

DIGITAL INCLUSION INITIATIVES IN TRINIDAD AND TOBAGO

CTU/ICT
WEEK 2024
/// ST. KITTS AND NEVIS ///
30TH SEPTEMBER - 4TH OCTOBER 2024



Outline:

- 1. The Telecommunications Authority of Trinidad and Tobago (TATT) – About us**
- 2. Overview of the Trinidad and Tobago ICT Market**
- 3. ITU Global Regulatory Outlook (2023)**
- 4. Achieving Digital Inclusion and Universal Connectivity**
- 5. DIS 2021 – outcome and findings**
- 6. TATT's Universal Service Initiatives and Public Outreach Activities that are aimed at Connecting the Unconnected**
- 7. What policies and initiatives are important to expand Internet connectivity?**



The Telecommunications Authority of Trinidad and Tobago – About Us



Objects of the Act (Section 3)

Creating an Open Telecommunications Market

With Conditions for Fair Competition

Ensuring the Orderly Development of Telecommunications

To safeguard, enrich and strengthen society's social, cultural and economic well being

Protecting and Promoting the Public Interest

Accessibility

Affordability

Quality of Service

Facilitating Universal Access to Telecommunications

Encouraging Investment in Telecommunications

Regulating Broadcasting Services

TATT's Strategic Focus 2022-2025

VISION

The leading regulator in the ICT sector, enabling an empowered and connected society.



MISSION

We will continue developing a dynamic, collaborative and progressive ICT environment, through efficient service delivery, that fosters quality, affordable, universal service and innovative, sustainable businesses in the digital economy.



CORE VALUES

Innovativeness
Commitment
Integrity
Professionalism
Service Excellence



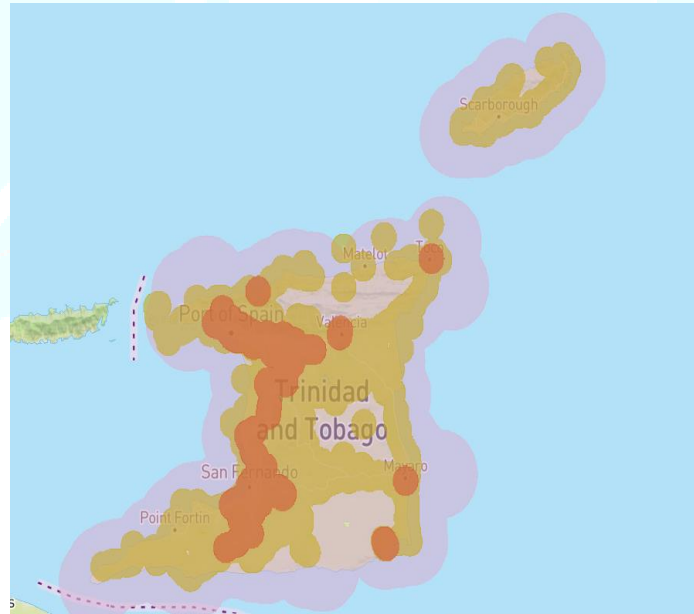
TATT's Strategic Focus

We will ensure the public's access to high quality, reliable and affordable services, with universal reach, with the intent of positively contributing to the development of the digital society.

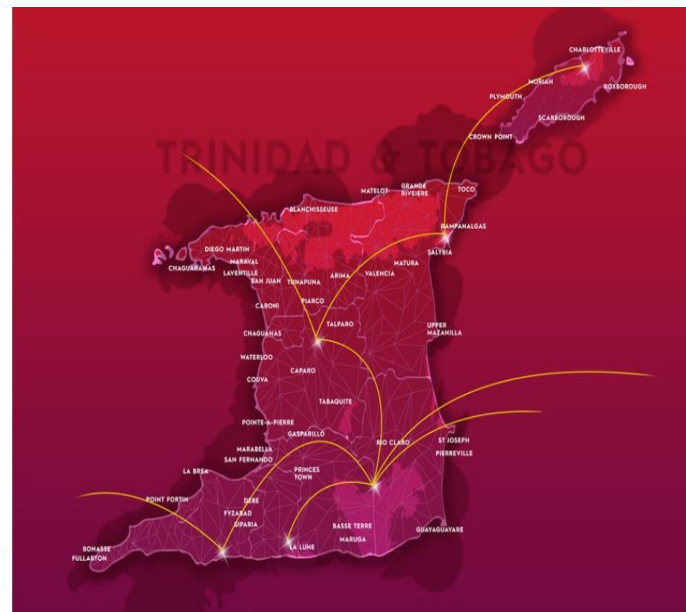


Overview of the Trinidad and Tobago ICT Market

- Population 1.4m
- 2 Mobile Operators
- 99% 3G coverage
- 94% 4G LTE coverage
- 92% Homes subscribed to broadband services
- 63% Mobile Internet penetration
- 5G micro-deployment in existence



