

2018 ANNUAL REPORT

Facilitating Growth

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Vision Clobal 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

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.

<u>Innovativeness</u>

- 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.
- $\hfill\blacksquare$ 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.





Telecommunications Authority of Trinidad and Tobago

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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 financial year ended September 30, 2018. Over the past year, the Authority continued to deliver on its objectives, fostering efficiency and competitiveness in the telecommunications and broadcasting sectors in Trinidad and Tobago.

The Authority remains focused on furthering the development of an advanced information and communications technology (ICT) landscape that will distinguish Trinidad and Tobago in the region. The transition to a digital economy and thus enhanced market growth is facilitated through strong, forward-looking legislation and regulations. We continue to strengthen the capacities that have been built over the past 14 years, following the liberalisation of the country's telecommunications sector and the establishment of the Authority to regulate and help drive development in this burgeoning industry as well as in broadcasting.

Supporting a Robust ICT Sector

One of the notable and encouraging trends that persisted in this financial year is the rise in penetration and usage among households, individuals and businesses vis-à-vis the Internet and broadband. As the ICT market matures, the focus of the Authority is on the efficient management of available resources, policy development, compliance and enforcement that will aid the development of a competitive, diversified, knowledge economy and foster investment in ICT.

In the coming year, the Authority is set to accomplish even more to encourage rapid development of the ICT sector including, in particular, extending universal service and access in remote areas that are currently underserved and not commercially feasible to serve.

One of the projects coming on stream is the National "Free" WiFi initiative. All citizens will benefit from free public WiFi zones at national libraries, hospital waiting areas and major transportation hubs. This initiative will provide a platform for increased productivity and engagement between citizens and the Government of the Republic of Trinidad and Tobago (GoRTT).

Facilitating Growth

The Authority is also committed to building partnerships with international and regional organisations, which is key to fulfilling its strategic objectives. In this regard, the Authority participates in domestic and international fora and seminars to keep abreast with global advancements that are shaping the telecommunications and broadcasting landscape.

Other projects in the next financial year will include:

- the efficient management of finite resources such as spectrum and numbering
- the hosting of programmes to encourage young people, and girls especially, to pursue careers in ICT
- the development of strategies to safeguard critical information and ICT infrastructure



the establishment of policies to protect the rights of telecommunications and broadcasting stakeholders.

In Appreciation

In closing, I take this opportunity to thank my fellow members on the Board of Directors, our line Ministry, and the staff of the Authority for their ongoing support and enthusiasm over the past year. I also recognise that, without the support of our stakeholders, the Authority's success to date would not have been attainable. I therefore express my heartfelt appreciation to you all, for giving the Authority the fundamental building blocks to deliver service excellence and to build on and extend the strategic vision and mission of the Authority.

A brilliant future lies ahead and the Authority will not miss opportunities to promote prosperity for all our citizens.

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

Message from the Chief Executive Officer (Ag.)

Prudent Persistence in Turbulent Times

The Telecommunications Authority of Trinidad and Tobago (the Authority) can assert that it has persisted prudently over this past year in the face of changes in the areas of consumer needs, technology, the climate and the economy.

> Cynthia Reddock–Downes Chief Executive Officer (Ag.) and Executive Officer Finance & Accounting

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To ensure our success in 2017/2018, we strove to counter, or buffer stakeholders from, the effects of some of this turbulence, ease transitions, and help bolster growth in the telecommunications and broadcasting sectors, and thus the wider economy.

Evolving Consumer Needs

This past year, we continued to address ongoing concerns regarding prices and quality of service (QoS) expectations to meet the emerging needs of Trinidad and Tobago's telecommunications and broadcasting consumers.

Convergence in existing technologies, especially with the rise of over-the-top (OTT) services, has resulted in the evolution of consumer needs. The exponential growth in demand for data is as a result of this, as well as consumers no longer being mere users of services but creators of content and services. Consumercreated content and services have exploded via tools such as blogs, social media and mobile application development. Pricing and quality of service are, therefore, of paramount concern to support this scale of expansion.

In light of this, the Authority has stressed the importance of being able to measure accurately the quality of service delivered to consumers, and to verify consumer complaints in relation to broadcasting services. Moreover, in Trinidad and Tobago, both subscription and free-toair (FTA) television have been transitioning from analogue to digital broadcasting. During the financial year under review, the Authority, therefore, developed QoS indicators for digital broadcasting services, which were published in the document, *Broadcasting Technical Quality* of Service Standards: Subscription and Free-to-Air Television Broadcasting Services in Trinidad and Tobago. With respect to telecommunications pricing, the Authority continued to be an advocate for both the consumer and proportionate regulation within the domestic telecommunications industry. In Trinidad and Tobago, a duopolistic market structure currently exists in the mobile market, with two integrated network and service operators competing for market share.

Over the five-year period 2011–2015, there were significant fluctuations in competitive retail prices in the mobile market, with notable increases and declining average revenue per user (ARPU) occurring in the latter years.

This year, the Authority embarked on an exercise to assess the relevant boundaries of the mobile market and to determine the existence of dominance by the service providers in this market. This project will allow the Authority to execute its powers, pursuant to sections 29 (2) (a), 29 (6) and 29 (8) of the Telecommunications Act, Chap. 47:31 (the Act), to establish price regulation regimes in instances of dominance, anti-competitive pricing and acts of unfair competition. The project is well underway and, when concluded, will assist the Authority in proposing any required price regulation that may become necessary in order to minimise abusive behaviour by dominant operator(s).

I continue to underscore that the citizenry must have ease of access to all available information regarding telecommunications issues which affect them. It is proven that a fully informed consumer will make rational choices, thus sending signals for a more competitive response by operators. Consequently, the Authority published several tariff notifications and consumer advisories with the intention of educating the public in a number of areas, including retail comparative pricing information.





Our local consumers must be encouraged to consider the prices they are paying for services and exercise their choice in the market, to spur greater competition between operators. Such consumer responsiveness would assist in addressing issues related to market competitiveness, consumer protection and promote innovation.

In like manner, we have also expanded the means by which the Authority provides consumers with critical information related to their rights and obligations, as well as guidelines for using the Authority's services and facilities vis-à-vis consumer and broadcast complaints and licence applications.

Evolving Technologies

The rate of technological change and innovation today is unprecedented compared to any other time in history. Consequently, the Authority has recognised the imperative of producing the requisite policies and regulations that would enable the country to keep pace with these advancements. We have proactively sought to create and publish consultative documents relating to topics at the leading edge of telecommunications and broadcasting development.

A transparent and collaborative approach in engaging stakeholders on telecommunications developments is critical, especially within the context of the rapidly changing technological environment. Thus, in 2017/2018, the Authority revised its Consultation Procedures (2010), to provide a revamped platform to foster greater collaboration, ensure transparency and build consensus with industry stakeholders and the public on current and impending matters of regulatory interest. The use of white space devices (WSDs) is one of the contemporary issues we focused on this year. WSDs are an alternative to the mainstream technologies used to provide broadband services and are associated with spectrum bands containing frequencies currently not allocated for use by mainstream providers. Trinidad and Tobago can benefit from WSD technology to provide broadband and other innovative services to underserved areas.

In order to protect incumbent services operating in frequency bands available for WSD operations, and to reassure potential users that a carefully planned and regulated environment has been created for the successful deployment and coexistence of WSDs, the Authority developed the Authorisation Framework for the Accommodation of White Space Radiocommunications Devices (the Framework).

