

# 2022 ANNUAL REPORT



NATIONAL TELECOMMUNICATIONS  
REGULATORY COMMISSION  
ST. VINCENT & THE GRENADINES

## ABOUT COVER PHOTO

The cover image depicts the closing ceremony of NTRC eighth annual MyAPP summer initiative held at the Buccament Bay Secondary School in August 2022. The summer program introduces students aged 13 to 18 to coding and enables them to work with micro controllers and robots. The NTRC hosted the MyApp summer program in 2022 at two locations: Union Island Secondary School and Buccament Bay Secondary School. The programs lasted for three (3) weeks, from July 11 to July 29, 2022, and from August 1 to August 19, 2022, respectively. Both programs were fully subscribed with a total of 41 students.





## 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, 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



**Mrs. Roxann Williams**  
Chairperson



**Mr. Petrus Gumbs**  
Commissioner



**Mr. Sehon Marshall**  
Commissioner



**Mr. Avalon Morris**  
Commissioner



**Mr. Ivo Carr**  
Commissioner

## 5. STAFF MEMBERS







**Apollo Knights**  
Director



**Nadine Hull**  
Spectrum  
Manager



**Mishka L. Quashie**  
Accountant



**Marcellus  
Constance Jr.**  
Technical  
Operations  
Manager



**Shonden Baptiste**  
Administrative  
Officer



**Andra Keizer**  
Executive Assistant



**Felica Thomas**  
USF Administrator



**Rhea Lewis**  
Consumer & Public  
Relations Manager



**Cyron Cyrus**  
Software Developer



**Eustasha Walter**  
Public Relations  
Officer



**Shadeja Gordon**  
USF Assistant



**Ronicia Douglas**  
Customer  
Experience Officer



**Christal Matthias**  
Administrative  
Support Officer



**Jamila Spence**  
Intern



**Alan Gooding**  
Intern



**Alexa Soleyn**  
Intern

## 6. 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.
- Full complement of Commissioners with a wide cross section of skills and experience

### 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.

### 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, knowledge sharing and access to local and regional content.
- Ability to address some of the current regulatory legislative deficiencies with a new electronic communications act.
- Collaborate with central Government on the rollout out of the Digital Transformation project that will be utilizing the current and future broadband networks of our country.
- Collaborate with the Ministry of Finance, Economic planning and Information Technology on seeking approval from the Cabinet on a new Broadband plan for St. Vincent and the Grenadines that can facilitate appropriate connectivity and other opportunities for all income groups.
- Collaborate with CARDTP and the OECS Commission on developing a new cybersecurity policy for our country.



## Threats

- The continued convergence of the ICT sector facilitated by IP technology which facilitates Over the Top (OTTs) Services that do not contribute to our regulatory ecosystem via regulatory fees.
- The current duopoly market for most of our telecommunication services is not functioning in the best interests of consumers and our country.
- The recent deployment of low earth orbiting (LEO) satellite constellations that have the ability to compete with terrestrial service providers in delivering Broadband

access directly to homes. Such services, if not properly licensed and regulated, could negatively affect the financial status of both the existing licensed service providers and our regulatory institutions across our sub region.

## 7. CRITICAL ISSUES

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

### Cyber Security

The NTRC recognizes that there is a need for increased capacity building and formal structures established where cyber security is concerned as we continue to increase our broadband penetration levels and speeds.

*Our NTRC is pleased to see this issue being addressed under the CARDTP but also believes it has to have a multistakeholder approach that covers critical areas such as Education, Health and critical infrastructure etc. A clear national cybersecurity policy and strategy is key to success in this area which will also cover areas of data protection and privacy, etc. The role of cyber security is critical in building trust and confidence in a digital economy.*

### Broadcast standards

The absence of broadcast standards/legislation in our country as well as a regulatory agency for such a sector (NTRC does not have a legal mandate for content or programming matters) is providing a catalyst for social and moral decay in our society.

*The Government may consider alternative mechanisms in the short term, such as agreements with the broadcast licensees to address issues such as local content and programming schedules. However there needs to be a longer-term structured solution to the issue which could be addressed in the current review of our regulatory system under the CarDTP. Data from our 2021 national ICT survey shows that 90% of people still listen to local radio as such this area can be targeted with a new regulatory framework. Currently over 60% of regulators globally are multisector regulators. ECTEL and*

*the NTRC, even with the new electronics communications act, is still a single sector regulator. So we are not even at the status quo but are behind. We have to seize the opportunity with the upcoming review of the regulatory framework under CarDTP to have ECTEL and the NTRCs cover other sectors, especially that of content and programming. We are not in a situation where we have another entity regulating content and want to merge both institutions but we have no one regulating content or programming.*

### **Broadband Penetration/Digital divide**

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 which 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 62% penetration. Such a penetration rate of (62%) 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. We saw in 2020 the impact of such a low penetration rate on the ability of some of our students to actively participate in online classes while face to face classes were suspended due to the Covid-19 pandemic.

Further while we have a high penetration rate of mobile phones around 80% only 66% of them maintain a regular data plan. Without consistent access to the internet feeds our digital divide and reduces the ability of our citizens to properly partake in a Digital economy.

*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.*

### **Digital Transformation**

Several countries within the OECS including St. Vincent and the Grenadines have embarked on several initiatives geared towards the transformation of their societies via digital technologies. Of



specific relevance is the new Caribbean Digital Transformation Project funded by the World Bank which commenced in 2020 and will close in June 2026. This project will touch on many aspects of the pillars of our economy including innovation, investment, digital financial services, e-commerce etc. While the project touches on many important areas both nationally and regionally, it is missing a very critical component which if left unaddressed would hamper the success of this project and others to come. This is the lack of a national addressing system in St. Vincent and the Grenadines and other states of the OECS. It is the main reason why there is very little domestic ecommerce in our islands. It is also the reason why there are delays in delivery

of goods and services at the domestic level which affects productivity and can have life threatening implications where the police, fire and health officials can be delayed in responding to emergencies. A 911 system cannot properly function without a national addressing system.

*The Government should seek to address this issue preferably on the regional level via a virtual base national addressing system. The NTRC is currently developing a prototype of such a system which we would like to see rolled out on an OECS level.*

## 8. SECTOR REVIEW

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## 2022 Financial Data Review

Total Telecom Revenue 2022



## Revenue of the NTRC and ECTEL for the period 2002 to 2022

Frequency fees are shared between the NTRC and ECTEL. There was a reduction of 14% for frequency fees collected in 2022 compared to 2021. In 2021, the NTRC collected \$3,395,118.75 while in 2022, \$2,911,638.53 were received as there were \$543,578.75 in receivables at the end of December 2022.

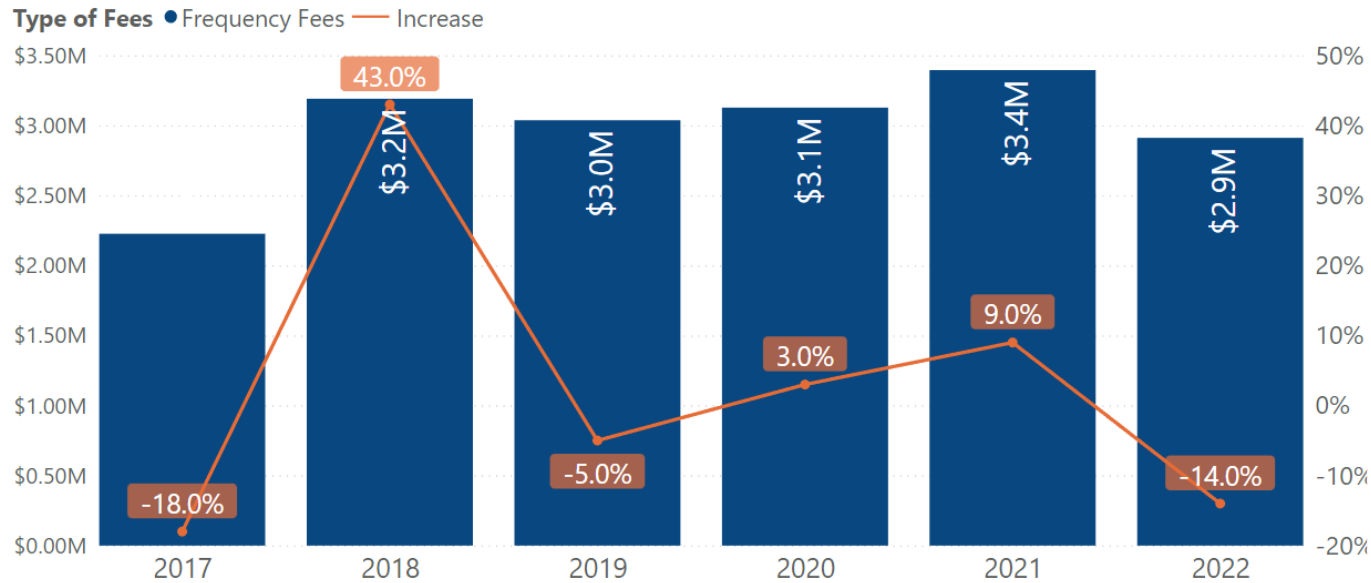


Figure 1 Frequency Fees 2017 - 2022

For application fees, in 2022, there was a 57% increase compared to 2021. The NTRC collected \$27,397.57 in 2021 and \$43,093.21 in 2022. In 2022, the Food and Agriculture Organization Sub-Regional Office for the Caribbean covered the application fees for the licensing of 81 VHF radios for fishermen.