Source: GSMA Coverage Map website



Source: Digicel TT website



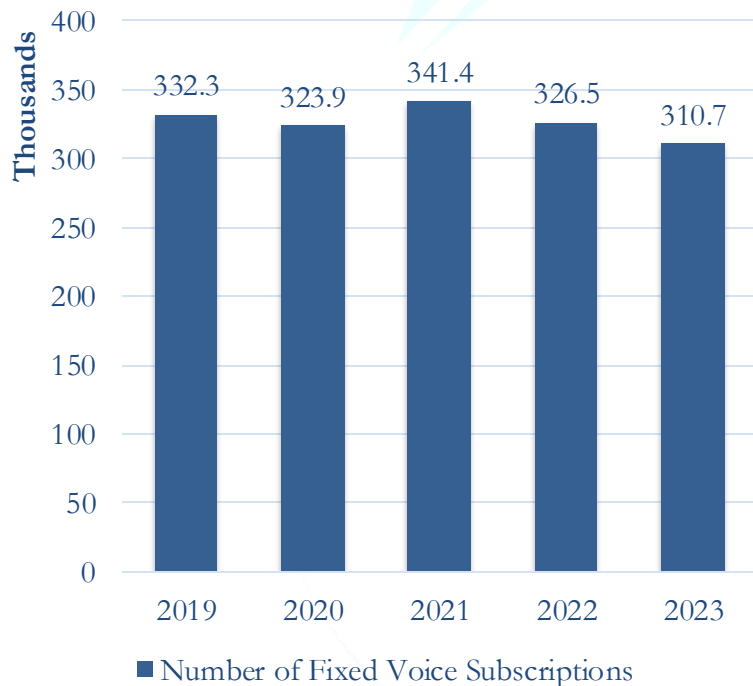
Current state of the Trinidad and Tobago ICT Industry

1. TATT is currently recognized as a G4 regulator by the International Telecommunications Union (ITU). G4 regulation is characterized by integrated regulation led by economic and social policy goals.
2. TATT collects quarterly data from authorised service providers in the telecommunications and broadcasting markets. The collated data is published in:
 1. a. Annual Market Reports
 2. b. Quarterly Market Updates
3. There are currently no unserved areas in Trinidad and Tobago. However, the results of digital divide and digital inclusion surveys have shown that there are under-served geographical areas and population groups in the country.