Now that the Framework is published, interested parties can apply to the Authority to have their WSDs certified, in accordance with the Authority's equipment certification procedure. The publication of the Framework also allows the Authority to accept applications from entities interested in providing geolocation database services in Trinidad and Tobago.

Environmental and Disaster Management

The Authority has championed the call for more consideration to be given to mitigating the effects of natural and man-made disasters by ensuring that networks remain available. We established a technical working group that developed resilience technical standards for public fixed telecommunications networks. This will be published and issued for public consultation in the next financial year.



In relation to the environment and the wellbeing of citizens, radiofrequency radiation (RFR) monitoring was also high on our agenda. It is our mandate to test and ensure RFR compliance with environmental health and safety standards with regard to electromagnetic radiation and emissions levels. We monitor and conduct field tests at all operational cellular sites and, this year, we developed a national standard for maximum permissible exposure limits from radiofrequency transmitting equipment, published in the document, *Proposed Maximum Permissible Exposure Limits for Radiofrequency Radiation in Trinidad and Tobago*.

Financial Management and Market Development

In our financial undertakings, we successfully completed our statutory duties in relation to the preparation of the Financial Statements 2016/2017, annual budget 2018/2019, and revised budget estimates 2017/2018, in keeping with the government's directive to prudentially manage the country's resources and to foster the development of the ICT sector, through astute, targeted measures.

Since 2006, the Authority has produced and published Trinidad and Tobago's relevant market data in its Annual Market Report: Telecommunications and Broadcasting Sectors. The report gives industry stakeholders, particularly operators and potential investors, deeper insights into customer behaviours, usage patterns and preferences, to enable more informed transactions and decision making.

Over the past year, the Authority also sought to promote investment in ICT infrastructure by facilitating access to fiscal incentives available to concessionaires. We encouraged service providers in both the telecommunications and broadcasting sectors to avail themselves of the exemptions from customs duties outlined in the Customs Act, Chap. 78:01. In this process, service providers must seek approval from the Authority for their development projects, after which these exemptions are made available. This initiative is intended to reduce the cost of investment in ICT infrastructure.

Concluding Remarks

As the country moves forward in this dynamic era of digitalisation and hypergrowth in technologies, the Authority will continue to focus on successfully fulfilling its mandate to promote further liberalisation and modernisation of the telecommunications and broadcasting sectors in Trinidad and Tobago.

As we enter the new financial year 2018/2019, the Authority will come to the end of its 2016 – 2019 strategic planning period and will begin drafting its new plan for the period ending in 2021. We will also cross our 15th anniversary milestone in 2019 and commemorate the progress made in the telecommunications and broadcasting sectors since the opening up of the markets in 2014 and the establishment of the Authority.

We look forward to another fruitful financial year ahead as we continue to fulfil our mandate.

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Cynthia Reddock-Downes Chief Executive Officer (Ag.) and Executive Officer Finance & Accounting





Board of Directors



Michael Lucien Oliver Elcock Deoraj Seegobin Stephen Tang Nian Gilbert Peterson, S.C.

Chairman





Dr. Kim Mallalieu Deputy Chairman Prof. St. Clair King

Kalana Prince-Wilson

Nikolaiski Ali

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 2017–2018:

Board of Directors

Gilbert Peterson, S.C. (Chairman) Dr. Kim Mallalieu (Deputy Chairman) Nikolaiski Ali Oliver Elcock Terrence Henry Professor St. Clair King Michael Lucien Kalana Prince-Wilson Deoraj Seegobin Stephen Tang Nian

Sub-Committees of the Board

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

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.

Stephen Tang Nian (Chair) Nikolaiski Ali Deoraj Seegobin

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. (Chair) Terrence Henry Michael Lucien Professor St. Clair King

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 (Chair) Kalana Prince–Wilson Stephen Tang Nian

Board Tenders Committee

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

Nikolaiski Ali (Chair) Oliver Elcock Professor St. Clair King

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.

Pamella Benson (Chair, external) Rawle Harvey Cheryl Johnson Michael Lucien Sherry Mc Millan

Management Team

Annie Baldeo Executive Officer Economics Cynthia Reddock-Downes Chief Executive Officer (Ag.) and Executive Officer Finance & Accounting

Sherry Mc Millon Executive Officer Corporate Communications and Administration

> Karel Douglas Coporate Secretary and Manager Legal and Enforcement

Kirk Sookram Executive Officer Technology and Engineering

Corporate Social Responsibility

Consumer Awareness

With the objective of Building a Better Digital T&T, TATT embarked on a series of consumer awareness seminars throughout Trinidad and Tobago to promote consumers' rights and increase consumers' awareness of what is happening within the ICT sector. TATT also conducted cyber safety sessions as well as encouraged students and young professionals to pursue careers in ICT.

28th ICT Open Forum

This forum initiated discussions on issues related to cryptocurrencies, including cybersecurity, global trading, central financial authority and legal considerations. It included presentations from:

- The Trinidad and Tobago Securities and Exchange Commission
- The Ministry of the Attorney General and Legal Affairs
 - Morpheus Software Solutions Limited

2nd Annual Broadcasters' Forum

TATT, in conjunction with the Trinidad and Tobago Publishers and Broadcasters Association, hosted the 2nd Annual Broadcasters' Forum on Wednesday 12th September, 2018.

This Forum brings together local media practitioners in the print, radio and television broadcasting industry to discuss contemporary issues affecting the media such as:

- Traditional Media and Digital Media Business Models for Survival
 - The Internet Broadcasting Experience Challenges and Opportunities
 - Building Resilience Natural Disaster Preparation within the Media Organization

TTARP

On Saturday 25th and Sunday 26th August, 2018, TATT participated in the Trinidad and Tobago Association of Retired Persons (TTARP's) 25th Anniversary Exposition. We engaged thousands of attendees in understanding their rights and responsibilities as users and owners of telecommunication and broadcasting services and devices. TATT also launched its *Connection Game*, which introduced a fun and informative way to learn how a mobile handset and network work.

Girls in ICT Day

The Telecommunications Authority of Trinidad and Tobago (TATT) and CANTO co-partnered to celebrate Girls in ICT Day 2018 with a two-day event titled When I Grow Up!

The event introduced 60 students from Russell Latapy Secondary School, Morvant Laventille Secondary School and Success Laventille Composite School to ICT career opportunities and hands-on ICT creation workshops, such as Scratch Animation, 2D and 3D Graphics. Girls in ICT Day is an International Telecommunications Union-backed initiative celebrated annually on the fourth Thursday in the month of April.

Is in ICT Day

WTISD

In commemoration of World Telecommunications and Information Society Day (WTISD) 2018, TATT hosted a robotics workshop for secondary school students in Tobago. The aim was to help raise awareness of the possibilities that the use of the Internet and other information and communications technologies (ICTs) can bring to societies and economies, and to foster ways to bridge the digital divide.







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 year of the plan 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 2017–2018 under each strategic imperative are reported on hereafter.





Strategic Imperative 1: ICT Sector Development

Strategic Objective: Facilitating ICT Development

Publication of Broadcasting Technical Quality of Service Standards: Subscription and Free-to-Air Television Broadcasting Services in Trinidad and Tobago

The Authority's Consumer Rights and Obligations Policy (CROP) (2014) safeguards consumers in the telecommunications and broadcasting sectors by ensuring high standards for customer service and consumer-related quality of service (QoS). However, CROP currently does not include consumer-related technical QoS standards for subscription and free-to-air (FTA) television broadcasting services, which are needed to improve the end-user experience.

