



NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
ANNUAL REPORT 2019

About Cover Photo

The cover photo shows an intern at the NTRC reviewing software codes for the iOS version of the Vincy Wi-Fi App. The Vincy Wi-Fi app was launched in 2019 by the NTRC to display various locations that offer open Wi-Fi access across St. Vincent and the Grenadines. The app also provides turn by turn directions on how a person can get to a selected location. The app is available free of charge on the Google Play Store and the Apple Play Store.

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1. Mission Statement

To facilitate quality, relevant and affordable Telecommunications Services throughout St. Vincent and the Grenadines.

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. Functions

The National Telecommunications Regulatory Commission (NTRC) in collaboration with the Eastern Caribbean Telecommunications Authority (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 (CAP 418) of the Revised Laws of St. Vincent and the Grenadines 2009.

4. The Commissioners



Mr. St. Clair Scott
Chairman



Mrs. Roxann Williams
Deputy Chairperson



Mr. Richard MacLeish
Commissioner



Dr. Alston Stoddard
Commissioner



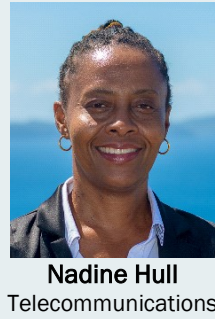
Mr. Petrus Gumbs
Commissioner

5. Staff Members

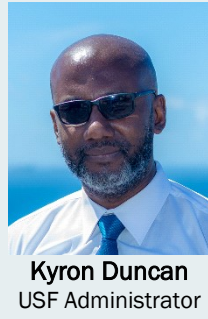




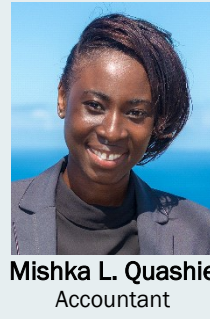
Apollo Knights
Director



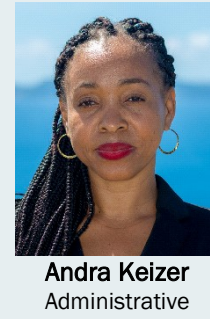
Nadine Hull
Telecommunications
and Information
Manager



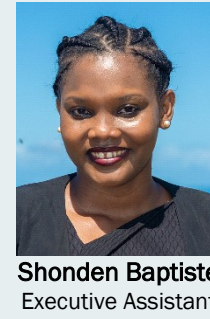
Kyron Duncan
USF Administrator



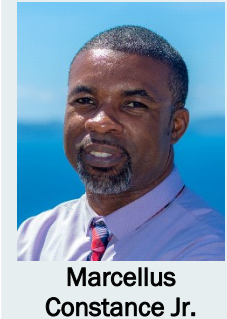
Mishka L. Quashie
Accountant



Andra Keizer
Administrative
Officer



Shonden Baptiste
Executive Assistant



**Marcellus
Constance Jr.**
Technical
Operations
Manager



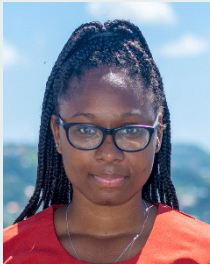
Cyron Cyrus
Software Developer



Eustasha Walter
Public Relations
Officer



Jori Thorne
Accounting Officer



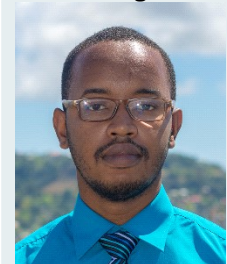
Shadeja Gordon
Customer Experience
Officer



Ronika Boyd
Public Relations
Officer



Shemar Leacock
Intern



Nashaza Anderson
Intern



Keisha Gurley
Consumer & Public
Relations Manager

SWOT Analysis

Strengths

- Availability of sufficient ICT infrastructure and software to efficiently carry out the NTRC's regulatory functions.
- Diversity of relevant skills and experience among current staff.
- A balanced combination of experienced staff alongside young, innovative and qualified interns.

Weaknesses

- Inadequate price control mechanisms for dominant suppliers of services specifically in areas of mobile, voice data, Fixed Broadband and Cable TV retail rates.
- Lack of regulatory oversight on promotional activities of mobile network operators.
- Absence of Quality of Service (QoS) regulations in the sector.
- Office space is inadequate for the current staff size.

Opportunities

- Ability to develop projects under the Universal Service Fund capable of reducing the digital divide that exists within our communities relating to data communication and knowledge sharing.
- Ability to address some of the current regulatory legislative deficiencies with new electronic communications act.
- Potential for the harmonization of Internet access speeds on the Grenadine islands with those that exist on mainland St. Vincent with the establishment of the Subsea fiber cable implemented under the CARCIP project in 2019.
- Potential for Quality of Service (QoS) improvements among mobile service providers as an indirect spin off from mobile number portability that was launched in 2019.

Threats

- Cybercrime is a threat not only to the NTRC, but to our country and the region.
- The continued convergence of the ICT sector facilitated by IP technology which facilitates Over the Top Services (OTTs).
- The current duopoly market for most of our telecommunications services is not functioning in the best interest of consumers.

6. Critical Issues

Currently, there are three critical areas that need to be addressed in the sector:

Cyber Security

The NTRC has continued to play its part in sensitizing the general public relating to matters of their security in cyber space. This has been done using social media, our monthly newsletters as well as presentations at educational institutions. The NTRC has also continued its funding of the Associate Degree program in Cyber Security at the St. Vincent and the Grenadines Community College.

Notwithstanding the above, there is a need for increase capacity building initiatives where cyber security is concerned as we seek to increase our broadband penetration levels.

Consideration should be given on establishing a dedicated full-time team in the Public service to address cyber security issues at the national level.

Broadcast Standards

In the absence of broadcast legislation or content/programming provisions within the new Electronic Communications Bill, the Government consider alternative mechanisms, such as, agreements with the licencees to address issues such as local content and programming schedules. We continue to see a situation of little oversight on what is played on local radio and in our public transport vehicles.

Broadband Penetration Level

If the country is expected to compete on the global market, irrespective of the sectors targeted, it is critical that as a country, we focus on increasing the penetration levels of broadband access to consumers. Broadband is seen as an essential service globally that is comparable to that of electricity, telephone and water. In relation to water and electricity St. Vincent and the Grenadines has a household penetration exceeding 90%. In comparison, for fixed broadband, at the household level we are at about 55%

penetration. Such a penetration rate of (55%) in electricity and water today is unimaginable, as such our broadband penetration levels must be increased such that it is comparable to that of our electricity and water penetration. It is imperative that the Government formalize a national Broadband policy via a national broadband plan that can be used to decrease the digital divide that exists among our households.

