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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

- **COMMISSIONERS**
  - Kenneth Douglas (Chairman), Clifford Davy, Roxann Knights, Peter Jacobs and Otto Sam

- **DIRECTOR**
  - Apollo Knights

- **RADIO ENGINEER**
  - Nadine Hull

- **IT TECHNICIAN**
  - Omar Wyllie

- **ACCOUNTANT**
  - Shefflorn Ballantyne

- **ADMINISTRATIVE ASSISTANT**
  - Andra Keizer

- **OFFICE ASSISTANT**
  - Keisha Gurley
4. **Functions**: The NTRC in collaboration with ECTEL is responsible for carrying out 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.

5. **SWOT Analysis**

5.1 **Strengths**

- Responsible for regulating all aspects of the telecommunications sector.
- Knowledgeable staff is dedicated to 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.
- 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.

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

- Lack of a proper pricing control mechanism for 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 short 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 a Universal Service Fund mechanism in 2007 resulting from the work being done under the ECTEL ICT project being funded by the World Bank.

• Capacity building opportunities may be available in a number of needed areas for NTRC personnel via the ECTEL ICT project.

• Review and updating 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.

• Increased 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.

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 Wholesale Services.

• 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 have 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 have 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 unlicenced 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 now 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**

6.1 **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 providers of telecommunications services for the period 1998 to 2006.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cable and Wireless WI Ltd (St. Vincent Business Unit)</th>
<th>Cable and Wireless Caribbean Cellular St. Vincent Ltd</th>
<th>Digicel (St. Vincent) Ltd</th>
<th>Wireless Ventures St. Vincent Ltd</th>
<th>Kelcom International</th>
<th>Caribbean Business Machines Ltd</th>
<th>Vincy Comm Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inter. Revenue (EC$)</td>
<td>Domestic Rev (EC$)</td>
<td>Total Revenue (EC$)</td>
<td>Total Revenue (EC$)</td>
<td>Total Revenue (EC$)</td>
<td>Total Revenue (EC$)</td>
<td>Total Revenue (EC$)</td>
</tr>
<tr>
<td>1998</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x</td>
<td>xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td>1999</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x</td>
<td>x,xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td>2000</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x</td>
<td>x,xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td>2001</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x</td>
<td>x,xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td>2002</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x</td>
<td>x,xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td>2003</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xxx,xxx</td>
<td>x</td>
<td>x,xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td>2004</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td>2005</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td>2006</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>x,xxx,xxx</td>
<td>xx,xxx,xxx</td>
<td>xx,xxx</td>
</tr>
</tbody>
</table>

Table # 1

**Note:** The years above 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, 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 2005 for Cable & Wireless WI Ltd, Cable & Wireless Caribbean Cellular SVG Ltd which were based on the breakdown of their computation of licence fees paid for the year ended October 8, 2006 in last year's annual report, have been updated with final figures from their audit financial statements. The 2005 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, 2006. Audit Financial statements
were used for Wireless Ventures SVG Ltd for 2005 and 2006, for which its revenue figures were apportioned based on a monthly average to arrive at total revenue as at March 31<sup>st</sup> 2006. The financial year end for Wireless Ventures was December 31<sup>st</sup>.

However its last audited financial statement covered a 15 month period up to March 31<sup>st</sup> 2006. For Vincom and CBM, the gross revenue for 2005 and 2006 is based on gross revenues outlined in their licence fees 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 2005 and 2006 in relation to Karib Cable are conservative estimates based on trends from the previous years.

For Wireless Ventures SVG Ltd (AT&T) their un-audited financial statements 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.

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**Revenue of Telecom Operators**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue EC$ (000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>80,000</td>
</tr>
<tr>
<td>1999</td>
<td>80,000</td>
</tr>
<tr>
<td>2000</td>
<td>100,000</td>
</tr>
<tr>
<td>2001</td>
<td>120,000</td>
</tr>
<tr>
<td>2002</td>
<td>140,000</td>
</tr>
<tr>
<td>2003</td>
<td>160,000</td>
</tr>
<tr>
<td>2004</td>
<td>180,000</td>
</tr>
<tr>
<td>2005</td>
<td>200,000</td>
</tr>
<tr>
<td>2006</td>
<td>220,000</td>
</tr>
</tbody>
</table>

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Fig.#1
It should be noted that total revenue for telecom operators fell in 2002 by 2%. 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 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 increase by 16% which is most likely directly related to its 44% increase 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 their customer base. Wireless Ventures (Cingular) revenue increased by 91% in 2005 not withstanding its 21% decrease in 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 detailed information on this issue may be found in section 7.1.5.

For the year 2006, all telecom operators except Wireless Ventures reported an increase in gross revenues. Digicel recorded the highest increase of 13% over the previous year’s figures. This may be accounted for by the increase in Digicel’s mobile customers during 2006 from 36,406 mobile customers as of December 2005 to 45,517 as of November 2006. It should be noted that approximately 4000 of these customers would have been obtained via Digicel purchase of Wireless Ventures that occurred during the first quarter of 2006.