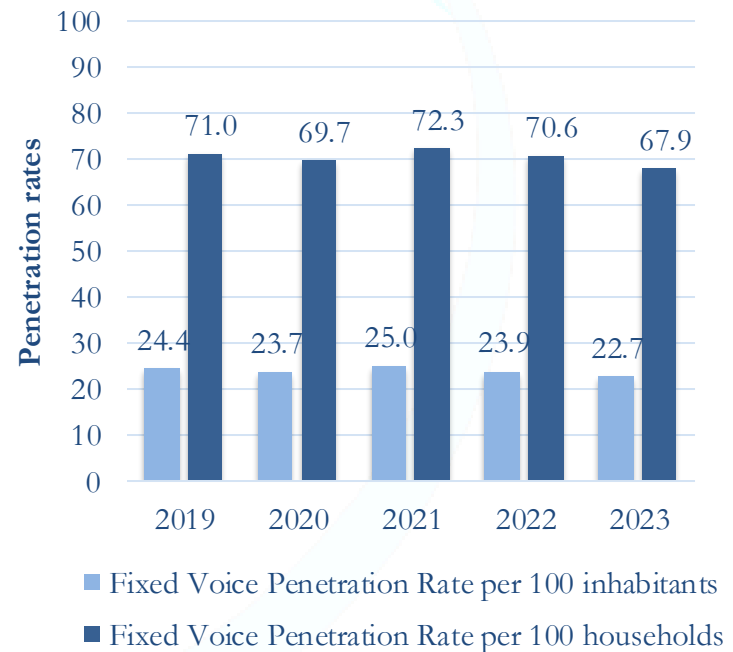


Fixed Voice Market Statistics as at December 2023

Fixed Voice Subscriptions

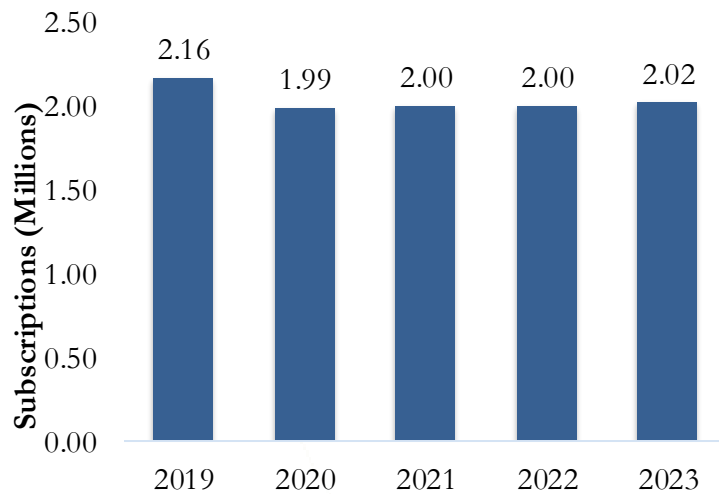


Fixed Voice Penetration



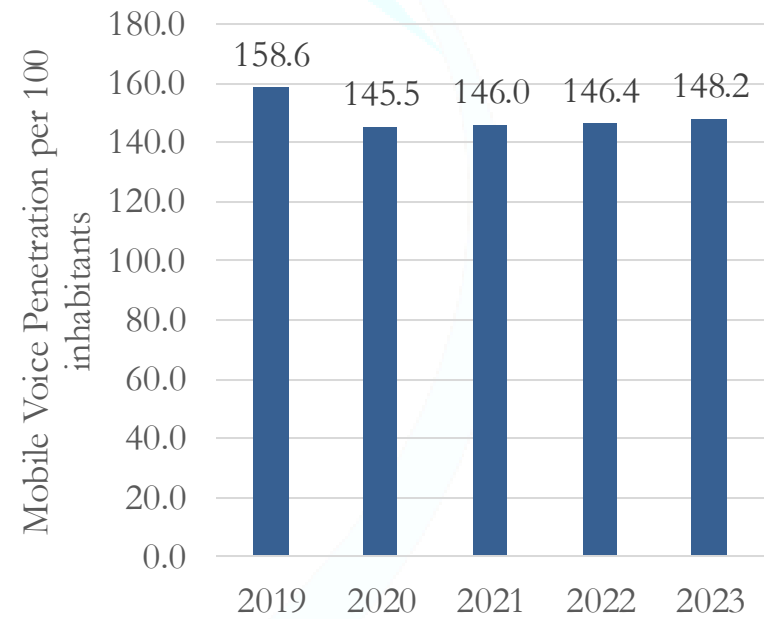
Mobile Voice Market Statistics as at December 2023

