NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION

Annual Report

2017

CONTENTS

Acknowledgements 3

Chairman's Report 4

01.

Who We Are & What We Do

- What We Do 6
- Who We Are 7
- Attendance 8
- The Secretariat 9
- Human Resource Development 10

02.

Operations Overview

- Public Consultations 11
- Regulatory Functions: Licensing & Technical 13
- Project Highlight 17

CONTENTS

03.

Financial Review

- Revenues Collected 18
- Trends in the Telecommunications Market Revenues & Investments 20
- Mobile 21
- Broadband 21
- Fixed Line 22

04.

Appendices

- Telecommunications Licences 25
- Type Approvals 26
- Frequency Authorizations 30
- Financial Statement 31

ACKNOWLEDGEMENTS

The National Telecommunications Regulatory Commission acknowledges the contribution of the Secretariat for its diligence and dedication towards the completion of this year's Annual Report.

The Commission also recognizes the contributions from the website of the Eastern Caribbean Telecommunications Authority (ECTEL).

ACAPS Disaster Profile – Dominica January 2018 – The Impact of Hurricane Maria.
A Report by the Government of Dominica – Post Disaster Needs Assessment – Hurricane Maria – September 18, 2017.

CHAIRMAN'S REPORT

Overview

As Chairman of the National Telecommunications Regulatory Commission (NTRC), I am pleased to present the 2017 Annual Report. The timeframe encompassed in this report is the period January 1, 2017 to December 31, 2017. This report underscores the activities carried out by the NTRC and outlines the impact of the telecommunications sector on Dominica's economic development. On Monday, 18th September 2017, the Telecommunications sector was adversely impacted by the passage of a Hurricane Maria. The sector suffered the hardest hit of 125M compared to Electricity 87M, Water and Sanitation 65M and the Ports 46M. (Post Disaster Needs Assessment – Hurricane Maria -Report by the Government of Dominica)

Regulatory Functions

The NTRC remains the chief regulatory organization for the telecommunications sector in Dominica. The suite of administrative and technical functions completed by the NTRC includes the processing of telecommunications licences, frequency authorizations, type approvals, the collection of fees, as well as the assignment of numbers, frequency investigations and spectrum monitoring.

Universal Service Fund

The NTRC also has the responsibility for the management of the Universal Service Fund, which was established by Statutory Regulatory Order 34 of 2009, to promote universal telecommunications service throughout Dominica.

In fulfillment of its mandate, the Universal Service Fund embarked on a number of projects within the reporting period. The Grand Fond Smart Center received ten (10) brand new Acer computers; one printer and several toner cartridges.

The Roseau Library, the National Youth Council, and the Christian Union Primary School were all gifted with four, three and six new all-in-one Acer computers respectively.

CHAIRMAN'S REPORT

The telecommunications sector continues to contribute significantly to the Dominica economy and it is still classified in the top 10% of sector contributions to GDP.

Mobile continues to rake in the majority of revenues from the telecommunications sector despite the slowdown in the penetration rate which started in 2014. The decrease may be attributed to market saturation and the ability to circumvent high offnet calling rates due to the increased use of OTT services like WhatsApp to call across networks. Further, the onslaught of Hurricane Maria in September of 2017 completely decimated the mobile telecommunications service as the telecommunications infrastructure sustained catastrophic damage. Reports have indicated that only four (4) towers were standing immediately after hurricane Maria and the island was completely dark with no telecommunications services for days.

The Commission would like to thank the Secretariat for its hard work and dedication throughout the year. The commitment of the Secretariat ensures that the Commission is able to achieve its mandate to effectively regulate the telecommunications sector.

Curtiss Winston

Chairman

National Telecommunications Regulatory Commission Commonwealth of Dominica

WHO WE ARE & WHAT WE DO

01

What We Do

The role of the National Telecommunications Regulatory Commission (NTRC) is to effectively regulate the telecommunications sector, to balance the interest of consumers and telecommunications providers, and to advise on the formulation of a national telecommunications policy, with a view to ensuring the efficient, economic and harmonized development of telecommunications, broadcasting and radio communications in the Commonwealth of Dominica.

The NTRC was established by the Telecommunications Act, 2000 (Act 8 No. of 2000). The Telecommunications Order, 2001 (S.R.O. No. 10 of 2001) brought the Act into operation on the 1st day of February, 2001.

02

The Vision

Universal and affordable access to high quality public telecommunications services whilst optimizing the potential of the sector for contributing to Dominica's socio- economic growth.

03

The Mission

To work within the ECTEL framework to effectively regulate the telecommunications sector, in harmony with other member states while balancing the interests of consumers and telecommunications providers and providing advice to the Minister on telecommunications matters.

WHO WE ARE

There were five (5) Commissioners serving on the Commission. For the period under review, inclusive of the Chairman, other members of the Commission were:

Careen Prevost

Willie Fevrier

Valentine Joseph

Stephen Isidore

ATTENDANCE

Due to the passage of Hurricane Maria in 2017, only six of twelve meetings were convened during this reporting period.

Names	# of Meetings Convened	# of Meetings Attended	# Absent (w/ Apology)	# Absent (w/o Apology)	Out of State
Curtiss Winston	6	6			
Willie Fevrier	6	6			
Valentine Joseph	6	6			
Stephen Isidore	6			6	
Careen Prevost	6	3		3	

Table 1: Commissioners' Attendance Record

THE SECRETARIAT

Section 27 of the Telecommunications Act, 2000 provides for the Commission to have such staff as is necessary for the performance of its functions.

Staff

At December 31st 2017, the NTRC Secretariat had a staff complement of ten (10) which consisted of seven (7) full time staff members and three (3) interns. Ms. Vida Williams left the Secretariat in March after fourteen (14) years of service.

Craig Nesty - Executive Director
Urania Williams - Universal Service Fund Administrator
Clementine Josephs - Administrative Officer
Cheryl Tavernier - Administrative Assistant
George James - Chief Engineer
Austin Andre - Assistant Engineer
Vida Williams - Office Attendant

Interns

Kiyana Edwards - Research Analyst
Melisha Toussaint - Assistant Engineer
Andy Joseph - Research Assistant

HUMAN RESOURCE DEVELOPMENT

During the year 2017, the Commissioners and Staff of the NTRC participated in the various trainings, seminars and workshops as tabled below:

Training	Date	Venue	Attendee	Organized by
Internet Engineering Task Force	Mar 26 - 31	Chicago, Illinois, USA	Craig Nesty Executive Director	Internet Society
Internet of Things: Smarter Living in the Caribbean	Apr 24 - 25	Trinidad & Tobago	Craig Nesty Executive Director	ITU
Number Portability Industry Working Group	May 25	St. Lucia	George James Engineer	ECTEL
ITU Global Symposium for Regulators	Jul 11 - 14	Nassau, Bahamas	Craig Nesty Executive Director	Government of the Bahamas and URCA
ECTEL/NTRC Number Portability Working Group & Work Plan and Budget 2017 - 2018	Jul 25 & 26	St. Lucia	Craig Nesty Executive Director Clementine Josephs Administrative Officer	ECTEL
Latin America & the Caribbean Internet Governance Forum (LACIGF)	July 30 - Aug 5	Panama	Craig Nesty Executive Director	ISOC
ICANN 60: Annual General Meeting	Oct 28 - Nov 3	Abu Dhani	Melisha Toussaint Assistant Engineer	ICANN

Table 2: Training, Seminars and Workshops in 2017

OPERATIONS OVERVIEW

PUBLIC CONSULTATIONS

As part of the NTRC's mandate, public consultations are utilized as part of the regulatory process. These consultations are important as they create a unique opportunity for the NTRC to collaborate with stakeholders and the wider public on issues and matters that relate to decision making within the telecommunications sector.

In 2017, the NTRC conducted one (1) consultation. Table 3 summarizes the consultation held in 2017, and provides the status of this consultation at the end of the review period.