### 7.1.2 Revenue of the NTRC and ECTEL for the period 2002 to 2006

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.
Revenue of NTRC and ECTEL for the period 2002 to 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>NTRC Application fee</th>
<th>NTRC Frequency Fees</th>
<th>ECTEL Frequency Fees</th>
<th>% increase/ (Decrease) over previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>107,036</td>
<td>607,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>5,100</td>
<td>1,366,604</td>
<td>125%</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>8,800</td>
<td>1,577,400</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>10,300</td>
<td>1,539,669</td>
<td>-2%</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>11,275</td>
<td>1,681,560</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>142,511</td>
<td>6,772,833</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N.B. Calendar year was the period used in the above table.

Application fees were highest in 2002 when a flood of applications from prospective operators were received due to the newly opened market. Frequency fees collected in 2005 was lower mainly due to the following two reasons: (a) Cable & Wireless Caribbean Cellular is in discussions with the NTRC on relinquishing certain frequencies, until this matter is resolved their payments would be on hold in relation to these specific frequencies, (b) some licencees did not pay their 2005 frequency fees until 2006. In 2006 there was an increase in frequency fees of 9% over 2005’s total despite the reduction in fees received from Cable and Wireless Caribbean Cellular referred to above. This is partially due to some 2005 fees being paid in 2006. Frequency fees collected in 2006 was
$211,560 (12%) higher than we projected in our 2005 Annual report for that period. The projected figure of 1,467,500.00 was later revised to $1,335,550 in 2006 to reflect more accurately what was expected to be collected for 2006 due to:

(a) changes made in the methodology used in calculating frequency fees relating to microwave links from late 2005 causing a reduction of approximately $140,000.00 and

(b) the giving up of frequencies by some licencees. The actual amounts collected in 2006 as fees related to the year 2006 was $1,320,522.00, the remaining amount being a mixture of prepayments for 2007 and outstanding amounts from 2005.

7.1.3 Revenue of the Government for the period 1998 to 2006

As the data below shows there was an increase in fees received by the Government over the period. This is an important point when noting that the cost of international calls has been reduced substantially from around the time of planned market liberalisation. In short total revenue from the sector has not decreased since the market was liberalized.

<table>
<thead>
<tr>
<th></th>
<th>Government of St. Vincent and the Grenadines</th>
<th>% Increase/(Decrease) over previous years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Royalties</td>
<td>Licence Fees</td>
</tr>
<tr>
<td>1998</td>
<td>1,303,189</td>
<td>15,001</td>
</tr>
<tr>
<td>1999</td>
<td>1,286,342</td>
<td>31,119</td>
</tr>
<tr>
<td>2000</td>
<td>1,450,800</td>
<td>43,529</td>
</tr>
<tr>
<td>2001</td>
<td>639,000</td>
<td>61,143</td>
</tr>
<tr>
<td>2002</td>
<td>0</td>
<td>3,365,391</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
<td>2,803,927</td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
<td>3,329,145</td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
<td>3,421,159</td>
</tr>
<tr>
<td>2006</td>
<td>0</td>
<td>3,580,955</td>
</tr>
<tr>
<td></td>
<td>4,679,331</td>
<td>16,651,369</td>
</tr>
</tbody>
</table>
Table #3

Calendar year was the period used in this table.

Note:
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 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 the licence fee due to the government from then on is being charged on all revenue not just on 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. 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%, while in 2006 licence fees increased by 5% over 2005 totals.

7.1.4 Effect of Interconnection Charges on Licence fee payments

Before the January 21st 2003 amended fee structure regulations, licensees were required to pay licence fees based on gross revenue. However, the gross revenues then included an amount not yet deducted for interconnection, which when deducted will be transferred to another provider as revenue to that provider, upon which this other provider must pay licence fees. The definition of “Gross revenue” was thus redrafted in the amended fee structure of 2003 to ensure a double charging of licence fees was avoided. The definition incorporated revenues “before any deductions … except, domestic interconnection payments…” As a result, 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 Issues needing possible regulatory Intervention: There are a number of issues that the NTRC has identified during 2006 as needing to be examined in detail noting their possible implications to the regulatory framework and the sector in general. The NTRC plans to have these addressed on a regional front and would be seeking to have them addressed at the ECTEL/NTRC forum in early 2007. Descriptions of these issues are outlined as follows:

1. **Expiration of Prepaid Minutes and Sim cards.** It is the view of the NTRC that these should not expire before 365 days. The issue was raised in the numbering regulations as it relates to expiration of numbers that are inactive. In our view it was not properly addressed. It has implications for tourists especially those that
travel on an annual basis to our shores. We should not leave this issue to “competition” as we do not have effective and efficient competition with only two mobile providers with limited regulatory oversight on this part of the sector. It is necessary to put some rules in place. We have examples of annual travelers to our Carnival and other annual events having to repurchase Sim cards on each visit and minutes even though they would have had minutes remaining on their sim cards when they left our country. Apart from the financial loss there are other issues relating to inconveniences where they are not able to have communication until the next business day because of the need to visit a provider store to purchase a new Sim card. It is an issue that could be fixed easily through regulations. It should be noted that only customers of some mobile providers from the U.S.A can roam in our country as most of the mobile providers in the USA do not use GSM technology as such they depend on their phones purchased in St. Vincent for communicating when they return.