Mobile Voice Subscriptions



■ Number of Mobile Voice Subscriptions

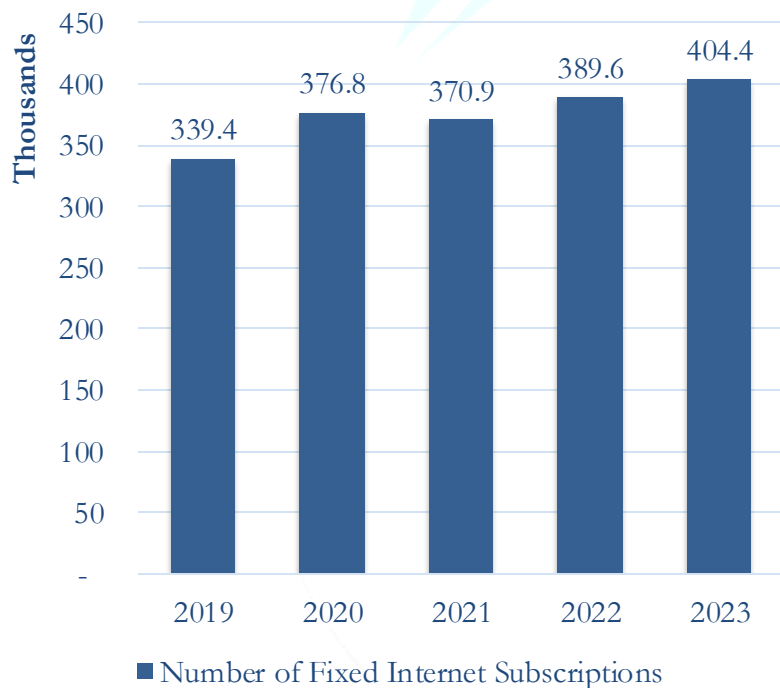
Mobile Voice Penetration



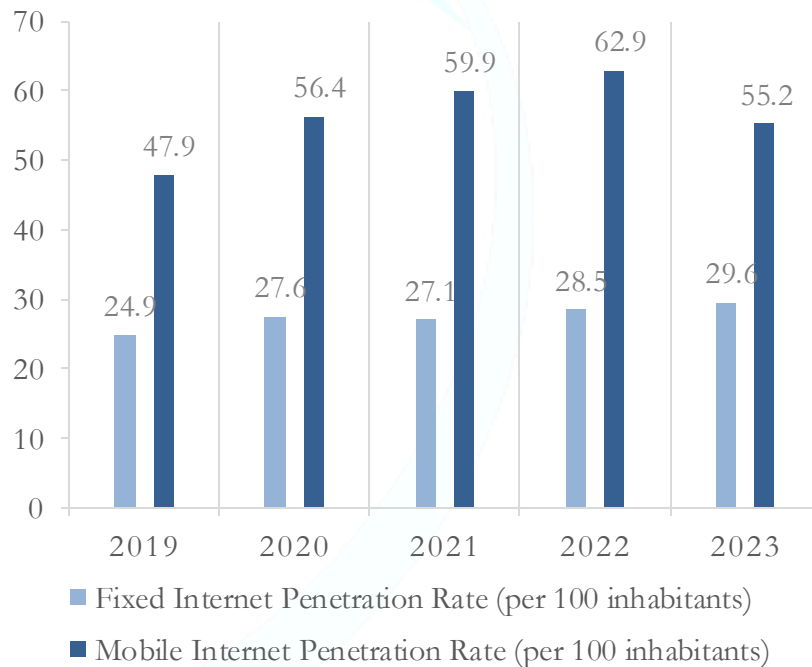
■ Mobile Voice Penetration per 100 inhabitants