The Broadcasting Technical Quality of Service Standards: Subscription and Free-to-Air Television Broadcasting Services in Trinidad and Tobago (Broadcasting QoS), therefore, serves to establish standards that are currently not captured in CROP. It provides a much needed update to the broadcasting technical QoS indicators referenced in Schedule F of a Type 5 concession, under which subscription broadcasters are authorised.

The technical quality indicators specified in the current concession do not facilitate the verification of consumer complaints about the quality of broadcasting services nor accurately measure the QoS delivered to consumers. Additionally, as both subscription and FTA television are transitioning from analogue to digital broadcasting, QoS indicators are needed for digital services. These indicators are included in the Broadcasting QoS document.

The Authority has concluded the consultation stage of this document which will be published in the next financial period.

Establishment of Standards to Promote Robustness of the National Telecommunications Infrastructure (Phase 2)

In an era where communication is integral to our lifestyle and where environmental and man-made disasters are increasing, the robustness of the national telecommunications infrastructure is of pivotal importance. In the same manner in which the Authority is responsible for ensuring that public telecommunications networks operate at an acceptable level of quality of service, so too is it necessary to ensure that such networks remain available in the face of environmental and manmade disasters. Whilst there may be a limit to the ability of a public telecommunications network to operate under such conditions, the development of minimum and/or reasonable standards would establish an acceptable level of resilience for such networks.

The aim of this project is to establish technical standards to promote resilience and redundancy of public mobile and fixed telecommunications networks and the infrastructure that supports such networks (e.g., buildings, poles and towers).

During this financial period, a technical working group (TWG) of fixed operators in Trinidad and Tobago was established. This TWG provided inputs into the draft standards document, *Technical Standards for Public Fixed Telecommunications Networks*, developed by the Authority, which is now ready for public consultation.

Facilitation of Concessionaires' Access to Telecommunications and Broadcasting Investment Incentives — Exemptions from Customs Duties

This initiative is intended to reduce the cost of ICT equipment imported into the country by concessionaires. In order to promote investment in ICT, the Authority encourages service providers in both the telecommunications and broadcasting sectors to take advantage of the exemptions from customs duties outlined in the Customs Act, Chap. 78:01. A process has been implemented in which service providers first seek the Authority's approval of their development projects, in order to benefit from the available tax exemptions.

Publication of Authorisation Framework for the Accommodation of White Space Radiocommunications Devices

White space devices (WSDs) are used to provide broadband connectivity as well as support other emerging technologies, such as machine-tomachine communications, in frequency bands not currently allocated for use by mainstream fixed and mobile broadband technologies. WSDs are authorised to operate in a manner that does not cause harmful interference to incumbent radiocommunications services within the same frequency band. Consequently, WSDs present an alternative to mainstream technologies used to provide broadband services and associated spectrum bands that may be heavily utilised. Trinidad and Tobago can benefit from WSD technology to provide broadband and other innovative services to underserved areas.

In November 2017, the Authority published the Authorisation Framework for the Accommodation of White Space Radiocommunications Devices (the Framework). This Framework establishes the rules for the operation of WSDs and for approving geolocation database administrators in Trinidad and Tobago. The Authority developed these rules to protect existing services operating in frequency bands available for WSD operations against interference, and to reassure potential users that a carefully planned and regulated environment has been created for the successful deployment and coexistence of WSDs.

Persons interested in using WSDs can now apply to the Authority to have their devices certified in accordance with the Authority's equipment certification procedure. Certification authorises users to deploy WSDs to meet their connectivity needs under the terms and conditions of a class licence, which currently carries no licence fee.

The Framework also allows the Authority to accept applications from entities interested in providing geolocation database services in Trinidad and Tobago. Approved geolocation database administrators will enter into an agreement with the Authority and will be listed in the Authority's Schedule of Devices Eligible for Use under a Class Licence which is accessible from the Authority's website.

Radiofrequency Radiation Monitoring

The Authority performs radiofrequency radiation (RFR) monitoring by conducting measurements for RFR emissions on radiotransmitting sites. The Authority is required to perform RFR monitoring, as mandated in section 18(1)(o) of the Telecommunications Act, Chap. 47:31 (the Act), to ensure compliance with environmental health and safety standards with regards to electromagnetic radiation and emissions. A national standard for maximum permissible exposure limits from radiofrequency transmitting

equipment was developed by the Authority and published in the document, *Proposed Maximum Permissible Exposure Limits for Radiofrequency Radiation in Trinidad and Tobago.*

The Authority regularly monitors RFR from all operational cellular and WiFi sites throughout the country and informs the public on compliance regarding emissions by publishing the RFR measurements in local daily newspapers and on the Authority's website. The Authority will continue its work in the measurement, research and regulation of RFR levels to ensure that the public is protected from harmful emissions.

Strategic Objective: Encouraging and Facilitating Competitiveness

Determination of the Relevant Boundaries of the Domestic Retail Mobile Markets

In accordance with sections 29(2)(a), 29(6) and 29(8) of the Act, the Authority is empowered to establish price regulation regimes in instances of dominance, anti-competitive pricing and acts of unfair competition. Defining the relevant markets and conducting dominance assessments will assist the Authority in determining if any price regulation is required to prevent abusive behaviour by dominant operator(s).

A duopolistic market structure currently exists in the mobile market with two integrated network and service operators competing for market share. Over the five-year period 2011–2015, the mobile market has experienced significant fluctuations in competitive retail prices, with notable increases and declining average revenue per user (ARPU) occurring in the latter years. As a result, it was necessary for the Authority to conduct an assessment of the relevant boundaries of the mobile market and to determine the existence of dominance that may be held by the service providers in the market.

In the period under review, the Authority collected data both from the service providers and through a national survey. This data will be used to conduct economic tests (empirical and qualitative) and analyses required for the assessment.

This is the first phase of an overall mobile dominance assessment which aims to promote fair, effective and sustainable competition in the mobile market, and will allow the Authority to exercise its powers to intervene in matters of anticompetitive pricing and abuse of dominance.



Strategic Imperative 2: People Empowerment

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

Improving the Authority's Consultation Procedures

The Authority is responsible for the ongoing liberalisation and regulating of the telecommunications and broadcasting sectors. A key aspect of this process, in collaboration with the Authority's line Ministry, is the drafting of the industry's regulatory framework comprising policies, regulations, procedures and other documents, the implementation of which will have an impact on all stakeholders in these sectors.

As a result, and in accordance with section 18(4) of the Act, the Authority formulated consultation procedures in 2005. In the period under review, these procedures were revised to increase transparency and collaboration with stakeholders in the industry.

Publication of Consumer Advocacy Articles in the Daily Newspapers

The Authority regularly publishes articles aimed at increasing public awareness and education. In particular, critical information relevant to consumers of telecommunications and broadcasting services, such as their rights and obligations, is also communicated through this avenue. During the financial year under review, the Authority published 20 consumer advocacy column articles in the three daily newspapers. These articles focused on a variety of topics such as cybersafety, tips for consumers on data roaming and protecting children from sexual predators, to name a few.

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 collation 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 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, 2017 were completed in December 2017, in accordance with the statutory timetable outlined in the Act. 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 statutory responsibilities to prepare an annual budget under section 55 (2) of the Act and, 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 thereafter the Minister of Finance, for final approval by Parliament.

