



A Consultative Document

DRAFT

Radio Spectrum Regulations

June 3, 2005 TATT 2/1/1/1/6

Maintenance History				
Date	Change Details	Version		
31 March 2005	First Draft	0.1		
1 June 2005	Redraft by J Burns	0.2		
2 June 2005	Redraft by Project Team	0.3		

Table of Contents

T	ABLE OF CONTENTS3				
1	IN	TRODUCTION	4		
	1.1	RELEVANT LEGISLATION	5		
	1.2	OBJECTIVES	8		
	1.3	REVIEW CYCLE	9		
	1.4	THE CONSULTATION PROCESS			
	1.5	OTHER RELEVANT DOCUMENTATION			
2	DI	RAFT RADIO SPECTRUM REGULATIONS	11		
3	RF	EFERENCES	44		

1 Introduction

The Government of the Republic of Trinidad and Tobago (GoRTT) has, over the past few years, launched a series of initiatives which collectively seek to further develop and transform the national economy leading to "the development of an Information Society and the attainment of developed country status by Trinidad and Tobago by the year 2020".

One of the major initiatives undertaken was the development of a National Information and Communications Technology (NICT) Plan [1] in which several programs aimed at the development of the Information and Communications Technology (ICT) sector have been launched.

A key enabler of the NICT plan was the de-monopolization and liberalization of the telecommunications sector and the opening of the telecommunications market to competition in Trinidad and Tobago.

Another factor which contributed to the liberalization of the telecommunications sector was the fact that, within the General Agreement in Trade in Services (GATS) under the World Trade Organization, GoRTT had given the commitment to the opening of services in the telecommunications sector to competition by 2009.

In order to facilitate the objectives of the NICT Plan and the commitment to the WTO, it was necessary to establish the legal and regulatory framework by means of a Telecommunications Act which was passed in 2001. This led to the establishment of the Telecommunications Authority of Trinidad and Tobago, hereinafter referred to as "the Authority" or "TATT", on 1st July 2004.

Another factor which contributed to the liberalization of the telecommunications sector was the fact that, within the General Agreement in Trade in Services (GATS) under the

World Trade Organization, GoRTT had given the commitment to the opening of services in the telecommunications sector to competition by 2009 [3].

One of the first imperatives of the Authority was the development of the overall regulatory framework including the various telecommunications' policies and regulations required in order to establish the relevant regulations under the Telecommunications Act.

One such document is the Radio Spectrum Regulations which are essential in establishing the framework for the granting of access to the radio frequency spectrum for the provision of telecommunications services, both to the general public and for private use.

Under the Telecommunications Act of 2001, the Telecommunications Authority of Trinidad and Tobago (TATT) is mandated to manage the radio frequency spectrum in Trinidad and Tobago.

1.1 Relevant Legislation

The relevant Sections of the Telecommunications Act which were taken into consideration in the framing of the Spectrum Regulations are stated hereunder.

Section 18 (1) (i) of the Telecommunications Act 2001 which states:

"Subject to the provisions of this Act, the Authority may exercise such functions and powers as are imposed on it by this Act and in particular...

Plan, supervise, regulate and manage the use of the radio frequency spectrum, including-

- (i) the licensing and registration of radio frequencies and call signs to be used by all stations operating in Trinidad and Tobago or on any ship, aircraft or other vessel or satellite registered in Trinidad and Tobago;
- (ii) the allocation, assignment and reallocation or reassignment of frequency bands where necessary;"

Section 41 of the Act which states that:

- (1) The Authority shall regulate the use of the spectrum in order to promote the economic and orderly utilization of frequencies for the operation of all means of telecommunications and to recover the cost incurred in the management of the spectrum.
- (2) The Authority shall develop a spectrum plan in order to regulate the use of the spectrum.
- (3) The National Spectrum Plan shall be made available to the public in the manner prescribed by the Authority.
- (4) The National Spectrum Plan shall state how the spectrum shall be used and the procedures for licensing frequency bands.
- (5) The procedures referred to in subsection (4) may include, but are not limited to-
 - (a) procedures for licensing frequency bands by auction;
 - (b) procedures for licensing frequency bands by tender;
 - (c) procedures for licensing frequency bands at a fixed price; or
 - (d) procedures for licensing frequency bands on stated criteria.

Section 42 of the Act which states:

- (1) Subject to subsection (2), the Authority may, in accordance with the spectrum plan allocate and reallocate frequency bands.
- (2) In the allocation or assignment and reallocation or reassignment of frequency bands by the Authority priority shall be given to the needs of the State in respect of matters of national security.