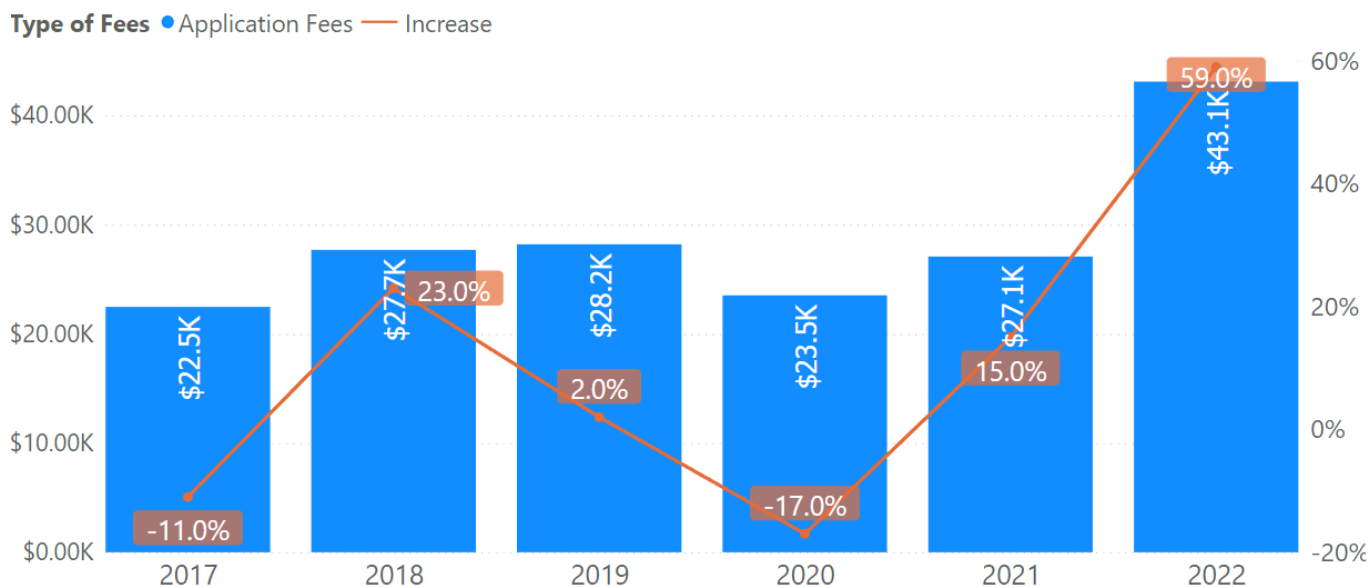


Figure 2 Application Fees 2017 - 2022

### Licence fees received by the Government for the period 2002 to 2022.

There was a 5% increase in revenue for licence fees collected by the NTRC on behalf of the Government in 2022 compared to 2021. In 2021, \$3,740,171.51 was collected while in 2022, the NTRC received \$3,927,195.01. Additional funds were received from Radio Broadcasters as their relicenses were issued later than expected which led to accumulated past due fees. In addition to this, in 2022, one Telecommunications Providers paid its annual licence fees which were due in May of the previous year.

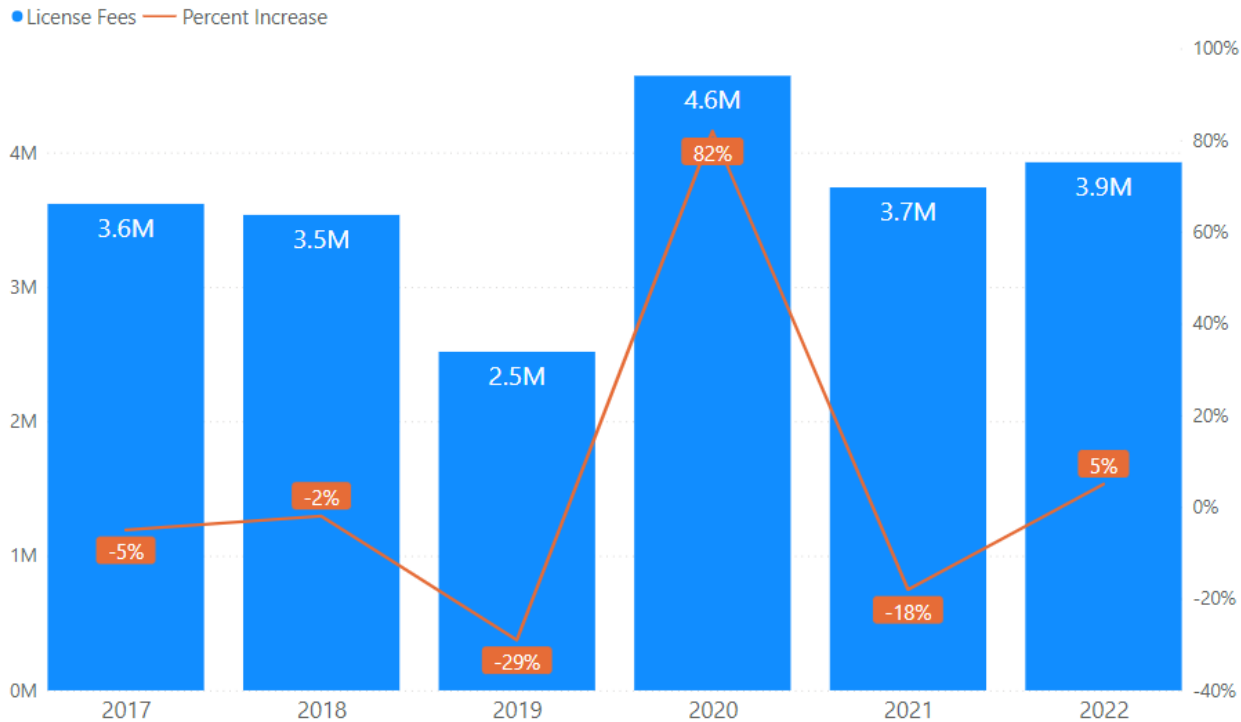


Figure 3 License Fees collected by Government. (2017 – 2022)



## Financial Performance of the NTRC

### A. Revenue

The NTRC's projected revenue for the year ending December 31, 2022 was \$1,705,262.81 while \$1,675,340.69 was collected. One Telecom Provider did not settle its numbering fees due in November 2022 before the year ended. In addition to this, receivables from 2021, amounting to \$37,073.98 was also received.

### B. Expenditure

#### i. Recurrent

For the year ending December 31, 2022, the NTRC had projected to spend \$1,576,499.85 on recurrent expenditure; however, \$1,639,527.15 was spent.

Included in this figure was \$58,628.29 for accrued expenses from 2021 covered by funds brought forward. At the end of December 2022, the NTRC had accrued expenses amounting to \$26,346.74.

#### ii. Capital

The amount of \$135,644.00 was budgeted for capital expenditure for the financial year 2022, while \$129,641.29 was spent in line with the projected amount.

### C. Conclusion

The NTRC's financial performance over the 2022 financial year was satisfactory.

## Projected Spectrum Revenue for 2023

For the fiscal year 2023, the NTRC expects that the projected spectrum revenue will increase by \$189,570.00 (6.14%) from \$3,087,075.00 projected in 2022 to \$3,276,645.00 projected for 2023.

## 9. Human Resource Development for 2022

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 2022 were as follows:

- BSc. Management Studies (Human Resource Management). This program is being done online via UWI Open Campus St. Vincent and the Grenadines.
- BSc. Management Studies (Marketing). This program is being done online via UWI Open Campus St. Vincent and the Grenadines.
- American Management Association (AMA) training course on How to Communicate with Diplomacy, Tact & Credibility. This training was conducted in New York.
- MSc. Information Security and Digital Forensics. This program is being done online via the University of East London.
- Managing Public Relations Communications. This short course was conducted online via UWI Open Campus St. Vincent and the Grenadines.
- Certificate in Accounting CPD. This training was conducted online with ACCA in partnership with Accounting CPD.
- Fundamentals of Project Planning and Management. This training was done online via Coursera.
- IBM Data Analytics with Excel and R. This training was done online via Coursera.
- Web Design for Everybody Basics of Web Development & Coding Specialization. This training was done online via Coursera.

- Financial Accounting Fundamentals. This training was done online via Coursera.
- Meta React Native Specialization. This training was done online via Coursera.
- Project Management Principles and Practices Specialization. This training was done online via Coursera.

## 10. Legislation

The following was gazetted on November 22, 2022.

1. Act No. 18 of 2022 Electronic Communications Act, 2022. This new act replaces the existing Telecommunications Act. It is expected to be proclaimed in early 2023.

## 11. Staff

In 2022, the NTRC appointed two new interns, Ms. Alexa Soleyn and Mr. Alan Gooding and a Customer Experience Officer Ms. Ronicia Douglas. Furthermore, in 2022, the

following persons were recognized for their years of service to the organization:

- Mr. Apollo Knights, Director/Secretary for twenty (20) years of service.
- Ms. Andra Keizer, Executive Assistant for twenty (20) years of service.
- Ms. Mishka L. Quashie, Accountant for fifteen (15) years of service.
- Ms. Shadeja Gordon, USF Assistant for five (5) years of service.
- Ms. Eustasha Walter, Public Relations Officer, for five (5) years of service.

## 12. Policy Development

During 2022 the NTRC worked with ECTEL and their consultants in developing a new draft Quality of Service Regulations (QoS). These are expected to be sent out for Public Consultation in early 2023. Thereafter they will be submitted to the ECTEL Council of



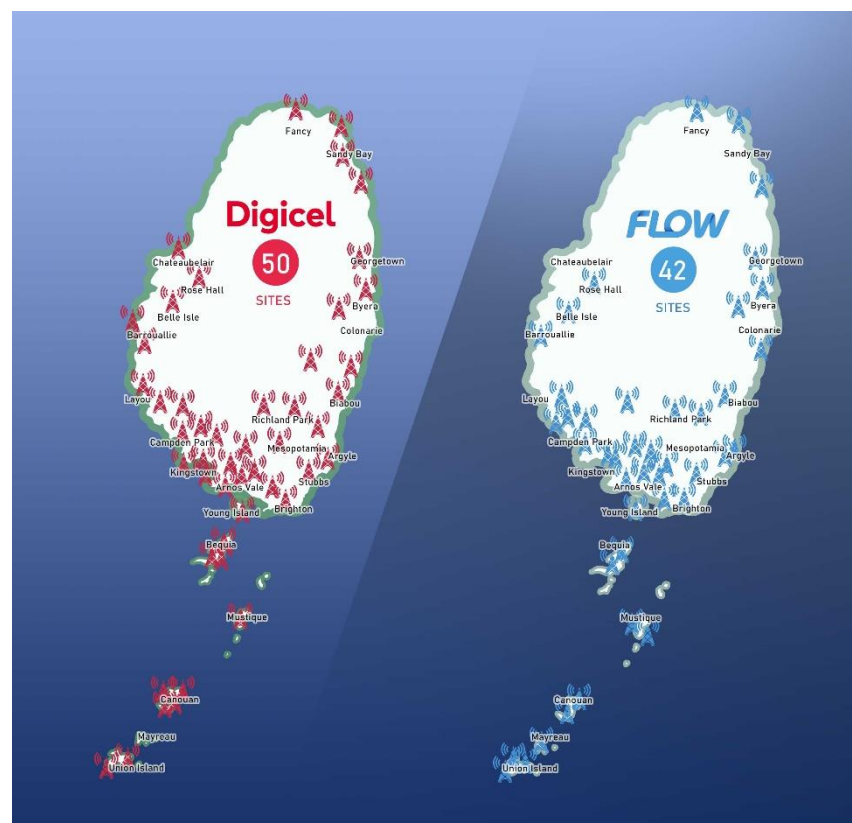
Ministers for final approval before being recommended to member states for enactment.

## 13. Spectrum Management

The NTRC continued to conduct its weekly spectrum monitoring activities in the year 2022. This was done via the use of a mobile spectrum monitoring equipment at various locations around St. Vincent & the Grenadines. Additionally, the NTRC continues to utilize the remote spectrum monitoring probes located at Union Island and Bequia to remotely monitor the spectrum in the Grenadines.

