of functions that are associated with regulating the telecommunications sector in St.Vincent and the Grenadines. These functions are outlined in detail in the Telecommunications Act of 2001 and 2004 annual report.

5. **SWOT Analysis**

5.1 **Strengths**

- Responsible for regulating all aspects of the telecommunications sector.
- Knowledgeable staff is dedicated in achieving the tasks at hand.
- Availability of relevant IT infrastructure and software.
- Automated filing and accounting systems.
- Automated billing and collections systems.
- Availability of adequate office space.
- Framework for efficient decision making.
- Enjoy a good informal working relationship with the SVG representative on the Board of Directors of ECTEL
- Ability to attract competent staff.

5.2 Weaknesses

- Absence of the full complement of regulations needed to properly regulate the sector.
- Absence of fines/penalties or other mechanisms necessary to enforce the Telecommunications Act and Regulations.
- Lack of procedures/processes/regulations for handling Licencee/consumer complaints.
- Existence of a number of contradictions between the ECTEL Treaty, Telecom Act and Regulations.
- Lack of proper pricing control on those services offered by the incumbent operator that are not exposed to 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.
- Not sufficient regulatory oversight given to the area of customer service agreements.

5.3 Opportunities

- Possibility of competition in the Submarine Cable sector in the medium term.
- Commencement of Telecom Skills Project in 2006 thereby accessing funds from the EDF to facilitate further capacity building through various training modules.
- Implementation of Dispute Resolution regulations in 2006.
- Implementation of a Universal Service Fund mechanism in 2006 resulting from the work being done under the ECTEL ICT project being funded by the World Bank.
- Some capacity building is available in a number of needed areas for NTRC personnel via the ECTEL ICT project.
- Review of the regulatory framework that exists in the region as part of the ECTEL ICT project.

5.4 Threats

- Possibility of continued litigation from Licencees.
- Churn of Commissioners and Staff.
- Increase competition in the sector from providers based in other countries and who are not licenced in our territory. This could have serious implications on licence fee revenue in the medium term.

- Competition from other countries in the region that have started Ship registries. This could impact on the licence revenues collected from this sector.

6. Critical Issues

- Implementation of further relevant regulations as required under Section 74 of the Telecom Act. These include areas such as Universal Service and Dispute Resolution.
- Amendment of the Telecommunications Act, ECTEL Treaty and Telecommunications regulations to address current deficiencies and inconsistencies. Having functioned under these pieces of legislation since the market was liberalized in 2001 a number of deficiencies and inconsistencies has come to light. These need to be addressed so as to make the regulatory framework more efficient and effective.
- There is a need to effectively regulate the rates of certain services offered by the incumbent operator, especially the wholesale rates offered to other providers. A common theme that has emerged from new entrants into the market has been the issue of resolving the rates for services offered to them by the incumbent. These rates are normally higher than what is offered at the retail level and has to be negotiated. Wholesale rates should be regulated and as such would not be opened for negotiation between parties. With known rates potential entrants would be in a far better position in preparing their business plans and establishing better timeframes for entry into the market.
- Need to have a clear mechanism established on how litigation issues are to be handled by all NTRCs. There are no guidelines as to how matters are to be processed from a legal/procedural standpoint.

- Need to address the issue of cross-border services being offered by unlicensed providers. This issue has arisen in recent times and is closely linked to the technological developments associated with the Internet and other wireless access solutions. It is not possible for providers based in one country offering services to citizens of another country but without holding the required licence(s) that a provider based in the said country would require. This issue has implications on licence fee revenues as well as regulatory compliance in areas such as quality of service.

7. **Sector Review**

7.1 **Revenue Analysis:-**

The NTRC is responsible for the collection of all fees levied under the Telecommunications Act of 2001. These include application fees, licence fees, frequency authorizations fees, and universal service fund fees.

7.1.1 **Revenue of the Telecom Operators**

The following table and graph illustrate the total revenues earned by the major providers of telecommunications services for the period 1998 to 2005.

Revenue of Telecom Operators

Year:	Cable & Wireless WI Ltd (St Vincent Business Unit)			Cable & Wireless Caribbean Cellular St Vincent Ltd	Digicel St Vincent Ltd	Wireless Ventures St Vincent Ltd	Grand Total EC\$	% Increase / (Decrease) over previous year
	Int. Revenue EC\$	Domestic Revenue EC\$	Total Revenue EC\$	Total Revenue EC\$	Total Revenue EC\$	Total Revenue EC\$		
1998	38,861,000	32,276,000	73,620,000	2,783,000	-	-	76,403,000	
1999	39,332,000	32,628,000	76,098,000	3,404,000	-	-	79,502,000	4%
2000	38,011,000	34,402,000	77,838,000	3,870,000	-	-	81,708,000	3%
2001	44,572,000	37,915,000	89,239,000	4,844,000	-	-	94,083,000	15%
2002	45,027,000	24,919,000	78,355,000	8,986,000	-	-	87,341,000	-7%
2003	46,254,000	28,983,000	84,859,000	14,299,000	179,315	-	99,337,315	14%
2004	25,992,000	35,399,000	73,534,000	22,945,000	34,971,937	3,735,218	135,186,155	36%
2005	24,145,000	30,378,000	69,169,419	28,762,532	33,883,113	7,143,005	138,958,069	3%
			622,712,419	89,893,532	69,034,365	10,878,223	792,518,539	

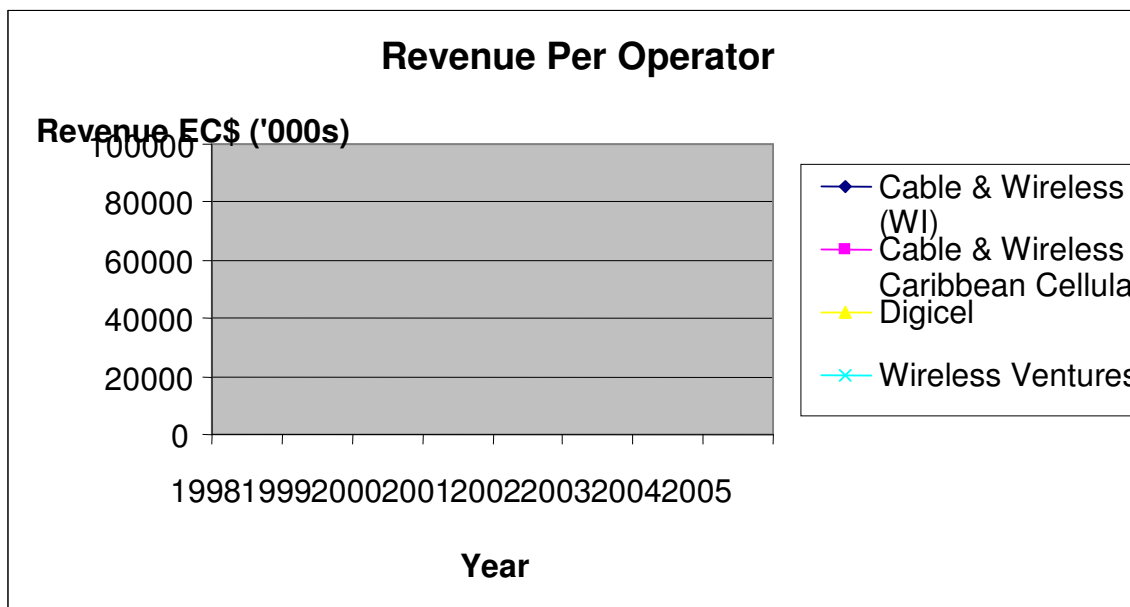
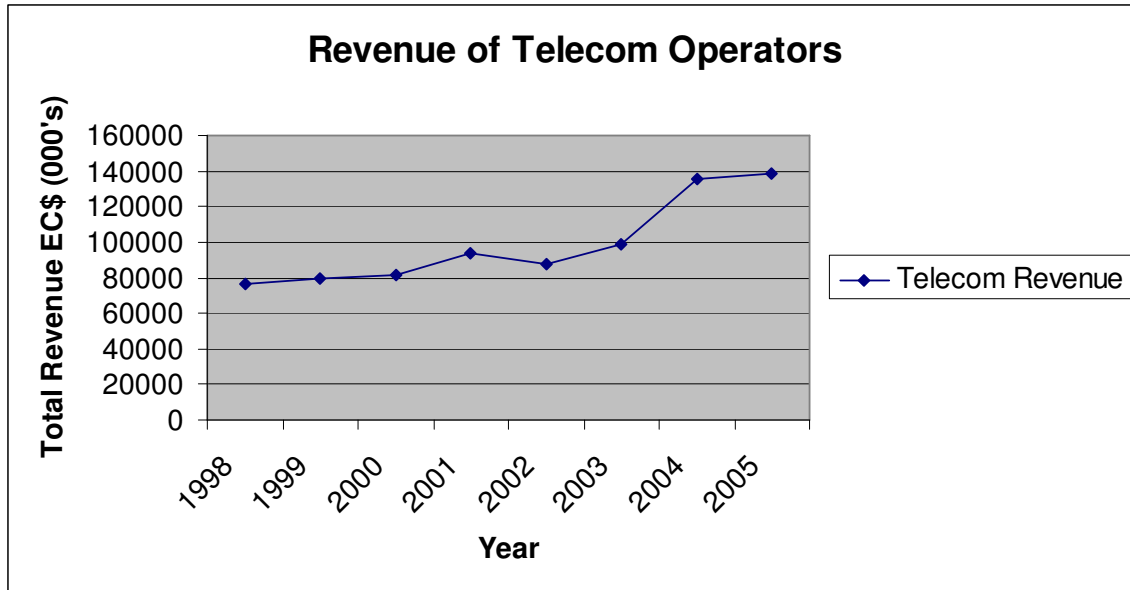
Note: The years above run from April 1 to March 31. E.g. 1998 runs from April 1, 1997 to March 31, 1998. This coincides with the financial years of Cable & Wireless WI Ltd, Cable & Wireless Caribbean Cellular SVG Ltd and Digicel SVG Ltd. The revenue amounts for Wireless Ventures SVG Ltd have been apportioned to the same periods using an average monthly revenue figure calculated by dividing its total revenue for its financial year by 12 for each year.

The figures for 2004 for Cable & Wireless WI Ltd, Cable & Wireless Caribbean Cellular SVG Ltd which were based on their breakdown of their computation of licence fees paid for the year ended October 8, 2005 in last years annual report, have been updated with final figures from their audit financial statements. The 2004 figures for Wireless Ventures have been updated as we have received their un-audited financial statements for the years ended December 31, 2003 and December 31, 2004.

Source: Audited financial statements were used for Cable & Wireless WI Ltd and Cable & Wireless Caribbean Cellular SVG Ltd and Digicel SVG Ltd up to year ended March 31, 2004.

For subsequent years for Cable & Wireless WI Ltd and Cable & Wireless Caribbean Cellular SVG Ltd and Digicel SVG Ltd estimates were used. For both Cable & Wireless WI Ltd and Cable & Wireless Caribbean Cellular SVG Ltd licence fees have been paid up to October 8, 2005. The companies submitted a breakdown of their computation of the licence fees they were submitting which included stating their Gross revenue. This gross revenue figure was used as an estimate for total revenue for the period April 1, 2004 to March 31, 2005, for which financial statements were not available.

For Wireless Ventures SVG Ltd (AT&T) thier un-audited financial statemens were used for 2004 and part of the year ended March 2005. The company's financial statements for the year ended December 31, 2004 were used for the first 9 months of the year ended March 2005 i.e. Apr - Dec 2004. For the remaining three months of the year ended March 2005 (Jan-Mar 2005) an average monthly revenue figure based on the gross revenue figure on its breakdown of its licence fees computation for licence periods November 2004 to October 2005 was used.



There was a 7 % drop in total revenue in 2002. This was due primarily to a \$12 million (34%) drop in Cable & Wireless WI Ltd's, Domestic revenue in that year. The reason for this drop is not clear. The general trend of increase picked up back in 2003 when there was a 14% increase in total revenue. This was due to a \$5 million (60%) increase in revenue of Cable & Wireless Caribbean Cellular and a \$6 million (8%) increase in revenue of Cable & Wireless WI Ltd. These increases were due to increases in customer base. Similar increases occurred in 2004, where a significant decrease in the revenue of

Cable & Wireless WI Ltd, was more than adequately offset by increases by all other operators. For Cable & Wireless Caribbean Cellular, in 2004 revenue increased by 50% and its customer base by 24%. In 2004 Digicel reported higher revenues than Cable & Wireless Caribbean Cellular. Its revenue was \$34.9 million, which was \$12 million dollars (52%) more than Cable & Wireless Caribbean Cellular. Please note that the 2004 revenue figures for Cable & Wireless Caribbean Cellular have been updated after receiving their audited financial statements for that year. Similarly, Digicel's customer base for 2004 was 96% higher than Cable & Wireless Caribbean Cellular.

In 2005 Cable & Wireless Caribbean Cellular revenue increased by 25% which is most likely directly related to its 44% increased in its customer base. Digicel's 2005 revenue dropped by 3% which could be attributed to the introduction of the mobile call tax even though there was a 17% increase in there customer base. Wireless Ventures (Cingular) revenue for 2005 saw a 91% increase in its revenue not withstanding its 21% decrease in its customer base. The reason for this could be attributed to the large percentage that roaming revenue represents in the total revenue of the company. It should be noted that roaming customers are not used in the calculation of customer base for the providers. More detail information on this issue could be found in section 7.1.5.

7.1.2 Revenue of the NTRC and ECTEL for the period 2002 to 2005

Frequency fees are shared between the National Telecommunications Regulatory Commission (NTRC) and the Eastern Caribbean Telecommunications Authority (ECTEL) whereas application fees belong to the NTRC.

	NTRC Application fees	% Increase / (Decrease) over previous year	NTRC & ECTEL Frequency fees	% Increase / (Decrease) over previous year
2002	107,036		607,600	
2003	5,100	-95%	1,366,604	125%
2004	8,800	73%	1,577,400	15%
2005	10,300	17%	1,539,669	-2%
	<hr/>		<hr/>	
	<u>131,236</u>		<u>5,091,273</u>	

Note: Calendar year was the period used in this table.

Application fees were highest in 2002 when a flood of applications from prospective operators were received due to the newly opened market. Subsequently, applications fees represented a small portion of the revenue of the NTRC. Frequency fees increased by 125% in the calendar year 2003, the year that the two new mobile operators began operations. 2004 saw a slight increase over 2003 which was due to additional frequency authorizations being issued. Frequency fees for 2005 saw a \$37,731 (2%) decrease. Also, the frequency fees collected in that year was \$242,331 (14%) lower than the \$1,782,000 we had projected in our 2004 annual report. Frequency fees collected in 2005 was lower mainly due to the fact that in that year Cable & Wireless Caribbean Cellular wrote to the NTRC to give up some of the frequencies on one of its frequency authorizations. The

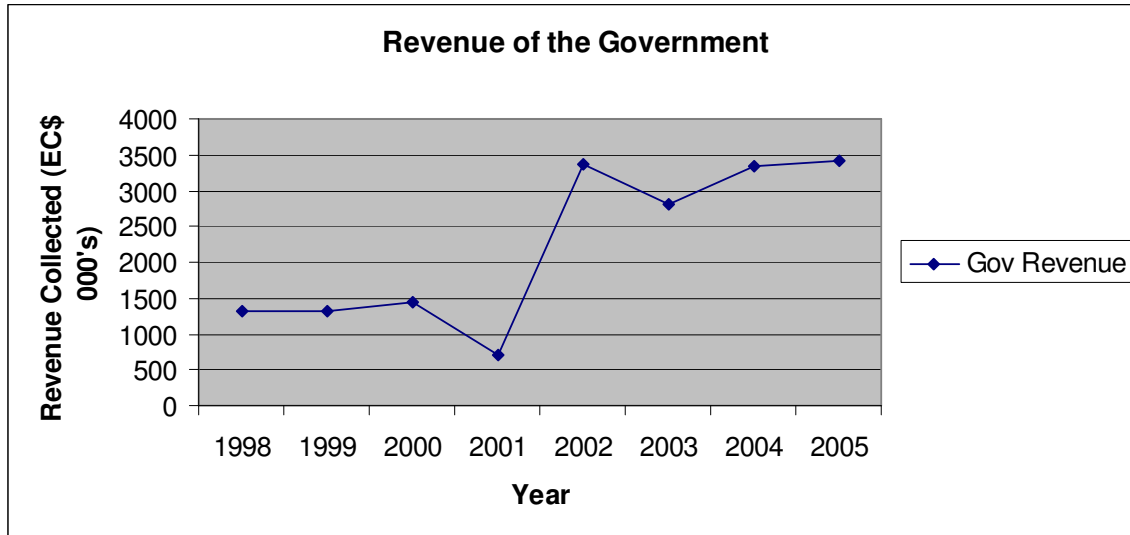
matter is still being dealt with, as such only two quarters of the four quarterly installments that is half of the year's frequency fees were paid on this frequency authorization for 2005. The total frequency fees on this frequency authorization would have been \$300,000 for the year 2005 but half of that figure, \$150,000 was not received.

7.1.3 Revenue of the Government for the period 1998 to 2005

As the data below shows there was an increase in fees received by the Government over the period.

Government of SVG				% Increase / (Decrease) over previous year
	Royalties	Licence fees	Total	
1998	1,303,189	15,001	1,318,190	
1999	1,286,342	31,119	1,317,461	0%
2000	1,450,800	43,529	1,494,329	13%
2001	639,000	61,143	700,143	-53%
2002	-	3,365,391	3,365,391	381%
2003	-	2,803,927	2,803,927	-17%
2004	-	3,329,145	3,329,145	19%
2005	-	3,421,159	3,421,159	3%
	<u>4,679,331</u>	<u>13,070,415</u>	<u>17,749,745</u>	

Note: Calendar year was the period used in this table.
 Before the enactment of the telecom act 2001 fees paid by Cable & Wireless to the government were called Royalties. After that date payments received from Cable & Wireless are called Licence fees. Licence fees were also received from Karib Cable, CCA Ltd and SVG Broadcasting Corporation, among others, over the period.
 The 2003 and 2004 licence fees figures have been amended to include additional payments made during 2005 that were for the 2003 and 2004 years by Wireless Ventures. The 2004 figures also have been amended to include payments made during 2005 that were for the 2004 year by Cable & Wireless Caribbean Cellular and Karib Cable.