Implementation of Measures to Ensure Compliance with the Public Procurement and Disposal of Property Act, 2015

All public bodies are mandated to carry out public procurement and disposal of public property in a manner that is consistent with the Public Procurement and Disposal of Public Property Act, 2015. The objects of the Public Procurement and Disposal of Public Property Act, 2015 are to promote:

- the principles of accountability, integrity, transparency and value for money.
- efficiency, fairness, equity and public confidence.
- local industry development, sustainable procurement and sustainable development in public procurement and the disposal of public property.

To ensure compliance with the provisions of the Public Procurement and Disposal of Public Property Act, 2015, during the financial period, the Authority reviewed and amended its internal procurement policies and processes, and vendor registration and solicitation documents.

Sustainable procurement, as defined by the Public Procurement and Disposal of Public Property Act, 2015, refers to a process whereby public bodies meet their needs for goods, works or services in ways that achieve value for money on a longterm basis vis-à-vis generating benefits not only to the public body but also to the economy and the wider society, whilst minimising damage to the environment. During the review period, the Authority sought to develop and implement a sustainable procurement strategy (SPS). In order to implement the SPS, several key initiatives were completed during the review period, such as:

- setting up a working committee comprising members of several departments of the Authority.
- drafting a sustainable procurement handbook.
- purchasing eco-friendly products.
- implementing eco-friendly solutions to reduce the environmental impact of business operations.

Strategic Imperative 3: Global Leader

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

Publication of 12th 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 to December, 2017. The report was completed in the financial year under review and published on the Authority's website.

Domestic Telecommunications and Broadcasting Statistics

The statistics in the telecommunications and broadcasting markets over the period 2009–2017, taken from the Annual Market Report 2017, are shown in Table 1.

These data—on subscriptions, average revenue per user (ARPU) and traffic from the relevant markets—are used by the Authority to monitor and inform policy decisions that facilitate the orderly development of the markets within these sectors.



Looking Ahead 2018–2019

The Authority's strategic direction for the period 2018–2019 will continue to focus on facilitating ICT sector development, empowering citizens by promoting wider access to ICTs and becoming a global exemplar within the ICT landscape, in keeping with the three key strategic imperatives laid out in the Authority's 2016–2019 strategic plan. The following sub-sections identify some of the objectives and key deliverables under these strategic imperatives to be implemented in the next financial period 2018–2019.

Strategic Imperative 1: Strategic Imperative 2: ICT Sector Development People Empowerment Strategic Objective: Facilitating ICT Strategic Objective: Regulating **Development** through a Consultative, Collaborative, Fair and Transparent Process Revision of the Act and drafting of subsidiary regulations to meet the maturing needs of 0 Development of public education campaigns the telecommunications and broadcasting and hosting broadcasting fora sectors Strategic Objective: Optimising Implementation of a universal service 0 People, Structure, Systems and initiative to provide assistive devices and **Facilities** technologies for persons with disabilities (PwDs) Facilitation of online payment of fees due to the Authority (e.g. licence and concession Implementation of a universal service fees) initiative to provide free public WiFi at various hotspots throughout Trinidad and 0 Development of a digital financial services Tobago framework Completion of the Digital Inclusion Survey for Trinidad and Tobago Ο Establishment of standards to promote the robustness of the national telecommunications infrastructure (Phase 3)

 Authorisation of additional spectrum for mobile broadband services

Strategic Imperative 3: Global Leader

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

Implementation of consumer awareness programmes including the launch of a social media campaign



Overview of the Telecommunications and Broadcasting Sectors

Trends in Market Revenues for January to December 2017

The data in the Authority's 12th Annual Market Report: Telecommunications and Broadcasting Sectors (Annual Market Report 2017) indicated that the telecommunications and broadcasting sectors generated an estimated TT\$5.14 billion (US\$758.1 million) in 2017 which, as a percentage of gross domestic product (GDP), equates to 3.4%. This represented a 7.8% decrease in total revenues generated by this industry when compared to the previous year.

Of the total telecommunications and broadcasting revenues, Internet services accounted for the majority, with TT1,561.6 million (30.4%). This was followed by mobile voice services, which contributed TT1,554.6 million (30.2%). The next highest revenue earners for the industry were pay TV services and fixed voice services, contributing a total of TT\$695.6 million (13.5%) and TT\$689.0 million (13.4%), respectively. The international voice market was next, generating TT\$318.0 million (6.2%) in revenues. The FTA radio and television markets each contributed TT\$151.1 million (2.9%) and TT\$77.2 million (1.5%), respectively. Leased line services contributed TT\$51.3 million (1.0%).

Other revenues generated TT\$41.3 million, which contributed 0.8% to total industry revenues. Of that TT\$41.3 million, other telecommunications revenues generated TT\$35.3 million, while other broadcasting revenues generated TT\$6.0 million.

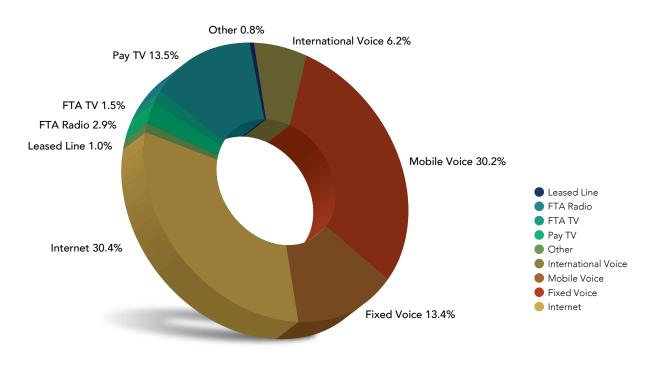


Figure 1: Percentage Revenue Contribution by each Market Towards Overall Gross Revenues of the Industry

- ¹ The full Annual Market Report 2017 is available at http://www.tatt.org.tt.
 ² This figure includes revenues from telecommunications and broadcasting services offered to members of the general public and private leased line
- services. ³ Exchange rate US\$1=TT\$6.68
- ⁴ Gross domestic product (GDP) at current market prices for 2017: TT\$145,685 million (Source: Ministry of Finance Review of the Economy 2017)
- ⁵ Fixed voice market revenues include revenues earned from fixed voice services and access (excluding international services).
- ⁶ Leased lines include both international and domestic leased circuits.
 ⁷ "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.



Domestic Telecommunications and Broadcasting Statistics

The statistics in the telecommunications and broadcasting markets over the period 2009–2017, taken from the Annual Market Report 2017, are shown in Table 1.

These data—on subscriptions, average revenue per user (ARPU) and traffic from the relevant markets—are used by the Authority to monitor and inform policy decisions that facilitate the orderly development of the markets within these sectors.

