



A Consultative Document

Draft Policy on the Authorisation of Telecommunications Networks and Services and Broadcasting Services in Trinidad and Tobago

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1 Introduction

As the Government of Trinidad & Tobago continues in its drive to liberalise the telecommunications sector, it is important that a proper regulatory framework is established to facilitate both the transition to and maintenance of a market driven sector. Prior to July 1st 2004, the regulatory framework for the telecommunications sector was established by the **Wireless Telegraphy Ordinance 1936**, the **Telephone Act 1968** and the **Regulated Industries Commission Act (RIC) 1998**. The Government recognised that the existing legislation did not adequately deal with the regulatory needs of a rapidly evolving telecommunications sector, and established the **Telecommunications Authority of Trinidad and Tobago** ('the Authority') by the **Telecommunications Act, 2001** (as amended – 'the Act') as the independent regulatory body of the telecommunications and broadcasting sectors. The Act was fully promulgated on July 1st 2004.

One of the Authority's mandates is to develop a comprehensive regulatory framework to effectively transform and govern a competitive telecommunications sector. An authorisation framework is an important part of this comprehensive regulatory framework. A coherent framework of authorisation is needed to enable the Authority to perform its duties and to oversee circumstances such as: market structure, the number and types of network operators or service providers, the extent of competition, the pace of infrastructure expansion, and the affordability and range of telecommunications and broadcasting services available to consumers.

1.1 The Authorisation Regime as prescribed by the Act

The authorisation process, or the licensing process as it has been traditionally known, provides the means of managing both entry into the telecommunications and broadcasting markets and the behaviour of telecommunications and broadcasting service providers once they have entered the market. In the context of regulation, "licence" is the term generally used to refer to a legal instrument granted or approved by a regulator or another government

authority that defines the rights and obligations of licensees. Sections 21 and 36 of the Act prescribe two types of instruments for authorising telecommunications and broadcasting operators to provide networks and/ or services under the new regime in Trinidad and Tobago:

1. A *concession* is granted by the Minister to authorise the operation of a *public telecommunications network* (Section 21) and/or the provision of any *public telecommunications service* or *broadcasting service*. An application for a concession must be submitted to, and evaluated by, the Authority before a recommendation is made to the Minister to grant the concession.
2. A *licence* is granted by the Authority to authorise the operation or use of any *radiocommunication service* or any *radiotransmitting equipment*, including that on board any ship, aircraft or other vessel in the territorial waters or airspace of Trinidad and Tobago, (Section 36)¹. Where the operation of a public telecommunications network or the provision of a public telecommunications or broadcasting service requires use of radio-transmitting equipment, the required licences will be granted with the applicable concession. Where radio transmitting equipment is used for a private or “closed-user group”² communication service, licences are required for the radio transmitting equipment employed. A concession however is not required.

The requirements under the Act for concessions and licences can be summarised at Table 1:

Concessions	Licences
Required for the operation of any public network or provision of any public service.	Required when networks, services or equipment use radiocommunication.
Not required for the operation/ provision of any private/ closed user group network/ service.	Issued with concession where radiocommunication is part of any public network or service.

Table 1

¹ A licence is not required for any radio-communication service on board any ship of war, or military aircraft or satellite registered in Trinidad and Tobago.

² Defined in the Act as “a group of persons, who have a common business or other economic interest other than the provision of a telecommunications service”.

1.2 Policy Objectives

The primary purpose of this policy is to set out the guidelines and processes in respect of the authorisation of telecommunications networks, telecommunications services and broadcasting services. “Authorisation” in this context refers to the granting of concessions or licences as defined by the Act. In addition, this policy will guide the preparation of any legal instrument that will govern the authorisation process.

Specifically, the policy is intended to ensure that:

- ◆ there is fair and efficient allocation of resources in the provision of telecommunications services, and that these resources are efficiently utilised;
- ◆ competition is effectively introduced in the provision of services, taking into consideration the convergence of technologies, services and networks;
- ◆ the Government’s objectives with respect to universality and the increase of the country’s Digital Access Index (DAI) are met;
- ◆ a “level playing field” exists for new and existing service providers in a competitive environment, being one that is fair, non-discriminatory and transparent;
- ◆ regulation of the sector is effective and supports the development of a competitive telecommunications market;
- ◆ the benefits of a competitive market are enjoyed by consumers; and
- ◆ there is regulatory certainty in liberalising the market so that new operators and investors have confidence in entering the market to expand the national telecommunications infrastructure.

1.3 Modification to Document

As the country’s telecommunications industry matures, the authorisation framework and regulatory practices will evolve. The authorisation policies prescribed in this document will be reviewed and modified as necessary, to ensure that regulatory practices and processes continue to be guided by appropriate policy guidelines and objectives.

Questions or concerns regarding this policy document may be directed to the Policy, Pricing and Research Department of the Authority (policy@tatt.org.tt).

1.4 The Consultation Process

The Authority will seek, in accordance with its “Procedures for Consultation in the Telecommunications Sector of Trinidad and Tobago” (<http://www.tatt.org.tt/pfc-m.html>), the views of the general public and industry stakeholders on the proposals made in this policy.

The initial consultation phase will take place over a period to be prescribed by the Authority.

1.5 Published Related Draft Policies

The Authority previously published two draft policies:

1. “National Policy on Cable Television Networks and Services” (dated November 2004); and
2. “Policy for Micro, Small and Medium-Sized International Public Telecommunications Services and/ or Network Providers in Trinidad and Tobago” (dated October 2004).

The former sets out guidelines for the introduction of competition in the cable television market, while the latter proposes principles and concepts to develop a regulatory framework for smaller International Call Centre Operators and Internet Service Providers.

The Authority received comments and recommendations from stakeholders and the public, which were considered in developing this policy document.

1.6 Other Relevant Documents

The following documents are under development by the Authority, to address specific issues relevant to concessionaires and licensees:

- Spectrum Management Policy and Regulations
- Concession and Licence Application Procedures
- Standards and Equipment Certification Regulations
- Interconnection Policy and Regulations
- Access to Facilities Regulations
- Universality Policy and Regulations
- Quality of Service Policy and Regulations
- Consumer Rights and Obligations Policy and Regulations
- Enforcement and Compliance Policy and Regulations
- Pricing Policy and Regulations
- Competition Policy
- National Numbering Plan
- National Frequency Allocation Table
- National Broadcasting Code

Drafts of some of these documents have already been published by the Authority for consultation with the public and stakeholders. Others are currently being drafted by the Authority.

2 Partial Analysis of Trinidad and Tobago's Telecommunications and Broadcasting Industries

2.1 The Licensing Regime of Trinidad and Tobago Prior to the Act

Prior to the promulgation of the Act, the regulatory framework for the telecommunications sector was guided by the **Wireless Telegraphy Ordinance 1936**, the **Telephone Act 1968** and the **Regulated Industries Commission Act (RIC) 1998**.

The Telephone Act 1968 empowered the Trinidad and Tobago Telephone Company (now the Telecommunications Services of Trinidad and Tobago (TSTT)) with the exclusive right to operate a telephone system and to provide a telephone service to the public. However, where TSTT used radio transmitting equipment in providing their telephone service (e.g. mobile cellular services), the company was required to apply for the relevant licence under the Wireless Telegraphy Ordinance. The rate structure of the company was also regulated as a public utilities company under the **Public Utilities Commission (PUC) Act (Chap. 54:01)** which was eventually replaced by the RIC Act.

Under the Wireless Telegraphy Ordinance of 1936 (the Ordinance), a licence was required to install, operate, sell or deal in, wireless apparatus. A special licence was also required to provide a public telecommunications or broadcasting service. The special licence detailed the terms and conditions applicable to the equipment and spectrum used in the provision of the services specified. The Minister responsible for telecommunications, through the Telecommunications Division, was also responsible for granting licences and for the management of spectrum resources.

