ANNUAL REPORT 2004



National Telecommunications Regulatory Commission (NTRC)

TABLE OF CONTENTS

CONTENTS

| Mission Sta | tement | . 1 |
|------------------|--|-----|
| Vision States | ment | 1 |
| Organisation | al Structure | 2 |
| Functions | | 3 |
| SWOT Anal | ysis | 8 |
| 5.1 | Strength | 8 |
| 5.2 | Weakness | 8 |
| 5.3 | Opportunities | 9 |
| 5.4 | Threats | 9 |
| Critical Issue | PS | 10 |
| Programme 1 | Review | 10 |
| 7.1 | Revenue Analysis/Financial Impact of Liberalization | |
| | 7.1.1 Effect of Liberalization on Telecom Operators | |
| | 7.1.2 Revenue of the NTRC &ECTEL for the period 1998 to 2004. | |
| | 7.1.3 Revenue of the Government for the period 1998 to 2004 | |
| | 7.1.4 Effect of Interconnection changes on the Licence Fee Payment | |
| 7.2 | Projected Revenue for 2005 | |
| 7.3 | Training done in 2004 | |
| 7.4 | Regulations | |
| 7.5 | Staff | |
| 7.6 | ECTEL | |
| 7.7 | Numbering | |
| 7.8 | Spectrum Management | |
| 7.9 | Policy | |
| 7.10 | Litigation. | |
| 7.11 | ICT | |
| 7.12 | Statistics | |
| 7.13 | Registered Ships | |
| 7.14 | Public Consultation | |
| 7.17 | Public Relation | |
| 7.16 | Licencing | |
| 7.17 | Training | |
| | nse Strategies | 4.1 |
| - | ntors 2004 | |
| | 005 | |
| • | 003 | |
| 11.1 | Technical Definitions/Terminology | |
| 11.1 | 1 connear Definitions/1 connictory | 5 |
| Annex B | | 5 |
| | Audited Financial Statements 2003 | 5 |

National Telecommunications Regulatory Commission (NTRC) <u>Annual Report 2004</u>

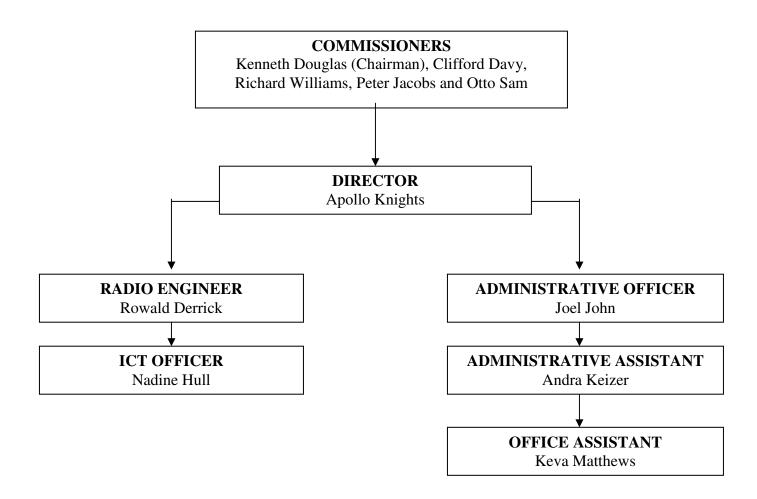
1. Mission Statement

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. <u>Vision Statement</u>

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. <u>Organizational Structure</u>



- **Functions:** The NTRC is responsible for carrying out the following functions as mandated by the Telecommunications Act and the ECTEL treaty:
 - to assist the Minister in establishing national policy on telecommunications matters with a view to ensuring the efficient, economic and harmonized development of the telecommunications sector;
 - to ensure compliance with the Government's international obligations on telecommunications:
 - to be responsible for technical regulation and the setting of technical standards of telecommunications and ensure compatibility with standards of the International Telecommunications Union and other international standards;
 - to plan, supervise, regulate and manage the use of the radio frequency spectrum in conjunction with ECTEL including the assignment and registration of radio frequencies to be used by all stations operating in SVG or on any ship, aircraft, vessel, or other floating or airborne contrivance or spacecraft registered in SVG;
 - to advise the Minister in all matters related to charges for telecommunications service;
 - to collect all fees prescribed and any other charges levied under the Telecommunications Act or regulations;
 - to receive and review applications for class licences and advise the Minister accordingly;
 - to monitor and ensure that licencees comply with the conditions attached to their licences and to any written law;

- to review proposed interconnection agreements by telecommunications providers and recommend to the Minister whether or not he should approve such agreements;
- to investigate and resolve any dispute relating to interconnections or sharing of infrastructure between telecommunications providers;
- to investigate and resolve complaints related to harmful interference;
- to monitor anti-competitive practices in the telecommunications sector and advise the national body responsible for the regulation of anti-competitive practices accordingly;
- to keep a register of licencees and frequency authorization holders;
- to provide the Minister with such information as he may require from time to time;
- to undertake in conjunction with other institutions and entities where practicable, training, manpower planning, seminars and conferences in areas of national importance in telecommunications.
- to report to and advise the Minister on the legal, technical, financial, economic aspects of telecommunications, and the social impact of telecommunications;
- to manage the Universal Service Fund;
- to perform such other functions as are prescribed;
- to liaise closely with ECTEL and promptly provide ECTEL with such information as ECTEL may require in order to carry out its functions under the agreement.

In the performance of its functions, the Commission shall consult and liaise with ECTEL.

The following are **ECTEL** functions as outlined in the **ECTEL Treaty**;

- co-ordinate with, and advise, the Contracting States on the conduct and regulation of telecommunications and ancillary matters for ensuring the purposes of this Treaty;
- prepare and maintain a harmonized regional radio spectrum plan;
- recommend a regional policy for the conduct of telecommunications, in particular in relation to universal service, interconnection, numbering and pricing, and to monitor its implementation in the Contracting States;
- recommend to the Contracting States the type of telecommunications
 networks or services which should be subject to an individual licence and
 class, respectively, and exemptions, if any;
- recommend to the Contracting States the type of communications networks, services and radio equipment which should be subject to frequency authorization, and exemption, if any;
- prepare and recommend to the Contracting States, forms, other
 instruments and regulations for the adoption by the Contracting States for
 the purpose of harmonization of telecommunications, including
 application forms and other forms in respect of licences, frequency
 authorizations and tender documents;

- design and operate open tender procedures for individual licences as requested by Contracting States;
- review applications for individual licences submitted by a Contracting
 State, and to recommend applicants who satisfy the relevant technical and financial requirements for individual licences;
- recommend to the Contracting States terms and conditions to be included in a licence, particularly with respect to the provision of universal service;
- recommend to the Contracting States matters relating to the management of frequency authorizations, including the sale, if any, by auction;
- monitor, in collaboration with the Contracting State, the effectiveness of the licence for the purpose of the Treaty and make the appropriate recommendation to the Contracting State including recommending suspension or revocation of licence;
- recommend to the Contracting States an appropriate fee structure for licences or other matters for or in relation to the conduct or regulation of telecommunications;
- recommend a regional cost-based pricing regime for implementation by each Contracting State;
- recommend the technical standards and procedures for the approval of equipment, including radio equipment for use in the operation of telecommunications in each Contracting States;

- co-ordinate activities with relevant international organizations, States or other bodies or persons for the promotion and implementation of the ECTEL treaty;
- advise Contracting States on the management of the Universal Service
 Fund and make recommendations on applications for disbursements from these Funds;
- prepare annual reports for submission to the Council on the execution of its functions;
- Perform such other functions are assigned to it by resolution of the Council.

5. **SWOT Analysis**

5.1 Strengths

- Responsible for regulating all aspects of the telecommunications sector.
- Present staff is dedicated in achieving the tasks at hand.
- Availability of IT infrastructure and software.
- Automated filing and database 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.
- Emergence of competition in the Internet access, Mobile services and International phone card sub sectors.
- All staff positions currently filled.

5.2 Weaknesses

- Lack of a regional spectrum plan.
- Lack of a regional numbering plan.
- Some software being used at the NTRC not licenced.
- Absence of the full complement of regulations needed to properly regulate the sector.
- Absence of fines/penalties under the Telecommunications Act of 2001.

- 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 pricing control on all services offered by the incumbent operator
- Lack of a formal link between ECTEL and the NTRCs.
- Appropriate funding to cover possible litigation costs and costs of ongoing legal advice.