Fixed Internet Market Statistics as at December 2023

Fixed Internet Subscriptions

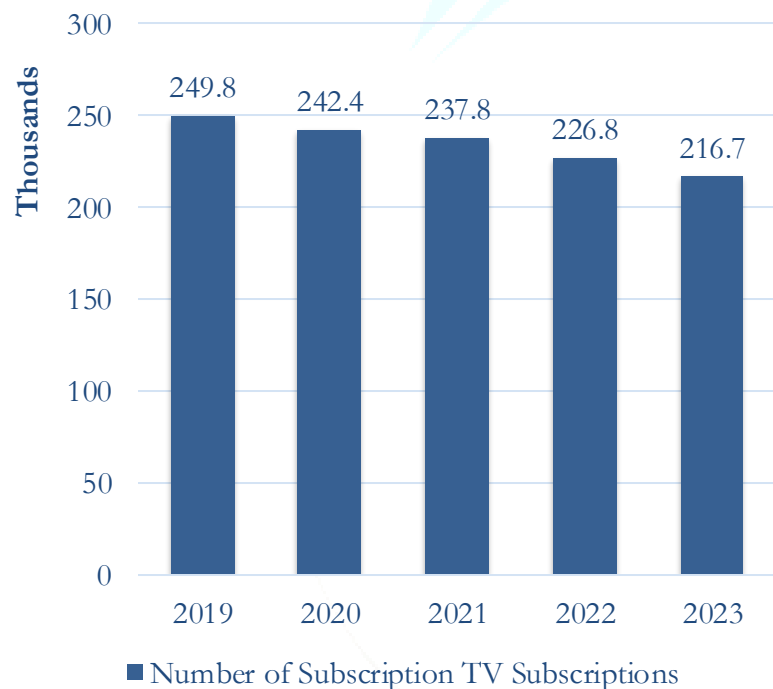


Fixed Internet Penetration

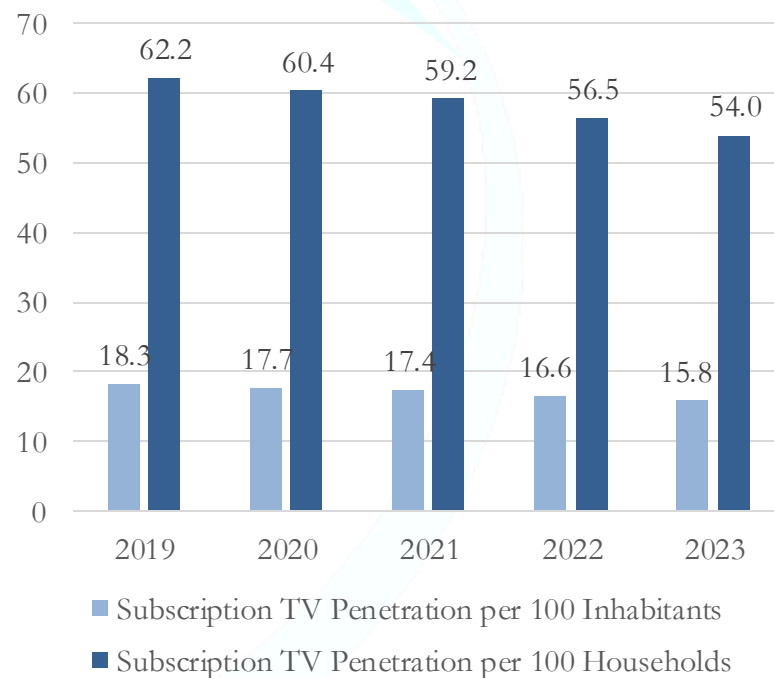


Subscription TV Market Statistics as at December 2023

Subscription TV Subscription



Subscription TV Penetration



ITU Global Digital Regulatory Outlook (2023)

ITU Global Digital Regulatory Outlook (2023) and the changing policy focus



Universal access and service

- Obligations to fixed, mobile and Internet providers
- Universal Service Funds

Broadband infrastructure investment

- Broadband stimulus plans
- ICT Master plans
- NGN/NGA strategies

Digital transformation

- Digitization, automation
- Digital economy
- Digital development
- Smart cities

Digital enablers

- 5G, 6G
- Internet of Things
- Artificial intelligence
- Digital assets

Source: ITU.

ITU Global Regulatory Outlook (2023)

1. ITU has noted that change and challenge have characterized the global industry and its development – from telecommunications to digital markets, through prosperity, stability and disruption.
2. ITU has also noted that many of the challenges of the telecommunication sector at the time of the “Missing Link” report in 1984 are still with us – from investment in infrastructure to financing of access initiatives to institutional capacity of government agencies.
3. Policies have targeted infrastructure challenges from investment to digital inclusion to innovation.
4. Connectivity is an important policy goal – it enables economic development and access to education, and fosters entrepreneurship and innovation.
5. Policies will remain at the heart of the transformation aligning national and global development goals.
6. The focus shifts from technologies to people – and from economic to the broader social impact.
7. Universal access and service policies – the bedrock of ICT reform – have been transformed into cross-sector infrastructure policy with an increasing number of countries now adopting a national broadband or a digital transformation strategy.

Achieving Digital Inclusion and Meaningful Connectivity



The Concept of Universal Service

Universal service is achieved when ICTs are available, accessible and affordable and are delivered on either a household or individual basis.

Universal Service is therefore based on three fundamental principles:

- 1. ICT Availability:** the service is available to all inhabited parts of the country;
- 2. ICT Accessibility:** all citizens can use the service, regardless of their location, gender, disabilities and other personal characteristics; and
- 3. ICT Affordability:** the service is affordable to all citizens.

In implementing universal service, TATT is guided by the statutory requirements in the Telecommunications Act and Universal Service Regulations.