The licence classifications under the Ordinance included the following:

1. An *Apparatus Licence* to authorise equipment operating in all bands for the following purposes:

- Commercial Radio (Point to Point Microwave, Point to Multipoint Microwave, Trunked and Conventional Radio Systems etc.)
- Aeronautical Radio
- Maritime Radio
- VSAT
- Satellite Earth and Space Stations
- Broadcast Stations

Apparatus licences were renewable annually.

2. An *Operator Licence* to operate:
 - Maritime Radio

3. An *Experimental Wireless Telegraphy Transmitting Licence* to permit the operations in respect of amateur radio systems. Amateur radio operators were also examined and certified to qualify for an amateur radio licence.

4. A *Wireless Dealers Licence* to authorise anyone importing, selling or dealing in wireless apparatus.

5. A *Special Licence* to authorise the provision of certain services e.g. “Free to Air” Radio and TV, Cable TV and Satellite Broadcasting Services.

The Ordinance was applicable to the limited services of its era, and became obsolete with the evolution of technology and the introduction of new services over time.

The management of the sector was seriously challenged by a lack of human and physical resources in the Telecommunications Division which were fundamental for thorough evaluation of licence applications and efficient assignment and monitoring of spectrum. These constraints resulted in:

- misallocation of valuable spectrum resources consequent upon the application of a first-come first-served award process;

- abuse of licences, including non-use and unauthorised transfers;
- the emergence of anticompetitive behaviour in the wired cable TV sector with the formation of a post licensing monopoly;
- a long and uncertain technical evaluation of application process;
- poor financial management of spectrum fees as evidenced by widespread delinquency in payment of license fees and sub-valuation of commercial spectrum; and
- some broadcast licensees disregarding their obligations to provide 100% national coverage or not confining to the geographical service areas of their licences.

2.2 Telecommunications and Broadcasting Networks and Services in Trinidad and Tobago

In determining the most appropriate approach to classifying networks and services in Trinidad and Tobago for the purposes of granting concessions and licences, the Authority gathered information from various stakeholders on the different types of telecommunications and broadcasting networks, and the types of services that can be offered on those networks. In particular, the Authority has considered the emergence of new and often unlicensed service providers who use alternative means to provide competing services to consumers, often at more affordable rates than those provided by established service providers. Although this policy seeks to minimise market entry barriers for entrepreneurs, and encourages the introduction of a variety of competing services to consumers, it is also intended to ensure that all services are provided in a fair manner and are subject to comparable and fair regulation.

Figure 1 illustrates the evolving structure of the telecommunications and broadcasting sectors in Trinidad and Tobago, and illustrates the various types of networks that will require concessions and/ or licences.

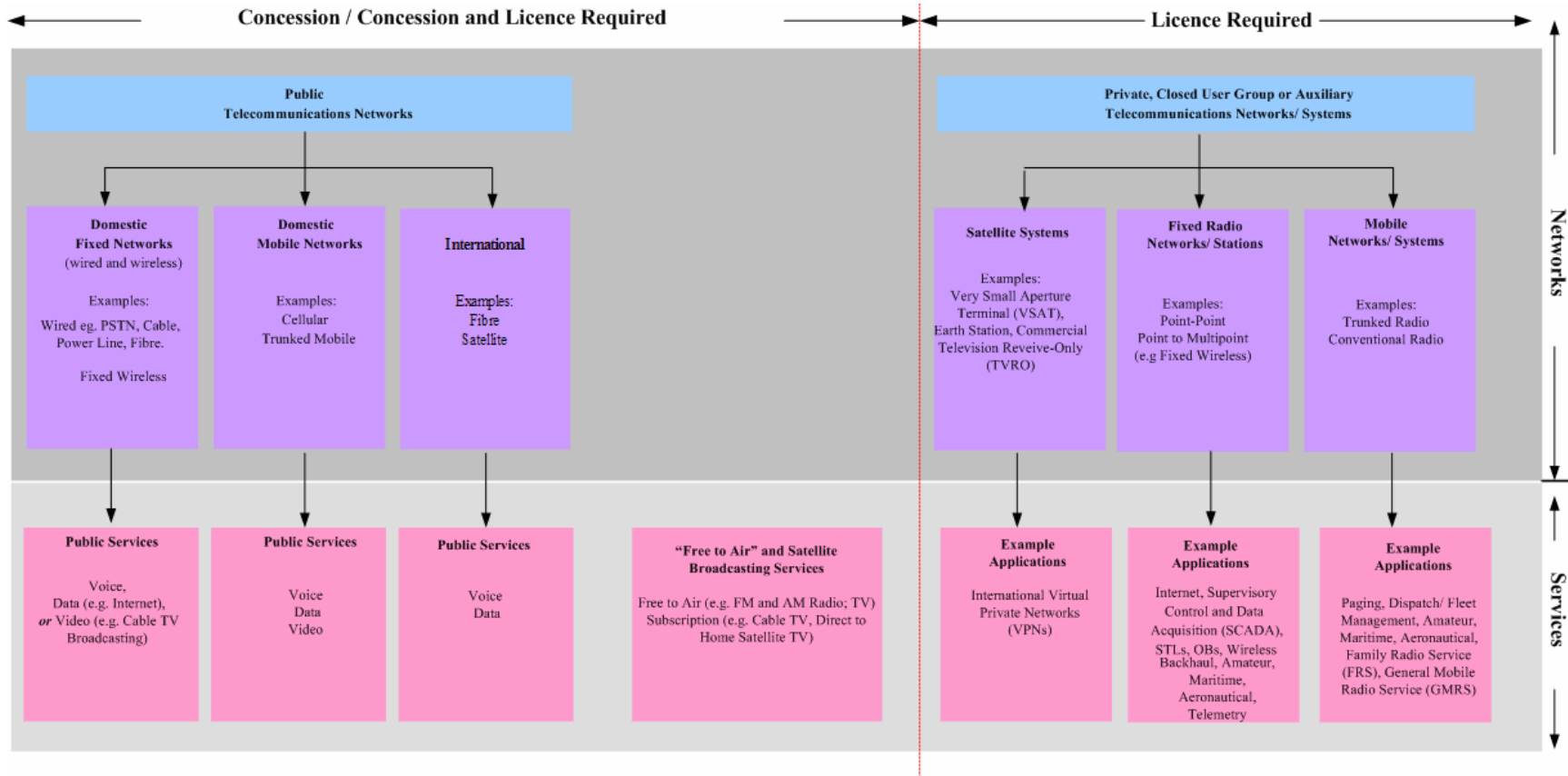


Figure 1

3 Considerations for the Role of an Authorisation Regime in an Era of Industry Change

3.1 Traditional Approaches

There have been three (3) broad approaches to authorising telecommunications globally, and many countries have employed more than one approach within the same regime:

1. Granting individual operator licences;
2. Granting class licences (or general authorisations);
3. Allowing open entry with no licensing requirements.

3.1.1 Individual Licences

An individual licence is generally a customised and detailed licence, where the regulator requires that a service is provided in a particular manner by a particular service provider. It has typically been used where a scarce resource such as spectrum is required, or where the regulator decides to limit the number of providers in a particular service market. Individual licences are often granted through a competitive selection process. In some countries, e.g. Australia, this method has been used to licence network/ facilities-based providers only.

3.1.2 Class Licences

A class licence normally sets out rights, obligations and other regulatory provisions of general application to a particular class of services. Services within the identified class are subject to the same general conditions, which are typically published by the regulator. These licences are generally granted via a non-competitive selection process, provided that the entities are suitably qualified to provide the class of services or facilities. Parties seeking class licences usually face a much less onerous process than

those seeking individual licences. In Australia, service providers who do not own or operate networks are class licensed.

3.1.3 Open Entry

In the open entry approach, no licensing process or qualifications requirements are imposed by the regulator, except perhaps for registration or other administrative requirements.