7. Sector Review

Financial Data Review

Telecommunications Sector Revenue

Year	Cable and Wireless (SVG) Ltd								Digicel St. Vincent Ltd				
	Mobile Revenue (EC\$)			Fixed Line Revenue (EC\$)		Internet Revenue (EC\$)	Other Revenue (EC\$)	Total	Mobile Revenue (EC\$)		Data Revenue (EC\$)	Other Revenue (EC\$)	Total
	International Revenue (EC\$)	Domestic Revenue (EC\$)	Data	International Revenue (EC\$)	Domestic Revenue (EC\$)				International Revenue (EC\$)	Domestic Revenue (EC\$)			
2014	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
2015	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
2016	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
2017	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
2018	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
2019	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx

Table 1 Total Revenue earned by providers of telecommunications services from 2014 to 2019

Year	Kelcom Int'l (Columbus Communications)						Silvakast	Andre Walker
	Fixed Line Revenue (EC\$)		Cable TV Revenue (EC\$)	Internet Revenue (EC\$)	Other Revenue (EC\$)	Total	Cable TV Revenue (EC\$)	Voice Resale (EC\$)
	International Revenue (EC\$)	Domestic Revenue (EC\$)						
2014	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
2015	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
2016	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
2017	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
2018	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX
2019	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX

Table 2 Total Revenue earned by providers of telecommunications services from 2014 to 2019

Total Telecom Revenue (XCD)



Telecom Revenue earned by the Providers from 2014-2019

Figure 1

Revenue of the NTRC and ECTEL for the period 2002 to 2019

Frequency fees are shared between the NTRC and ECTEL. There was a reduction of 5% for frequency fees collected in 2019 compared to 2018. In 2018, the NTRC collected \$3,190,599. However, \$457,900 represented receivables for 2017. As such, the actual funds for 2018 was \$2,732,700. In comparing the 2018 fees (\$2,732,700) to those collected for 2019 (\$3,037,137), an increase of 11% would have been realized. This increase arose as \$309,900 was collected as new frequency fees in 2019.

For application fees, in 2019, there was a marginal increase of 2% compared to 2018. In 2018, the NTRC collected more application fees for type approvals and class licences. However, in 2019, more application fees were received for frequency authorizations which led to the marginal increase.

Year	NTRC Application fees	Percent increase	NTRC & ECTEL Frequency Fees	Percent increase
2002	\$107,036		\$607,600	
2003	\$5,100	-95%	\$1,366,604	125%
2004	\$8,800	73%	\$1,577,400	15%
2005	\$10,300	17%	\$1,539,669	-2%
2006	\$11,275	9%	\$1,681,560	9%
2007	\$22,725	101%	\$1,245,183	-25%
2008	\$13,325	-42%	\$1,906,089	53%
2009	\$13,225	-7%	\$1,487,390	-21%
2010	\$23,846	80%	\$1,392,962	-7%
2011	\$16,109	-48%	\$1,723,158	24%
2012	\$16,390	2%	\$2,055,433	19%
2013	\$15,927	-3%	\$1,787,020	-13%
2014	\$31,547	98%	\$1,748,588	-2%
2015	\$25,617	-18%	\$2,681,489	53%
2016	\$25,324	-1%	\$2,708,686	1%
2017	\$22,473	-11%	\$2,226,562	-18%
2018	\$27,685	23%	\$3,190,599	43%
2019	\$28,199	2%	\$3,037,137	-5%

Table 3

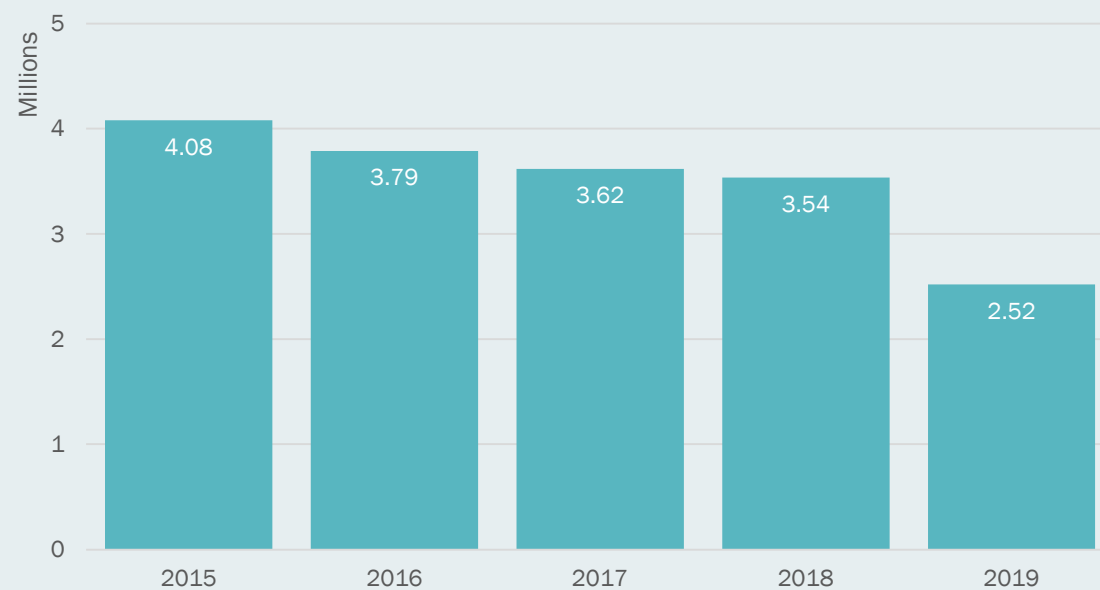
Licence fees received by the Government for the period 2002 to 2019

There was a 29% decrease in revenue for licence fees collected by the NTRC on behalf of the Government in 2019 compared to 2018. The annual fee that was due to be paid in October 2019 by one of the major Telecommunications Providers was not settled before the year ended. However, this is expected to be collected in January 2020.