Consultation	Objective	Timelines
Draft Cost Models for Fixed and Mobile Interconnection Rates	Adoption of new rates as it relates to interconnections.	The document was received from ECTEL on May 31st 2017. It was circulated for comments to stakeholders. Comments should be submitted to ECTEL on or before 28th June 2017. The initial comments period ran from 30th May to 28th June 2017. On 23rd June, ECTEL decided to extend the deadline of submission of initial comments to Tuesday, 18th July 2017. The period for reply to comments ran from 20th July – 9th August 2017.

Table 3: Table of Consultations

REGULATORY FUNCTIONS: LICENSING & TECHNICAL

The NTRC engages in a number of activities related to licensing and other technical matters. During the 2017 reporting period, the Commission received applications for various licences which were recommended, approved and issued as follows:

Class Licences

During the 2017 reporting period, the Commission received thirty-one (31) applications for Class Licences. All thirty-one (31) applications were approved and issued (Appendix 1).

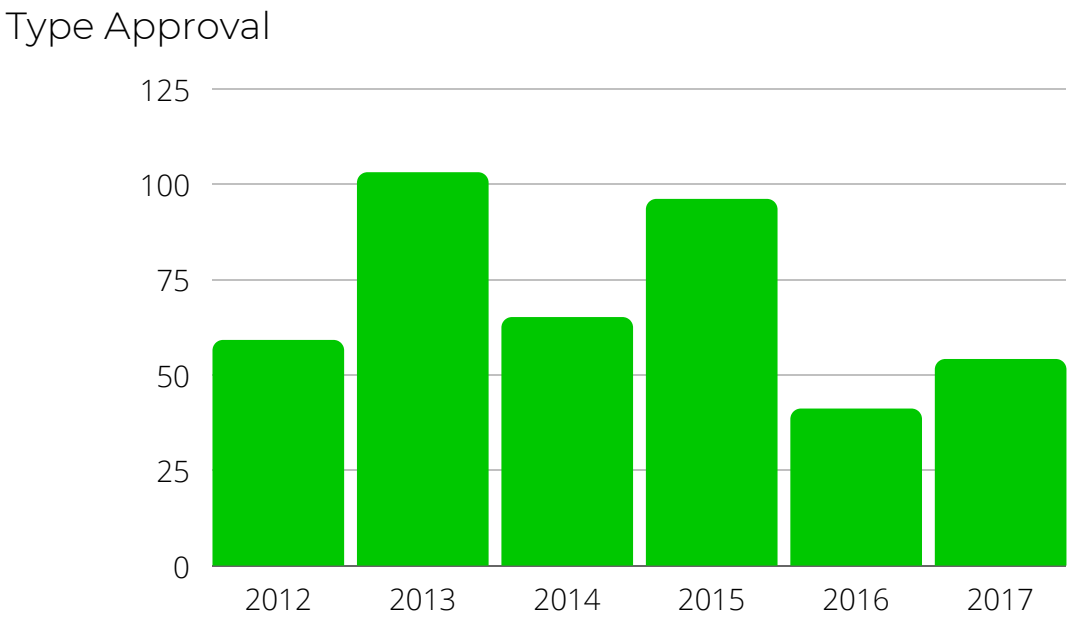


Figure 1: Type Approvals 2012 - 2017

Type approval is required to certify all equipment used, as well as those offered for sale on the local market is not a source of harmful interference, and that the equipment conforms to the required telecommunications standards.

A total of fifty-four (54) applications were approved and granted in reporting year 2017. (Appendix 2). An increase of 24% over what was recorded in 2016.

Frequency Authorizations

During the 2017 reporting period the NTRC received three (3) applications for Frequency Authorization. They were all approved and issued (Appendix 3).

At the end of 2017, there were nine (9) Class Licence holders as follows:

Maritime Mobile Radio

- HHV Whitchurch & Co. Ltd.
- VIA Sat Inc.

Open Land Mobile Radio

- NH International Caribbean Ltd.

Private Land Mobile Radio Licence

- IMG Media Ltd.
- Indigo Asia Services
- Fort Young Hotel

FM Radio Broadcast Licence

- Nature Island Communications Corp. (Kairi FM)
- West Indies Communications Enterprises Ltd. (Q95 FM)
- Dominica Broadcasting Corporation (DBS)

Individual Licenced Service Providers

At the end of 2017, there were eleven (11) individual licence holders. These licences included: Fixed Public Telecommunications, Public Mobile Telecommunications, Internet Network and Services and Submarine Cable Landing Licences.

Fixed Public Telecommunications

- Cable & Wireless Dominica Ltd./LIME
- Marpin 2K4 Limited
- SAT Telecommunications Ltd*

Public Mobile Telecommunications

- Cable & Wireless Dominica Ltd./LIME
- Digicel (Dominica) Limited

Internet & Networking Services

- Cable & Wireless Dominica Ltd./LIME
- Marpin 2K4 Limited
- SAT Telecommunications Ltd*
- Green Dot

Submarine Cable Landing

- Middle Caribbean Network
- Cable & Wireless Dominica Ltd./LIME

Table 4: Individual Licence Holders in 2017

Radio Broadcasting - Interferences

The NTRC received a report from the National French Authorities from France, (ANFR), received on 23rd February 2017, indicated that from January 2017, there was a reoccurrence of Intermodulation Interference (IMI) on 121.3 MHz affecting the French Aviation Band. IMI is interference on a frequency due to the super imposition of two or more other frequencies. ANFR complained that French aircrafts were receiving Dominica radio station transmissions on their communication band.

Immediately, on 23rd February 2017, we confirmed the ANFR's report of the IMI on 121.3 MHz and continued to record and analyze the IMI field measurements. Having observed that the resultant frequency was due to intermodulation of frequencies belonging to Kairi FM and Vibes Radio and that it was excessive bandwidth along with the already heighten output power of the transmitters, they were both instructed to adjust their bandwidth and output power at their respective transmitter site at Morne Español. Kairi FM and Vibes Radio were both advised to install appropriate transmission filters to further reduce the probability of IMI from reoccurring on 121.3 MHz.

Notably, the recommended adjustments sufficed and although the appropriate transmitter filters have not been installed, no further reports of Intermodulation Interference affecting the French Aviation Band have been received.

On 6th Mar 2017, Eric Fevrier of Grand Bay made a complain that DBS was being heard on several frequencies in the FM Band. The complainant reported that the harmful radio frequency interference was caused by 103.5 MHz frequency assigned to DBS and that the splattering was being heard on other frequencies in the FM Band, in the Grand Bay area. It was also noted that the radio used when the splattering occurred was an analog radio.

Occupancy checks were performed for DBS' 103.5 MHz in the Grand Bay area and DBS was only heard on their assigned frequency of 103.5 MHz. It appeared that the claimant's receiver or the radio used when the splattering occurred was an unoptimized or compromised analog receiver.

On 21st April 2017, NTRC wrote Wikibuli/EPIC concerning a complaint which alleged that Wikibuli/EPIC operated in almost every orthogonal channel of the 2.4 GHz Wi-Fi band and consequently, in several cases, that caused interference, particularly when near EPIC's network sites. It was also alleged that it was virtually impossible for a number of persons to operate and use their domestic WIFI systems, in a number of areas in and out of the capital. Subsequently, EPIC confirmed its commitment to collaborate with the NTRC to resolve the matter. The matter was not resolved before the Hurricane Maria.

EPIC PROFILE

EPIC COMMUNICATIONS INC

EPIC Communications Inc opened its doors in August 2014 by Phillip Alleyne and Eric Giraud and began providing IT and Telecommunications Services with the desire to become a Licenced Internet Service Provider.

*Hurricane Maria in 2017 caused extreme damage to the island and EPIC felt it necessary and privileged to be a part of the repair and recovery process. EPIC immediately jumped into action and with the assistance of the NTRC and relaxed regulatory conditions, EPIC provided **Free of Charge** Internet to the following essential organizations and residents:*

- *Residents of Roseau, Goodwill, Bellevue Chopin*
- *The Emergency Telecoms Cluster (ETC)*
- *Emergency Operations Center (EOC) (Government of Dominica – Financial Center)*
- *Roseau Health Center – Botanical Gardens*
- *Red Cross*
- *World Food Programme (WFP – Woodbridge Bay)*
- *Samaritans Purse*
- *International Office of Migration (IOM)*
- *Jamaican Military – Canefield Airport*
- *Regional Security Services (RSS)*
- *Canfield Airport*
- *Bishops Residence – Relief Center*

In spite of the extremely difficult challenges and damage caused to their Network, EPIC was able to bring relief to many individuals and organizations who to this day continue to show their appreciation when they met the founders in the streets hard at work.