2. **Directory Services:** This issue needs discussion taking into account what is happening presently and what we think is best for the public. This issue is also of importance when one takes into account the disparity in the customer base of mobile and fixed customers. We need to consider what is in our best interest and not make decisions on what developed countries are doing or not doing on this subject matter. Currently the telephone directory only covers the fixed line customers. There must have been a valid reason why a Directory was developed in the first place. Is this same reason not valid in today’s world where there are other services that serve the same purpose? Directories should also cover mobile and email contacts. As with the current directory persons can choose to keep their contact info confidential for a fee (not a large fee). There should also be one directory instead of one for each provider. The important issue that arises is who should be responsible for publishing such a directory. It should be remembered that we now have a large pool of small businesses (also mobile businesses) that only have a mobile phone for communication. Is it fair that they are not offered the same level of exposure as larger businesses? Would it not be helpful if we can
have a listing of masons or lawn cutters in the yellow pages of a single national directory? Someone needing the services of one of these entities (persons) can easily contact many of these entities to see who are available and what prices they charge instead of having to go about it the current way of asking somebody if they know of somebody and then go out trying to locate the person physically to see if they are available and what price they may charge, etc.

3. **Roaming:** There is a need to look at in-country roaming and roaming in general. In-country roaming is important in that one would be able to get a wider coverage since where coverage is not available from one network it could be available from another. There are a number of specific areas currently where coverage is not available from one network but is available on another network. Rates for in-country roaming will need to be regulated in that it should be based on the incremental real costs involved in making this type of call. A very important reason also for in-country roaming is one that may be somewhat particular to our region in that of hurricanes. Specific reference could be made of Grenada where only one mobile provider had service after Hurricane Ivan. As such only customers from this provider would have been able to make calls in the aftermath of the disaster. If in-country roaming were in place (mandated) the users of other networks would not have been left without communication until their network was restored. One of the most important things to have functioning soon after a disaster is communications. As it relates to other normal forms of roaming we need to do some research into the reasons for their high tariffs and their implications on the sector. As it relates to the other forms of roaming we also need to look at how these rates are developed and if there is need for some form of regulatory intervention. Also we need to discuss how the revenue received from this stream is accounted for. This is especially important when it comes to verifying payment of annual licence fees noting that all revenue of the providers needs to be accounted for. This issue is also addressed in item 8 below.
4. **Numbers**: At least one provider is currently assigning numbers issued in another country to its customers based in SVG. What are the implications on this practice? Is it legal? If it is, should it be made illegal? What can we do if companies start assigning our numbers in another country? They could argue that the persons in the other countries are also their customers (notwithstanding they do not operate a network or offer services directly to persons in that country but may have a business relationship with some company that does). These are all issues that are arising from the sector moving from a circuit switched environment to that of a packet based one. Will need to do a comprehensive study to see if our legal framework addresses (to the best of our ability) the potential issues that are (and will) arising due to the migration to packet based networks. While we note the work that has been done with the recent consultation paper developed by ECTEL on convergence we will need to do some more detailed analysis on the subject matter.

5. **Carrier selection**: This issue should be investigated to see its possible benefits if implemented in the region. Especially when taking into consideration the work being carried out currently to facilitate cost based interconnection rates. It can also be a tool to get more competition into certain areas of the market. For example a company wanting to offer international calling only would only need to have an international gateway facility in order to start offering their services to the public. Customers from one network would also be able to benefit from promotions on other networks since a customer only needs to enter a certain code to access the services of a competitor in the market.

6. **Radiation levels**: This subject has not been given much attention to date in our regulatory framework. It is a very important issue and needs to be addressed noting the ever increasing migration from wire line services to wireless services. With the increasing dependency on wireless services and resulting need for capacity increases we would have a higher density of towers/antennas on our landscape. This is even more of an issue with the newer 3G technologies that
require more towers to cover the same area as required by 2G systems. Radiation levels are directly dependent on antenna height and distance. Most developed countries already have regulations that govern these parameters. Should we leave it to our providers to comply with these benchmarks or should we implement regulations to ensure that they are followed. At present the providers do not require regulatory permission from the NTRC to erect new mobile transmitters they only require planning permission in relation to the tower itself. The planning department is not required to liaise with us and is more concerned with the physical presence of the tower as compared to the radiation emitted from the transmitters. We have also seen the recent practice of one provider using utility poles as towers. The NTRC is not sure if this is a cost saving measure or one that is used to bypass the planning requirements as they may not need planning approval to erect a utility pole as they would with a normal steel tower. Another important parameter that affects radiation levels is co-location. While our legislation promotes this practice for good reasons there are no provisions to look at the radiation levels that could result. The levels of radiation at a collocated tower are greater than that of a single user on the tower. Are we certain that the radiation levels around these sites are within industry guidelines? Especially for areas that will expose persons for long periods (office and residential locations).