5.3 Opportunities

- Possibility of competition in the Submarine Cable sector in 2005/2006.
- Possibility of accessing funds from the EDF to facilitate capacity building through various training modules.
- Implementation of Dispute Resolution regulations in 2005.

5.4 Threats

- Possibility of continued litigation from Licencees.
- Churn of Commissioners and Staff.
- Not being able to predict the regulatory workload due to the expansion of licencees in the sector and the possible disputes and complaints that may follow.
- Competition from other OECS States who have started Ship registries. This could impact on the revenue collected from this sector.
- Ability to retain trained competent staff.

6. <u>Critical Issues</u>

- Continuation of relevant regulatory and other training noting that the OECS Telecom Reform Project is completed and the limited funds available under the NTRC annual budget. The project previously funded most of the training accessed by the NTRC.
- Implementation of further relevant regulations as required under Section 74 of the Telecom Act.
- Amendment of the Telecommunications Act, ECTEL Treaty and Telecommunications regulations to address current deficiencies and inconsistencies
- The need to regulate certain services of the incumbent operator not currently being regulated especially wholesale rates offered to other providers.
- Need to have a clear mechanism established on how litigation issues are to be handled by all NTRCs.

7. <u>Programme Review</u>

The launch of a mobile telecommunications network by Digicel Ltd in February of 2003 was a historic moment within those English speaking Caribbean countries that Cable & Wireless operates. This launch coincided with a similar launch at the same time in St. Lucia and signified the full liberalisation of the telecom sector in both countries as customers of this company could have now made an international call without using the network of Cable & Wireless. It should be noted that while mobile competition has existed in Jamaica and Antigua prior to this date, the competitors in those markets were still required by law/agreements to use Cable & Wireless for their international traffic. Jamaica was fully liberalised in 2003. Antigua still has a monopoly on international traffic even though competition came to the mobile sector in 2004 with Digicel and AT&T wireless.

It should be noted that while five countries of the OECS embarked jointly on the liberalisation of the telecom sector in the sub region via the OECS Telecom Reform Project (partly funded by the world bank) in 1998, St. Vincent and St. Lucia were the first to see full competition (both local and international calling) with the launch of mobile networks by AT&T Wireless and Digicel in 2003. St. Kitts & Nevis should see competition in early 2005 from AT&T Wireless who was granted a licence recently and have started construction of their network. The original licencee, a local company that was granted a licence in 2002 had failed to build a network to date, however this company has now partnered with a Dutch company UTS and have started work on their Network. Grenada has since licenced Digicel and AT&T Wireless to provide mobile services after they issued licences to two other companies, which failed to build mobile networks to date. Digicel and AT&T wireless launched their networks in late 2003. Dominica has mobile competition from AT&T Wireless and Orange. There is Internet competition in St. Kitts & Nevis, Dominica and St. Vincent & the Grenadines. All of which are being provided by Cable TV providers using their existing infrastructure. Dominica is the only country that has fixed line competition for voice services this is also being provided by one of their Cable TV companies Marpin Telecom. St. Vincent is the only country to have competition in the phone card sector for international calls. A number of other companies have been granted this type of licence both locally and in the other ECTEL states but have not started operations to date. This is mostly due to the difficulties experienced in getting access to the incumbent services at cost based prices.

The NTRC can see that there has been a positive impact on the telecom sector resulting from the liberalisation process occurring in the OECS and specifically in St.Vincent and the Grenadines. The mobile sector has seen competition since 2003, which has resulted in a growth of this sector and not just a redistribution of the customer base. At the end of 2002, Cable & Wireless Caribbean Cellular had approximately 20,000 mobile customers. At the end of December 2003 there was approximately 60,000 handsets sold during the previous year. In 2004, the NTRC has seen a stabilisation of the mobile market with very little growth in subscriber base. As

of June 2004 there were approximately 58,000 active mobile subscribers. It have also seen a reduction in the fixed line customer base from approximately 26,000 in March 2003 to approximately 18,000 in March 2004. This figure while being submitted by the incumbent provider needs to be confirmed based on other data collected. If this is confirmed, it could be attributed to persons voluntary or involuntary giving up their fixed line phones for mobile ones. One can look at this and infer that there might not be a market for fixed line voice service for a competitor or it can be looked at as an opportunity for a new entrant since there could be a large pool of dissatisfied customers. Not only has the mobile market taken over the fixed market but also it is approximately three times the size of the fixed market, all happening within a nine month period.

Benefits of liberalization include the following:

- Lower rates for domestic mobile calls
- Lower rates for international calls
- Increased access to persons (all levels of the society) which should result in increased levels of efficiency and possible productivity in the economy on a whole.
- Increase in the amount collected for duties/consumption taxes at the Customs on handsets.
- Increase in licence fees collected from all providers both fixed and mobile since traffic goes between both networks and the customer base has increased.
- Increased in foreign investment. Both initial investment as well as current expansion to their networks. Both new mobile providers have already moved into phase 2 & 3 of their network deployment. The incumbent has also decided to offer both technologies to their current TDMA as well as GSM, which the new providers are using.
- Employment opportunities have increased in the sector. A number of persons have left the incumbent both voluntarily and otherwise and are

- working with the new entrants. The new entrants have also created new job opportunities that would not have existed previously.
- One sector that has benefited directly from the liberalisation of the sector is the media; with increased numbers of telecommunication advertisements appearing both in print and Broadcast (Radio/TV).
- Also benefiting directly from the competition present in the telecom sector
 is the sponsorship of a number of activities/functions by all providers. It
 seems that there is competition among the providers to sponsor
 organisations.

Negatives:

- Other business entities in the country might see a decrease in their revenue base, due to their customers now having new expenses, that is, daily telephone expenses. This is due to 90% of the mobile customers being prepaid customers who pay up front for their calls using existing disposable income instead of a monthly bill. Companies who depend on this daily disposable income such as soft drink manufacturers, the Brewery, National Lottery and convenience stores could see these mobile providers as competitors in the market place.
- The developments in the mobile market have also brought some social/familial problems as well as adding a new dimension to crime by facilitating its organization and implementation.

7.1 Revenue Analysis/ Financial Impact of Liberalisation:-

The NTRC is responsible for the collection of all fees levied under the Telecommunications Act of 2001. These include application fees, licence fees and Frequency authorisations fees.

The following table illustrates the total revenues earned by the major providers of telecommunications services for the period 1998 to 2004. Keeping in mind that effectively there was a new entrant in the market in the last month of the year ending March 31, 2003 with the launching of Digicel SVG Ltd mobile telecommunications service. Wireless Ventures St Vincent Ltd (AT&T) mobile telecommunications service started in June 2003, which is included in the 2004 year in the table and graph below.

7.1.1 Effect of Liberalization on Telecom Operators

| | | ireless WI Ltd Business Unit) | | Cable & Wireless Caribbean Cellular St Vincent Ltd | Digicel St Vincent Ltd | Wireless Ventures St Vincent Ltd | | % Increas e / (Decrea |
|--------------|----------------------------|----------------------------------|----------------------------|--|---------------------------|--|-----------------------------|--------------------------------|
| | Int. Revenue EC\$ | Domestic Revenue EC\$ | Total Revenue EC\$ | Total Revenue EC\$ | Total Revenue EC\$ | Total Revenue EC\$ | Grand Total EC\$ | se) over previou s year |
| Year: | | | | | | | | |
| 1998 | xx ,xxx,xxx | xx ,xxx,xxx | xx,xxx,xxx | xx ,xxx,xxx | - | - | xx ,xxx,xxx | |
| 1999 | xx ,xxx,xxx | xx ,xxx,xxx | xx ,xxx,xxx | x ,xxx,xxx | - | - | xx ,xxx,xxx | 4% |
| 2000 | xx ,xxx,xxx | xx ,xxx,xxx | xx,xxx, xx | x ,xxx,xxx | - | - | xx ,xxx,xxx | 3% |
| 2001 | xx ,xxx,xxx | xx ,xxx,xxx | xx,xxx, xx | x ,xxx,xxx | - | - | xx ,xxx,xxx | 15% |
| 2002 | xx ,xxx,xxx | xx ,xxx,xxx | xx,xxx, xx | x ,xxx,xxx | - | - | xx ,xxx,xxx | -7% |
| 2003 2004 | xx ,xxx,xxx xx ,xxx,xxx | xx ,xxx,xxx xx ,xxx,xxx | xx ,xxx,xxx xx ,xxx,xxx | xx ,xxx,xxx xx ,xxx,xxx | xxx,xxx xx, xxx,xxx | x,xxx,xxx | xx ,xxx,xxx xxx ,xxx,xxx | 14% 35% |
| | | | xxx ,xxx,xxx | xx, xxx,xxx | xx, xxx,xxx | X,XXX,XXX | xxx,xxx,xxx | |

