



PRINCIPLE 5 — Upholding Technology Neutrality and progressively transitioning to Service Neutrality

Technology Neutrality

The statements provided in this document will be kept under review and amended as appropriate in light of further experience and developing law, practice, market conditions and any change to the Authority's powers and functions.

These comments provide the Authority's general view of upholding technology neutrality and transitioning to service neutrality and do not have binding legal effect.

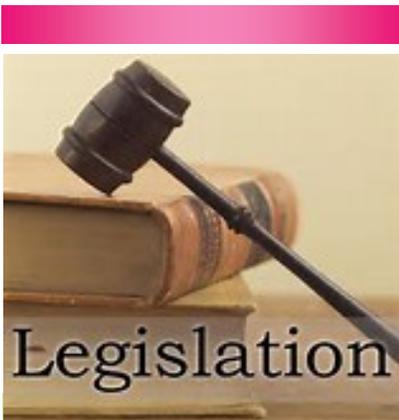
Defining the Mandate – Technology Neutrality

- *Technology Neutrality....“that different technologies offering essentially similar services should be regulated in similar manners. However, technologies offering similar services do not necessarily have similar features in all aspects, and exactly identical regulations may, therefore, result in the advantage of one technology over another in the market. Technology neutral regulation can, consequently, include slightly differing regulations for different technology solutions in the same market segments.” - ITU, ICT Regulation Toolkit*

According to TATT 's Authorisation Framework, 2005, “The Authority shall facilitate the Government in ensuring minimal barriers to entry and competition in converged telecommunications markets by adopting, as far as practicable, a **service- and technology-neutral approach** to authorizing **telecommunications networks, and public telecommunications and broadcasting services”**

Where The Telecommunications Act Chap. 47:31 defines:

- *“telecommunications network” as a system or any part thereof used for the provision of a telecommunications service;*
- *“telecommunications service” as a service using telecommunications whereby one user can communicate with any other user in real time, regardless of the technology used to provide such a service and includes a public telecommunications service, a private telecommunications service, a closed user group service and a radio communication service;”*
- *“public telecommunications service” as a telecommunications service, including a public telephone service, offered to members of the general public, whereby one user can communicate with any other user in real time, regardless of the technology used to provide such service;”*



Article 96 of the EPA

Article 96 of the EPA addresses the country's obligations with respect to authorisation of providers of telecommunications service. Article 96 states:

1. Provision of services shall, as much as possible, be authorised following mere notification.

2. A licence can be required to address issues of attributions of numbers and frequencies. The terms and conditions for such licences shall be made publicly available.

3. Where a licence is required:
a. all the licensing criteria and a reasonable period of time normally required to reach a decision concerning an application for a licence shall be made publicly available;

b. the reasons for the denial of a licence shall be made known in writing to the applicant upon request;

c. the applicant of a licence shall be able to seek recourse before an appeal body in case a licence is unduly denied;

d. licence fees required by the EC Party or by the Signatory CARIFORUM States for granting a licence shall not exceed the administrative costs normally incurred in the management, control and enforcement of the applicable licences."

Policies and Frameworks

The Authority proposes to uphold service and technology neutrality in its regulatory functions. In so doing, the Authority encourages investment by reducing barriers to entry on matters relating to the authorisation of telecommunications networks and public telecommunications and broadcasting services. The Authority's technology neutral approach in regulatory decision-making also reduces the regulatory burden by ensuring consistency and continuity in regulatory application, even as markets evolve and technologies and services transition, develop and advance.

The Authority's frameworks and regulatory instruments which advance this Principle include:

- The Authorisation Framework
- Draft Telecommunications (Network QOS) Regulations
- Telecommunications Network QOS Policy
- Consumer Rights and Obligations Policy

Neutrality in Authorizations

According to the Authorisation Framework (2005), technology and service neutral authorisation do not limit the network authorised provider or service provider to using a specific technology or equipment configuration and/or providing a specific service to consumers. This gives the provider the option of choosing the optimal technological solution (**technology neutrality**) and the flexibility to determine their service offerings (**service neutrality**) based on market demands and cost effectiveness.

For example, a public domestic mobile telecommunications network authorised provider can deploy 2G, 3G or even 4G mobile technologies using its assigned spectrum. This network authorised provider is also permitted to provide a wide range of public telecommunications services over its network, such as mobile voice and data services, as well as services that emulate those provided on fixed (landline) networks.

Additionally, one of the mandates of the Authority is to develop a robust regulatory framework that not only governs the telecommunications and broadcasting sectors but meets the changing needs of the evolving industry while honouring the country's national and international commitments. As a result, the Authority in 2014, undertook amendments to the Authorisation Framework (2012) as a means of ensuring Trinidad and Tobago's compliance with the obligations stipulated in applicable articles of the Economic Partnership Agreement ("EPA") as brought into force by Act No. 9 of 2013. This agreement, to which Trinidad and Tobago through the Caribbean Forum ("CARIFORUM") is a signatory party, along with the European Community ("EC"), further encourages service neutrality.

Network Quality of Service (QoS)

The Authority's Network Quality of Service Policy and Regulations, ensure that regardless of the technology being used, there would be the assurance of a widely recognized measurable Quality of Service parameter that can be applied such that, amongst other things, there is an effective QoS indicator for network and service provisioning between authorised providers at points of interconnection and other areas where authorised providers share or interconnect facilities.

The QoS approach ensures continuity and quality of service across various technologies.



Customer Service QoS and Consumer-related Network QoS

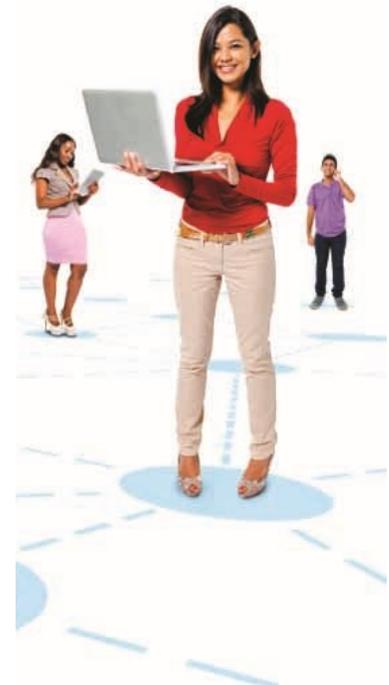
Quality of Service as it pertains to the consumer is addressed in the Consumer Rights and Obligations Policy and accompanying regulations. The Policy and Regulations seek to promote the interests of consumers regardless of the technology employed.

Cognizant that the environment is made up of the deployment of diverse network technologies, the Authority, in its general methodology of determining consumer-related network quality of service indicators, establishes a level playing field for all authorised providers.

This is accomplished through the definition of QoS indicators that can be applied to varying technologies and service standards that can be imposed across different services.

For instance, the network QoS indicators for fixed networks are applicable to traditional circuit-switched technologies, as well as the contemporary IP-based next generation network (NGN) technologies being deployed.

The customer service indicators such as service activation, can be applied across a plethora of public telecommunications services.



**Telecommunica-
tions Authority of
Trinidad and Toba-
go**

**Please also see
“Guiding Principles
on Regulatory Deci-
sion Making”**

The Telecommunications Authority of Trinidad and Tobago

Email, write or call the Authority using the following:

Email : info@tatt.org.tt

Address: #5, Eighth Avenue Extension,
off Twelfth Street,
Barataria,

Republic of Trinidad & Tobago

Tel: 675-8288, 222-8288

Document Last Updated: 18th August 2015

Telephone : (868)675-8288 / 221-8288