7. **ADSL lines:** Need to discuss the issue of the price of the ADSL lines that C&W offer persons holding ISVR licences. If the tariff is currently higher (which we think is the case) than what they offer to “normal” customers would this practice be legal under our current framework? Noting the absence of wholesale regulations could a provider charge another provider higher than their normal retail tariff for a particular service especially a service that was never considered to be subsidized and which they have been reducing substantially over recent times. It is our preliminary view that in the absence of wholesale regulations that would govern how one arrives at wholesale prices one should either charge the same retail price or even a little less.
8. **Revenue verification:** In recent time the major mobile providers in the market have started to offer the option for their customers to purchase additional minutes while in another jurisdiction that they also provide service. They also offer the option of purchasing minutes via credit card over the Internet. While these are all options that we welcome in the market as they benefit the customer in a direct way, we have to also look at possible implications from a regulatory standpoint. Of importance, is the issue of how this revenue is recorded. Is it recorded when the minutes are activated or when it is used. We are confident that it is recorded when activated or could even be before in the case of cards purchased by vendors who sell for the providers. It should be noted that the vendors do not sell the cards then reimburse the provider they actually pay up front for the cards (or minutes in the case of electronic top up). The issue that arises is to which jurisdiction the revenue from the card sale is credited. Is it in the country that the card was bought or the country where the customer came from? With post paid accounts it is very simple as all revenue should be recorded in the home country. If this is actually done correctly is a different issue since the company might not record the total amount billed to their customer roaming in another country (which is what should be done) but only record the amount that they keep after paying the necessary roaming charges to the roaming network. However, back to the issue at hand. If the customer uses only part of the minutes in the foreign jurisdiction and uses the balance when he returns home is the revenue credited separately. We need to look at this issue very carefully. As it relates to the purchasing of minutes online we have to confirm that these revenues are properly accounted for in the correct jurisdictions.

9. **Vendor commission:** From recent investigations carried out by the NTRC during our normal process of verifying the amounts paid by licencees it is seen that some providers are not accounting for the commission paid to vendors in their revenue calculations that are used to pay their annual licence fees. These fees are based on gross revenue minus interconnection charges. This is a very important issue noting the level of commission paid to the vendors (10%) and that most of their
customers are prepaid. As these providers operate in other ECTEL member states we assume that the same practice is occurring in these jurisdictions as well. One should also check to see if the same thing is done in relation to those countries that have a tax on mobile calls. Is the tax calculated on the value of the card or the amount received by the provider which excludes the vendor commission? If operating expenses are not exempt from the licence fee calculations why should the cost incurred by the provider in selling its cards/minutes be exempt? Need to deal with this matter in a harmonized way noting that it should be common to all states. We may need to implement regulations that require the providers to submit reports with their licence fee payments that are broken down on a monthly basis this would allow for proper verification with their audited financial statements. At present it is difficult to verify licence fee payments noting that the due date for annual licence fees does not correspond to the period used for their audited statements.

7.2  **Projected Revenue for 2007:** The NTRC projected in 2006 to collect around $1,484,950.00 from frequency authorizations fees in 2007 based on the current fee structure (S.R.O #2 2003) under which the fees were collected in 2006. However, it is expected that the Government will enact the new fees regulations in the first quarter of 2007. The NTRC projects to receive around $2,387,450.00 under this new fees regulation in 2007 reflecting a 60% increase over the amount initially projected under the current fees regulation. This new projected figure may be reduced to $2,237,450.00 based on whether the frequency authorization for which Cable & Wireless Caribbean Cellular has decided to give up some of their frequencies is changed and the time period from which the changed authorization applies. The NTRC however has some concerns with the methodology used in developing the new fees regulations and have been able to convince ECTEL to make the necessary changes before the regulations are enacted. The large increase in the projected amount above is mainly due to the increase to a single licencee’s (Karib Cable) annual frequency fee in excess of
$400,000.00 annually. This figure may not be a practical figure as we are sure the provider in question will challenge this large increase.

The NTRC is of the view that the trend of there being a greater increase in licence fees than what occurred in 2006 will occur again in 2007 resulting in an increase in licence fees for 2007 over 2006. This view is in light of new licences issued in 2006 that have the potential of generating additional revenues. These include a Submarine Cable Licence as well as a Fixed Public Telecommunication licence. Both of these are expected to be operational in 2007. Also, there is expected to be the continued normal annual growth in revenue of the existing licencees.

Application fees also showed a small increase in 2006 over 2005, as $925 (9.5%) more were collected in 2006 than received in 2005. The NTRC expects an increase in 2007 in applications related to services to be offered under the recently granted submarine cable licence (e.g., Internet Service Provision, etc) and also to communications licences related to the hosting of Cricket World Cup games. Revenues from application fees are thus expected to continue its upward trend in 2007.
7.3 Capacity building in 2006:- The NTRC sees the continued building of its human resource capacity as important to the regulatory mechanism as any other area. The Telecommunications sector is subjected to the most change of any sector of the economy and as such those who are responsible for regulating it have to be constantly updating their expertise. To this end, the NTRC has to plan carefully each year to maximize its capacity building opportunities noting the limited budget that it has available. Below is a list of the main training events that contributed to the continued development of the skills of the NTRC staff and Commissioners during 2006.