The NTRC felt it necessary to highlight the efforts of an indigenous telecommunications company with very limited resource but captured the true essence of the Dominica 'Koudament' spirit during those difficult times.

FINANCIAL REVIEW

Revenues Collected

The NTRC's financial year extends from October to September, as such, this report addressed the financial period 2017 which encompasses October 1, 2016 to September 30, 2017. See Appendix 4 for the unaudited financial statements, October 1, 2016 to September 30, 2017.

The revenues received by the NTRC are based on the various fees received which includes Licence Fees, Frequency Authorizations (Spectrum fees) Type Approval and Numbering Fees. The table below shows a total of all receipts during the reporting year 2017.

The total fees collected is not all retained by the Commission. The Frequency Authorization fees are submitted to the Eastern Caribbean Telecommunication Authority (ECTEL) who would then appropriate a percentage of the Frequency Authorization revenues to the NTRC's operational budget. (figure 3).

Licence fees are remitted to the Government of Dominica and Numbering and Type Approval fees are retained by the NTRC.

Categories of Fees	All Fees Collected	Revenue retained by NTRC	Remitted to ECTEL	Remitted to Government
Licence Fees	2,326,989.53	-	-	2,326,989.53
Spectrum Fees	1,600,451.26	-	1,600,451.26	-
Numbering Fees	141,130.00	141,130.00	-	-
Application Fees	19,687.98	19,687.98	-	-
Total	**4,088,258.77**	**160,817.98**	**1,600,451.26**	**2,326,989.53**

Table 5: Distribution of Fees in 2017

A summary of the distribution of fees paid to the Government of Dominica; ECTEL and the Application fees retained by the NTRC are depicted below in Figure 2.

The data shown in Table 5 above represents collections from October to December 2017. Previous files were destroyed during the passage of Hurricane Maria.

Allocation of Fees Collected

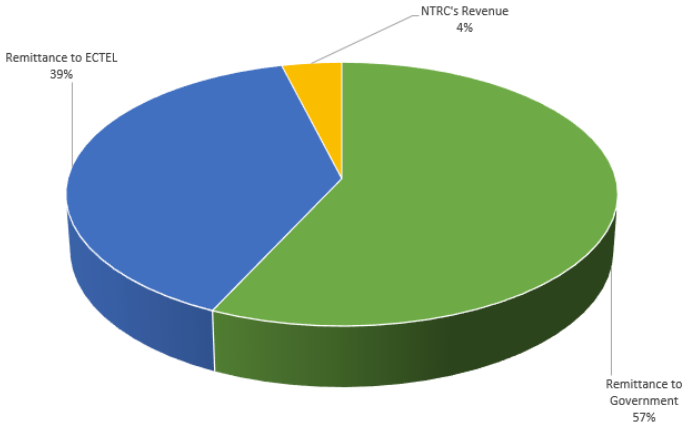


Figure 2: Fees Allocation 2017

In October 2017, the NTRC received its annual expenditure budget from the Eastern Caribbean Telecommunications Authority (ECTEL); a total of XCD $916,470.00. This figure represents an increase of XCD $52,697.00 or 6% from the previously approved 2016 budget of XCD $863,773.00.

Figure 3 below depicts the amounts allocated to NTRC Dominica by ECTEL over the past seven years.

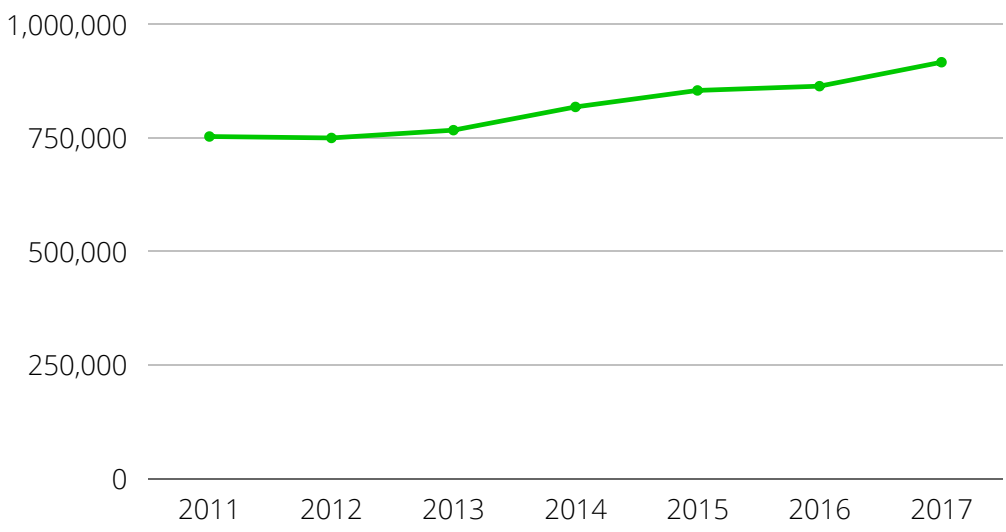


Figure 3: ECTEL Budget Allocation 2011 - 2017

TRENDS IN THE TELECOMMUNICATIONS MARKET

Revenues and Investments

The Telecommunications sector recorded a substanial decline in revenues for the financial year 2017. Revenues fell from over 89 million in 2016 to approximately 83 million in 2017. This 7% fall was due to the unslaught of Hurricane Maria in the final quarter of the year 2017.

The telecommunications service providers saw a massive spike in investment in 2015 which resulted in increased revenues for the year 2016. However, investments dropped to XCD $13 million in 2016 and moved slightly up to XCD $16 million in 2017. This represented a 19% increase in spend for the financial year 2017 (See Figure 4).