The low Royalties collected in calendar year 2001 was due to a still unsettled dispute with Cable & Wireless regarding licence fees it paid for the period April to September 2001 but later deducted from subsequent payments. There was a significant increase in the licence fees collected by the NTRC on behalf of the government in 2002. The increase in 2002 was due to the fact that licence fees due to the government from then on, is being charged on all revenue not just international revenue as was the case before 2002. The small decrease in licence fees in 2003 is due to the licence fees rate being decreased from 3.5 % to 3.0% of Gross Revenue and a change in the definition of “Gross Revenue” to avoid the double counting of payments to other local providers for interconnection charges. Since then there has been increases in licence fees each year. In 2004 there was an increase of 19%. This 19% figure takes into consideration payments made by Cable & Wireless Caribbean Cellular and Wireless Ventures in 2005 that represented payments that were supposed to have been made in 2004. 2005 also saw a small increase of 3%.

7.1.4 Effect of Interconnection Charges on Licence fee payments

In the first fee structure regulation (effective January 2002), licence fees were based on gross revenue. It was noted, however, that after interconnection, the provider will have to

pay on the amount that is transferred over to another provider who would also have to pay on it. In order to avoid double charging licence fees on the interconnection portion, the amount paid as interconnection charges by one provider to the other is exempt from licence charges on the licence fees computation of the provider that makes the payment. Thus, in the amended fee structure regulation which became effective January 21, 2003 “gross” revenue, was defined as “revenue of ... the Licencee and its affiliates, from whatever source derived before any deductions ... except, domestic interconnection payments...” As a result of the fact that interconnection charges are deducted from revenue and the resulting figure is what the licence fees are computed on, licence fees collected after January 2003 are lower than they would have been, had there not been the deduction for Interconnection charges.

7.1.5 Impact of the Mobile Call tax on the telecom sector / Government

In addition to fees levied under the Telecommunications ACT of 2001 there is also a surcharge levied under the Finance Act, 2005 on all mobile originated telecommunications. This surcharge is commonly referred to as the mobile call tax and is collected by the Comptroller of Inland Revenue. It “is imposed upon all sums received by all telecommunications providers in respect of domestic mobile cellular calls made from mobile cellular phones” according to the act.

The mobile call tax was effective January 1, 2005 and is charged as follows (extracted from the act):

Surcharge Rate for International Telecommunications	Surcharge Rate for Domestic Mobile Cellular Calls
10%	5%

Effect of the mobile call tax on the revenue of the telecom operators

In an effort to determine whether the introduction of the mobile call tax had an effect on the revenues of the telecom operators let us consider the revenue per customer figures.

Firstly, the customer base figures for the period are as follows;

	2004	Increase / (Decrease)	2005
Cable & Wireless Caribbean Cellular	xx, xxx	x,xxx	xx, xxx
Digicel	xx, xxx	x,xxx	xx, xxx
Wireless Ventures	x,xxx	(x,xxx)	x,xxx
	xx, xxx	xx, xxx	xx, xxx

Revenues per customer figures for the period are as follows;

	2004			2005			Increase / decrease in revenue per customer
	Customer base	Total Revenue	Revenue per customer	Customer base	Total Revenue	Revenue per customer	
Cable & Wireless Caribbean Cellular	xx, xxx	xx,xxx,xxx	x, xxx.xx	xx, xxx	xx,xxx,xxx	xxx.xx	(xxx.xx)
Digicel	xx, xxx	xx,xxx,xxx	x, xxx.xx	xx, xxx	xx,xxx,xxx	xxx.xx	(xxx.xx)
Wireless Ventures	x,xxx	x,xxx,xxx	xxx.xx	xxxx	x,xxx,xxx	xxxx.xx	xxxx.xx
	xx, xxx	xx,xxx,xxx	xxx.xx	xx, xxx	xx,xxx,xxx	xxx.xx	xx.xx

From the above data we can see that there was an overall increase in 2005 of the number of mobile subscribers in 2005 of 13,670 (24%). Only Wireless Ventures saw a 1,016 (21%) decrease, the customer base of Cable & Wireless Caribbean Cellular increased by 9,079 (43%) while Digicel saw a 5,339 (17%) increase. In analyzing the above data, the first thing that stands out is the 121% increase in Wireless Ventures revenue in 2005 even though they had a 21% decrease in their customer base. This is a result of almost 50% of their 2005 revenue being revenue earned from roaming customers. The fact is that while Wireless Ventures has a very small local customer base compared to the other two providers their revenue from roaming in 2005 is larger than that of Cable & Wireless (approximately \$2 million) and Digicel (\$1.2 million). The issue that needs to be investigated further is why this large increase in revenue in 2005 for Wireless Ventures.

The NTRC does not have roaming revenue figures for 2004 for Wireless Ventures at this time and as such cannot state if the large increase is due to an increase in roaming revenue, local customers or incorrect information for 2004 year. Notwithstanding the issue with Wireless Ventures, it is clear that the revenue per customer figures for both Digicel and Cable and Wireless are comparable for both 2004 and 2005 and could be used to make some calculated assumptions. It is also seen that the revenue per customer for both entities dropped in 2005 when compared with 2004. Even with the figures for Wireless Ventures included, it is seen that there is an average drop of \$94.33 (8.7%) in customer revenue in 2005. This figure is comparable with the 10% Tax imposed on domestic mobile calls in 2005 when considering that 95 % of all customers are prepaid customers and the tax is automatically deducted from a customer account balance when a call is placed. As an example, a person will buy a \$10.00 card and make calls with it until it is finished. When the amount is finished he/she would have been charged the domestic tax within the \$10.00 and as such would have received less airtime than before. The end result is that the customer spent the same amount on phone expense as before but the provider has received less income which is evident in the lower revenue per customer figures listed above. In closing, it could be stated that the mobile tax has not resulted in the customers spending less but the providers receiving less per customer. The two main providers have been able to offset this situation by being able to attract more customers in 2005 and in so doing increase or maintain their overall gross revenue.

From examining the data received so far from the providers for 2005 it is seen that the government should have collected approximately \$2,000,000.00 in additional revenue from the implementation of the 5% tax on domestic mobile calls for the 2005 calendar year .

7.1.6 Gross Domestic Product (GDP) – Telecommunications sector

Gross Domestic Product (GDP) measures the level of economic activity of a country as a whole as well as the level of economic activity for individual sectors of the country. Looking at the GDP figures for the Telecom Sector should give good insight into the level of activity that has occurred in the sector in recent years, given the fact that there have been significant changes.

GDP figures for the telecommunications sector were only available combined with the postal service under the heading Communications. It was however noted by the Statistical Department that the postal service in all years, accounts for less than 2% of the GDP of the communications sector.

The following table and graphs show the Gross Domestic Product of the communications sector from 2001 to 2005 and also shows how this amount is split between the amount for the telecommunications sector and the postal service. 98% of the Communications sector GDP is apportioned to the telecommunications sector and 2% to the postal service.

The financial statements of the providers were also used to calculate GDP for the purpose of comparison. This was done so that the published GDP figures may be compared with more accurate data based on the audited financial statements of the providers, rather than just the selected data that the providers may have supplied to the statistical department. The GDP figures based on the audited financial statements were calculated based on the international standard for measuring GDP.

When reviewing the table and graphs below, please take into account the following:

- The calendar year 2004 (January to December 2004) GDP figures are estimates and are not based on actual figures. Also the calendar year 2005 GDP figures are not yet available.
- In the statistical department's GDP figures, the financial results are recorded in the calendar year in which the majority of the months of the financial year fall. Thus, for the financial year ended March 31, 2001 the full year's results are shown in the column for calendar year 2000 due to the fact that 9 of the 12 months in the financial year ended March 2001 fall in the calendar year 2000. In other words, due to the fact that the 9

months spanning from April to December 2000 would be included in the financial statements for the year ended March 31, 2001, the March 31, 2001 financial results would be recorded in the year 2000 GDP figures.

- On the other hand, the GDP figures based on the financial statements in the table are recorded in the year in which the financial year end falls. Thus, the results for the financial year ended March 31, 2001 are recorded in the 2001 column of the GDP based on financial statements of telecom providers section of the table below. The statistical department's GDP figures for calendar year 2000 are thus compared with the financial statements from the telecom providers for financial year ended March 2001 in this table and in the graphs below. In the analysis that follows, the financial year end would be the years referred to not the calendar years.
- Also note that audited financial statements for the year ended March 31, 2005 were not available. The financial statements for the year ended March 31, 2005 should be compared to the statistical department's 2004 GDP figures; however, since the financial statements were not available there are no figures presented to be compared to the Statistical Departments estimated GDP figures for 2004.
- The GDP figures based on the financial statements were calculated using the audited financial statements of Cable & Wireless WI Ltd, Cable & Wireless Caribbean Cellular and Digicel. The calculations were based on the international method of calculating GDP.

Contribution of Gross Domestic Product by Economic Activity

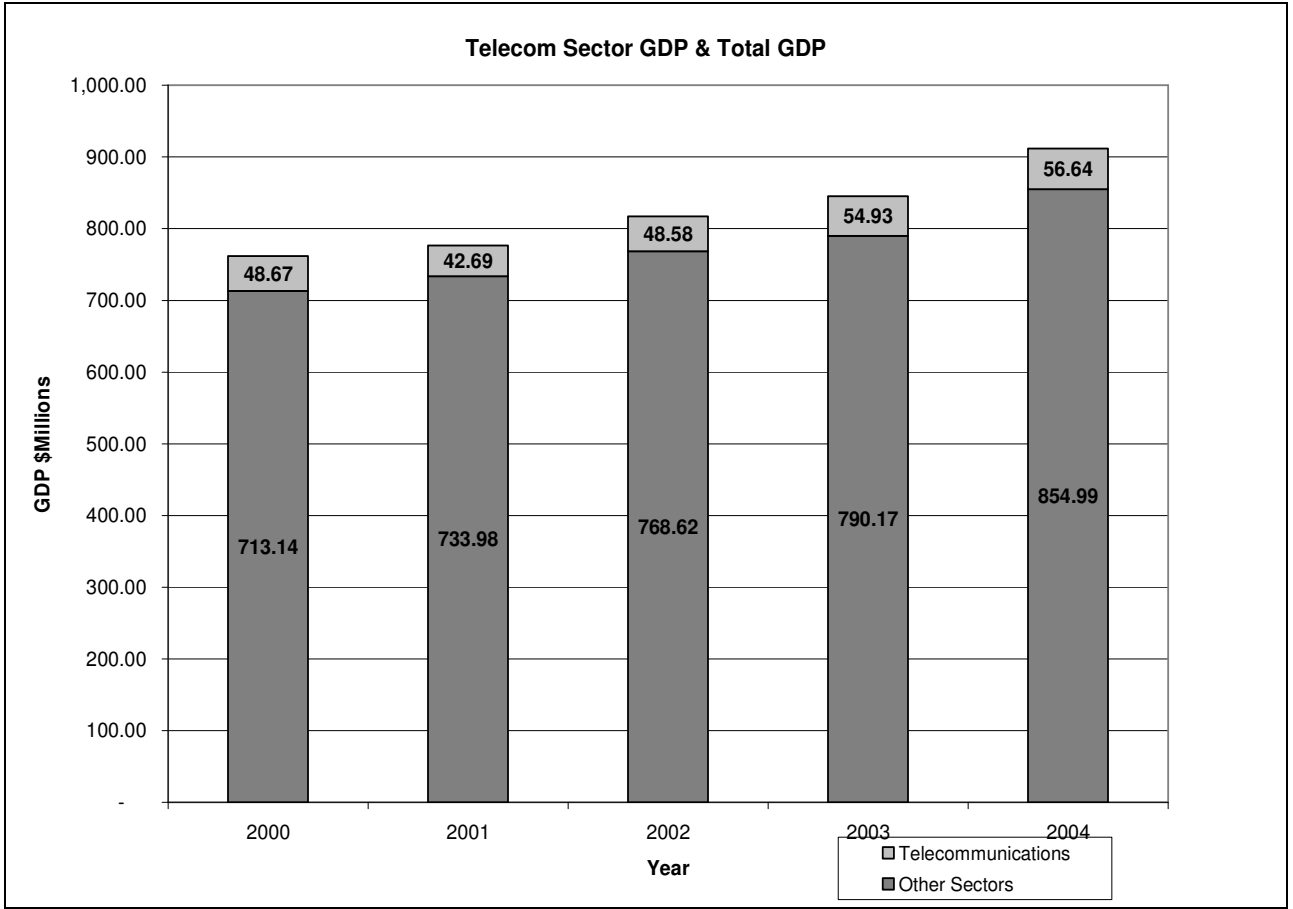
	Calendar year 2000 \$ Millions	Calendar Year 2001 \$ Millions	Calendar Year 2002 \$ Millions	Calendar Year 2003 \$ Millions	Calendar Year 2004 \$ Millions
Telecommunications	48.67	42.69	48.58	54.93	56.64
Postal services	0.99	0.87	0.99	1.12	1.16
GDP : Communications	49.66	43.56	49.57	56.05	57.8
Telecom GDP % Contribution	6.39%	5.50%	5.94%	6.50%	6.21%
Total GDP	761.81	776.67	817.2	845.1	911.63

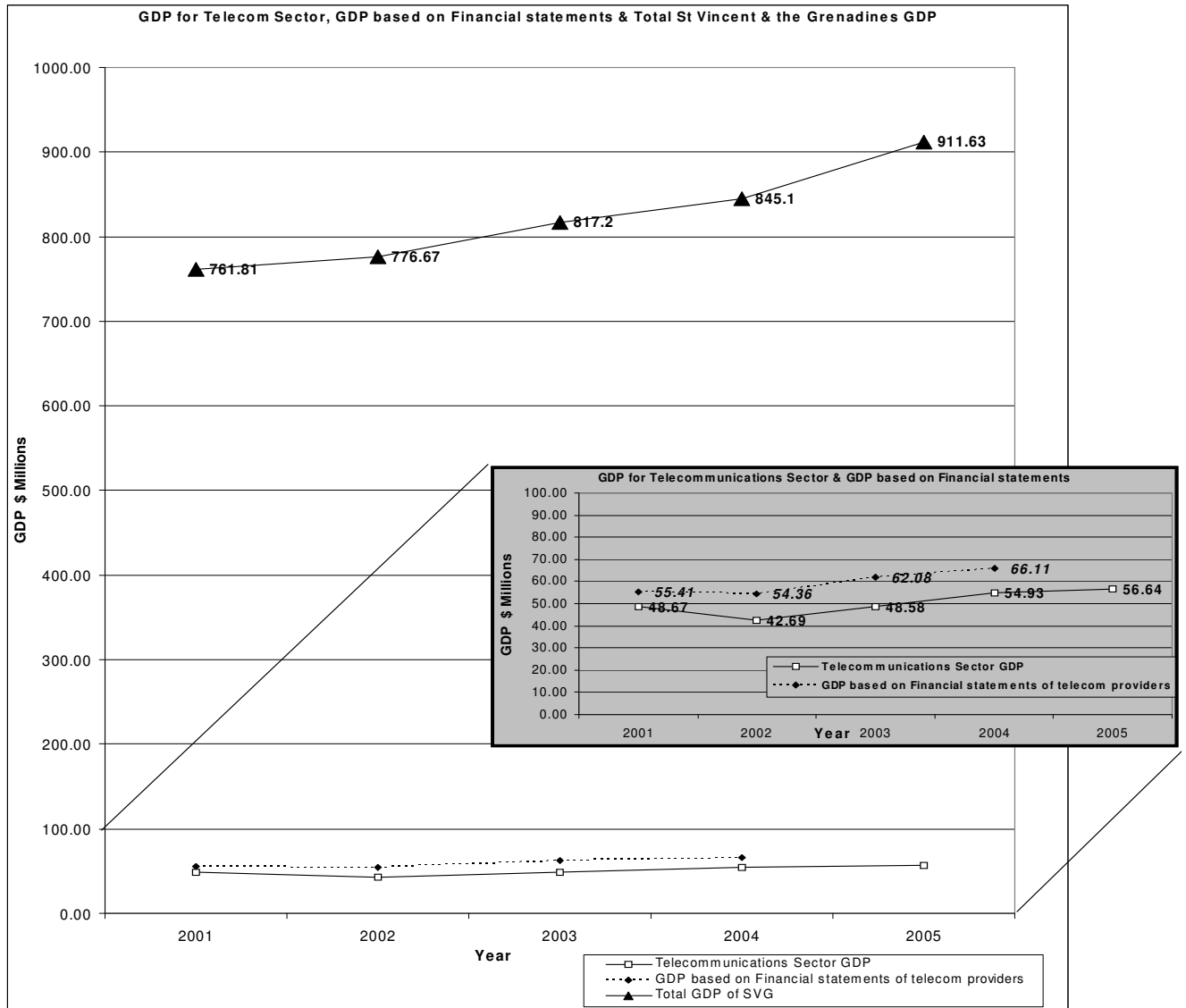
Source:

St. Vincent & the Grenadines Statistical Office \ ECCB

GDP based on Financial statements of telecom providers

	Financial year ended Mar 2001 \$ Millions	Financial year ended Mar 2002 \$ Millions	Financial year ended Mar 2003 \$ Millions	Financial year ended Mar 2004 \$ Millions	Financial year ended Mar 2005 \$ Millions
	55.41	54.36	62.08	66.11	-





The above figures show that the GDP figures computed based on the financial statements are generally higher than the published GDP figures. However, the trend in the GDP of the telecommunications sector over the period matches the trend in the GDP figures computed based on the financial statements of the companies.

