



# 2017

ANNUAL REPORT



BUILDING A DIGITAL WORLD CONSUMERS CAN TRUST





## VISION

GLOBAL EXEMPLAR,  
EMPOWERING PEOPLE THROUGH  
ICT SECTOR DEVELOPMENT



## MISSION

FOSTERING A COMPETITIVE  
ICT ENVIRONMENT USING COMPETENT,  
FAIR, TRANSPARENT, FORWARD-  
THINKING AND RESPONSIVE  
APPROACHES FOR THE BENEFIT OF ALL





# CORE VALUES

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## COMMITMENT

- We are loyal to the organisation.
- We are ambassadors of the organisation.
- We are dedicated to the interests of the organisation.

## INTEGRITY

- We are honest, objective and fair in all matters.
- We are accountable for our actions.
- We respect the value and confidentiality of our customers' information.

## INNOVATIVENESS

- We are data driven and open to new ideas.
- We seek creative solutions to meet the challenges of our work.
- We effectively implement innovative ideas.
- We utilise a proactive approach to our changing environment.

## PROFESSIONALISM

- We respect and value the contributions of all persons.
- We are committed to achieving excellence.
- We recognise the importance of team work.
- We are productive, efficient and timely in our work.
- We continually seek to acquire expert knowledge.

## SERVICE EXCELLENCE

- We promote and protect the interests of our consumers.
- We recognise the different interests of our customers and are responsive to their needs.
- We effectively engage all our stakeholders.





# CORPORATE INFORMATION

## **Telecommunications Authority of Trinidad and Tobago**

5 Eighth Avenue Extension  
Off Twelfth Street, Barataria  
Tel: (868) 675-8288 and (868) 221-8288  
Fax: (868) 674-1055  
Email: [info@tatt.org.tt](mailto:info@tatt.org.tt)  
Website: [www.tatt.org.tt](http://www.tatt.org.tt)

## **Tobago Office**

Shop D48  
Gulf City Lowlands Mall  
Lowlands  
Tobago  
Tel: (868) 639-8288

## **Bankers**

First Citizens Bank Limited  
23-27 Eastern Main Road  
San Juan

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## MESSAGE FROM THE CHAIRMAN

It is my privilege to present to you the Annual Report of the Telecommunications Authority of Trinidad and Tobago (the Authority) for the year ended September 30, 2017.

After 13 years of prudent regulation of the telecommunications and broadcasting sectors, the Authority can be justly proud of what has been achieved—a maturing, competitive industry with service providers of all types and sizes offering consumers greater choice, diversity of services and value for money. Moreover, as the regulating body, the Authority has been vigilant in ensuring that all of these indicators of a modern, competitive industry benchmark well against the best in the world.

### MEETING EXPECTATIONS

In fulfilling our accomplishments in a race against time, we recognise that there is no room for complacency. The expectations of consumers for next generation services, and the aspirations of the Government of the Republic of Trinidad and Tobago (GoRTT) for telecommunications and broadcasting to help advance sustainable and inclusive social and economic development, pose ongoing challenges.

For example, over the last decade, the demand for data has increased astronomically and service providers have had to adapt by upgrading their networks to keep up with demand. With the advent of over-the-top (OTT) services, operators are now pressed to change course and develop new strategies, to find new ways to diversify their revenue streams. This explosive demand for access to OTT services is an international challenge. The issues affecting both operators and consumers drove the Authority to intervene and engage all stakeholders through public consultation to inform policy.



**GILBERT PETERSON, S.C.**  
*Chairman*



In the fast-evolving communications arena, every year brings a unique set of challenges. The Authority has to keep abreast of new developments, reflecting them in our policy-making and regulatory actions, whilst guiding both the providers and consumers of telecommunications and broadcasting services.

## THE ROAD AHEAD

During this reporting period, the Authority implemented its new strategic plan, taking advantage of the solid foundation that was built over the last 13 years. We focused on strategic initiatives to propel the country into a future where Information and Communications Technology (ICT) is a major catalyst for social and economic development.

The Strategic Plan 2016–2019 identified three strategic imperatives, namely, ICT Sector Development, Global Leader and People Empowerment. These imperatives will steer the Authority's direction over the next three years, in the following areas:

- Increasing access to broadband
- Aiding in closing the digital divide
- Facilitating access to efficient, online Government and business services
- Promoting investment in ICTs by modernising our legal and regulatory framework
- Facilitating innovation in business development through encouraging the use of ICTs

We will maintain our open-dialogue policy in engaging our stakeholders. We have set as our mission fostering a competitive ICT environment using competent, fair, transparent, forward-thinking and responsive approaches for the benefit of all.

The Authority never loses sight of its goal to support and encourage the industry to

provide world-class telecommunications and broadcasting services, in terms of quality, variety and accessibility.

Our new strategic direction requires us to advance ICT sector development, to empower citizens by promoting universal access and to be a global leader within the ICT landscape.

## APPRECIATION

The Authority's many accomplishments over the past year would not have been possible without the constant support and active participation of my colleagues on the Board of Directors. Thank you for your support and I look forward to achieving with you again next year.

The Authority is also very fortunate to have a talented, dedicated and hard-working staff delivering high quality output. Indeed, our employees are our most valuable asset. On behalf of the Board of Directors, and on my own behalf, I thank you for your outstanding efforts towards the achievement of the Authority's mandate.

It is the dynamism of our stakeholders that drives the development of the sectors in alignment with global trends. We would not succeed as a regulatory body without their receptivity to the policies and changes that we make to support that transformation towards modern and competitive telecommunications and broadcasting sectors. We offer our profound appreciation.

As we look forward to 2018, building on the momentum of this and previous years and the new challenges that we will need to address, be assured the Authority is at work!



**Gilbert Peterson, S.C.**  
Chairman of the Board of Directors

# MESSAGE FROM THE CHIEF EXECUTIVE OFFICER

## ADVANCING ECONOMIC DEVELOPMENT THROUGH ICT GROWTH

My passion for the academic study of economics, and the realisation of economic development for my country, fuels my drive for excellence at the Authority. There is an undisputed, direct relationship between growth in ICTs and economic development and, thus, like many authorities and governments around the world, we at the Authority strive to promote growth in ICTs.

At the opening ceremony of the International Telecommunication Union's (ITU) Regional Forum on *Bridging the Standardisation Gap for the Americas*, Prime Minister of the Republic of Trinidad and Tobago, Dr. the Honourable Keith Christopher Rowley, stressed that we must be an e-ready country looking towards ICT for solutions to both mundane and complex problems in all aspects of social, educational and business life. This I endorse and thus, at the Authority, we promote investment in the build-out of facilities and infrastructure sharing in the provision of telecommunications and broadcasting services.

In fact, this year, we have had major mergers and acquisitions in both the telecommunications and broadcasting sectors, which indicate that the potential for growth in ICT in Trinidad and Tobago is still promising for investors. These mergers and acquisitions also signal a positive impact for local and regional economies, however only where such synergies are realised by customers.

To further facilitate development in ICT, this year we issued, for public consultation, a *Framework for the Modernisation of the Authority's Spectrum Management*, and we are well on our way to completing the planning works for a second subsea cable landing point as well as the assessment of the Chaguaramas Bottleneck Facility.

While our markets are open, however, Trinidad and Tobago continues to develop its telecommunications sector consistent with our obligations under the World Trade Organization's General Agreement on Trade in Services. Ultimately, therefore, it is the free market that will dictate the entrance, viability and profitability of any new entrant into the local telecommunications market.



DR. JOHN PRINCE, C.M.  
Chief Executive Officer

## PROMOTING THE CONTEMPORARY ICT AGENDA

The Internet of Things (IoT) is here! In the recent *Internet of Things Forum: Smarter Living in the Caribbean*, hosted by the Authority, we focused on standardisation requirements for IoT technologies and applications in building our own smart cities and communities. Similarly, Digital Financial Services (DFS) can no longer denote an abstract crypto ideal and indeed it has been endorsed by the Authority this year, in collaboration with the ITU, as an avenue for promoting digital inclusion. The Authority has noted that the backbone of this contemporary financial delivery system and its success is a healthy, vibrant telecommunications sector.

In 2017, we also made it possible for the local industry to generate discussion and awareness on white space devices and the various opportunities these provide. An authorisation framework was issued by the Authority for public consultation on the accommodation of white space radio communications devices.

The Authority has also spearheaded discussions on renewable energy for telecommunications and broadcasting services. It is my view that the Authority must be relevant, proactive and forward thinking if we are to help Trinidad and Tobago keep pace with the global ICT development thrust. Consequently, we have been discussing with the relevant stakeholders the future use of renewable energy technologies in the domestic telecommunications and broadcasting sectors, and the potential economic and environmental cost savings to the industry.

Moreover, we are not delaying the urgent conversations and planning sessions we must undertake as a country with respect to public protection and disaster relief, particularly as we have only recently grieved for our Caribbean brothers and sisters in the wake of the severe regional hurricanes they endured this year. We, therefore, began championing the development of resilient communications and hosted an ICT

Open Forum entitled *Resilient Communications: Staying Connected During a Disaster*.

At that forum, we initiated discussions on the need to enhance the robustness of public telecommunications and broadcasting networks so they can better withstand both man-made and natural disasters. This audience included representatives of telecommunications and broadcasting concessionaires, suppliers of telecommunications and broadcasting network equipment, relevant government and non-governmental organisations involved in disaster preparedness and members of the academic community.

## A REVOLUTIONISED PERFORMANCE FRONTIER

Our performance as an Authority will be seen and felt by customers and service providers in both the telecommunications and broadcasting markets.

I am results driven, and tangible results are ones that our stakeholders receive. Consequently, one of the Authority's mandatory universal service initiatives is to provide subsidised assistive devices to persons with disabilities (PwDs) in Trinidad and Tobago. The aim is to bridge the gap between those who have access to basic telecommunications services and those who do not.

Consumers need to know that we are working for them and we are available to bring resolution to matters that their operators do not satisfactorily address. I am very proud of my team at the Authority who recognise and champion the role we hold as a consumer advocate. Even if legislation may fall short, this year we actively pursued the removal of inappropriate advertisement content, false advertising and insufficient advertising of tariffs. We issued relevant consumer advisories and made significant strides in complaints resolution. What we are going after now is quality of service. Operators need to ensure high standards are met and, with our new vision of compliance and enforcement enabled by amendments to the

Telecommunications Act, Chap. 47:31, we will be hitting hard at poor quality of service.

Relevance is key to the Authority's success. This year, we issued advisories on issues such as importing or using drones and two-way radios, data caps for "unlimited plans", smartphone social media use, and international data roaming, amongst many others. In fact, on the issue of international mobile roaming, having surveyed customers and operators, we developed and issued for public consultation a *Facilitative Framework for International Mobile Roaming (IMR) for Trinidad and Tobago*, with the aim of bringing resolution to IMR consumer issues.

In terms of broadcasting, the Broadcast Code is long overdue and needs to be implemented. At the same time, we are also aiming to ensure that all broadcasting operators meet their local and international property rights obligations while maintaining harmony between the subscription television market and the free-to-air (FTA) broadcaster. As a step in that direction already, I am proud to report that in September of this year, we held the Authority's first *Annual Broadcasters' Forum* for talk show hosts, their producers, programme directors and other electronic media personalities, to examine ways to improve the quality of broadcasting in Trinidad and Tobago.

## TOBAGO—ENSURING QUALITY ICT SERVICE DELIVERY

ICTs are increasingly bringing market information, and financial, health and education services to both urban and remote or underserved areas and are helping to change people's lives in meaningful ways. Accordingly, the GoRTT and the Authority considered it imperative that ICTs are accessible, available and affordable to all consumers in Trinidad and Tobago. As you may already know, Tobago is very close to my heart and is, therefore, no exception to our considerations. In fact, at our recently established monitoring site in Tobago, we

developed a playground for use by the community in the spirit of corporate social responsibility. We also have plans for the establishment of a new cable landing station in Tobago. We will also be actively striving for better free-to-air broadcasting coverage in Tobago.

## MOVING FORWARD

In this report and our *11th Annual Market Report: Telecommunications and Broadcasting Sectors (Annual Market Report 2016)*, we present the statistics showing that the telecommunications and broadcasting sectors have been demonstrating evidence of sustained, improved and potential competition, investment and growth in mobile broadband, pay TV services and broadband services. What is notable is that, due to convergence in technologies and markets and the evolving roles of the consumer and operators, the required regulatory and policy frameworks need to be in place and in motion to steer the sector towards becoming an even more open and robust one.