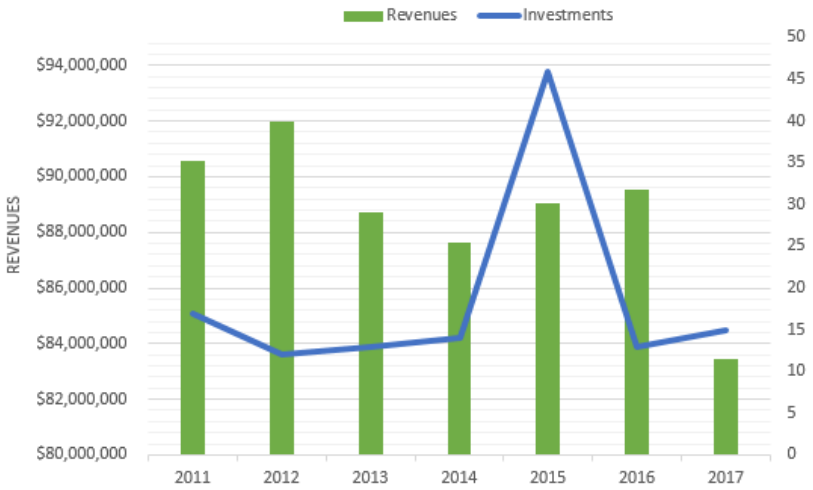


Figure 4: Revenues and Investments

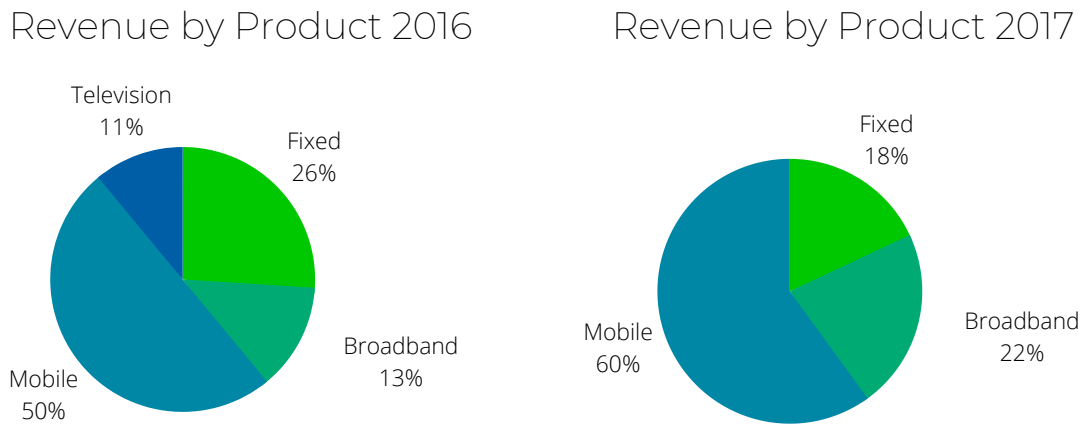
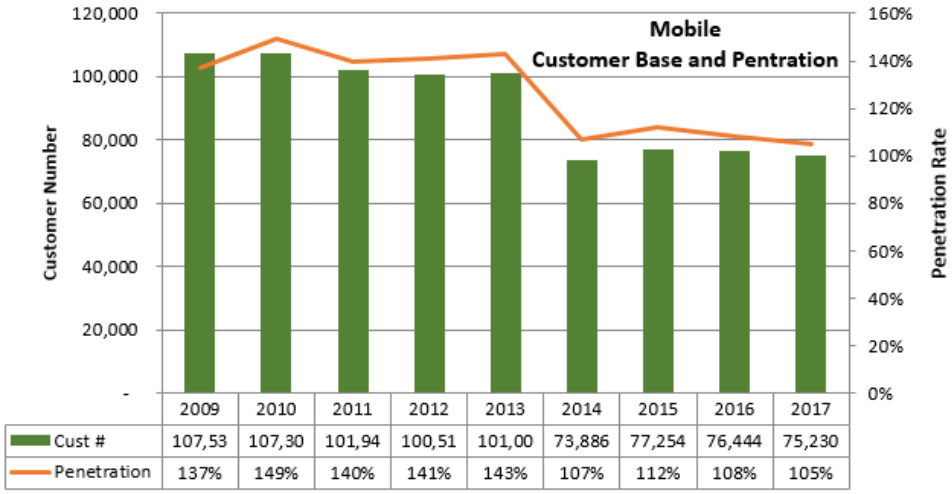


Figure 5: Revenue by Product

A breakdown of the telecommunications revenues by product depicts mobile as the largest revenue stream. This trend continues with a 10% increase in 2017. Mobile constitutes more than half of all revenues generated by the telecommunications sector in Dominica. Broadband, fixed lines and TV makes up the other 40% of the revenue pie.

Market Data: Mobile

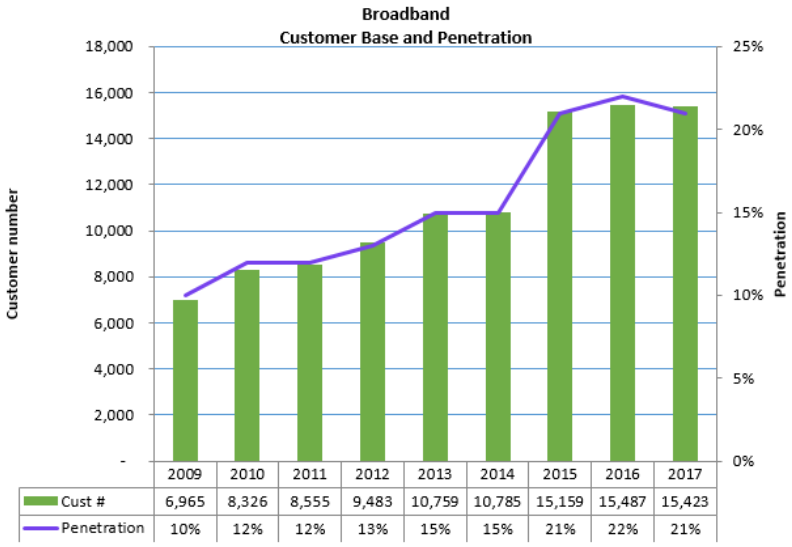


	2009	2010	2011	2012	2013	2014	2015	2016	2017
Cust #	107,53	107,30	101,94	100,51	101,00	73,886	77,254	76,444	75,230
Penetration	137%	149%	140%	141%	143%	107%	112%	108%	105%

Figure 6: Customer Base & Penetration Rate - Mobile

The market data for 2017 shows a reduction of 3% from 2016 while the customer numbers declined by 2% for the same period.

Broadband



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Cust #	6,965	8,326	8,555	9,483	10,759	10,785	15,159	15,487	15,423
Penetration	10%	12%	12%	13%	15%	15%	21%	22%	21%

Figure 7: Customer Base & Penetration Rate - Broadband

In 2017, the customer numbers and penetration rate barely shifted. The already saturated market showed a drop in customer numbers of 64. The broadband defined here is fixed broadband and does not include the use of mobile to access the internet. It rose sharply in 2015 to reflect the rise in broadband connections at private residences. This may be due to the entrance of new plans in the market and increased competition, thus lower prices for broadband services.

Please note that the data gathered for Figure 7 above, were collected in March 2017 before Hurricane Maria.

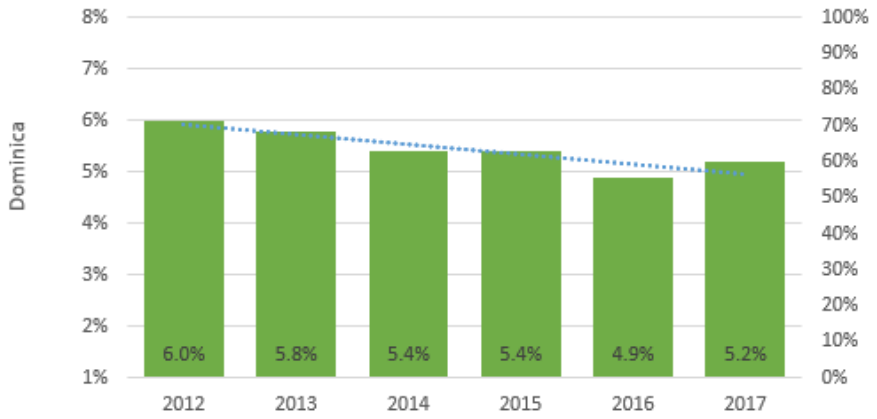


Figure 8: Fixed Broadband prices as a % of GNI within the ECTEL States

The reporting year 2017 shows an 0.30% increase over the previous year and have moved out of the 5% target set by the Broadband Commission.

Fixed Line

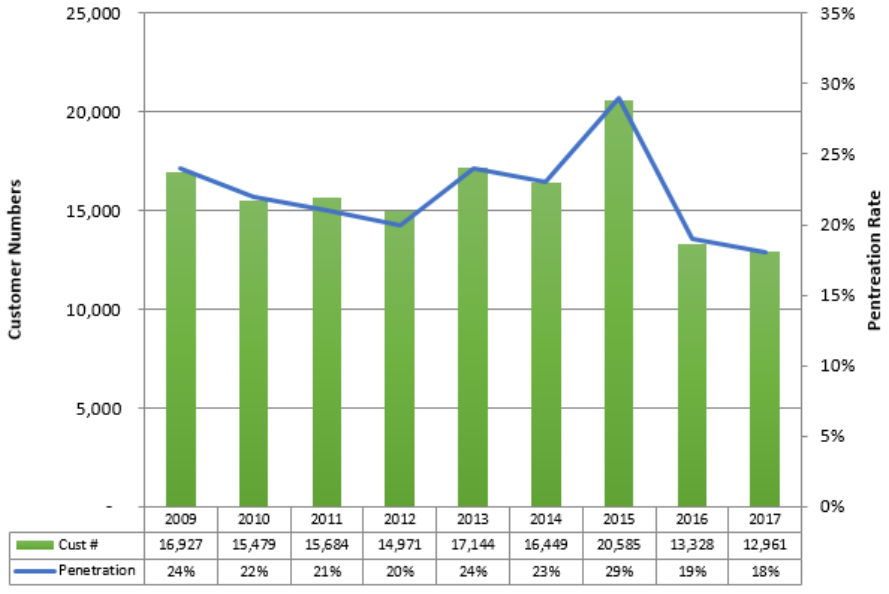


Figure 9: Customer Base & Penetration - Fixed Line

Fixed line customers dropped significantly by 7,257 or 35% in 2016 over 2015 as more and more customers gave up their traditional landline with its extra cost in favor of mobile phones. The financial year of 2017 recorded a further decrease of 367 or 3% in landline use. This data was gathered in March 2017 and therefore did not capture the impact of the destruction caused to the infrastructure only six months later by Hurricane Maria.