Year	License Fees	Total	Percent Increase
2002	3,365,391	3,365,391	
2003	2,803,927	2,803,927	-17%
2004	3,329,145	3,329,145	19%
2005	3,421,159	3,421,159	3%
2006	3,850,955	3,850,955	5%
2007	4,301,521	4,301,521	11%
2008	4,081,151	4,081,151	-6%
2009	4,065,706	4,065,706	-4%
2010	4,034,096	4,034,096	-1%
2011	3,886,912	3,886,912	-4%
2012	3,756,898	3,756,898	-3%
2013	3,638,128	3,638,128	-3%
2014	4,146,265	4,146,265	14%
2015	4,079,164	4,079,164	-1.6%
2016	3,788,925	3,788,925	-7%
2017	3,617,662	3,617,662	-5%
2018	3,535,564	3,535,564	-2%
2019	2,517,823	2,517,823	-29%

Table 4

Government Revenue



Licence Fees collected from 2015 - 2019

Figure 2

Financial Performance of the NTRC

A. Revenue

The NTRC's projected revenue for the year ending December 31, 2019 was \$1,358,870. However, \$1,404,098 was received resulting in additional revenue of \$45,756 being collected. This was mainly due to the collection of the 2018 receivable for numbering fees amounting to \$41,130.

B. Expenditure

i. Recurrent

For the year ending December 31, 2019, the NTRC had projected to spend \$1,318,887 on recurrent expenditure; however, \$1,339,179 was actually spent. It must be noted that the accrued expenses for 2018 paid in 2019 had amounted to \$26,500. The Commission also had accrued expenses at the end of 2019 amounting to \$18,556.

ii. Capital

The amount of \$30,200 was budgeted for capital expenditure for the financial year 2019, while \$33,903 was spent keeping in line with the projected amount.

Conclusion

The NTRC's financial performance over the 2019 financial year was satisfactory.

Projected Revenue for 2020

For the fiscal year 2020, the NTRC has projected to collect \$3,085,475 in revenue from frequency fees. This is an increase of 11% or \$316,800 compared to the 2019 budgeted amount of \$2,768,675. As additional frequencies were assigned during 2019 through modifications of existing frequency authorizations, more revenue is expected going forward for these additional assignments.

Human Resource Development for 2019

The NTRC continues to expose its staff and Commissioners to relevant courses and seminars that would benefit the organization both in the short and long term considering the limited resources available.

The areas covered during 2019 were as follows:

- **GSMA Ministerial Programme** which was conducted in Barcelona, Spain.
- **CANTO ICC TRMC Spectrum Master Class** which was conducted in United Kingdom.
- **BSc. Management Studies (Human Resource Management)**. This program is being done online via UWI Open Campus St. Vincent and the Grenadines.
- **ECLAC training session on increasing access to technology for Persons with Disabilities**. This training was conducted in Trinidad and Tobago
- **20th Annual ECTEL NTRC Consultation Forum and Retreat**
This was conducted in Miami.
- **International Telecommunications Union (ITU) FIGI Security Clinic -Securing the Infrastructure and Applications for Digital Financial Service**. This was held in Geneva, Switzerland.
- **American Registry of Internet Numbers (ARIN) Inaugural Caribbean Internet Symposium and Connected Caribbean Leaders Forum**. This was conducted in St. Kitts and Nevis.
- **International Telecommunications Union (ITU) Spectrum Management Seminar for the Caribbean Islands**. This seminar was conducted in St. Lucia.

Regulations

No new Telecommunications Regulations were gazetted during 2019.

Staff

In 2019 the following member of staff was recognized for his years of service to the organization:

- Mr. Cyron Cyrus, Software Developer for Five (5) years of service.

Ms. Shonden Baptiste, Executive Assistant and Cyron Cyrus, Software Developer were appointed as permanent staff in 2019. In addition, two new interns were hired in the persons of Mr. Shemar Leacock and Mr. Nashaza Anderson.

Policy Development

In September 2019, ECTEL submitted the final draft of the new electronic communications bill to member states for their passage into law. This new draft bill will replace the current

telecommunications Act that has been in place since 2001. It is expected that this draft bill will be taken to Parliament in 2020.

Spectrum Management

The NTRC continued to conduct its weekly spectrum monitoring and management activities in the year 2019. Our spectrum monitoring activities focus on St. Vincent, Bequia, Canouan and Union Island.

Also, during the year, as a part of the new Integrated Spectrum Management and Monitoring System (ISMMS) one of the spectrum monitoring probes received in December 2019 was installed in Bequia. The other probe is scheduled to be installed in Union Island in the first quarter 2020.

In December 2019, the Telecommunications and Information Manager attended a weeklong ITU Spectrum Management for the Caribbean Seminar which took place in St. Lucia. The Seminar discussed:

- The possible effects of the recently concluded 2019 World Radiotelecommunications Conference (WRC) which was held in Egypt. The WRC reviews, and, if necessary, revises the Radio Regulations, an international treaty governing the

use of the radio-frequency spectrum, the geostationary-satellite and non-geostationary-satellite orbits.

- The spectrum harmonization, broadcasting and Caribbean Spectrum Task Force initiatives.

Cellular Sites

The table below shows the number of cellular sites with 4G services and LTE Services in St. Vincent and the Grenadines.

Mobile Network Operator	Location	Number of Cell Sites	Number of LTE Sites
Cable & Wireless	St. Vincent	31	31
	Grenadines	10	10
Digicel	St. Vincent	38	38
	Grenadines	12	12

The sites provide coverage to most of the populated areas on mainland St. Vincent, however, there is a need for better coverage on most of the Grenadines islands and rural areas on mainland St. Vincent.

Internet Access

As of December 2019, the total number of Fixed internet subscribers in St. Vincent and the Grenadines was Twenty-One Thousand, Nine Hundred and Seventy-Nine (21,979). This figure shows a 11.52 % decrease over the number of subscribers in 2018. In 2019, the NTRC was unable to execute new projects under the Universal Service Fund but conducted various monitoring exercises to ensure our existing free Wi-Fi service is functional throughout the country.

Public Consultation

The NTRC conducted a public consultation in 2019 on the Draft **Electronic Communications (Net Neutrality) Regulations**. The aim of this consultation was to gather the views of stakeholders as it relates to defining a licensee's obligation to adopt and comply with the principle of net neutrality.

Public Awareness

In 2019, the NTRC executed several public awareness initiatives.

1. Launch of Vincy Wi-Fi

The National Telecommunications Regulatory Commission (NTRC) launched a free mobile app on the Android and iOS platform on March 19, 2019 at the National Insurance Services (NIS) Conference Room. The app which is dubbed “Vincy Wi-Fi” is a mobile application designed to assist locals and visitors of St. Vincent and the Grenadines to find the locations of various connectivity hotspots across the country. Such connectivity spots include open Wi-Fi hotspots at all educational institutions across St. Vincent and the Grenadines and Wi-Fi hotspots at various Community centers and tourism sites. The Wi-Fi hotspots were put in place by the NTRC via the Universal Service Fund (USF). The app provides the user with information about the schools, pictures of the schools and allows for persons to report a Wi-Fi fault. The app can be accessed on the Google Play Store and Apple App store via the name “Vincy Wi-Fi”.