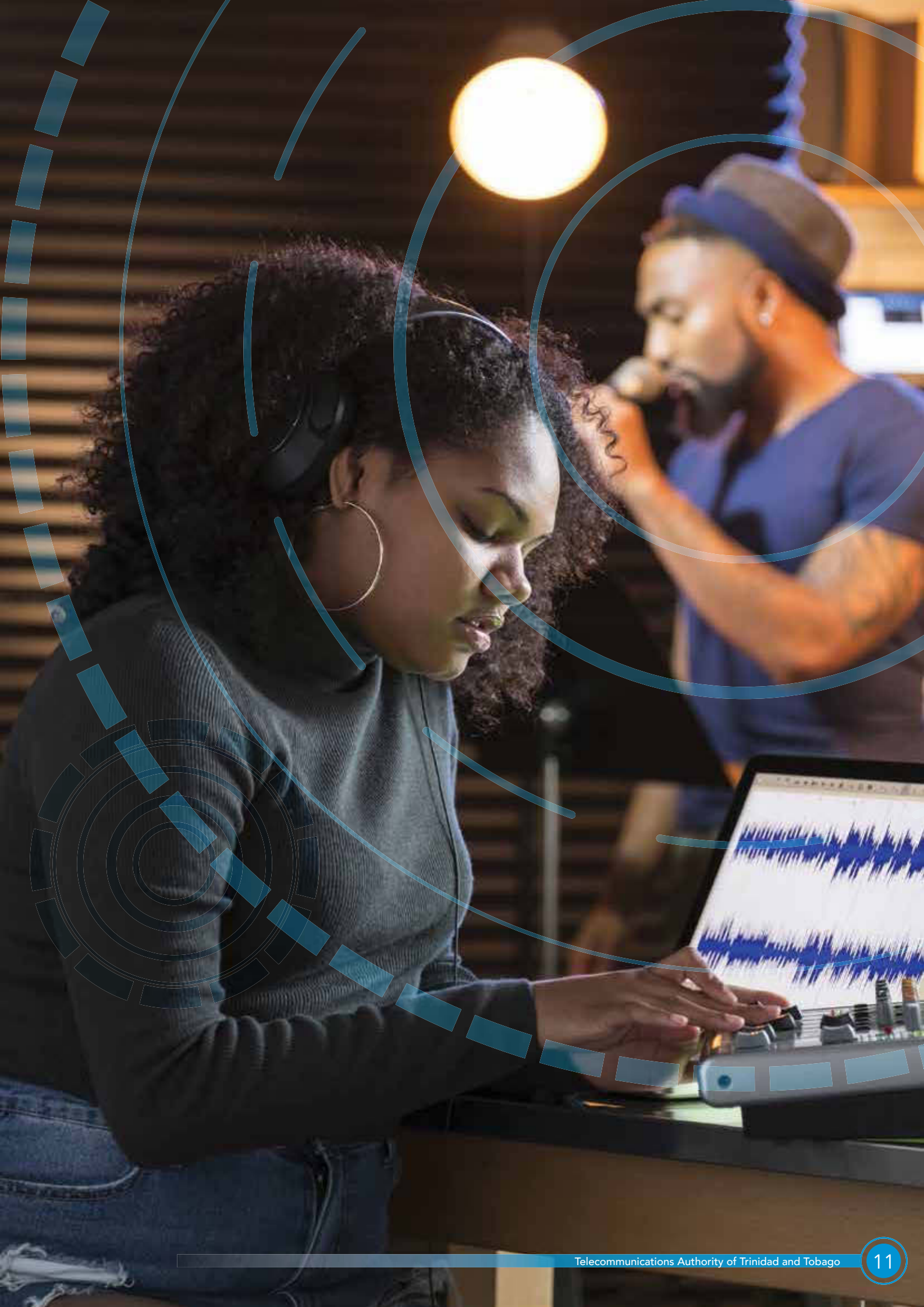
I, therefore, look optimistically toward the future where the promulgation of the Act amendments will assist in taking us to greater success in meeting the needs of consumers and wider stakeholders, including the desired growth prospects of the GoRTT.

In my role as CEO of the Authority, I have been given the responsibility to serve my country well, and this I will continue to do proudly, to bring the required benefits to the citizenry of Trinidad and Tobago.



Dr. John Prince, C.M.  
Chief Executive Officer





# BOARD OF DIRECTORS



**OLIVER ELCOCK**



**DEORAJ SEEOBIN**



**ERIC BUTLER**



**GILBERT PETERSON, S.C.**  
*Chairman*





**DR. KIM MALLALIEU**  
*Deputy Chairman*

**NIKOLAISKI ALI**

**KALANA PRINCE-WILSON**

**TERRENCE HENRY**

# GOVERNANCE STRUCTURE

The Telecommunications Authority of Trinidad and Tobago (the Authority) is an independent regulatory body established by the Telecommunications Act, Chap. 47:31 of the Laws of Trinidad and Tobago. The Authority became operational on July 1, 2004 and is responsible for the development of Trinidad and Tobago's telecommunications and broadcasting sectors.

One of the Authority's primary responsibilities is the continual review and development of a rigorous regulatory framework to serve as a platform for the delivery of reliable, affordable technologies by service providers from which all segments of society can benefit.

A Board of Directors appointed by the President of the Republic of Trinidad and Tobago manages the Authority and all initiatives are implemented under the guidance of the Board of Directors, Board Committees and the Senior Management Team as listed hereunder for the period 2015–2016:

## BOARD OF DIRECTORS

Gilbert Peterson, S.C. (Chairman)  
Dr. Kim Mallalieu (Deputy Chairman)  
Nikolaïski Ali  
Eric Butler  
Oliver Elcock  
Terrence Henry  
Kalana Prince-Wilson  
Deoraj Seegobin

## BOARD COMMITTEES

Adherence to optimal ethical standards and international best practice in the telecommunications and broadcasting sectors are assured through keen oversight by the following sub-committees of the Board.

### GOVERNANCE COMMITTEE

The main role of this sub-committee is to ensure the Authority fulfills its legal, ethical, and functional responsibilities in areas such as recruitment and training of staff.

Gilbert Peterson, S.C. (Chairman)  
Oliver Elcock  
Terrence Henry

### BOARD TENDERS COMMITTEE

This committee, inter alia, considers tenders and awards contracts.

Oliver Elcock (Chairman)  
Nikolaïski Ali  
Eric Butler  
Deoraj Seegobin

### AUDIT COMMITTEE

The committee assists the Board of Directors in fulfilling its oversight responsibilities in a number of areas, including management of risk and compliance with legal and regulatory requirements.

Nikolaïski Ali (Chairman)  
Eric Butler  
Kalana Prince-Wilson  
Deoraj Seegobin

### BOARD REVIEW COMMITTEE

This committee assists in a number of areas, including reviewing regulatory documents, as well as reviewing and considering technical, policy and other decisions as may be requested by the Authority's stakeholders.

Dr. Kim Mallalieu (Chairman)  
Gilbert Peterson, S.C.  
Kalana Prince-Wilson

### ETHICS COMMITTEE

The role of this committee is to consider matters relating to adherence to the Authority's Code of Conduct by members of the Board, management and staff.

Gilbert Peterson, S.C. (Chairman)  
Anisa Duncan  
Terrence Henry  
Ryan James  
Sherry Mc Millan

### CONSUMER COMPLAINTS COMMITTEE

This committee collects, decides on and reports to the Board on all consumer complaints. It is headed by an individual external to the Authority and comprises members of the Board and staff.

Pamela Benson (Chairman)  
Oliver Elcock  
Rawle Harvey  
Cheryl Johnson  
Sherry Mc Millan  
Deoraj Seegobin



# MANAGEMENT TEAM

**DR. JOHN PRINCE, C.M.**  
*Chief Executive Officer*



**ANNIE BALDEO**  
*Executive Officer  
Economics*



**SHERRY MC MILLAN**  
*Executive Officer  
Corporate Communications  
and Administration*



**NIEVIA RAMSUNDAR**  
*Corporate Secretary*



**KIRK SOOKRAM**  
*Executive Officer  
Technology and  
Engineering*



**CYNTHIA REDDOCK-DOWNES**  
*Executive Officer  
Finance and Accounting*





# CORPORATE SOCIAL RESPONSIBILITY

Prime Minister of the Republic of Trinidad and Tobago, Dr. the Honourable Keith Christopher Rowley (centre), with (L) Amine Mcharek, International Telecommunication Union, and (R) Gilbert Peterson, S.C., Chairman, Telecommunications Authority of Trinidad and Tobago, at the opening ceremony of the *Regional Standardisation Forum for Bridging the Standardisation Gap*, at Parliament Building, Port of Spain, March 6, 2017



A cross-section of radio and television talk show hosts at the *Annual Broadcasters' Forum* hosted by TATT with support from the Trinidad and Tobago Publishers and Broadcasters Association, September 2017



Students from Barataria North Secondary School learning about robotics at TATT's *Girls in ICT Day* event in May, 2017



(L-R) Wendell Etienne – Moderator; Colonel Dave Williams, Chief Executive Officer (Ag), Office of Disaster Preparedness and Management; Avinash Singh, Manager - Safety, Health and Environment, TSTT (representing CANTO); and Dexter Boswell-Inniss, Manager, Networks and Standards, TATT. They presented at the 27th ICT Open Forum on *Resilient Communications: Staying Connected During a Disaster*, hosted by TATT in September 2017.



(L-R) The Honourable Darcy Boyce, Minister of Energy, Immigration, Telecommunications and Invest Barbados; Selby Wilson, Telecommunications Strategist, Caribbean Telecommunications Union (CTU); and Cleveland Thomas, Area Representative, International Telecommunication Union at the *Digital Financial Services Workshop*, 24–26 April, 2017









# REVIEW OF KEY ACCOMPLISHMENTS AND ONGOING ACTIVITIES

In January 2017, a new strategic plan for the period 2016–2019 was approved by the Authority's Board of Directors. The plan identified three strategic imperatives as follows:



## ICT SECTOR DEVELOPMENT

To continue developing an enabling framework that promotes competition, affirms our regulatory presence and stimulates a robust investment climate in Trinidad and Tobago. Activities will be geared towards strengthening our regulatory framework, enhancing competition regulation in the industry, and effectively addressing emerging issues which present challenges to the traditional forms of regulation.



## PEOPLE EMPOWERMENT

To be an organisation that is known to be fair, competent, transparent and responsive. We recognize the importance of engaging all stakeholders in policy formulation for the industry, and we strive to continuously improve our human capital, internal systems and processes.



## GLOBAL LEADER

To strengthen our leadership position in emerging areas of sector development, while exemplifying fairness and parity in our collaborative approach to all stakeholders. We aspire to position ourselves as a leader in the region, and to be competitively ranked internationally.

An operational plan for the strategic planning period was developed at the start of the financial year and key deliverables for each financial year were proposed. The key deliverables were monitored and managed through a quarterly corporate performance management system to ensure that the objectives of the strategic plan were realised.

Some of the key deliverables for the financial year 2016–2017 under each strategic imperative are reported on hereafter.

## ICT SECTOR DEVELOPMENT

### Strategic Imperative 1: ICT Sector Development

#### Strategic Objective: Facilitating ICT Development

##### Establishment of Standards to Promote the Robustness of the National Telecommunications Infrastructure

In an era when communication is integral to our lifestyle, and environmental and man-made disasters are increasing, the robustness of the national telecommunications infrastructure is a pressing contemporary issue. In the same manner in which the Authority is responsible for ensuring that public telecommunications networks operate with a desirable quality of service, so too is it necessary to ensure that such networks remain available in times of disasters. While there may be a finite limit to the ability of a public telecommunications network to operate under such conditions, the establishment of minimum or reasonable standards would ensure or provide a reasonable level of resilience of such networks.

This project aims to establish technical standards to promote resilience and redundancy for public mobile and fixed telecommunications networks, and infrastructure that support such networks (e.g. buildings, poles and towers). The Authority presented on this topic at the ITU-T SG2, AMR meeting in Port of Spain, March 6 to 10, 2017, and also held the 27<sup>th</sup> ICT Open Forum entitled, *Resilient Communications: Staying Connected During a Disaster* on September 28, 2017.

During the financial year, a draft document was prepared entitled *Technical Standards for Public Fixed Telecommunications Networks* and it was recommended that a Technical Working Group (TWG), chaired by the Authority and comprising fixed wireline operators, be formed and the draft document submitted for their discussion and input. The output of the TWG was taken into consideration by the Authority in the development of the draft technical standards document.

##### Modernisation of the Authority's Spectrum Management Framework

The scope of this project involves the revision of the *Framework for the Modernisation of the*

*Authority's Spectrum Management* to include considerations for contemporary future policies and principles that will inform the efficient and effective management of the national spectrum resource.

Due to the pace at which wireless technologies are evolving and its impact on the use of radio frequency spectrum, there is a need to revise the *Framework for the Modernisation of the Authority's Spectrum Management*. This serves to embrace emerging and near-future technological developments which promote the efficient and effective use of spectrum. The need to allocate and use spectrum to satisfy contemporary market and social imperatives is also recognised, such as the need for more spectrum to satisfy the demands of the mobile market, and the need to allocate spectrum for public protection and disaster relief.

Based on the research conducted to date, a revision to the *Framework for the Modernisation of the Authority's Spectrum Management* has been drafted.

##### Establishment of Second Subsea Cable System Landing Point

Following the study completed by the World Bank Group (WBG) for the establishment of a second subsea cable system landing point, the Authority completed the necessary assessment and planning work for the establishment of this second landing point. This deliverable also entailed an assessment of the current landing point at Chaguaramas, which is a bottleneck facility.

For this financial year, the draft WBG study was reviewed and a report prepared. The technical options for the implementation of a new cable landing station and cable landing point in Trinidad and Tobago were identified. A recommendation was put forward for the option deemed to be the most technically feasible, which was in agreement with the recommendation in the WBG study.

An analysis was also conducted on possible ownership options that could be adopted to move the project forward, and a recommendation made as to the best ownership model deemed to be the most feasible and risk averse. In this regard, a report was drafted and submitted for approval by Management during the financial year.