Note:

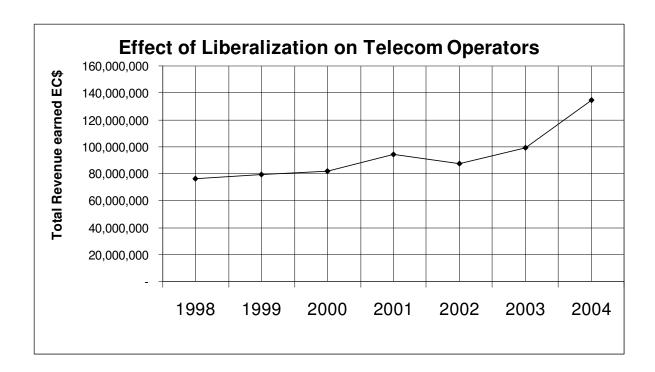
The years above run from April 1 to March 31. e.g. 1998 runs from April 1, 1997 to March 31, 1998. This coincides with the financial years of Cable & Wireless WI Ltd, Cable & Wireless Caribbean Cellular SVG Ltd and Digicel SVG Ltd. The revenue amounts for Wireless Ventures SVG Ltd have been apportioned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

Source

Audited financial statements were used for Cable & Wireless WI Ltd, Cable & Wireless Caribbean Cellular SVG Ltd and Digicel SVG Ltd up to year ended March 31, 2003.

For subsequent years for Cable & Wireless WI Ltd, Cable & Wireless Caribbean Cellular SVG Ltd and Digicel SVG Ltd estimates were used. Licence fees have been paid up to September 2004. 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, 2003 to March 31, 2004, for which financial statements were not available.

For Wireless Ventures SVG Ltd (AT&T) no financial statements have been received to date. The company however submitted a breakdown of its licence fees computation for September 2002 to October 2003 which included a statement of gross revenue for the period. Gross revenue was used to estimate total revenue for the period. The company also submitted licence fees for September 2003 to October 2004 but has not supplied a breakdown. The gross revenue and hence the total revenue for the period September 2003 to March 2004 were estimated based on the licence fees paid for the period.



The above data shows that 2002 saw a 7 % drop in total revenue. This was due to a \$10million (12%) drop in revenue for Cable & Wireless WI Ltd, particularly its Domestic revenue which saw a \$12 million (34%) drop in that year. The reason for this drop is not clear.

There was an increase in total revenue in the year ended March 2003. 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. It is beneficial to consider the customer base for this period. For Cable & Wireless Caribbean Cellular its number of customers was 9,144 for 2002 and had increase to 17,108 - which represents an 87% increase - for 2003 compared to a 60% increase in revenue. Its domestic tariff was \$1.10 in 2002 and had decreased to \$0.79 in 2003. It can thus be seen that the increase in revenue was due to an increase in its customer base. This can be directly attributed to increased activity in 2003, due to the liberalization of the telecom market. Digicel was only offering telecommunications service from the last week of March 2003. Its revenue of \$179,315 represented only 1.5% of the increase in revenue for that year, so it did not have a significant impact on the total revenue for 2003. Wireless Ventures (AT&T) did

not launch there service until the subsequent period. For Cable & Wireless WI Ltd, revenue levels in the year ended March 2004 were lower than in all years other than the first year of this report (1998). It can be clearly seen that the low revenue figures in 2004 are the result of a \$20 million (44%) decrease in international revenue from \$46 million in 2003 to \$26 million in 2004.

This drop in International revenue for Cable & Wireless WI in 2004 could be attributed to competition in the International sector from Digicel and AT&T who were offering competitive rates. For 2004, the international rate to the USA was \$1.65 per minute for both Cable & Wireless WI and Cable & Wireless Caribbean Cellular subscribers. Digicel's rate was \$1.30 and AT&T's rate was \$1.32. However all companies were offering lower promotional prices on International calling that lasted for a considerable period in 2003. It can thus be concluded that cable & wireless lost considerable market share for International calling to its mobile competitors.

Domestic revenue in 2004 saw a significant increase of \$6.4 million (22%). It should be noted, however, that the majority of the telecommunications market in 2004 was mobile subscribers. This being the case, a portion of the monies recorded for domestic revenue by Cable & Wireless WI would be turned over to each of the three (3) mobile providers as domestic interconnection charges. This is the charge incurred in terminating a fixed line call to a mobile phone. Approximately 75% of the cost of a Fixed to Mobile call is turned over to the mobile operator by Cable & Wireless.

For 2003, Cable & Wireless Caribbean Cellular was the only operator to which domestic interconnection charges were paid, except for one (1) week in the last month of that year when Digicel was in operation and would have also received interconnection payments from Cable & Wireless WI. Total domestic interconnection charges paid by Cable & Wireless WI Ltd for 2004 was \$10 million, which is a \$1.4 million (16%) increase over 2003. This increase seems small noting the large increase in mobile customers in the 2004 period. An explanation could be that due to the high cost of fixed to mobile calls the expected increase in revenue did not materialize as persons only make these types of calls

as a last resort. Most of the calls in the liberalized sector could be mobile to mobile calls as it is cheaper to use your mobile to call another mobile especially on the same network than to call a mobile from a Fixed line. It should also be noted that the fixed to mobile charges are not billed by the second.

Reported domestic revenue for Cable & Wireless WI Ltd increased by \$6.4 million in 2004, however, after subtracting the increase in domestic interconnection charges of \$1.4 million, the NTRC notes that actual retainable revenue increased by \$5 million (17%). This increase could be attributed to increased activity in the market which effectively started in that year when both Digicel (with 41,480 customers) and AT&T (with 4,871 customers) were also in operation, along with increases in Cable & Wireless Caribbean Cellular's customer base from 17,108 in 2003 to 21,143 in 2004. There was now an additional 50,386 local mobile customers to which fixed line users would have made calls during the year. Thus, this increase in mobile customers caused the domestic revenue to increase similarly. Despite the significant increase in domestic revenue, the overall figures for the company showed a \$10 million (12%) decrease over the previous year.

The decrease in revenue for Cable & Wireless WI Ltd, however, was offset by increases by all other operators. For Cable & Wireless Caribbean Cellular, in 2004 revenue increased by 50% and its customer base was 21,143 compared to 17,108 in 2003. This represented a 24% increase. This despite the fact that there were two new entrants sharing the market – Digicel and AT&T.

Digicel reported significant revenues. In 2003 it had been offering mobile telecommunications service for only one week and reported \$179,315 in revenue. For 2004 it reported revenue of \$34.9 million, which was \$13.8 million dollars (65%) more than the incumbent mobile operator (Cable & Wireless Caribbean Cellular) even though that was the best year ever for Cable & Wireless Caribbean Cellular. Similarly, Digicel's customer base for 2004 was 41,480 which were 20,337 or 96% higher than Cable & Wireless Caribbean Cellular.

Wireless Ventures (AT&T) reported revenue in 2004 of \$3.5 million. This represented 5.9% of total revenue for the mobile market in that year. Its comparatively small revenues are primarily due to its small customer base of 4871.

7.1.2 Revenue of the NTRC and ECTEL for the period 1998 to 2004

There was a steady increase in the frequency fees revenue of The National Telecommunications Regulatory Commission (NTRC) and the Eastern Caribbean Telecommunications Authority (ECTEL) since the NTRC began operations in November 2001. Frequency fees are shared between the NTRC and ECTEL whereas application fees belong to the NTRC. Application fees have dropped to small amounts since 2002. The high figure for 2002 was as a result of the market being opened to competition for the first time which resulted in large numbers of applications being submitted with the hope of obtaining licences to operate in the competitive market.