The GDP of the telecom sector can also be compared with the overall GDP of St Vincent and the Grenadines. The above data and graphs show that telecom sector GDP decreased in the financial year ended March 2002 where there was no corresponding decrease in overall GDP of the country. This same phenomenon was seen earlier in this report in our analysis of total revenue of the telecom sector in 2002 in section 7.1.1. As noted in that

section, this decline was due to a \$12million (34%) drop in C&W Domestic revenue for financial year ended March 2002. The reason for the decrease in the company's domestic revenue in that year is not clear.

The data and graphs also show that in the financial year ended March 2004, the telecom sector GDP was 6.5% which was an increase from the year before, but in the financial year ended March 2005, the telecom sector accounted for 6.21% of total GDP. Further analysis shows that the increase in Total GDP in the financial year ended March 2005 (7.9%) was greater than the increase in the GDP of the telecom sector (3%). The conclusion to be drawn from the figures is that the Telecom sector is playing a decreasing direct role in the overall GDP of the country. In considering this, however, please note that these figures for GDP in the financial year ended March 2005 are estimates. Also it should be noted that the Telecom sector affects various other sectors and could contribute growth to these sectors indirectly. There are also other benefits that are captured under the GDP but which affect consumers directly and which were looked at in our 2004 annual report.

7.2 Projected Revenue for 2006: The NTRC projects to collect around \$1,765,750.00 from frequency authorizations fees in 2006 based on the current fee structure however this may change if some proposed changes, bases on a recommended new fee structure regulation being recommended by ECTEL that is still being reviewed is enacted. This figure may also be reduced to \$1,467,500 if the matter of the frequency authorization on which Cable & Wireless Caribbean Cellular has decided to give up some of their frequencies is not finalized and we are unable to resume the collection of fees on this frequency authorization. The NTRC is of the view that the trend of their being a small increase in licence fees as occurred in 2005 will occur again in 2006 resulting in a small increase in licence fees for 2006 over 2005. There was a \$1500 (17%) increase in application fees in 2005 over 2004.

Analysis of competition in the sector since liberalisation.

Following the opening of the sector in late 2001 having put in place the requisite regulatory framework, a number of applications for licences for various types of services were received and evaluated. This section would be analyzing the current level of competition that exist for those types of licences issued under the Act that allows persons to offer telecom services to the public or other Licencees. It was envisioned that appropriate competition made available in the sector would be beneficial both to the consumer and the economy in general.

The following list of licence types are those that allow for the offering of services to the general public or other licencees:

1. **Public Mobile:** Allows a licensee to operate a network offering mobile services to the public.
2. **Fixed Public:** Allows a licensee to operate a network that offers fixed services to the public.
3. **Submarine Cable landing:** Allows a licensee to operate a network that offers international bandwidth to other licencees via a submarine cable (fiber cable linking one country to another that is laid on the sea bed).
4. **Internet Networks/Services:** Very similar to a Fixed Public except that it allows the offering of internet services. Our Commission has never understood the reason for this type of licence. A provider can operate the same network/services holding a Fixed Public and Internet services licence.
5. **Subscriber Television:** Allows a licensee to offer television services to the public on a subscription basis.

6. **Internet Services:** Allows a licensee to offer Internet service to the public. The licensee has to use the network of a licensed provider to offer the services.
7. **International Simple Voice Resale:** Allows the licensee to offer International voice service to the public. The licensee has to use the network of a licensed provider to offer the service.
8. **Value Added Services:** Allows the licensee to offer various services to the public that are outside the normal voice services. The specific services are outlined in the licence and include such things as fax (store and forward, 1-900 services, etc. The licensee has to use the network of a licensed provider.

Following from the above, we would now outline the level of competition that currently exists in the various categories:

- **Public Mobile-** This area received the most applicants during liberalisation of the sector. Two new providers were issued with licences and both entities launched service in 2003. While persons were able to choose between three providers for service, the market has since been dominated by two providers (C&W and Digicel). Cingular (formerly AT&T) did not make an impact on the market and may be the reason why the company's Caribbean assets were sold to Digicel. We can say that some level of competition exists in this area however this has not led to all the benefits that one would expect from a truly competitive market. We have seen substantial decreases in the rates for International calls, reduced costs of handsets and some reduction in the rates for domestic calls. One of the main concerns that need to be addressed is that of the rates charged for domestic calls by the mobile providers. Most of the traffic on these networks is as a result of domestic calls. **While the rate for making an International call on a mobile network is almost identical or even less than that of making the same call on**

the fixed network, the same cannot be said in relation to domestic calls. A fixed to fixed domestic call is still considerable less (90%) than the corresponding mobile to mobile, fixed to mobile, mobile to fixed domestic call. The cost of a domestic call especially within a single mobile network is significantly less than the cost of making a call to another network and a lot less than making a call to an International destination. This however is not reflected in the rates offered by the providers to their customers. It should be noted that the mobile customer base is almost three times that of the Fixed Line customer base. As such most mobile customers are not using their mobile phone as a compliment to their fixed line but as their only phone. As a result, it is fair to say that the average phone bill of this category of mobile customer is quite larger than what would have been the case if they had access to a fixed line at the current fixed line rates with a larger fixed line customer base. We are not suggesting that we try to install more fixed lines but instead try to reduce the domestic mobile rates (through cost based price regulation) since it is a less costly in deploying a new mobile network than a fixed one. *Building fixed networks (non-wireless) is something that could well be a part of our history instead of being part of our future.* One school of thought is that the mobile providers want a short timeframe for a return on their investment and is the main reason for the high mobile rates, while this may have some merit one also has to look at what would happen when this timeframe has elapsed with a market that is virtually a duopoly. Will it be a case of these companies being default cash cows for their shareholders if their rates are not influenced by a cost based system?

- **Fixed Public:** - While there were a number of applications for this type of licence only one company followed up on their application. All other companies that applied were not interested in obtaining a licence in this category. Kelcom International (Karib Cable) was the only company that showed interest in this licence. Following the positive recommendation of ECTEL to grant a licence to the company, approval was given by the Minister for the issuance of a licence to the company. However, having gone this far, it seems that the company no longer was interested in obtaining the licence as it has not paid the granting fee to obtain

the licence. In short there is no competition in the fixed market and this seems to be the position for the medium term.

- **Submarine Cable Landing:** - A similar situation occurred with this type of licence as was the case with the Fixed Public. A positive recommendation was given by ECTEL to grant a licence to West Indies Network 1 (Win-1) a U.S based entity and approval was given by the Minister to grant a licence. The company while very interested in the preliminary stages was not forthcoming when it was time to pay the granting fee and obtain the licence. Subsequently Kelcom International (Karib Cable) application was recommended by ECTEL for a licence but they also ended in the same position as Win-1. The end result is that there is no competition in Submarine Cable landing market. There is however continued interest in this area for possible competition but may require some form of Government assistance.
- **Internet Networks/Services:** There was only one application for this type of licence. The company never pursued the application.
- **Subscriber Television:** There have been no new applications for this type of licence. The incumbent operator Kelcom International (Karib Cable) has not been re-licenced under the new Act to date. There is a need to have Karib Cable licenced and properly regulated under the Telecom Act noting that it is a monopoly provider of Cable TV service in St.Vincent and the Grenadines.
- **Internet Services:** There were a number of applications for this type of service. Four companies were granted licences. Two of these were the new mobile providers that offer internet services (low data rates) via their mobile handsets. Kelcom International (Karib Cable) was granted a licence and is offering Internet Service over their Subscriber Television (Cable TV) network. While being able to offer service using their island wide network they have capacity issues due to not being able to source sufficient International bandwidth at an affordable rate.

Cariaccess was also granted a licence for Internet Service but has not started service to date. They intended to offer service by reselling wholesale services obtained from the incumbent Fixed line provider. However, they have not been able to obtain wholesale prices that are to their satisfaction. Wholesale prices are not currently regulated which leaves new entrants (those without their own networks) to the market with no other option but to negotiate these prices from the incumbent.

- **International Simple Voice Resale:** There were a number of applications for this type of licence however, not all pursued their applications. Five licences have been granted to date. Caribbean Business Machines (CBM) and VinCom have started operations, they are however somewhat constrained in their operations due to none regulation of wholesale rates. Their business models are based on obtaining the best wholesale rates from providers of licenced networks. This maybe one of the reason for the absence of more competition in the sector. They are also restricted from providing incoming international calls. The other three licencees Kelcom International, Carlisle Ryan and Almus Mc Dowall and Pac's Telecommunications have never provided service.
- **Value added Services:** They have only been two applicants in this category and both were issued licences. One licence was issued to Trevor Sayers for a 1-900 service but was never implemented. The other was issued to Caribbean Business Machines (CBM) for Fax (store and forward) service but was also never operational.

Following from the above, one can clearly see that the only areas that have seen some competition is that of the Mobile Voice market, Internet Service and International Simple Voice Resale with the Mobile area being the most competitive of the three areas mentioned. The mobile competitors have built their own networks and could operate with low capacity VSAT links since their International traffic is voice based with minimal data. There are two main reasons for the low level of competition in the other areas. The

primary one being International Access and the other being the regulation of wholesale rates offered by the Incumbent. Even in the absence of a second network to facilitate competition in the International Access area we could facilitate more competition if the wholesale rates charged by the Incumbent were regulated. This would allow easier entry of resellers into the market as well as enable them to be more competitive due to cost oriented (regulated) wholesale rates. The regulation of these rates would also enable better competition in the Internet service area where International bandwidth is critically important. The current solution of using VSAT links for International access is not a viable alternative to resellers or to Internet service providers. VSATs are more suitable for voice communications that are not dependent on high capacity links and the licences of resellers do not allow them to operate their own VSAT link.

The only new player that may be attracted to the market in the medium term may be a Submarine Cable Landing licensee which may require substantial concessions from the Government but may prove beneficial to the country in the long term.

We would see direct benefits both to the consumer and other licensees in the sector if there were regulations governing the whole sale rates offered by providers as well as the rates charged for domestic mobile calls. There is no reason why the domestic calls on C&W fixed network should be regulated but not those on a mobile network. Both mobile providers at this time have a larger customer base than that which exists on the fixed line network of the incumbent.

7.3 Capacity building in 2005:-

1. The Director attended a three day course on “Third Generation Wireless Access systems” sponsored by USTTI, INTEL, and the NTRC and was held in Washington D.C.

2. The Director attended a three day “Technology Briefing Seminar” sponsored by the CTU, NORTEL and the NTRC and was held in Ottawa, Canada.
3. The RadioCommunications Engineer continued with her Master’s degree in “Telecommunications Policy and Regulation” via distance learning from the UWI, sponsored by the NTRC and the ITU. As part of the program she attended her final three day seminar which was held in Trinidad sponsored by the NTRC. She will be completing her degree in the first quarter of 2006.
4. The Radiocommunication Engineer attended a three day workshop on “Spectrum Management” This was sponsored by the CTU and the NTRC and held in Trinidad and Tobago.
5. The Radiocommunication Engineer attended a three day workshop “Regional Indigenous Workshop on Information & Communication Technologies” This was sponsored by the ITU and the NTRC and held in Mexico.
6. The Radiocommunication Engineer attended a three day meeting “Regional Indigenous Preparatory meeting for the World Telecommunications Development Conference” This was sponsored by the ITU and the NTRC and held in Peru.
7. The Radiocommunications Engineer attended a two week training program on “Radio Frequency Spectrum Management”. This was held in the USA and was sponsored by the USTTI, FCC, NTIA and the NTRC.
8. The Administrative Officer completed an online course on “Project Management”. This was sponsored by the ITU and the NTRC.
9. The Administrative Officer attended a one week course “Financial Statement Analysis”. This was sponsored by SEDU and the NTRC and was held in St.Vincent.

- 10.** The Administrative Officer attended a one week course on “Competition Policy & Regulatory & Privatization Issues in Telecom” sponsored by the USTTI and the NTRC and was held in Washington D.C.

- 11.** The Administrative Officer, Administrative Assistant and Office Assistant underwent training in the use of our newly acquired Peachtree accounting software.

- 12.** The Chairman and the IT Technician completed an online course on “Wi-Fi Networks”. This was sponsored by the ITU and the NTRC.

- 13.** The Chairman attended a two week training program on “ Utility Regulation and Strategy” sponsored by the University of Florida, the World Bank and ECTEL and held in Florida.

- 14.** Commissioners Mr. Davy and Mr. Jacobs completed an online course on “VoIP”. This was sponsored by the ITU and the NTRC.

- 15.** Commissioner Mr. Davy attended a three day workshop on “VoIP”. This was sponsored by the CTU and the NTRC and was held in Trinidad and Tobago.

Apart from the training outlined above, the NTRC staff skills are continually being developed through the on going sharing of experience among staff members via the assignment and delegation of various tasks to staff members. The Commissioners expertise is also being improved via regular briefs on specific issues at their monthly meetings by the Director and other staff members.

- 7.4 Regulations:** No new regulations were implemented in 2005. New draft regulations covering fees and dispute resolution were forwarded to the Ministry of Telecommunications in 2005 but these have not been Gazetted to date.
- 7.5 Staff:** The former ICT Officer was offered the Radiocommunications Engineer post following interviews for the vacant post. The NTRC was not able to find a suitable replacement for the ICT officer post and decided to create a temporary position of IT Technician which was filled in June 2005.
- 7.6 ECTEL:** The NTRC has provided 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. One of the major issues has to do with which entity has responsibility for certain functions. This issue has existed since inception and while there has been some improvement there is a lot of room for improvement which can only occur if there is greater clarity in the legal framework. As it relates to the fundamental issue of a formal linkage between ECTEL and NTRC, it still needs to be addressed.
- 7.7 Numbering:** - The regional Numbering plan was completed in 2005 and work commenced on preparing the National Numbering plans. Consultations were also had with stakeholders regarding a proposal to implement administrative fees for numbers assigned.
- 7.8 Spectrum Management:** - Weekly monitoring of the spectrum is being done with the mobile monitoring system. This has resulted in better policing of the radio spectrum especially emissions from all broadcasting stations which continue to be area where most compliance issues arise. We hope to see a reduction in incidents as the operators are now aware of our continuing monitoring activities.

Of great concern however is the continued absence of fines/penalties under the act which would go a long way in curbing the practice of repeat offenders.

Our NTRC was also involved with ECTEL in commencing a pilot project related to operationalising the spectrum management system and correcting any problems encountered. This project is expected to be completed in the first quarter of 2006. Thereafter the experience gained would be used in operationalising the systems located at the other four NTRCs.

7.9 Policy: - The NTRC worked closely with ECTEL in the development of draft regulations, revised licences, the regional spectrum plan and a regional numbering plan during 2005.

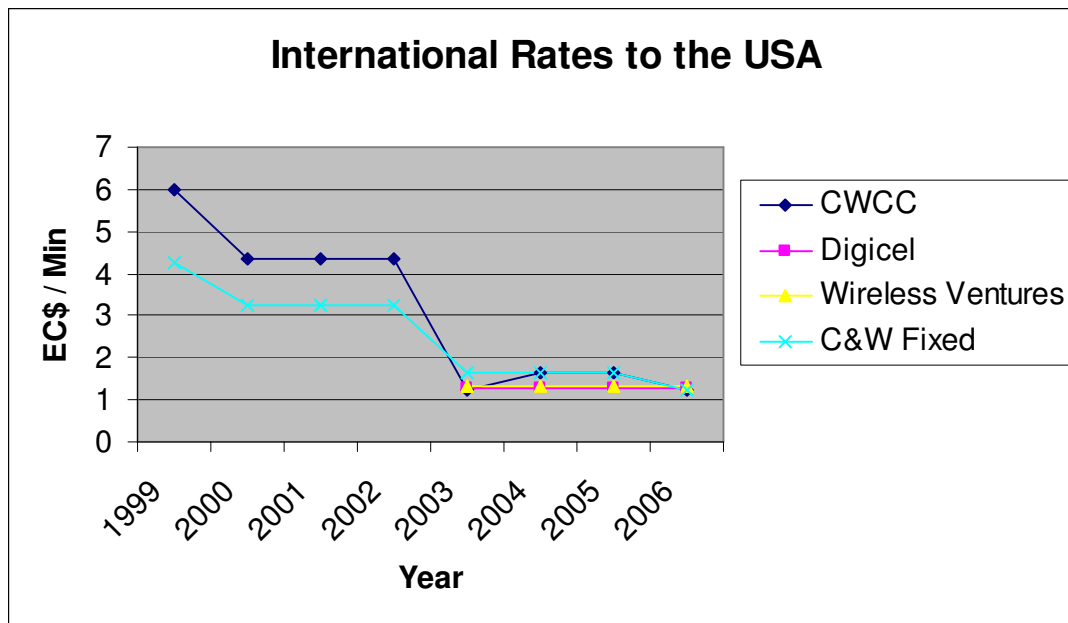
7.10 Litigation: The NTRC was not involved in any litigation during 2005.

7.11 ICT:- The NTRC continued with the development of its ICT resources and functions during 2005. These could be summarized as follows:

- Upgrading of our website which was carried out in house.
- Established a public access computer that can be used by the general public to access non confidential documents of the Commission that are not available on our website as well as access to our library cataloging system. This computer also has access to the Internet and it is the intention to make available with prescribed conditions to students of the tertiary level institutions. This would not only benefit the students but would serve as a public relations tool for the NTRC.
- Operationalising of our Peachtree accounting system. This new system has replaced our in-house excel spreadsheets that have been in operation since 2001. Apart from allowing more automation of accounting processes, it would give more stringent control on our accounting transactions.