		2009	2010	2011	2012	2013	2014	2015	2016	2017
	Population (millions)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4
	GDP per capita (US\$ millions) ⁸	15,067	15,924	17,042	19,018	27,855	28,183	19,311	16,637	20,077
General	Telecommunications revenue (US\$ million)	685.2	713.1	737.0	834.0	864.4	881.5	876.7	836.0	758.1
Gen	Total telephone subscriptions ('000s)	2,149.6	2,187.6	2,117.7	2,169.8	2,235.2	2,270.4	2,393.2	2437.1	2,349.3
	Total telephone penetration per 100 inhabitants	165.3	167.2	160.7	164.7	168.3	171.4	180.7	184.0	177.3
	Average revenue per user ⁹ (ARPU) US\$	318.7	322.5	348.0	384.4	386.7	388.3	366.3	342.9	322.7
	Fixed voice subscriptions ('000s)	303.2	293.3	291.5	286.1	291.3	289.8	269.8	271.9	318.7
Ū.	Fixed voice penetration per 100 inhabitants	23.2	22.3	22.0	21.6	21.9	21.9	20.0	20.1	23.5
Fixed Voice	Fixed voice household penetration	70.1	67.5	67.1	55.3	56.2	56.6	52.5	53.7	66.3
ш	Average revenue per user (ARPU) US\$	403.5	411.5	417.3	430.5	413.1	410.7	424.2	416.4	359.0
	Fixed voice subscriptions growth (%)	-3.7	-3.3	-0.6	-1.9	1.6	-0.7	-6.3	0.8	4.2
	Mobile subscriptions ('000s)	1,846.3	1,894.2	1,826.2	1,880.6	1,943.9	1,980.6	2,123.4	2,165.8	2,031.6
Mobile	Mobile penetration per 100 inhabitants	141.1	143.8	138.6	142.2	146.4	149.1	157.3	160.0	150.0
Mo	Average revenue per user (ARPU) US\$	170.0	164.0	173.0	188.0	189.0	174.5	147.1	136.8	113.0
	Mobile subscription growth (%)	2.2	2.6	-3.6	3.1	3.2	1.9	7.2	2.0	-6.2

Table 1: Domestic Telecommunications and Broadcasting Statisticsfor the Period December 2009 – December 2017

⁸ GDP per capita is recorded at current market prices.

⁹ 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 2009 – December 2017

		2009	2010	2011	2012	2013	2014	2015	2016	2017
	Total Internet subscriptions ¹⁰ ('000s)	238.3	309.9	325.2	646.7	682.3	820.1	925.2	962.9	1,031.6
	Fixed Internet subscriptions ¹¹ ('000s)	145.0	171.1	192.0	224.2	231.7	249.6	279.8	255.6	327.0
	Mobile Internet subscriptions ¹² ('000s)	93.3	138.8	133.2	422.5 ¹³	450.6	570.5	645.4	707.3	704.6
	Fixed broadband subscriptions ¹⁴ ('000s)	130.1	162.9	187.9	221.3	229.6	248.1	278.5	255.6	326.8
Internet	Fixed Internet users ¹⁵ ('000s)	579.8	684.0	768.0	726.0	751.0	757.8	851.1	775.1	1,001.4
Inte	Fixed Internet penetration per 100 inhabitants	11.1	13.0	14.6	16.9	17.4	18.8	21.1	18.9	24.2
	Mobile Internet penetration per 100 inhabitants	7.1	10.5	10.1	31.9	33.9	43.0	47.8	52.2	52.0
	Fixed Internet household penetration	40.1	49.9	52.8	52.1	54.2	58.3	65.4	59.6	76.9
	Average revenue per user (ARPU) US\$ for fixed Internet	433.2	409.9	431.9	422.8	440.0	448.6	430.3	542.2	417.9
	Fixed Internet subscription growth (%)	27.1	18.0	21.7	10.7	6.0	7.8	12.1	8.6	11.1
	International - Outgoing (min. million)	259.2	282.9	274.5	263.5	277.9	268.3	247.2	170.9	12.2
Traffic	International - Incoming (min. million)	399.4	358.5	256.2	245.7	234.8	234.1	199.2	202.7	192.9
	Inbound/outbound int'l traffic ratio	1.5	1.3	0.9	0.9	0.8	0.9	0.8	1.2	1.5
	Pay TV subscriptions ('000s)	179.6	178.9	187.8	198.7	209.3	228.8	232.8	206.7	146.7
	Pay TV penetration per 100 inhabitants	13.7	13.6	14.1	14.8	15.4	16.8	16.8	15.3	18.2
Pay TV	Pay TV penetration per 100 households	52.3	52.1	54.0	48.2	50.9	55.7	56.6	50.1	61.5
	Average revenue per user (ARPU) US\$	404.9	431.2	468.6	505.5	520.8	493.2	497.7	514.5	425.2
	Pay TV subscription growth (%)	10.2	-0.4	5.0	5.8	5.3	9.3	1.7	-11.2	-0.6

 ¹⁰ Total Internet subscriptions refer to the sum of fixed Internet subscriptions and mobile postpaid Internet subscriptions.
 ¹¹ Fixed Internet subscriptions refer to the total number of subscriptions with ¹³ Mobile Internet subscriptions from 2012 to 2017 include prepaid and postpaid mobile Internet users.
 ¹⁴ Fixed broadband subscriptions are the number of Internet subscribers with

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

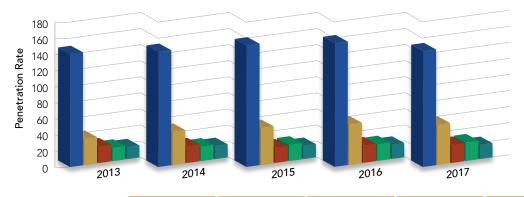
¹² Mobile Internet subscriptions from 2009 to 2011 include postpaid mobile customers who subscribe to monthly Internet airtime and who are billed accordingly. access to download speeds of 256 kbps or above. ¹⁵ Fixed Internet users are the number of persons who regularly use fixed Internet services.

Trends in Subscription Penetration as at December 2017

The subscription penetration rate is calculated as the number of subscriptions per 100 inhabitants. Figure 2 shows the penetration rates for all subscription-based markets from 2013 to 2017. The penetration rates for fixed voice, fixed Internet and pay TV services increased over the five years; the penetration rates for mobile voice and mobile Internet also increased but dropped in 2017.

The fixed Internet penetration rate increased from approximately 22 out of every 100 inhabitants having a fixed Internet subscription to 24 out of every 100 inhabitants. There was similar growth in the penetration rate for fixed voice services in 2017, with 23.5 recorded per 100 inhabitants.

There was a significant decline in mobile voice penetration from 160.0 in 2016 to 150.0 in 2017, while mobile Internet decreased only marginally, from 52.2 in 2016 to 52.0 in 2017. The pay TV penetration rate also decreased from 18.3 in 2016 to 18.2 in 2017.



	2013	2014	2015	2016	2017
Mobile Penetration	146.4	149.1	157.3	160.0	150.0
Mobile Internet Penetration	33.9	43.0	47.8	52.2	52.0
Fixed Voice Penetration	21.7	21.7	20.0	22.6	23.5
Fixed Internet Penetration	17.4	18.8	21.1	21.7	24.2
Pay TV Penetration	15.4	16.8	16.8	18.3	18.2

Figure 2: Penetration Rate of Subscriptions 2013 – 2017

Broadcasting and Telecommunications Concessionaires as at September 2018

Tables 2 and 3 list the number of broadcasting and telecommunications concessions, respectively, that are authorised and operating within these markets as at September 2018.