## 14. Cellular Sites

Figure 4 shows the number of LTE cellular sites in St. Vincent and the Grenadines. There were no new approved Cellular sites in 2022. As such, the number of sites remains at 42 sites for Cable and Wireless and 50 for Digicel.



**Figure 4 Cell Sites in St. Vincent and the Grenadines**

The sites provide coverage to most of the populated areas on mainland St. Vincent, however, there is a need for improved coverage in the Grenadines and in rural areas on mainland St. Vincent. In 2022 Digicel applied for two new sites for Bequia. These

are expected to be approved in early 2023. Cable and Wireless also applied for two new sites in 2022. One will be in Anos Vale and the other in Union island.

## 15. Internet Access

As of December 2022, the total number of Fixed internet subscribers in St. Vincent and the Grenadines was Twenty-Nine Thousand, Five Hundred and Ninety (29,590). This figure shows a 5% increase over the number of subscribers in 2021. In addition, the NTRC signed a contract in July 2022 to implement the Online 24/7 Project which will provide internet access to locations such as community centers, playing fields, non-governmental organizations, and tourism sites to improve telecommunication across St. Vincent and the Grenadines, this project is scheduled to be commissioned in May 2023. More information on the projects can be found in the USF 2022 Annual Report.

## 16. Town Hall Meeting

The NTRC held a town hall meeting in Union Island in May 2022. This was done in collaboration with CarDTP. Attendees were briefed on the benefits of the new project and the event also sought to cater feedback on the ICT issues facing our citizens in the southern Grenadines.

## 17. Public Awareness

In 2022, the NTRC executed several public awareness initiatives.

1. icode784 competition

On Wednesday September 14, 2022, the NTRC launched its 10<sup>th</sup> icode784 competition. The launch was viewed live on both Facebook and YouTube and two lucky viewers each won a brand-new smartphone. This competition was a forum that challenged students to develop and present projects in the form of Ideas and or Mobile Applications targeting both the

public and private sectors of St. Vincent and the Grenadines while assisting our country in achieving the targets of the UN Sustainable Development Goals (SDGs).

Following the launch of the competition, Fifty- Seven (57) entries were received in 2022 as compared to twenty-two (22) for the 2021 competition which was impacted by the covid-19 pandemic. Twenty-eight (28) groups entered the Secondary Idea Category, six (6) 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 Twenty-three (23) entries.

The Preliminary Judging round was held during the period October 19-20, 2022, where the groups presented their projects to a panel of judges. The Grand Finale which concluded the competition was held on November 18, 2022.

The team U.I.S.S from the Union island secondary were the winners of the Secondary Ideas Category , the team Software Explorers from the Canouan Secondary were the winners of the Secondary App category and the Open Category was won by the team LYRIC.

## 2. 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 sixth consecutive year, where Brielle Robertson, a student at the Belair Government School received an amount of \$1000.00 and Aldon Hooper Jr a student at the Union Island Secondary School received an amount of \$1,500.00. 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 with plans to increase the number of recipients.

## 3. The NTRC's myApp Summer Program

For 2022 the commission hosted the MyApp summer program in two locations. One at the Buccament Bay Secondary School from July 11-29, 2022, and one at the Union Island Secondary School for the period August 2-19, 2022. A total of Forty-one (41) students were enrolled in both programs for this year.

#### 4. Radio and Interview Sessions

Radio and Television interviews were conducted at the Agency for Public Information (API), Xtreme FM, WE FM, Boom FM, and Hot 97.1 FM. These interviews were used as a promotional tool to relay information to the public regarding the activities that were being carried out by the NTRC such as the NTRC's 2022 iCode784 competition and the MyApp Summer Program.

#### 5. Social media Campaign

To reach a wider audience, the NTRC engaged the public on Facebook and Instagram providing them with information about our organization. This has helped to engage the public and increase our followers on Instagram and our likes on Facebook.

#### 6. Global Maritime Distress and Safety System (GMDSS) Training Sessions

The commission partnered with the St. Vincent and the Grenadines Coast Guard Services to continue the hosting of GMDSS Radio Training Sessions for fishermen and persons involved in maritime activities across the St. Vincent & the Grenadines. The training sessions informed individuals of the GMDSS system which was implemented

by the NTRC to facilitate emergency and non-emergency communications at sea. The training also provided demonstrations on how to use the handheld GMDSS radios, which have the necessary features that allow people to communicate with the GMDSS system and ships.

The community training session was held at the Clare Valley Government School. After the session a free GMDSS radio was raffled among the attendees. In addition, a training session was held at the Spring Police Station and a handheld GMDSS radio was donated to this Police Station.

#### 7. School Visits

To increase the number of entries for the tenth annual iCode784 competition, the public awareness committee visited various secondary schools that had never participated in the competition since inception. The presentations at the school events revolved around the NTRC's iCode784 competition over the years, the different phases in the competition, how to register for the competition and the rewards of entering the competition.

## 18. Universal Service Fund

The Universal Service Fund(USF) was established under Section 42 of Telecommunications Act (Cap 418) of the Revised Laws of St. Vincent and the Grenadines 2009. The Fund is managed by the NTRC which collects, disburses, and makes relevant decisions with regards to the proper and effective management of the Fund. The fund is used by the NTRC to compensate any telecommunications provider that is required to provide or promote Universal Service.

For the year ending December 31, 2022, the Universal Service Fund had projected to receive a total of Two Million Nine Hundred and Nine Thousand, Nine Hundred and Eighty-Eight Dollars and Seventy-Seven Cents (\$2,909,988.77) from Telecommunications Service Providers. Two Million Five Hundred and Fifty-Seven Thousand, Six Hundred and Fifty-Seven Dollars and Fifty-One Cents (\$2,557,657.51) was received. The USF also received Two Hundred and Seventy-One Thousand One Hundred and Ninety-Eight Dollars and Twenty-Five Cents (\$271,198.25) as a subvention from the Government for capital items under the GMDSS Expansion project.

USF monitoring was conducted at the various sites across St. Vincent and the Grenadines under the six USF projects to ensure that the equipment and services were in place and operational at the various facilities.

The following gives an update of the projects currently being implemented under the USF:

### Community Access Project

This project is the combination of the first project undertaken by the NTRC, the Internet Project, and the sixth project, the Community Center Project. The contract for this project was signed on March 8th, 2019, between Cable & Wireless and the NTRC for a total of Three Hundred and Thirty-Three Thousand One Hundred and Seventy-Two Dollars and Three Cents (EC\$333,172.03) and was commissioned on December 19th, 2019. This project ran for two years and came to an end on December 18th, 2021. This project is now part of the Online 24/7 Project.

### Payphone Project

The second project is the Payphone Project. This project was signed with Cable and Wireless in 2011, at a cost of One Million, Four Hundred Thousand, Five Hundred and Seventy-Five Dollars



(EC\$1,400,575). Under this project, twenty-five (25) payphones were installed at various locations across SVG, including tourism sites, beaches and at points along the main road. Internet access was also provided at tourism sites and beaches. The payphone project came to an end on December 28, 2021. Some components of the project are now under the Online 24/7 project. The NTRC has taken the decision not to continue with keeping the payphones operational due to maintenance issues.

#### Schools' Project

The schools' project was first signed on June 7th, 2011, which saw all 107 schools throughout St. Vincent and the Grenadines given wireless internal and external internet access points with minimum speeds of 8Mbps download and 2Mbps upload. This original contract came to an end and a new contract for this project was signed on October 23rd, 2019, for a total of Two Million Five Hundred and Fifty-One Thousand and Fifty-Four Dollars and Eighty-Seven Cents (EC\$2,551,054.87). The project will run for five years and would come to an end on October 22nd, 2024. In 2022, the NTRC identified that most of the schools had internet connectivity issues due to older model access points that were installed from the first project, no longer functioning optimally due

to firmware updates. As such the NTRC procured 200 new access points in 2022 to alleviate this issue and which are expected to be installed by the second quarter of 2023.

#### Maritime Project

This project was implemented to provide access to both emergency and non-emergency communications in the Exclusive Economic Zone (EEZ) of St Vincent and the Grenadines and saw the implementation of a Global Maritime Distress and Safety System (GMDSS) in St. Vincent and the Grenadines at a total cost of One Million, One Hundred and Twenty-Five Thousand, Seven Hundred and Eighty Dollars (EC\$1,125,780) and was maintained for a period of five years. This project was retendered in 2017 and a new contract was signed on March 8th, 2019, for a period of five years for a total cost of Five Hundred and Ninety-One Thousand, Eight Hundred and Forty Dollars and Sixty-Five Cents (\$591,840.65).

#### GMDSS Expansion Project in Jerome Union Island

The objective of the project is to expand the coverage of the GMDSS. The GMDSS coverage was previously limited to the Mainland and the Northern Grenadines as there is only one transmission site located at Mount St. Andrew. The contract for the

project were signed on May 17, 2022, between Cable & Wireless and the NTRC at a cost of Four Hundred and Forty-Eight Thousand, and Seventy-One Dollars and Eighty-One Cents (\$448,071.81) for the capital items for the project, while the cost of the maintenance of the project amounted to One Hundred and Sixty-Six Thousand, Four Hundred and Nineteen Dollars and Ninety-Two Cents (\$166,419.92). This project will run for 5 years.

#### Police and Health Center Project

This project was initially signed on November 1, 2012, and it provided wireless internet access at all twenty-nine (29) Police Stations and forty-two (42) Health Centers throughout St. Vincent and the Grenadines at a minimum speed of 8 Mbps. The cost of this project was Seven Hundred and Eleven Thousand, and Fifteen Dollars (EC\$711,015). This project came to an end in June 2017 and a new contract was signed on May 14, 2019. The contract for the second project was Five Hundred and Forty-One Thousand, Three Hundred and Forty Dollars (\$541,340.00) and ended in October 2021. The project was retendered in July 2002 and will cater for

improved coverage and faster speeds. The new contract for this project is expected to be signed in early 2023.

#### SMART Project

The first contract for this project was signed on November 20th, 2012, at a total cost of One Million, Six Hundred and Ninety-Eight Thousand, Nine Hundred and Ninety-Four Dollars (EC\$1,698,994) for the supply of equipment and teaching aids at the St. Vincent and the Grenadines Community College (SVGCC) to enable them to offer specialized ICT training. This five-year project was commissioned on September 25th, 2014, and came to an end on September 24th, 2019. The project was retendered on July 24th, 2019, and the NTRC subsequently entered into a contract with Cable and Wireless on March 26th, 2020.