Post Disaster Assessment: Hurricane Maria

On Monday, 18th September 2017, Hurricane Maria, a category 5 hurricane swept across the Nature Island of the Caribbean with intense winds of over 160mph. The storm hovered over the island for about twelve (12) hours. This was accompanied by heavy rainfalls which resulted in flashfloods and landslides. The impact on the small island developing state was severe on both the economy and citizenry. A total of 30 individuals lost their lives.

Four months after the passage of Hurricane Maria, A post disaster needs assessment concluded that the category 5 mega storm resulted in total damages of EC$2.51 billion (US$931 million)
Its passage left massive damage with 90% of buildings damaged. Other critical infrastructure was also very badly damaged. (Post Disaster needs Assessment Hurricane Maria September 18th 2017 – A Report by the Government of Dominica)

A summary of the damages in infrastructure is depicted below in million.

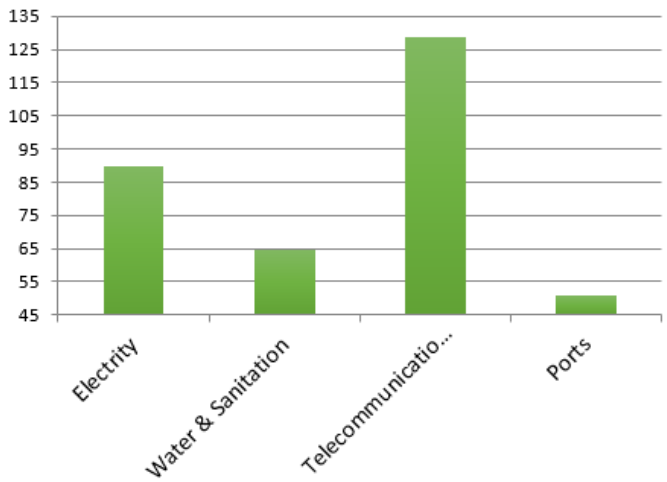


Figure 10: Cost of Damages to Infrastructure

According to the Post Disaster needs Assessment Report, the Telecommunications sector was the hardest hit with damages estimated at EC$128.88 million. Electricity followed at EC$89.59 million. Water & Sanitation and Ports suffered substantially less damage at EC$65 million and EC$51 million respectively.

The interruption of telecommunication services after the hurricane had a negative impact on the people of Dominica. The island was almost completely cut off from the outside world for days, some villages were isolated from one another due to broken roads. A few satellite phones and only sparse amateur radio network delivered critical information.

Telecommunications services in Dominica are managed by two service providers, DIGICEL and Flow. All telecommunication services were disabled with a total of thirty-three (33) cellular sites destroyed or very severely damaged.

Although DIGICEL had retained it services, the majority of people had no access to electricity to charge their mobile phones. One month after the hurricane, FLOW began restoring service to the north of the island. However, actual phone calls were limited leaving residence in the north to use WhatsApp as a means of connecting to the outside world.

APPENDICES

Appendix 1: Telecommunications Licences (JAN - DEC 2017)

Category Licences	Number of Applications	Recommended by ECTEL/NTRC	Approved	Issued
Individual Licences & Submarine Cable				
Fixed Telecom-munications	0	0	0	0
Public Mobile Telecommunications	0	0	0	0
Internet Network Services	0	0	0	0
Sub-Total	**0**	**0**	**0**	**0**
Class Licences - Telecommunications Services				
Private Networks/Services	0	0	0	0
Value Added Services	0	0	0	0
Internet Service Provision	0	0	0	0
International Smple Voice Resale	0	0	0	0
Broadcasting Radio/TV	3	3	3	3
Sub-Total	**3**	**3**	**3**	**3**
Class Licences - Radio Licences				
Private/Open Land Mobile	4	4	4	4
Maritime Mobile	2	2	2	2
Aeronautical Mobile	1	1	1	1
Amateur Radio	24	24	24	24
Sub-Total	**31**	**31**	**31**	**31**
Total	**34**	**34**	**34**	**34**

Category Licences	Number of Applications	Recommended by ECTEL/NTRC	Approved	Issued
Type Approval	54	54	54	54
Frequency Authori-zations	3	3	3	3
Special Licences	0	0	0	0
Radio Broadcast (Temporary)	0	0	0	0
Total	**57**	**57**	**57**	**57**

Appendix 2: Type Approvals

Certificate No.	Manufacturer	Equipment/Device ID	Equipment Type	Model Identifier	Date Issued
DMA – 0117 – 0541a	Alpine Electro	BLE Module	BLE Module	MT9234SMI	17, January 2017
DMA – 0117 – 0539e	Apple Inc.		Wireless Headphones	A1763	30th January 2017
DMA – 1217 – 0534a	Electronics Ltd	Lenovo Essential Wireless Mouse	Lenovo Essential Wireless Mouse	MORFKHO	11th January 2017
DMA – 1217 – 0531a	Hyundai MOBIS Co., Ltd	Digital Car Audio System	Digital Car Audio	AC114C1GG	11th January 2017
DMA – 1217 – 0532a	Hyundai MOBIS Co., Ltd	Digital Car Audio System	Digital Car Audio System	ACB212C1GG	11th January 2017
DMA – 1217 – 0530a	Hyundai MOBIS Co., Ltd	Digital Car Audio System	Digital Car Audio	ACB10C1GG	11th January 2017
DMA – 0217 – 0535a	Alpine Electronics Manufacturing of Europe, Ltd	Automotive Infotainment System	Vehicle immobilizer	MMXF online	8th February 2017
DMA – 0217 – 0536p	lectronics Ltd	Lenovo Essential Wireless Keyboard	Wireless Mouse	KBRFBU71	8th February 2017
DMA – 0217 – 0539p	Electronics Ltd	Lenovo Wireless Dongle	Wireless Dongle	MORFFHL-D	8th February 2017

Certificate No.	Manufacturer	Equipment/Device ID	Equipment Type	Model Identifier	Date Issued
DMA – 0217 – 0550a	Delphi Deutschland GmbH	Radar Sensor	Radar Sensor	R3TR	14th February, 2017
DMA – 0217 – 0537a	PIONEER CORPORATION, Kawagoe Plant	Car Audio Bluetooth	Car Audio Bluetooth	PVH-3578	8th February, 2017
DMA – 0217 – 0580a	PIONEER CORPORATION, Kawagoe Plant	Car Audio with Bluetooth	Car Audio Bluetooth	PVH-3678	8th February, 2017
DMA – 0217 – 0539a	PIONEER CORPORATION Kawagoe Plant	Car Audio Bluetooth	Car Audio Bluetooth	PVX-4078	8th February, 2017
DMA – 0217 – 0537a	PIONEER CORPORATION Kawagoe Plant	Car Audio Bluetooth	Car Audio Bluetooth	PVX-4178	8th February, 2017
DMA – 0217 – 0544a	Samsung Electronics Co., Ltd	Smart Control	Smart Control	RMCRMM1AP1	14th February, 2017
DMA – 0217 – 0549a	Samsung Electronics Co., Ltd	Smart Control	Smart Control	WCM730Q	14th February, 2017
DMA – 0317 – 0550a	Delphi Deutschland GmbH	IMMOBILIZER	Vehicle Immobilize CV1-134TRX	VO3-134TRX	15th March, 2017
DMA – 0417 – 0561a	Robert Bosch Car Multimedia GmbH	Radio Navigation System with Bluetooth	Radio Navigation System with Bluetooth	52R0	13th April 2017
DMA – 0417 – 0560a	Hella KGaA Hueck & Co	Short Range-Radar Base Device	Radar-Base Device	RS4	13 April 2017
DMA – 0416 – 0562t	Apple Inc.	Apple Tablet	Apple Tablet	A1822	28th April, 2017
DMA – 0416 – 0563t	Apple Inc.	Apple Tablet	Apple Tablet	A1823	26th April, 2017
DMA – 0417 – 0540p	Jiangsu Toppower Automotive Electronics Co., Ltd	Vehicle Audio System	Vehicle Audio System	26682656	13th April 2017
DMA – 0417 – 0569a	Continental Automotive GmbH	Body Control Module	Integrated Receiver	MRRevo14F	10th April, 2017