It is to be noted that the Authority was verbally advised of a possible new international fibre optic cable system to be implemented throughout the Caribbean. This system includes new cable landing points in Trinidad and a new cable landing station in Tobago. This system may influence the project implementation approach and associated time-frames.

### Implementation of Universal Service Initiative: Provision of Assistive Devices for Persons with Disabilities (PwDs)

In accordance with the schedules contained within the *Telecommunications (Universal Service) Regulations, 2015*, this mandatory universal service initiative aims to provide subsidised assistive devices to PwDs in Trinidad and Tobago, with the aim of bridging the gap between those who have access to basic telecommunications services and those who do not.

The objectives of this project ensure that PwDs have access to basic mobile telecommunications services through the provision of assistive mobile devices, whilst reducing the digital divide by promoting digital inclusion of ICTs to PwDs. This project is also intended to enhance quality of life by helping those with physical disabilities to participate more fully in society—in school, work and civic life—and ensuring equality of opportunity for this population group. The scope of this project involves participation by a number of stakeholders in three phases, namely, project assessment, equipment sourcing and equipment distribution.

The Implementation Plan for this initiative was developed and approved by the Authority's Board of Directors in September 2017. Full rollout of this project is scheduled for financial year 2018.

### Completion of Interconnection Benchmarking Study

The purpose of this Interconnection Benchmarking Study is to provide information that will be used to determine interconnection rates in Trinidad and Tobago. This entailed gauging our interconnection rates against those in benchmarked countries and prescribing possible changes in the rates charged by the authorised service providers.

In accordance with Section 25 (2) of the Telecommunications Act, Chap. 47:31 and Section 15 of the Telecommunications (Interconnection) Regulations, 2006, rates must be cost-based.

As a result, during the financial year 2016–2017, the Authority commenced work on a robust and relevant benchmarking study of prevailing fixed and mobile networks' interconnection rates in comparable and diverse jurisdictions. The output of this study is credible for informing and negotiating the interconnection rates, particularly fixed and mobile termination rates in Trinidad and Tobago.

### Strategic Objective: Encouraging and Facilitating Competitiveness

#### Authorisation of Advanced Wireless Services (AWS) Band

The AWS band (1.7/2.1 GHz) had been included for the provision of public mobile telecommunications services in the preceding financial period. Upon conclusion of the process to licence 700 MHz spectrum, the Authority shall proceed immediately to license spectrum in the AWS to the cellular mobile operators, in order to add capacity to the advanced mobile broadband networks via the use of Long Term Evolution (LTE) technologies.

Based on the Authority's decision to consider the Asian Pacific Telecommunity (APT) 700 MHz band plan for the provision of public mobile telecommunications services, discussions were held with the two mobile concessionaires and no objection was received to changing from the US 700 MHz to APT 700 MHz band plan.

Discussions were also held with the Ministry of National Security between March and May, 2017 for the allotment of spectrum for broadband public protection and disaster relief systems it may consider in the future.

The *Spectrum Plan for the Accommodation of Public Mobile Telecommunications Services*, was revised, and the second and final round of consultation was held in this financial year. The Plan, along with the proposed process for the assignment of 700 MHz and AWS spectrum, will be submitted to the Board. Subsequent to the approval of this Spectrum Plan, the Authority will conduct the authorisation process for the assignment of 700 MHz and AWS spectrum.

#### Framework on Internet Governance: Focus on Net Neutrality and Over-the-Top (OTT) Services

Net neutrality is based on the principle of an open and indiscriminate network. However, in light of the growing uptake of various content

applications and the increased demand on network capacity, it has become imperative for the Authority to adopt balanced policy positions that protect competition and consumer rights while promoting continuous innovation.

This deliverable aims to outline the main issues relating to the net neutrality and OTT debate, and present the key principles underlying both sides of the discussion. It also examines the applicability of legislation adopted globally in addressing the challenges faced by Trinidad and Tobago.

In August, 2017 the subject of the prevalence of android boxes in the local market prompted a consultation session with key stakeholders on the impact of these in Trinidad and Tobago on service providers and consumers. Following this, the scope of this deliverable was expanded to include a report addressing android boxes.

## Strategic Imperative 2: People Empowerment

### Strategic Objective: Regulating Through a Consultative, Collaborative, Fair and Transparent Process

#### Development and Implementation of an Annual Broadcasters' Forum

The first *Annual Broadcasters' Forum* was hosted jointly by the Authority and the Trinidad and Tobago Publishers and Broadcasters Association (TTPBA) on September 16, 2017 at the Authority's head office.

The event was attended by 52 radio and television broadcasters and journalists. This intense and informative one-day workshop gave attendees the opportunity to engage with industry leaders. Talk show hosts, producers, programme directors and other electronic media personalities examined ways to improve the quality of broadcasting in Trinidad and Tobago.

Presentations included:

1. *Strategies for Talk Show Hosts*
2. *Law and Ethics in the Media*
3. *Protection of Children in the Media*
4. *Fact Checking and Accuracy in the Media*
5. *Broadcasting in the Digital Age*

The presentations were very stimulating and led to rich discussions on the topics. The overwhelming response from participants was their call for the Authority to host half-day Saturday sessions quarterly on each of the topics as well as others in the future, so there could be greater depth of discussion.

### Revision of the Telecommunications Fees Methodology and Regulations

The Authority has a statutory responsibility to collect fees under the Telecommunications Act, Chap. 47:31. The existing fee regime has been in place since it was approved by Parliament in 2006. However, with the significant changes that have occurred in the telecommunications and broadcasting industry over the last decade, the Authority's existing fees regime needed to be revised.

The revised *Telecommunications Fees Methodology and Regulations* were completed and are due to be submitted to the Authority's line Ministry for review. The amended documents were also made available on the Authority's website.

### Strategic Objective: Optimising People, Structure, Systems and Facilities

#### Preparation of Annual Report, Financial Statements and Annual Budget

The Authority's preparation of its Annual Report and Financial Statements for submission to Parliament involves the collection and collating of information on the Authority's deliverables for each financial year. This includes gathering statistics from all divisions of the Authority and the preparation of financial statements which are to be approved by the Authority's Audit Committee and, subsequently, the Board of Directors.

The Annual Report and Financial Statements for the year ended September 30, 2016 were completed in December, 2016 in accordance with the statutory timetable outlined in the Telecommunications Act, Chap. 47:31. The documents were submitted to the line Minister for laying in Parliament, and the Authority's surplus for that period was paid into the Consolidated Fund.

The Authority has a statutory responsibility to prepare an annual budget under Section 55 (2) of the Telecommunications Act, Chap. 47:31, and also has a responsibility as an operating entity to prudently manage its financial resources. This



deliverable thus involved the preparation of the annual budget with the requisite approvals from the Audit Committee and, subsequently, the Board of Directors. It also included submissions to the line Ministry and, subsequently, the Minister of Finance, for approval by Parliament.

### Revision of the Authority's Financial Rules

The Authority's *Financial Rules* were prepared in 2007 with amendments subsequently made in some areas as circumstances required. It is now important that the *Financial Rules* be reworked to align to current processes and procedures and take into consideration new financial legislation.

Revisions to the *Financial Rules* were completed during the financial period under review and are currently awaiting Board approval before submission to the Ministry of Finance for review and approval, in accordance with section 59 of the Telecommunications Act, Chap. 47:31.

## Strategic Imperative 3: Global Leader

### Strategic Objective: Leading as an ICT Authority, Regionally and Internationally

#### Publication of 11th Annual Market Report: Telecommunications and Broadcasting Sectors

This report presents annual information on the markets within the telecommunications and broadcasting sectors, which includes data on subscriptions, gross revenues and traffic of the relevant markets. The data collected are also used by the Authority to determine the market share of the relevant service operators, and to monitor and inform policy decisions that will facilitate the orderly development of markets within these sectors.

The data are based primarily on the results of a survey of concessionaires conducted within the telecommunications and broadcasting sectors for the period January–December, 2016. The report was completed in the financial year under review and published on the Authority's website.

### Consumer Education Campaign

In keeping with its mandate to protect the interest of consumers, the Authority hosted a number of consumer education activities and events. For the period October 1, 2016 to September 30, 2017 the Authority published 18 column articles and hosted the three ICT Open Fora, which follow.

- **White Space Devices: Opportunities for Trinidad and Tobago**

The purpose of this forum held on February 16, 2017 was to broaden awareness and generate discussion on white space devices, taking into consideration the *Authorisation Framework for the Accommodation of White Space Radiocommunications Devices* issued by the Authority during the financial period.

The audience consisted of persons from the ICT industry, Internet concessionaires, academia, State agencies and the general public. There were presentations by: Keith Sinclair, Senior Director, Marketing, Adaptrum; Dr. Sean Rocke, Lecturer, Communications, The University of the West Indies (UWI), St. Augustine; Michelle Baptiste-Williams, Telecommunications Strategy and Services Manager, Ministry of Public Administration and Communications and the Authority's Kirk Sookram, Executive Officer, Technical Services and Development.

- **Renewable Energy: Powering Future Telecommunications and Broadcasting Services**

The objective of this forum held on July 20, 2017 was to initiate discussions on:

1. The future use of renewable energy technologies in the domestic telecommunications and broadcasting sectors.
2. The potential economic and environmental cost savings to the telecommunications and broadcasting sectors in Trinidad and Tobago from the use of such technologies.

Present were representatives of telecommunications and broadcasting companies, members of the energy and heavy industrial sectors, representatives of power generating companies, relevant government and non-governmental organisations, suppliers of telecommunications and broadcasting network equipment and members of the academic community.

Speakers at the event were: Anita Hankey, Senior Planning Officer, Ministry of Energy and Energy Industries; Dr. Thackwray Driver, President and Chief Executive Officer, Energy Chamber of Trinidad and Tobago; Andre Escalante, Managing Director, Energy

Dynamics Limited and Trevonne Clarke-Ferguson, Economist II with the Authority.

- **Resilient Communications: Staying Connected During a Disaster**

This forum was held on September 28, 2017 with the aim of initiating public discussions with several stakeholders on the need to enhance the robustness of public telecommunications and broadcasting networks so that they are resilient under both man-made and natural disasters.

The audience included representatives from telecommunications and broadcasting concessionaires, suppliers of telecommunications and broadcasting network equipment, relevant government and non-governmental organisations involved in disaster preparedness and members of the academic community.

Presentations were delivered by: Colonel Dave Williams, Chief Executive Officer (Ag), Office of Disaster Preparedness and Management; Daren Lee Sing, President, TTPBA; Avinash Singh, Manager, Safety, Health and Environment, TSTT, and Dexter Boswell-Inniss, Manager, Networks and Standards at the Authority.

- **Column Newspaper Articles**

During the year in review, column articles were written on a variety of topics by the Authority. They focused on a range of topics including educating parents on how to keep their children safe while using ICTs; consumer protection; the role of ICTs for development; as well as information on the Authority's consumer complaints and equipment certification processes. The 18 articles were laid out with relevant graphics and printed in full colour, once a week, in each daily newspaper.

Complementing this, consumer advocacy meetings were held in communities across Trinidad and Tobago including areas such as Matelot, Tabaquite, Curepe, Brasso Venado, Moruga, Speyside, Roxborough, Scarborough, Castara and Charlotteville, to name a few.

#### Hosting of Regional and International Conferences

The Authority has earned a good reputation for assisting in the development of its Caribbean partners in areas of emerging ICT issues through its hosting of workshops and conferences. These activities are in harmony with the organisation's strategic objective of "attaining a





heightened international presence”.

The following conferences/events were held during the financial period 2016–2017:

1. March 6–10, 2017 — the ITU’s Regional Standardisation Forum for *Bridging the Standardisation Gap* and the ITU-T Study Group 3 Regional Group for Latin America and the Caribbean (SG3RG-LAC), and the meeting of ITU-T Study Group 2 Regional Group for the Americas (SG2RG-AMR). These events took place at the ANR Robinson Room East, Ninth Floor, Parliament Building, Port of Spain. Prime Minister of the Republic of Trinidad and Tobago, Dr. the Honourable Keith Christopher Rowley, delivered the feature address.
2. April 24–26, 2017 — *Internet of Things Forum: Smarter Living in the Caribbean* was hosted by the Authority in collaboration with the ITU. The Honourable Maxie Cuffie, Minister of Public Administration and Communications, delivered the feature address.
3. April 27–28, 2017 — *Exploring Innovation in Transactions and Financing in the Caribbean II* was hosted in partnership with the ITU, the UWI, St. Augustine Campus, Caribbean Telecommunications Union (CTU) and the Economic Commission for Latin America and the Caribbean (ECLAC). The feature address was delivered by the Honourable Darcy Boyce, Minister of Energy, Telecommunications, Immigration and Invest in Barbados.
4. May 5, 2017 — *Girls in ICT Day*. To commemorate *Girls in ICT Day*, the Authority hosted a one-day robotics workshop for 15 female students enrolled in secondary schools in the Barataria area. The primary objective of this event was to encourage these young women to go on to pursue careers in ICT. The workshop gave them hands-on experience in building and activating robots and was conducted by staff from the National Institute of Higher Education, Research, Science and Technology (NIHERST).
5. June 22, 2017 — To commemorate World Telecommunication and Information Society Day (WTISD) 2017, the theme of which was *Big Data for Big Impact*, the Authority focused on educating its staff on new and emerging developments in the global ICT arena. At the Authority’s head office, a seminar was hosted for all staff on big data, IoT and white space devices. The presentations were done by members of the Authority’s staff who have developed expertise in these areas through training and work-related experience.