3.2 Convergence and its Regulatory Effects

There is no universally accepted definition of telecommunications industry convergence. However, the following have been perceived as indicators of convergence:

- ◆ Integration of customer terminal equipment or access devices such as the telephone, television and personal computer;
- ◆ Provision of data, image, voice and video services over a single transmission technology or infrastructure;
- ◆ Provision of the same, or substitutable, service by a variety of different types of providers (e.g. Internet access over cable TV, telephone, or even electrical power networks);
- ◆ Substitution of mobile service for fixed service, creating a converged voice service market; and
- ◆ Authorisation to provide a combination of communications and content services under a single licence.

For the consumer, bundling of services and the capabilities of a converged network can offer the convenience of dealing with a single supplier i.e. no separate billing for cable TV, telephone and Internet (video, voice and data) services.

The Authority is an example of a “converged” regulatory body as it is responsible for the regulation of the telecommunications and broadcasting sectors. The Act’s definition of telecommunications also encapsulates information technology.

When governments first started liberalising their telecommunications markets, they often did so on a restrictive basis. Many governments introduced competition on a service-by-service basis, so as to reduce the investment burden on new entrants and permit regulators and established operators to adjust practices developed in a monopoly environment before the introduction of unrestricted competition. Often this meant that competition was first permitted in cellular mobile or Internet access service markets.

In some countries, licences were both service- and technology-specific. As a case in point, in the European Union (EU) cellular mobile licensees were required to use GSM technology to ensure that mobile subscribers could use their handsets anywhere in the EU.

In response to industry convergence and other developments, governments and regulators have been adopting more flexible means of authorisation. Permitting both established and new entrant operators and service providers to provide a broad range of services, and use a range of network technologies, enables them to deploy new services and technologies to meet market demand without having to seek new or amended ‘licences’.³

The regulatory framework, in general, should be flexible to ensure that it does not create barriers to entry or impair competition in converged markets. In addition, matters such as interconnection, quality of service, consumer rights and fair competition are increasingly being addressed in regulations of general application and do not need to be addressed as detailed provisions in individual licences.

³ Examples of jurisdictions that have moved to more flexible authorisation and converged industry authorisation schemes are the member countries of the European Union, India, Malaysia and Singapore. A further discussion of these developments is provided by the ITU publication “Trends in Telecommunications Reform 2004: Licensing in an Era of Convergence”.

3.3 Technology and Service Neutrality

A technology neutral authorisation means that the network operator or service provider is not limited to a specific technology or equipment configuration in the provision of services to the consumer. This gives the provider the option of choosing the most suitable technology that would provide the most efficient and affordable service.⁴

In addition to technological neutrality, service neutral authorisations permit network operators and service providers to determine their service offerings based on market demand and cost effectiveness and do not prescribe or limit the services to be provided.

Policy statement on technology and service neutral authorisations:

The Government shall ensure minimal barriers to entry and competition in converged telecommunications markets by adopting, as far as practicable, a service- and technology-neutral approach to authorising telecommunications networks, and public telecommunications and broadcasting services.

⁴Spectrum management practices can have a significant effect on the objective of having technology neutral licences. See the Authority's statement of Spectrum Management Policy for a full discussion of spectrum management issues and their effect on spectrum licensing.

4 The Authority's Classification of Concessions and Licences for the New Regime

Other jurisdictions have taken significant steps to creating a single licensing classification for all telecommunications and broadcasting services, in order to simplify the licensing process to accommodate industry convergence. While this approach might be commendable, the Government has recognised that it took many years before the approach was appropriate for the respective jurisdictions. This approach would be premature in the context of the current state of Trinidad and Tobago's telecommunications and broadcasting industries. It is the intention of the Government that, once these industries mature to a competitive state where lighter regulation is the most appropriate approach, the regulatory frameworks will be adapted accordingly.

4.1 Classification of Concessions

As indicated earlier, a concession is required for the operation of a public telecommunications network and the provision of a public telecommunications or broadcasting service. Based on the considerations outlined in Section 3, and the requirements of the Act, the Authority shall evaluate and recommend the award of concessions for the operation of telecommunications networks and/ or the provision of telecommunications and/ or broadcasting services in accordance with the classifications described in this section.

Policy statements on concession classification:

1. In accordance with the Act, the Authority shall evaluate and recommend the award of concessions for one or more of the following:

- *Operation of Public Telecommunications Network(s)*
- *Provision of Public Telecommunications Service(s)*
- *Provision of Broadcasting Service(s)*

2. A public telecommunications network can be any of the following as defined by the Authority:

- *Domestic Fixed Telecommunications Network (DFTN)*
- *Domestic Mobile Telecommunications Network (DMTN)*
- *International Telecommunications Network (INTN)*

3. The operation of a public telecommunications network, with or without the provision of public telecommunications or broadcasting services, will require a “network-based” concession.

4. The provision of a public telecommunications service and/ or broadcasting service, without the operation of any public telecommunications network, will be subject to a “service-based” concession.

4.1.1 Domestic Fixed Telecommunications Networks

Domestic Fixed Telecommunications Networks can have either wired or wireless components, or a combination of both.

In a fixed wired telecommunications network, there is no use of spectrum for the transmission of information through the network or to the customer.

By contrast, fixed wireless telecommunications networks transmit information to subscribers using spectrum. Except at customer premises, there is virtually no wiring required to connect the subscriber to the network. Subscribers are typically equipped with radio receiving equipment that enables them to access the services on the network.

Currently in Trinidad and Tobago, there are two major domestic fixed telecommunications network operators. TSTT provides predominantly voice and data services on its public switched telecommunications network (PSTN), while the Trinidad and Tobago Trans-Cable Company (CCTT) provides cable TV services on its cable network. Convergence of technologies enables the provision of broadband voice, data and video services on either of these traditional networks.

Entities that will require and be eligible for network-based concessions to operate DFTNs, regardless of the range of telecommunications and broadcasting services that can be provided on the network or using the technology employed, will include operators/ owners of:

- Public switched telephone networks (PSTNs);
- Public cable TV networks ;
- Public fixed wireless access (FWA) networks;
- Public power line networks; or
- A combination of any of the above.

4.1.2 Domestic Mobile Telecommunications Networks

A Domestic Mobile Telecommunications Network is any network in which the physical location of the end user/ subscriber equipment is not limited to a stationary position at any point of time while using the network. Currently TSTT is the sole public mobile network operator in Trinidad and Tobago.

Entities that will require and be eligible for network-based concessions to operate DMTNs, regardless of the range of service offerings on the network or technology employed, will include operators/ owners of:

- Public cellular networks;
- Public trunked radio networks.

4.1.3 International Telecommunications Networks

Entities that will require and be eligible for network-based concessions to operate an INTN, regardless of the type of traffic carried on the network (voice, data, etc.) or the technology employed, will include owners and operators of international facilities (fibre optic cable systems, VSAT earth stations, etc.).

An operator of an international facility may acquire its network resources in a number of ways, and can include any entity that:

- Owns an international facility or has an Indefeasible Right of Use (IRU) or similar agreement with an owner of an international facility;
- Leases the facilities of an international facility provider to provide international services to subscribers on its domestic network.

A domestic network-based concessionaire who interconnects to an international network-based concessionaire, in order to hand-off traffic and thereby provide international services to subscribers on its domestic network, does not require an INTN concession.

4.1.4 Provision of Broadcasting Services

A broadcasting service means the offering of the transmission of programmes, whether or not encrypted, by any means of telecommunications for reception by the general public, including sound, radio, television and other types of transmissions.

Entities that will require and be eligible for concessions to provide broadcasting services include:

- FM and AM radio broadcasters;
- VHF and UHF television broadcasters;
- Direct to Home (DTH) satellite TV service providers; and
- Wired or wireless cable TV service providers.
- An entity that leases capacity from a telecommunications network operator and provides broadcasting services via that media.