Certificate No.	Manufacturer	Equipment/Device ID	Equipment Type	Model Identifier	Date Issued
DMA – 0417 – 0568a	Continental Automotive GmbH	Body Control Module	Body Control Module	NCMF1_01	28th April, 2017
DMA – 0217 – 0539p	Abbott Point of Care, Inc.	Vv-0906 Darwin i-STAT System	SDIO Wireless Module	AN-500	19th April 2017
DMA – 0417 – 0562p	Marquardt GmbH	Vehicle Key	Vehicle Key	DC12A	28th April 2017
DMA – 0416 – 0570a	Delphi Electronic and Safety	Mid-Range Radar	Vehicular Radar	L2C0065TR	28th April 2017
DMA – 0617 – 0575p	Lear Corporation	RF Receiver	RF Receiver	290MG1	8th May 2017
DMA – 0417 – 0566a	Delphi Deutschland GmbH	Vehicle Immobilizer	Vehicle Immobilizer	F16-125kHz	8th May, 2017
DMA – 0517 – 0566p	Wistron NewWeb Corporation	Connected Cooler Radio Rest of World Version	Connected Cooler Radio Rest of World Version	D52A1	8th May 2017
DMA – 0416 – 0571a	Lear Corporation	Communication Receiver	Communication Receiver	290MG1	18th May 2017
DMA – 0617 – 0572a	Harman de Mexico S de RL de CV	Automotive Infotainment System with Bluetooth/WLAN	Automotive Infotainment System with Bluetooth/WLAN	GEN MID BC7	9th June 2017
DMA – 0617 – 0577p	Wistron NeWeb Corporation	Connected Cooler Radio Rest of World Version	Connected Cooler Radio Rest of World Version	D52A1	9th June 2017
DMA – 0617 – 0579p	Panasonic Corporation	Personal Computer	Personal Computer	CF-54	9th June 2017
DMA – 0717 – 0590t	Apple Inc	Apple iPad Pro	Apple iPad Pro	A1670	10th July 2017
DMA – 0717 – 0591t	Apple Inc	Apple iPad Pro	Tablet	A1671	Roseau, 10th July 2017

Certificate No.	Manufacturer	Equipment/Device ID	Equipment Type	Model Identifier	Date Issued
DMA – 0717 – 0592t	Apple Inc.	Apple iPad Pro	iPad Pro Tablet	A1701	10th July 2017
DMA – 0717 – 0593t	: Apple Inc.	Apple iPad Pro	iPad Pro Tablet	A1709	10th July 2017
DMA – 0717 – 0563t	Apple Inc	Apple Keyboard	Apple Keyboard	A1843	10th July 2017
DMA – 0717 – 0578a	Mitsubishi Electric Corporation	Smart Keyless Entry System	Smart Keyless Entry System	SKEA7B-01	10th July 2017
DMA – 0717 – 0580a	Panasonic Automotive & Industrial System Europe GmbH	Car Audio with Bluetooth Hand free	Car Radio with Bluetooth Hand free	NTG5*2BASE	24th July, 2017
DMA – 0717 – 0598a	Panasonic Automotive & Industrial System Europe GmbH	Car Audio with Bluetooth Handfree	Car Radio with Bluetooth, CD &GPS	NTG5*2 CD	25th July, 2017
DMA – 0717 – 0594p	Universal Electronics Inc.	BV LGI RF4CE NextGen 2016	NextGen Remote Control	URC-184400-00R30	10th July 2017
DMA – 0617 – 0579a	Continental Automotive System	LC BCM Remote Keyless Entry Receiver	Automotive Keyless Entry Receiver	A2C74295202	10th July 2017
. DMA – 0717 – 0579a	Continental Automotive GmbH	FMC B479 SCU PK CGEA 1.3 Key	RKE Transmitter	A2C11639400	10th July 2016
DMA – 0817 – 0586a	Visteon Engineering Services Ltd	Bluetooth Transceiver	Radio Navigation System with Bluetooth	Radio AHU	25th August 2017
DMA – 0817 – 0580p	AzureWave Technologies Inc.	Wireless LAN Module	Wireless LAN	AW-NM383	25th August 2017
DMA – 0817 – 0583p	Canon Inc	Facsimile Board	Multimedia Board which provides combination data/fax/video	F170102	Roseau, 25th August 2017
DMA – 0817 – 0584p	Canon Inc.	Multifunction modem with a combination data/fax/video	G3 Facsimile Board	F634211	25th August 2017

Certificate No.	Manufacturer	Equipment/Device ID	Equipment Type	Model Identifier	Date Issued
DMA – 0817 – 0587p	Canon Inc	Multimedia device that provide combination data/fax/video	Multimedia device that provide combination data/fax/video	F631617	25th August 2017 DMA – 0817 – 0582p
DMA – 0817 – 0582p	Canon Inc	G3 Facsimile Board	Facsimile Board provides combination of data/ Fax/ Video	F631618	25th August 2017
DMA – 0817 – 0586p	Canon Inc.	G3 Facsimile Board	G3 Facsimile connect to PSTN	F634211	28th August 2017
DMA – 0817 – 0589a	Marquardt GmbH	Vehicle Key	Vehicle key	PK2	28th August 2017

Appendix 3: Applications for Frequency Authorization

Organization	Request	Date Issued
Fort Young Hotel	New	Feb 6 2017
IMG Media Ltd.	New	May 8 2017
Indigo Asia	New	May 8 2017

Appendix 4: Financial Statements

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION

FINANCIAL STATEMENTS (UNAUDITED)

YEAR ENDED SEPTEMBER 30, 2017

CONTENTS

BALANCE SHEET (UNAUDITED) 32

STATEMENT OF INCOME AND EXPENDITURE 33

STATEMENT OF CHANGES IN ACCUMULATED FUND 34

STATEMENT OF CASH FLOWS 35

NOTES TO THE FINANCIAL STATEMENTS 36

ADDITIONAL COMMENTS OF AUDITORS 43

SCHEDULE OF GENERAL AND ADMINISTRATIVE EXPENSES 44

PROPERTY, PLANT AND EQUIPMENT 45

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
Balance Sheet
As at September 30, 2017
(Expressed in Eastern Caribbean Dollars)

	Notes	2017 $	2016 $
ASSETS			
Current Assets			
Cash and bank balances		1,280,585	808,305
Accounts Receivable	4	45,119	503,281
Other Receivables		400	48,995
Prepayments - Rent & Insurance		5,000	5,310
Total Current Assets		**1,331,103**	**1,365,891**
Plant and equipment	3(c) & 7	80,552	162,179
TOTAL ASSETS		**1,411,656**	**1,528,070**
LIABILITIES			
Current Liabilities			
Accounts payable and accrued liabilities		164,886	156,041
Due to related party	6		309,486
Due to the Government of the Commonwealth of Dominica	8	13,200	54,297
Due to the Eastern Caribbean Telecommunications Authority (ECTEL)	9	1,400	1,400
Due to Universal Fund	10		33,624
Total Current Liabilities		**179,486**	**554,849**
ACCUMULATED FUND			
Accumulated surplus		1,232,170	973,221
Numbering Fees Reserve Fund	14		
Total accumulated fund		**1,232,170**	**973,221**
TOTAL LIABILITIES AND ACCUMULATED FUND		**1,411,656**	**1,528,070**

The accompanying notes form an integral part of these financial statements.