Universal and Meaningful connectivity

By achieving universal service, we are one step closer to reaching universal and meaningful connectivity.

Important factors affecting connectivity are:

1. the digital divide;
2. the level of digital inclusion

The digital divide is the gap that exists between those who have access to ICTs and those who do not. This gap occurs between and within:

- **Population groups** e.g., PWDs, age groups, socioeconomic status (income level, employment)
- **Geographic areas** e.g., municipalities, communities, urban/rural classification
- **Regions and Countries**

Digital Inclusion Survey – 2022

TATT designed and conducted Digital Divide surveys in 2007 and 2013; and a national Digital Inclusion survey (DIS) in 2021.

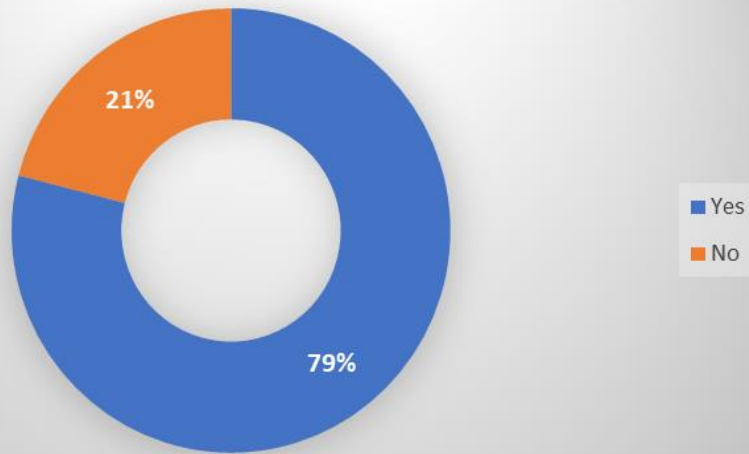
The DIS survey was commissioned to:

1. measure the number of ICT users in Trinidad and Tobago;
2. determine the extent of the digital divide within Trinidad and Tobago;
3. benchmark the progress of Trinidad and Tobago's ICT development against other countries;
4. identify population groups and geographic areas most at risk of being digitally excluded within Trinidad and Tobago;
5. inform the choice of universal service and digital transformation initiatives at TATT;
6. support the country's Vision 2030 macro-economic goals and the National ICT Plan;
7. support international obligations, such as the UN Sustainable development goals (SDGs) and the ITU Connect 2030 Agenda



DIS 2021 Outcome and Findings

Individuals Using the Internet



Overall, 79% of the population of Trinidad and Tobago, five years and older, use the Internet.

Internet usage among females as a percentage of the total female population is 85% compared to 83% among males.

Mobile phone ownership, by gender



- According to ITU, ownership of mobile phones is an important tool to reduce gender inequality.
- In Trinidad and Tobago, females are slightly ahead of males with respect to mobile phone ownership. Females account for 51% of the overall sample of respondents.

Digital Development Dashboard

An overview of the state of digital development of Trinidad and Tobago

2021 Digital Inclusion Survey

INFRASTRUCTURE & ACCESS

Network coverage



Population covered by a mobile-cellular network (2020) **100%**

Population covered by at least a 3G mobile network (2020) **100%**

Population covered by at least a 4G mobile network (2020) **75%**

Mobile phone ownership



Individuals owning a mobile phone (2021) **83.9%**

Female mobile phone ownership as a % of total female population (2021) **85%**



Male mobile phone ownership as a % of total male population (2021) **83%**



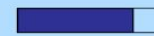
ICT access at home



Households with Internet access at home (2021) **81%**



Households with Internet access at home, rural (2021) **79%**



Households with computer access at home (2021) **60%**



Households with Internet access at home, urban (2021) **83%**



Mobile and fixed telephone subscriptions



Mobile cellular subscriptions per 100 inhabitants (Q3 2021) **144**

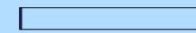
Fixed-telephone subscriptions per 100 inhabitants (Q3 2021) **25%**

