





BYTES

Whose Right is it?

We have watched television seemingly for free all our lives and now, understandably, we think we have a right to continue to do so especially as over the years, local viewers, have developed a taste for foreign content.

Unfortunately, television is never free because the content belongs to somebody. Free to air and subscription television broadcasters (cable and satellite TV) buy the content that they air. The use of content which has not been purchased constitutes subscription (cable) TV piracy.

Piracy affects artistes such as actors, directors, producers, designers, stylists, cameramen, writers and musicians, etc. who have rights to their work and must be paid. These payments are a significant part of the costs involved in production before the content reaches your television.

Removal of Cable Channels

As a consequence of some local broadcasters airing a number of channels for which payments were not made, TATT ordered the removal of those channels.

For local viewers, the question remains - why was it necessary for TATT to take such drastic action? Why could they not leave well alone and let people enjoy their viewing?

There has been a lot of discussion amongst local viewers about the removal of their favourite cable channels, changing subscription television programming and why wasn't something done

about it previously

TATT has been dealing with this core issue of intellectual property.

Cable piracy is not new. For more than 30 years the Caribbean, and Trinidad and Tobago in particular, have been grappling with this problem. Over the years and prior to the inception of TATT, Intellectual Property Rights were not as carefully policed by content owners and as a result local viewers became accustomed to US based programming which is not authorised for airing in this region.

In 2007, three years after its inception, TATT was given a Cabinet mandate to address the issue of breaches by cable providers and to pursue independent legal advice on the issue of compulsory licensing.

In 2008, TATT began working with local cable providers to 'regularise' their programing to ensure only authorised content was being aired. TATT exercised forbearance whilst providers were given the opportunity to regularise their content.

Broadcasters treated with premium content first and included – HBO, Starz and Showtime, Zee TV, etc. This brought compliance levels of large providers into a range of 70% and above.

Available Content for the Region

There was then the question of where content can be legitimately aired and on purchase of the rights, where available, for airing in particular regions. The spread of a signal footprint over any





Whose Right is it? continued

region does not give the right to reach up with satellite dishes and download the content. Right to air programming must be negotiated and paid for. More recently, over the last 3 years or so, TATT started to treat with the foreign free to air channels (ABC, NBC, CBC, CBS) and their affiliate stations in an attempt to help subscription providers obtain rights to content to which viewers have become accustomed but for which rights are not currently available for this region.

By July 2015 when it was clear that agreement was not going to be had from foreign networks; TATT had to change its approach and move towards a 'zero tolerance' approach to IPR non-compliance.

It must be noted that currently Trinidad and Tobago, like the rest of the Caribbean, use the Latin American feed that is Spanish, not English. The aim is to





reach an agreement on an English language feed, preferably from the US, for local viewers. To date neither TATT nor subscription TV providers have been successful in obtaining such rights.

No Rights! No Broadcast!

Consumers complained vociferously on all platforms — in the press, on the television, social media and other popular on-line sites.

Even then TATT continued to work with the foreign networks in an attempt to resolve the matter. TATT also held a meeting with local free-to-air and subscription television broadcasters in a collaborative effort towards the implementation of a zero tolerance approach.

Other approaches were explored. Meetings were then held with all broadcasters, representatives from the US Embassy, representatives from the foreign free-to-air networks as well as signal aggregators, such as Lorac and Gulfcom, to try to resolve the matter. In the end, Zero Tolerance was the only option and 16 channels had to be taken off air.

Blackouts to Continue

Cable providers must adhere strictly to the current practice of "blackouts" regarding network programming for which the rights have been obtained by local 'free-to-air' or other broadcasters. This includes popular sitcoms, sporting and other special events for which rights are purchased by either party.



Trinidad & Tobago off US 301 Watch List

The work done by TATT has led to Trinidad and Tobago being removed from the Office of the United States Trade Representative's (USTR) 2015 watch list of countries infringing intellectual property rights (IPR) protection and enforcement by U.S. trading partners around the world.