1. The Commissioners, Director and Accountant attended an Alternative Dispute Resolution training session held in St. Kitts and Nevis and sponsored by ECTEL.

2. Commissioner (former) Mr. Williams attended a one week Mediation Skills Workshop held in St. Lucia. This was sponsored by the NTRC.

3. Commissioner Mr. Davy attended a one day Submarine Cable Presentation held in St. Lucia. This was sponsored by ECTEL and the NTRC.

4. Commissioner Mr. Jacobs attended Workshops/Seminars related to the TICT Project held in St. Lucia and sponsored by ECTEL and NTRC.

5. The Director attended a two (2) week International Training Program on Utility Regulation and Strategy held in Florida and sponsored by the University of Florida, the World Bank and the NTRC.

6. The Director attended a one week workshop on “VoIP/SIP Technologies” held in Antigua and sponsored by the CTU and the NTRC.

7. The Director and the Chairman attended a Seminar on Matters Relating to Interconnection held in St. Lucia and sponsored by ECTEL.
8. The Director attended a Spectrum Management Workshop and Consultation held in Antigua and sponsored by the CTU and NTRC.

9. The Director attended a one week training program on “3G Broadband Wireless Access” held in the USA and sponsored by the USTTI and the NTRC.

10. The Radiocommunications Engineer attended a one week training program on “Radio Spectrum Monitoring Techniques and Procedures” held in the USA and sponsored by USTTI and the NTRC.

11. The Radiocommunications Engineer completed her Masters Degree in Telecommunications Regulation and Policy from UWI sponsored by the ITU and the NTRC.

12. The Radiocommunications Engineer and the IT Technician attended an ITU Spectrum Management System Seminar held in Antigua and sponsored by ITU and NTRC.

13. The Radiocommunications Engineer and the IT Technician attended an ICS Training Course held in St. Lucia and sponsored by NTRC and ECTEL.

14. The IT Technician took part in an Online Seminar on WiFi Networks provided by Centre of Excellence of the Americas.

15. The IT Technician attended a Cisco Certified Network Associate (CCNA) Course at the NIT, Ottley Hall, sponsored by the NTRC.

16. The IT Technician attended a CIW Foundations Site Development Course at the NIT, Ottley Hall, sponsored by the NTRC.
17. Office Assistant (former) and the Administrative Assistant attended a Support Staff Training Workshop held in St. Lucia and sponsored by ECTEL and the NTRC.

Apart from the training outlined above, the NTRC staff skills are continually being developed through the ongoing 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 2006. However the following regulations were Gazetted in January 2007:

- Telecommunications (Licensing & Authorisation) Regulations S.R &O #1 of 2007
- Telecommunications (Dispute Resolution) Regulations S.R &O #2 of 2007
- Telecommunications (Fees) Regulations S.R &O #3 of 2007
- Telecommunications (Spectrum Management) Regulations S.R &O #4 of 2007

7.5 Staff: The Accountant position (formerly Administrative Officer) had to be filled in 2006 after the resignation of the previous holder of the post. The Office Assistant position also had to be filled in 2006 after the former holder migrated. The NTRC continues to look at ways of reducing the rate of churn of its staff noting its small staff complements, however in some cases there is little that could be done. These staff changes do affect the smooth operation of the NTRC noting its small staff complements (maybe the smallest of any statutory institutions in the
state) and the highly specialized expertise that is required to carry out its functions. As such there is considerable lag time for new employees to come up to speed with their duties as they are to do considerable on the job training noting again that the expertise required is not available as required on the job market. This applies both to professional as well as clerical positions.

7.6 **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. The NTRC is optimistic that improvements could be realized with the current work being done under the ECTEL TICT project on updating the ECTEL Treaty and the Telecommunications Acts in the member states.

7.7 **Numbering:** - The National Numbering plan was completed in 2006 and draft numbering regulations to replace the existing numbering regulations were developed by ECTEL in 2006 and forwarded to member countries for enactment.

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.

As indicated in the previous annual report our NTRC was involved with ECTEL in a pilot project related to testing the spectrum management system and correcting any problems encountered. This project was expected to be completed in the first quarter of 2006. However because of operational problems with
regards to the IRIS spectrum management software and the Billing software modules the project has yet to be completed.

7.9. **Internet Access:** This issue remains one of utmost importance for the further development of our country. It has implications on all faucets of our economy. While we have enjoyed tremendous growth on access to voice communications (increased mobile penetration) since liberalisation of the sector, we cannot say the same in relation to access to the Internet (both fixed and mobile). Two issues have been identified to date as the main reasons for low fixed penetration to the Internet. These are (1) cost of Internet access from the provider and (2) cost of the terminal equipment required to access the Internet (computers). While we have seen sizable reductions in access cost over the last five years the same cannot be said for computers not withstanding that they have always been exempted from import duty and taxes. The average cost of a desktop computer over the last five years has remained approximately the same. As such, it would seem that new innovative measures would need to be implemented at various levels to remedy this situation. It makes no sense having the cost of access reduced if the costs of computers remain the same. One has to look at the whole picture.