Under the new project, the NTRC will continue to fund the associate degree program offered at the St. Vincent Community College in Cybersecurity, internet access will be provided to a maximum of Six Hundred and Eighty (680) needy households at a subsidized cost of \$10 per month, and Six-Hundred and Forty (640)

computers will be disbursed to various schools throughout St. Vincent and the Grenadines over the 5 years of the contract.

#### Online 24/7 Project

The project comprises some components of the Payphone Project and the Community Access locations from the Community Access Project along with new high traffic locations such as playing fields, hard courts and tourism sites. The contract for the project was signed on July 18, 2022, between Digicel SVG Limited and the NTRC in the amount of Four Million, Three Hundred and Twenty- Six Thousand Three Hundred and Sixty-Three Dollars and Five Cents (\$4,326,363.05). A special component of this project is the provision of a second high speed internet fiber connection at the villa campus of the SVGCC. This connection was completed in December 2022. The other component of the project is scheduled to be completed by the second quarter of 2023.

## 19. Statistics

The NTRC continued in 2022 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 detailed information can be found on table 5 on pages 57- 58, which gives a thorough overview of customer data supplied by Telecommunications Providers.

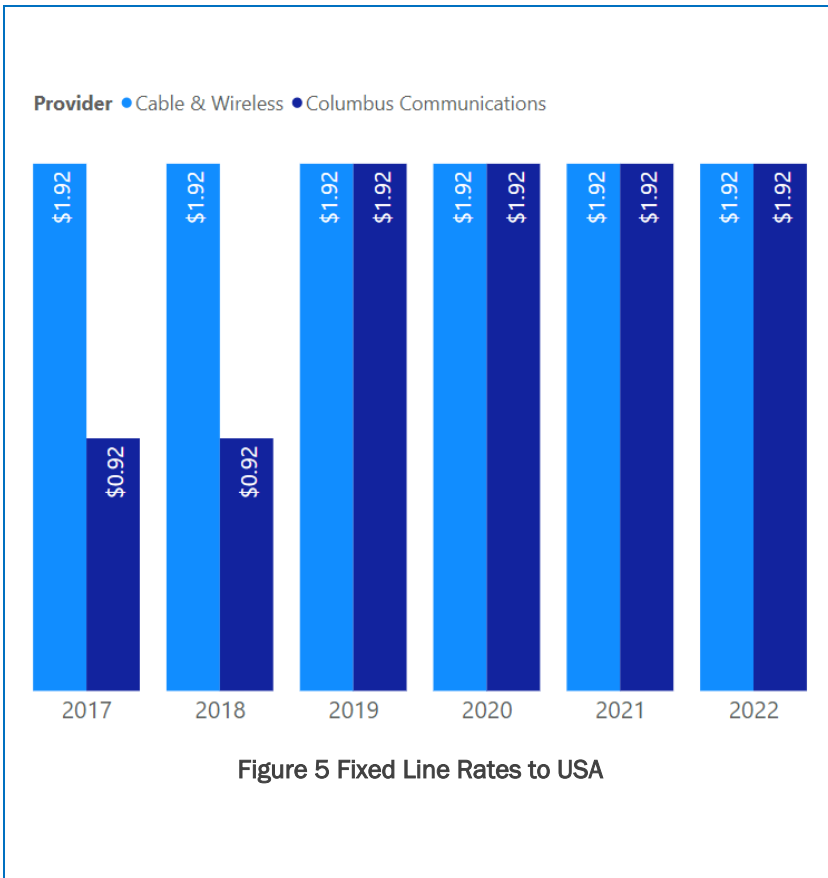


Figure 5 shows that Columbus Communications and Cable and Wireless fixed line rates to the USA remained unchanged.

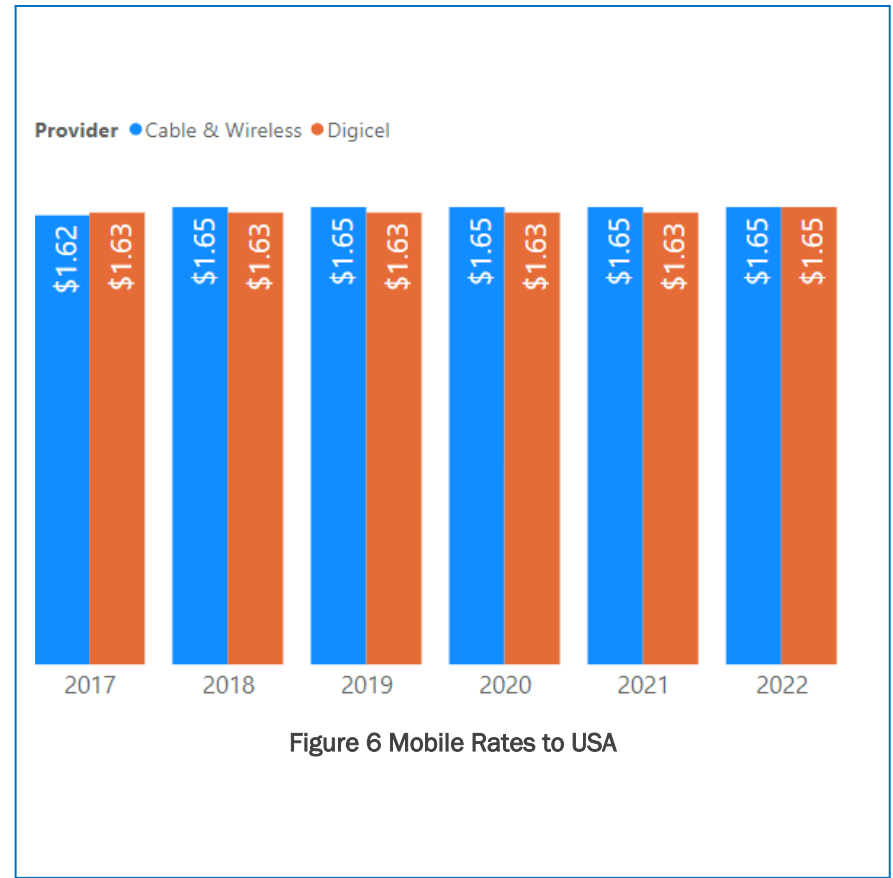
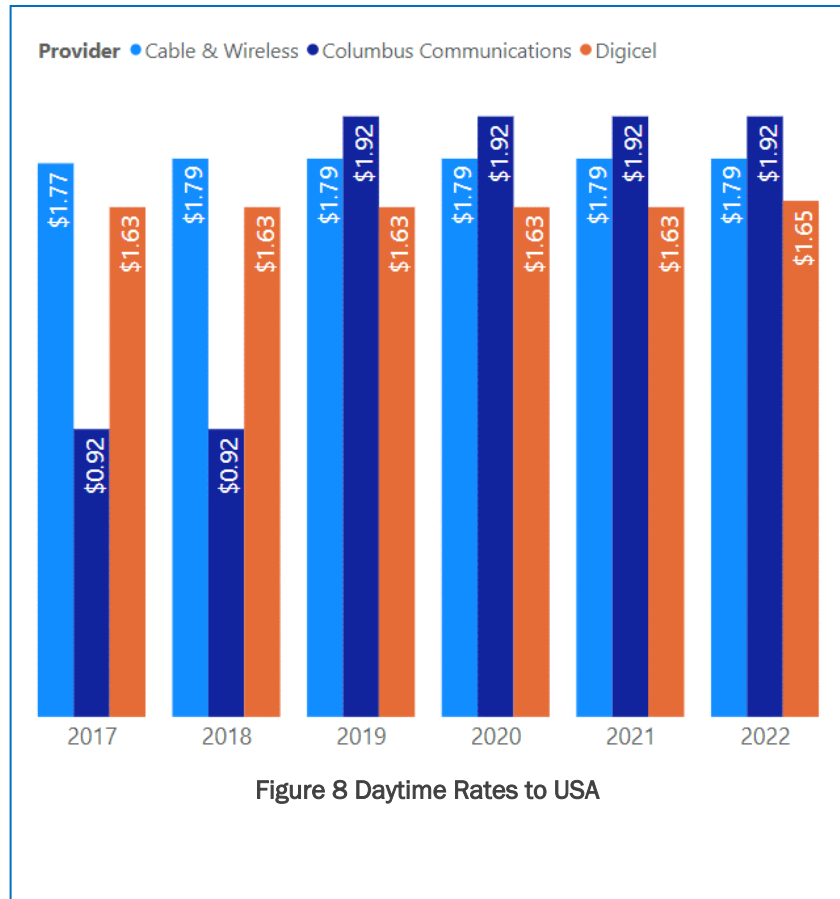


Figure shows that Digicel mobile rate to the USA increased by 2 cents in 2022 matching Cable & Wireless's rate.



Figure 7 Domestic on Network Rates



The domestic rates in Figure 7 are the daytime rates for calls made to customers on the same network.

The international rates in Figure 8 are the fixed line daytime rates for calls to the USA for providers. Columbus Communications and Cable and Wireless remained unchanged in 2022. However, there was a slight increase in Digicel's rate in 2022.

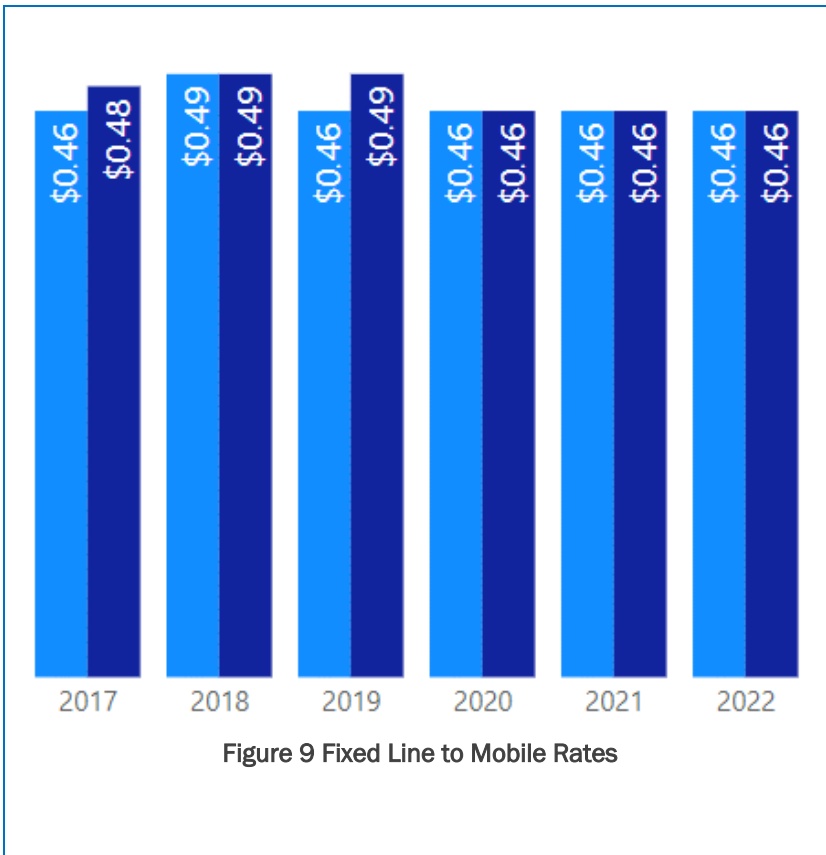


Figure 9 shows Cable & Wireless' and Columbus Communications fixed line to mobile rates for 2017 to 2022. Cable & Wireless and Columbus Communications rates remained unchanged in 2022.