According to the 301 Report:

"In Trinidad & Tobago, the Telecommunications Authority of Trinidad & Tobago (TATT) took concrete steps to enforce its concessions agreement that requires broadcasters to respect IPR and to obtain all required permissions from IP owners prior to broadcasting programs, information, and other material. TATT set a December 31, 2015 deadline for operators to come into compliance spurring operators to remove several unauthorized changes.

TATT is conducting an audit and has pledged to take further enforcement action. In recognition of this commitment to copyright enforcement and on the basis that enforcement action will continue, Trinidad & Tobago is removed from the Watch Lis this year.

The United States commends government authorities in Trinidad and Tobago and Jamaica and encourages the region to look to these actions as good examples of first steps governments can take to address a complex and challenging problem."

The Special 301 Report is the result of an annual review of the state of intellectual property rights (IPR) protection and enforcement in U.S. trading partners around the world, which the Office of the United States Trade Representative (USTR) conducts pursuant to Section 182 of the Trade Act of 1974, as amended by the Omnibus Trade and Competitiveness Act of 1988, the Uruguay Round Agreements Act, and the Trade Facilitation and Trade Enforcement Act of 2015 (19 U.S.C. § 2242).

https://ustr.gov/sites/default/files/USTR-2016-Special-301-Report.pdf



My Number. My Identity.

Implementing number portability in Trinidad and Tobago in 2016

It's my number, my identity. That is how People know me. That's how clients find me. It's how I do business!

These are the concerns users of mobile and fixed telephone services have whenever they consider changing their service providers.

Telephone consumers have long been asking for the ability to keep their numbers when they change their telephone providers.

As far back as 2011 in a nationwide Customer Satisfaction Survey commissioned by TATT, to assess the demand for Number Portability (NP), customers were asked: "If given the choice, would you like to keep your landline or mobile phone number if you decide to change your landline or mobile network operator?"

92% of the fixed line respondents said 'yes' whilst 90% of the mobile respondents said 'yes'.

After two rounds of consultation with all stakeholders, in February 2016, Service





Providers and TATT signed an agreement for the implementation of NP in Trinidad and Tobago.

As a prelude to implementation TATT hosted an ICT Open Forum on NP at its Barataria office to explain NP;

consumers of these services, lower prices, better products and an improved ability to choose networks

wish to port, by encouraging service providers to offer more attractive packages and improved quality of service to their subscribers as a customer retention



My Number. My Identity.

Implementing number portability in Trinidad and Tobago in 2016 continued







According to Ms. Patty de Haan, Project Manager from the clearing house Porting XS, "NP is for the consumers". She explained that the Clearing House and Central Reference Database (CRDB) would interface with local service providers as an intermediary between the donor operator (provider of the consumer who wants to port) and the recipient operator (provider that the consumer wants to go to) in the porting process.

Mr. Kurleigh Prescod, Vice President Technology at CCTL (Flow) explained that a single neutral clearing house will ensure that there is no opportunity for dispute in the porting process.

Ms. Christa Leith, Acting Head, Regulatory & Policy Affairs at TSTT noted that consumer procedures were agreed to by providers working with TATT and Porting XS to ensure there were minimum standards of service developed to implement and guide NP. She also explained the porting process.

Mr. Avinash Rambeharry, Head of IP & Switching at Digicel and Mr. Kurleigh Prescod, Flow; explained why a port can be rejected and what happens with a regret purchase.

How to port and frequently asked questions that will include important service standards are available on the TATT's Website at www.tatt.oro.tt.

Mr. Dexter Boswell-Inniss, Manager, Networks and Standards at TATT stressed that TATT will remain a source of redress for consumers who have complaints with their ported service.