2. icode784 competition

On September 8, 2019, the Commission rebranded and launched the icode784 competition previously known as the i² competition. The reason for the name change is to reflect our objectives of targeting some of the goals in the seventeen (17)

UN Sustainable Development Goals (SDGs). The following six (6) SDGs are the ones that our competition relates to the most out of the 17 SDGs; No Poverty, Zero Hunger, Quality Education, Decent Work and Economic Growth, Industry Innovation and Infrastructure and Sustainable Cities and Communities. As per previous years, the focus of the competition was on the development of mobile apps and ideas that can facilitate the implementation of new systems or improve existing systems within both the private and public sectors of St. Vincent and the Grenadines. The aim was to improve the efficiency of their services and to increase their profits which will lead to national development.

In 2019, there was an increase in the number of entries for the competition over 2018. Fifty-Seven (57) entries were received in 2019 as compared to fifty-four (54) entries which were received for the 2018 competition. Forty (40) groups entered the Secondary Idea Category, ten (10) groups entered the Secondary Mobile Application Category, and for the Open Category, consisting of Individuals under the age of thirty-five (35) years, there were Seven (7) entries.

The schools that entered the secondary level were Petit Bordel Secondary School, Mountain View Adventist Academy, Union Island Secondary School, St. Vincent Girls High School, St. Vincent Grammar School, Troumaca Secondary School, Dr. JP Eustace Memorial Secondary School, North Union Secondary School and the St. Joseph's Convent Kingstown.

The Open Category saw participation from Seven (7) teams from the public.

The finals of the competition concluded on November 12, 2019 at the Kingstown Methodist Church Hall. The winners of the various categories of the competition were as follows:

- Secondary Idea Category: "NUSS Conquerors 2" from the North Union Secondary School.
- Secondary Mobile Application Category: "Astra" from the St. Vincent Grammar School.
- Open Category (Individuals under the age of 35 years): "KNR".

3. Financial Assistance Program

In 2017, the NTRC developed a yearly program where financial assistance was given to one (1) Primary school student and one (1) Secondary school student. This program continued for its third consecutive year, where Clifana McDowall a student of the North Union Secondary School received an amount of \$500.00 and Gabrielle Phillips a student of the Questelles Government School received an amount of \$1,000.00. The program targets students attending all schools in St. Vincent and the Grenadines. A letter was sent to all Primary and Secondary schools for the principals to submit the names of students that would qualify for the assistance and the reason/s why they should be considered. As such, the NTRC selected the neediest students based on the objectives of the program. The financial assistance program will continue for the foreseeable future.

4. The NTRC's myApp Summer Program

For the fifth consecutive year, the NTRC held its annual myApp Summer program. The 2019 program was held in Mesopotamia from July 15- August 2, 2019 at the Emmanuel High School Mesopotamia. A total of twenty (20) students attended the

program. The objective of the NTRC's myAPP Program is to teach participants between the ages of 13-18, who may or may not have previous exposure, how to code and design applications. This program develops the necessary programming skills of the participants that would enable them to enter forums such as the annual NTRC's icode784 Competition. The valedictorian for the program was Ms. Runel Primus a resident of Cane End, Mesopotamia. The 2019 program was made possible through sponsorship from the, Digicel, Flow, Mickey's Roast City and JMK Auto parts.

5. Radio and Interview Sessions

Radio and Television interviews were conducted at the Agency for Public Information (API), Xtreme FM and National Broadcasting Corporation Radio Station (NBC). These interviews were used as a promotional tool to relay information to the general public regarding the activities that were being carried out by the NTRC such as the NTRC's 2019 icode784 competition and myApp Summer Program.

6. Social media Campaign

In an effort to reach a wider audience, the NTRC engaged the public on Facebook and Instagram providing them with information about our organization. In addition, we held several competitions on our social media networks to engage the public and to increase our followers on Instagram and our likes on Facebook.

7. Food Gift Basket distribution drive

During the month of April 2019, the NTRC conducted a Food Gift Basket distribution drive under the theme "My community helper". The NTRC partnered with the Ministry of National Mobilization, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth to obtain three families from each constituency to be a candidate to receive the gift basket. This promotion targeted persons of need in the various constituencies as well as, elderly persons over the age of 65 years. The distributions were done during the period April 17-18, 2019.

Universal Service Fund

For the year ended December 31, 2019, the Universal Service Fund had projected to receive a total of \$2,110,300 from Telecommunications Service Providers, interest of \$19,000 and other income of \$30,900. The actual revenue received by the Universal Service Fund in 2019 was \$1,523,893. The shortfall in revenue arose as one of the major telecommunications providers did not settle their annual USF contribution before the year ended.

The USF equipment and services located at various sites under the seven projects funded by the Universal Service Fund are currently in place and functional. The NTRC did not seek to pursue any new projects in 2019 but will seek to do so as soon as funds become available.

More details on the USF projects can be found in the 2019 USF Annual Report.

Statistics

The NTRC continued in 2019 with the provisioning of statistical data from the Telecommunications sector to several local, regional and international entities. The following graphs depict some of the more relevant information on the sector while Table 5 on page 31 gives a detailed overview of customer data supplied by the Telecommunications Providers.

Fixed Line Rates per minute to the USA (XCD)

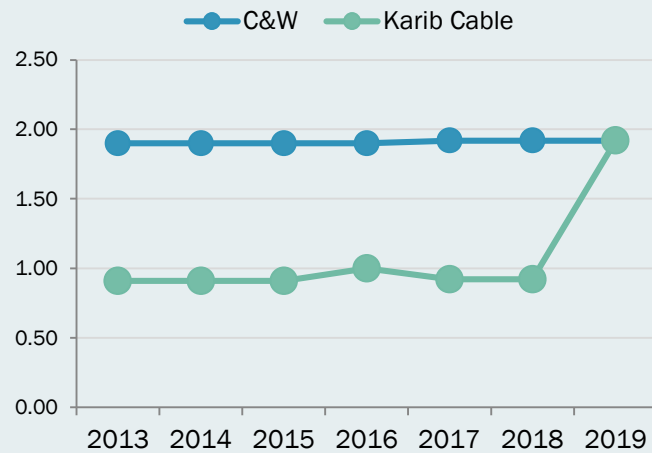


Figure 3

The rates depicted in Figure 3 are not regulated. In 2019 we saw an increase in the Karib Cable (Columbus Communications) fixed line rate. However, Cable and Wireless rates remained unchanged.