Mobile and fixed broadband subscriptions



Active mobile-broadband subscriptions per 100 inhabitants (Q3 2021) **43**

Fixed broadband (% of total): 256kbit/s-<2Mbit/s (Q3. 2021) **2%**



Fixed broadband subscriptions per 100 inhabitants (2021) **27**

Fixed broadband (% of total): 2 to 10 Mbit/s (Q3. 2021) **18%**



International bandwidth per Internet user (kbit/s) (2021) **226**

Fixed broadband (% of total): >10 Mbit/s (Q3. 2021) **80%**



Total fixed broadband subscriptions (Q3. 2021) **365,289**



INTERNET USE

Percentage of population using the internet



Individuals using the Internet, total (2021) **79%**

Female Internet use as a % of total female population (2021) **82%**

Male Internet use as a % of total male population (2021) **76%**



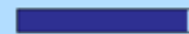
<15 years as a % of all <15 years (2021)

67%



15-24 years as a % of all 15-24 years (2021)

94%



25-74 years as a % of all 25-74 years (2021)

83%



75+ years as a % of all 75+ years (2021)

37%



Broadband traffic



Average monthly fixed broadband Internet traffic per fixed broadband subscription (MB) (2020)

234074



Average monthly mobile broadband Internet traffic per mobile broadband subscription (MB) (2020)

9039



ENABLERS & BARRIERS

ICT prices



Mobile data and voice basket (low consumption) as a % of GNI p.c. (2020) **2.3%**



Mobile data and voice basket (high consumption) as a % of GNI p.c. (2020) **2.3%**



Mobile broadband basket as a % of GNI p.c. (2020) **2.3%**



Fixed broadband basket as a % of GNI p.c. (2020) **1.5%**



Mobile cellular basket as a % of GNI p.c. (2020) **1.0%**



ICT skills



Individuals with basic skills



Individuals with standard skills



Individuals with advanced skills



TATT's Universal Service Initiatives and Public Outreach Activities that are aimed at Connecting the Unconnected

INITIATIVES TO CONNECT THE UNCONNECTED: TTWIFI

- Expand broadband connectivity to public areas lacking reliable high speed broadband service
- A GORTT initiative to allow the general public to access quality broadband Internet to be productive, whilst they wait for service at a public location.

TATT is responsible for the roll out of TTWiFi at:

- public libraries
- public transport hubs
- schools without connectivity
- public waiting areas in health institutions (hospitals, health centres)

Initiatives to Enable Digital Accessibility

Rollout of TTWiFi services to date:

	Transport Hubs	Libraries	Schools	Health Institutions	Total
Live/Completed	12	23	61	77	173

INITIATIVES TO CONNECT THE UNCONNECTED: PERSONS WITH DISABILITIES

This initiative seeks to promote digital inclusion for persons with disabilities in Trinidad and Tobago. It was launched in September 2020.

The goal of this initiative is to provide subsidised mobile phones containing assistive features to persons who are visually and/or hearing impaired or have a disability and in receipt of a disability assistance grant from the Ministry of Social Development and Family Services.

TATT provides a subsidy of **TT\$600**.

1800 PwD participants to date.

INITIATIVES TO CONNECT THE UNCONNECTED: ICT DEVICES FOR STUDENTS

This initiative provides ICT-Enabled Devices and Internet Connectivity Access Service to students in Trinidad and Tobago

During the Covid-19 pandemic period, TATT provided 10,000 ICT (tablets) devices and Internet connectivity to assist students who experienced challenges due to the online learning environment.

TATT collaborated with the Ministry of Education on this initiative.

ICT Access Centres

1. Establishing public access technology centres in underserved communities to facilitate access to ICTs.
2. TATT is seeking to implement ICT access centres as part of the GORTT initiative throughout Trinidad and Tobago.
3. The initiative is geared towards improving the existing modes of Internet access in targeted rural communities through access to the internet and ICT equipment via a community-centred facilities.



INITIATIVES TO CONNECT THE UNCONNECTED: INFRASTRUCTURE PROJECTS

This initiative targets municipalities and communities with limited access (lowest IDI access scores from DIS 2021) for the deployment of broadband infrastructure through contractual universal service initiatives.

The project deployed telecommunications access infrastructure to facilitate the provision of broadband Internet access service via a fibre-to-the-home network in the St. John's Parish, Tobago. The communities included are Parlatuvier, Bloody Bay and L'Anse Fourmi. Residents are now able to subscribe to affordable broadband Internet access service commonly available in well-served areas.