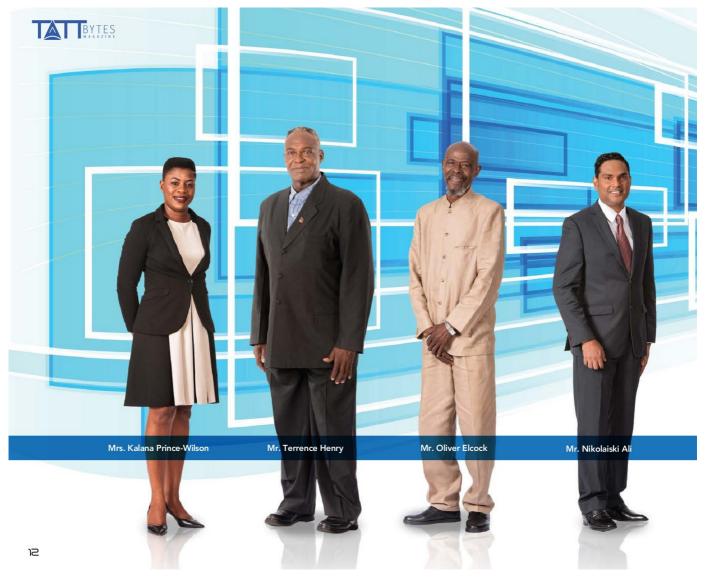
TATTBit: Highlights of the ICT Open Forum are available for viewing on TATT's You Tube channel.



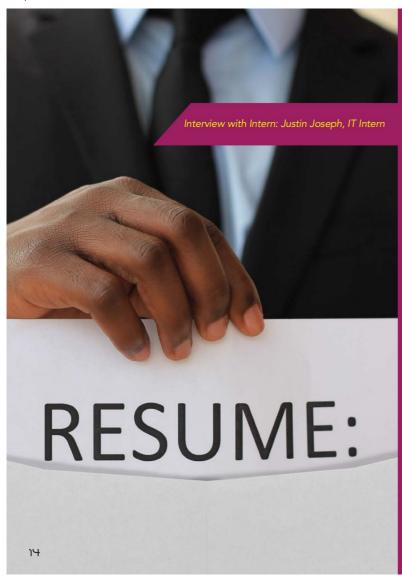
Trinidad and Tobago's mobile and fixed line markets are well poised for NP. Growth in the fixed line telephone market in Trinidad and Tobago has been mirroring global patterns and the mobile market has been growing steadily over the last ten years.

TATT's 2015 statistics for the country's telecommunications sector indicate total fixed telephone subscriptions standing at approximately 269,800 and mobile telephone subscriptions at 2.12 million.

n







Getting Ready for the World of Work

1) How has your experience been at TATT?

My experience has been both educational and enjoyable. Educational in the aspect that I am learning new things which apply to my area of studies but on the other hand, I am also learning a lot from the other workers, with regards to their outlook on the working world and other issues in terms of how they approach it, each one different, but each one unique on its own.

In terms of my work experience being enjoyable, I guess it has to do with the environment I am currently working in, to me, everyone has been rather friendly, kind and co-operative and always willing to give advice where necessary. I admire everyone's work ethics even though they may be different from one another, so I guess that is what makes it unique, because each one is inspiring in a sense.

2) How does it relate to your studies?

The degree I did was the BSc Information Technology, throughout this I did not have much practical work, however while working here. I have seen the relations between certain areas of my studies to real life scenarios. So in a way the work experience obtained so far has helped me bridge the theory learnt along with the practical lessons only gained from working.

3) How do you think this internship will affect your career chances?

Well I shall carry on the work experience as well as knowledge from other workers acquired to future career choices; I will also apply what I have gained throughout this experience towards other related fields.

4) Any words for future interns?

Just the basics, to enjoy every day and never stop learning, be it from work activities and others around you.

Are you ready for the world of work?

In early April, current students of The University of the West Indies (The UWI) showcased their knowledge and talent as they participated in the university's World of Work (WOW) Recruitment Fair.

TATT offers one premium internship position during the June to August period, affording a graduating student the opportunity to work in the telecommunications and broadcasting sector, which is one of the most robust, dynamic and growing sectors worldwide.

Jumpstart Your Career

Sherry Ann Sealey, HR Manager at TATT says, "Local universities are a great place to tap into today's burgeoning talent. She noted that at TATT, these top quality candidates can develop and broaden their skill sets as they bridge lessons learnt from academia with fascinating insights into the world of work.

"We want young bright minds who can learn and energise our environment," Sealey added.

"At TAIT," Sealey continued "our internship involves mentorship - not only do our interns learn about the diversity and complexity of the industry in which we operate, they also reap the benefit of strengthening their soft skills such as effective communication, collaboration and problem solving."