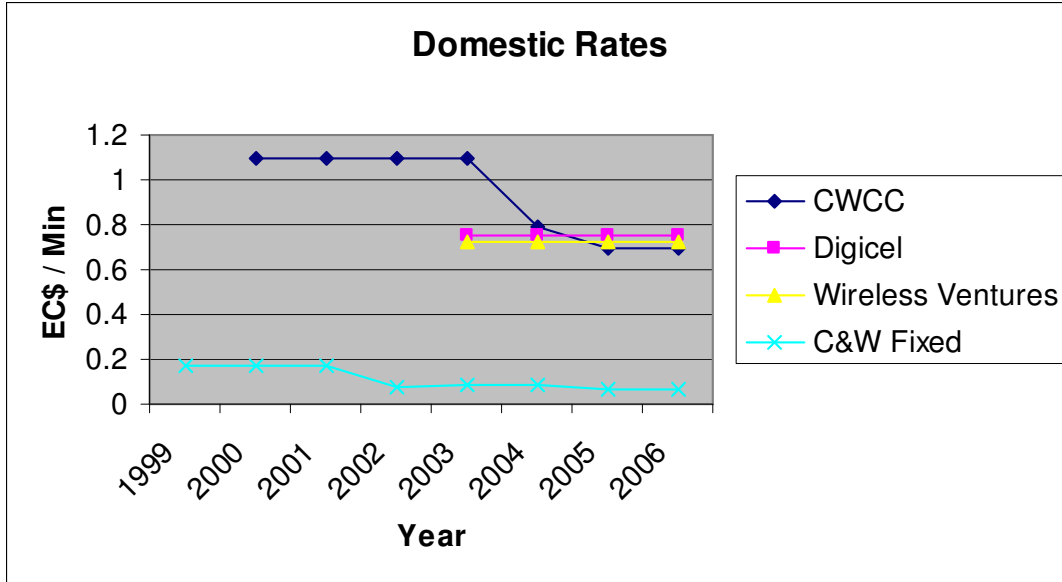
- The NTRC carried out research in a number of areas that were used by the consultants in preparation of the World Bank Study on Implementing Universal Service Funds in the ECTEL States. This research looked at the Geographical penetration of certain Telecommunications services as well as the location of certain public service institutions such as schools, clinics and post offices in St.Vincent and the Grenadines. The information is accurate as of the second quarter of 2005 and is outlined in Annex B.

7.12 Statistics: The NTRC continued in 2005 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.



Graph 1

The rates depicted in Graph 1 are not regulated.

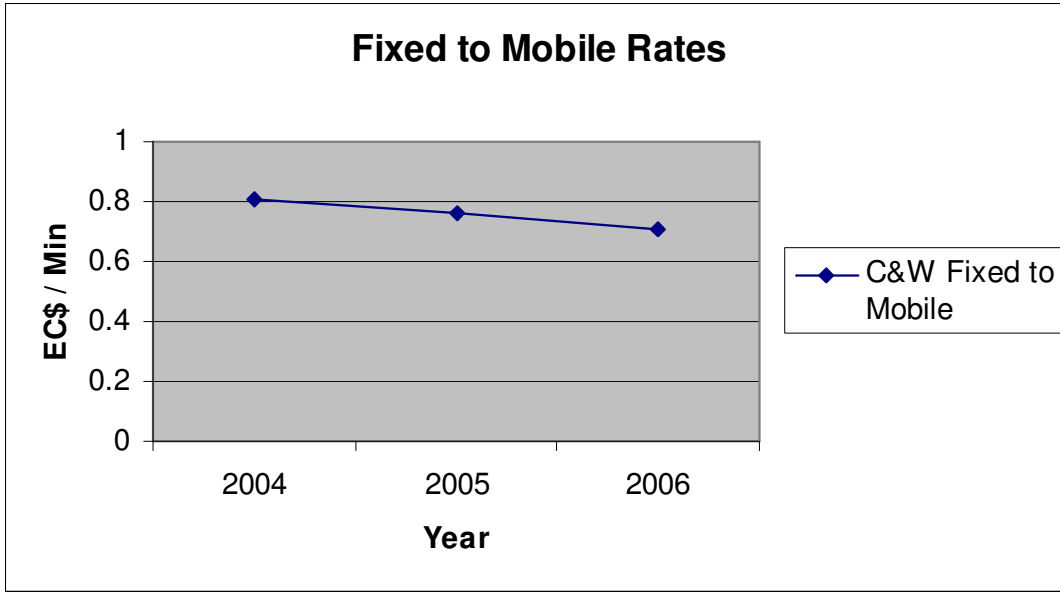


Graph 2

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

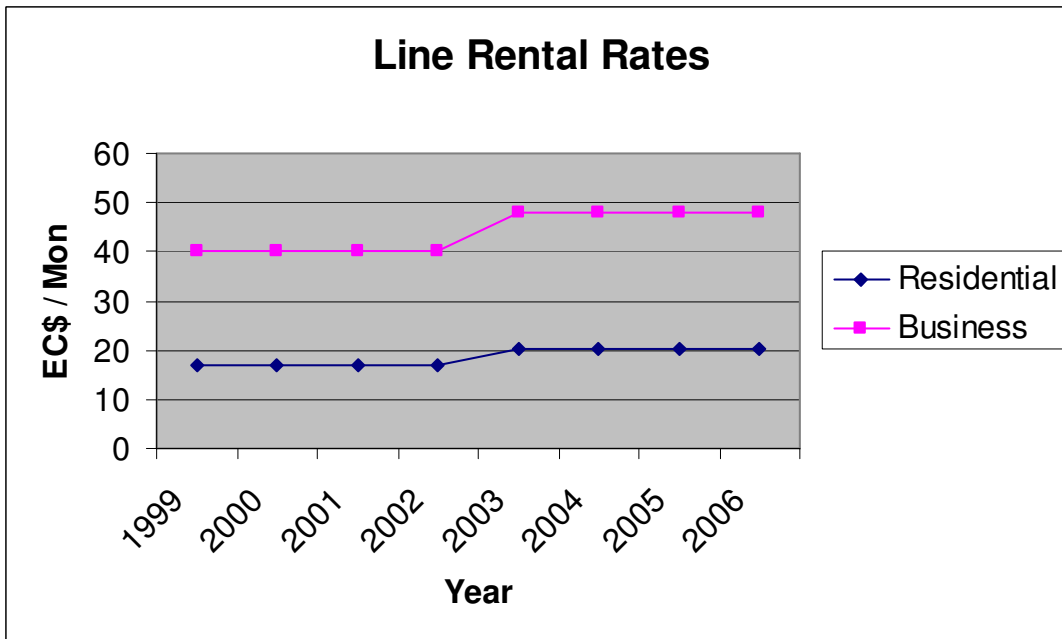
The Cable & Wireless fixed line rate from 1999 to 2001 was EC\$0.17 for 2 minutes; however the subscriber also paid EC\$0.17 for a 1 minute call.

The 2005 & 2006 C&W Fixed rates are set by the Price Cap Regime. An important point to note from the above graph is the large difference between the domestic rates on the mobile network to that of the Fixed network. This is far different from what exist with the international rates. The issue is dealt with in more detail within the annual report.



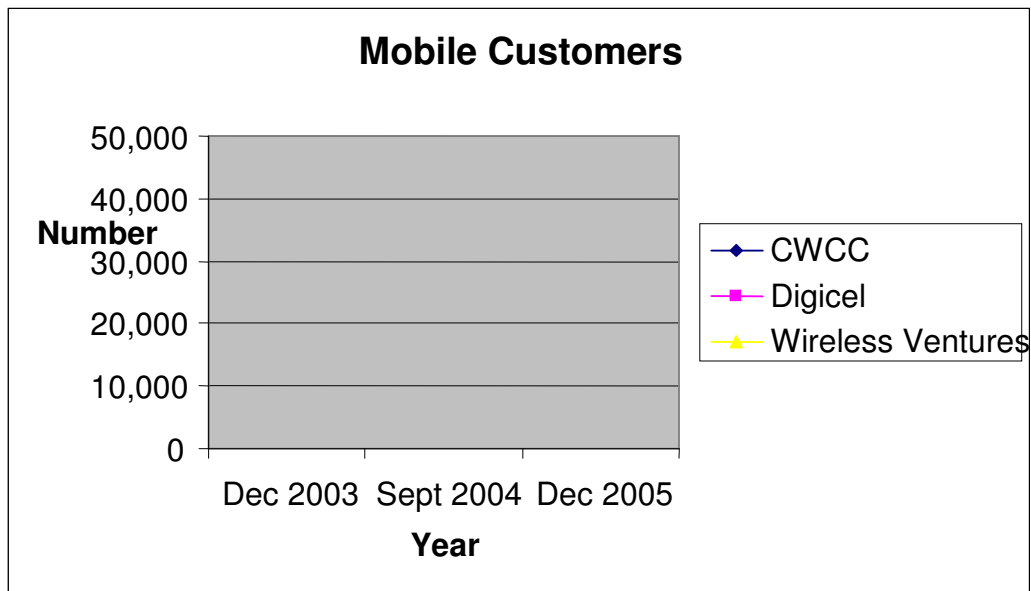
Graph 3

The 2005 and 2006 fixed to mobile rate in Graph 3 is the rate prescribed by the Price Cap regime.



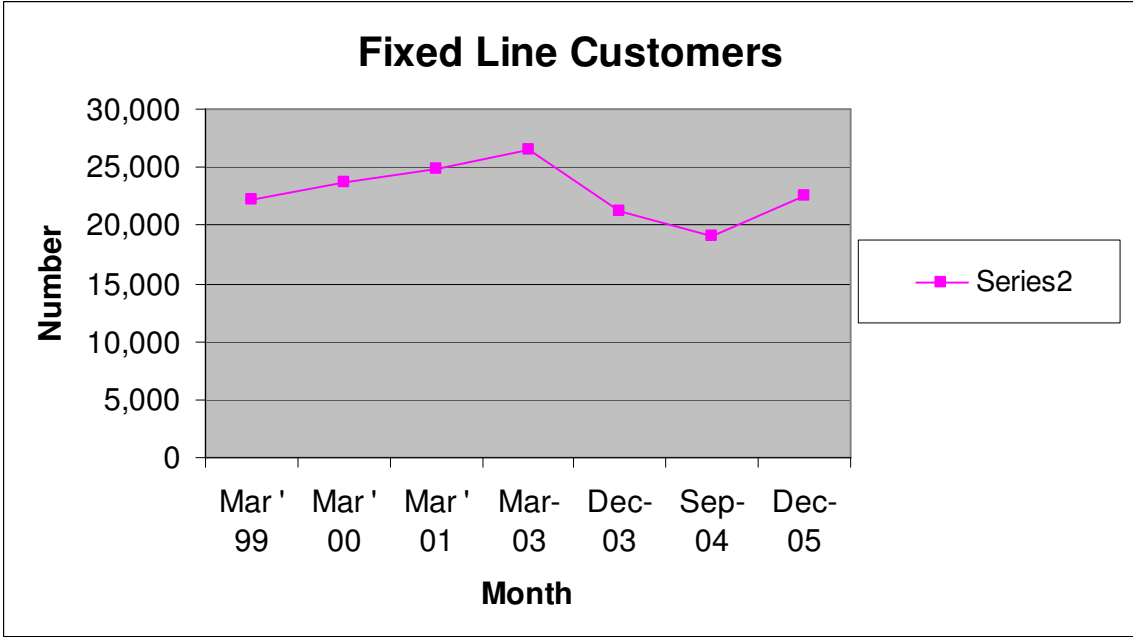
Graph 4

The 2005 residential line rental rates depicted in Graph 4 includes 60 free minutes of fixed to fixed calling on nights and weekends per month. For 2006 the number of free minutes moves from 60 to 80.



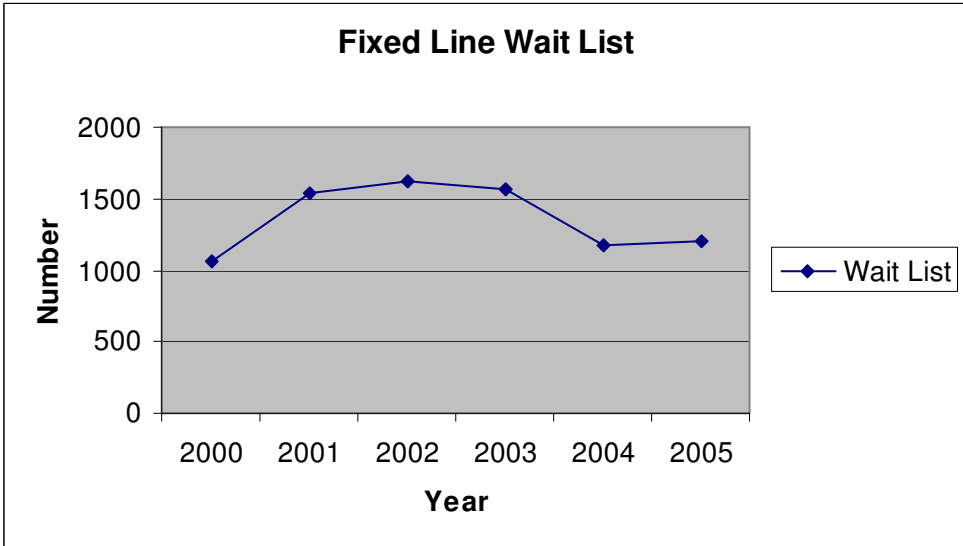
Graph 5

Graph 5 indicates a drop in the numbers of mobile subscribers between 2003 and 2004. This drop could be as a result from improper data submitted. In this case the numbers submitted for 2003(the year competition started) possibly reflected the number of handsets sold and not the number of subscribers 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 a result of customers changing providers. In 2005 all providers except Wireless Ventures saw increases to their customer base with Cable and Wireless having the largest increase of 44% while Digicel had a 17% increase. This is an important point to note since it would seem that there were almost 14,000 new customers added to the mobile sector taking into account the 17% drop in Wireless ventures customer base and the introduction of the mobile call tax in 2005.



Graph 6

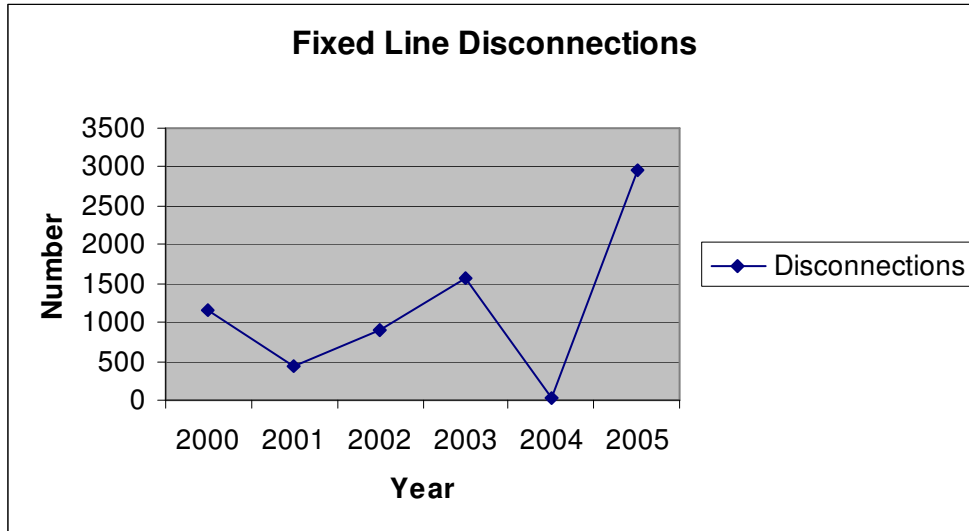
Graph 6 shows the numbers of connected fixed line customers from March, 1999 to December 2005.



Graph 7

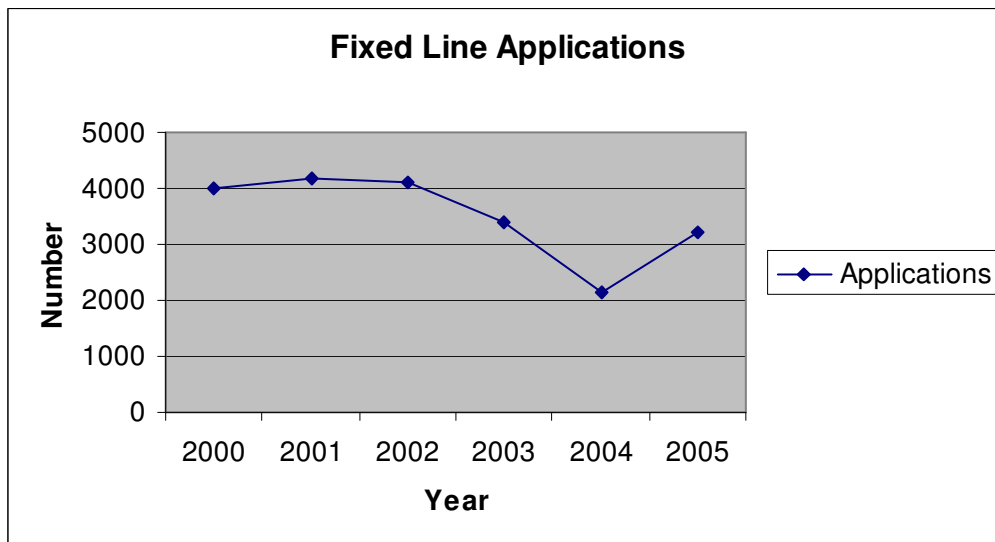
Graph 7 shows the number of customers on Cable & Wireless's waiting list for fixed line telephones. It should be noted that persons on this waiting list are not just located in rural and undeveloped areas but in suburban areas that are well

developed. The reason for being on the waiting list is due to limited line plant capacity in these areas.