# LOOKING AHEAD 2017–2018

The Authority's strategic direction for the period 2016–2019 will focus on further facilitating ICT sector development, empowering citizens by promoting wider access to ICTs and becoming a global leader within the ICT landscape. Arising from the development of the 2016–2019 strategic plan, three key strategic imperatives were identified, viz. ICT Sector Development, Global Leader and People Empowerment. The following sub-sections identify some of the strategic objectives and key deliverables under each strategic imperative.

## Strategic Imperative 1: ICT Sector Development

### Strategic Objective: Facilitating ICT Development

- Implementation of mandatory universal service initiative: rollout of assistive devices and technologies for PWDs
- Implementation of a national survey to measure the digital divide in Trinidad and Tobago
- Finalisation of draft Competition Regulations, Pricing Regulations and Authorisation Regulations
- Facilitation of access to fiscal incentives available to concessionaires for investment in ICT infrastructure
- Establishment of standards to promote the robustness of the national telecommunications infrastructure
- Modernisation of the Authority's Spectrum Management Framework
- Revision of Trinidad and Tobago's Frequency Allocation Table
- Finalisation of the Broadcasting Technical Quality of Service Standards: Pay TV and FTA Television Broadcasting Services in Trinidad and Tobago

### Strategic Objective: Encouraging and Facilitating Competitiveness

- Determination of the relevant boundaries of the domestic retail mobile market

## Strategic Imperative 2: People Empowerment

### Strategic Objective: Regulating through a Consultative, Collaborative, Fair and Transparent Process

- Finalisation of consultation procedures
- Development of a Monitoring and Compliance Framework

### Strategic Objective: Optimising People, Structure, Systems and Facilities

- Development of a new suite of standardised contracts for all goods and services
- Revision of the current procurement policies and processes
- Implementation of the Authority's new organisation structure
- Facilitation of an online system for the payment of fees from licensees, concessionaires and other parties (Phase 1)
- Development of a Monitoring and Compliance Management System
- Implementation of automated transcription and voice monitoring in the Broadcast Content Monitoring System
- Advanced Spectrum Management System operationalisation (final phase)

## Strategic Imperative 3: Global Leader

### Strategic Objective: Leading as an ICT Authority, Regionally and Internationally

- Publication of the *12th Annual Market Report: Telecommunications and Broadcasting Sectors*
- Hosting of the Authority's first annual signature event
- Hosting of the Commonwealth Telecommunications Organisation (CTO) Forum and Council Meeting 2018

# OVERVIEW OF THE TELECOMMUNICATIONS AND BROADCASTING SECTORS

## TRENDS IN MARKET REVENUES FOR JANUARY–DECEMBER 2016

The data in the Authority's 11th Annual Market Report: Telecommunications and Broadcasting Sectors (Annual Market Report 2016)<sup>1</sup> indicated that the telecommunications and broadcasting sectors generated an estimated TT\$5.60 billion<sup>2</sup> (US\$836.0 million<sup>3</sup>) in 2016, which as a percentage of gross domestic product (GDP)<sup>4</sup>, equates to 3.8%. This represented a 0.3% decrease in total revenue generated by this industry compared to last year. Of total telecommunications and broadcasting revenues, mobile voice services accounted for most of the revenue with TT\$1,889.6 million (33.9%). This was followed by Internet services, which contributed TT\$1,485.5 million or 26.6%. The next highest revenue earners for the

industry were fixed voice<sup>5</sup> services and pay TV services, which contributed TT\$723.4 million and TT\$718.4 million respectively (13.0% and 12.9%). International voice services were next, generating TT\$331.4 million (5.9%) in revenue. FTA radio and television services brought in TT\$167.0 million and TT\$98.2 million respectively (3.0% and 1.8%). Other contributors included "other revenues"<sup>6</sup> and "leased line services"<sup>7</sup> with earnings of TT\$112.0 million and TT\$50.4 million respectively (2.0% and 0.9%).

Figure 1 shows the percentage revenue contribution by each market towards overall gross revenue of the industry.

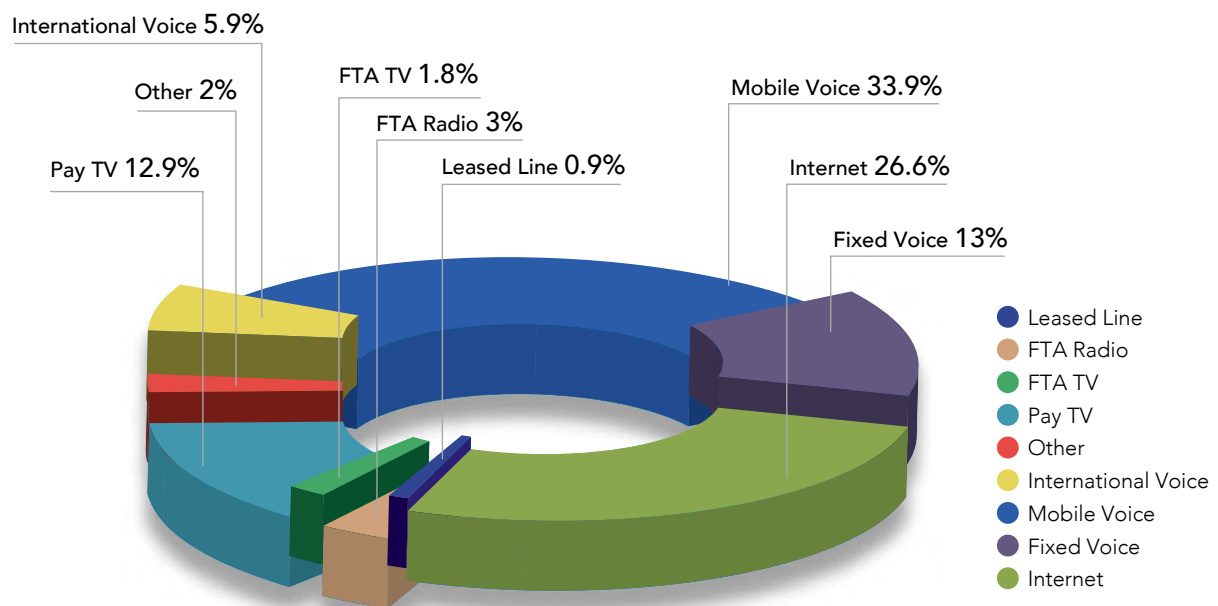


Figure 1: Percentage of Gross Revenues Contributed by Markets 2016

<sup>1</sup> The full Annual Market Report 2016 is available at <http://www.tatt.org.tt>

<sup>2</sup> This figure includes revenues from telecommunications and broadcasting services offered to members of the general public and private leased line services.

<sup>3</sup> Exchange rate US\$1=TT\$6.67

<sup>4</sup> Gross domestic product (GDP) at current market prices for 2016: TT\$145,910 million (Source: Ministry of Finance Review of the Economy 2016)

<sup>5</sup> Fixed voice market revenues include revenues earned from fixed voice services and access (excluding international services).

<sup>6</sup> Other revenues comprise revenues earned from both the telecommunications sector and the broadcasting sector, such as revenues received from wholesale services and production, and airtime for local programming on pay TV.

<sup>7</sup> Leased lines include both international and domestic leased circuits.

## Domestic Telecommunications and Broadcasting Statistics

The following information on subscriptions, average revenue per user and traffic of the relevant markets was extracted from the Authority's *11th Annual Market Report: Telecommunications and Broadcasting Sectors*. These data are used by the Authority to monitor and inform policy decisions that will facilitate the orderly development of the markets within these sectors.

The statistics in the telecommunications and broadcasting markets over the period 2008–2016 are shown in Table 1.

Table 1: Domestic Telecommunications and Broadcasting Statistics  
for the Period December 2008–December 2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016	
General	Population (millions)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	
	GDP per capita (US\$ millions) <sup>8</sup>	21,408	15,067	15,924	17,042	19,018	27,855	28,183	19,311	16,637
	Telecommunications revenue (US\$ million)	775.3	685.2	713.1	737.0	834.0	864.4	881.5	876.7	836.0
	Total telephone subscriptions ('000s)	2,120.9	2,149.6	2,187.6	2,117.7	2,169.8	2,235.2	2,270.4	2,393.2	2437.1
	Total telephone penetration	163.1	165.3	167.2	160.7	164.7	168.3	171.4	180.7	184.0
	Average revenue per user <sup>9</sup> (ARPU) US\$	365.6	318.7	322.5	348.0	384.4	386.7	388.3	366.3	342.9
Fixed Voice	Fixed voice subscriptions ('000s)	314.8	303.2	293.3	291.5	286.1	291.3	289.8	269.8	271.9
	Fixed voice penetration	24.1	23.2	22.3	22.0	21.6	21.9	21.9	20.0	20.1
	Fixed voice household penetration	73.3	70.1	67.5	67.1	55.3	56.2	56.6	52.5	53.7
	Average revenue per user (ARPU) US\$	486.5	403.5	411.5	417.3	430.5	413.1	410.7	424.2	416.4
	Fixed voice subscriptions growth (%)	2.4	-3.7	-3.3	-0.6	-1.9	1.6	-0.7	-6.3	0.8
Mobile	Mobile subscriptions ('000s)	1,806.1	1,846.3	1,894.2	1,826.2	1,880.6	1,943.9	1,980.6	2,123.4	2,165.8
	Mobile penetration	138.0	141.1	143.8	138.6	142.2	146.4	149.1	157.3	160.0
	Average revenue per user (ARPU) US\$	197.0	170.0	164.0	173.0	188.0	189.0	174.5	147.1	136.8
	Mobile subscription growth (%)	19.6	2.2	2.6	-3.6	3.1	3.2	1.9	7.2	2.0

<sup>8</sup> GDP per capita is recorded at current market prices.

<sup>9</sup> ARPU is calculated as the total revenue generated from the service divided by the total number of subscriptions to the service.



Table 1 (cont'd): Domestic Telecommunications and Broadcasting Statistics  
for the Period December 2008–December 2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Internet	Total Internet subscriptions <sup>10</sup> ('000s)	129.6	238.3	309.9	325.2	646.7	682.3	820.1	925.2	962.9
	Fixed Internet subscriptions <sup>11</sup> ('000s)	114.1	145.0	171.1	192.0	224.2	231.7	249.6	279.8	255.6
	Mobile Internet subscriptions <sup>12</sup> ('000s)	15.6	93.3	138.8	133.2	422.5 <sup>13</sup>	450.6	570.5	645.4	707.3
	Fixed broadband subscriptions <sup>14</sup> ('000s)	85.4	130.1	162.9	187.9	221.3	229.6	248.1	278.5	255.6
	Fixed Internet users <sup>15</sup> ('000s)	456.0	579.8	684.0	768.0	726.0	751.0	757.8	851.1	775.1
	Fixed Internet penetration	8.7	11.1	13.0	14.6	16.9	17.4	18.8	21.1	18.9
	Mobile Internet penetration	1.2	7.1	10.5	10.1	31.9	33.9	43.0	47.8	52.2
	Fixed Internet household penetration	21.4	40.1	49.9	52.8	52.1	54.2	58.3	65.4	59.6
	Average revenue per user (ARPU) US\$ for fixed Internet	491.8	433.2	409.9	431.9	422.8	440.0	448.6	430.3	542.2
	Fixed Internet subscription growth (%)	38.9	27.1	18.0	21.7	10.7	6.0	7.8	12.1	8.6
	Traffic	International - Outgoing (min. million)	304.3	259.2	282.9	274.5	263.5	277.9	268.3	247.2
International - Incoming (min. million)		375.4	399.4	358.5	256.2	245.7	234.8	234.1	199.2	202.7
Inbound/outbound int'l traffic ratio		1.2	1.5	1.3	0.9	0.9	0.8	0.9	0.8	1.2
Pay TV	Pay TV subscriptions ('000s)	163.0	179.6	178.9	187.8	198.7	209.3	228.8	232.8	206.7
	Pay TV penetration	14.2	13.7	13.6	14.1	14.8	15.4	16.8	16.8	15.3
	Pay TV household penetration	47.5	52.3	52.1	54.0	48.2	50.9	55.7	56.6	50.1
	Average revenue per user (ARPU) US\$	337.0	404.9	431.2	468.6	505.5	520.8	493.2	497.7	514.5
	Pay TV subscription growth (%)	12.5	10.2	-0.4	5.0	5.8	5.3	9.3	1.7	-11.2

<sup>10</sup> Total Internet subscriptions refer to the sum of fixed Internet subscriptions and mobile postpaid Internet subscriptions.

<sup>11</sup> Fixed Internet subscriptions refer to the total number of subscriptions with fixed wired or fixed wireless Internet access.

<sup>12</sup> Mobile Internet subscriptions include postpaid mobile customers who subscribe to monthly Internet airtime and who are billed accordingly.