An important development that the NTRC has seen and which we believe is an area that needs to be looked at in the short term is mobile access to the Internet. We believe that the country can use this medium to improve its Internet access penetration figures substantially to what exists currently. This year’s annual report is the first time that we have collected data on the number of mobile customers that could access the Internet. While the level of access to the Internet would depend on the features available on the specific mobile handset, it would be safe to say that at a minimum all customers listed under the Mobile Data figures (page 33) would be able to send and receive emails. From looking at the data, it is seen that the mobile penetration for Internet access has already surpassed the penetration on the fixed networks.
Considering the current customer base for mobile users in our country, it is seen that there is tremendous opportunity for growth in this area. Noting this, one needs to see what can be done to increase mobile access to the Internet. The NTRC believes that the biggest obstacle to increasing these numbers is again related to the cost of the terminal equipment, in this case the mobile device. While computers are listed as duty free items, all mobile devices (except laptops) are liable for duty. The NTRC is not clear if the problem comes from an interpretation of current laws/policy. If this is the case, then it should be clarified at the level of the Cabinet and the necessary directives/laws implemented. If computers are listed as duty free then one should not define a computer based on its size, but on its functions. As such mobile devices that have all the functions of a computer should not be classified as a phone or other classification because they can make phone calls since all computers can make phone calls but are not classified as phones. If this policy is clarified there would be a direct impact on the penetration rate of mobile internet users and achieve some of the goals that our country wants to achieve by having persons being able to access the Internet. By having these devices classified as duty free would result in lower cost to the consumer and as such lower the current entry barrier for persons wanting to access the Internet.

7.10 Policy: - The NTRC worked closely with ECTEL in the development of a number of new draft regulations during 2006. These were in the following areas:

- Exemption
- Numbering
- Universal Service Fund
- Wholesale
- Convergence
- Quality of Service (QoS)
- Interconnection
7.11 **Litigation:** The NTRC was named as a second defendant in a claim filed by Cariaccess Ltd against Cable & Wireless in the High Court in December 2006. The claim in short has to do with issues surrounding the rates being offered to Cariaccess by Cable & Wireless for certain services. Our lawyers have advised that the NTRC is in good legal standing on this matter.

7.12 **Statistics:** The NTRC continued in 2006 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](image)

The rates depicted in Graph 1 are not regulated.
Please note that with respect to Wireless Ventures (all graphs), no rates were included since the Company has merged with Digicel.
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 to 2007 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 to 2007 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 and 2007 the line rental rates include 80 free minutes.
Graph 5 indicates a drop in the numbers of mobile subscribers between 2003 and 2004. This drop could be as a result of improper data being 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.

In 2006 no customers are recorded for Wireless Ventures since it merged with Digicel.
Graph 6

Graph 6 shows the numbers of connected fixed line customers from March, 1999 to December 2006.

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 fixed line customers disconnected during each year.

Graph 9

Graph 9 shows the number of applications made for fixed line service.
Graph 10 shows the number of fixed line Internet customers by provider. Please note that the number of subscribers for Karib Cable are as of November 2006. It should also be noted that there are some 7,066 mobile customers as of December 2006 with various forms of Internet access. In short the mobile Internet customers have already surpassed those of the Fixed Networks. This is a trend that the NTRC believes will continue noting the lower cost of entry into the mobile market with data capable mobile phones as compared to that of the fixed network with standard computers.
Graph 11 shows the number of Cable TV subscribers

<table>
<thead>
<tr>
<th>Cable &amp; Wireless (West Indies) Limited</th>
<th>Dec ’03</th>
<th>Sept ’04</th>
<th>Dec ’05</th>
<th>Dec ’06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed line Customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
</tr>
<tr>
<td>Business</td>
<td>xxxx</td>
<td>xxxx</td>
<td>xxxx</td>
<td>xxxx</td>
</tr>
<tr>
<td>Total</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
</tr>
</tbody>
</table>

| Internet Customers                   |         |          |         |         |
| Dialup                               | xxxx    | xxxx     | xxxx    | xxx     |
| ISDN                                 | x       | x        | xx      | x       |
| ADSL                                 | xxx     | xxx      | xxxx    | xxxx    |
| Total                                | xxxx    | xxx      | xxxx    | xxxx    |

<p>| Cable &amp; Wireless Caribbean Cellular  |         |          |         |         |
| Mobile Customers                     |         |          |         |         |
| Post paid                            | xxx     | xxxx     | xxxx    | xxxx    |</p>
<table>
<thead>
<tr>
<th></th>
<th>Prepaid</th>
<th>xx, xxx</th>
<th>xx, xxx</th>
<th>xx, xxx</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
</tr>
<tr>
<td>Mobile Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-paid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>xxxxxx</td>
</tr>
<tr>
<td>Post paid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>xxxxxx</td>
</tr>
</tbody>
</table>