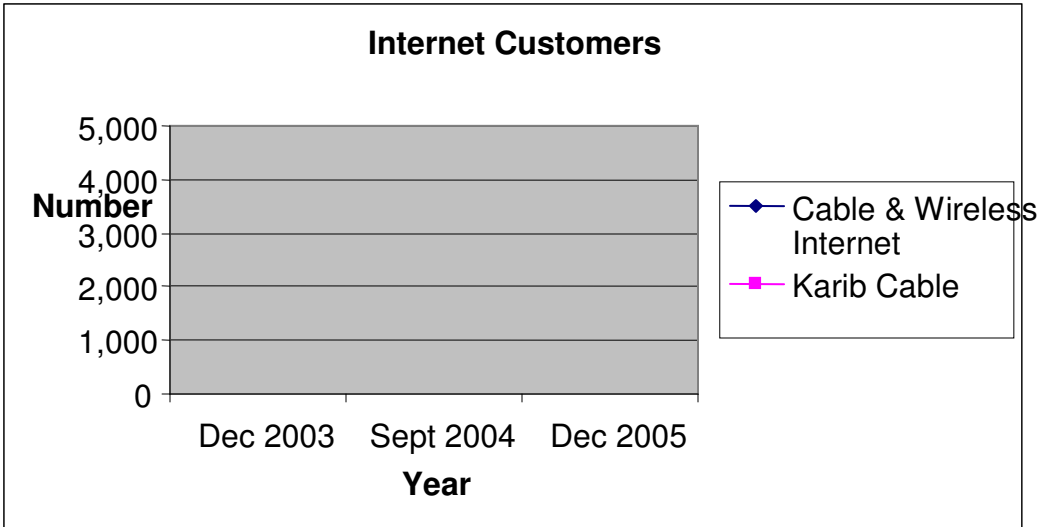
Graph 8

Graph 8 shows the number of customer fixed line customers disconnected during each year. .



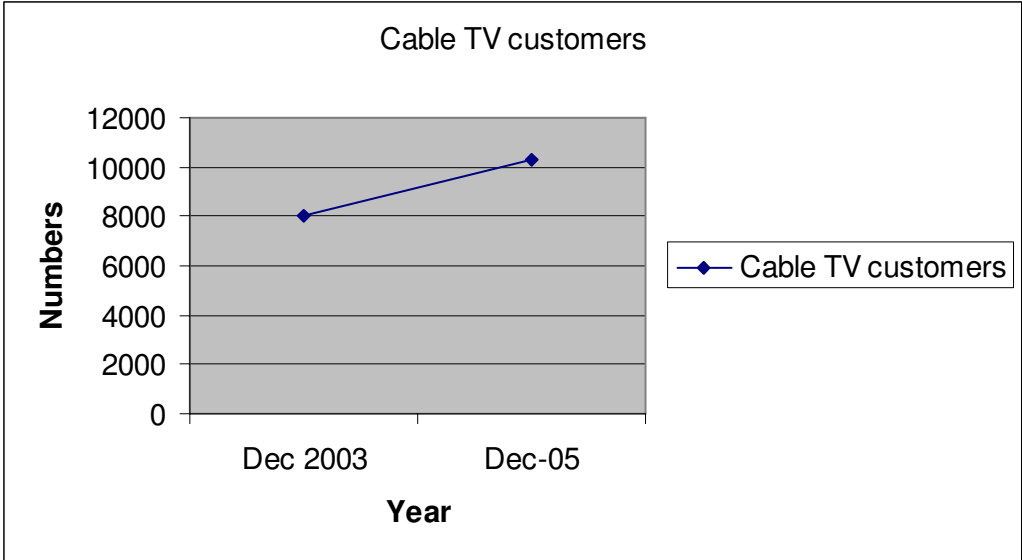
Graph 9

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



Graph 10

Graph 10 shows the number of Internet customers by provider



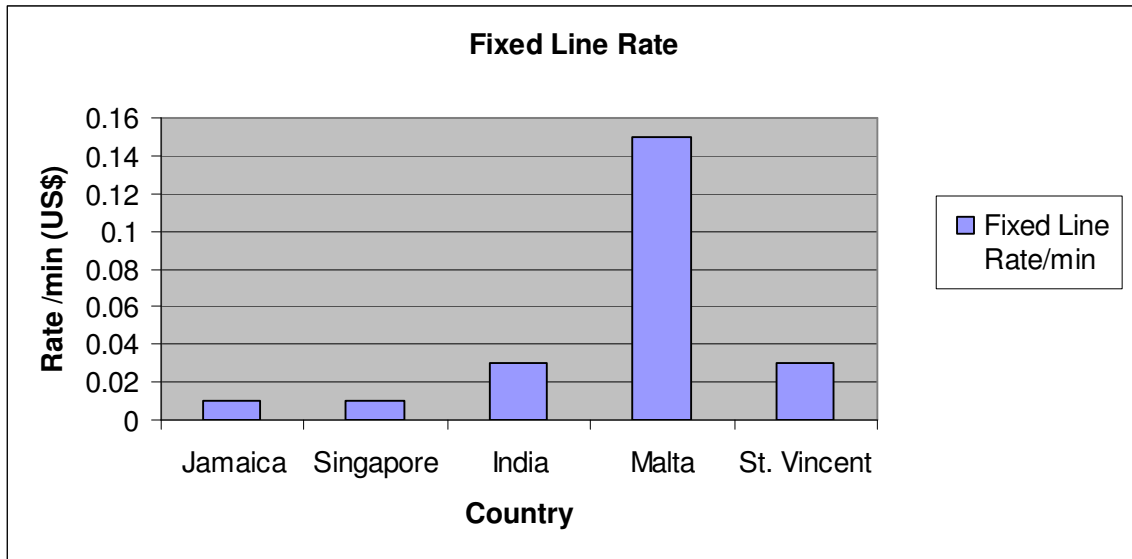
Graph 11

Graph 11 shows the number of Cable TV subscribers

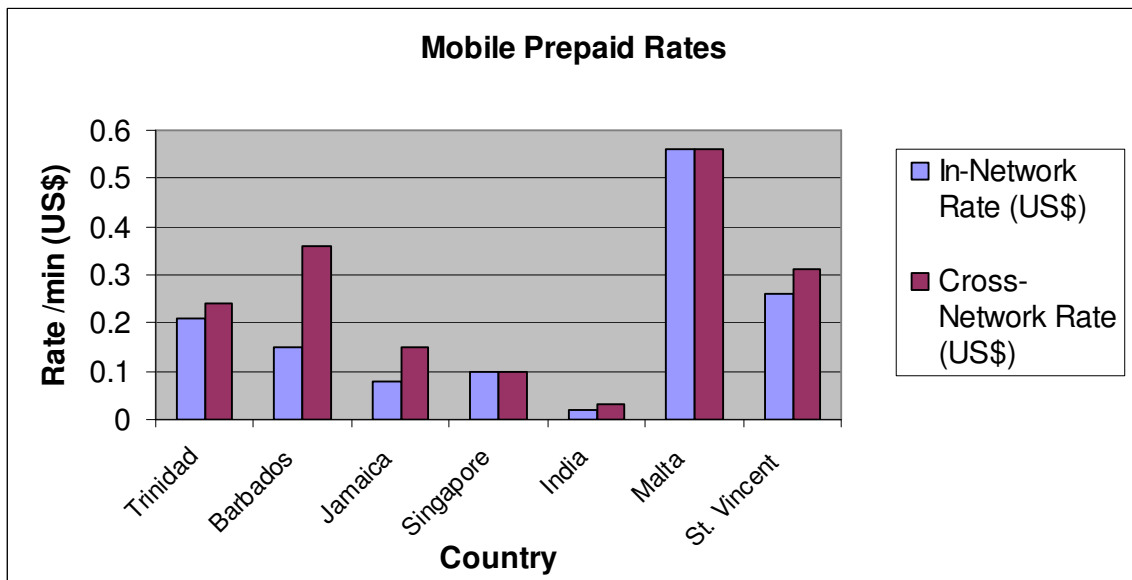
Detail Customer Stats

Cable & Wireless (West Indies) Limited		Dec '03	Sept '04	Dec '05
Fixed line Customers				
	Residential		xx,xxx	xx,xxx
	Business	xxxx	xxxx	xxxx
	Total	xx,xxx	xx,xxx	xx,xxx
Internet Customers				
	Dialup	xxxx	xxxx	xxxx
	ISDN	xx	x	xx
	ADSL	xxx	xxx	xxxx
	Total	xxxx	xxxx	xxxx
Cable & Wireless Caribbean Cellular				
Mobile Customers				
	Post paid	xxx	xxxx	xxxx
	Prepaid	xx,xxx	xx,xxx	xx,xxx
	Total	xx,xxx	xx,xxx	xx,xxx
Digicel				
Mobile Customers				
	Post paid	xxxx	xxxx	xxxx
	Prepaid	xx,xxx	xx,xxx	xx,xxx
	Total	xx,xxx	xx,xxx	xx,xxx
Wireless Ventures(AT&T)				
Mobile Customers				
	Post paid	xxx	xxx	xxx
	Prepaid	xxxx	xxxx	xxxx
	Total	xxxx	xxxx	xxxx
Karib Cable				
Cable TV customers		xxxx		xxxxx
Internet customers		xxx		xxx

Below is a comparison of domestic telecommunications rates in US\$ for selected countries worldwide



Graph 12



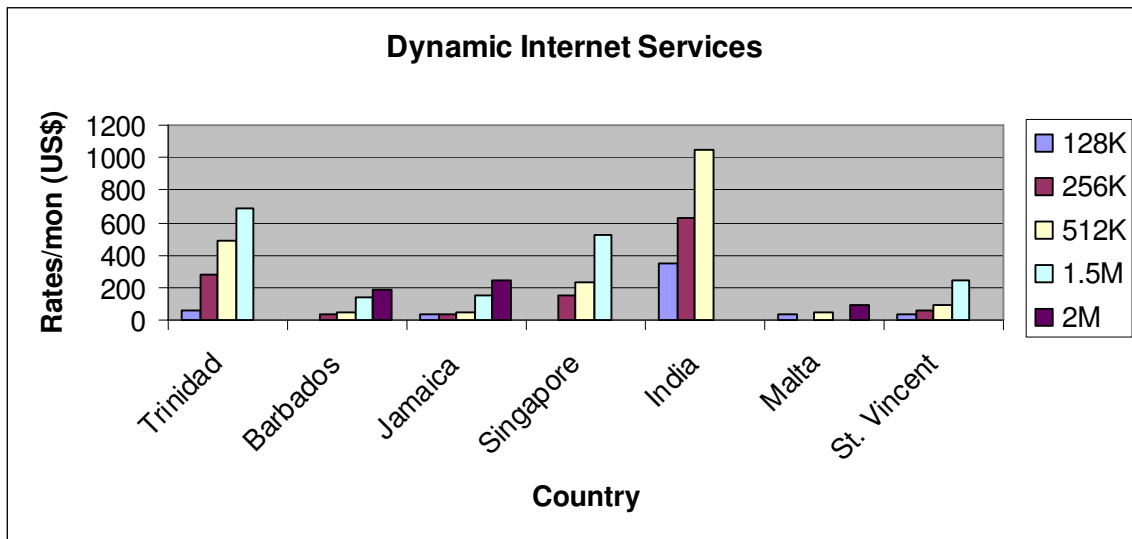
Graph 13

Country	Fixed Line	Mobile			
	Rate / min	Post-paid		Pre-paid	
		Rate / min	Minutes Included	In-Network	Cross-Network
Trinidad	36.99 /mth			0.21	0.24
Barbados	17.59 / mth			0.15	0.36
Jamaica	0.01			0.08	0.15
Singapore	0.01			9.71	9.71
India	0.03			0.02	0.03
Malta	0.15			0.56	0.56
St. Vincent	0.03			0.26	0.31

Note:

The fixed line rate quoted for Barbados and Trinidad is the monthly tariff for unlimited calling.

Below is a comparison of Dynamic (IP address is not static as is the case with Dedicated Internet) Internet Service rates in US\$ for selected countries worldwide:

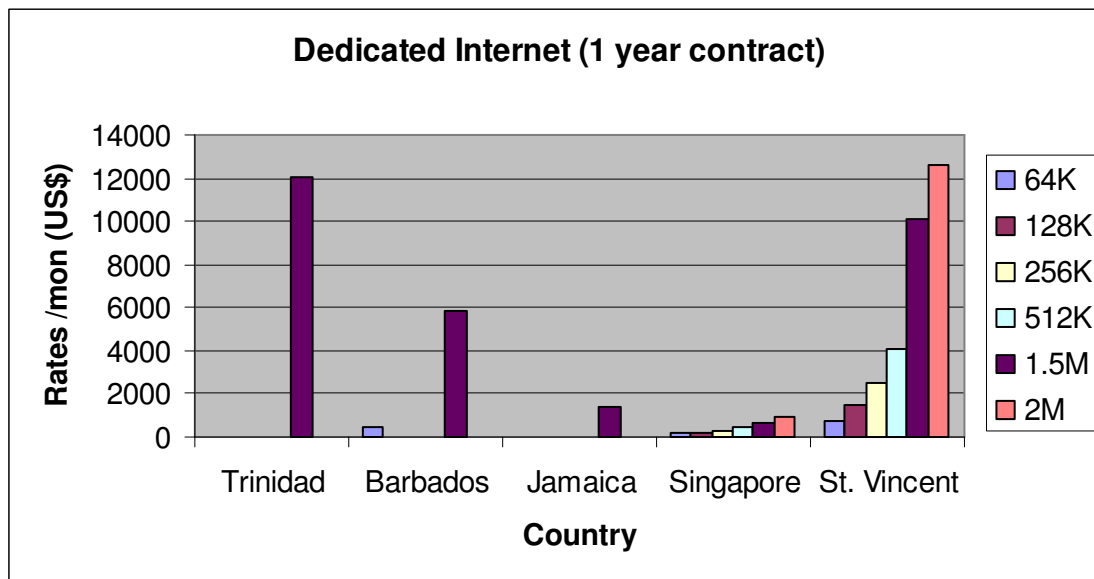


Trinidad Barbados Jamaica Singapore India Malta St. Vincent

Broadband Internet

64k							\$29.10
128k	\$64.00	-	\$29.95	-	\$22.35	\$32.43	\$36.43
256k	\$285.12	\$34.67	\$39.95	-	\$36.04	-	\$54.84
512k	\$486.81	\$49.75	\$49.95	\$48.85	-	\$50.03	\$91.65
768k	\$585.59	\$69.85	-	-	-	-	\$128.46
1544k	\$690.35	\$139.00	\$149.00	-	-	\$94.00	\$238.88
3072k							-

Below is a comparison of Dedicated Internet Service rates in US\$ for selected countries worldwide:



The above chart outlines a most important fact. That while we have been able to achieve reductions in the cost of International calls that are comparable with other developed countries worldwide, we have not been able to achieve the same results when it relates to the cost of dedicated Internet access lines. These are the lines that are the backbone for development of the ICT sector in any country. We see that the rates in Jamaica are closer to the rates in Singapore than that of the other Caribbean countries listed. These rates in Jamaica have been reduced by the incumbent C&W not because of any new cables or equipment the company would have

installed making it more efficient but due to the entry of competition in the sector. We should not have to depend on competition to reduce rates as was the case with the International calls in the past. The arguments used then for high International rates being the need to subsidise domestic rates cannot be used in this scenario. Internet Access rates were never set in order to subsidise any other rates. As such these rates need to be regulated on a cost basis until effective competition comes to this segment of the market. The current regulation of these rates via the Price Cap Plan is not effective. From the graph you can see that the rate for a T1 line in St.Vincent and the Grenadines (Cable & Wireless) is 10 times the rate of the same line in Jamaica (also Cable & Wireless). One has to ask the question which country would be able to build a better ICT sector.

Trinidad Barbados Jamaica Singapore St. Vincent

Dedicated Internet					
64k	-	\$453.30	-	\$154.57	\$777.36
128k	-	-	-	\$176.21	\$1,445.77
256k	-	-	-	\$287.50	\$2,464.57
512k	-	-	-	\$4417.34	\$4,069.34
1544k	\$12,045.85	\$5865.12	\$1399.00	\$602.82	\$10,079.13
2048k	-	-	-	-	-
3072k	-	\$70,307.40	-	-	-

The dash (-) in the tables above indicate that no rates were recorded for the service or the service is not being offered.

7.13 Registered Ships: The NTRC continued facilitating the issuance of Ship Station licences to ships registered at the Kingstown Registry (Customs & Excise Department). This process involves the assignment of an SVG Call Sign, assignment of an MMSI number, reviewing applications for compliance with international requirements including GMDSS regulations for Telecommunications on ships, and issuing Radio licences to those ships meeting the requirements. The

NTRC has been sharing its experience in this area with the other NTRCs in the sub region who are now starting Ship Registries. With the enactment of the new shipping Act in 2004, the NTRC has been working with the recently appointed Maritime Commission on a number of issues. The Director of Telecommunications currently attends meetings of the Maritime Commission on a regular basis.

7.14 Public Consultations: The NTRC in collaboration with ECTEL conducted a number of Public Consultations during 2005 dealing with the following issues:

- Regional Numbering Plan for the ECTEL states that would then be used to develop National Numbering plans.
- Regional Spectrum Plan that would provide for a harmonized approach to Spectrum Management.
- Revised Telecommunications (Licensing and Authorization) regulations.
- Revised International Simple Voice Resale Licence (ISVR) template.
- Revised Telecoms (Quality of Service) regulations.
- Fees for the use of Numbering resources.

7.15 Licencing: The NTRC continued facilitating the application process for new licences 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.