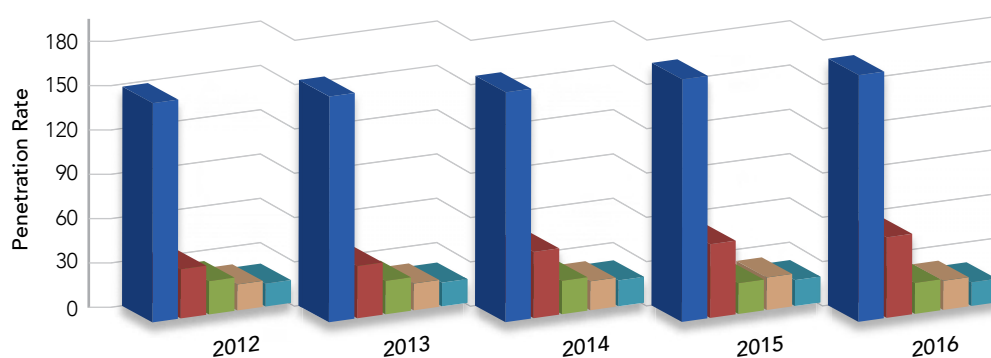
<sup>13</sup> Mobile Internet subscriptions from 2012–2016 include prepaid and postpaid mobile Internet users.

<sup>14</sup> Fixed broadband subscriptions are the number of Internet subscribers with access to download speeds of 256 kbps or above.

<sup>15</sup> Fixed Internet users are the number of persons who regularly use fixed Internet services.

## Trends in Subscription Penetration as at December 2016

The subscription penetration rate is defined as the number of subscriptions per 100 inhabitants. As seen in Figure 2, the penetration rates for all subscription-based markets increased for the 2016 period, with the exception of fixed Internet and pay TV services, which recorded penetration rates of 18.9 and 15.3, respectively. Mobile voice penetration sustained its dominant position, increasing from 157.3 in 2015 to 160.0 in 2016. The level of mobile Internet penetration in the country maintained its second place, with a penetration rate of 52.2. There was a minimal increase in the penetration level for the fixed voice services to 20.1.



	2012	2013	2014	2015	2016
Mobile Penetration	142.2	146.4	149.1	157.3	160.0
Mobile Internet Penetration	31.9	33.9	43.0	47.8	52.2
Fixed Voice Penetration	21.6	21.7	21.7	20.0	20.1
Fixed Internet Penetration	16.9	17.4	18.8	21.1	18.9
Pay TV Penetration	14.8	15.4	16.8	16.8	15.3

Figure 2: Penetration Rate of Subscriptions 2012–2016

## Broadcasting and Telecommunications Concessionaires as at September 2017

Tables 2 and 3 list the number of broadcasting and telecommunications concessionaires authorised and operating within the market as at September 2017.

Table 2: Broadcasting Market Concessions as at September 2017

Types of Broadcasting Concessions	September 2014	September 2015	September 2016	September 2017
<b>Free-to-Air Television</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>6</b>
National	6	6	5	5
Major Territorial	2	1	1	1
<b>Subscription (Pay) Television</b>	<b>13</b>	<b>14</b>	<b>14</b>	<b>14</b>
National	7	8	8	8
Major Territorial	1	1	1	1
Niche	4	4	4	4
Minor Territorial	1	1	1	1
<b>TV Broadcasting via Cable</b>	<b>7</b>	<b>10</b>	<b>13</b>	<b>14</b>
National	6	8	12	13
Major Territorial	1	2	1	1
<b>Free-to-Air Radio</b>	<b>39</b>	<b>38</b>	<b>37</b>	<b>37</b>
National	31	30	29	29
Major Territorial	6	6	6	6
Minor Territorial	2	2	2	2
<b>Total</b>	<b>67</b>	<b>69</b>	<b>70</b>	<b>71</b>

Table 3: Telecommunications Market Concessions as at September 2017

Types of Telecommunications Concessions	Authorised Providers	Operational Providers
	September 2017	September 2017
Fixed Telecommunications:	19	-
Fixed Telephony	-	11
Fixed Internet	-	12
International Telecommunications	8	8
Mobile Telecommunications	2	2

With reference to the Fixed Telephony and Fixed Internet markets in Table 3, a single concession is granted for the provision of fixed telephony and/or fixed Internet services and networks. During the period under review, of the 19 operators authorised to provide fixed domestic telecommunications services, only 11 concessionaires opted to provide fixed telephony services and 12 concessionaires opted to provide fixed Internet services.

## STAKEHOLDER ENGAGEMENT STATISTICS

1. Consumer Complaints Handling	2. Consumer Complaints Committee
3. Broadcast Content Complaints	4. Interference Complaints
5. Licence Applications	6. Concession Applications
7. Tower Administration	8. Radio Frequency Radiation (RFR) Measurements of Cellular Sites
9. Numbering Assignment	10. Freedom of Information Act

The statistics in the following sections give details of the work of the Authority in each of the above categories for the financial period under review.

### Consumer Complaints Handling

During the reporting period, a total of 587 consumer complaints were received, five of which were from Tobago. Of the total, approximately 74%, or 436, complaints were resolved. There are 151 pending complaints still being investigated, most of which were submitted during the last quarter of the financial year, and these are expected to be resolved early in the next financial year, 2017–2018. The majority of complaints received — just over 38% — were attributable to a loss of service. The type and status of the consumer complaints are shown in Figure 3.

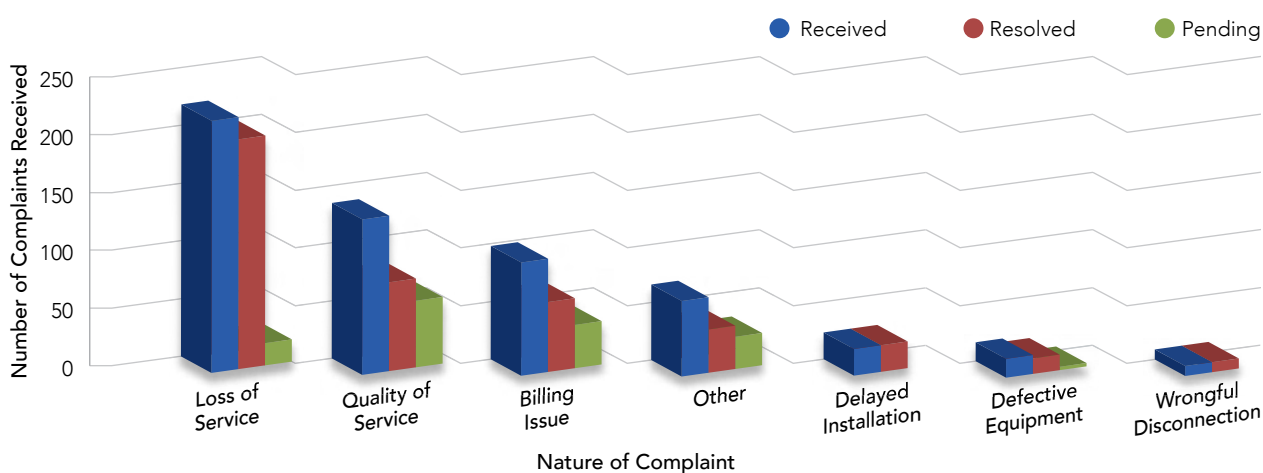


Figure 3: Consumer Complaints Handling October 1, 2016–September 30, 2017

## Consumer Complaints Committee

The Consumer Complaints Committee (CCC) was established in May 2008 in accordance with Section 18 (q) of the Telecommunications Act, Chap. 47:31, and is responsible for deciding on complaints that have not been resolved at the operational level.

The CCC met on four occasions during the financial period under review. Discussions centred on refining the CCC's decision-making process. Extensive reviews were conducted of the CCC's *Charter and Complaint Handling Procedures*, with proposed amendments being subsequently approved by the Authority's Board of Directors.

Additionally, the CCC placed high importance on matters related to consumer advocacy and empowerment, particularly quality of service complaints related to FTA radio and television stations.

No complaints were brought before the CCC during the review period.

## Broadcast Content Complaints

The Authority receives complaints regarding both FTA radio and television broadcast content, as shown in Table 4. Most of the invalid complaints resulted from a significant lapse of time between the broadcast date and complaint date. All pending complaints were either awaiting further details from the complainant or are currently being investigated by the Authority.

## Interference Complaints

Section 18(l) of the Telecommunications Act, Chap. 47:31 authorises the Authority to investigate and resolve all allegations of harmful interference and to issue "cease or modify" orders to those causing the interference. For the financial year 2016–2017, the Authority received seven complaints regarding harmful interference, four of which were resolved within the period under review.

The remaining three unresolved complaints are currently being investigated by the Authority. These complaints were submitted by the licensee or individual experiencing the harmful interference

Table 4: Broadcast Complaints as at September 2017

Type of Complaint	Number of Received Complaints	Resolved Complaints	Pending Complaints	Invalid Complaints
Radio	40	34	3	3
Television	32	27	1	4
Total	72	61	4	7

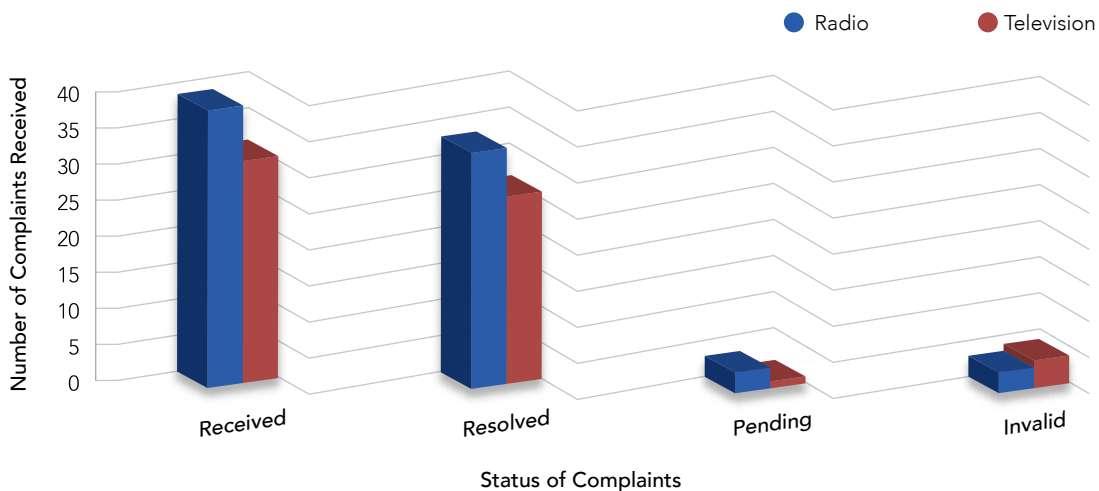


Figure 4: Broadcast Content Complaints from October 1, 2016–September 30, 2017



to their radiocommunications system. In all instances, the Authority evaluates such complaints in accordance with its interference complaints process. The Authority first verifies the existence of the harmful interference. Once this interference has been confirmed, the Authority proceeds to investigate the external interfering source based on consideration of the nature of service, the severity of the interference, the impact on the authorised user(s), and any action taken by the licensee to resolve their own interference problem. Based on the Authority's findings, the necessary action is pursued to resolve the complaint.

Three complaints, which were previously pending, were subsequently resolved in the period under review.

### Licence Applications

During the financial year under review, 483 licence applications were granted and two were rejected by the Authority. At the end of the period, 88 licence applications, most of which were submitted during the last quarter of the financial year, were pending approval.

Figure 5 illustrates the number and types of licence applications that were either granted, pending approval, or rejected during the period 2016–2017.

### Concession Applications

The granting of concessions to existing and potential service providers is done in accordance with the Authority's Authorisation Framework. During the period under review, eight concession applications were received—three being new applications and five being renewals.

Of the 13 applications approved, nine related to applications received during the previous financial period 2015–2016 and four were received during the financial period 2016–2017.

Of the 11 applications pending as at September, 2017, five were received during the previous financial period 2015–2016, and six were received during the current financial period.

The details of the status of concession applications as at the end of the financial year are shown in Table 5.