**Figure 10 Mobile Subscribers 2022**

**Figure 11 Mobile Subscriptions per 100 inhabitants**

Figure 10 shows the number of mobile subscribers for 2022. It is noted that Cable & Wireless' mobile subscribers increased in 2022, however Digicel had a decrease in their mobile subscribers in 2022.

Figure 11 shows the number of mobile subscribers per 100 inhabitants from 2017 to 2022. For 2022 we see that there was a slight decrease in the number of mobile subscriptions per 100 inhabitants.

Figure 11 Mobile Data Subscribers 2022

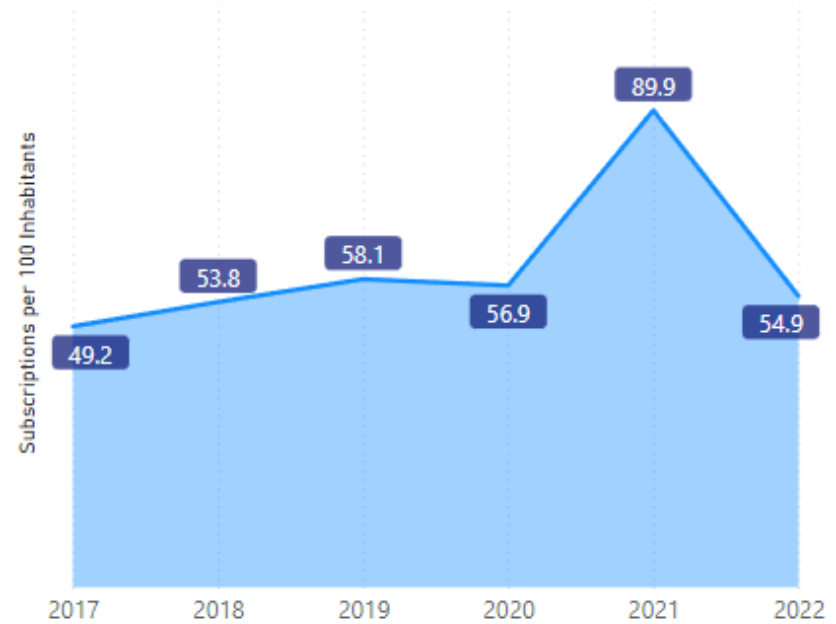


Figure 13 Mobile Data Subscribers per 100 inhabitants

Figure 12 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 further reduction in 2022 and Cable and Wireless saw an increase in their subscribers.

Figure 13 shows a substantial drop in mobile data subscribers in 2022 but which is more inline with past numbers.

Figure 14 Fixed Line Subscribers 2022

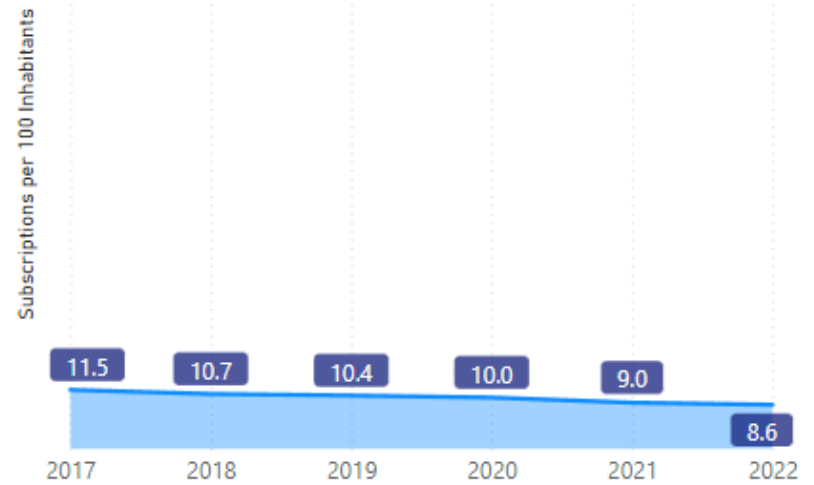


Figure 15 Fixed Line Subscriptions per 100 Inhabitants

Figure 14 shows the total number of Fixed Line Subscribers. As Cable and Wireless completes its migration of its fixed line customers to Columbus communications in 2023 this total will represent only one provider.

Figure 15 shows the Fixed Line Subscriptions per 100 Inhabitants. In 2022 we note that there was a slight decrease in the number of Fixed Line Subscriptions per 100 Households.

Figure 16 Broadband Subscribers 2022

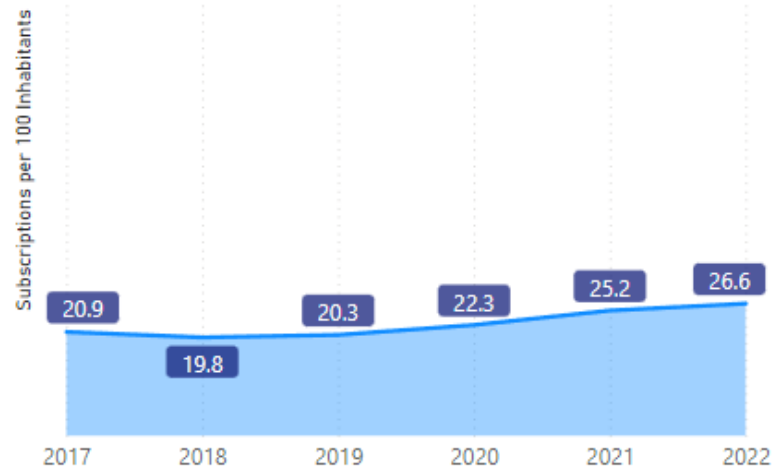


Figure 17 Broadband Subscriptions per 100 Inhabitants

Figure 16 shows the number of Fixed Broadband Internet Subscribers. Cable and Wireless experienced a decline in broadband subscribers in 2022, however there was an increase in broadband subscribers for Columbus Communications and Digicel in 2022.

Figure 17 shows the Broadband Subscriptions per 100 Inhabitants. In 2022, there was an increase in the broadband subscriptions per 100 Inhabitants.



Figure 18 Cable TV Subscribers

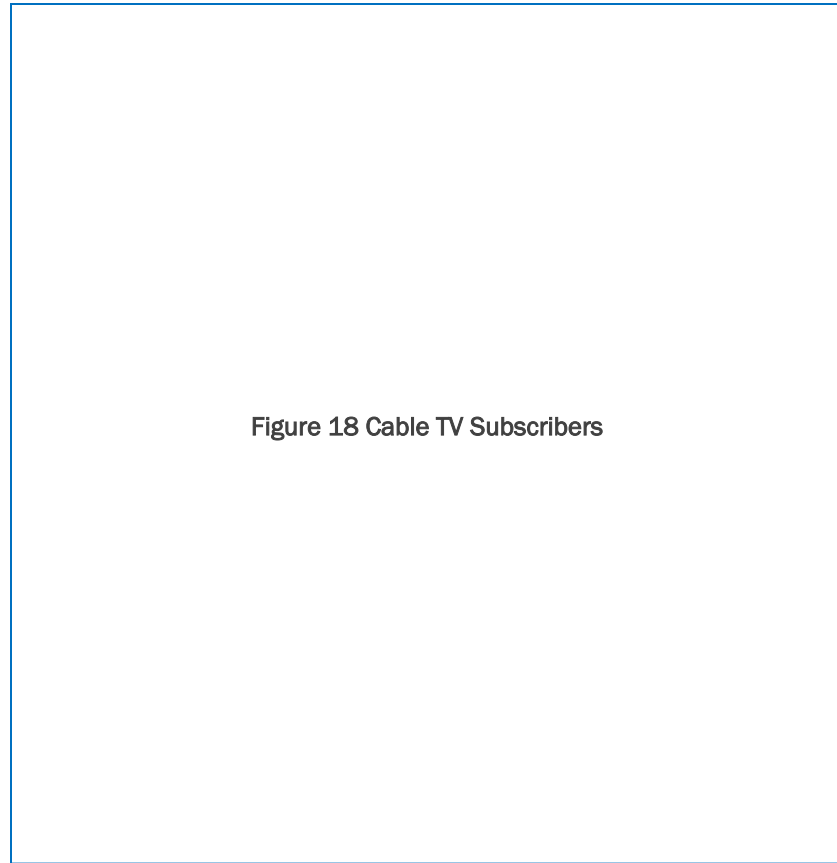


Figure 18 shows the Cable TV subscribers for 2022.

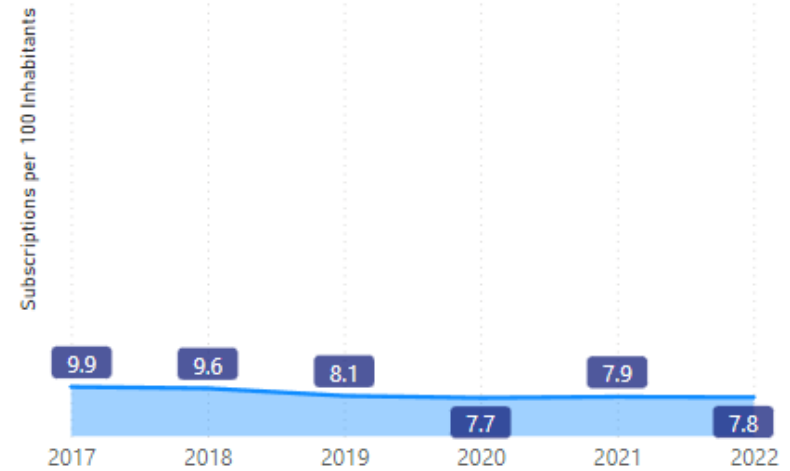
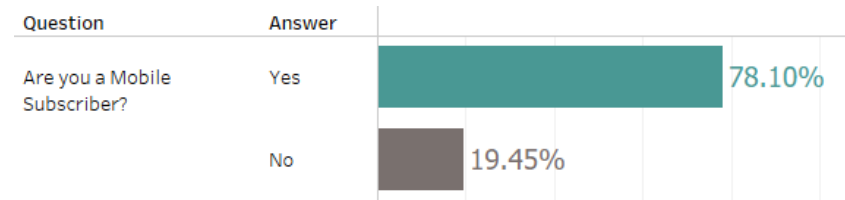


Figure 19 Cable TV Subscriptions per 100 Inhabitants

Figure 19 illustrates the Cable TV Subscriptions per 100 Inhabitants. In 2022 we note that there was a slight decrease in cable TV subscriptions.