Revenue of NTRC and ECTEL for 1998 to 2004

| | NTRC Application fees | % Increase / (Decrease) over previous year | NTRC & ECTEL Frequency fees | % Increase / (Decrease) over previous year |
|------|-----------------------|---|--------------------------------------|--|
| 1998 | - | | - | |
| 1999 | - | | - | |
| 2000 | - | | - | |
| 2001 | - | | - | |
| 2002 | 107,036 | | 607,600 | |
| 2003 | 5,100 | -95% | 1,366,604 | 125% |
| 2004 | 8,800 | 73% | 1,577,400 | 15% |
| | | | | |
| | 120,936 | | 3,551,604 | |

Note: The 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 (compared to 2002), the year that the two new mobile operators began operations. It should be noted that frequency fees in 2002 were mainly from the incumbent Cable & Wireless since frequency authorization for other providers were not granted as yet. Frequency authorizations for the new entrants were effective in the 2003 calendar year and hence there was an increase in frequency fees in that year.

7.1.3 Revenue of the Government for the period 1998 to 2004

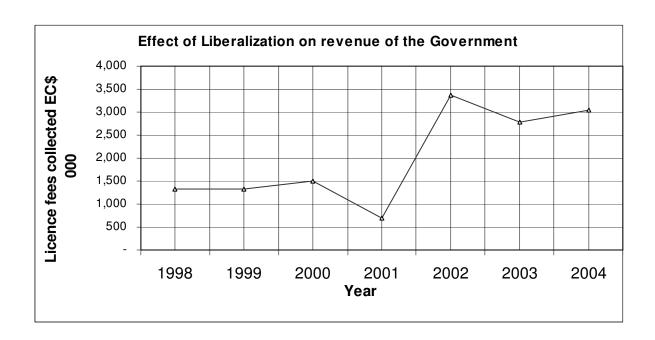
As the data below shows there was an increase in fees collected by the Government over the period.

| | Go Royalties | overnment of SV Licence fees | 'G Total | % Increase / (Decrease) over previous year |
|------|-----------------|---------------------------------|-------------|--|
| 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 | - | 2,791,537 | 2,791,537 | -17% |
| 2004 | - | 3,049,468 | 3,049,468 | 9% |
| | 4,679,331 | 9,357,188 | 14,036,519 | |

Note:

The 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 based on the definition used in the existing licence agreements. After that date all payments from licenced providers were called Licence fees. Licence fees were also received from Karib Cable, CCA Ltd and FM Radio Stations etc, over the period.



The low Royalties collected in calendar year 2001 was due to the fact that after paying the fees for April to September 2001 the company later stated that it did not think it should have paid royalty fees in this period. Their reason was that this period came after the Telecom Act of 2001 was enacted in April 2001 thereby terminating there monopoly licence agreement with the Government and before they were issued with new licences under the Act in October 2001. They later deducted the amount they had paid from subsequent remittances; the licence fees for this period are still in dispute.

Revenue collected by the government saw a significant increase in 2002 followed by a slight decrease in 2003. The increase in 2002 was due to a change in the method of computation of fees due to the government. Prior to the enactment of the Telecom Act 2001, Royalties were calculated as 3% of International Revenue. With the new act, however, Licence fees were now payable at 3.5% of Gross Revenue not just International Revenue. The increase in calendar year 2002 was due to an increase in the rate of the licence fee payment, the change in the base from only International Revenue to all revenue as well as an overall increase in the revenue of the incumbent in that year. 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" with the gazetting of the new fee structure on January 21 2003. The change in the definition of

Gross Revenue caters for payments to other local providers for interconnection charges. Under the new definition a company does not have to pay licence fees on revenues that will not be staying with the company but is being transferred to another company. As such in 2002 CWCC would have paid licence fees on revenue received from C&W due to interconnection even though C&W was also paying licence fees on the same revenue. The change in 2003 was made to avoid this double counting and would have resulted in the drop in licence fees in 2003. The 2004 government revenue, however, shows signs of recovery. It is up by 9% over 2003.

7.1.4 Effect of Interconnection Charges on Licence fee payments

The total revenue for all operators for the year ended March 31, 2004 was approximately \$134 million. This was \$35 million more than the previous year representing a 35% increase. The total revenue figure in 2004, however, includes interconnection costs for each operator. Interconnection costs refer to amounts paid by one provider to another for use of its network infrastructure for terminating or transiting calls made from the originating provider.

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. Take as an example, a fixed to mobile call originating on Cable & Wireless WI network and terminating on Digicel network. The caller pays \$0.81 to Cable & Wireless WI who in turn turns over \$0.61 of that amount to Digicel. Cable & Wireless would include the \$0.81 collected in its total revenue figure and Digicel will also record the \$0.61 in its total revenue. Under the amended fee structure regulation Cable & Wireless does not pay licence fees on the \$0.61 that it pays over to Digicel.

To use this example as a guide, the \$0.61 amount paid as interconnection charges by Cable & Wireless to Digicel is exempt from licence charges by Cable & Wireless. It is

however recorded as revenue by both the provider collecting the revenue from the user (C&W) and also by a second provider (Digicel) whose network is also used. In order to avoid double charging licence fees on the interconnection portion, the interconnection amount (\$0.61) collected by the provider on whose network the call originates, is deducted from revenue and the licence fees payable computed on the resultant figure.

Licence fees under the amended fee structure regulation effective January 21, 2003 are paid on "gross" revenue, as mentioned above, which is defined in that regulation as:

"revenue of the reporting year received by, or due to the Licencee and its affiliates, from whatever source derived before any deductions for expenses, discounts, returns, or offsets of any kind, save and except, domestic interconnection payments and those pass through taxes or charges for and on behalf of the Government or the NTRC."

Interconnection charges in 2004 totaled \$22.6 million. The total revenue collected for 2004 after deducting interconnection payments is approximately \$111 million. This represents a \$12 million (12%) increase over the previous year. The increase in licence fees in 2004 of 9% can thus be seen to be reasonable when compared to the increase in gross revenue (adjusted for interconnection payment) of 12%.

7.2 Projected Revenue for 2005: The NTRC projects to collect around \$1,782,000.00 from frequency authorisations fees in 2005 based on the current fee structure. It is however possible that this projection could be different depending on when the new fee structure regulations is implemented. ECTEL is in the process of recommending a new fee structure for adoption of member states following the completion of the public consultations in 2004. It is unclear whether the new fees regulations will increase or decrease frequency revenue. The ambiguity is due to some unclear definitions in the draft fees regulations.

Having looked at statistics from the companies after one full year of competition, the NTRC is of the view that there would not be significant changes to the subscriber base or

tariffs in 2005; as such licence fee revenue which is based on the gross revenue of companies should be comparable to 2004 figures.

The NTRC should expect minimal applications in 2005; as such the figures for 2005 should be even less than 2004. A major portion of application fees in 2004 was due to the re-licensing exercise undertaken during the period.

7.3 Training done in 2004:-

- 1. The Director of Telecommunications attended a two day workshop on "Numbering" sponsored by the CTU and held in St. Lucia.
- 2. All Senior staff and Commissioners attended a two day Legal Seminar on "Telecommunications regulatory issues". The Seminar was sponsored by ECTEL and was held in St. Vincent.
- **3.** The Director attended a one week course on "Internet regulation and Trade Policy" sponsored by USTTI, ECTEL and the NTRC and was held in Washington D.C.
- **4.** The Director of Telecommunications attended a two day workshop "Home Network Identifiers" sponsored by the CTU and held in Trinidad.
- **5.** The Administrative Officer continued with his CGA accounting certification program. Two examinations were taken during the year. Partly funded by the NTRC.
- **6.** The ICT Officer completed one module of the "Microsoft Certified Systems Engineer (MCSE)" program (Four modules remain) partly funded by the NTRC.
- 7. The ICT Officer 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 a three day seminar in Jamaica sponsored by the NTRC.
- **8.** The Radiocommunication Engineer and the ICT Officer attended two one week workshops on "Spectrum Management and Monitoring" in St. Lucia sponsored by the OECS Telecom Reform Project. This training is the last under the project

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: In keeping with the implementation agreement for the Price Cap Regime for Cable & Wireless, it was necessary to establish new Retail Tariff regulations which repealed the existing Tariff Regulations. These new regulations were implemented in the last quarter of 2004 as S.R& O # 23 of 2004. Consultations were carried out on other draft regulations during 2004 and which should be implemented in 2005.
- **7.5 Staff:** There was no staff churns during 2004, as such, all staff members from 2003 continued with the NTRC in 2004. This has led to a continued development of expertise through all staff levels and resulted in the NTRC being able to operate smoothly during the period. However, this will be changing early in 2005 noting that the Radio Engineer has submitted his resignation and will be taking up a post with ECTEL in the first quarter of 2005.