- (0)

Approved on Behalf of the Board this ..... day of ..... 2017.

.....	.....
Mr. Curtiss Winston	Mr. Craig Nesty
Chairman	Executive Director

NATIONAL TELECOMMUNICATION REGULATORY COMMISSION
Statement of Income and Expenditure
Year Ended September 30, 2017
(Expressed in Eastern Caribbean Dollars)

	Notes	2017 $	2016 $
INCOME			
ECTEL subvention	6	1,042,460	863,733
Application fees		60,180	56,095
Numbering Fees		91,010	85,710
		1,193,650	**1,005,538**
Interest Income		14,725	15,075
Other Income	3 (i)	3,562	1,100
OPERATING INCOME		**1,211,938**	**1,021,713**
General and administrative expenses		(1,082,340)	(831,781)
Surplus/(Deficit) for the year		**129,598**	**189,932**

The accompanying notes form an integral part of these financial statements.

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
Statement of Changes in Accumulated fund
Year Ended September 30, 2017
(Expressed in Eastern Caribbean Dollars)

	Notes	Accumulated Surplus $
Balance as of September 30, 2014		**345,840**
Less: Amortisation		-
Numbering Fees Income	**14**	-
Less: Shortfalls Income	**14**	-
Surplus/(Deficit) for the year		(19,156)
Correction entry- Deposit in transit and returned check		980
Adjustment – Petty Cash		365
Transfer of Surplus		-
Prior Year Adjustment- Gratuity Payable, Accumulated Depreciation, Accounts Payable & Cash at Bank		(11,800)
Balance as of September 30, 2015		**316,229**
Less: Amortisation		-
Numbering Fees Income Adjustment prior years		455,666
Less: Shortfalls Income		-
Surplus/(Deficit) for the year		189,932
Correction entry- prior adjustment		11,394
Adjustment - FIXED ASSET		
Prior Year Adjustment- Spectrum Fees		
Depreciation, Accounts Payable & Cash at Bank		
Balance as of September 30, 2016		**973,221**
Less: Amortisation		-
Numbering Fees Income Adjustment prior years		
Less: Shortfalls Income		-
Surplus/(Deficit) for the year		129,598
Correction entry- prior adjustment		129,351
Adjustment - FIXED ASSET		
Prior Year Adjustment- Spectrum Fees		-
Balance as of September 30, 2017		**1,232,170**

The accompanying notes form an integral part of these financial statements.

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
Statement of Cash Flows
Year Ended September 30, 2017
(Expressed in Eastern Caribbean Dollars)

	Notes	2017 $	2016 $
Cash Flows from Operating Activities			
Surplus for the year		129,598	189,932
Adjustment for:			
Depreciation expense	7	24,638	42,187
Adjustment- Petty Cash			
Prior Year Adjustment - Gratuity Payable, Accumulated Depreciation, Accounts Payable, Spectrum fees & Cash at Bank		(10,649)	
		143,587	**232,119**
Operating Profit before working capital changes			
(Increase) Decrease in accounts receivable		458,162	(108,714)
(Increase) Decrease in other receivable		48,595	(41,131)
(Increase) Decrease in prepayments		310	-
Increase (Decrease) in accounts payable and accrued liabilities		8,845	(21,379)
Cash (used in) generated from Operations		**659,500**	**60,895**
Net Cash (used in) generated from Operating Activities		**659,500**	**60,895**
Cash flows from Investing Activity			
Purchase of plant and equipment	7		(82,131)
Disposal of equipment		196,988	1,447
Net Cash used in Investing Activity		**856,487**	**(19,789)**
Cash flows from financing Activities			
Increase (Decrease) in due to related party	6	(309,486)	-
Increase (Decrease) in due to ECTEL	9	-	-
Increase (Decrease) in due to Universal Service Fund	10	(33,624)	-
Numbering Fees Reserve Fund	14		82,861
Increase (Decrease) in due to the Government of Dominica		(41,097)	(76,478)
Net Cash generated from Financing Activities		**(384,207)**	**6,383**
Net change in cash equivalents		**472,280**	**(13,406)**
Cash and Equivalents- beginning of year		808,305	821,711
Cash and Cash Equivalents- end of year	3(h)	**1,280,585**	**808,305**

The accompanying notes form an integral part of these financial statements.

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
Notes to the Unaudited Financial Statements
Year Ended September 30, 2017
(Expressed in Eastern Caribbean Dollars)

1. Legal Status

The National Telecommunications Regulatory Commission was established by the Commonwealth of Dominica Telecommunications Act No. 8 of 2000, which was assented to on September 5, 2000. The Commissioners were appointed with effect from April 1, 2001.

2. Principal Activities

Its principal activities are to collect all fees and tariffs levied under the Act and to ensure compliance with the Government's international obligations on telecommunications.

3. Significant Accounting policies

(a) Basis of Accounting

These financial statements are stated in Eastern Caribbean dollars and have been prepared in accordance with International Financial Reporting Standards (IFRS) adopted by the International Accounting Standards Board (IASB).

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that could affect the reported amount of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenditure during the year. Actual result could differ significantly from those reported. The significant accounting policies adopted in the preparation of these statements by the Commission are as follows:

(b) Basis of preparation

The measurement basis used is the historical cost

(c) Plant and Equipment

Plant and equipment are recorded at cost less accumulated depreciation and impairment losses. Depreciation is charged to the income statement on the straight-line method at rates, which are expected to write off the costs of the fixed assets over their estimated useful lives. The following annual rates are used:
Furniture and Equipment - 15 & 14%
Computer Software - 33.33%
Computers - 20%
Building - 2.5

3.Significant Accounting Policies (Cont'd)

(d) Foreign Currencies

Foreign currencies are translated to Eastern Caribbean dollars at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated to Eastern Caribbean dollars at the exchange rate ruling at the date. Foreign exchange differences arising on translation are recognized in the income statement. Non-monetary assets and liabilities denominated in foreign currencies, which are stated at historical costs are translated to Eastern Caribbean dollars at the foreign exchange rate ruling at the date of transaction.

(e) Income tax

No provision has been made in the regulations, Telecommunications Act and/or Income Tax Act for the imposition of income tax, if any.

(f) Impairment

The carrying amounts of the Commission's assets are reviewed at each date to determine whether there is indication of impairment. If any such indication exists, the assets recoverable amount is estimated. For intangible assets that are not yet available for use, the recoverable amount is estimated at each balance sheet date. An impairment loss is recognized whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. An impairment loss in respect of investment property is recognized in the same way as a revaluation decrease. All other impairment losses are recognized in the income statement.

(g) Revenue Recognition

Revenue earned by the Commission is recognized on a receipt basis, except interest income, which is recognized on an effective yield basis.

(h) Cash and Bank balances.

For purposes of the cash flow, cash and bank balances represent balances at Banks and Petty Cash balances at year-end.

3.Significant Accounting Policies (Cont'd)

(i) Other Income

This includes transfer of Application Fees.

4. Accounts Receivable

	2017 $	2016 $
License fees		
Numbering, Initial and Annual fees:		
- Marpin 2K4 Ltd	2050	302,899
- Digicel	33,540	64,960
- Northern Broadcasting		1,000
- Cable & Wireless		49,130
- Middle Caribbean Network Inc	60	50,005
- SAT Telecommunication Ltd		2,050
- Nature Island Communications	2,000	1,500
- Dominica Catholic Radio		500
- Vibes Radio		1,000
- Gospel Broadcasting Service		
- Dominica Broadcasting corporation	500	500
-Other Customers	6,729	3,845
Other Receivables:		
- H. H. V. Whitchurch & Co		375
- National Petroleum	750	750
- Pitch it		49,455
	45,119	**503,281**

Accounts receivable, with respect to annual fees, is difficult to determine for a particular period, unless the telecommunications providers submit their "gross annual revenue reports" for that period. This is because annual fees are calculated as a percentage of gross annual revenue.

5. Annual Fees

These are to be based on the licensees' gross revenue of the previous/current years of operations (See Note 4).