PROPOSED INITIATIVE TO CONNECT THE UNCONNECTED: DIGITAL SKILLS PROGRAMME

This initiative is intended to be Phase 2 of the GORTT Digital Skills Development Programme “WeLearnTT” aimed at bridging the digital divide and providing individuals with the requisite digital skills needed to secure employment.

The project collaborates with Microsoft platform and content providers to design a programme for 10,000 individuals’ capacity to utilize the digital tools, platforms, products and services required to navigate the shift to online and remote work.

TATT will collaborate with the GoRTT, Microsoft and ITU on this initiative to bring digital skills to PWD’s, senior citizens and small-scale fishers.

Consumer awareness and public outreach activities

1. Consumer awareness programmes on consumer rights and obligations

This activity takes the form of a community outreach caravan at rural communities throughout the country to hold meetings at community facilities such as community centres, regional complexes and community access centres. We intend to collaborate with NALIS and iGov.tt on future initiatives

2. Girls in ICT and Boys in ICT

Both the Girls in ICT Day and Empowering Men (Boys in ICT Day) focused on - Entrepreneurship in ICTs in 2024. These e-commerce workshops provided an opportunity for both young women and young men to learn how to design an online store that reflects their brand's unique personality and style without any coding knowledge. Participants benefited from advice on website optimisation, personal branding and marketing tips to help them promote their websites once developed.



Policies developed by TATT to Promote Internet Connectivity: Universal Service Framework

1. Our universal service framework details the intervention needed to facilitate 100% of the population having access to affordable basic telecommunication services, including Internet services.
2. Details the initiatives to be implemented to close the digital divide.

Policies drafted by TATT to Promote Internet Connectivity: 5G Framework

1. 5G, is the new generation of mobile communications that will improve current systems and services by offering, among other things, increased data rates, lower latency and better mobility.
2. The Authority has developed a Framework for Fifth Generation (5G) Public Mobile Telecommunications Networks to create the regulatory environment to support the introduction and development of 5G networks in Trinidad and Tobago.
3. Facilitating the adoption of these networks directly promotes the national aim of the “Improving Connectivity” and incentivises private sector investment and market actors to advance the national ICT infrastructure.

National Digital Transformation Strategy

Pillars of Digital Transformation contained in the National Strategy



Meaningful connectivity

- Improve access to information and knowledge resources via the Internet
- Improve access to ICT equipment (connected to the Internet)
- Increase ICT knowledge and vocational training for citizens
- Increase ICT literacy levels among citizens in underserved communities
- Improve access to ICT infrastructure for underserved communities
- Greater inclusion in the knowledge-based society



Deliver public value

- Increase GoRTT e-Services delivery methods
- Targeted GoRTT e-Service delivery
- Promote eDemocracy and eParticipation
- Promote GoRTT transparency and accountability through ICTs
- Improve GoRTT internal efficiency;
- Promote a single face of GoRTT “One-stop-shop”;
- Agile Government



Global economy opportunities

- Ease of doing business
- Greater opportunities for increased revenue generating activities for rural communities and SMEs
- Establish multiple online payment facilities
- Develop ICT as a sector
- Greater ICT contribution to GDP

Closing Remarks

1. According to the ITU's Digital Regulatory Outlook, 2.7 billion people worldwide remain unconnected.
2. The digital divide persists in rural areas, across income, gender and age groups – and new, deep divides have emerged for vulnerable groups.
3. Relevant and appropriate universal service projects are being implemented to bridge the digital divide and promote digital inclusion.
4. Change and incremental improvements are needed in policy and regulation – without this people will still be left behind.

Useful Resources:

1. The Telecommunications Act:

[https://tatt.org.tt/Portals/0/Telecommunications%20Act%20Chap.%2047.31%20\(2022\).pdf?ver=2022-03-03-075048-513](https://tatt.org.tt/Portals/0/Telecommunications%20Act%20Chap.%2047.31%20(2022).pdf?ver=2022-03-03-075048-513)

2. The National Digital Inclusion Survey (2021):

https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1628&PortalId=0&TabId=222

3. The TATT Annual Market Report (2023):

<https://tatt.org.tt/market-information/annual-market-reports/>

4. The National Digital Transformation Strategy:

<https://mdt.gov.tt/media/Digital%20Priorities.pdf>



Thank You