Types of Broadcasting Concessions	September 2015	September 2016	September 2017	September 2018
Free-to-Air Television	7	6	6	5
National	6	5	5	4
Major Territorial	1	1	1	1
Subscription (Pay) Television	14	14	14	13
National	8	8	8	7
Major Territorial	1	1	1	1
Niche	4	4	4	4
Minor Territorial	1	1	1	1
TV Broadcasting via Cable	10	13	14	14
National	8	12	13	14
Major Territorial	2	1	1	-
Free-to-Air Radio	38	37	37	37
National	30	29	29	29
Major Territorial	6	6	6	6
Minor Territorial	2	2	2	2
Total	69	70	71	69

Table 2: Broadcasting Market Concessions for the Period September 2015 – September 2018



Types of Telecommunications Concessions	Authorised Providers	Operational Providers
	September 2018	September 2018
Fixed Telecommunications: Fixed Telephony Fixed Internet	19	11 12
International Telecommunications	7	7
Mobile Telecommunications	2	2

Table 3: Telecommunications Market Concessions as at September 2018

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 telephony services and 12 concessionaires opted to provide fixed Internet services.

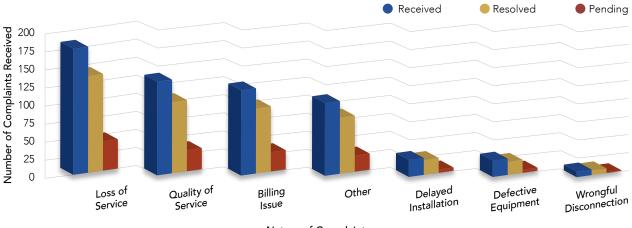
Stakeholder Engagement Statistics

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.	Mobile Number Portability
11.	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 604 consumer complaints were received, two of which were from Tobago. Of this total, approximately 467 complaints (77%) were resolved. There are 137 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, 2018–2019. The majority of complaints received — just over 30% — were attributable to a loss of service. The type and status of the consumer complaints are shown in Figure 3.



Nature of Complaint

Figure 3: Consumer Complaints Handling October 1, 2017 – September 30, 2018



Consumer Complaints Committee

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

The CCC met on two occasions, in February and March 2018. Additionally, the CCC met with senior officers from six service providers on consumerrelated matters such as:

- 1. Automatic rebates for service disruption.
- 2. The issuance of contracts to persons applying for services online or over the telephone.
- 3. The font size of contracts.
- 4. The submission of quarterly consumer complaints reports by the service providers to the Authority.
- 5. Information presented in advertisements.
- 6. The plans for mobile service coverage in remote and rural areas.

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. All of the complaints deemed invalid were due to a significant lapse of time between the broadcast date and the complaint date. All pending complaints are currently being investigated by the Authority and are expected to be resolved in the new financial period.

Interference Complaints

Section 18(I) of the Act 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 2017–2018, the Authority received six complaints regarding harmful interference, four of which were resolved within the period under review.

Of the remaining two complaints, one was pending and the other complaint was deemed invalid.

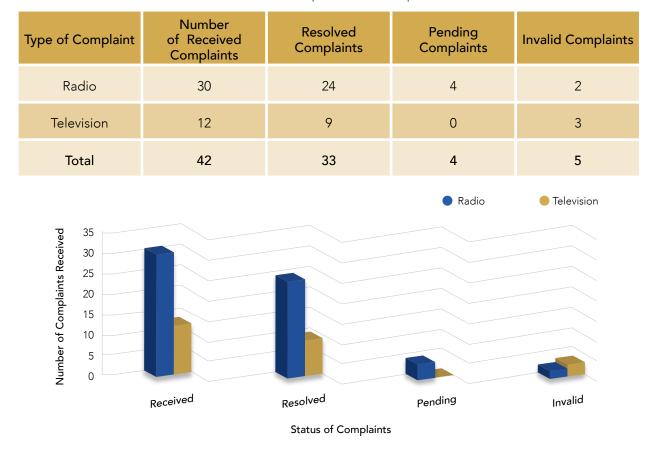


Table 4: Broadcast Complaints as at September 2018

Complaints are considered invalid if the information submitted is not in compliance with the Authority's Interference Complaint Form, or in instances where the complainant does not provide sufficient information to the Authority, upon which a proper assessment can be made.

The pending complaint currently being investigated by the Authority was submitted by a licensee experiencing harmful interference 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 the 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.

Licence Applications

During the financial year under review, 440 licence applications were granted and 28 were either declined or withdrawn. At the end of the period, 66 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 declined/withdrawn during the period 2017–2018.

Concession Applications

The granting of concessions to existing and potential service providers is done in accordance with the Authority's Authorisation Framework for the Telecommunications and Broadcasting Sectors of Trinidad and Tobago. During the period under review, four concession applications were received—two being new applications and two being renewals.

No applications were approved during the period under review.

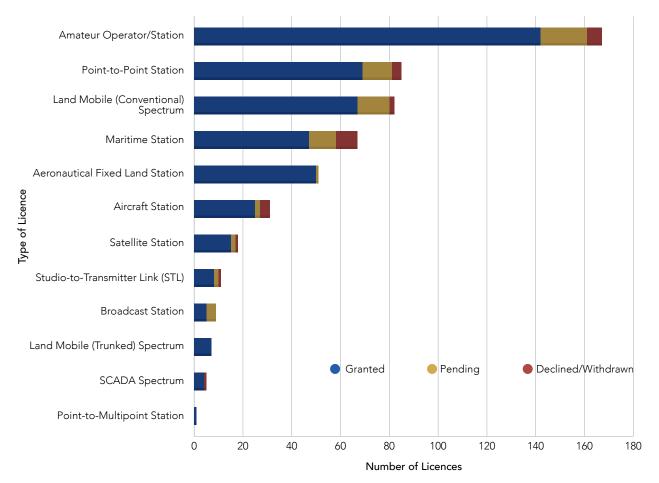


Figure 5: Status of Licence Applications as at September 30, 2018



The details of the status of concession applications brought forward, received, approved and pending as at the end of the financial year are shown in Table 5.

APPLICATION TYPE	APPLICATIONS BROUGHT FORWARD 2015–2016			ATIONS IVED -2017	APPLICA- TIONS APPROVED	APPLICA- TIONS PENDING	
	New	Renewal	New	Renewal	AFFROVED		
International Telecommunications	2	1	-	-	-	3	
FTA Radio	-	1	-	-	-	1	
FTA Television	-	-	-	2	-	2	
Mobile Telecommunications	-	-	-	-	-	-	
Subscription Television Broadcasting	-	-	1	-	-	1	
Television Broadcasting Service via Cable	5	-	1	-	-	6	
Fixed Telecommunications	1	1	-	-	-	2	
SUB-TOTAL	8	31	2	2	-	15	
TOTAL	1	1	4	4	15		

Table 5: Concession Applications as at September 2018

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, i.e., the distance between towers and the feasibility of co-location.

Seventeen non-objection applications were received by the Authority, all of which were approved. A summary of the tower administration activity over the period 2017–2018 is given below:

- Telecommunications Services of Trinidad and Tobago Limited (TSTT) — 14 applications
- Digicel (Trinidad & Tobago) Limited 2 applications
- Mayaro/Rio Claro Regional Corporation 1 application.

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

A total of 200 radiofrequency radiation (RFR) measurements were conducted at the following cellular sites, all of which were found to be within acceptable limits:

- TSTT 75 sites
- Digicel (Trinidad & Tobago) Limited 125 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 the switching office providing the service to the customer.

For the period 2017–2018, the Authority issued one fixed CO code to Air Link Communications Limited.



Mobile Number Portability

Mobile number portability commenced in Trinidad and Tobago on October 31, 2016. In the period under review, a total of 6,966 mobile numbers were ported between Digicel (Trinidad & Tobago) Limited and TSTT—the two mobile operators.

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 six requests, of which five were fulfilled. The outstanding request will be addressed in the new financial year.