6. Due to/from Related Party

The amounts due to related party represent annual licence fees payable to Government by telecommunication providers. The amount due from related party represent budgeted income (obtained from frequency fees paid by licensees to ECTEL) receivable from the Eastern Caribbean Telecommunications Authority (ECTEL). The amounts are unsecured, non- interest bearing and have no stated repayment terms.

7. Property, Plant and Equipment (See Schedule)

8. Due to the Government of the Commonwealth of Dominica

The amount due to the government of the Commonwealth of Dominica represents license fees collected on behalf of the Government of the Commonwealth of Dominica. This amount is non-interest bearing and has no stated repayment terms (See note 4).

	2017 $	2016 $
Receipts and receivables during years	3,584,640	2,795,552
Payments during year	(3,571,440)	(2,741,255)
Balance due	**13,200**	**54,297**

9. Due to Eastern Caribbean Telecommunications Authority (ECTEL)

These amounts are frequency (spectrum) fees, due to the Eastern Caribbean Telecommunications Authority (ECTEL), collected on behalf of ECTEL.

10. Due to Universal Service Fund

This amount represents 40% of USF Administrator salary payable with effect from 1st January, 2013.

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
Notes to the Unaudited Financial Statements
Year Ended September 30, 2017
(Expressed in Eastern Caribbean Dollars)

11. Lease Commitments

The Commission has the following operational lease commitments that provides for a security deposit of one month rental to be held in an interest-bearing account, which if not utilized shall be reimbursed to the tenant at the determination of his tenancy. It is a three-year lease term from April 1st 2012. This lease expires on the March 31, 2015.

	2017 $	2016 $
Expiring within seven months	30,000	
Expiring in more than1 to 2 years		30,000

12. Personnel Expenses

AAdministrative salaries wages and DSS contributions	**503,473**	**421,210**

13. Universal Service Fund

Under section 44 (1) of the Telecommunications Act 8 of 2000 there is provision for establishment of the Universal Service Fund, which is to be managed by the Commission in accordance with regulations by the Minister for telecommunications on the recommendation of ECTEL.

The fund shall be used by the Commission on the recommendation of ECTEL to compensate any telecommunications provider who is required to provide universal service by virtue of section 44 (4) or 45 (1) of the Act or otherwise promote universal service.

In accordance with the Telecommunications (Universal Service Fund) Regulations, 2009, S.R.O 34 of 2009: “Any monies accruing to the Fund shall be kept in one or more accounts, separate and independent from the other operating accounts of the Commission.” The accounts of the Fund shall be audited by an independent auditor appointed by the Commission.

At 30th September, 2017, the balances in the Fund at the National Bank of Dominica were: Savings account $762,684.46 and Current account $490,419.11.

14. Numbering Fees Reserve Fund

Statutory Rules and Orders (S.R.O) No. 32 of 2008 – Telecommunications (Numbering) Regulations – "The Commission shall maintain control of all telecommunications numbers to ensure fair and efficient use of them by maintaining the National Telecommunications Numbering System Register of all providers in respect of the numbers assigned to them".

The General Ledger Reserve Fund account was created: (1) to distinguish the fees collected for the use of numbers from other telecommunications fees that are paid to Government and ECTEL and (2) to meet shortfalls in budgetary allocations.

Numbering fees are payable in accordance with the provisions set out in the schedule. The numbering fees payments are payable to the Commission.

15. Financial Instruments

(a) Fair Value

Due to the short-term nature of certain financial instruments, the Commission is of the opinion that their carrying values approximate fair value. These financial instruments include cash and bank, accounts payable and accrued liabilities, and amounts due to related party and the government of the Commonwealth of Dominica.

The estimates of fair values presented herein are subjective in nature and do not necessarily indicate the amount the Commission could realize in current market exchange. Assets such as prepayment expense are excluded from fair value. Thus, the total fair value amount cannot be aggregate to determine the underlying economic value of the Commission.

(b) Credit Risk

Credit risk represents the accounting loss that would be recognized at the reporting date if counterparties failed completely to perform as contracted.

To reduce exposure to credit risk, the Commission performs ongoing credit evaluations of the financial condition of its customers, in some case requiring collateral. The Commission invests its available cash with various financial institutions. Although, the Commission is exposed to credit-related losses in the event of non-performance by counterparties to financial instruments, it does not expect any counterparties to fail to meet their obligations given their credit ratings.

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION

ADDITIONAL INFORMATION

TO

FINANCIAL STATEMENTS

YEAR ENDED SEPTEMBER 30, 2017

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
Notes to the Unaudited Financial Statements
Year Ended September 30, 2017
(Expressed in Eastern Caribbean Dollars)

ADDITIONAL COMMENTS OF ACCOUNTANT

The Commissioners
National Telecommunications Regulatory Commission
26 King George V Street
Roseau
Dominica

The accompanying page financial statements presented as supplementary information only. This information was not subjected to an audit, review or compilation by an independent outside auditor In this respect and hence no opinion expressed to the Commissioners on such financial statements. The information in this schedule has NOT been subject to audit procedures and is only to the extent necessary to express that an opinion is fairly presented in all respects material to those financial statements.

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
Schedule of General and Administrative Expenses
Year Ended September 30, 2017
(Expressed in Eastern Caribbean Dollars)

	Notes	2017 $	2016 $
Advertising and Promotion		19,810	7,046
Audit and accounting fees		4,773	4,773
Bank charges		2,252	2,791
Consultancies		11,509	2,000
Commissioners' allowances		72,000	72,000
Depreciation expense		24,638	42,187
Electricity expense		45,354	42,414
Miscellaneous expense		20,300	7,769
Subscriptions & donations		465	1,034
VAT		21,825	21,933
Postage and delivery		1,517	2,456
Publications		471	545
Fuel expenses		596	-
Rent		72,041	72,000
Insurance office contents		2,657	2,042
Repairs and maintenance		79,202	18,946
Salaries, wages and DSS	12	503,473	421,210
Meetings & Conference Local &Overseas		46,603	31,003
Stationery and office supplies		11,486	10,037
Telephone and fax		29,845	41,076
Training		37,253	9,235
Travel & Accommodation & Entertainment		13,407	14,461
Loss on Disposal of Fixed Assets		56,988	-
Vehicle Maintenance		1,076	2,541
Water and sewage		2,798	2,284
FRIDA/PITCH IT			
		1,082,340	831,781

The accompanying notes form an integral part of these financial statements.

NATIONAL TELECOMMUNICATIONS REGULATORY COMMISSION
Notes to the Financial Statements
Year Ended September 30, 2017
(Expressed in Eastern Caribbean Dollars)

7. Property, Plant and Equipment

	BUILDING (MMS Garage) $	FURNITURE & EQUIPMENT $	COMPUTER SOFTWARE $	COMPUTERS $	TOTAL 2017 $	TOTAL 2016 $
COST						
Balance- beginning of year 2015	46,901	364,320	62,152	208,199	681,572	601,470
Accumulated depreciation	(8,797)	(312,107)	(35,863)	(162,627)	(519,394)	(477,812)
Balance- end of year 2016	**38,104**	**52,213**	**26,289**	**45,572**	**162,178**	**123,658**
Year Ended September 30, 2017						
Balance- beginning of year	38,104	52,213	26,289	45,572	162,178	147,220
Additions during the year	-	-	-	-	-	82,133
Adjustments for disposal on cost	-	(176,162)	(28,161)	(44,960)	(249,283)	(2,030)
Adjustments for disposal on accumulated depreciation	-	132,332	28,162	31,779	192,273	583
Charge for the year	(1,173)	(4,014)	(10,175)	(9,276)	(24,637)	(42,187)
Closing net book values	**36,931**	**4,370**	**16,115**	**23,115**	**80,531**	**185,719**
At Year End September 30, 2016						
Cost	46,901	188,158	33,990	163,239	432,287	681,571
Accumulated depreciation	(9,970)	(183,789)	(17,876)	(140,102)	(351,736)	(519,394)
End of Year	**36,931**	**4,370**	**16,113**	**23,137**	**80,552**	**162,178**