Mobile Rates per minute to the USA (XCD)

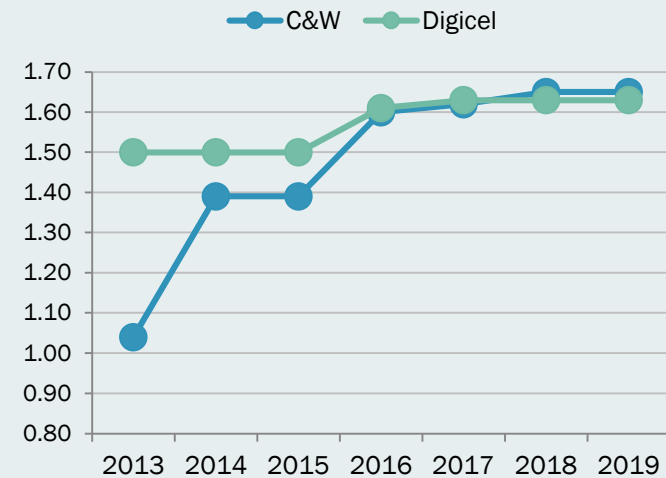


Figure 4

The rates depicted in Figure 4 are not regulated. In 2016 and 2017 we saw slight increases in the Digicel rates. However, in 2018 and 2019 the rates remained unchanged for both Cable and Wireless and Digicel.

Domestic Rates per minute (XCD)

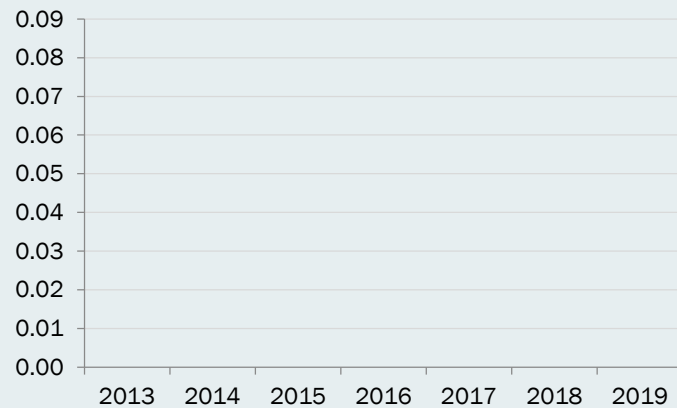


Figure 5

The domestic rates in Figure 5 are the daytime rates for calls made to customers on the same network. Cable and Wireless' and Digicel's mobile domestic rates remained unchanged in 2019 while Cable and Wireless' fixed line rates slightly increased.

International Rates per minute (XCD)

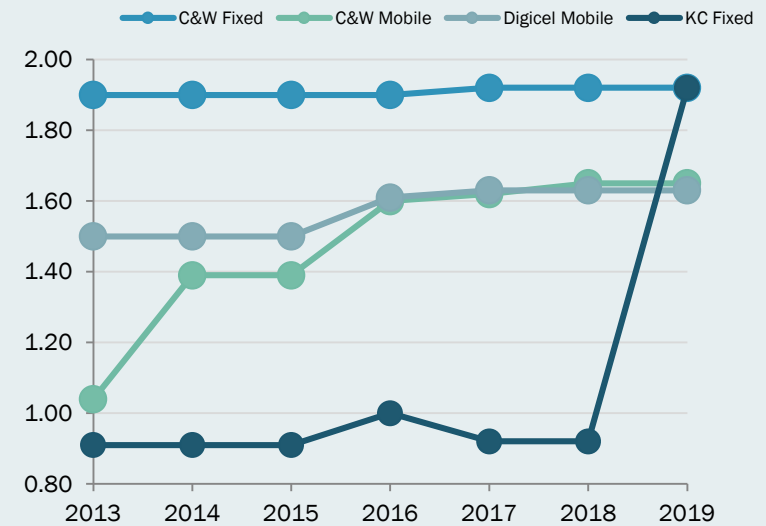


Figure 6

The international rates in Figure 6 are the daytime rates for calls to the USA for all providers. Karib Cable (Columbus Communications) increased its rate in 2019 while the rates for Digicel and Cable and Wireless remained unchanged. It should be noted that both Cable and Wireless and Karib Cable international rates were \$1.92 in 2019.

Fixed Line to Mobile Rates per Minute (XCD)

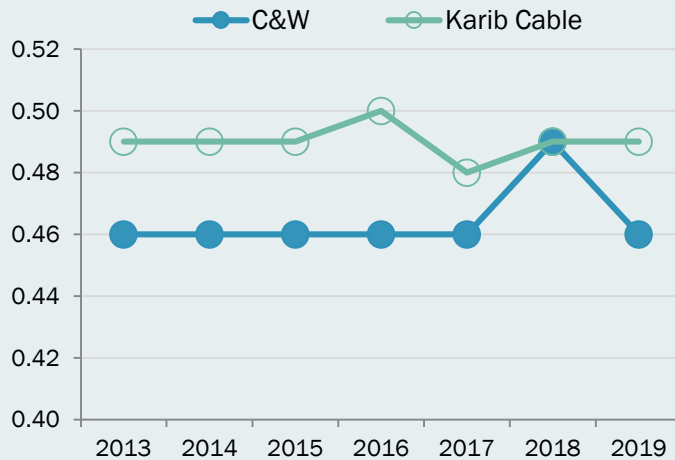


Figure 7

Figure 7 shows Cable & Wireless' and Karib Cable's (Columbus Communications) fixed line to mobile rates for 2013 to 2019. Cable & Wireless rates decreased in 2019. However, Karib Cable (Columbus Communications) rates remained unchanged.

Mobile Subscribers

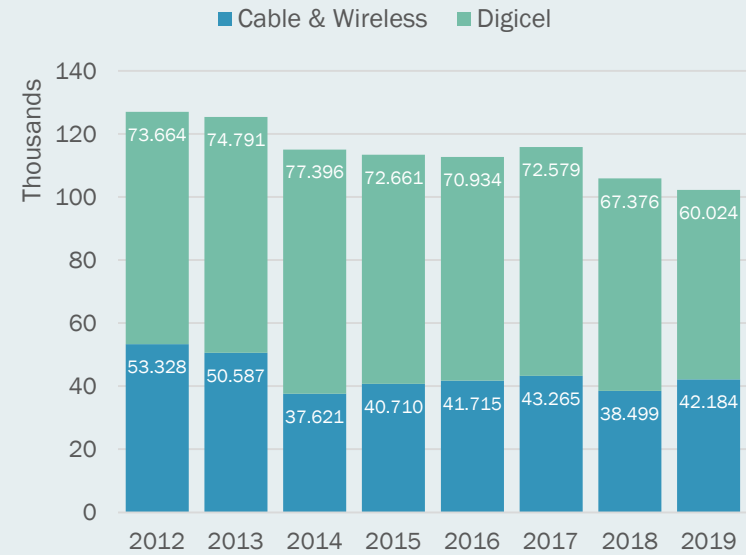


Figure 8

Figure 8 shows the number of mobile subscribers for the years 2012 to 2019. It is noted that Cable & Wireless' mobile subscribers increased while Digicel subscribers decreased in 2019.