Financial Performance

The Authority generates its own revenues, sourced primarily by concession and licence fees levied on all service providers within the telecommunications and broadcasting sectors. These funds are used to finance the operations of the Authority as it delivers on its mandate.

Pursuant to sections 56 and 57 of the Act, 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 audited financial statements for the financial period ended September 30, 2018.

The Authority received gross revenues of \$87,874,446 during the financial period 2017–2018 —an increase of approximately 28% from the

previous period. Of this amount, concession and licence fees generated revenues of \$27,989,873 and \$57,279,434, respectively.

The Authority's operating expenditure for the year amounted to \$50,180,417. This represented a decrease of approximately 7.8% over the previous year's expenditure of \$54,428,522. As in the past, staff costs continued to be the largest expense, accounting for approximately 56% of the Authority's total expenditure. The capital expenditure for the year amounted to \$1,663,873.

The Authority's receivables of \$8,750,370 represented a decrease of approximately 28% over the previous year. Accounts payables and accruals decreased by approximately 3.4% over the financial period to record \$3,925,281.

Currently, a cash balance of \$120,693,273 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 was 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 initiatives are expected to be fully implemented during the financial period 2018–2019.







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.

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

December 28, 2018

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Dr. Kim Mallalieu Deputy Chairman

December 28, 2018

Financial Statements For the year ended September 30, 2018



Statement of Financial Position (Expressed in Trinidad and Tobago dollars)

	Notes	As at Septe 2018	mber 30, 2017
ASSETS		\$	\$
Non-current assets Plant and equipment	6	14,686,010	17,682,182
Total non-current assets		14,686,010	17,682,182
Current assets Trade and other receivables Universal Service Fund contribution receivable Cash and cash equivalents Cash and cash equivalents	7 7 8	8,750,370 50,708,491 30,535,118 120,693,273	12,179,585 25,208,062 19,097,047 120,627,343
Total current assets		210,687,252	177,112,036
Total assets		225,373,261	194,794,218
LIABILITIES & RESERVES Reserves Reserves: Universal Service Fund Reserves: Universal Service Fund contribution	9 9	120,693,273 50,708,491	120,627,343 25,208,062
Total reserves		171,401,764	145,835,405
Non-current liabilities			
Deferred income	10	172,603	1,770,967
Total non-current liabilities		172,603	1,770,967
Current liabilities Accounts payable and accruals Amount due to Consolidated Fund	11	3,925,281 49,873,613	4,063,336 43,124,510
Total current liabilities		53,798,894	47,187,846
Total liabilities		53,971,497	48,958,813
Total liabilities and reserves		225,373,261	194,794,218

The notes on pages 41 to 58 form an integral part of these financial statements.

On December 28, 2018, these financial statements were authorised for issue by the Board of Directors:

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

Dr. Kim Mallalieu **Deputy Chairman**



Statement of profit or loss and other comprehensive income (Expressed in Trinidad and Tobago dollars)

	Notes	Year ended Sep 2018	2017
Income		\$	\$
Concession fees Licence fees Bank interest Other income Amortisation of deferred income Total income	10	27,989,873 57,279,434 626 1,006,148 1,598,364 87,874,446	25,574,101 42,246,709 256 984,879 71,775 68,877,721
Expenses			
Communications, marketing and policy expenses Fees Training Utilities Rent and lease expenses Staff costs Repairs and maintenance Other administrative costs Depreciation	12 13 14 15 16 17	3,378,250 1,755,993 2,737,860 1,072,216 3,833,948 28,094,398 930,321 3,902,660 4,474,771	3,764,725 1,587,507 2,971,710 1,046,906 3,841,537 29,324,559 569,259 6,028,428 5,293,890
Total expenses		50,180,417	54,428,522
Surplus for the year		37,694,029	14,449,199
Other comprehensive income, net of taxes			
Total comprehensive income for the year		37,694,029	14,449,199

The notes on pages 41 to 58 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, 2018 2017	
	\$	\$
Amount due to Consolidated Fund brought forward from the previous period	43,124,510	58,799,843
Payment to Consolidated Fund during the year	(30,944,925)	(30,124,533)
Outstanding amount brought forward	12,179,585	28,675,310
Net surplus for the current year	37,694,029	14,449,199
Net amount for the year due to Consolidated Fund	37,694,029	14,449,199
Net amount due to Consolidated Fund at the end of the year	49,873,614	43,124,510

The notes on pages 41 to 58 form an integral part of these financial statements.



Statement of cash flows (Expressed in Trinidad and Tobago dollars)

	Year ended Se 2018	ptember 30, 2017
	\$	\$
Cash flow from operating activities		
Net surplus for the year	37,694,029	14,449,199
Adjustment for non-cash items:		
Amortization of deferred income	(1,598,364)	(71,775)
Amortization of deferred income-licence fees Depreciation Gain on disposal of assets Adjustment to Consolidated Fund	4,474,771 (81,018)	 5,293,890
	40,489,418	19,505,885
Changes in:		
Decrease/(Increase) in Receivables (Decrease)/Increase in Accounts payable and accruals	3,429,215 (138,055)	3,624,491 628,549
Net cash generated from operating activities	43,780,578	23,758,926
Cash flow from investing activities		
Acquisition of plant and equipment	(1,490,914)	(2,191,842)
Proceeds from sale of plant and equipment	93,333	434,000
Reserves – Universal Service Fund	65,930	89,338
Net cash used in investing activities	(1,331,651)	(1,668,504)
Cash flow from financing activities		
Amount paid to Consolidated Fund	(30,944,925)	(30,124,533)
Net cash used in financing activities	(30,944,925)	(30,124,533)
Net decrease in cash and cash equivalents	11,504,001	(8,034,112)
Cash and cash equivalents at start of year	139,724,390	147,758,501
Cash and cash equivalents at end of year	151,228,391	139,724,390

The notes on pages 41 to 58 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') Chapter 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
- IFRS 15
- IFRS 16
- Amendments to IAS 12
- Amendments to IAS 1
- Amendments to IFRS 2

Financial instruments² Revenue from Contracts with Customers² Leases³ Recognition of Deferred Tax Assets Unrealised Losses¹ Disclosure initiative¹ Classification and Measurement of Share-based Payment Transactions³

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

 ² Effective for annual periods beginning on or after January 1, 2018, with earlier application permitted
 ³ Effective for annual periods beginning on or after January 1, 2019, with earlier application permitted



For the year ended September 30, 2018 (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 recognized 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 recognized 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.



For the year ended September 30, 2018 (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 recognized.
 - 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 Chapter 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 recognize 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 5-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.



For the year ended September 30, 2018 (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 recognizes 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 amortization 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 do 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-fordistribution accounting is discontinued.

For the year ended September 30, 2018 (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 the 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 do not anticipate that the application of these amendments will have a significant impact on the Authority's financial statements.





For the year ended September 30, 2018 (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 ¹
• IFRS 14	Regulatory Deferral Accounts ¹
 Amendments to IAS 16 and IAS 41 	Agriculture: Bearer Plants ¹
• Amendments to IFRS 10 and IAS 28	Sale of Contribution of Assets between an Investor and its Associate or Joint Venture ¹
• Amendments to IAS 27	Equity Method in Separate Financial Statements ¹
 Amendments to IFRS 10, IFRS 12 and IAS 28 	Investment Entities: Applying the Consolidation Exception ¹



For the year ended September 30, 2018 (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.