The NTRC has been able to maximize the efficiency of its small staff compliment by having multiple duties assigned to all staff. The office remains open to the public from 8:00 am to 4:00 pm Monday to Friday. The NTRC does not have a typist only, or receptionist only or office attendant only. For example the NTRC Administrative Assistant assists the Administrative Officer with his duties, while also doing typing duties, receptionist duties and acting as the secretary to the Director of Telecommunications. Similarly, the Office Assistant does clerical duties, office attendant duties, and some duties of the Administrative Assistant when she is on lunch or leave.

- 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 functions. responsibility for certain The **ECTEL** Treaty Telecommunications Act have some contradictions which have led to these issues developing. There are also instances where the Act and Treaty are quite clear on who has responsibility yet there are problems. This has led to duplication of work which in turn has led to confusion for some of the licencees on occasions.
- Numbering: There is still no National Numbering Plan in place. The plan is to be developed based on a Regional Numbering Plan that is to be developed by ECTEL for the Contracting States. The absence of the numbering plan which allows the NTRC to assign numbers to local providers in accordance with the numbering regulations, the NTRC has to resort to ECTEL for assignment of numbers. This has resulted in delays in assignment and non-assignment. However, it seems that some progress is being made in this area as a Draft Numbering Plan has been developed by ECTEL in 2004 and which public consultations were held to gather comments from stakeholders. It is the objective to have the plan finalized in 2005.
- Management. This was a great year as it related to Spectrum Management. The NTRC finally received the specialized equipment to carry out its Spectrum Management and Monitoring activities as mandated by the Telecom Act. The equipment was procured due the OECS Telecom Reform Project. The equipment comprises of a vehicle outfitted with the relevant equipment as well as equipment that is based at the NTRC office. With this equipment, the NTRC can now carry out its weekly monitoring activities with more precision and expertise. The equipment will also help in solving frequency interference issues and in the proper assignment of new frequencies. The equipment is linked via a network

connection to other equipment located at ECTEL so as to harmonise the spectrum management functions across the sub region.

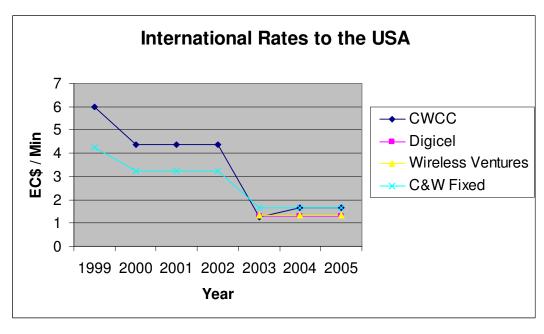
- **7.9 Policy:-** The NTRC continued to work closely with ECTEL in the development of new regulations during 2004. Work has also commenced on reviewing the Telecommunications Act and licencing regime. All of this work will go back to the Minister for final approval before being implemented on the sector.
- 7.10 Litigation: The NTRC was not involved in any litigation during 2004. This is a lot different than 2003. A main reason for this could be the fact that major competition came to the sector in 2003. Also agreement was reached between ECTEL and Cable & Wireless on the price cap regime in 2004 without having to pursue litigation. It should however be understood that there are other issues affecting the sector that could result in litigation in the future and as such, the NTRC should have a clear mechanism in place on how to proceed with legal action when necessary.
- 7.11 ICT:- The NTRC continued with the development of its ICT resources and functions during 2004. An extension of its Local Area Network (LAN) was carried out to cater for the installation of additional computers that will be used for Spectrum Management functions. A wireless access point was installed in the conference room. This would allow for easier access to the Internet and documents during meetings. It is also beneficial to persons visiting the NTRC from overseas and who may require access to the Internet while visiting using their own laptops.

An Accounting software package (Peachtree) was purchased in 2004 based on the recommendations of KMPG. This software has been installed on the network and will be used in computerization of the NTRC accounting functions. The system should be fully operational in early 2005.

The NTRC has also developed in house a customized cataloging system using Microsoft Access. The system is similar to what could be found in a library but is specifically design for a specialized agency such as the NTRC. Staff can now use the system to locate information within the NTRC library on a number of topics whether it is located within a text, periodical, manual, report from a meeting, CD, etc.

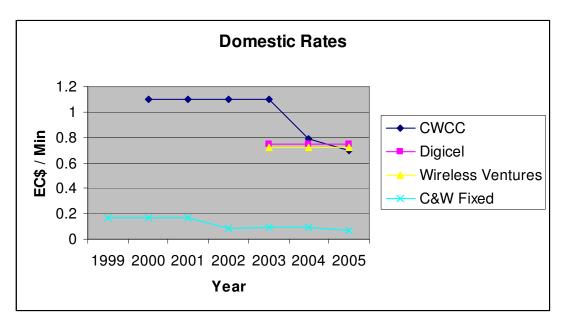
The NTRC also completed work on its document tracking software in 2004 whereby all correspondence both incoming and outgoing are tracked on an ongoing basis. This allows for timely responses and also to follow up on tasks that are assigned to staff members or outside entities. All correspondence is given a tracing number and can be easily located at any time by any staff member using the application. This application was also developed in house.

7.12 Statistics: The NTRC continued in 2004 with the provisioning of statistical data from the Telecommunications sector to a number of local, regional and international entities. The NTRC will be looking to implement a standardized format for collecting data on a quarterly basis in 2005. This will be done in collaboration with ECTEL. This information will be analysed on an ongoing basis to guide both the decision making process of the Government, ECTEL and the Commission. Data for 2004 with comparable figures for earlier years where available are outlined below:



Graph 1

The rates depicted in Graph 1 are not regulated.

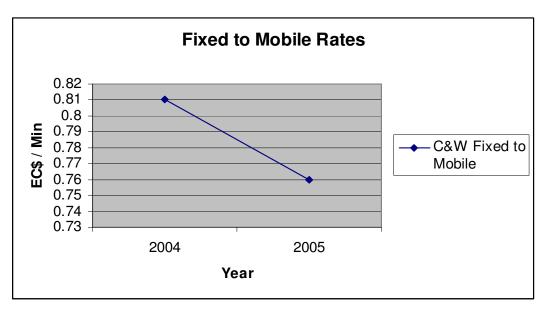


Graph 2

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

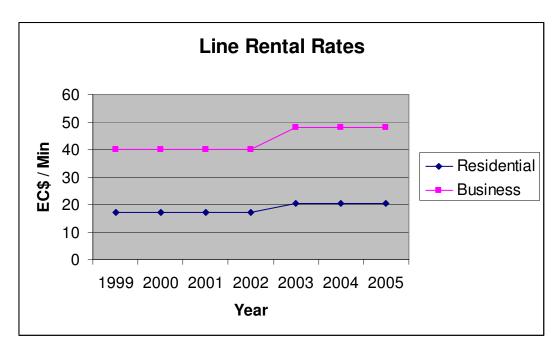
The Cable & Wireless fixed line rate from 1999 to 2001 was EC\$0.17 for 2 minutes; however the subscriber also paid EC\$0.17 for a 1 minute call.

The 2005 C&W Fixed rates are set by the Price Cap Regime



Graph 3

The 2005 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. The rates for 2005 have been prescribed under the Price Cap Regime.

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

| | Fixed Line | Mobile | | | | | | |
|-------------|------------|------------|---------------------|----------------|-------------------|--|--|--|
| | | Post- | oaid | Pre- | paid | | | |
| Country | Rate | Rate / min | Minutes Included | In- Network | Cross- Network | | | |
| Barbados | 42.26 | 0.14 | 175 | 0.10 | 0.35 | | | |
| Jamaica | 6.47 | 0.13 | 600 | 0.16 | 0.30 | | | |
| Trinidad | 5.01 | 1.19 | 89 | | | | | |
| England | 34.18 | 0.47 | 30 | 0.60 | 0.66 | | | |
| USA | 30.00 | 0.09 | 450 | 0.10 | 0.35 | | | |
| Romania | | 0.14 | 60 | | | | | |
| Singapore | 4.65 | 0.19 | 100 | 0.10 | 0.10 | | | |
| India | | 0.05 | 60 | | | | | |
| China | | 0.07 | 170 | 0.07 | 0.07 | | | |
| Taiwan | 2.06 | | | 0.17 | 0.17 | | | |
| Germany | 15.00 | 0.40 | 50 | 0.35 | 0.35 | | | |
| St. Vincent | 7.73 | 0.22 | 75 | 0.25 | 0.28 | | | |

Note:

The fixed line rates quoted for Barbados, England and the USA is the monthly tariff for unlimited calling.

