



Establishing Quality of Service For Telecommunication Services

In
Trinidad & Tobago

Introduction

- The Telecommunications Act of 2001 set the stage for an open market.
- Telecommunication Authority of Trinidad & Tobago (TATT), was established in July 2004.
- Competition in the industry introduced July 2005 with the auction of Mobile Spectrum.
- The Concession document includes some QoS requirements

Two QoS Standards

- **“Wholesale” Services:** Services exchanged between Concessionaires through network interconnection – addressed in the *Network QoS Policy* and accompanying *Regulations*
- **“Retail” Services:** Services delivered to the end-user/customer – addressed in the *Consumer Rights & Obligations Policy* and accompanying *Regulations*

The Process

- TATT develops and publishes the Draft Policy and conducts Consultation⁽¹⁾ with stakeholders(at least 2 rounds of consultation)
- Final Draft sent to the Minister for approval
- The Policy is published and posted on website www.tatt.org.tt

(1) *Procedures for Consultations in the Telecommunications Sector of Trinidad and Tobago* (<http://www.tatt.org.tt>).

The Process (contd.)

- Draft Regulations are developed based on the Policy
- Again, at least two rounds of consultation with stakeholders
- Final Draft sent to Minister, then to the Cabinet, and finally to Parliament
- The new Regulations are passed into Law

QoS Regulations

- **Network Quality of Service** and accompanying *regulations* targets network and service provisioning and performance provided to and between competing (interconnecting) concessionaires for *fixed, mobile, international* and *Internet access* networks and services.
- Quality of Service as it pertains to the consumer addressed in the **Consumer Rights and Obligations Policy** and accompanying *regulations*. For all Concessionaires, including Radio & TV Broadcasters
- The *Schedules* of each regulation details the Quality of Service **Elements, Indicators** and their **Parameters**
 - The schedules may be updated through consultation

What's Included

- **“Wholesale”**: Interconnected Domestic & International Network and/or Service Providers
 - Voice (nothing special for VoIP)
 - Internet service providers
- **“Retail”**: All Concessionaires
 - Voice (nothing special for VoIP)
 - Internet service providers
 - Radio and TV Broadcasters
 - Subscription services (cable & satellite TV)

QoS Elements & Indicators “Wholesale”

Element 1. Intervals for Provision of Interconnection Services	<ul style="list-style-type: none"> • Interconnection Installation • Activation of Carrier Pre-Selection (CPS) • Unbundled Loop Order Service • Interconnection Trunk Order
Element 2. Intervals for Interconnection Repair Services	<ul style="list-style-type: none"> • Interconnection Repair Appointments • Interconnection Mean Time to Repair • Interconnection Out-of-Service Reports
Element 3: Network Services	<ul style="list-style-type: none"> • Grade Of Service (GOS) • Call Failure Ratio • Call Drop Rate • Network Element Annual Availability
Element 4: Internet Access Services	<ul style="list-style-type: none"> • Internet Connection Uptime • Wholesale Internet Leased Access Local Network Availability
General Record Keeping Requirements	<ul style="list-style-type: none"> • Service Requests • Fault Reports • Service Complaints

Consumer QoS

Fixed Services	<ul style="list-style-type: none"> •Fault Repair Time •Network Availability •Peak Traffic Completed Calls •Public Payphone Availability
Public Mobile	<ul style="list-style-type: none"> •Call Success Rate •Call Drop Rate •Service Access Delay
Internet Service Providers	<ul style="list-style-type: none"> • Average Bandwidth to Consumer (dial-up, Broadband) •Dial-up Service Accessibility
<u>All Providers</u>	<ul style="list-style-type: none"> Service Activation Time Service Re-Activation Time Consumer Query Response Time Billing Accuracy Consumer Complaint Resolutions Consumer Satisfaction

Where Are We Now?

- Consumer Rights & Obligations
 - First round of Consultation completed
 - Second Round of consultation in progress

- Network Quality of Service
 - First round of Consultation completed
 - Preparation for Second Round of consultation in progress



Thank You