Section 43 of the Act which states that:

"The Authority, in exercising the functions under Sections 36 to 42, shall take into account-

- a) the objects of the Act;
- b) the impact of the spectrum plan on existing and future use;
- c) the efficient use of the spectrum;
- d) the Convention;
- e) applicable international standards, conventions and other agreements; and
- f) any other relevant matters having regard to the circumstances of the case."

Section 78 of the Act which states that:

"The Minister, on the recommendation of the Authority, shall make such regulations, subject to negative resolution of Parliament, as may be required for the purposes of the Act, including regulations prescribing-....

- (a) application procedures in relation to concessions and licences;
- (b) fees payable to the Authority for or in relation to applications, concessions, licences or the provision of services provided by the Authority to any person;
- (c) procedures for the management of spectrum..."

1.2 Objectives

The primary objective of the Radio Spectrum Regulations is to provide a regulatory framework for the management of the radio frequency spectrum in order to:-

- ensure the effective liberalization of the telecommunications sector and the introduction of competition
- facilitate the provision of a wide range of telecommunications services for both public and private use
- support the telecommunications policy of the Government of the Republic of Trinidad and Tobago
- provide a responsive, effective and flexible approach to meeting the needs of users of spectrum
- make adequate provision for spectrum in respect of national security, law enforcement and emergency services
- derive an effective mechanism for the management of the spectrum in the era of converged technologies and telecommunications services
- promote the economic and orderly utilization of spectrum for the operation of all means of telecommunications
- allocate radio spectrum resources for the provision of telecommunications services in an effective and efficient manner
- recover the cost incurred in the management of spectrum and to realize an adequate economic benefit to the country for the use of spectrum resources
- provide an efficient, equitable and transparent system for the establishment of the fee regime for the use of spectrum, taking into account both the commercial and non-commercial use of spectrum
- encourage the use of efficient radiocommunications' technologies so that a wide range of services can be made available to the public at large
- honour the country's commitment to the World Trade Organization in respect of telecommunications services

- ensure that treaty obligations by the Government of the Republic of Trinidad and Tobago in respect of telecommunications are respected and
- promote the country's interest at regional and international for ain respect to the use of the radio frequency spectrum.

1.3 Review Cycle

This document will be modified as deemed necessary by the Authority in order to adapt to the needs of the telecommunications industry and to meet changing circumstances. When need for modification is identified, the Authority will announce its intention to review the document and any interested party or entity in the telecommunications sector or any appropriate industry forum may suggest changes to the document.

Questions or concerns regarding the maintenance of this document may be directed to the Authority via email at legal@tatt.org.tt.

1.4 The Consultation Process

The Authority will seek the views and opinions of the general public and other stakeholders regarding the proposals made in this document, in accordance with the Authority's *Procedures for Consultations in the Telecommunications Sector of Trinidad and Tobago* [4].

The draft regulations will be made available for public comments for a period to be prescribed by the Authority.

The finalized document will be submitted to the Minister for approval and promulgation in accordance with Section 78 of the Act.

1.5 Other Relevant Documentation

The Radio Spectrum Regulations are prescribed alongside other policies, plans and regulations prepared by the Authority including the following:-

- Policy on the Authorization of Telecommunications Networks and Services and Broadcasting Services in Trinidad and Tobago
- Spectrum Management Policy
- National Frequency Allocation Table
- Interconnection Policy
- Interconnection Regulations
- Quality of Service Policy
- Consumer Rights and Obligations
- Concession and Licensing Fee Regulations

2 Draft Radio Spectrum Regulations

Made pursuant to the Telecommunications Act, 2001

PART I PRELIMINARY

Citation

1. These Regulations may be cited as the Radio Spectrum Regulations 2005, hereinafter referred to as the "Regulations".

Interpretation

2. In these Regulations:

"Amateur Station" means a station in respect of which a licensed Amateur radio operator is authorised to use.

"authorised officer" means any officer authorised by the Authority to act on its behalf.

"class licence" means a class licence referred to in regulation 62.

"class licensee" means a person or company who is deemed to have been granted a class licence.

"radio spectrum" means the part of the spectrum in the range between 9 kHz and 3,000 GHz.

"spectrum licence" means an authorisation granted by the Authority to use one or more specific radio frequencies or frequency bands for the purpose(s) defined in the licence.