Mobile Data Subscribers

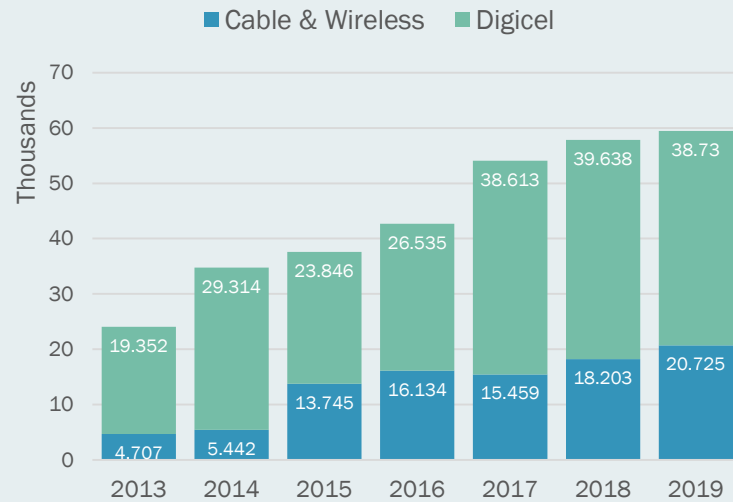


Figure 9

Figure 9 shows a comparison of the total Mobile Data Subscribers for Cable & Wireless and Digicel. It is noted that Digicel's mobile data subscribers saw a slight reduction in 2019 and Cable and Wireless saw a slight increase in their subscribers.

Fixed Line Subscribers

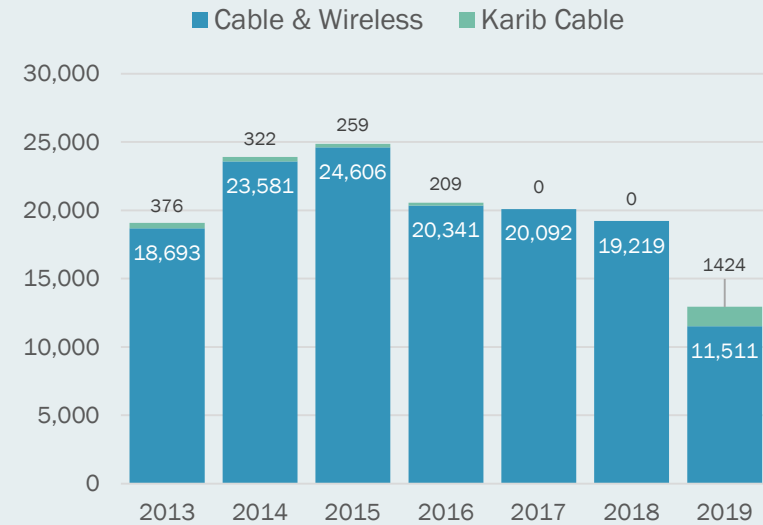


Figure 10

Figure 10 shows a comparison in Fixed Line Subscribers for Cable & Wireless and Karib Cable (Columbus Communications). In 2019, Cable & Wireless recorded a decrease in their Fixed Line Subscribers. In 2017 and 2018 Karib Cable (Columbus Communications) had no fixed line subscribers, however in 2019 they recorded over one thousand subscribers.

Broadband Internet Subscribers

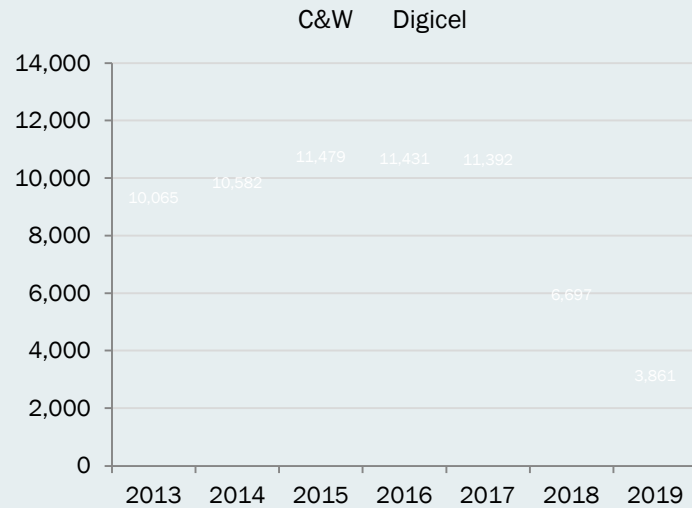


Figure 11

Figure 11 shows the number of Broadband Internet Subscribers per provider. Cable and Wireless experienced a decline in broadband subscribers in 2018, however there was an increase in broadband subscribers for Karib Cable (Columbus Communications) within this year. Also, Digicel recorded 698 broadband internet subscribers in 2019.

Broadband Internet Subscribers

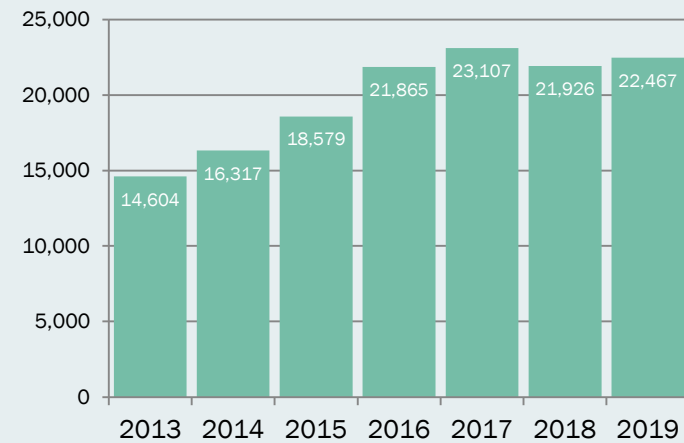


Figure 12

Figure 12 shows the total number of Broadband Internet Subscribers from 2013 to 2019. In 2018, there was a decrease in the broadband subscribers while in 2019 we saw an increase in the broadband subscribers. It should be noted that the figures were adjusted for 2018 broadband subscribers based on clarifications received with the service providers.