We offer our interns practical experience within any of the following careers I.T., technical services (telecommunications and broadcasting regulation), legal and regulatory services, finance, administrative and procurement services, market economics, human resources and corporate communications. An internship at TATT also provides the opportunity to connect with industry leaders as interns are exposed to our symposiums, workshops and seminars such as ICT Open Fora, Skills in ICTs Workshop to name a few.

Let's face it; the job market is a tough place, especially when starting out. Our output has been prodigious, as at the end of the internship, our interns usually discover that he or she has developed key competencies, knowledge and skills which give them a competitive advantage in the marketplace.





Increasing WIFI Access in Trinidad And Tobago

This initiative is being implemented in three phases starting with the provision of Wi-Fi service on some of the country's buses. Phase two will give citizens access at specific transportation hubs and hospital waiting rooms and Phase 3 will cover other specified public

Provision of the Wi-Fi service will auger well for this country as, while a significant section of the population can afford and/or have access to the Internet, coverage has not yet reached the desired 100%.

TATT's Annual Market Report 2015 states there were approximately 851,000 fixed Internet users recorded during that year. Additionally, there were 645 thousand mobile Internet users. It should be noted that some fixed Internet users may also be mobile Internet users.

These figures mean that in Trinidad and Tobago in 2015 approximately 21 out of every 100 persons had a fixed Internet subscription and 48 out of every 100 persons were using mobile Internet services at the end of 2015 suggesting that a consolidated Internet penetration rate of 69% exists.

Rollout of the Free National Wi-Fi initiative will result in widened access to the Internet by citizens, moving this country closer to achieving 100% coverage.

About TTWiFi

TT Wi-Fi is available on 13 (thirteen) specific Public Transportation Service Corporation (PTSC) buses: twelve (12) in Trinidad and one (1) in Tobago. TT Wi-Fi is available to all users using a Wi-Fi enabled device, including smartphones, laptops and tablets on specific buses on the following routes:

- Port- of- Spain to Arima and Sangre Grande
- Port-of-Spain to San Fernando
- Port-of-Spain to Diego MartinPort-of-Spain to Chaguanas
- Tobago

These buses operate from 5a.m-11p.m daily. TT Wi-Fi allows you to:

- Access government websites and e-services
- Check your email
- Connect using your preferred social media
- Keep in contact with friends and family via Instant Messaging apps
- Check the latest news

For more information on TTWifi visit: www.ttwifi.gov.tt

EXPANDING HORIZONS. CHANGING ATTITUDES.



We've been hearing about the need for more gender diversity in the growing science, technology, engineering and mathematics (STEM) / ICT sector for years, about the necessity to challenge the stereotypes and to encourage girls and women to consider careers in these disciplines. Under the theme 'Expanding horizons, changing attitudes,' the Girls in ICT Day is an annual event in which telecommunications regulators, ICT organisations as well as universities around the world participate. "Equality for women and girls is not only a basic human right. It is a social and economic imperative. Where women are educated and

empowered, economies are more productive and strong. Where women are fully represented, societies are more peaceful and stable," says UN Secretary-General Ban Ki-moon.

The dogma that studying ICT or pursuing a career in ICT is not suited for girls remains an on-going challenge, despite the increasing demand for skilled ICT employees as the information age

General Houlin Zhao, ITU Secretary, in a press release remarked, "ICT professionals work on some of the most exciting projects imaginable ... Girls with ICT skills can expect to earn good salaries and enjoy plenty of career opportunities." He adds, "Girls in ICT Day (an ITU initiative) reminds us that ICTs help to improve the lives of people everywhere – through better health care, better environmental management, better communications, and better educational systems that transform the way children and adults learn." Girls and young women who learn computing, coding, apps development, digital skills and so forth are better positioned to take full advantage of the growth in jobs within the technology industries.





Against this backdrop, TATT annually celebrates Girls in ICT Day and this year, hosted a full day mini exhibition at the organisation's office at Lowlands Mall, Tobago. On Thursday April 28, 2016, TATT's female technical and communication staff met with approximately 100 young women and provided guidance on the various careers available within the telecommunications and broadcasting industries of Trinidad and Tobago. These young women were also encouraged to raise their aspirations and capitalise on the opportunities available to them by combining their passion with technology studies.