Licences issued					
		2002	2003	2004	2005
Individual type					
Fixed Public		1	1	0	0
Internet Networks		1	0	0	0
Subscriber Television		0	0	0	0
International simple voice resale		0	4	1	0
Mobile Cellular		3	0	0	0
Public Radio paging		0	0	0	0
Submarine cable		0	0	0	0
Class type					
Private network/services		2	0	1	0
Internet services		2	1	1	0
Radio Broadcast		0	0	0	10
Community radio		0	0	0	0
Television Broadcast		0	0	0	0
Maritime mobile		22	16	26	21
Land mobile		10	0	315	301
Aeronautical radio		0	0	0	0
Aircraft station		20	16	18	17
Amateur Radio station		7	8	11	18
Citizen Band radio		0	3	7	6
Family Radio Band		0	0	78	0
Ship Station		159	129	107	125
Miscellaneous					
CPE Dealers registration fee		9	6	3	18
Internal Wiring registration fee		0	0	0	0
Type Approval fee		6	0	10	08
Ship station Operators lic		32	29	22	15
Aircraft Station Operators lic		0	0	0	0

8. 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 in relation to certain functions under the Telecommunications Act of 2001.

Recognizing the limitations outlined above, the NTRC would seek to do the following in response to the critical issues that need to be addressed:

- Continue with our lobbying efforts both at the ECTEL level and at the policy level for the drafting and implementation of other necessary regulations under the Telecommunications Act of 2001.
- Seek to have an audience with the consultants hired to review our current regulatory framework with the objective of outlining the Commission views on the current deficiencies and inconsistencies existing in the Telecom Act, ECTEL Treaty and regulations as well as our recommendations for improvements.
- Continue with our efforts to have ECTEL draft appropriate regulations to effectively regulate the wholesale rates of all licenced providers.
- Work with ECTEL and the other NTRCs in developing harmonized guidelines to deal with all possible issues that could arise relating to litigation. The issue of funding the associated legal costs would also be addressed.
- Prepare a white paper on the issues surrounding cross-border services by unlicensed providers for discussion at a regional forum involving all NTRCs and ECTEL with the aim of arriving at a clear vision of the implications and appropriate solutions.

9. Result Indicators 2004 and 2005

1. **Dispute Resolution:** The draft regulations have been completed following extensive consultations with the Public. They are currently with the Ministry of Telecommunications for implementation.
2. **Establish the Universal Service fund:** This task has been incorporated within the ECTEL ICT project. Consultants have already been contracted to prepare the necessary regulations to govern the process. They would also draw upon the work completed by the World Bank ICT study that was completed in 2005.
3. **Have all existing licencees, re-licensed under the Telecommunications Act of 2001:** The NTRC was able to make considerable progress on this task since 2005. There are currently only two entities that remains to be licenced under the new act, all other entities and categories of licences were completed in 2005. These are the sole Cable TV provider and the lone Television Broadcast station. Legal advice was sort and received in 2005 relation to the process for the Cable TV provider.
4. **Broadcast Act:** The NTRC participated in the consultation process on the third draft of the proposed Broadcast Bill being developed by the OECS Secretariat. The NTRC however has serious concerns on the scope of the draft bill as it does not cater for the advancement made in broadcasting technologies that has taken place over the last ten years and which will continue in the short term.
5. **Price Cap Plan:** The Price Cap Plan which was approved by the NTRC in December 2004 was implemented in 2005 on the incumbent Cable & Wireless. This plan has brought some benefits to most Fixed line customers of the incumbent provider.
6. **Wholesale Rates:** The regulations governing the rates charged for wholesale services were not developed in 2005. This task has been incorporated within the ECTEL Telecommunications and ICT project which was launched in mid 2005. It is expected that work will commence on these regulations in 2006. The NTRC will continue to stress the importance of such regulations being implemented.

7. **New Fee Structure:** The draft Fee structure regulations were completed in 2005. However a hold was put on their implementation due to the possible financial implications of the takeover of Cingular operations in the Caribbean by Digicel. It is expected that the regulations would be implemented early in 2006.
8. **International Access:**
- Approval was granted for the issuance of a Submarine cable licence to Kelcom International. However to date the company has not followed up on having the licence formally issued by paying the granting fee.
 - Antilles Crossing has successfully terminated its Submarine cable in St.Lucia and Barbados in 2005 with services expected to be launched in 2006. It is expected that St.Vincent and the Grenadines should see some benefits from this in the short term as plans are in place to utilize the existing broadband microwave links between St.Vincent and St.Lucia to allow access to this new international gateway.
9. **Statistics:** The NTRC was not able to complete this task in 2005 of having a harmonised approach to collecting statistics in the sector throughout the ECTEL region. It would try to have it dealt with at the NTRC/ECTEL forum in mid 2006. It has however continued with its existing format of collecting statistical data in the interim.
10. **Quality Service Obligations:** Some work was done in 2005 in this area with plans for its continuation in 2006. Due to financial and human resource limitations we were not able to start the monitoring phase. The NTRC plans to start the monitoring phase in 2006 after the balance of the necessary equipment is procured.

10. Objectives 2006:

- 1. Work closely with consultants involved on various components of the ECTEL ICT project with the aim of maximizing all possible benefits that could come to the citizens of St.Vincent and the Grenadines and those of the other ECTEL states.**
- 2. Pursue cooperation with the Ministry of Telecommunications on the issue of further developing the ccTLD country code for St.Vincent and the Grenadines.**
- 3. Seek authorisation from Inmarsat for the NTRC to be a Point Of Service (PSA). This would allow the NTRC to activate Inmarsat terminals for ships registered under our flag among other services. There are currently no PSA's located in the Caribbean for SVG registered ships.**
- 4. Relicence Kelcom International under the Telecommunications Act of 2001 in relation to their Subscriber Television operations.**
- 5. Relicence SVG broadcasting under the Telecommunications Act of 2001 in relation to their Television broadcasting operations.**
- 6. Prepare and publish a procedural manual covering all functions currently carried out by the NTRC.**
- 7. Seek to settle matter relating to the disputed licences fees from Cable & Wireless covering the period April to September 2001.**
- 8. Seek to find a solution on the issue of cross border Telecommunication services offered by unlicensed providers.**

11.

Annex A

11.1

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 subscribers connected to the general telecommunications network principally to call ships automatically.*

Radio frequency spectrum: -	<i>“that part of the electromagnetic Spectrum used for communications; includes frequencies used for AM-FM radio and cellular phones and television etc”</i>
Ship Station: -	<i>“A Mobile station in the maritime mobile service Located on board a vessel which is not permanently moored, other than a survival craft station.”</i>
Spectrum:-	<i>“(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.”</i>
Stations:-	<i>“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. St. Vincent Broadcasting Corporation at Dorsetshire Hill for example, there are many stations in that yard for FM, TV and Cellular. You direct TV Dish with the receiver can be considered a station.”</i>
Telecommunications:-	<i>“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.</i>
Universal Service:-	<i>“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.</i>
USAID:-	<i>“The US Agency for International Development”</i>

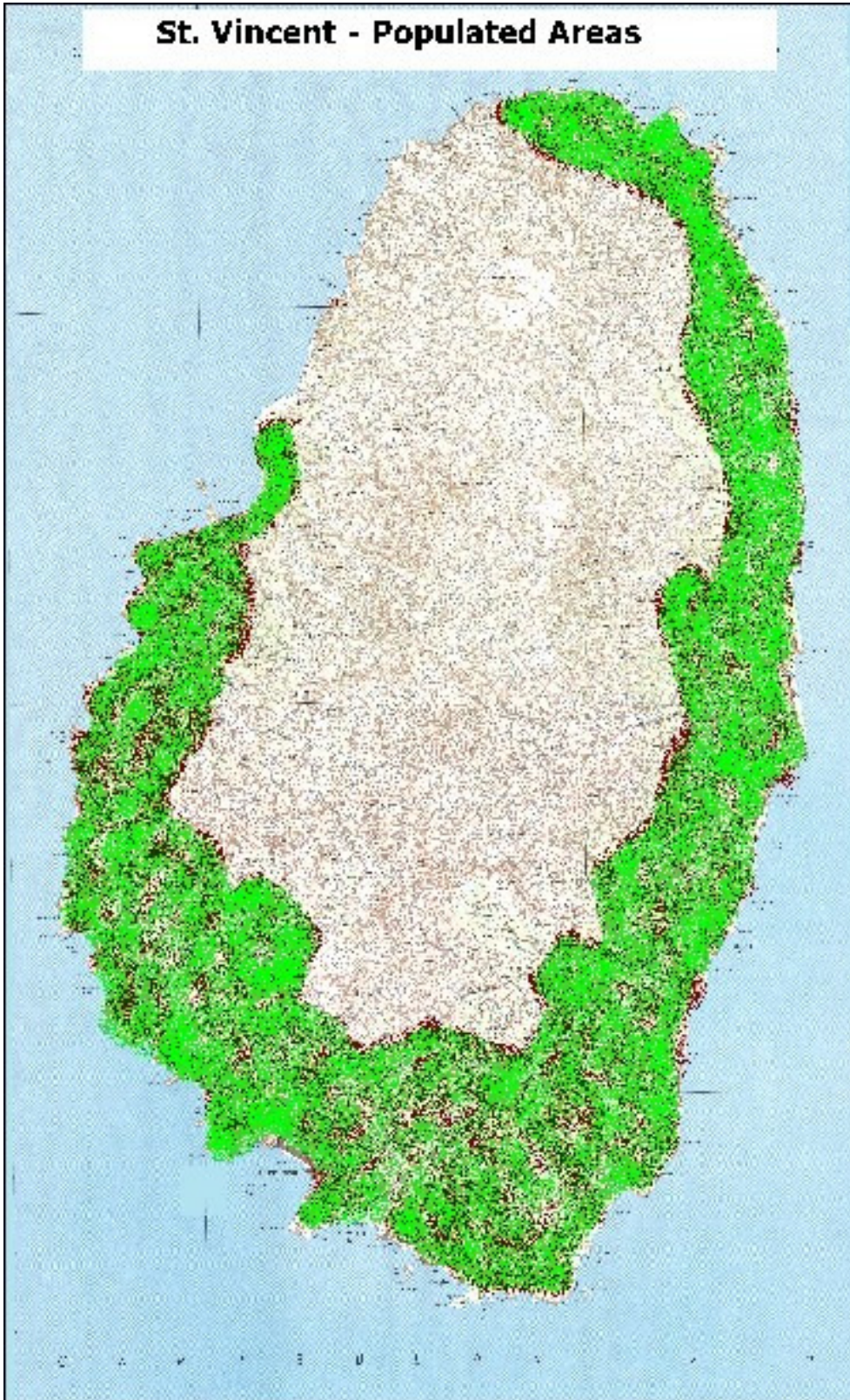
12.

Annex B

12.1

Geographic Penetration of certain Telecommunications Services and location of certain Public service institutions

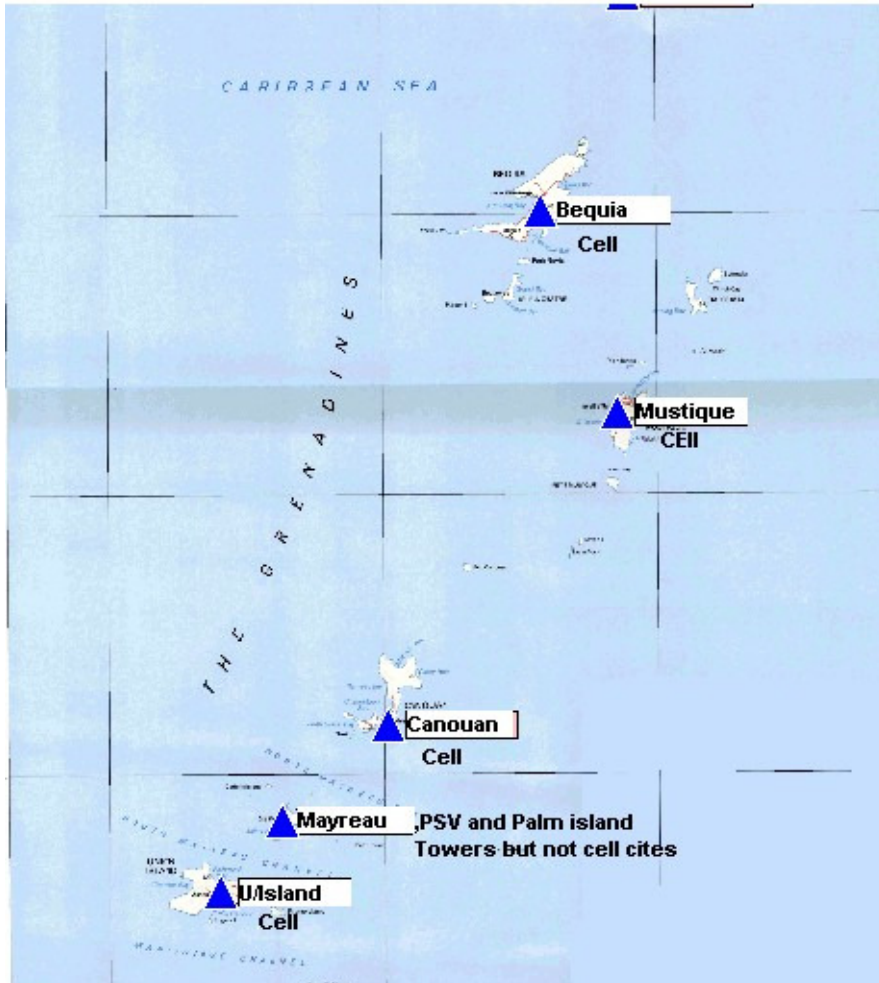
St. Vincent - Populated Areas



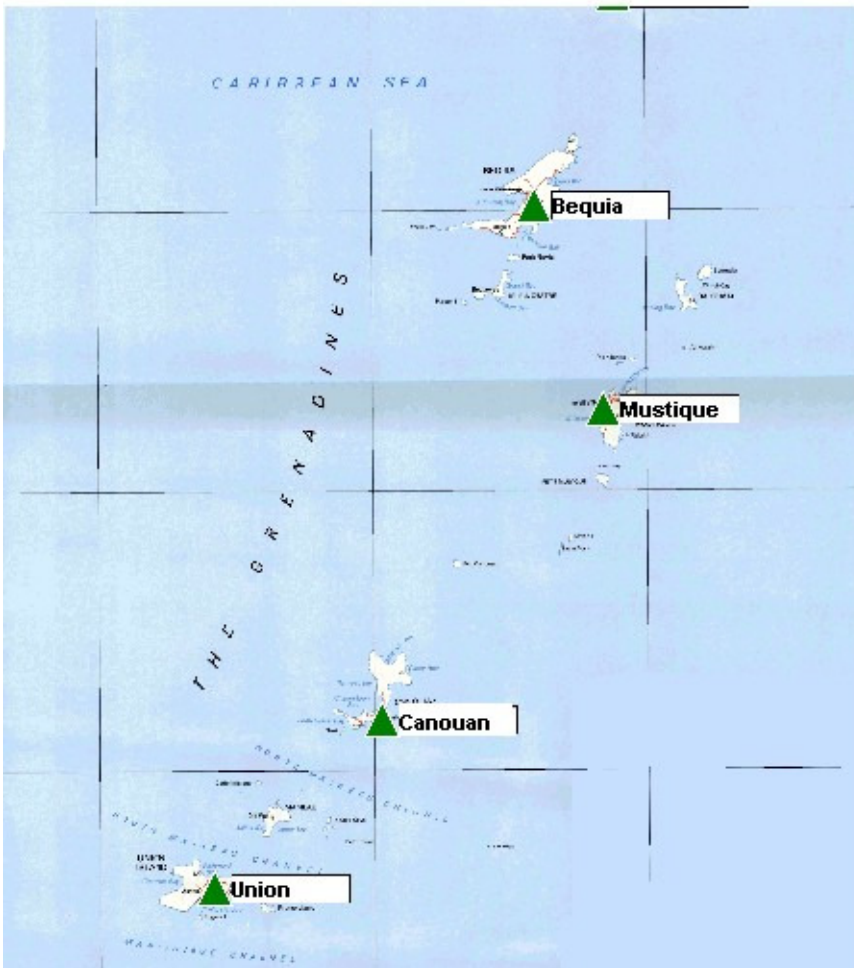
St. Vincent - Cable & Wireless Cell Sites