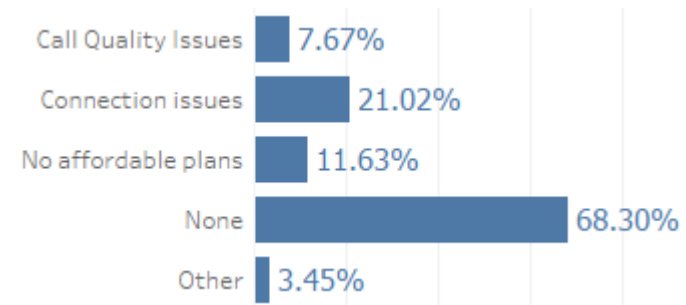
## 20. Results from 2021 Survey

The National Telecommunications Regulatory Commission (NTRC) conducted a national survey in December 2021. The aim of the survey was to acquire the status of telecommunication access throughout St Vincent and the Grenadines. A targeted sample size of two thousand (2000) households spread across the thirteen (13) census divisions were used. The NTRC analyzed the data collected and some aspects of the results are illustrated in figures 20-27.



**Figure 20 Mobile Service Subscribers**

From Figure 20 we see that around 78% of the population has a mobile phone.



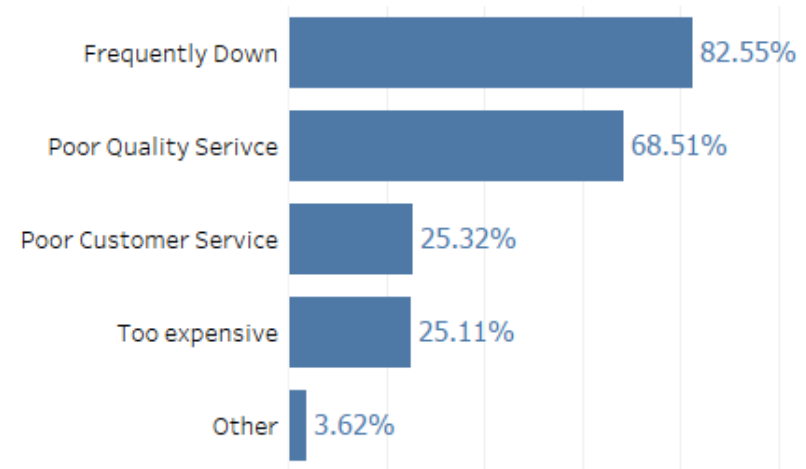
**Figure 21 Satisfaction with Prepaid Services**

Figure 21 illustrates how satisfied mobile subscribers are with different aspects of their prepaid service.

Call Quality	Quality of call Issues	7.11%			
Connection Issues	Connection Issues	21.80%			
No affordable plans	No affordable plans	7.11%			
None	None	67.77%			
Other	Too expensive and they to thief	0.95%			
	Plans are expensive	0.95%			
	To expensive	0.47%			
	They too thief. Money can't stay on the phone	0.47%			
	The data switches from LTE to Hplus when on a call	0.47%			
	Sloopy	0.47%			
	Plans could be a bit cheaper	0.47%			
	No specials or discounts available for postpaid customers	0.47%			
	Highway robbery	0.47%			
	Calls end after a certain amount of minutes	0.47%			

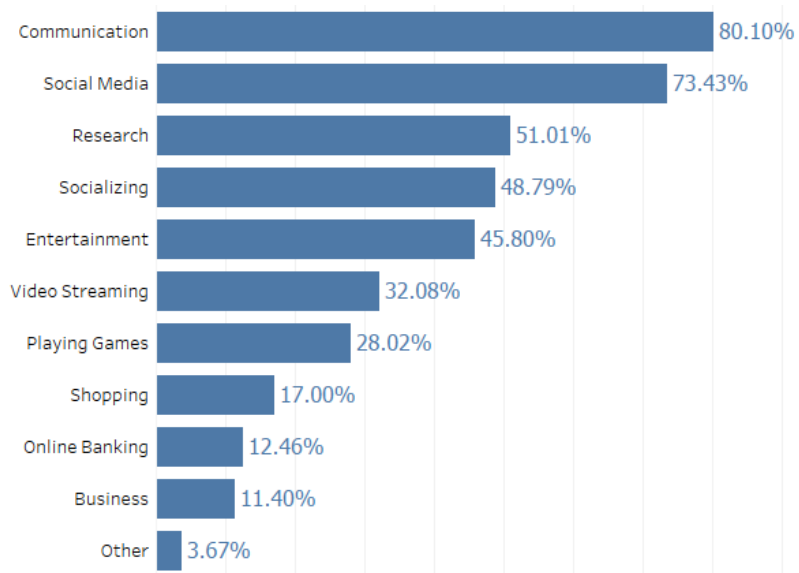
**Figure 22 Satisfaction with Postpaid Services**

Figure 22 illustrates customers' satisfaction with their postpaid services.



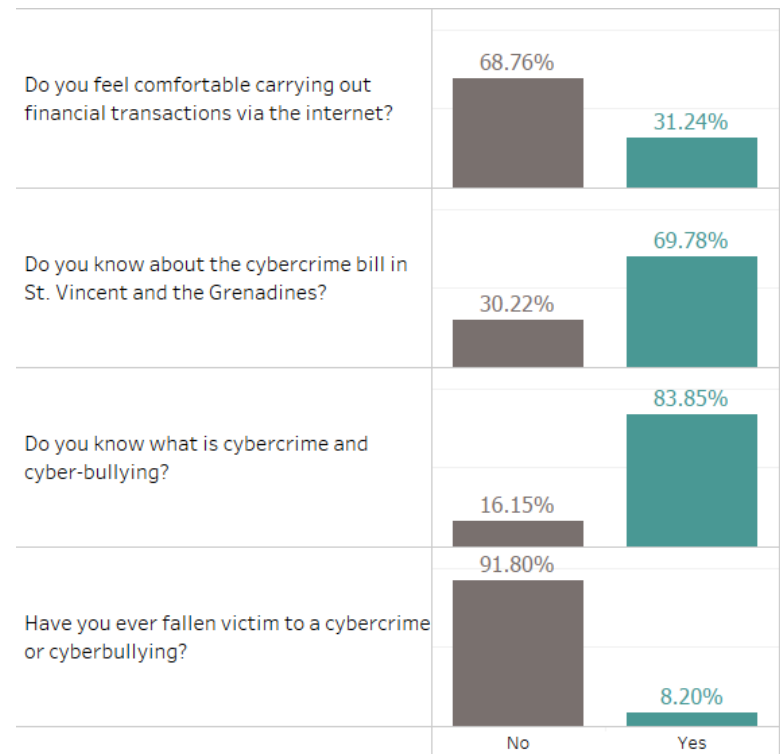
**Figure 23 Customer Dissatisfaction with Fixed Internet Services**

Figure 23 is used to illustrate customers' dissatisfaction with fixed internet service. It is noted that 68.51% of people stated that the quality of the service is poor.



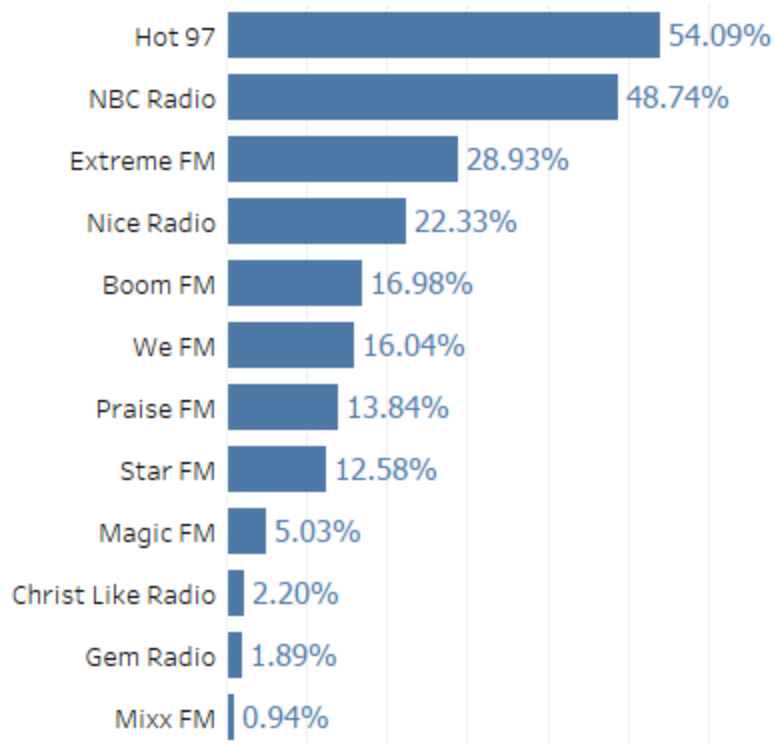
**Figure 24 Fixed Internet Uses**

Figure 24 illustrates the most popular use of Fixed Internet. It is seen that a very small percentage of our internet usage is linked with the Digital economy.



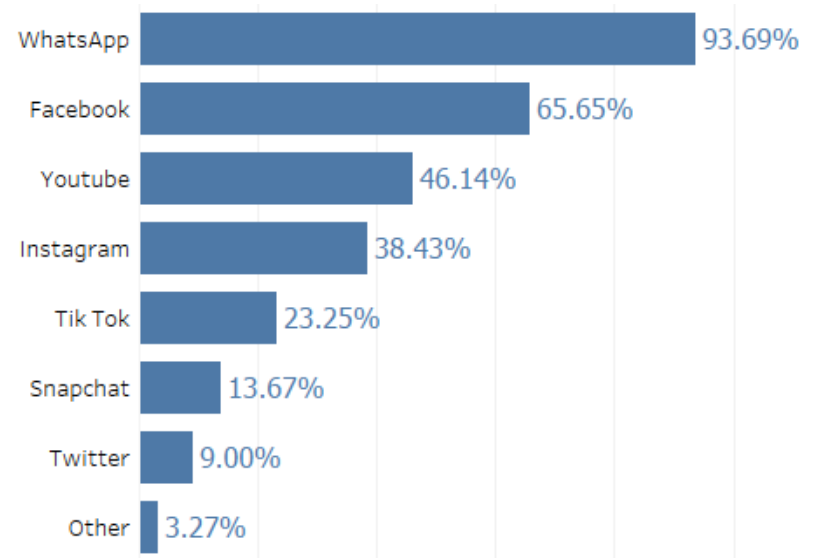
**Figure 25 Cybercrime Awareness**

Figure 25 illustrates a person's level of awareness when it comes to cybercrime. This data shows the low confidence level of our citizens in conducting financial transactions via the Internet.