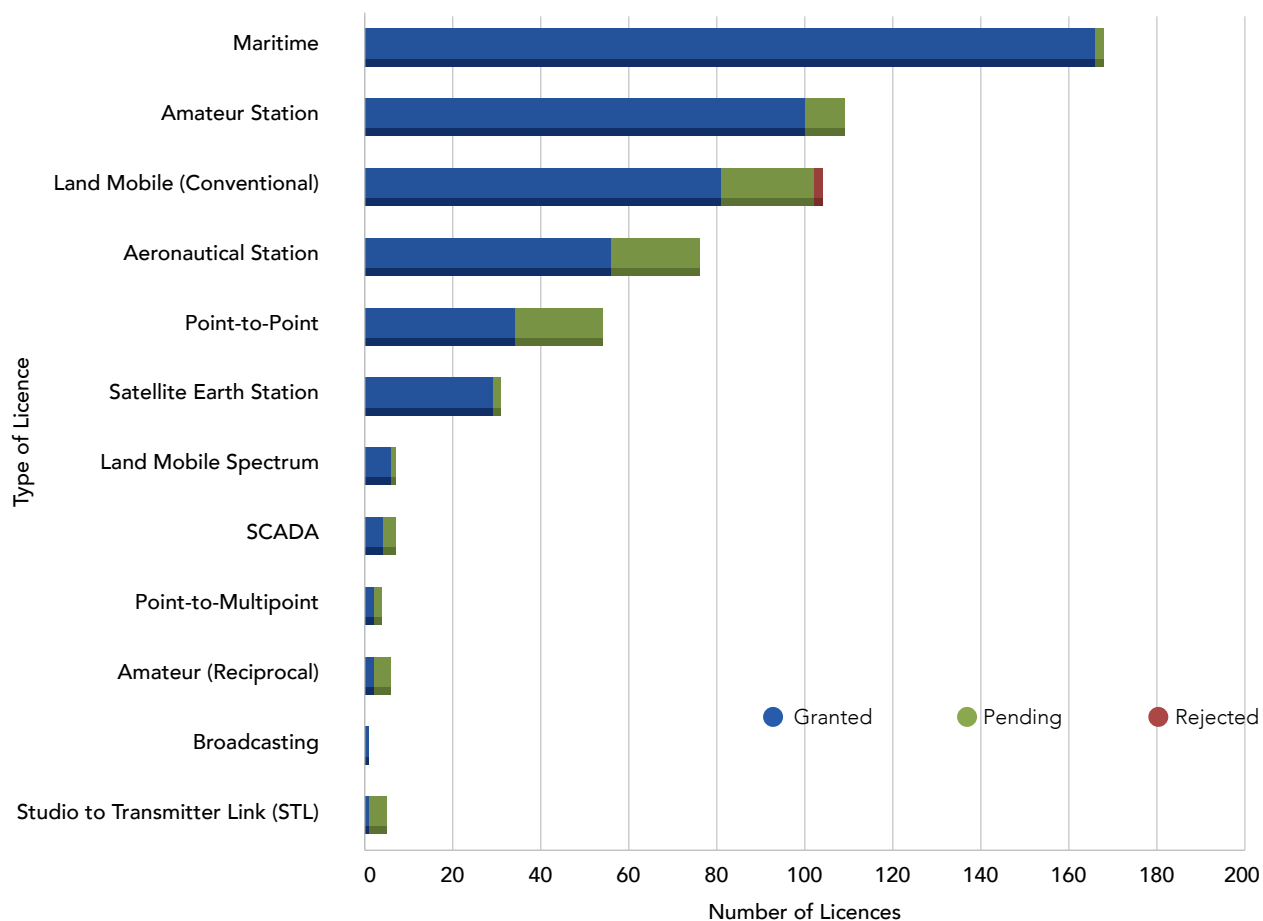


Figure 5: Status of Licence Applications as at September 30, 2017

Table 5: Concession Applications as at September 2017

APPLICATION TYPE	APPLICATIONS BROUGHT FORWARD 2015–2016		APPLICATIONS RECEIVED 2016–2017		APPLICATIONS APPROVED	APPLICATIONS PENDING
	New	Renewal	New	Renewal		
International Telecommunications	-	3	2	2	4	3
FTA Radio	-	2	-	2	3	1
FTA Television	-	-	-	-	-	-
Mobile Telecommunications	-	-	-	-	-	-
Subscription Television Broadcasting	-	3	-	-	3	-
Television Broadcasting Service via Cable	4	-	1	-	-	5
Fixed Telecommunications	1	3	-	1	3	2
<b>SUB-TOTAL</b>	<b>5</b>	<b>11</b>	<b>3</b>	<b>5</b>	<b>13</b>	<b>11</b>
<b>TOTAL</b>	<b>16</b>		<b>8</b>		<b>24</b>	

## Tower Administration

Tower administration is the process by which the Authority approves the location of new towers or recommends co-location on existing towers between service providers, usually to provide mobile telecommunications services. Service providers are required to apply to the Authority for tower non-objection, and their applications are assessed to ensure they meet the criteria for co-location of sites, which are the distance between towers and the feasibility of co-location.

The Authority received one non-objection application for tower renewal from TSTT, which was approved. No tower non-objection applications were received by the Authority during the period under review.

## Radio Frequency Radiation (RFR) Measurements of Cellular and WiFi Sites

A total of 200 RFR measurements of cellular and WiFi sites (including roadside poles) were conducted, all of which were found to be within acceptable limits:

- TSTT – 93 sites
- Digicel (Trinidad and Tobago) Limited – 67 sites

- Green Dot Limited – 40 sites

## Numbering Assignment

Central Office (CO) codes are assigned to operators of both fixed and mobile telephone networks by the Authority. The CO codes are three digits in length and usually identify the operator and switching office providing the service to the customer.

For the period 2016–2017, the Authority issued four fixed CO codes to Columbus Communications Trinidad Limited. The Authority also received an application from Air Link Communications Limited for a block of fixed CO codes, which is currently being processed.

## Freedom of Information Act

The Freedom of Information Act (FOIA) gives members of the public a general right (with exceptions) to access official documents of public authorities.

During the financial year, the Authority received 11 requests, of which 10 were fulfilled. The outstanding request will be fulfilled in the new financial year.

## FINANCIAL PERFORMANCE

The Authority generates its own revenues sourced primarily by concession and license fees levied on all services providers within the telecommunications and broadcasting sectors. These funds are used to finance the operations of the Authority, thereby allowing the Authority to deliver on its mandate.

Pursuant to sections 56 and 57 of the Telecommunications Act, Chap. 47:31, the Authority prepares financial statements in accordance with International Financial Reporting Standards which are Generally Accepted Accounting Principles (GAAPs) adopted in Trinidad and Tobago, and which are subject to an annual audit. Included in this report are the unaudited financial statements for the financial period ended September 30, 2017.

The Authority received gross revenue of \$68,877,721 during the financial period 2016–2017. Of this amount, concession and licence fees generated revenues of \$25,574,101 and \$42,246,709, respectively.

The Authority's operating expenditure for the year amounted to \$54,428,522. This represented an increase of approximately 5% over the previous year's expenditure of \$51,947,598. The capital

expenditure for the year amounted to \$2,835,430.

The Authority's receivables of \$12,179,585 represented a decrease of approximately 23% over the prior year. Accounts payables and accruals increased by approximately 18% over the financial period to record \$4,063,336.

Currently, a cash balance of \$120,627,343 exists in the Universal Service Fund (USF). With the coming into force of the Telecommunications (Universal Service) Regulations in 2015, these USF contributions will be used to fund several key initiatives geared towards bridging the gap between those who have basic telecommunications services in Trinidad and Tobago and those who do not.

During the period under review, the Authority commenced work on two universal service initiatives. The first initiative involved the implementation of Phase 2 of the National Free WiFi initiative, and the second was the provision of assistive technology devices for PwDs. These two universal service initiatives are expected to be fully implemented during the new financial period 2017–2018.





## STATEMENT OF MANAGEMENT'S RESPONSIBILITIES

It is the responsibility of management to prepare financial statements for each financial year which present fairly, in all material respects, the state of affairs of the Telecommunications Authority of Trinidad and Tobago (the 'Authority') as at the end of the financial year and the operating results of the Authority for the year. It also requires management to ensure that the Authority keeps proper accounting records, which disclose with reasonable accuracy at any time the financial position of the Authority. They are also responsible for safeguarding the assets of the Authority.

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards ('IFRS'). This responsibility includes designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error, selecting and applying appropriate accounting policies, and making accounting estimates that are reasonable in the circumstances.

Management accepts responsibility for the annual financial statements, which have been prepared using appropriate accounting policies supported by reasonable and prudent judgements and estimates, in conformity with IFRS. Management is of the opinion that the financial statements present fairly, in all material respects, the state of the financial affairs of the Authority and its operating results. Management further accepts responsibility for the maintenance of accounting records, which may be relied upon in the preparation of financial statements, as well as adequate systems of internal financial control.

Nothing has come to the attention of Management to indicate that the Authority will not remain a going concern for at least the next twelve months from the date of this statement.



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Gilbert Peterson, S.C.  
Chairman of the Board of Directors

December 18, 2017



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Dr. John Prince, C.M.  
Chief Executive Officer

December 18, 2017

**UNAUDITED**  
**FINANCIAL STATEMENTS**  
For the year ended September 30, 2017

# STATEMENT OF FINANCIAL POSITION

(Expressed in Trinidad and Tobago dollars)

	Notes	Year ended September 30, 2017	2016
		\$	\$
<b>ASSETS</b>			
<b>Non-current assets</b>			
Plant and equipment	6	<u>17,682,182</u>	<u>21,052,801</u>
<b>Total non-current assets</b>		<u>17,682,182</u>	<u>21,052,801</u>
<b>Current assets</b>			
Trade and other receivables	7	12,179,585	15,804,076
Universal Service Fund contribution receivable	7	25,208,062	25,297,760
Cash and cash equivalents	8	<u>139,724,390</u>	<u>147,758,501</u>
<b>Total current assets</b>		<u>177,112,036</u>	<u>188,860,337</u>
<b>Total assets</b>		<u><b>194,794,218</b></u>	<u><b>209,913,138</b></u>
<b>LIABILITIES &amp; RESERVES</b>			
<b>Reserves</b>			
Reserves: Universal Service Fund	9	120,627,343	120,538,005
Reserves: Universal Service Fund contribution	9	<u>25,208,062</u>	<u>25,297,760</u>
<b>Total reserves</b>		<u>145,835,405</u>	<u>145,835,765</u>
<b>Non-current liabilities</b>			
Deferred income	10	<u>1,770,967</u>	<u>1,842,742</u>
<b>Total non-current liabilities</b>		<u>1,770,967</u>	<u>1,842,742</u>
<b>Current liabilities</b>			
Accounts payable and accruals	11	4,063,336	3,434,787
Amount due to Consolidated Fund		<u>43,124,510</u>	<u>58,799,843</u>
<b>Total current liabilities</b>		<u>47,187,486</u>	<u>62,234,630</u>
<b>Total liabilities</b>		<u>48,958,813</u>	<u>64,077,372</u>
<b>Total liabilities and reserves</b>		<u><b>194,794,218</b></u>	<u><b>209,913,138</b></u>

The notes on pages 43 to 60 form an integral part of these financial statements.

On December 18, 2017, these financial statements were authorised for issue by the Board of Directors:



Gilbert Peterson, S.C.  
Chairman of the Board of Directors



Dr. John Prince, C.M.  
Chief Executive Officer

# STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

(Expressed in Trinidad and Tobago dollars)

	Notes	Year ended September 30,	
		2017	2016
		\$	\$
<b>Income</b>			
Concession fees		25,574,101	24,473,504
Licence fees		42,246,709	56,640,478
Bank interest		256	92
Other income		984,879	862,522
Amortisation of deferred income	10	71,775	95,535
<b>Total income</b>		<u>68,877,721</u>	<u>82,072,131</u>
<b>Expenses</b>			
Communications, marketing and policy expenses	12	3,764,725	3,116,006
Fees	13	1,587,507	1,384,602
Training	14	2,971,710	2,412,239
Utilities		1,046,906	939,166
Rent and lease expenses	15	3,841,537	3,856,603
Staff costs	16	29,324,559	27,040,479
Repairs and maintenance		569,259	429,482
Other administrative costs	17	6,028,428	6,491,606
Depreciation		5,293,890	6,277,415
<b>Total expenses</b>		<u>54,428,522</u>	<u>51,947,598</u>
<b>Surplus for the year</b>		<b>14,449,199</b>	<b>30,124,533</b>
<b>Other comprehensive income, net of taxes</b>		<u>—</u>	<u>—</u>
<b>Total comprehensive income for the year</b>		<u><b>14,449,199</b></u>	<u><b>30,124,533</b></u>

The notes on pages 43 to 60 form an integral part of these financial statements.



## STATEMENT OF CHANGES IN AMOUNT DUE TO CONSOLIDATED FUND

(Expressed in Trinidad and Tobago dollars)

	Year ended September 30, 2017	2016
	<u>\$</u>	<u>\$</u>
Amount due to Consolidated Fund brought forward from the previous period	58,799,843	65,350,533
Payment to Consolidated Fund during the year	<u>(30,124,533)</u>	<u>(36,675,223)</u>
Outstanding amount brought forward	28,675,310	28,675,310
Net surplus for the current year	<u>14,449,199</u>	<u>30,124,533</u>
Net amount for the year due to Consolidated Fund	<u>43,124,510</u>	<u>30,124,533</u>
Net amount due to Consolidated Fund at the end of the year	<u>43,124,510</u>	<u>58,799,843</u>

The notes on pages 43 to 60 form an integral part of these financial statements.

# STATEMENT OF CASH FLOWS

(Expressed in Trinidad and Tobago dollars)

	Year ended September 30, 2017	2016
	<u>\$</u>	<u>\$</u>
<b>Cash flow from operating activities</b>		
Net surplus for the year	14,449,199	30,124,533
Adjustment for non-cash items:		
Amortisation of deferred income	(71,775)	(95,535)
Amortisation of deferred income-licence fees	—	—
Depreciation	5,293,890	6,277,415
Gain on disposal of assets	(165,429)	—
Adjustment to Consolidated Fund	—	(360)
	<u>19,505,885</u>	<u>36,306,053</u>
Changes in:		
Receivables	3,624,491	3,020,959
Accounts payable and accruals	628,549	(808,187)
	<u>23,758,926</u>	<u>38,518,826</u>
<b>Net cash generated from operating activities</b>		
<b>Cash flow from investing activities</b>		
Acquisition of plant and equipment	(2,191,842)	(2,131,012)
Proceeds from sale of plant and equipment	434,000	—
Reserves – Universal Service Fund	89,338	—
	<u>(1,668,504)</u>	<u>(2,131,012)</u>
<b>Net cash used in investing activities</b>		
<b>Cash flow from financing activities</b>		
Amount paid to Consolidated Fund	(30,124,533)	(36,675,223)
	<u>(30,124,533)</u>	<u>(36,675,223)</u>
<b>Net cash used in financing activities</b>		
<b>Net decrease in cash and cash equivalents</b>	(8,034,112)	(287,409)
<b>Cash and cash equivalents at start of year</b>	<u>147,758,501</u>	<u>148,045,910</u>
<b>Cash and cash equivalents at end of year</b>	<u>139,724,390</u>	<u>147,758,501</u>

The notes on pages 43 to 60 form an integral part of these financial statements.