An entity that supplies programmes or other broadcast content to a broadcasting service provider does not require a concession.

Broadcasting service providers shall be required to maintain records and to provide information regarding programmes in accordance with the terms and conditions of the concession.

Policy statement:

Any provider of broadcasting services shall be required, under its concession, to obtain all rights in the programming or programme materials it includes in its services that are required by the laws of Trinidad and Tobago, including any copyright or retransmission right, and to comply with any Broadcasting Code or similar programming obligations.

4.1.5 Provision of Public Telecommunications Services

A public telecommunications service means 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 a service. The Act requires that providers of public telecommunications services obtain a concession, regardless of whether they own or operate a public telecommunications network.

Entities that will require and be eligible for concessions to provide public telecommunications services include providers of:

- Domestic telecommunications services
- International telecommunications services

Public telecommunications services can be provided by either:

- A service provider who owns or operates a network; or
- A service provider who does not own or operate a network, but who uses the facilities of another network provider.

There are various models of service providers that do not own or operate a network.

A Type A service provider is any entity that acts as an agent for the network operator. In this case, the network operator is still responsible for activation of the service and billing of the consumer.

A Type B service provider is any entity that has an agreement with the network operator to access the billing and activation resources of the network operator, and re-packages the service to provide to the consumer. This reseller is ultimately responsible for the activation and billing of the consumer. An example of this type of reseller is a virtual network operator.

A Type C service provider is any entity that leases facilities or buys wholesale capacity from a network operator, and sells either the same services offered by the network operator, or differentiated services, to the consumer. Examples include:

- (i) Internet service providers (ISPs);
- (ii) Calling card providers (international or domestic);
- (iii) Call centre operators (international or domestic);
- (iv) Community access centres;
- (v) International service providers who purchase wholesale minutes or who lease facilities from an international network operator, and who resell those resources to a domestic network provider.

Type A service providers do not provide services in their own capacity and so do not need a concession. Type B and C service providers will require service-based concessions.

4.1.6 Class Concessions

Policy statement on “class concessions”:

The Authority will introduce a class concession regime for particular classes of concessionaires which in the Authority’s view warrant a lighter regulatory framework.

The Authority’s treatment of class concessions will be developed in consultation with the industry, but is likely to address smaller International Call Centres, Internet Cafes, Internet “Hot Spot” providers and at least some calling card providers. The class concessions may be similar to schemes of general authorizations adopted in other jurisdictions.

4.2 Structure of Concession Document

The Authority has prepared a “modular” form of concession, which sets out conditions of general application to all concessionaires, followed by conditions and authorisations specific to different types of networks and services⁵. Accordingly, the following concession structure will be adopted for concessions to be granted by the Minister upon recommendations made by the Authority:

<p>Title of Concession Concession for the Operation of (DFTN/DMTN/INTN) Telecommunications Network(s) and/ or The Provision of (Telecommunications and/or Broadcasting) Services</p>
<p>Definitions</p>
<p>Section A: General Conditions applicable to all concessionaires.</p>
<p>Section B: Conditions applicable to Network(s) specified in Schedule A. This section will only apply to network-based concessions.</p>
<p>Section C: Conditions applicable to the Telecommunications Services specified in Schedule B. This section will apply to network-based and service-based concessions.</p>
<p>Section D: Conditions applicable to the Broadcasting Services specified in Schedule C. This section will apply to network-based and service-based concessions.</p>
<p>Schedule A: Telecommunications Networks This schedule will list the networks to be operated by the concessionaire as authorised by the Minister, and applies only to network-based concessions.</p>
<p>Schedule B: Telecommunications Services This schedule lists the public telecommunications services to be offered by the concessionaire as authorised by the Minister. It applies both to network-based and service-based concessions.</p>
<p>Schedule C: Broadcasting Services This schedule lists any broadcasting services to be offered by the concessionaire as authorised by the Minister. It applies both to network-based and service-based concessions.</p>
<p>Schedule D: Licences (applicable only for concessions in which radio transmitting equipment forms part of the concessionaire’s network or is otherwise used in the provision of the services authorised).</p>

Table 2 General Structure of a Concession

⁵ Section 7 provides further clarification on the terms and conditions applicable to network-based and service-based concessions.

4.3 Classification of Licences

As previously mentioned, a licence is required for the use of any radio transmitting equipment or for the operation of any radio communication service. For each of the concession classifications above, where radio-transmitting equipment is used in the provision of the service, or for any auxiliary/ backhaul systems of the network, the appropriate licences are required, and will be listed in Schedule D of the concession.

Licences are also required for any private or closed-user group networks that use radiocommunication systems.

The Spectrum Management Policy defines three types of licences that may be granted by the Authority:

1. A *spectrum licence* which authorises the licensee to operate radiocommunication systems within a specified frequency band on a technology neutral basis. Flexibility will be provided on the range of services which can be provided within the given frequency band. Systems for which a spectrum licence will be required include the following:
 - a. Public mobile radio systems
 - b. Private mobile radio systems
 - c. Trunked mobile radio systems
 - d. Fixed wireless access systems

2. A *station licence* which authorises the licensee to operate the specified station in accordance with specific technical parameters determined by the Authority, including: antenna characteristics, transmitter power, polarisation, frequency, modulation techniques etc. A station licence will be required in respect of the following systems:
 - a. Amateur stations
 - b. Maritime stations
 - (i) Ship stations
 - (ii) Coastal stations

- (iii) Radionavigation and radiolocation systems
- c. Satellite stations
 - (i) Earth stations
 - (ii) Very Small Aperture Terminals
 - (iii) Portable Satellite Communication Terminals
- d. Broadcasting stations
 - (i) TV transmission stations
 - (ii) Sound broadcast (radio) transmission stations
- e. General radiocommunication stations
 - (i) Point to point links
 - (ii) Point to multipoint links
 - (iii) Private mobile radio
 - (iv) Trunked mobile radio
- f. Aeronautical stations
 - (i) Aircraft stations
 - (ii) Aeronautical mobile ground stations
 - (iii) Radionavigation and radiolocation systems
 - (iv) Aeronautical stations
- g. Citizen Band (CB) stations
- h. Stations for special events
- i. Stations for test and development purposes

3. A *class licence* which authorises persons to use specific radiocommunication devices within specific technical and operational parameters, and will generally apply to systems for personal use. The Authority will determine the radio devices for which class licences will apply. These radio devices may include:

- a. Alarm Systems
- b. Radio transmitting computer peripherals
- c. Cordless telephones
- d. Radio frequency identification devices
- e. Family Radio Service (FRS) systems

- f. Wireless subscriber devices (mobile handsets, pagers etc.)

Policy statements on licence classifications:

1. The Authority shall grant radiocommunication licences within the following broad classifications:

- *Spectrum Licence*
- *Station Licence*
- *Class Licence*

2. The Authority shall publish a list of radio-transmitting equipment that requires authorisation by a class licence, and shall update this list as it deems necessary.

4.4 Structure of Licence Document

The Authority has prepared a modular form of radiocommunication licence, to match the modular concession, which sets out conditions of general application to all licensees, followed by conditions and spectrum authorisations specific to different types of radio communications networks and equipment. Accordingly, the following structure shall be adopted for licences to be granted by the Authority:

<p>Title of Licence</p> <p>(Private/ Public) Spectrum Licence or (Name of Station) Station Licence</p>
<p>Definitions</p>
<p>Section A: General Conditions applicable to all licences.</p>
<p>Section B: Conditions applicable to specific type of licence (spectrum, station or class)</p>
<p>Schedule A: Technical Specifications</p>
<p>Schedule B: Frequencies / Spectrum assigned to licensee</p>

Table 3 Structure of Licence Document

4.5 Geographic and Coverage Considerations

In order to encourage a broad range of service providers, the Authority’s authorisation framework caters for the provision of services at a *national* level, at a *territorial* level and at a *niche* level. This policy approach is also in keeping with the Government’s objective of increasing the country’s digital access index to one that is in line with developed nation status.