The rates quoted for Jamaica, Trinidad, Taiwan, Germany, Singapore and St. Vincent is their monthly subscription.

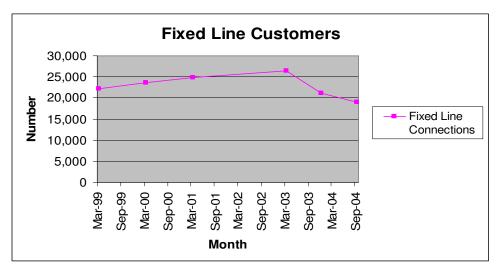
Below is a comparison of Internet rates in US\$ for selected countries worldwide:

| | Barbados | Jamaica | Trinidad | Mexico | England | USA | India | St. Vincent |
|---------------------|-----------------|---------|----------|--------|---------|------|--------|-------------|
| Dial-up Internet | | | | | | | | |
| 10 hours | 14.08 | 28.75 | | | | | | 12.96 |
| 20 hours | | | 79.35 | | | | | |
| 30 hours | | | | | | | | 29.62 |
| 40 hours | 24.99 | 51 | | | | | | |
| 50 hours | | | 143.75 | | | | | |
| 100 hours | | | 230.00 | | | | | |
| 500 hours | | | | | | | 72.00 | |
| 1000 hours | | | | | | | 114.28 | |
| Unlimited | 28.91 | 59.00 | 345.00 | | | 9.95 | 205.71 | 47.77 |

Broadband Internet

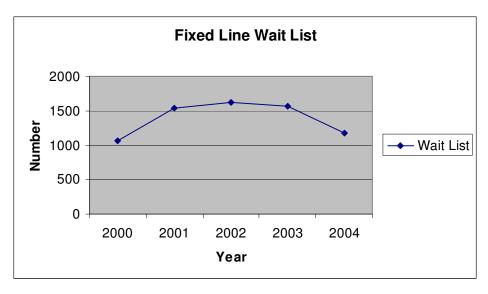
| 64k | | | | 88.00 | | | |
|-------|--------|--------|----------|----------|-------|-------|--------|
| 128k | 48.51 | 99.00 | 460.00 | 177.00 | | | 65.88 |
| 256k | 73.25 | 149.5 | 1,788.00 | 319.00 | | 24.95 | 91.65 |
| 512k | | | | 566.00 | 33.50 | | |
| 768k | 208.5 | 425.5 | | | | | 220.47 |
| 1024k | | | | 1,062.78 | 40.20 | | |
| 2048k | | | | 1,417.16 | | | |
| 1544k | 339.79 | 693.45 | | | | 32.95 | 367.7 |
| 3072k | | | | | | 44.95 | |

| T1 Leased | | | | | |
|-----------|-----------|-----------|--|--|-----------|
| Circuits | 23,422.00 | 18,240.00 | | | 20,072.00 |



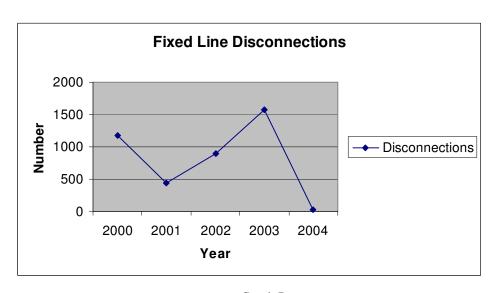
Graph 5

Graph 5 shows the numbers of connected fixed line customers from March, 1999 to September 2004. This graph is based on data submitted by Cable & Wireless however in subsequent information requested from the company which is outlined in the below graphs seems not to support the above data. The NTRC is pursuing the matter.



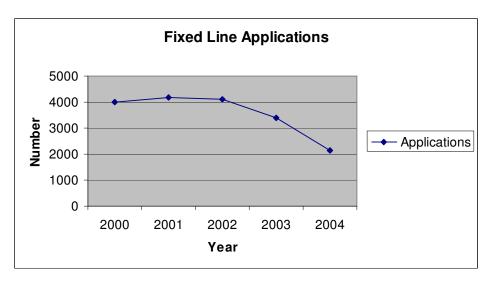
Graph 6

Graph 6 shows the number of customers on Cable & Wireless's waiting list for fixed line telephones.



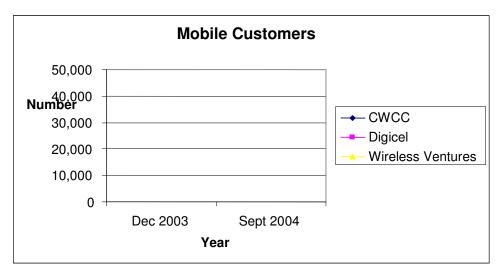
Graph 7

Graph 7 shows the number of customer fixed line customers disconnected during each year..



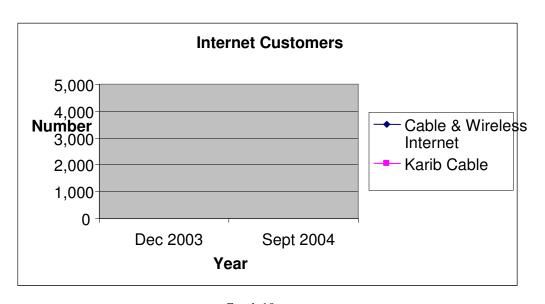
Graph 8

Graph 8 shows the number of applications made for fixed line service.



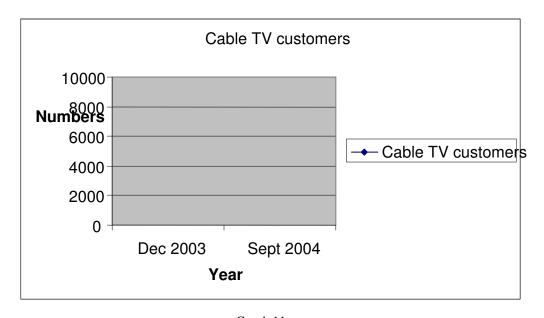
Graph 9

Graph 9 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 were in 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.



Graph 10

Graph 10 shows the number of Internet customers by provider



Graph 11

35

Graph 11 shows the number of Cable TV subscribers

Detail Customer Stats

| Cable & Wireless (West Indies) Limited | | Dec '03 | Sept '04 |
|---|----------------------|------------|-------------|
| | | | |
| Fixed line Customers | | | |
| | Residential | XX,XXX | XX,XXX |
| | Business | XXXX | XXXX |
| | Total | XX,XXX | XX,XXX |
| 1 | | | |
| Internet Customers | Dialor | | |
| | Dialup | XXXX | XXXX |
| | ISDN | XX | X |
| | ADSL Total | XXX | XXX |
| | Total | XXXX | XXXX |
| Cable & Wireless Caribbean Cellular | | | |
| Mobile Customers | | | |
| Mobile Gustomers | Post paid | XXX | XXXX |
| | Prepaid | XX,XXX | XX,XXX |
| | Total | XX,XXX | XX,XXX |
| | 10141 | жижж | АХ,ХХ |
| Digicel | | | |
| Mobile Customers | | | |
| | Post paid | XXXX | XXXX |
| | Prepaid | XX,XXX | XX,XXX |
| | Total | xx,xxx | xx,xxx |
| Wireless Ventures(AT&T) | | | |
| Mahila Cuatamara | | | |
| Mobile Customers | Post paid | VVV | VVV |
| | Post paid Prepaid | XXXX | XXX |
| | Total | XXXX | XXXX |
| | Total | ^^^^ | **** |
| | | | |
| Karib Cable | | | |
| Cable TV customers | | XXXX | |
| Internet customers | | XXX | |
| | | | |

- 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 Telecommunication on ships, and issuing 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 to licence ship stations. 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 conducted a number of Public Consultations during 2004 and these were as follows:
 - Price Cap Plan (PCP): A public consultation was held on the draft PCP that was recommended by ECTEL to regulate certain prices of incumbent provider Cable & Wireless (West Indies) Ltd.
 - **2. Broadcast Licences:** Two rounds of Public Consultations including a meeting with stake holders were held in relation to the draft broadcast licence templates that were developed by ECTEL for adoption by member states.
 - 3. Numbering Plan: A public consultation was conducted on a draft regional numbering Plan. A second round should commence in 2005. This regional numbering plan is required by the Telecom Act and will guide the development of national numbering plans in the ECTEL member states. Numbering plans are needed for the efficient management and assignment of all numbers/codes used by telecom providers in their networks.
 - **4. Fee Structure Regulations:** The NTRC held consultations on the new draft fees regulations. The fees regulations covers all fees prescribed under the telecom act and include application, licence, frequency fees, etc. It is envisioned that this new

fee structure regulations should be in place in the member states in 2005. This regulation will replace the current fee structure regulations S.R & O #24 of 2002 which was amended by S.R & O #2 of 2003.