# NOTES TO THE FINANCIAL STATEMENTS

## 1. Principal activities

The Telecommunications Authority of Trinidad and Tobago (the 'Authority') is an independent regulatory body, established by the Telecommunications Act (the 'Act') Chap. 47:31. The Authority is charged with the responsibility for the regulation of the telecommunications and broadcasting sectors. The Authority's mandate includes recommendations to the Minister for the granting of Concessions, the granting of Spectrum Licences and the collection of related fees, the determination of Universal Service obligations throughout Trinidad and Tobago, the establishment of National Telecommunications Industry Standards and Technical Standards, Price Regulation and Consumer Protection. The Authority became operational on July 1, 2004.

The Authority is located at # 5 Eighth Avenue Extension, Barataria, Trinidad.

The Authority reports to the Ministry of Public Administration and Communications.

## 2. Adoption of new and revised International Financial Reporting Standards

### Standards and Interpretations adopted with no effect on financial statements

There were no new standards or interpretations which were adopted by the Authority during the year beginning October 1, 2017.

### Standards and Interpretations in issue not yet adopted, which may have an impact on the Authority's financial statements

The Authority has not applied the following new and revised IFRS that have been issued but are not yet effective:

• IFRS 9	Financial instruments <sup>2</sup>
• IFRS 15	Revenue from Contracts with Customers <sup>2</sup>
• IFRS 16	Leases <sup>3</sup>
• Amendments to IAS 12	Recognition of Deferred Tax Assets Unrealised Losses <sup>1</sup>
• Amendments to IAS 1	Disclosure initiative <sup>1</sup>
• Amendments to IFRS 2	Classification and Measurement of Share-based Payment Transactions <sup>3</sup>

<sup>1</sup> Effective for annual periods beginning on or after January 1, 2017, with earlier application permitted

<sup>2</sup> Effective for annual periods beginning on or after January 1, 2018, with earlier application permitted

<sup>3</sup> Effective for annual periods beginning on or after January 1, 2019, with earlier application permitted



# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 2. Adoption of new and revised International Financial Reporting Standards (cont'd)

### Standards and Interpretations in issue not yet adopted, which may have an impact on the Authority's financial statements (cont'd)

#### • IFRS 9 Financial Instruments

IFRS 9, which was issued in November 2009, introduced new requirements for the classification and measurement of financial assets. IFRS 9 was subsequently amended in October 2010 to include requirements for the classification and measurement of financial liabilities and for derecognition, and in November 2013 to include the new requirements for general hedge accounting. Another revised version of this IFRS was issued in July 2016 mainly to include a) impairment requirements for financial assets and b) limited amendments to the classification and measurement requirements by introducing 'fair value through other comprehensive income' ('FVTOCI') measurement category for certain simple debt instruments.

Key requirements of IFRS 9:

- all recognised financial assets that are within the scope of IAS 39 Financial Instruments: Recognition and Measurement are required to be subsequently measured at amortised cost or fair value. Specifically, debt investments that are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest on the principal outstanding are generally measured at amortised cost at the end of subsequent accounting periods. Debt instruments that are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and that have contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, are measured at FVTOCI. All other debt investments and equity investments are measured at their fair value at the end of the subsequent accounting periods. In addition, under IFRS 9, entities may make an irrevocable election to present subsequent changes in the fair value of an equity investment (that is not held for trading) in other comprehensive income, with only dividend income generally recognised in profit or loss.
- with regard to the measurement of financial liabilities designated as at fair value through profit or loss, IFRS 9 requires that the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is presented in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. Changes in fair value attributable to a financial liability's credit risk are not subsequently reclassified to profit or loss. Under IAS 39, the entire amount of the change in the fair value of the financial liability designated as fair value through profit or loss is presented in profit or loss.

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 2. Adoption of new and revised International Financial Reporting Standards (cont'd)

### Standards and Interpretations in issue not yet adopted, which may have an impact of the Authority's financial statements (cont'd)

#### • IFRS 9 Financial Instruments (cont'd)

- in relation to the impairment of financial assets, IFRS 9 requires an expected loss model, as opposed to an incurred loss model under IAS 39. The expected loss model requires an entity to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition. In other words, it is no longer necessary for a credit event to have occurred before credit losses are recognised.
- the new general hedge accounting requirements retain three types of hedge accounting mechanisms currently available in IAS 39. Under IFRS 9, greater flexibility has been introduced to the types of transactions eligible for hedge accounting, specifically broadening the types of instruments that qualify for hedging instruments and the types of risk components of non-financial items that are eligible for hedge accounting. In addition, the effectiveness test has been overhauled and replaced with the principle of an 'economic relationship'. Retrospective assessment of hedge effectiveness is also no longer required. Enhanced disclosure requirements about an entity's risk management activities have also been introduced.

Based on the Telecommunications Act, Chap. 47:31, the Authority is not permitted to engage in any investment activities. As a result, the requirements relating to hedge accounting will not apply to the Authority.

#### • IFRS 15 Revenue from Contracts with Customers

In May 2016, IFRS 15 was issued which establishes a single comprehensive model for entities to use in accounting for revenue from contracts with customers. IFRS 15 will supersede the current revenue recognition guidance including IAS 18 Revenue, IAS 11 Construction Contracts and the related Interpretations when it becomes effective.

The core principle of IFRS 15 is that an entity should recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Specifically, the Standard introduces a five-step approach to revenue recognition:

- Step 1: Identify the contract(s) with a customer.
- Step 2: Identify the performance obligations in the contract.
- Step 3: Determine the transaction price.
- Step 4: Allocate the transaction price to the performance obligations in the contract.
- Step 5: Recognise revenue when (or as) the entity satisfies a performance obligation.

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 2. Adoption of new and revised International Financial Reporting Standards (cont'd)

### Standards and Interpretations in issue not yet adopted, which may have an impact of the Authority's financial statements (cont'd)

#### • IFRS 15 Revenue from Contracts with Customers (cont'd)

Under IFRS 15, an entity recognises revenue when (or as) a performance obligation is satisfied, i.e. when 'control' of the goods or services underlying the particular performance obligation is transferred to the customer. Far more prescriptive guidance has been added in IFRS 15 to deal with specific scenarios. Furthermore, extensive disclosures are required by IFRS 15.

IFRS 15 becomes effective for annual periods beginning on or after January 1, 2017, and does not require retrospective application. Management does not anticipate that this IFRS will be early adopted. Once adopted, the standard is not expected to have a significant impact on the amounts reported and disclosures made in the Authority's financial statements. Management will carry out a detailed review of the final version of the IFRS.

#### • Amendments to IAS 16 and IAS 38 Clarification of Acceptable Methods of Depreciation and Amortisation

The amendments to IAS 16 prohibit entities from using a revenue-based depreciation method for items of property, plant and equipment. The amendments to IAS 38 introduce a rebuttable presumption that revenue is not an appropriate basis for amortisation of an intangible asset. This presumption can only be rebutted in the following two limited circumstances:

- a) when the intangible asset is expensed as a measure of revenue; or
- b) when it can be demonstrated that revenue and consumption of the economic benefits of the intangible asset are highly correlated.

The amendments apply prospectively for annual periods beginning on or after January 1, 2017.

The Management of the Authority does not anticipate that the application of these amendments to IAS 16 and IAS 38 will have a material impact on the Authority's financial statements.

#### • Annual Improvements 2013–2017

The Annual Improvements to IFRS 2013–2017 include a number of amendments to various IFRS, which are summarised below.

IFRS 5 — Adds specific guidance in IFRS 5 for cases in which an entity reclassifies an asset from held for sale to held for distribution or vice versa and cases in which held-for-distribution accounting is discontinued.



# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 2. Adoption of new and revised International Financial Reporting Standards (cont'd)

### Standards and Interpretations in issue not yet adopted, which may have an impact of the Authority's financial statements (cont'd)

#### • Annual Improvements 2013–2017 (cont'd)

IFRS 7 — Additional guidance to clarify whether a servicing contract is continuing involvement in a transferred asset, and clarification on offsetting disclosures in condensed interim financial statements.

IAS 19 — Clarify that the high quality corporate bonds used in estimating the discount rate for post-employment benefits should be denominated in the same currency as the benefits to be paid.

IAS 34 — Clarify the meaning of 'elsewhere in the interim report' and require a cross-reference.

The Management of the Authority do not anticipate that the application of these amendments will have a significant impact on the Authority's financial statements.

#### • Amendment to IAS 1: Disclosure Initiative

Amendments were made to IAS 1 Presentation of Financial Statements to address perceived impediments to preparers exercising their judgement in presenting their financial reports by making the following changes:

- a) clarification that information should not be obscured by aggregating or by providing immaterial information, materiality considerations apply to all parts of the financial statements, and even when a standard requires a specific disclosure, materiality considerations do apply;
- b) clarification that the list of line items to be presented in these statements can be disaggregated and aggregated as relevant and additional guidance on subtotals in these statements and clarification that an entity's share of OCI of equity-accounted associates and joint ventures should be presented in aggregate as single line items based on whether or not it will subsequently be reclassified to profit or loss;
- c) additional examples of possible ways of ordering the notes to clarify that understandability and comparability should be considered when determining the order of the notes and to demonstrate that the notes need not be presented in the order so far listed in paragraph 114 of IAS 1.

The Management of the Authority does not anticipate that the application of these amendments will have a significant impact on the Authority's financial statements.

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 2. Adoption of new and revised International Financial Reporting Standards (cont'd)

### Standards and Interpretations in issue, which will not have an impact on the Authority's financial statements

The following new and revised IFRS that have been issued but are not yet effective and will not have any impact on the financial statements of the Authority:

- |   |  |
|---|--|
| • Amendments to IFRS 11                     | Accounting for Acquisitions of Interest in Joint Operations <sup>1</sup>                           |
| • IFRS 14                                   | Regulatory Deferral Accounts <sup>1</sup>  |
| • Amendments to IAS 16 and IAS 41           | Agriculture: Bearer Plants <sup>1</sup>  |
| • Amendments to IFRS 10 and IAS 28          | Sale of Contribution of Assets between an Investor and its Associate or Joint Venture <sup>1</sup> |
| • Amendments to IAS 27                      | Equity Method in Separate Financial Statements <sup>1</sup>  |
| • Amendments to IFRS 10, IFRS 12 and IAS 28 | Investment Entities: Applying the Consolidation Exception <sup>1</sup>                             |

<sup>1</sup>Effective for annual periods beginning on or after January 1, 2017, with earlier application permitted.

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 3. Summary of significant accounting policies

The principal accounting policies adopted in the preparation of these financial statements are set out below:

### Basis of preparation

These financial statements have been prepared in accordance with International Financial Reporting Standards ('IFRS'). The financial statements have been prepared under the historical cost convention.

The preparation of these financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Authority's policies.

#### a) Foreign currency translation

##### i) *Functional and presentation currency*

Items included in the financial statements of the Authority are measured using the currency of the primary economic environment in which the Authority operates ('the functional currency'). The financial statements are presented in Trinidad and Tobago dollars, which is the Authority's functional and presentation currency.

##### ii) *Transactions and balances*

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of profit or loss.

#### b) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable.

- i) Fees charged by the Authority are recognised as income when services are provided.
- ii) Income from licences is recognised on a straight-line basis over the licence period.
- iii) Interest income is recognised as it accrues, unless collectability is in doubt.
- iv) Income is also recognised from receipt of Government grants. See note 3(d) for Government grants.

#### c) Plant and equipment

All plant and equipment is stated at historical cost less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items of plant and equipment. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Authority and the cost of the item can be measured reliably. All other repairs and maintenance costs are charged to the statement of profit or loss during the financial period in which they are incurred.

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 3. Summary of significant accounting policies (cont'd)

### c) Plant and equipment (cont'd)

Plant and equipment are depreciated on the reducing balance basis at rates estimated to write off the cost of fixed assets over their useful lives. Current rates of depreciation are as follows:

Fixtures and fittings	20%
Computer equipment and software	25%
Office furniture and equipment	20%
Motor vehicles	25%
Telecommunication equipment and related software	25%

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised in the statement of profit or loss.

### d) Government grants

Government grants related to fixed assets are deferred in the statement of financial position and amortised over the estimated useful lives of the assets to which it relates.

### e) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits held at call with banks.

### f) Receivables

Trade receivables are carried at original invoice amount less an allowance made for impairment of these receivables. The allowance for impairment of trade receivables is established based on a review of all outstanding amounts at the year-end. Bad debts are written off during the year in which they are identified.

### g) Trade payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities.

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

### h) Provisions

Provisions are recognised when the Authority has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligations and a reliable estimate of the amount of the obligation can be made.



# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 3. Summary of significant accounting policies (cont'd)

### h) Provisions (cont'd)

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

### i) Reserves

#### *Universal Service Fund*

In accordance with the Telecommunications Act (2001) section 28 (3), the Board approves the appropriation of reserves to the Universal Service Fund. Section 53(3) of the Act restricts the use of these funds to the provision of Universal Service.

#### *Consolidated Fund*

In accordance with the Telecommunications Act (2001) section 53 (7), "At the end of each financial year, any surplus of funds remaining in the account opened in accordance with sub-section (5), after defraying the expenditure referred to in subsection (2), shall be paid into the Consolidated Fund".

### j) Financial assets

#### *Loans and receivables*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for those with maturities greater than 12 months after the statement of financial position date, which are classified as non-current assets.

The Authority assesses at each statement of financial position date whether there is objective evidence of impairment of its financial assets.

### k) Impairment of financial assets

The carrying amounts of the Authority's assets are reviewed at each statement of financial position date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in the statement of profit or loss.

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 3. Summary of significant accounting policies (cont'd)

### k) Impairment of financial assets (cont'd)

#### i) Calculation of recoverable amount

The recoverable amount of other assets is the greater of their net selling price and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

#### ii) Reversals of impairment

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

### l) Taxation

As stated in section 54 of the Telecommunications Act, the Authority is exempt from income tax.

### m) Leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the statement of profit or loss over the period of the lease.

### n) Comparatives

Where necessary comparative figures have been adjusted to conform to changes in presentation in the current year.

## 4. Critical accounting estimates and judgements

In the application of the Authority's accounting policies, which are described in note 3, management of the Authority is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimates. Key sources of uncertainty, which require the use of estimates, include:

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 4. Critical accounting estimates and judgements (cont'd)

### *Useful lives and residual values of plant and equipment*

The estimates of useful lives as translated into depreciation rates are detailed in the plant and equipment policy above. These rates and the residual lives of the assets are reviewed annually taking cognisance of the forecasted commercial and economic realities and through benchmarking of accounting treatments within the industry.

### *Contingent liabilities*

Management applies its judgement to the facts and advice it receives from its attorneys, advocates and other advisors in assessing if an obligation is probable, more likely than not, or remote. Such judgement is used to determine if the obligation is recognised as a liability or disclosed as a contingent liability.

## 5. Financial risk management

### a) *Market risk*

The Authority's activities do not expose it to any significant market risks (including currency risk, fair value interest rate and price risk).

#### i) Cash flow and fair value interest rate risk

As the Authority has no significant interest bearing assets, the Authority's income and operating cash flows are substantially independent of changes in market interest rates. The Authority does not own any investments.

#### ii) Currency risk

Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates. The majority of the financial instruments of the Authority are denominated in Trinidad and Tobago dollars, thus, the risk to the Authority is considered minimal.

### b) *Credit risk*

Credit risk arises from cash and cash equivalents as well as credit exposures to customers for outstanding receivables. The Authority does not have significant credit risk exposure to any single third party counterparty or any group of counterparties having similar characteristics. The Authority defines counterparties as having similar characteristics if they are related entities.

Credit risk also arises from cash and deposits with banks and financial institutions. For banks and financial institutions, only those with good standing and with a sound reputation are used.

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 5. Financial risk management (cont'd)

### c) *Liquidity risk*

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying business, the Authority aims to maintain flexibility in funding by keeping committed credit lines available.

The table below analyses the Authority's financial liabilities based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed are the contractual undiscounted cash flows. Balances due within one year equal their carrying balances, as the impact of discounting is not significant.

	Less than 1 year \$
<b>At September 30, 2017</b>	
Accounts payables and accruals	<u>4,063,336</u>
<b>At September 30, 2016</b>	
Accounts payables and accruals	<u>3,434,787</u>



# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

6. Plant and equipment	Telecommunications equipment & related software	Computer equipment & software	Office furniture & equipment	Motor vehicles	Fixtures & fittings	Construction in progress	Total
	\$	\$	\$	\$	\$	\$	\$
<b>Cost</b>							
At October 1, 2015	23,260,894	10,128,952	3,707,994	1,003,826	227,505	1,837,399	40,166,570
Additions	175,299	1,112,133	122,453	489,240	18,340	213,547	2,131,012
Transfer from construction in progress	925,250	859,742	—	—	—	(1,784,992)	—
Disposals	—	—	—	—	—	—	—
At September 30, 2016	24,361,443	12,100,827	3,830,447	1,493,066	245,845	265,954	42,297,580
Adjustment for the period		(22,358)					
Additions	147,529	795,947	206,159	703,200	6,091	355,275	2,214,201
Transfer from construction in progress	355,275	265,954	—	—	—	(621,229)	—
Disposals	—	—	—	(657,701)	—	—	(657,701)
At September 30, 2017	24,864,246	13,162,729	4,014,247	1,538,565	251,935	—	43,831,722
<b>Accumulated depreciation</b>							
At October 1, 2015	4,947,394	7,018,937	2,296,952	532,957	171,128	—	14,967,368
Disposals	—	—	—	—	—	—	—
Expense for the year	4,853,512	998,846	293,350	117,717	13,990	—	6,277,415
At September 30, 2016	9,800,906	8,017,783	2,590,302	650,674	185,118	—	21,244,783
Adjustment for the period	—	(5)	—	—	—	—	(5)
Disposals	—	—	—	(389,129)	—	—	(389,129)
Expense for the year	3,697,302	1,109,684	254,444	220,035	12,425	—	5,293,890
At September 30, 2017	13,498,209	9,127,462	2,844,746	481,581	197,542	—	26,149,540
<b>Carrying value</b>							
At September 30, 2016	14,560,538	4,083,045	1,240,145	842,392	60,727	265,954	21,052,801
At September 30, 2017	11,366,037	4,035,267	1,169,500	1,056,985	54,392	—	17,682,182

## NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

### 7. Trade and other receivables

	<u>2017</u>	<u>2016</u>
	\$	\$
Trade receivables (Note 20)	10,644,162	10,876,736
Less: allowance for impairment	<u>(4,581,745)</u>	<u>(2,893,984)</u>
Trade receivables-net	6,062,417	7,982,752
Staff loan (other)	313,264	198,648
Staff loan (vehicle)	2,263,447	1,989,396
VAT receivable	2,192,877	4,964,476
Other receivables and prepayments	743,768	668,804
Goods in transit	<u>603,813</u>	<u>—</u>
	12,179,585	15,804,076
Receivables – Universal Service Fund Contribution	<u>25,208,062</u>	<u>25,297,760</u>
	<u><b>37,387,647</b></u>	<u><b>41,101,836</b></u>

Included within staff loans are loans to management amounting to \$ nil (2016: \$ nil).

### 8. Cash and cash equivalents

	<u>2017</u>	<u>2016</u>
	\$	\$
Cash at bank (TT\$ account)	18,666,844	27,021,393
Cash at bank (US\$ account)	427,203	196,103
Universal Service fund (TT\$ account)	120,627,343	120,538,005
Cash on hand (TT\$ account)	<u>3,000</u>	<u>3,000</u>
	<u><b>139,724,390</b></u>	<u><b>147,758,501</b></u>

### 9. Appropriation of reserves: Universal Service Fund

#### Due to Universal Service Fund

	<u>2017</u>	<u>2016</u>
	\$	\$
Balance at October 1	120,538,005	120,538,365
Bank charges	(360)	(360)
Bank deposits	<u>89,698</u>	<u>—</u>
	120,627,343	120,538,005
Reserves – Universal Service Fund Contributions	<u>25,208,062</u>	<u>25,297,760</u>
Balance at September 30	<u><b>145,835,405</b></u>	<u><b>145,835,765</b></u>

## NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

### 9. Appropriation of reserves: Universal Service Fund (cont'd)

The following have been charged in arriving at the amount due to the Consolidated Fund:

Staff costs (Note 16)	29,324,559	27,040,479
Directors' fees and expenses	627,000	709,500
Depreciation (Note 6)	5,293,890	6,277,415

### 10. Deferred income

	<u>2017</u>	<u>2016</u>
	\$	\$
Government grant relating to fixed assets	1,842,742	1,938,277
Amortisation	(71,775)	(95,535)
	<u>1,770,967</u>	<u>1,842,742</u>

### 11. Accounts payable and accruals

	<u>2017</u>	<u>2016</u>
	\$	\$
Accounts payable	656,425	261,531
Deferred revenue	339,171	105,714
Outstanding commitments	2,976,718	2,984,450
Other current liabilities	91,022	83,092
	<u>4,063,336</u>	<u>3,434,787</u>

### 12. Communications, marketing and policy expenses

	<u>2017</u>	<u>2016</u>
	\$	\$
Promotions, publicity and printing	1,937,741	1,502,838
Official overseas travel	816,518	549,451
Hosting conferences/ seminars	1,010,466	1,063,717
	<u>3,764,725</u>	<u>3,116,006</u>

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 13. Fees

These fees comprise mainly of legal fees incurred in compliance and enforcement, opinions from senior counsel and judicial review from the Authority's providers.

	<u>2017</u>	<u>2016</u>
	\$	\$
Legal and professional fees	1,272,455	633,480
Subscription and other charges	<u>315,052</u>	<u>751,122</u>
	<u>1,587,507</u>	<u>1,384,602</u>

## 14. Training

In accordance with section 18(n) of the Act, the Authority is committed to continuous training of its personnel to ensure that the industry standards are in compliance with:

- i) International standards of the Telecommunications Union Convention
- ii) Testing and certifying of telecommunications equipment
- iii) Other relevant training necessary to achieve the objectives of the Act as outlined in section 3 of the Act.

	<u>2017</u>	<u>2016</u>
	\$	\$
Training, registration fees	668,554	633,854
Foreign travel, per diems, airfare	<u>2,303,156</u>	<u>1,778,385</u>
	<u>2,971,710</u>	<u>2,412,239</u>

## 15. Rent/lease expenses

### Operating lease arrangements

#### Leasing arrangements

The Authority leases its facilities, which include executive and administrative offices which are renewed annually. Substantially the lease provides that the lessee shall pay maintenance, insurance and certain other operating expenses applicable to the leased property. The lease also includes renewal options.



## NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

### 15. Rent/lease expenses (cont'd)

#### Lease commitments

	<u>2017</u>	<u>2016</u>
	\$	\$
No later than 1 year	3,841,537	3,856,603
Later than 1 year	<u>—</u>	<u>—</u>
	<u><b>3,841,537</b></u>	<u><b>3,856,603</b></u>

### 16. Staff costs

	<u>2017</u>	<u>2016</u>
	\$	\$
Salaries	26,844,975	24,624,417
Directors' fees and expenses	627,000	709,500
Pension contributions	1,647,728	1,457,192
Short term employment	28,993	99,836
Other personnel expenses	<u>175,863</u>	<u>149,534</u>
	<u><b>29,324,559</b></u>	<u><b>27,040,479</b></u>

The number of employees at September 30, 2017 was 98 (2016: 99).

### 17. Other administrative costs

	<u>2017</u>	<u>2016</u>
	\$	\$
Security	518,634	543,534
Janitorial services	323,323	281,313
Supplies	838,214	780,157
Other contracted services	2,355,672	2,474,708
Bad debt expenses	1,725,347	1,990,560
Other administrative costs	<u>267,238</u>	<u>421,334</u>
	<u><b>6,028,428</b></u>	<u><b>6,491,606</b></u>

### 18. Contingent liabilities and assets, commitments

#### Legal proceedings

The Authority is both plaintiff and defendant to several legal suits and proceedings. However, the disposition of these matters is not likely to have a materially adverse effect on its financial condition or results of operation.

# NOTES TO THE FINANCIAL STATEMENTS (CONT'D)

For the year ended September 30, 2017  
(Expressed in Trinidad and Tobago dollars)

## 19. Related party transactions

A number of transactions are entered into with related parties in the normal course of business.

Parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial decisions.

Key management personnel are those persons having the authority and responsibility for planning, directing and controlling the activities of the Authority.

These transactions were carried out on commercial terms and conditions at market rates, except loans to officers.

### Related party transactions and balances

Balances and transactions with related parties and key management personnel during the year were as follows:

	<u>2017</u>	<u>2016</u>
	\$	\$
Key management compensation	<u>4,262,672</u>	<u>4,612,898</u>
Sale of asset	<u>—</u>	<u>—</u>

## 20. Financial instruments by category

The accounting policies for financial instruments have been applied to the line items below:

	<u>2017</u>	<u>2016</u>
	\$	\$
Financial assets		
Cash and cash equivalents	139,724,390	147,758,501
Receivables (Note 7)	<u>10,644,162</u>	<u>10,876,736</u>
	<u>150,368,552</u>	<u>158,635,237</u>
Other financial liabilities		
Payables held at amortised cost	<u>4,063,336</u>	<u>3,434,787</u>
	<u>4,063,336</u>	<u>3,434,787</u>

## 21. Events after the reporting date

No significant events occurred after the reporting date affecting the financial performance, position or changes therein for the reporting year presented in these annual financial statements.





Telecommunications  
Authority  
of Trinidad and Tobago

5 Eighth Avenue Extension  
Off Twelfth Street  
Barataria  
Tel: (868) 675-8288; (868) 221-8288  
Fax: (868) 674-1055  
Email: [info@tatt.org.tt](mailto:info@tatt.org.tt)  
Website: [www.tatt.org.tt](http://www.tatt.org.tt)