In the past, licences were granted to community broadcasters who targeted particular geographic areas (including Tobago). In those licences, the community was defined as the area within a specified radius from the transmitter site.

It is the intention of the Authority to encourage the build-out of all types of networks and services, including those to under-served communities. Incentives for service expansion by network operators and service providers, with a particular emphasis on encouraging service provision in under-served communities, will be detailed in the Universality Policy, which will include at a minimum:

- A reduction in the otherwise applicable Universal Service Obligation (USO);
- The ability to access the Universality Fund to help offset any large capital investments required;
- A temporary waiver or reduction of licence fees for the wireless parts of their networks in under-served communities.

Policy statements regarding geographic service areas:

1. A national network/ service provider is one whose service area includes 100% of the geographic area and/ or population of both Trinidad and Tobago.

2. A major territorial network/ service provider is one whose service area includes 100% of the geographic area and/ or population of the island of Trinidad.

3. A minor territorial network/ service provider is one whose service area includes 100% of the geographic area and/ or population of the island of Tobago.

4. A niche network/ service provider is one that provides its services to only under-served communities, or other specific groups of subscribers identified by the Authority, in either island of Trinidad or Tobago. Under-served communities may include rural communities, communities in topographically challenged areas and subscriber populations that have special needs, and shall be designated by the Authority as it deems appropriate. The Authority shall maintain and publish a list of subscriber communities that are recognised as appropriate for niche authorisation.

5. The Authority shall prescribe the roll out/ service area obligations of concessionaires in a manner consistent with the interests of all segments of the subscriber population to have access to services provided within a reasonable period of time. The Authority may require performance bonds as security for a concessionaire's roll out/ service area obligations, which will be set out in the concession.

6. The Authority's Spectrum Management Regulations shall prescribe the technical obligations of licensees to ensure that harmful interference is not generated by their radiocommunication equipment or systems where spectrum has been licensed on a geographically limited basis. These obligations will include, at a minimum, the maximum power level at the service boundary. The Authority will identify re-usable frequencies in the applicable spectrum plans.

Table 4 summarises the geographic categories that will be applicable to the different types of network-based and service-based concessions.

Concession Type	Applicable Geographic Categories
Domestic Fixed Networks	National Major Territorial Minor Territorial Niche
Domestic Mobile Networks	National
International Networks	N/A
Broadcasting Services	National Major Territorial Minor Territorial Niche
Telecommunications Services	As applicable to the network over which the service is provided; or as otherwise defined by the concession.

Table 4 Applicability of Geographic Categories to Concession Classifications

5 The Authorisation Process

The Act requires that all applications for concessions and licences be made to the Authority. The Authority has the authority to grant licences. Concessions are granted by the Minister, following evaluation of applications and recommendations by the Authority.

The Authority will consider the award of concessions and the relevant licences for:

- Existing public network operators and/ or service providers who may or may not have been regulated or licensed under the old regime; and
- New network operators and/ or service providers entering the public telecommunications and broadcasting sectors.

The authorisation method adopted by the Authority for recommending the award of concessions will be based on a number of factors, including:

- Potential number of applicants;
- Number of concessions to be granted based on the potential sustainability of network operators and/ or service providers in a given market; and
- The Government's economic and social objectives.

The authorisation method adopted by the Authority for spectrum and station licences will be based on a number of factors, including:

- Potential number of applicants;
- Number of licences to be granted based on spectrum availability;
- Type of service linked to the use of the spectrum; and
- Economic value of the resource.

The application procedures that will be applicable per concession/ licence category will be determined by the authorisation method adopted by the Authority for the respective category.

5.1 Methods of Authorisation

Table 5 below summarises the methods generally used for authorising telecommunications services, networks and resources on an international level, and the circumstances to which they may apply.

Authorisation Method	Description/ Advantages & Disadvantages	Applicable Circumstances
“First Come, First Served” (FCFS)	<p>Requires that legal, financial and technical requirements be satisfied.</p> <p>Licences or Concessions granted in the order that the applications are received, granted that requirements are satisfied.</p> <p><i>Advantages:</i></p> <ul style="list-style-type: none"> ◆ Simple and least burdensome of all methods. ◆ Fast, practical and inexpensive. ◆ Little subjectivity involved, therefore opportunity for favouritism is minimised. <p><i>Disadvantages:</i></p> <ul style="list-style-type: none"> ◆ Successful applicants may not be the entities that would most economically value the authorisation. 	<p>May be applicable when the number of qualified applicants is less than the number of concessions to be granted, or where there is not a high demand for spectrum.</p> <p>Not appropriate for competitive or economically desirable markets.</p>
Comparative Evaluation (or “Beauty Contest”)	<p>Involves an assessment of competitive applicants based on predetermined criteria and public policy objectives. Each criterion is weighted, and the</p>	<p>When demand for spectrum or other resources exceed the</p>

Authorisation Method	Description/ Advantages & Disadvantages	Applicable Circumstances
	<p>weightings made known to the applicants prior to selection. Applicants are selected based on their rank after evaluation.</p> <p>Criteria may include:</p> <ul style="list-style-type: none"> ◆ Proposed Business Plan (marketing strategy, proposed tariffs, etc.) ◆ Experience in the market (demonstration of an understanding of the market to be served) ◆ Ability to use spectrum efficiently (where applicable) ◆ Proposed service offerings (coverage, QOS) ◆ Technological capability ◆ Coverage targets ◆ Commercial feasibility ◆ Extent to which there is regional involvement ◆ Commitment to social objectives ◆ Financial backing <p><i>Advantages:</i></p> <ul style="list-style-type: none"> ◆ Ensures that the successful applicant will make best use of the opportunity: socially, financially and technically ◆ Keeps spectrum costs low compared to an auction ensuring lower service prices for consumers ◆ Enables policy makers to utilise subjective requirements in the evaluation process to 	<p>supply, or there is a limitation to the number of concessions to be granted.</p>

Authorisation Method	Description/ Advantages & Disadvantages	Applicable Circumstances
	<p>achieve social goals.</p> <p><i>Disadvantages:</i></p> <ul style="list-style-type: none"> ◆ Can be a slow and costly process if a proper mechanism is not put in place to deal with complex applications and the effort involved in fairly and objectively evaluating applications. ◆ Subjective, therefore may give rise to problems of transparency: regulator’s capacity to identify best proposal is limited, difficult to justify selection of best proposals, possibility of political or other interferences. This may be minimised in developing countries if experienced consultants are contracted to assist in drafting terms of references and selecting applicants. ◆ Costly. ◆ Successful applicants may not be able to fulfil the proposals made in applications. ◆ Does not provide a clear way of choosing between two applicants who are equal in quality. ◆ Applicants may propose systems that appear appealing or innovative but may not be well suited to the marketplace resulting in higher prices for consumers. 	
Lottery	<p>Involves a random selection from a pool of qualified applicants.</p> <p><i>Advantages:</i></p>	<p>May be used when there are a large number of applicants and licences</p>

Authorisation Method	Description/ Advantages & Disadvantages	Applicable Circumstances
	<ul style="list-style-type: none"> ◆ Fast, inexpensive and transparent. ◆ Fair for selecting among applicants of substantially equal opportunity. <p><i>Disadvantages:</i></p> <ul style="list-style-type: none"> ◆ Will not guarantee that the best service provider is awarded a licence/ concession. The regulator can minimise this by using a pre-qualification process, however, this adds to the time, complexity and cost of the process, negating the principal advantages of the lottery. 	<p>to be granted.</p> <p>Recommended that they are preceded by a comparative evaluation process to ensure technical and financial viability of applicants.</p>
Auction	<p>The regulator selects from qualified applicants based on their willingness and capability to pay for the spectrum resource.</p> <p>Can be open or closed single round auction or a multi-round auction that can be sequential or simultaneous</p> <p><i>Advantages:</i></p> <ul style="list-style-type: none"> ◆ Provides an efficient, transparent and objective means of awarding spectrum licences to bidders who most value the resource. ◆ Can be conducted quickly and efficiently. ◆ Provides information on economic value of resources. ◆ Excess revenues generated can be used by the government to fulfil universality and other social objectives. ◆ Discourages spectrum hoarding. <p><i>Disadvantages:</i></p>	<p>When demand for spectrum or other resources exceed the supply.</p> <p>When there is a limitation on concessions to be granted; and</p> <p>When the resource has high economic value.</p> <p>Recommended that they are preceded by a comparative evaluation process to ensure technical and financial viability of applicants.</p>