- 5. Dispute Resolution Regulations: Two rounds of consultations were held on these draft regulations in 2004. These regulations have been pending for quite some time and are critically needed in the sector. These regulations will guide the NTRCs in handling any disputes filed under the Telecom Act either by providers or customers. These regulations should be implemented in 2005.
- **7.15 Public Relations:** As part of the NTRC public awareness program, four community meetings were held across St.Vincent and the Grenadines. Meetings were also held with secondary and tertiary level institutions. NTRC personnel also participated on radio talk show programs.

A television series was also conducted during the last quarter of the year. A logo competition that involved the public was also a part of the NTRC public awareness program for the year. With the implementation of the Dispute Resolution regulations early in 2005 that will affect all telecom consumers The NTRC would continue its PR work in a targeted manner noting the limited human and financial resources.

7.16 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.

There are still a number of applications pending from 2002 and 2003; these include Subscriber Television, FM Broadcast, TV Broadcast and Community Radio. Some of these companies are already operating and need to be licenced under the new Act, others are new applications. The longer it takes to grant these

licences the greater the amount of revenue lost to the Government and the regulatory regime. ECTEL has recently forwarded licence templates for some of the licences. This will allow for the licencing process to be completed early in 2005. However draft licence templates for Community Radio and TV Broadcast remain outstanding.

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

7.17 Training

| Training Needs | Commission ers | Director | Admin Officer | Admin Assistant | Office Assistant | Engineer | ICT Officer |
|--|-------------------|----------|------------------|--------------------|---------------------|----------|-------------|
| Telecoms Law and Legal Environment | х | | | | | | |
| Telecoms regulations and implications | 7 | Х | | | | | |
| Regulation | | | X | Х | | Х | Χ |
| Telecoms Policy and Strategy | х | X | | | | | |
| Interconnection (technical, legal, economic) | | | | | | | |
| Interconnection (economic and finance) | х | | X | | | | |
| Universal Service / Access | х | | | | | | |
| Licensing (carriers and services) | | | Х | X | | | |
| Price caps | | Х | | | | | |
| Costing and Pricing | | | X | | | | |
| Quality of Services | | | X | | | | |
| Ship station licensing | | | X | | | | |
| Internet Governance | | X | | | | | |
| Spectrum Monitoring | | | | | | X | X |
| Spectrum Management | | | | | | X | X |
| Microsoft Office Suite | | X | X | X | X | X | |
| Microsoft Networking systems | | | | | | | X |
| Peachtree Accounting | | | X | X | Х | | |
| Website development and maintenance | | | | Х | | | |

The above matrix outlines the current training needs of the NTRC Commissioners and staff.

8. **Broad Response Strategies:**

As the Telecom Sector continues to be liberalized via the introduction of competition in the various telecommunications services the NTRC in collaboration with ECTEL has to respond to 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 by itself. It has to depend on ECTEL for expertise in the areas of Economics and Law both of which are central to a regulatory regime. In this regard the NTRC will endeavor to monitor the necessary tasks required to fulfill its objectives for 2005, and would pursue all avenues in having this done both directly with the ECTEL Directorate located in St.Lucia, and indirectly through it's Board and Council of Ministers.

The NTRC is of the view that there is an urgent need to improve the linkages/relationship between the NTRCs and ECTEL. A number of issues of national importance are dealt with at the ECTEL level and there is no formal system/process in place to have the views/inputs of the NTRC taken into consideration when formulating recommendations to the NTRC for implementation. This has led to delays and implementation of recommendations that the NTRC view as not being in the country's best interest in the past. This issue was brought to the fore at the ECTEL/NTRCs retreat that was held in September 2003. However, there was no clear consensus of how this can be achieved. The current regulatory regime while requiring both the NTRC and ECTEL to carry out functions that are interlinked there is no provision in the legislative framework to interlink the organizational structure. The NTRC is of the view that the best solution to this issue is to review the regulatory framework that exists. The NTRC will take the opportunity during the planned review of the regulatory framework planned for 2005 by ECTEL to recommend some solutions to these problems.

The NTRC will continue to make its services more accessible and efficient by continued development of its interactive web site. With a liberalized regulated environment in place, the need for information by consumers, investors, and the licence holders will be much greater. The web-site is necessary not only for easy access to non-confidential material but also to facilitate an easier process for filing and renewing licence applications as well as conducting public consultations.

One of the main shortcomings of the NTRC since inception is the ability to handle complaints both by licencees and customers. The NTRC has been campaigning for the implementation of the dispute resolution regulations for the last three years. To this end, the Commission has spent considerable time in commenting on the draft regulations that were circulated in 2004 and is of the view that the final draft should be capable of providing the framework necessary to handle any disputes in the future. The NTRC looks forward to having the regulations in place in 2005 and will be putting the necessary administrative measures in place to cater for the mandate of the dispute resolution regulations.

To address the area of training for the present staff and Commissioners of the NTRC. The NTRC will continue to seek relevant training opportunities specifically those that are fully or partly sponsored by international and regional institutions such as the ITU, CTU, CIDA, CTO, USAID, CITEL, CANTO and ECTEL including courses offered through distance learning. With the NTRC current small training budget this is the only viable way at present in trying to fulfill the training needs of the NTRC. The NTRC will again try to have the Ministry of Telecommunications pursue the possibility of accessing funds from the European Union to implement the "Telecom Skills Development" project which was part of the Government's 2002 estimates but which has not started to date. This area is in keeping with fulfilling the objectives of the key result indicator of the Ministry of Telecommunications for the NTRC as outlined in the 2004 estimates.

The NTRC will put the necessary facilities/equipment in place that will be responsible for monitoring quality of service obligations of all licence providers in St.Vincent and the Grenadines. This will ensure that the providers meet the minimum standards outlined in their licences and will be to the benefit of their customers in this liberalized market. One of the first parameters that usually suffer in a competitive market is that of quality of service.

The NTRC will continue to raise the issue of international access both at the local and regional levels. This issue is the last hurdle in bringing the full benefits of a liberalized sector to the citizens of the OECS. By keeping the issue alive, the relevant parties that can make a difference on the issue will take the required actions.

The NTRC will try to facilitate deepening the understanding and value of harmonization, collective action and the fundamental principles of the treaty establishing ECTEL. The NTRCs and ECTEL have to come to the realization that when dealing with regulatory matters that involve large established corporate providers, the most successful way of countering their dominance is always to harmonize not only the NTRC legislative framework, but its approach to issues, there is absolutely no value in each NTRC taking on a regional provider individually without reference to or the implicit support of the other NTRCs.

As such ECTEL and the NTRCs will have to:-

- Ensure that Legislation/Regulations in each Member State mirror each other as far as possible. Additional, there must be a concerted effort to rationalize inconsistencies between the Treaty, the Telecommunications Act and Regulations.
- Ensure that the views of all NTRCs are solicited in a timely manner before any action that affects an NTRC is contemplated.
- Ensure that their Ministers and Board Members discuss the fundamental principles of the ECTEL Treaty, this would go a far way in dispelling a number of misconceptions.
- Periodically meet with all of the NTRCs to discuss and deepen each others understanding of the fundamental principles of the ECTEL Treaty.

- Ensure that policy and recommendations emanating from any level of ECTEL should be discussed with the NTRCs for their input prior to them being discussed/approved at the Board /Council level.
- With the approval of the NTRCs, set up a regional legal team to deal with various litigations in the ECTEL Member States, thereby providing continuity, efficiency, and cost effectiveness.
- Promote the need for collective efforts in all matters with special emphasis on matters related to Legislative, Financial and Legal Issues, always preserving the established levels of independence between the various components of the Regulatory Framework.
- Review the need for the imposition of penalties/fines for any breach of its Legislation.