**Digicel**

| Mobile Customers  |         |         |         |         |         |
| Post paid         | xxxxx   | xxxxx   | xxxxx   | xxxxx   | xxxxx   |
| Prepaid           | xx, xxx | xx, xxx | xx, xxx | xx, xxx | xx, xxx |
|                   | Total   | xx, xxx | xx, xxx | xx, xxx | xx, xxx |
| Mobile Data       |         |         |         |         |         |
| Pre & Post Paid   |         |         |         |         | xxxxxx  |

**Wireless Ventures(AT&T)**

| Mobile Customers  |         |         |         |         |         |
| Post paid         | xxx     | xxx     | xxx     | NA      |
| Prepaid           | xxxxxx  | xxxxxx  | xxxxxx  | NA      |
|                   | Total   | xxxxx   | xxxxx   | NA      |

**Karib Cable**

<table>
<thead>
<tr>
<th>Dec '03</th>
<th>Sept '04</th>
<th>Dec '05</th>
<th>Nov '06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable TV customers</td>
<td>xxxxx</td>
<td>xx, xxx</td>
<td>xx, xxx</td>
</tr>
<tr>
<td>Internet customers</td>
<td>xxx</td>
<td>xxx</td>
<td>xxxxxx</td>
</tr>
</tbody>
</table>

*Please note that the values indicated for Digicel Subscribers in 2006 are up to November 2006.

7.13 **Ship Station licences:** St.Vincent and the Grenadines maintains two ship registries, one in Geneva and the other in Kingstown. It is a requirement for all registered ships to have a valid Ship Station licence. This licence authorizes the operation of all telecommunications equipment on the ship. The NTRC is responsible for the issuing of ship station licences to all ships registered at the Kingstown registry. The Merchant Shipping Act gives the authority to the
Commissioner of Maritime Affairs to issue ship station licences for ships registered in Geneva. During 2006 the NTRC processed 220 renewals for ship station licences and 29 new licences. Nine (9) ships are still outstanding for renewal giving a total of 258 ships on our ship station registry as at December 2006. It should also be noted that the NTRC also provides other services to these registered ships such as the issuing of MMSI codes, Radio Operators licences and GMDSS certification. Our NTRC is the only one to provide these services at present in the ECTEL member states.

7.14 Public Consultations: The NTRC in collaboration with ECTEL conducted a number of Public Consultations during 2006 dealing with the following issues:

- Revised International Simple Voice Resale Licence.
- Revised Private Telecommunications and Services Licence.
- Revised Telecommunications Licence Evaluation Criteria.
- Policy on Convergence.
- Universal Service Fund Guidelines.
- Telecommunications (Interconnection) Regulations.
- Telecommunications (Quality of Service) Regulations.
- Telecommunications (Wholesale) Regulations.
- Telecommunications (Universal Service Fund) Regulations.
- Telecommunications (Numbering) regulations.
- Telecommunications (Exemption) Regulations.

The above consultations were carried out in various forms. There were done in written format via the web and correspondence directly to stakeholders as well as sit down meetings.
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. Below is a schedule outlining the number of licences issued since the inception of the NTRC. 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, the table below outlines the new licences and the existing licences renewed in the year 2006.

<table>
<thead>
<tr>
<th>Licences issued</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Public</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Internet Networks</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Subscriber Television</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>International simple voice resale</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mobile Cellular</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Public Radio paging</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Submarine cable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Class type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private network/services</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Internet services</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Radio Broadcast</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Community radio</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Television Broadcast</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Maritime mobile</td>
<td>22</td>
<td>16</td>
<td>26</td>
<td>21</td>
<td>3</td>
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<tr>
<td>Land mobile</td>
<td>10</td>
<td>0</td>
<td>315</td>
<td>301</td>
<td>3</td>
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<tr>
<td>Aeronautical radio</td>
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<td>0</td>
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<tr>
<td>Aircraft station</td>
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<tr>
<td>Amateur Radio station</td>
<td>7</td>
<td>8</td>
<td>11</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Citizen Band radio</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Family Radio Band</td>
<td>0</td>
<td>0</td>
<td>78</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ship Station</td>
<td>159</td>
<td>129</td>
<td>107</td>
<td>125</td>
<td>29</td>
</tr>
</tbody>
</table>

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, the table above outlines the new licences and the existing licences renewed in the year 2006.
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.

- 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. Work has commenced in this regard in 2006 and will continue in 2007. The NTRC will continue to analyse the feedback from the stakeholders via the public consultation events and
apply its expertise both at the staff and Commissioners levels to guide the polices that the consultants are developing and implementing in the various components of the project which will eventually be manifested in a new regulatory framework for the Telecommunications sector by 2008.

9. **Result Indicators 2005 and 2006**

1. **Dispute Resolution:** The Dispute Resolution regulations were enacted in January 2007 via publication in the Government Gazette.

2. **Establish the Universal Service Fund:** Regulations to manage the fund were developed and consulted upon in 2006. Final drafts would be ready for enactment in 2007.