Authorisation Method	Description/ Advantages & Disadvantages	Applicable Circumstances
	<ul style="list-style-type: none"> ◆ Due to the high fees paid, it may be harder to roll out the network as quickly as proposed. ◆ Smaller market participants may be discouraged to enter the market. ◆ High costs may be passed on to the consumer, which can result in reduced service penetration. ◆ Governments can exploit the process for revenue purposes only, without taking into consideration the policy impacts. ◆ Auction designs can be quite complex depending on the nature of the award. An improper design can yield results that does not maximise economic benefits. 	
Hybrid	A mixture of one or more of the above.	The benefits of more than one of the above methods are required.

Table 5 Methods of Authorisation (Bogdan-Martin et al., 2004)

Policy statements on methods of authorisation:

1. The Authority will adopt a competitive selection process such as comparative evaluation, auction or any other method or combination of methods for recommending the award of concessions or the granting of licences, where it determines that there should be a limit to the number of providers in the market, or where it determines that based on its spectrum plans, the spectrum resources for the provision of those services are limited.

2. Where the Authority determines that there shall be no limit on the number of providers in a particular market category, or where the available spectrum resources exceed demand, a First-Come First Served award method will be adopted, subject to the applicant meeting the criteria set out by the Authority for the award of the relevant concession/ licence.

3. Regardless of the award method, the Authority shall develop the applicable evaluation criteria and associated weightings in a transparent and open manner, and shall ensure that applications are evaluated in a fair and objective manner and in accordance with the applicable criteria and weightings.

The criteria for recommending the award of concessions and for granting the associated spectrum or station licences *may* include, but may not be limited to:

- General company information;
- Operational and management plans;
- Technical proposals and network rollout plans where applicable;
- Proposed service offerings (where applicable);
- Evidence of relevant technical and engineering expertise;
- Evidence of commercial arrangements with existing concessionaires (applicable to resellers) and forecast capacity/ facility resource requirements;
- Financial viability;
- Risk assessment;

- Relevant telecommunications sector experience;
- Marketing strategies;
- Pricing strategies.

The criteria for granting spectrum and station licences not associated with the provision of a public telecommunications service may include, but may not be limited to:

- General applicant information;
- Technical proposals and/ or engineering plans;
- Financial viability;
- Ability to adequately maintain the radiocommunication system on an ongoing basis.

5.1.1 Review and Modification of Award Methods

The Authority may determine from time to time to adopt a different method to recommend the award of concessions, or grant licences, as the market changes and the demand for services or resources vary accordingly.

Policy statement on modification of award methods:

The Authority may alter the award method for licences and concessions based on changing market forces that affect the demand for services and resources.

5.1.2 Renewals and Treatment of Existing Network Operators and Service Providers

There are three categories of existing network operators, service providers and users of radio transmitting equipment for whom the Authority may recommend the award of concessions or to whom the Authority may grant licences, before their current transitional authorisations expire. These are:

1. Those who were not regulated under the Wireless Telegraphy Ordinance (e.g. Internet Service Providers (ISPs), International Call Centre/ Calling Card Operators (ICCs));
2. Those who were licensed under the Wireless Telegraphy Ordinance or Telephone Act (e.g. TSTT, cable TV providers; broadcasters; private/ closed-user group network operators); and
3. Those who were not licensed to operate but continued to do so.

The evaluation criteria for each of the above categories will be consistent with those outlined in Section 5.1 above, and on consideration of the following:

- Compliance with existing licence terms and conditions where applicable;
- Conformance of existing systems to the Authority's Spectrum Plans;
- The investments made by stakeholders;
- The technical and financial capacity of the licence holder to sustain its obligations over the proposed duration of the new concession/ licence; and
- The interests of existing subscribers or end-users.

The above criteria will also apply to Authority's consideration of renewals for concessions and licences. Section 31 of the Act prescribes that for the renewal of any concession granted for the first time under the Act, the Minister shall, on the recommendation of the Authority, renew that concession unless the concessionaire:

- failed to operate within the terms and conditions of the first concession;
 - failed to comply materially with any provisions of the Act or regulations;
- or
- failed to comply with any lawful direction of the Authority.

5.2 The Application Process for Concessions and Licences

The Act does not limit the mechanism to be used for applying for licences and concessions. Sections 21(2) and 36(2) require that the Authority prescribe the manner in which applications are submitted.

Application procedures will vary depending on the service or network to be provided, the band of spectrum to be utilised, and the award method adopted by the Authority for the particular classification.

The Authority shall develop and publish application procedures for concessions and licences. The Application Procedures for Licences and Concessions will address at minimum the following:

- the categories of services and networks for which concessions/ licences will be granted;
- information on where application forms can be collected;
- instructions on the manner in which applications should be completed, including the information and any accompanying materials to be provided by the applicant;
- application fees and the manner in which payments should be made;
- the time period within which the application will be processed by the Authority in accordance with the provisions of the Act;
- information on how to acquire the relevant policies, plans and regulations to inform applicants of the relevant requirements for the different service/ network/ spectrum categories;
- provision of updated or additional information;
- renewals;
- amendments;
- withdrawal of applications;
- cancellation of application process by the Authority;
- confidentiality; and

- conflict of interest.

5.3 Methods of Application for Concessions/ Licences

The Authority will adopt two methods for receiving applications from prospective concessionaires and licensees:

1. General Application; and
2. Response to a Request for Proposal.

5.3.1 General Application

In the cases where the Authority determines that a First Come First Served method will be used to recommend the award of a concession or grant a licence, a general application form will be available at the Authority's office.

The form will require the applicant to provide the information and materials to be used for evaluating the application. For concessions where the use of radio-transmitting equipment is required, the concession application form will indicate the relevant licence application form that should be attached.

5.3.2 Response to an Invitation by the Authority to Participate in a Competitive Selection Process

In the cases where competition is being introduced for the first time in highly profitable markets, where there is demand for spectrum or other resources that may be limited, or where there is a need to limit the entry of providers in a particular market, the Authority shall publicly issue requests for proposals (RFPs) to invite interested parties to participate in a competitive selection process for the relevant concession(s) and/ or licence(s).

The RFP issued by the Authority will include all specific instructions and details particular to the process to be adopted by the Authority for that concession/ licence, and the criteria and associated weightings to be used in the evaluation process.

5.4 Treatment of Class Licences

Policy statement on treatment of class licences:

Due to the nature of equipment that requires a class licence, the Authority shall adopt an authorisation process that imposes minimal burdens on itself and users of such equipment.

6 Equipment Certification and Standardisation

Under Sections 18(d) and 18(o) of the Act, the Authority is required to establish national telecommunications standards, and to test and certify telecommunications equipment, to ensure compliance with international standards and environmental health and safety standards, including electromagnetic radiation and emissions. Sections 32, 45 and 48 set out related powers and duties of the Authority.

For the purposes of Sections 18, 32, 45 and 48, the Authority will adopt internationally recognised standards in the development of “National Telecommunications and Broadcasting Standards”. These standards will be published on the website maintained by the Authority and may be modified as the Authority deems appropriate from time to time.