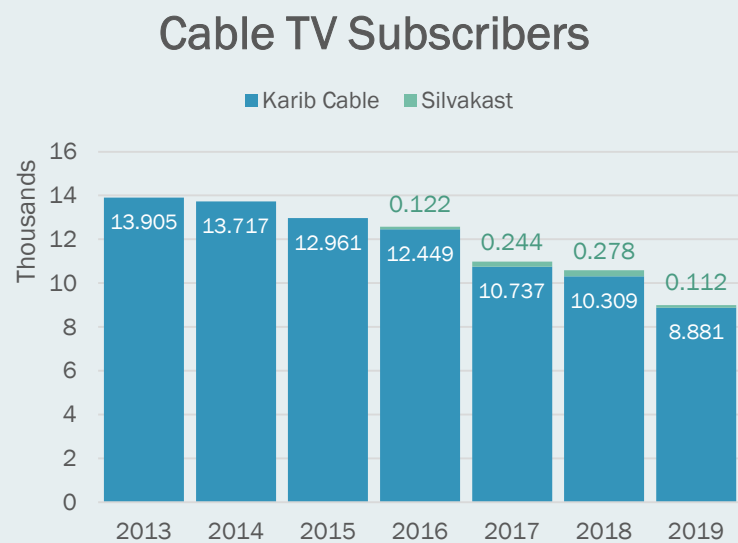


Figure 13

Figure 13 shows that both Karib Cable (Columbus Communications) and Silvast recorded a decrease in Cable TV subscribers in 2019.

Licensing

The NTRC continued in 2019 to facilitate the application process for new licences under the Telecommunications Act (CAP 418) of the Revised Laws of St. Vincent and the Grenadines 2009. Applications for Individual licences were forwarded to ECTEL for evaluation while those for Class licences were evaluated by the NTRC. The NTRC also evaluated and made recommendations to the Minister on a number of frequency applications.

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cable & Wireless (WII) Ltd	Fixed Line Subscribers	Residential	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Business	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Total	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
	Internet Subscribers	Dialup	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		ISDN	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		ADSL (Residential)	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		ADSL (Business)	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Total	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
	Mobile Subscribers	Post paid	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Prepaid	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Total	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Digicel	Mobile Subscribers	Post paid	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Prepaid	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Total	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
	Broadband subscribers	Residential	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Business	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Total	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Karib Cable	Cable TV Subscribers	Residential	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Business	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Free Service	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Total	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
	Internet Subscribers	Residential	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Business	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Free Service	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Total	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
	Fixed Line Subscribers	Residential	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Business	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Free Service	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Total	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
SilvaKast	Cable TV Subscribers	Residential	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
		Business											
		Total											

Table 5

		2012		2013		2014		2015		2016		2017		2018		2019	
		New	Renew	New	Renew	New	Renew	New	Renew	New	Renew	New	Renew	New	Renew	New	Renew
Individual Type Licenses	Fixed Public	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	1	1	1
	Internet Networks	0	N/A	0	N/A	1	N/A	1	N/A	0	N/A	0	N/A	0	0	0	N/A
	Subscriber Television	0	N/A	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	0	4	0	4
	Int'l Simple Voice Resale	0	N/A	0	N/A	1	N/A	0	N/A	0	N/A	0	N/A	0	1	0	1
	Mobile Cellular	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	1
	Public Radio paging	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
	Submarine cable	0	N/A	0	N/A	0	N/A	0	N/A	0	1	1	1	0	1	1	1
Class type Licenses	Private network/services	1	N/A	0	N/A	0	N/A	1	1	1	1	1	1	0	1	0	N/A
	Internet services	0	N/A	0	N/A	0	N/A	0	N/A	0	2	1	1	0	2	0	2
	Radio Broadcast	0	N/A	0	3	1	5	1	6	1	7	1	8	0	12	0	11
	Value Added Services	0	N/A	0	N/A	1	N/A	1	N/A	0	0	0	0	0	1	0	N/A
	Community radio	0	2	0	N/A	0	N/A	1	1	2	3	2	4	0	5	1	3
	Television Broadcast	1	N/A	0	N/A	0	N/A	0	N/A	0	1	0	2	0	0	0	2
	Maritime mobile	4	67	35	31	35	31	1	16	1	26	3	44	10	18	2	24
	Land mobile	3	172	2	155	3	204	0	10	10	20	12	28	2	17	4	18
	Aeronautical radio	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	2
	Aircraft station	2	17	4	17	3	17	1	18	1	17	1	18	3	18	0	18
	Amateur Radio station	27	80	25	84	26	82	8	47	20	20	23	14	8	76	12	76
	Citizen Band radio	0	1	0	0	0	0	2	3	0	0	0	0	2	2	0	5
	Family Radio Band	1	5	1	3	1	3	1	2	2	1	1	1	0	2	0	2
	Ship Station	27	122	15	182	18	157	46	177	41	184	40	163	22	175	28	168
Miscellaneous	CPE Dealers reg. fee	15	18	14	16	10	17	2	10	5	18	5	20	6	22	2	25
	Exam Fees for Radio Operators	0	N/A	1	N/A	1	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	0
	Type Approval fee	16	N/A	22	N/A	27	N/A	56	N/A	85	N/A	102	N/A	125	N/A	85	N/A
	Ship station Operators	25	9	27	7	29	21	17	40	16	28	18	30	6	22	26	17
	Aircraft Station Operators	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 6 Table 6 outlines the number of licences issued from 2012 to 2019. The issued licences are broken down as new licences, issued in the specific year, and renewals of existing licences, first issued in previous years.

8. Broad Response Strategies

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

The NTRC must operate within the harmonized framework of the ECTEL Treaty and the Telecommunications Act (CAP 418) of the Revised Laws of St. Vincent and the Grenadines 2009. Many of the substantive objectives cannot be pursued solely by the NTRC due

to the mandate given to ECTEL on certain issues. However, the Universal Service Fund allows for some flexibility at the national level and the NTRC SVG has strategically utilized the available resources for maximum benefits via practical and needed projects that meet the needs of our citizens.

Recognizing the limitations outlined above, the NTRC aims to continue working closely with ECTEL, the Ministry/Minister responsible for Telecommunications and relevant stakeholders to facilitate the enactment of the new Electronic Communications Bill and subsidiary legislation.