9. Result Indicators 2004

- Establish the Universal Service fund: This fund is required by the Telecommunications Act of 2001 and would be used to facilitate universal service and access within the telecom sector in St.Vincent and the Grenadines. The Universal Service fund was established in early 2004. Some fees have already been collected from telecom providers and deposited into the fund. The NTRC is currently awaiting the enactment of the relevant regulations under the Telecom Act that will govern disbursements from the fund. Work on these regulations should be completed in 2005 and would be guided by a World Bank study on Universal Access in the ECTEL States scheduled to be completed in early 2005.
- Facilitate competition in the fixed network: Kelcom International was
 granted a fixed network licence in 2003, however to date, the company has
 not commenced service in this sector. A possible obstacle to the
 commencement of competition in this sector could be affordable rates for
 international access.

- regulations needed for the sector: New Retail Tariff Regulations were implemented in the last quarter of 2004. Completed consultations on new dispute resolution regulations and amendment to the fee structure regulations in 2004. These should be ready for implementation in 2005. The NTRC started a comprehensive review of the Telecommunications Act of 2001 in 2004 with the objective of addressing current deficiencies. This is being undertaken in conjunction with ECTEL and the other NTRCs in the sub region in the interest of preserving a harmonized Telecommunications regulatory framework in the sub region. The NTRC has indicated to ECTEL the urgent need for regulations to govern wholesale tariffs.
- Facilitate the establishment of a pricing control mechanism for the incumbent provider Cable & Wireless: Work on this has been ongoing since 2002. In 2004 ECTEL and Cable & Wireless came to an agreement on a propose Price Cap Plan (PCP) which will regulate the rates of certain services of the incumbent operator Cable & Wireless until 2008. The PCP was approved by the NTRC after completion of a public consultation process in 2004 and will take effect from January 1, 2005.
- Have all existing licencees, re-licensed under the Telecommunications Act of 2001: All persons licenced (or Authorised) prior to the enactment of the Telecommunications Act of 2001 are required to obtain licences under the said Act. Until this process is completed both the Government and the NTRCs will continue to lose revenue. The NTRC has made progress in this area during 2004. All categories of licences except the broadcasting category are completed. The delay in the broadcasting category is due to the unavailability of licence templates under the Act. Draft templates that were prepared by ECTEL were circulated to stakeholders recently after a delay of almost two years. The final Draft Broadcast licence templates were received in December 2004 as such the process should be completed in 2005.

- Establishment of a communication protocol between ECTEL and NTRCs to facilitate a more cohesive regulatory process in the sub region: The draft protocol has been completed by the NTRC and will be circulated to the relevant stakeholders for comments shortly.
- Establish a public relations campaign in collaboration with ECTEL and the other NTRCs: The campaign was held in the first quarter of 2004. It involved the following:
 - o Community meetings in various locations around the country.
 - o Radio call in programs.
 - Meetings involving secondary and tertiary institutions.
- Establishment of procedures/guidelines for dealing with complaints by both consumers and licencees: The NTRC is required by law to handle complaints by both licencees and telecom consumers. The NTRC has worked closely with ECTEL in developing draft dispute resolution regulations in 2004. These draft regulations went through two rounds of public consultation in 2004 noting its importance and should be ready for implementation in early 2005.

10. <u>Objectives 2005</u>

1. **Dispute Resolution:** The new Telecommunications Dispute Resolution Regulations should be implemented in early 2005. With this implementation, the NTRC would be in a position to carry out one of its main functions under the Telecommunications Act of 2001. It would be able to process complaints/disputes by consumers and providers. In a competitive sector especially one in its early

stages, it is important that Licencees (specifically new entrants) have an avenue outside of the judicial system to resolve disputes that develop. This is one area that the NTRC has been deficient in since opening the sector. Consumers also need to have redressed if they are unsatisfied with a decision or action of a provider. The only redress at present is to either change provider or take the provider to court. The second option is usually not an option nothing the costs involved. Changing the provider should be a last resort. With the new regulations consumers would have a better option to turn to than what exists currently at minimal or no cost to them. The NTRC will be establishing the necessary internal administrative procedures to cater for the requirements of the dispute resolution regulations in 2005.

- 2. **Broadcast Act:** The NTRC will continue working with the OECS Secretariat in developing a draft broadcast Act for adoption in member states. The objective of this act is for the regulation of the content and programming of broadcasting entities operating in member states of the OECS.
- 3. **Price Cap Plan:** With the implementation of the Price Cap Plan consumers will be paying lower rates for fixed line voice services in 2005.
- 4. Wholesale Rates: One of the critical issues facing the telecom sector is that of the rates offered by some providers to other providers. Especially of importance are the rates being offered by the incumbent to competitors. Over the past two years the NTRC has been informed that the rates usually offered to these new providers are higher than what the incumbent charges for the same service to its retail customers. As these wholesale rates are not currently regulated there is very little that the NTRC could do. However, with regulations enacted to govern wholesale tariffs the issue could be addressed. ECTEL has indicated that they would be developing regulations for wholesale rates in 2005.
- 5. **New Fee Structure:** ECTEL in collaboration with the NTRC is facilitating an amendment to the current fee structure regulations. This should be implemented in early 2005. The objective of the amendment is to correct certain deficiencies within the current regulations and to provide for sufficient revenue to sustain the regulatory structure of the sector.

- 6. **International Access:** At present International telecommunication access is provided as follows:
 - Through Cable & Wireless who part owns the only submarine cable (undersea fiber optic cable) that terminates in St.Vincent. This type of access provides the greatest telecom bandwidth at the least cost without any noticeable delays as compared to other means of international transport such as satellite links.
 - Karib Cable uses a satellite link to provide their Internet service to their customers. Wholesale rates quoted by C&W to Karib Cable to use their submarine cable were prohibitive.
 - Digicel and Wireless Ventures both use a microwave link to St. Lucia.
 This link also takes both companies traffic from Grenada via St. Vincent.
 Digicel then uses a satellite link for international access from St. Lucia.
 Wireless Ventures uses a lease circuit (from Cable & Wireless) for international access from St. Lucia.

All of the providers above will prefer to get international access via a submarine cable if there were offered cost based rates. Not only will their communication costs would be less but the quality of service would be better than what is delivered via satellite. In 2005, the NTRC in conjunction with ECTEL will be trying to resolve this situation. This would be tackled from three angles:

- (1) To licence other providers of submarine cables. Kelcom International a local company has just applied for such a licence.
- (2) Facilitate other short term technical solutions, a U.S based company, Antilles Crossing is planning to terminate a submarine cable in St. Lucia within the next to years. This can then be used to replace the current International satellite links in St. Lucia that currently service

- St. Vincent. This in turn will also offer surplus bandwidth that can be made available to other providers in St. Vincent.
- (3) This option might not give the best results but would be better than what currently exists and can be implemented faster than the other options. Option three will require the regulation of international lease circuit tariffs of the incumbent Cable & Wireless. This service is still a monopoly service in the OECS. This can be done under wholesale tariff regulations which ECTEL and the NTRCs plan to have implemented in 2005. Currently, the service is unregulated which has led to the provider setting the rates in an ad hoc manner since the market was liberalised.
- 7. **Statistics:** There is a need to have data collected from the companies on an ongoing basis so that proper and timely analysis can be done with the sector. The NTRC in the past two years has tried to do this on a quarterly basis. While the NTRC obtains the information, it is never timely, as some of companies have to be written to on numerous occasions with follow up telephone calls. The NTRC will try to work with ECTEL in 2005 in developing a standardized format for collection of data that would be adopted in all the ECTEL States. It will then convene meetings with the managers of the companies to outline the importance of the tasks and seek their commitment in providing the relevant data on a timely basis. The issue of penalties also arises here in that the current regulatory framework requires the providers to provide any information that is requested by the Commission or ECTEL. However, due to the absence of penalties some of the providers refuse to submit information that is requested.
- **8. Quality Service Obligations:** The Licences issued to service providers under the Telecom Act requires that the provider meets certain quality of service targets to their customers. To date, as the Regulator, it has not been monitoring these targets. In 2005 there are plans to start implementation of such a program. This would require that the NTRC be able to access the services being offered by the

providers and also requiring the providers to file certain information on a regular basis with the NTRC. Due to the financial implications, this program will have to be done on a phased approach. Notwithstanding this, the NTRC will explore the possibilities of having the providers provide the required access to their services either at no cost or reduced cost noting the objectives of the program. The NTRC would also examine the possibility of having this requirement placed in the licences issued to future applicants.

11. Annex A

11.1 <u>Technical Definitions/Terminology</u>

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:- "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"*

12.1 <u>Audited Financial Statements 2003</u>