The Authority will also develop “Procedures for Certification of Telecommunications and Broadcasting Equipment” to be followed by all concessionaires and licensees.

The Authority will collaborate with the Trinidad and Tobago Bureau of Standards (TTBS), the Environmental Management Agency (EMA) and other relevant agencies in the development and maintenance of the “National Telecommunications and Broadcasting Standards”. The TTBS may be called on by the Authority to perform metrology and calibration functions on its behalf for the purposes of certifying telecommunications and broadcasting equipment.

The Authority will consult with the EMA in prescribing environmental, health and safety standards for electromagnetic radiation and emissions.

Policy statement on equipment standards and certification:

In exercising its powers and performing its duties under the Act, the Authority will adopt methods of setting standards and certifying equipment, which will include at a minimum:

- publishing criteria for certification and establishing standards for approval of telecommunications equipment;*
- identifying domestic or foreign organizations or testing facilities for approval of telecommunications equipment;*
- maintaining a register of certified or approved types of telecommunications equipment, criteria for certification and standards for approval; and*
- entering into mutual recognition agreements with authorities in other countries to provide for mutual recognition, certification and approval of telecommunications equipment.*

7 Terms and Conditions

Sections 22 to 26 of the Act prescribe terms and conditions that must be included in concessions, and Section 37 prescribes conditions that must be included in licences.

The Act also prescribes conditions with respect to interconnection, universal service, quality of service obligations, price regulation, consumer relations and other provisions for which policies and regulations are to be developed.

Accordingly, the authorisation framework includes terms and conditions contained in the specific concessions or licences, and regulations and procedures promulgated or recommended by the Authority from time to time. The Authority will require that a concessionaire or licensee comply with the terms and conditions of its concession or licence as well as any applicable regulations or procedures.

This policy describes many of the general terms and conditions that apply to both concessions and licences. The specific rights and obligations of the different types of licences will be addressed in the Spectrum Management Regulations. Table 6 outlines additional rights and obligations of concessionaires that are not addressed in this policy, but which are the subject of regulations or management plans that are under development by the Authority.

Description of Rights and Obligations of Concessionaires	Relevant Regulations/ Plans	Applicable Concession Types
Universality Obligations	Universality	Network-based Service-based
Quality of Service between Concessionaires	Quality of Service	Network-based Service-based
Consumer Specific Quality of Service and their rights and obligations	Consumer Rights and Protection; Complaint Handling Procedures; Quality of Service	Network-based Service-based
Spectrum Related Obligations	Spectrum Management Regulations and relevant Spectrum Plans	Network-based
Numbering (Obligations specific to central office codes, international mobile subscriber identifiers, etc)	Numbering Plan	Network-based
Commercial, Technical and Legal Rights and Obligations with respect to Interconnection	Interconnection, Quality of Service	Network-based Service-based
Obligations for Broadcasters	Broadcast Code	Network-based Service-based (only where broadcasting services are provided)
Pricing in markets where there is not effective competition	Pricing	Network-based Service-based
Collocation	Access to Facilities	Network-based
Requirements and Procedures for Equipment Certification and Standardisation	Equipment Certification Regulations	Network-based Service-based
Compliance and Enforcement	Compliance and Enforcement Regulations (includes Dispute Resolution Procedures)	Network-based Service-based
Dominance and other competition issues	Competition Policy	Network-based Service-based

Table 6 Additional Rights and Obligations applicable to Concessionaires

7.1 Fees for Concessions and Licences

Approaches to setting fees for licences have varied around the world and have primarily been based on the type of licence awarded and whether a scarce resource is being used. To ensure the efficient use of spectrum where it is used for providing services in highly profitable markets, regulators have taken the view that the economic value of the resource should be reflected by the fees paid for use of that resource. For licences where spectrum is not being used, fees have typically been based on some combination of the following:

- A percentage of gross revenues;
- An allocation of the regulator's administration costs.

Policy statement on the determination of fees:

In developing a fee structure for concessions and licences, the Authority will ensure that:

- *fees imposed on concessionaires and licensees do not create significant barriers to entry or impair competition;*
- *the financial viability and profitability of concessionaires and licensees are not jeopardised; and*
- *the efficient use of scarce resources is encouraged by imposing charges that reflect the economic value of those resources.*

7.1.1 **Concession Fees**

The concession fee structure developed by the Authority will include the following features:

- a fair and proportionate contribution towards the costs incurred by the Authority to administer all concessions over a period to be prescribed in the Fee Regulations;

- a charge for the right to provide public services, which will be based on a proportion of the net annual free cash flow of the provider in the relevant concession classification, as determined by the Authority.

The Authority's classification of concessions is service-neutral, such that a network provider is not limited in the types of services offered. The contribution to the administrative costs incurred by the Authority applicable to a particular concessionaire will be determined by:

- a proportion of the Authority's administrative costs; and
- the types of services provided by that concessionaire.

7.1.2 Licence Fees

As mentioned in Section 5, the method adopted for awarding a particular licence will depend on whether the availability of the resource is greater or less than the demand. Similarly, in setting fees for the use of spectrum the Authority will take into consideration the scarcity and commercial value of the resource.

In a competitive selection process, including where the auction method is adopted by the Authority, the licence fee shall be determined by the price set or voluntarily paid in the process.

A licence fee, where a competitive selection process does not set its value, shall be based on a relative contribution towards the costs incurred by the Authority in managing the spectrum resource. The contribution applicable to a particular licensee may be based on a combination of, but not limited to, any of the following:

- The proportion of the Authority's spectrum management costs (including spectrum monitoring costs to ensure compliance);
- The number of available channels for the licence classification;
- The number of channels utilised by the licensee;
- The channel bandwidth to be assigned;
- The geographic coverage of the station(s) to be licensed;

- The spectrum efficiency of the technology employed; or
- The exclusivity of use of the spectrum/ frequency to be licensed.

7.2 Periods for Concessions and Licences

The period of a concession or licence should balance the needs of a network operator or service provider to recoup investment, and the needs of the Government to ensure that the sector develops properly over the longer term. This balance suggests that the more capital invested by the operator or service provider, the longer the term of the associated concession and licence(s). Fair treatment will be afforded to all concessionaires and licensees based on the type of network, coverage, and investment made or required.

Table 7 shows the proposed periods for the different concession classes and the licences associated with them.

Concession Type	Proposed terms for concession and associated licences
Network-Based	10 to 20 years (depending on network and market characteristics)
Service-Based	5 to 10 years (depending on service and market characteristics)

Table 7 Proposed terms for concessions and associated licences

Where a licence is not associated with a concession, the period of the licence shall be determined by the type of radiocommunication licence and the application for which the licence is granted.

Policy statement on “use or lose” periods:

The Authority will prescribe an appropriate “use or lose” period for concessions and licences. Failure to operate a network or provide a service within the “use or lose” period or failure to comply with any terms and conditions of a concession / licence may result in the revocation of the concession/licence.

7.3 Renewals

The criteria to be adopted by the Authority for renewals are outlined in Section 5.1.2.

The Authority will prescribe a minimum period prior to the expiration of concessions and licences for which concessionaires and licensees must apply for the renewal of the existing concessions/ licences. This period will provide sufficient time for the Authority, and if necessary the Minister, to make a decision before the relevant authorisation expires. Such periods shall be prescribed in the statement of Application Procedures published by the Authority, and will be set in line with the relevant provisions of the Act.

If applicants fail to apply in a timely manner, they risk failure to have their concession and/or licence renewed before the expiration date. Operation of a network or provision of a service without a valid concession or licence will constitute an offence under the Act.

7.4 Amendments

The modular concession document prepared by the Authority makes possible addition of networks, network elements or services through the process of amending the appropriate schedule. The Authority will put in place an application procedure for this purpose. The extent of the evaluation required will depend upon the nature of the change or service extension being proposed.