**Figure 26 Preferred Local radio stations**

Figure 26 shows the market share of our licensed Radio stations.



**Figure 27 Most Used Social Media Platforms**

Figure 27 illustrates the most used social Media platforms. Of importance is the high usage of WhatsApp which is also a substitute platform for communication.

## 21. Licensing

The NTRC continued in 2022 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 several frequency applications.

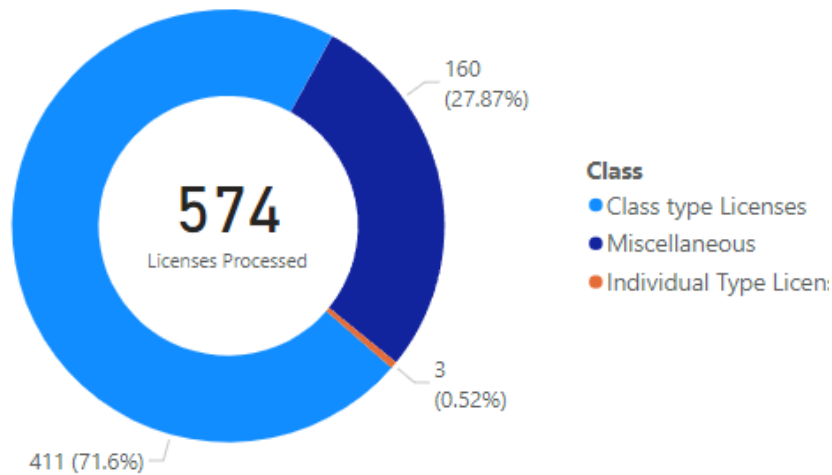


Figure 28 Licenses Processed in 2022

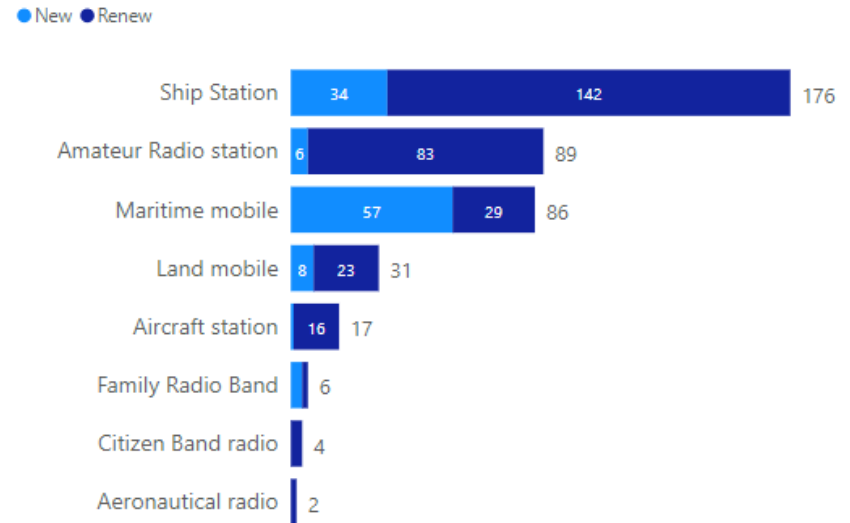
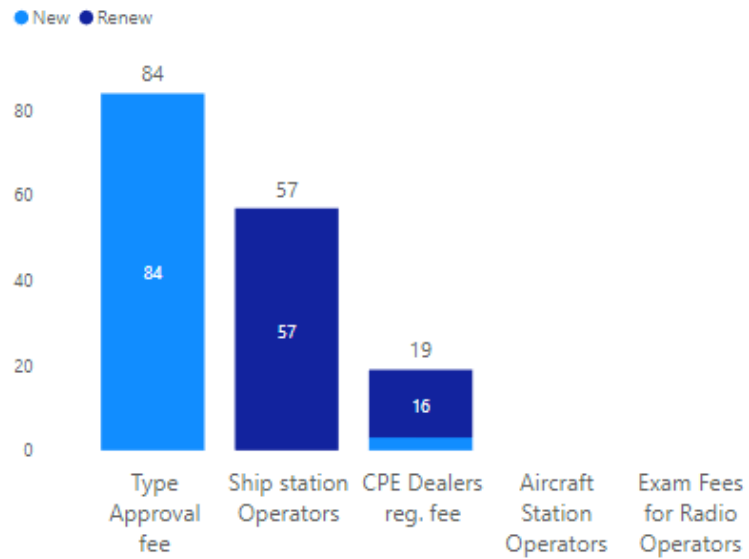


Figure 29 Class Licenses Processed in 2022





**Figure 30 Misc. Licenses Processed in 2022**

Figure 30 shows the number of miscellaneous licences which were processed in 2022.

## 22. RESULT INDICATORS 2022

1. To execute the 10th annual NTRC's Icode784 competition (formerly i2 Competition).

This objective is complete. The competition was launched on September 14, 2022. The preliminary judging was held October 19-20, 2022, and the finals were held on November 18, 2022. In 2022 there were a total of fifty-seven (57) teams that entered the competition compared to twenty-three (23) in 2021. The 2021 numbers were severely impacted by the covid-19 situation. The Canouan secondary were the winners of this year idea category, Union Island secondary were the winners of the secondary mobile app category. The winners of the Open category was the team LYRIC consisting of students from the SVGCC and they received a trip to attend the 4yfn (Four Years From Now) forum for tech startups which is to be held in Barcelona Spain in March 2023. The aim of the icode784 competition is to inspire our youths to become involved in the software industry. An area which our Caribbean

civilization is currently lagging. The current global software and services industry has a market size of US\$474 billion and is projected to grow by 11% per year until 2030.

2. Review and update National Broadband plan for St. Vincent and the Grenadines (be part of pledge for International Telecommunications Union (ITU) program on connecting people everywhere). The National broadband plan was reviewed and updated in the second quarter of 2022 and submitted to the Director General of Finance and Economic Planning. This objective was also submitted as part of our country's pledge to the ITU global program (Partner2Connect) on connecting people everywhere. It is expected that the 5 year plan will be brought before Cabinet in 2023 for approval.

The intent is to connect SVG's communities to high-speed broadband access, which improves their socio-economic position, facilitates seamless participation in the global economy, develops innovative solutions and applications,

improves efficiency, effectiveness, and productivity, strengthens health and wellness programs, modernizes and furthers educational opportunities and other pursuits. The St. Vincent and the Grenadines National Broadband Plan consists of 8 strategic areas of focus:

Focus 1: An affordable, reliable, and robust national high-speed broadband network with sufficient wireless broadband coverage in rural areas and along primary and secondary roads.

Focus 2: The provision of affordable and universal broadband services.

Focus 3: Strengthening of the universal service fund.

Focus 4: The protection, through modernized legislation and regulations, of users' privacy and rights.

Focus 5: The introduction of a Government Wide Area Network with associated applications, IP-PBX and Undersea connectivity for the Grenadines.

Focus 6: The increased usage of broadband access to allow businesses, especially small and medium-sized as well as the agricultural sector, to innovate and access new regional and international markets.

Focus 7: The strengthening of on-going telemedicine programmes; and

Focus 8: The introduction of computer science at all levels of education.

This plan is particularly important for a knowledge base economy and for parity in the digital transformation initiatives of the Government. An IDB study of 26 Latin America and Caribbean (LAC) countries has found that a 10% increase in broadband penetration brought about an average increase of 3.19 percent in per capita GDP.

3. To execute the 24/7 online project which comprises of four lots covering the provision of free wireless internet access at community centers, learning resource centers, playing fields and hard courts, tourism sites and NGOs, the provision of surveillance cameras at high traffic areas, USB charging stations at popular tourism sites and bus stops and high-speed internet connection at the St. Vincent Community College Glen Campus as well as, the purchasing of internal access points.

Only two of the 4 lots were undertaken by the NTRC due to funding constraints. This included lot 1 the provision of wireless internet connectivity at 120 public locations which includes community centers, learning resource centers, playing fields and hard courts, tourism sites and several NGO sites along with 202 internet access points. The other lot that was undertaken was lot 4, which covers the provision of additional bandwidth via high-speed fiber optic cable at the SVGCC Villa Campus as well as the procurement of 200 Internet access points. These 200 access points will replace aging access points in our nation's schools. The five-year contract for lots 1 and 4 were signed with Digicel on July 18, 2022, in the sum of \$4,326,000.00. The project is expected to be commissioned by May 2023. As of December 2022, the fiber optic Internet connection has been installed at the Villa campus which is providing 500 Mbps download and 300Mbps upload. This will complement the current fiber connection being provided by Cable & Wireless at the said location under the school's project which is 100Mbps download and 100 Mbps upload. Under the contract with Digicel the fiber connection will increase in bandwidth to 1GB download and 700Mbps upload from year 3 of the contract.

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 objective is incomplete. Columbus Communications has not submitted the renewal applications for their licenses after requesting an extension to June 2022. On December 14, 2022, Cable and Wireless wrote to the NTRC indicating that their parent company is exploring the amalgamation of its subsidiaries into one legal entity where most likely cable and Wireless will be the sole legal entity by December 31, 2022. The NTRC has written to ECTEL for advice on this development.

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 is partly completed, the new electronic communications act was passed in the House of Assembly on October 25, 2022, and was assented to by the Governor General on the 16th of November 2022 as act No.18 of 2022. The NTRC has been advised by the Attorney General that a date will need to be fixed by proclamation for the act to come into force.

6. Collaborate with the Ministry of Tourism, Civil Aviation, Sustainable Development and Culture in launching a new Tourism app. This objective is partly complete. The NTRC completed the Android version of this application and recently completed the iOS version of the app in December 2022. It is expected that both apps will be formally launched in the first quarter of 2023 after testing and feedback from selected stakeholders. The NTRC took the initiative to include an additional feature in the app than what was in the original scope submitted by the Ministry of tourism. This involves geospatial information on 40 waterfalls which we believe would be appreciated by both locals and visitors and can provide a competitive advantage for our tourism

product. This component contributed to the delay of the apps.