Supporting gender equality and the empowerment of women in the workplace is the keystone of a vibrant and diversified economy. Changing attitudes is not a short-term agenda, but a long-term approach to create an enabling environment for women and girls. As an entity that operates within ICT, TATT actively seeks to "foster an open and competitive telecommunications and broadcasting environment to facilitate the use of ICTs for social and economic well-being" and is an equal opportunity employer that challenges the stereotype that the ICT sector is male dominated. TATT is keen to continue to drive the

change in the ICT sector, especially as it is an organisation that is gender-balanced with fifty per cent of the workforce being females inclusive of management.

Girls in ICT Day is celebrated on the fourth Thursday in April annually and TATT will continue to advocate the call to action in expanding horizons for girls and women in technology industries and we ask for you to consider whether as an individual or an organisation "What can you do for Girls in ICT Day?"



Upcoming Event

24th ICT OPEN FORUM- "The dangerous effects of cyberbullying"

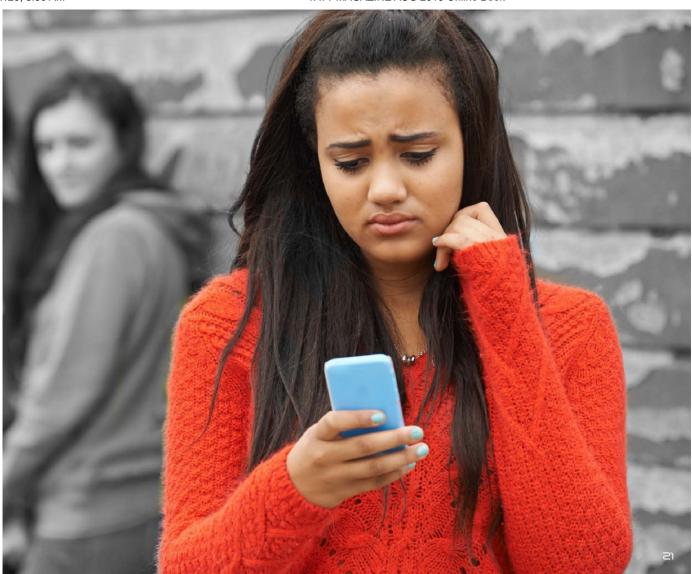
TATT will host the 24th edition of its ICT Open Forum Series, on Thursday September 15th, titled "The dangerous effects of cyberbullying". This event will take place at the Scarborough Library Facility, Scarborough, Tobago.

Cyberbullying occurs when a child, preteen or teen is tormented, threatened, harassed, humiliated, embarrassed or otherwise targeted by another child, preteen or teen, via the Internet.

Trinidad and Tobago has seen increased reports of cyberbullying given the proliferation of Internet- connected devices and the widespread use of social media among young people.

This Forum will feature presentations from experts in the fields of Information Technology, National Security and Child Psychology and the targeted audience will be secondary school students and their teachers.





Market Report

Telecommunications Authority of Trinidad and Tobago

Annual Market Report 2015 10th Edition The number of households in Trinidad and Tobago that had a fixed Internet connection reached 50% in 2011.

Journey Towards a Digital Society

Over the past decade, the TATT has consistently produced and published the Annual Market Report (AMR) - a comprehensive compilation of statistics on the telecommunications and broadcasting sectors of Trinidad and Tobago. That document highlights key statistics and information on prevailing market trends. The first edition of the AMR was published in 2006. Looking back, this sector has undergone several industry changes – from market liberalisation to technological development. Overall, the performance of this sector has been stable; generating positive growth despite a protracted period of economic slowdown in the domestic economy.

Let us take a look at some of the key market milestones over the past decade as reflected in the latest issue of the AMR.

• In 2010 FTA television broadcasting revenues increased by 25%, generating TT3132m; FTA radio broadcasting revenues increased by 9%, generating TT\$167m.

 Internet subscriptions (fixed & mobile) increased by 84% over 2008. This is the highest growth rate ever recorded for this market.