At this time, the Authority will require amendments to network-based concessions for domestic fixed network operators and all service-based concessions, where the concessionaire wishes to provide additional telecommunications or broadcasting services that are otherwise permitted by the Authority. Operators of domestic mobile and international networks will be allowed to provide any service that can be provided on the network authorised by the respective concession without the need to make a formal application for an amendment to the Authority.

Where new networks are added to any existing concession, or where new services are added to service-based concessions and network-based concessions authorising domestic fixed networks, the concession fees and period may be adjusted to comply with the fees or periods otherwise applicable to the relevant networks or services. Other amendments will be considered on a case by case basis.

Amendments to licences will usually be required for changes in equipment or frequencies being used. In either case the same considerations as would apply to an initial grant of licence, including the suitability of the equipment and the availability of spectrum, will be evaluated by the Authority prior to making a decision.

7.5 Trading of Concessions and Licences, Change of Control, Disposal of Assets

Allowing network and service providers to trade concession and licence rights can result in public benefits, including the option for spectrum to be utilised by persons who value the resource more highly or who are capable of more efficient use. However, trading is not an end in itself. An unrestricted trading of rights could interfere with the overall management of the sector and create arbitrage and other market incentives not in the public interest. In addition, concession obligations associated with specific users, such as network roll-out requirements and public service broadcast commitments, must be adhered to, to ensure that public access to the services is retained.

The Authority may determine that certain licences may not be traded based on allocations in its spectrum plans. These may or may not include aeronautical and maritime spectrum allocations, emergency, health and safety allocations, blocks assigned to the national security services and other blocks that the Authority may deem appropriate.

Concessions and licences shall not be traded within the obligatory 'use or lose' period of the concession/ licence agreement.

Policy statement on transfers and similar transactions:

1. All concessionaires and licensees will require the prior approval of the Authority for any transfer of the concession/ licence, for any change of control of the concessionaire/ licensee and for any other form of agreement with a third party under which the third party would obtain any rights or privileges under the concession/ licence, and must be an entity that would have been appropriate to hold the concession or licence on first grant.

2. Where a concessionaire is determined by the Authority to be dominant in one or more markets for the provision of basic public telecommunications services⁶, the Authority will require that the concessionaire seek the approval of the Authority for the transfer or disposal of any component of its network/ service that would affect the provision of access to services in the relevant markets.

The requirement for approvals of network or service equipment does not apply where the transfer or disposal of network/ service components is in the ordinary course of the concessionaire's maintenance, replacement or upgrading of such network or service.

7.6 Transmitter Sites

In accordance with its objective to manage the national spectrum resource and act to avoid the production of, any harmful interference, or to eliminate such interference if it occurs, the Authority retains the right to oversee the sites of operation for any and all licensed spectrum users.

This oversight shall include the review of all radiotransmitting equipment installations. All licensees shall be required to provide updated records of all locations of licensed

⁶ See the Authority's draft Consumer Rights and Obligations Policy for the definition of basic telecommunications services.

transmitters, for all locations including primary or secondary/ repeater sites. This information should include:

- Latitude and Longitude of radiators;
- Height above ground level (AGL) and height above mean sea level (AMSL) of all radiators;
- Vertical and horizontal separation between transmitters/ receivers on structures with co-located systems; and
- Validation that the relevant health and safety precautions are met.

In addition, the Authority shall implement measures put in place by Government to minimise the negative effects of the placement of dedicated structures for public telecommunications networks and services. These measures will be designed to:

1. limit the number of such structures required by careful location planning and sharing arrangements;
2. ensure that where towers are necessary their location and/or design is such that the negative impact is minimal (for example use of stealth construction techniques and situating structures away from residential areas or areas of particular aesthetic value, such as national heritage sites and popular public areas);
3. afford the public an opportunity to raise objections to proposed sites, especially where they are in sensitive areas; and,
4. streamline and expedite the application processes, while ensuring that the operators or persons who build and place such structures are held to a high level of accountability.

The Town and Country Planning Division (TCPD) as the body responsible for planning approvals, and the Authority, will provide a system of approvals and monitoring which

will ensure that applications to obtain planning approval for the building of dedicated structures for telecommunications equipment will be determined in a manner that achieves the above objectives.

The basis of this system is the TCPD's "Planning Policy for Personal Wireless Service Facilities". An application to the TCPD for planning approval of the construction of any structure dedicated to the situation of telecommunications equipment will also require the approval of the Authority.

The Authority shall consider applications for such approval on the basis of the following:

1. Approval will only be given if the structure is guaranteed to be used by a holder of a concession for the operation of a public telecommunications network, or provision of a public telecommunications or broadcasting service, under the Act. Accordingly, applicants will need to produce to the Authority sufficient proof of such use, in a form acceptable to the Authority. Such proof must give sufficient control to the concessionaire in accordance with 2. below.
2. A concessionaire may only use dedicated structures which it owns or controls, or which are owned or controlled by another concessionaire. Such ownership or control may be achieved through lease arrangements. Such arrangements however must give sufficient control to the concessionaire in order to enable the Authority to give effect to the provisions of the Act, in particular sections 25 and 26. The Authority will consider, on a case by case basis, any lease arrangement between a concessionaire and a non-concessionaire, to determine whether the arrangement grants to the concessionaire sufficient control over the dedicated structure or the part being leased.
3. Structures for mobile cell sites must be constructed with sufficient capacity for collocation as specified in the relevant regulations, but in any event, for at least three operators, failing which approval will not be granted.
4. The location of proposed new sites will be considered in accordance with a Transmitter Site Inventory and a Generic Transmitter Site Map which will be

managed and maintained by the Authority on an ongoing basis. This will assist in ensuring the sharing of sites (collocation) by operators in cases where such sharing is possible without disrupting network efficiency or quality.

5. Structures built without the required approvals (TCPD and the Authority) will not be given retroactive approval. Any structure which has not, prior to construction, received all required approvals shall not be used by any concessionaire for the siting of telecommunications equipment.

7.7 Rights of Way

In addition to obtaining access to individual properties for the installation of telecommunications equipment or facilities, this term also refers to rights of access to streets, sidewalks, road allowances and other public property for the purpose of laying overhead and underground cables.

These 'rights' should be accompanied by rules for access, defining cost recovery or other payments, requirements for public safety and convenience, environmental impacts etc. The Authority is not responsible for granting nor is it empowered to grant such rights of way and therefore concessionaires and licensees will need to apply to the relevant Government body for permission. Generally, in respect of roads such rights are administered by either the Highways Division (for major highways and roads) or the Regional or City Corporation within which the roads are situated. Currently, the agencies which have various 'rights of way' include the Water and Sewerage Authority (WASA), the Trinidad and Tobago Electricity Commissions (TTEC), TSTT and CCTT.

The Authority will, however, seek to facilitate the obtaining of such rights by concessionaires and licensees to the extent truly needed and practicable. The Authority will also seek to provide a procedure for concessionaires and licensees to share information regarding any works being planned or undertaken so that other concessionaires and licensees can coordinate their works wherever possible in order to

minimise disruption, and the need for each concessionaire or licensee to obtain separate approvals.

7.8 Dominant Providers

Where the Authority considers it appropriate in the interest of the public of Trinidad and Tobago, it may place certain restrictions and additional obligations on concessionaires determined by the Authority to be dominant in one or more telecommunications or broadcasting markets. Such restrictions may include limits on the disposal of assets, or dealings with subsidiaries, in order to ensure that such power is not employed to limit, distort or adversely affect competition. Additional obligations may include additional elements of price regulation and more rigorous interconnection terms.

The Authority may determine that a concessionaire is dominant where, individually or jointly with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. The Authority shall take into account the following circumstances in any such determination:

- The relevant market;
- Technology and market trends, including ease of market entry;
- The market share of the concessionaire; and
- The power of the concessionaire to set and maintain prices.

The Authority will publish a Competition Policy providing further guidance on its determination of market dominance, including applicable criteria and processes.

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