3. **Have all existing licencees, re-licensed under the Telecommunications Act of 2001:** Held meetings with the Cable TV operator in 2006 to resolve the relevant issues involved in re-licencing the company under the Telecommunications Act of 2001. Have agreed to have the process completed by April 2007. Have not been successful in getting ECTEL to develop the licence template for over the air television broadcast. As soon as this template is available we would proceed to have the over the air television broadcast station relicenced under the Telecommunications Act. These are the only existing Telecommunications entities left to be relicenced under the act. It should be noted that the St.Vincent NTRC has been the only NTRC in the region to have relicenced the FM radio Broadcasters under the Telecommunications Act.

4. **Wholesale Rates:** The draft regulations to govern the rates charged for wholesale services were developed in 2006 and public consultations were conducted. It is
expected that ECTEL would complete the final drafts of these regulations in 2007.

5. **New Fee Structure:** The new fee structure regulations were Gazetted in January 2007.

6. **International Access:** Southern Caribbean fiber applied for and was granted a submarine cable licence in 2006. The company landed its cable in St. Vincent in February 2007. The company expects to launch service in mid 2007. This is a major development in our sector as it would be the first time that there would be competition in the submarine cable market in St. Vincent and the Grenadines. Consumers and other providers of Telecommunication services should expect to see direct benefits from this development as cost for International access especially in the area of data services (Internet access and lease lines) should be lower than what currently exist. This area has been the last impediment to having real competition in a variety of telecommunications services.

7. **Statistics:** The NTRC was able to make progress on this matter in collaboration with ECTEL in 2006. Have come to an agreement on a standard form to be used for collection of certain statistical data in all five member countries. It is expected that use of these standardized forms would commence in early 2007.

8. **Quality Service Obligations:** Noting the work done in developing regulations to govern this area in 2006 the NTRC has decided to wait until the regulations are in place before commencing any monitoring activities in this area.

9. **Work closely with consultants involved with various components of the ECTEL TICT project:** The NTRC have given full support to the consultants working on the TICT project as follows:
• Facilitated a number of public consultations involving the consultants and local stakeholders.
• Provided advice and comments to the Consultants on a number of working documents.
• Held meetings with the Consultants involving the Commissioners and senior staff to discuss various issues surrounding the work of the Consultants.
• Attended a number of regional workshops involving the consultants, ECTEL and other NTRCs to discuss various issues surrounding the work of the consultants and which require a harmonized approach.

10. Pursue cooperation with the Ministry of Telecommunications on the issue of further developing the ccTLD country code for St.Vincent and the Grenadines: This issue is being addressed in a harmonized approach by one of the consultancies under the ECTEL TICT project.

11. 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 St. Vincent and the Grenadines registered ships. This objective was not achieved in 2006. The NTRC will seek to have it completed in 2007.

12. Relicence Kelcom International under the Telecommunications Act of 2001 in relation to their Subscriber Television operations: The NTRC had meetings with Kelcom International (Karib Cable) on this issue in 2006. Have agreed to have the relicencing process completed by April 2007. The main issue that is still to be resolved has to do with the treatment of concessions that is in their existing licence agreement but which are not issues that are dealt with under the framework of the Telecommunications Act. These are issues such as duty free concessions. It is expected that Cabinet will address the concession issues early in
2007 which will clear the way for the NTRC to proceed with the issuing of the new licence under the Telecommunications Act.

13. **Relicence SVG broadcasting under the Telecommunications Act of 2001 in relation to their Television broadcasting operations.** Cannot proceed with this task until ECTEL completes its work on the over the air television broadcasting licence template.

14. **Prepare and publish a procedural manual covering all functions currently carried out by the NTRC:** Work was carried out on this manual in 2006 and has resulted in a draft manual being completed. Noting the considerable amount of detail that is required for this manual the final document would not be completed until mid 2007.

15. **Seek to settle matter relating to the disputed licences fees from Cable & Wireless covering the period April to September 2001.** This issue was put on the agenda at the NTRC/ECTEL forum in 2006 noting that a similar situation would most likely have occurred in the other ECTEL states. ECTEL subsequently forwarded their advice on the matter during 2006. The NTRC plan to have our recently retained legal counsel work on the matter in early 2007.

16. **Seek to find a solution on the issue of cross border Telecommunication services offered by unlicenced providers.** This issue was also put on the agenda of the ECTEL/NTRC forum and discussed in detail. We however were unable to get ECTEL to do any further research on the issue. We have also brought the issue recently to the attention of the area representative at the ITU regional office located in Barbados.
10. **Objectives 2007**

1. Continue to work closely with the consultants involved with various components of the ECTEL TICT 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. 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 players and technology into the market.

3. Conduct a study of the present telecommunications coverage of our maritime areas with the aim of making recommendations for improvements.

4. Redesign and deploy an updated NTRC website with the objective of having more information more easily available to interested parties locally, regionally and internationally.

5. Implement relevant systems both electronic and manual to facilitate the work of the NTRC as it responds to the requirements of the Dispute Resolution Regulations.

6. Seek to find a legislative solution as part of the ECTEL TICT project that will help to reduce the churn of the NTRC staff.

7. 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.
11. **Annex A**

11.1 **Technical Definitions/Terminology**

**CANTO:**

“Caribbean Association of National Telecommunications 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: - “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. 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.”

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”
12.        Annex B

12.1     Audited Financial Statements 2006