St. Vincent Cable & Wireless Cell Sites



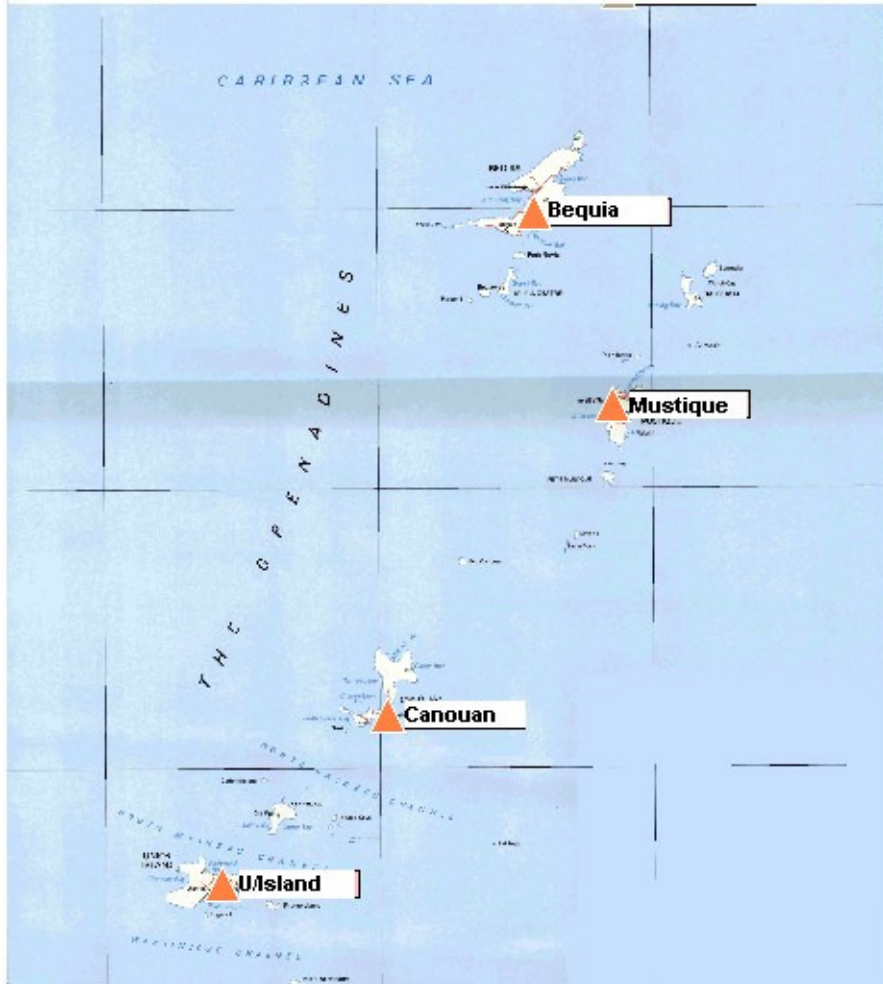
St. Vincent - Digicel Cell Sites



St. Vincent - Wireless Ventures Sites



St. Vincent - Wireless Ventures Cell sites



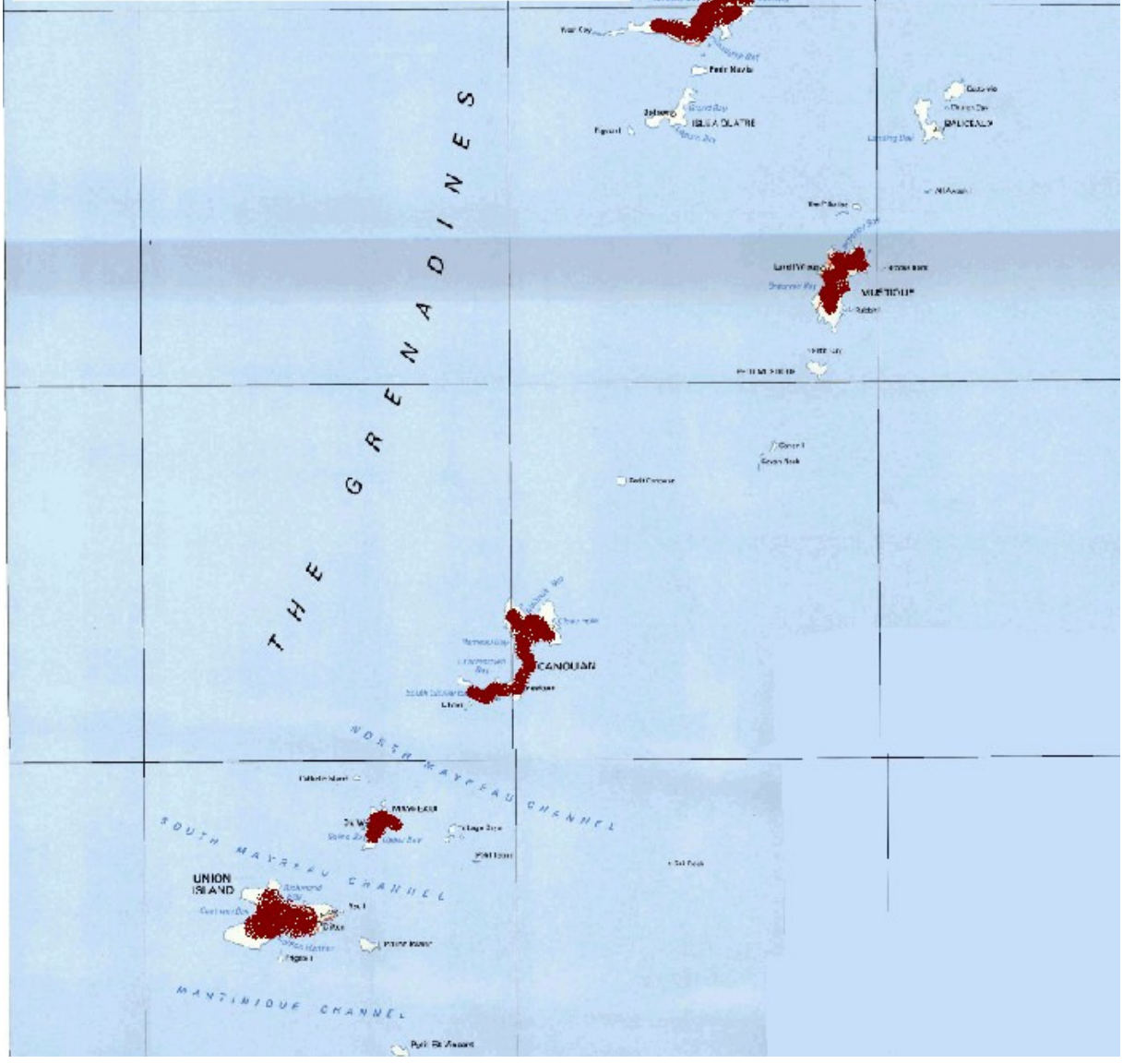
St. Vincent - Cable & Wireless ISDN Coverage



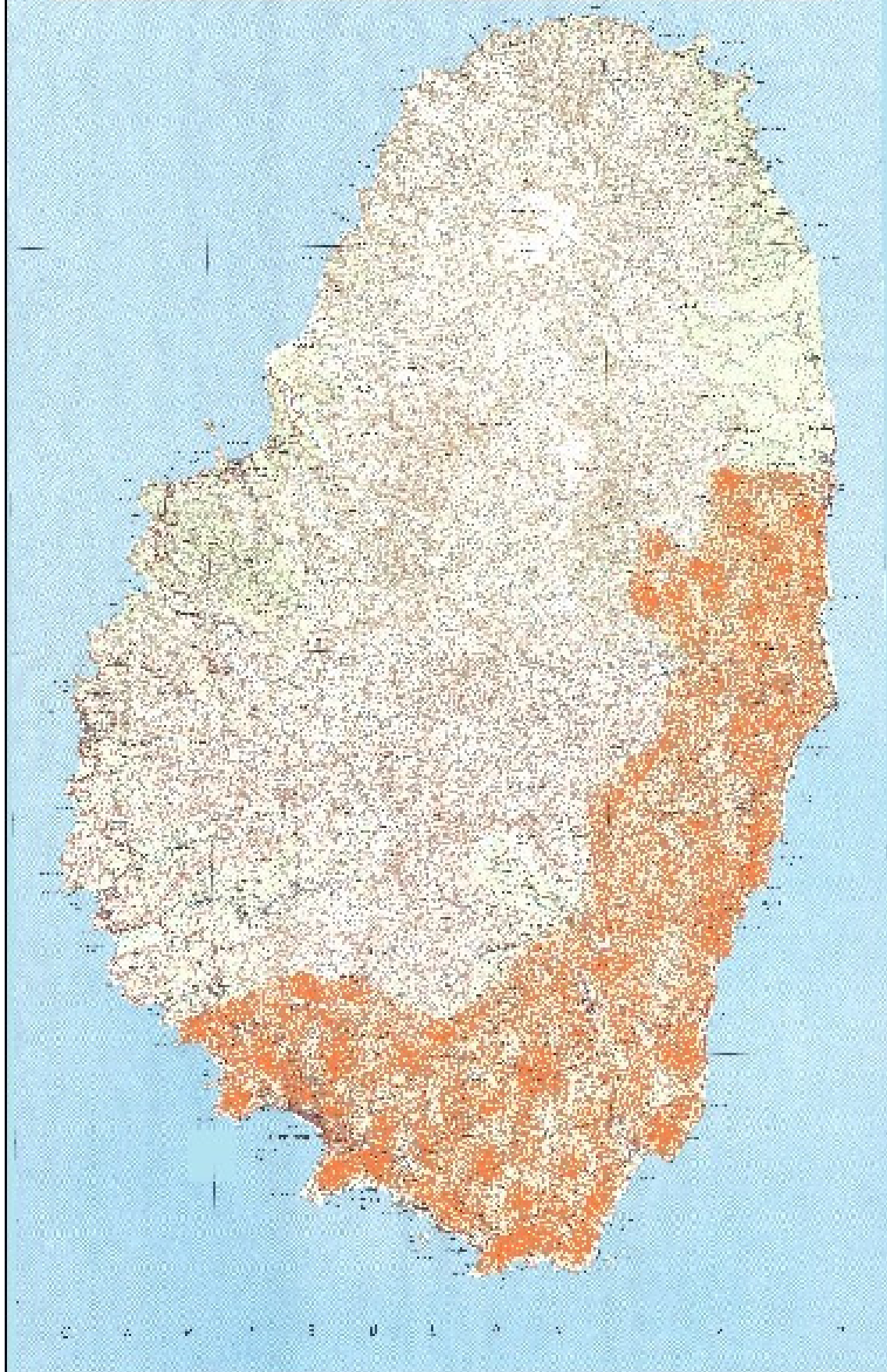
St. Vincent - Cable & Wireless Dial-Up Coverage



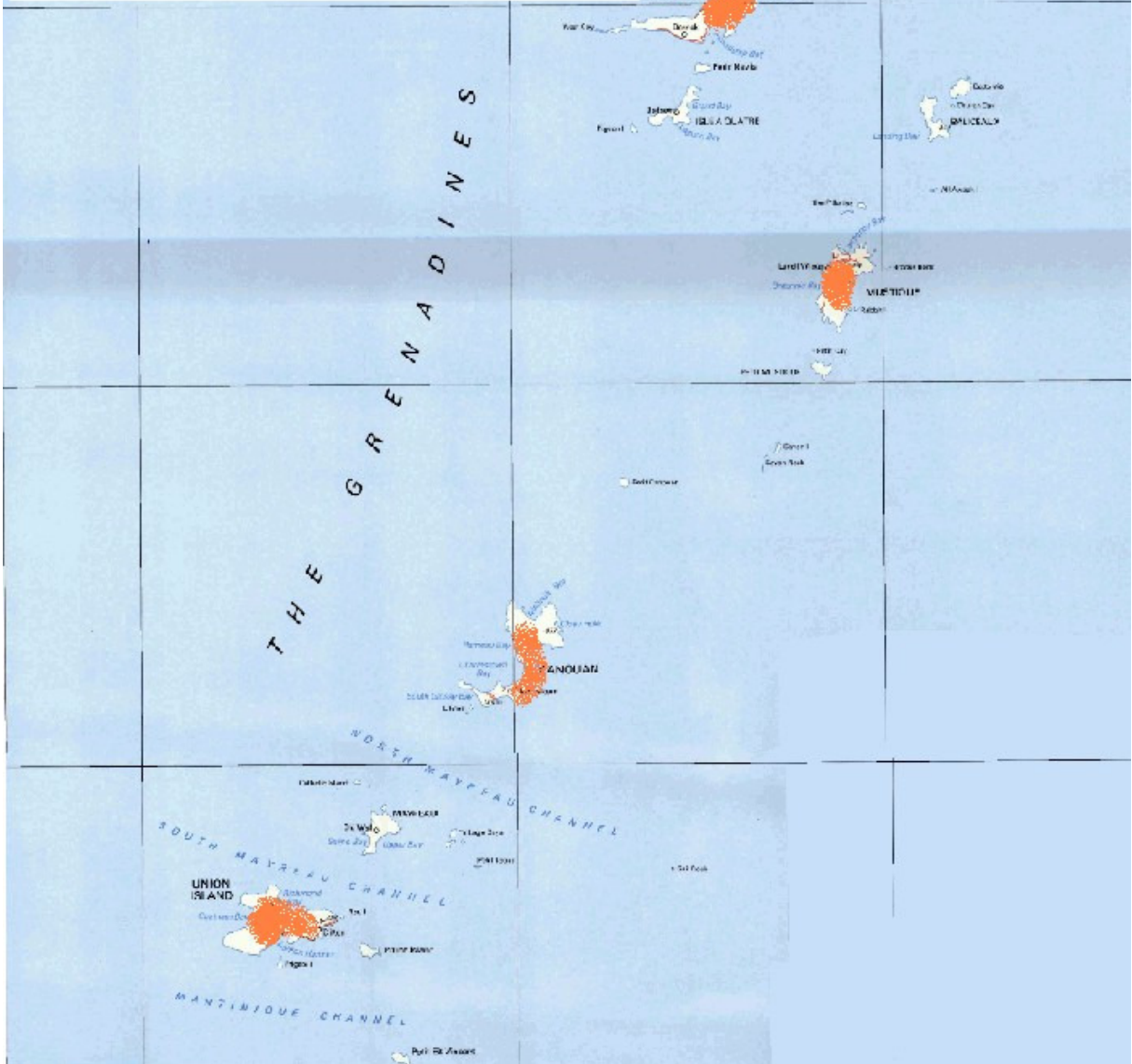
St. Vincent - Cable & Wireless Dial-Up Coverage



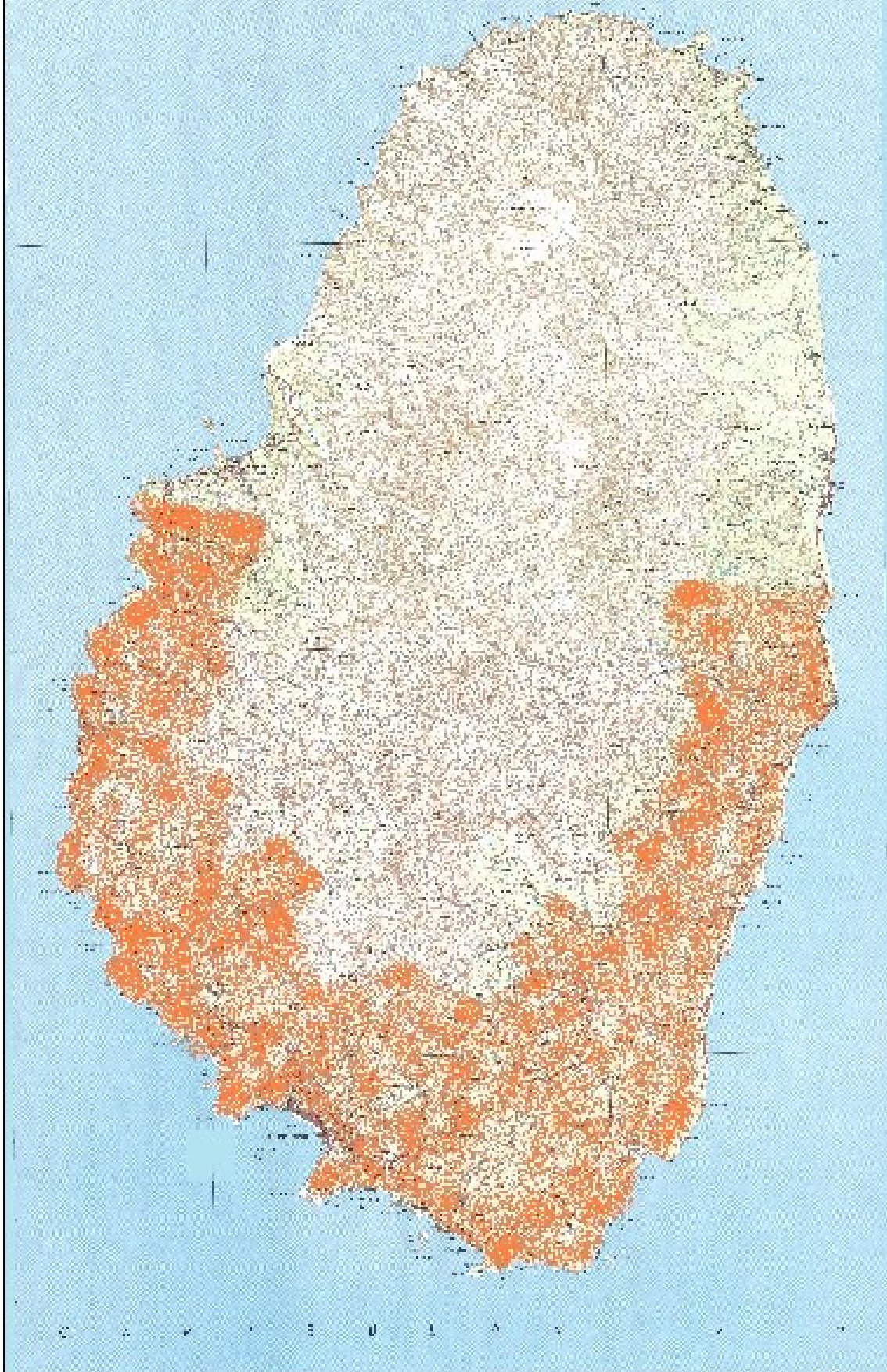
St. Vincent - Cable & Wireless ADSL Coverage