7. Connect 180 needy households with wireless internet access at a subsidized price of \$10 per month in our efforts to bridge the digital divide. This task was not completed as the NTRC only received 78 applications under this program in 2022.
8. Provide internet connectivity to 850 students with a government issued tablet via three-month mobile data plans. This task is not complete. The task was discontinued in June 2022 given that the program was not taken up by the public as we had anticipated. Despite our efforts to sensitize the public about the program, only one application was submitted for the period January to June 2022.
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 continues to work with ECTEL with regards to the

implementation of the e-licensing module of the Spectrum-E system. During 2022 the Type Approval module was completed, and the Commission has started accepting type approval applications using the platform. Work also continued on the Amateur Radio and Ship Station modules with final testing for the Amateur Radio module being completed in December 2022. It is anticipated that the Ship Station module will be completed in the first quarter of 2023. The two fixed spectrum monitoring stations required for SVG under the project were already installed prior to 2022. One is located on Bequia, and the other is located on Union Island. To date only Dominica and SVG of the ECTEL member states have their two fixed monitoring stations operational. The Regional Integrated Spectrum Management System is expected to be completed by the end of September 2023.

10. Finalizing the new location to provide the required office space for the NTRC staff. This task is in progress. The NTRC was able to come to an agreement with the owners of Layne's building on Murry's Road on the terms and conditions of the sale agreement. It is expected that the

agreement will be signed in January 2023. The NTRC also requested quotations from three contractors in November 2022 to undertake the necessary renovations work. The NTRC expects to complete the required renovations and relocate its offices to the new location by the third quarter of 2023. The total cost of this project will be approximately \$2.1 million and is being jointly financed by the NTRC and Central Government.

11. Develop a prototype national addressing system (virtual base) for St. Vincent and the Grenadines. This objective is incomplete. The NTRC has not started work on this objective as the Tourism apps (android and IOS) took longer than anticipated. Additionally, the NTRC received a request to revisit and complete the development of an application for the Police Traffic Department which was originally started in 2019. The Addressing system task will be completed in 2023.

12. To host two MyAPP summer programs. This objective is complete. For 2022, the NTRC hosted the MyAPP summer program at two locations: one at the Union Island Secondary school from July 11-29, 2022, and the other at the Buccament Bay Secondary School for the period August 2-19, 2022. Twenty (20) students took part in the Union Island program while twenty-two (22) took part in Buccament. These annual summer programs target students in the 13-18 age group and expose them to coding (software) and robotic skills development.



## 23. MAJOR OBJECTIVES FOR 2023

1. To execute the 11th annual NTRC's Icode784 competition (formerly i<sup>2</sup> Competition).
2. Sensitize the public regarding the provisions of the new Electronic Communications Act.
3. Complete the implementation of the Online 24/7 project which comprises of two lots. Lot 1 covers the provision of free wireless internet access at community centers, learning resource centers, playing fields and hard courts, tourism sites and NGOs, and lot 2 covers the provision of a high-speed internet connection at the St. Vincent Community College Glen Campus as well as, the purchasing of 200 internal access points
4. Adjust the NTRC's processes and procedures to be in line with the new Electronic Communications Act.
5. Work with the Ministry of Tourism to launch the Explore SVG app.
6. Connect 160 needy households with wireless internet access at a subsidized price of \$10 per month in our efforts to bridge the digital divide.
7. Replace 200 internet access points in our schools.
8. Work along with ECTEL and the other NTRC's to complete the Regional Integrated Spectrum Management and Monitoring System.
9. Complete renovations of the Layne's Building and relocate the NTRC's office.

10. Develop a prototype of the National Addressing system for approval by Cabinet.
11. Host two MyApp summer programs.
12. Collaborate with SVGCC to update the curriculum in the Cyber Security programme.
13. Create a new USF project for the disabled and elderly people requiring special equipment.
14. Work along with the world bank funded Caribbean Digital Transformation Project (CarDTP) to help execute the project.

## 24.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 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.

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 shareable 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

**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

## 25.ANNEX B

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\$)	Wireless Broadband	Other Revenue (EC\$)	Total
	International Revenue (EC\$)	Domestic Revenue (EC\$)	Data	International Revenue (EC\$)	Domestic Revenue (EC\$)				International Revenue (EC\$)	Domestic Revenue (EC\$)				
2015														
2016														
2017														
2018														
2019														
2020														
2021														
2022														

Table 1 Total Revenue earned by providers of telecommunications services from 2015 to 2022.

Year	Kelcom Int'l (Columbus Communications)						Silvakast	Andre Walker	Spectra		
	Fixed Line Revenue (EC\$)		Cable TV Revenue (EC\$)	Internet Revenue (EC\$)	Other Revenue (EC\$)	Total	Cable TV Revenue (EC\$)	Voice Resale (EC\$)	Cable TV Revenue (EC\$)	Internet Revenue (EC\$)	Total
	International Revenue (EC\$)	Domestic Revenue (EC\$)									
2015	█	█	█	█	█	█	█	█	█	█	█
2016	█	█	█	█	█	█	█	█	█	█	█
2017	█	█	█	█	█	█	█	█	█	█	█
2018	█	█	█	█	█	█	█	█	█	█	█
2019	█	█	█	█	█	█	█	█	█	█	█
2020	█	█	█	█	█	█	█	█	█	█	█
2021	█	█	█	█	█	█	█	█	█	█	█
2022	█	█	█	█	█	█	█	█	█	█	█

Table 2 Total Revenue earned by providers of telecommunications services from 2015 to 2022.

Year	NTRC Application fees	Percent Change	NTRC & ECTEL Frequency Fees	Percent Change
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	102%	1,245,183	-26%
2008	13,325	-41%	1,906,089	53%
2009	13,225	-1%	1,487,390	-22%
2010	23,846	80%	1,392,962	-6%
2011	16,109	-32%	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	-19%	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%
2020	23,521	-17%	3,126,872	3%
2021	27,074	15%	3,395,118	9%
2022	43,093	59%	2,911,639	-14%

**Table 3 ECTEL & NTRC Revenue**



Year	License Fees	Total	Percent Change
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	13%
2007	4,301,521	4,301,521	12%
2008	4,081,151	4,081,151	-5%
2009	4,065,706	4,065,706	0%
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	-2%
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%
2020	4,570,250	4,570,250	82%
2021	3,740,171	3,740,171	-18%
2022	3,927,195	3,927,195	5%

**Table 4 Licence Fees Collected**

Mobile Network Operator	Location	Number of Cell Sites	Number of LTE Sites
Cable & Wireless	St. Vincent	32	32
	Grenadines	10	10
Digicel	St. Vincent	38	38
	Grenadines	12	12

			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Cable & Wireless (W) Ltd	Fixed Line Subscribers	Residential	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Business	█	█	█	█	█	█	█	█	█	█	█	█	█	
		<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	
	Internet Subscribers	Dialup	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		ISDN	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		ADSL (Residential)	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		ADSL (Business)	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	Mobile Subscribers	Post paid	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		Prepaid	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	Digicel	Mobile Subscribers	Post paid	█	█	█	█	█	█	█	█	█	█	█	█	█
Prepaid			█	█	█	█	█	█	█	█	█	█	█	█	█	
<b>Total</b>			█	█	█	█	█	█	█	█	█	█	█	█	█	
Broadband subscribers		Residential	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		Business	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
Columbus Communications	Cable TV Subscribers	Residential	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Business	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Free Service	█	█	█	█	█	█	█	█	█	█	█	█	█	
		<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	
	Internet Subscribers	Residential	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Business	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Free Service	█	█	█	█	█	█	█	█	█	█	█	█	█	

	Fixed Line Subscribers	<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Residential	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		Business	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		Free Service	█	█	█	█	█	█	█	█	█	█	█	█	█	█
		<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	█
SilvaKast	Cable TV Subscribers	Residential	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Business	█	█	█	█	█	█	█	█	█	█	█	█	█	
		<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Spectra	Cable TV Subscribers	Residential	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Business	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Free Service	█	█	█	█	█	█	█	█	█	█	█	█	█	
		<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	█
	Internet Subscribers	Residential	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Business	█	█	█	█	█	█	█	█	█	█	█	█	█	
		Free Service	█	█	█	█	█	█	█	█	█	█	█	█	█	
<b>Total</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	█		

Table 5

		2015		2016		2017		2018		2019		2020		2021		2022		
		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	1	1	1	0	2	1	1	0	0	
	Internet Networks	1	N/A	0	N/A	0	N/A	0	0	0	N/A	0	0	1	0	0	0	
	Subscriber Television	1	N/A	1	N/A	1	N/A	0	4	0	4	0	3	0	3	0	0	
	Int'l Simple Voice Resale	0	N/A	0	N/A	0	N/A	0	1	0	1	0	1	0	1	0	0	
	Mobile Cellular	0	N/A	0	N/A	0	N/A	0	N/A	0	1	0	2	2	0	0	0	
	Public Radio paging	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	0	0	0	0	0	0
	Submarine cable	0	N/A	0	1	1	1	0	1	1	1	0	2	0	2	0	0	
Class type Licenses	Private network/services	1	1	1	1	1	1	0	1	0	N/A	0	0	1	0	0	0	
	Internet services	0	N/A	0	2	1	1	0	2	0	2	0	3	0	2	0	0	
	Radio Broadcast	1	6	1	7	1	8	0	12	0	11	0	6	2	6	0	0	
	Value Added Services	1	N/A	0	0	0	0	0	1	0	N/A	0	0	0	0	0	0	
	Community radio	1	1	2	3	2	4	0	5	1	3	0	4	1	3	0	0	
	Television Broadcast	0	N/A	0	1	0	2	0	0	0	2	0	0	1	0	0	0	
	Maritime mobile	1	16	1	26	3	44	10	18	2	24	3	23	10	21	57	29	
	Land mobile	0	10	10	20	12	28	2	17	4	18	7	19	6	21	8	23	
	Aeronautical radio	1	1	0	0	0	0	0	0	3	2	0	2	0	2	0	2	
	Aircraft station	1	18	1	17	1	18	3	18	0	18	0	16	0	16	1	16	
	Amateur Radio station	8	47	20	20	23	14	8	76	12	76	3	83	18	73	6	83	
	Citizen Band radio	2	3	0	0	0	0	2	2	0	5	0	4	0	4	0	4	
	Family Radio Band	1	2	2	1	1	1	0	2	0	2	1	0	1	1	4	2	
	Ship Station	46	177	41	184	40	163	22	175	28	168	10	156	12	142	34	142	
Miscellaneous	CPE Dealers reg. fee	2	10	5	18	5	20	6	22	2	25	1	19	3	18	3	16	
	Exam Fees for Radio Operators	0	N/A	0	N/A	0	N/A	0	N/A	0	0	0	0	0	0	0	0	
	Type Approval fee	56	N/A	85	N/A	102	N/A	125	N/A	85	N/A	0	93	72	0	84	0	
	Ship station Operators	17	40	16	28	18	30	6	22	26	17	6	34	46	19	0	57	
	Aircraft Station Operators	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Table 6 outlines the number of licences issued from 2015 to 2022. The issued licences are broken down as new licences, issued in the specific year, and renewals of existing licences, first issued in

## 27. AUDITED FINANCIAL STATEMENTS 2022