9. Result Indicators 2019

1. To execute the 7th annual NTRC's *i*² Competition.

This was completed. The 2019 icode784 Competition was held during the period September 10 – November 12, 2019 and saw over 50 teams participating. The NTRC took the decision in 2019 to rebrand the competition from “i² Competition” to “icode784”. The reason for the rebranding is to focus the competition on playing a part in assisting our country in achieving the targets of six (6) of the UN Sustainable Development Goals (SDGs). The six (6) UN SDGs are those that closely align with the objectives and goals of the competition being:

1. No Poverty
2. Zero Hunger
3. Quality Education
4. Decent Work and Economic Growth
5. Sustainable Cities and Communities

6. Industry, Innovation and Infrastructure

The colors representing the 6 SDGs were incorporated in the new logo of the competition.

2. To seek international funding for USF projects

This task is incomplete as the NTRC began work with the Ministry of Finance and Economic Planning in trying to source funding for the projects which were developed. The project document however is incomplete as some additional background information is needed before the document can be finalized and submitted to the Ministry for approval. The Ministry of Finance and Economic Planning has assigned a staff member to assist the NTRC in updating the project document. This project document is expected to be completed and submitted to the Ministry of Finance and Planning for approval by the second quarter of 2020.

3. To seek approval from Cabinet for the adoption and Execution of the National Broadband Plan that was finalized in 2017.

This objective is incomplete as the draft National Broadband Plan has not yet been approved by Cabinet for adoption and execution. During 2019, the NTRC met with the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology in order to facilitate the submission of the draft plan to Cabinet.

4. Working jointly with the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology, in having new licences issued to Cable and Wireless and Columbus Communications.

This task is incomplete as ECTEL is still in the process of developing and finalizing new licence templates. It is expected that the new licence templates will be completed and submitted to member states in early 2020.

5. Working jointly with ECTEL and the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology, in having the new electronic communications bill and relevant subsidiary regulations enacted.

This objective is incomplete. The Ministry of Finance, Economic Planning, Sustainable Development and Information Technology received the draft Electronic Communications Bill from ECTEL in September 2019. This draft bill now has to be approved by Cabinet before being taken to Parliament to be enacted.

6. Launch the IOS version of the NTRC connect app.

This was completed. The Android and iOS versions of Vincy Wi-Fi were launched at a ceremony held on March 19, 2019 at the NIS Conference room. The mobile app displays the locations of all open Wi-Fi hotspots in St. Vincent and the Grenadines and is a resource tool that can be utilized by our citizens and visitors.

7. To update the Vincy prices app to include new and improved features.

This objective is incomplete. During the year, the NTRC software development team worked on the Vincy Wi-Fi app, the icode784 app as well as an app to aid the police force in retrieving vehicle and drivers licence information while on patrol. The work on the apps have delayed the completion of the planned updates to the Vincy Prices app. It is expected that the new updates will be completed during the first quarter of 2020. The Vincy Prices app in summary allows shoppers to compare prices at our local supermarkets for several popular grocery items.

8. To conduct a National ICT Survey in St. Vincent and the Grenadines on behalf of the Caribbean Regional Communication Infrastructure Program (CARCIP)

This was completed. The Survey was completed in July 2019 where over Three Thousand persons were interviewed by enumerators in the thirteen census divisions across St. Vincent and the Grenadines. The data collected from the

respondents were done electronically via tablets to minimize potential errors and to increase the efficiency of the process. After the survey, the necessary analysis of the data was done, and the final report was submitted to the Ministry of Finance and Economic Planning.

9. To work along with ECTEL and the other NTRC's to implement the Integrated Spectrum Management and Monitoring System

This objective is incomplete. The NTRC was successful in completing the installation of equipment at the remote fixed monitoring site in Bequia, however, the installation of equipment at the remote fixed monitoring site in Union Island has not yet been completed. This will be completed within the first quarter of 2020. These remote monitoring sites will allow for 24/7 monitoring of the radio spectrum from the NTRC's office thereby reducing the time and cost of travel for spectrum monitoring in the Grenadine islands. They will also allow for earlier detection of illegal/harmful spectrum activity. Our NTRC is the first in the region to have a remote fixed monitoring site operational.

10. To host the 2019 MyApp summer program in Mesopotamia.

This was completed. The NTRC held its 2019 MyApp Summer program at the Emmanuel High School Mesopotamia during the period July 15 – August 2, 2019. The program catered for 20 students between the ages of 13-18 and exposed them to coding and robotic skills development. This year's program was the first to incorporate robotics.

10. Major Objectives for 2020

1. To execute the 8th annual NTRC's Icode784 competition (formerly i² Competition).
2. To improve the Wi-Fi speeds and coverage in all primary and secondary schools.
3. To establish Wi-Fi service at 15 playing fields and hard courts.
4. Working jointly with the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology, in having new licences issued to Cable and Wireless, Columbus Communications and Digicel.
5. Working jointly with ECTEL and the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology, in having the new electronic communications bill and relevant subsidiary regulations enacted.
6. To execute four (4) training workshops to raise awareness on internet security and to aid individuals and smaller businesses to use the internet safely.
7. Develop and bring to the market two mobile apps based on ideas from the icode784 competition.
8. To connect 300 Households with subsidized Internet Access.
9. To work along with ECTEL and the other NTRC's to complete the Regional Integrated Spectrum Management and Monitoring System.
10. Conduct training on VHF DSC radio usage for Police Officers at 5 Police stations.
11. To host two MyApp summer programs.

11. Annex A

Technical Definitions/Terminology

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

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

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

The US Agency for International Development

Coursera provides universal access to the world's best education, partnering with top universities and organizations to offer courses online. Every course on Coursera is taught by top instructors from the world's best universities and educational institutions. Courses include recorded video lectures, auto-graded and peer-reviewed assignments, and community discussion forums. When you complete a course, you'll receive a sharable electronic Course Certificate.

CTO Commonwealth Telecommunications Organization

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

CTU Caribbean Telecommunications Union

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

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

GMDSS Global Maritime Distress and Safety System

The GMDSS provides for automatic distress alerting and locating in cases where a radio operator doesn't have time to send an SOS or MAYDAY call.

ITU International Telecommunication Union

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

Land Mobile A mobile service between base stations and land mobile stations, or between land mobile stations

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

MMSI Maritime Mobile Service Identity

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

Radio frequency spectrum That part of the electromagnetic Spectrum used for communications; includes frequencies used for AM- FM radio and cellular phones and television etc.

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

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

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

Telecomm unications 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

Audited Financial Statements 2019