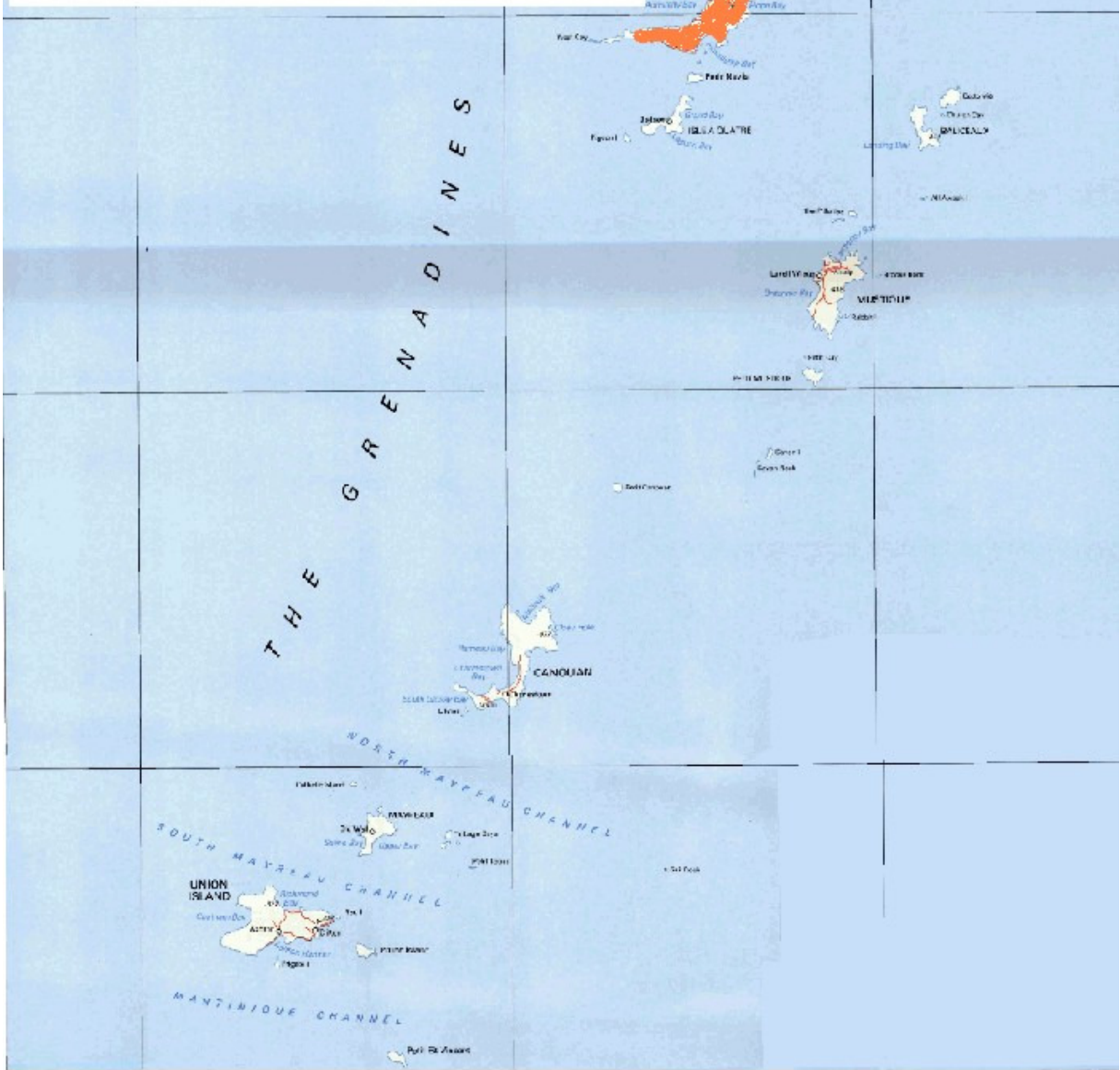
St. Vincent - Cable & Wireless ADSL Coverage



St. Vincent - Karib Cable Internet Coverage



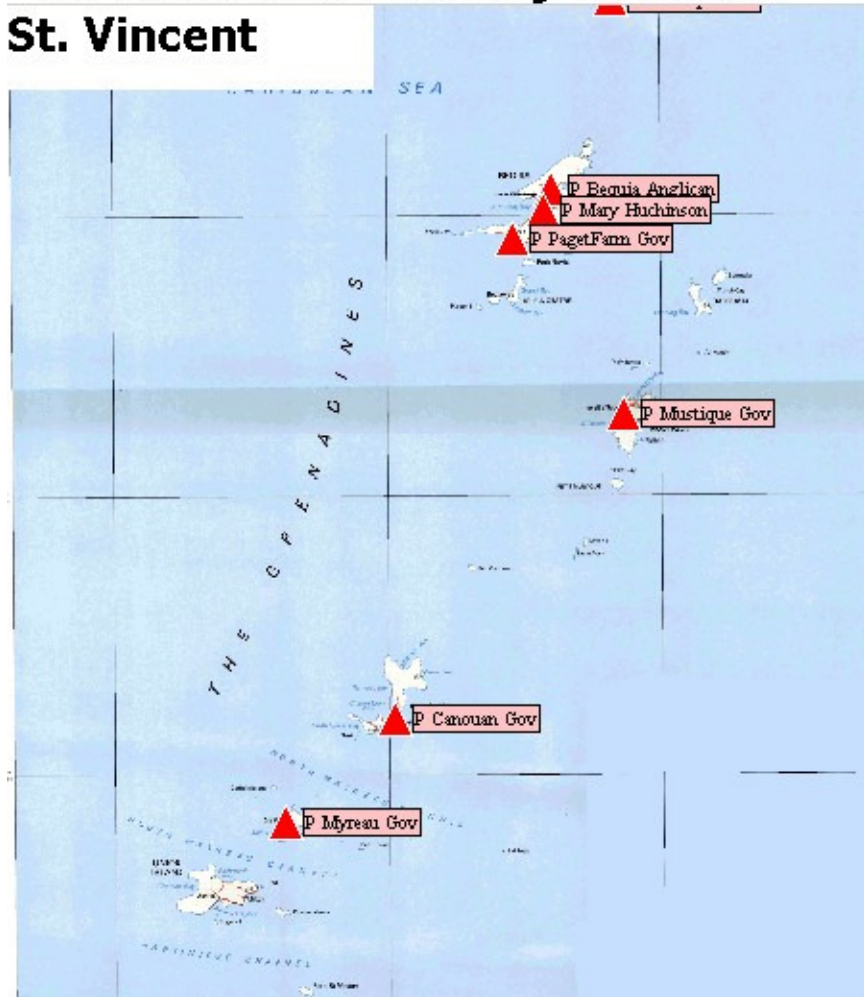
St. Vincent - Karib Cable Internet Coverage



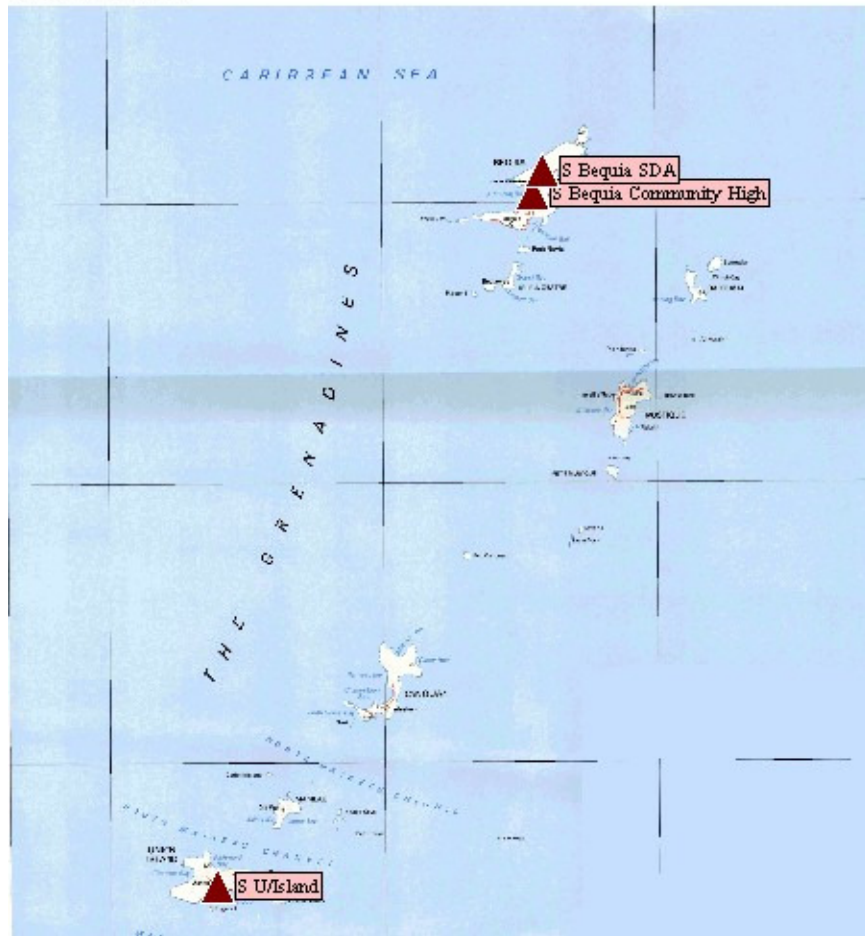
St. Vincent - Government Primary Schools



Government Primary Schools St. Vincent

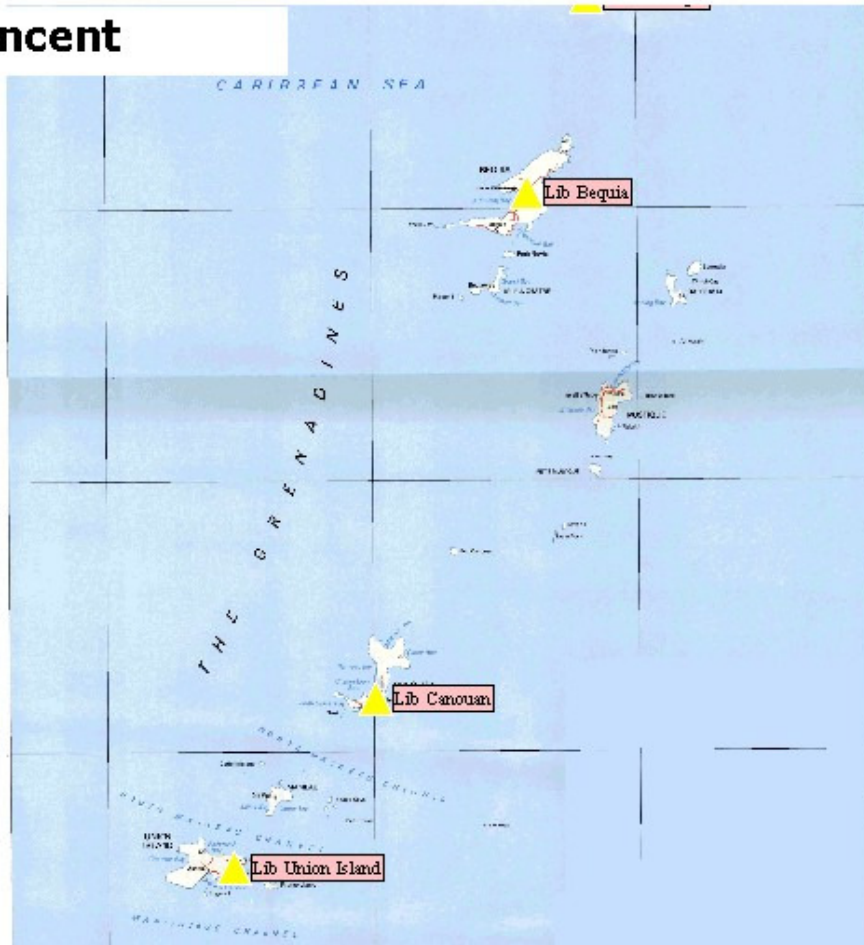


St. Vincent - Secondary and Tertiary Schools

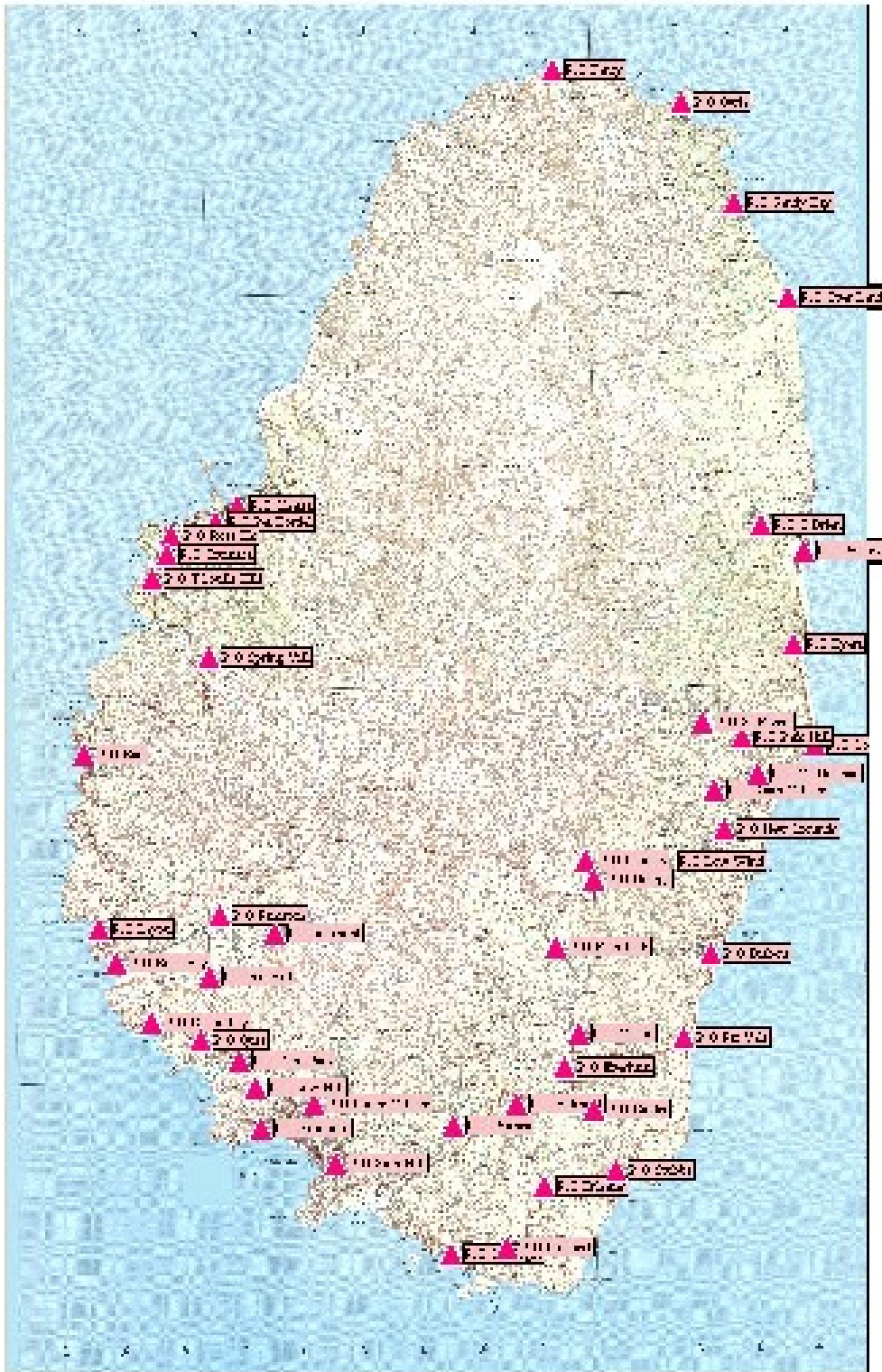


Libraries(Lib) and Resource Centers(Res Cen)

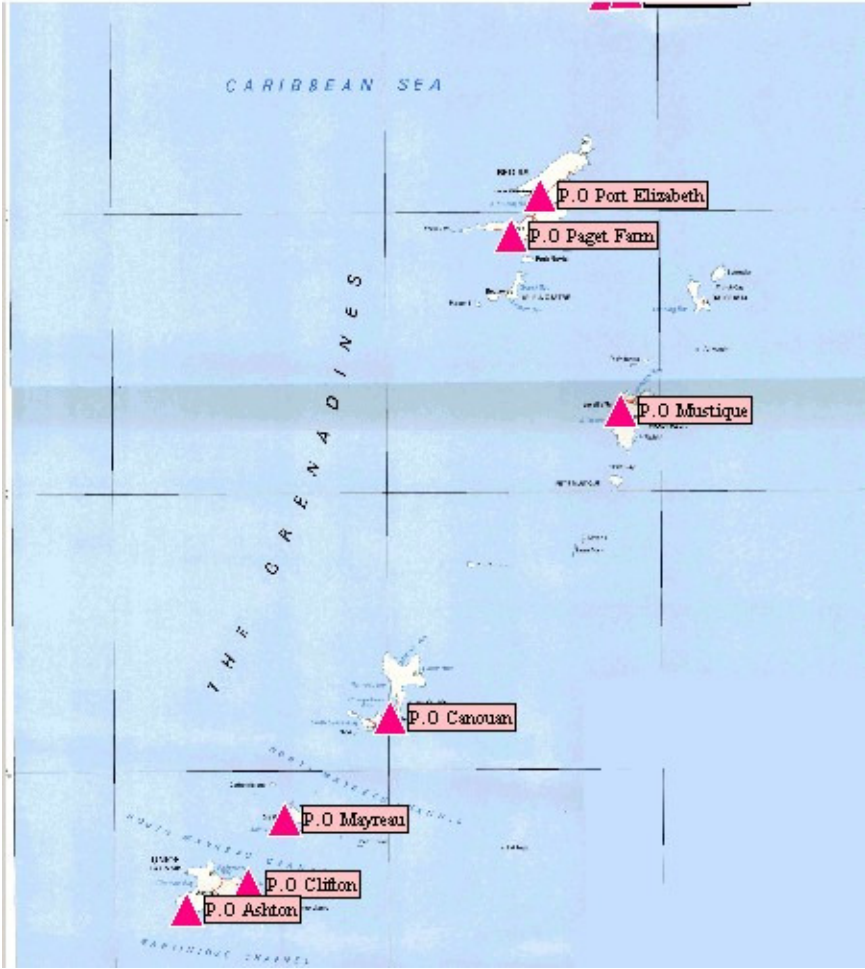
St. Vincent



St. Vincent - Post Offices



St. Vincent - Post Offices



13.

Annex C

13.1

Audited Financial Statements 2004