For the year ended September 30, 2018 (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 noncurrent 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.

For the year ended September 30, 2018 (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 subsection (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 cashgenerating unit exceeds its recoverable amount. Impairment losses are recognised in the statement of profit or loss.





For the year ended September 30, 2018 (Expressed in Trinidad and Tobago dollars)

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

k) Impairment of financial assets (cont'd)

i) <u>Calculation of recoverable amount</u>

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) <u>Reversals of impairment</u>

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 are 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:

For the year ended September 30, 2018 (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 cognizance 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) <u>Currency risk</u>

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.



For the year ended September 30, 2018 (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 1 year equal their carrying balances, as the impact of discounting is not significant.

	Less than 1 year \$
At September 30, 2018 Accounts payables and accruals	3,925,281
At September 30, 2017 Accounts payables and accruals	4,063,336

Notes to the financial statements (cont'd) For the year ended September 30, 2018 (Expressed in Trinidad and Tobago dollars)

	Telecommunications equipment & related software	Computer equipment & software	Office furniture & equipment	Motor vehicles	Fixtures & fittings	Construction in progress	Total
	\$	ŝ	÷	÷	↔		\$
Cost At October 1, 2016	24,361,443	12,100,827	3,830,447	1,493,066	245,845	265,954	42,297,580
Additions	147,529	795,947	183,801	703,200	6,091	355,275	2,214,201
iransier nom construction in progress Disposals	355,275	265,954 		(657,701)		(621,229) 	_ (657,701)
At September 30, 2017	24,864,246	13,162,729	4,014,247	1,538,565	251,935	I	43,831,722
Adjustment for the period		(154,594)	(18,365)				(172,959)
Additions Transfer from construction	I	485,536	234,103	332,000	5,500	606,734	1,663,873
in progress Disposals	11			(154,000)			(154,000)
At September 30, 2018	24,864,246	13,493,671	4,229,985	1,716,565	257,435	606,734	45,168,636
Accumulated depreciation At October 1, 2016	9,800,906	8,017,778	2,590,302	650,674	185,118	I	21,244,783
Uisposais Expense for the year	3,697,302	1,109,684	254,444	(389,129) 220,035	12,425	I	(389, 129) 5,293,890
At September 30, 2017	13,498,209	9,127,462	2,844,746	481,581	197,542	I	26,149,540
Adjustment for the period		I	I		I		
Disposals Expense for the year	2,841,509	1,074,250	257,573	(141,684) 290,551	10,887	I	(141,684) 4,474,771
At September 30, 2018	16,339,718	10,201,712	3,102,319	630,448	208,429	Ι	30,482,626
Carrying value At September 30, 2017	11,366,037	4,035,267	1,169,500	1,056,985	54,392	I	17,682,182
At September 30, 2018	8,524,528	3,291,959	1,127,666	1,086,118	49,005	606,734	14,686,010

Plant and equipment ý.



Notes to the financial statements (cont'd) For the year ended September 30, 2018 (Expressed in Trinidad and Tobago dollars)

Trade and other receivables 7.

	2018	2017
	\$	\$
Trade receivables (Note 20) Less: allowance for impairment	7,116,714 (4,389,825)	10,644,162 (4,581,745)
Trade receivables-net	2,726,889	6,062,417
Staff Ioan (other) Staff Ioan (vehicle) VAT receivable Other receivables and prepayments Goods in transit	214,126 1,405,187 3,163,454 999,168 241,547	313,264 2,263,447 2,192,877 743,768 603,813
Descinded as the instant Constant Constant	8,750,370	12,179,585
Receivables – Universal Service Fund Contribution	50,708,491	25,208,062
	59,458,861	37,387,647

Included within staff loans are loans to management amounting to \$nil (2017: \$nil).

Cash and cash equivalents 8.

	2018	2017
	\$	\$
Cash at bank (TT\$ account)	30,225,136	18,666,844
Cash at bank (US\$ account)	306,982	427,203
Universal Service fund (TT\$ account)	120,693,273	120,627,343
Cash on hand (TT\$ account)	3,000	3,000
	151,228,391	139,724,390

Appropriation of reserves: Universal Service Fund 9.

Due to Universal Service Fund	<u>2018</u> \$	<u>2017</u> \$
Balance at October 1 Bank charges Bank deposits	120,627,343 (360) 66,290	120,538,005 (360) 89,698
	120,693,273	120,627,343
Reserves – Universal Service Fund Contributions	50,708,491	25,208,062
Balance at September 30	171,401,764	145,835,405

For the year ended September 30, 2018 (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:

		<u>2018</u> \$	<u>2017</u> \$
	Staff costs (Note 16)	28,094,398	29,324,559
	Directors' fees and expenses	478,500	627,000
	Depreciation (Note 6)	4,474,771	5,293,890
10.	Deferred income	2018\$	2017\$
	Government grant relating to fixed assets Amortization	1,770,967 (1,598,364)	1,842,742 (71,775)
		172,603	1,770,967
11.	Accounts payable and accruals	<u>2018</u> \$	<u>2017</u> \$
	Accounts payable Deferred revenue Outstanding commitments Other current liabilities	246,911 105,884 3,447,396 125,557	656,425 339,171 2,976,718 91,022
		3,925,281	4,063,336
12.	Communications, marketing and policy expenses	<u>2018</u> \$	<u>2017</u> \$
	Promotions, publicity and printing Official overseas travel Hosting conferences/ seminars	1,814,767 346,354 1,217,129	1,937,741 816,518 1,010,466
		3,378,250	3,764,725





For the year ended September 30, 2018 (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>2018</u> \$	<u>2017</u> \$
Legal and professional fees Subscription and other charges	1,261,393 494,600	1,272,455 315,052
	1,755,993	1,587,507

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>2018</u> \$	<u>2017</u> \$
Training, registration fees Foreign travel, per diems, airfare	409,675 2,328,185	668,554 2,303,156
	2,737,860	2,971,710

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.



For the year ended September 30, 2018 (Expressed in Trinidad and Tobago dollars)

15. Rent/lease expenses (cont'd)

<u>Lease commitments</u>	<u>2018</u> \$	<u>2017</u> \$
No later than 1 year Later than 1 year	3,833,948	3,841,537
	3,833,948	3,841,537

16. Staff costs

	2018	2017
	\$	\$
Salaries	25,425,680	26,844,975
Directors' fees and expenses	478,500	627,000
Pension contributions	1,650,146	1,647,728
Short term employment	378,348	28,993
Other personnel expense	161,724	175,863
	28,094,398	29,324,559

The number of employees at September 30, 2018 was 94 (2017: 98).

17. Other administrative costs

	2018	2017
	\$	\$
Security	482,985	518,634
Janitorial services	320,189	323,323
Supplies	721,118	838,214
Other contracted services	2,284,713	2,355,672
Bad debt expenses	(191,920)	1,725,347
Other administrative costs	285,576	267,238
	3,902,660	6,028,428

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.





For the year ended September 30, 2018 (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:

	2018	2017
	\$	\$
Key management compensation	3,975,207	4,262,672
Sale of asset		

20. Financial instruments by category

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

	2018	2017
	\$	\$
Financial assets		
Cash and cash equivalents	151,228,391	139,724,390
Receivables (Note 7)	7,116,714	10,644,162
	158,345,105	150,368,552
Other financial liabilities		
Payables held at amortised cost	3,925,281	4,063,336
	3,925,281	4,063,336

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



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