"station licence" means an authorisation issued by the Authority to operate one or more specific radio stations in accordance with specific parameters specified in the licence.

3. Save as otherwise specified above, words and expressions used shall have the meaning given in the Act.

PART II GENERAL OBLIGATIONS

National Spectrum Plan

- 4. (1) The Authority shall prepare in accordance with section 41 of the Act a national spectrum plan and shall publish it for information in any form as it considers appropriate.
 - (2) The National Spectrum Plan shall
 - (a) include a Frequency Allocation Table (FAT) which will divide into such number of radio frequency bands as the Authority considers appropriate, so much of the radio spectrum, as the Authority considers necessary for the purpose of facilitating radiocommunication;
 - (b) include spectrum utilisation plans which specify the intended purpose or purposes for which each radio frequency band may be used;
 - (c) state the procedures for licensing radiocommunication services in the various frequency bands;
 - (d) have regard to any agreement, treaty or convention between the Government of the Republic of Trinidad and Tobago (GoRTT) and any other country or international organisation, in relation to the management, regulation and utilisation of the radio spectrum.

Spectrum Utilisation Plans

- 5. (1) The Authority may prepare and publish for information Spectrum Utilisation Plans in any form as it considers appropriate relating to one or more radio frequency bands.
 - (2) Spectrum Utilisation Plans shall
 - (a) be consistent with the use of the radio frequency bands as specified in the FAT;
 - (b) conform with any applicable radio frequency band allocation plans made pursuant to any agreement, treaty or convention which is binding on the GoRTT; and
 - (c) specify the purpose(s) for which the radio frequency band(s) may be used.
 - (3) A channel plan for various bands of a spectrum utilisation plan may in some cases be developed.
- 6. The Authority may amend or revoke any part of the National Spectrum Plan, in whole or in part and will endeavour to provide adequate notice of such amendments to affected users in order to ensure minimum disruption of services.

Assignment of Radio Spectrum

- 7. (1) The Authority may determine that any specified part of the radio spectrum shall be assigned, on an exclusive or shared basis, for use by persons by the grant of licence, subject to such conditions as the Authority considers appropriate.
 - (2) Subject to this, the Authority may, upon payment of fees determined by the Authority, grant any person the right to use any specified part of the radio spectrum referred to in subsection (1) for such a period as it may specify.
 - (3) The Authority may also determine that any specified part of the radio spectrum shall be made available for use under a class licence, whereby users may for the duration of the class licence access the spectrum without the need for an individual licence, subject to compliance at all times with the terms and conditions of the class licence.
 - (4) Where the Authority considers it appropriate, users operating under a class licence may be required to provide the Authority with details of the stations operating under the licence, in accordance with the conditions specified in the licence, and the Authority may levy a charge in order to recover the costs involved.
- 8. The procedure for assigning radio spectrum, the conditions for participating in the assignment of radio spectrum and the fees payable for the use of radio spectrum shall be determined by the Authority on a competitive or non-competitive basis and, without limiting the methods which may be used, may include one or a combination of the following methods:
 - i. procedures for licensing frequency bands by auction;
 - ii. procedures for licensing frequency bands by tender;
 - iii. procedures for licensing frequency bands at a fixed price; or
 - iv. procedures for licensing frequency bands based on stated criteria.

The Authority may decide not to grant a licence for the use of any spectrum unless the applicant meets such requirements as the Authority may determine.

Eligibility Criteria for grant of a Licence

9. Individual licences to use radio spectrum shall only be granted to persons who are residents of the Republic of Trinidad & Tobago or to companies registered in the Republic of Trinidad & Tobago.

Conditions of a Licence

- 10. A licence granted by the Authority shall be subject to such conditions as the Authority considers appropriate, which may include
 - i. Conditions regarding the use of the frequency or frequencies so licensed;
 - ii. The expiration and renewal of the licence;
 - iii. The circumstances under which the licence may be amended, e.g. *force majeure*, national security, changes in national legislation or implementation of international obligations;
 - iv. Type of emission, power and other technical and operational requirements for the radiocommunication service, for the avoidance of harmful interference and for the limitation of exposure of the general public to electromagnetic fields. These may include but are not limited to:
 - 1. conditions specifying the maximum permitted level of radio emission that may be caused by operation of a station or network under the licence;
 - 2. conditions specifying the location(s) at which operation of a station is authorised
 - 3. the geographic coverage area within which operation of a station or network is authorised;
 - 4. conditions specifying the maximum permitted level of radio emission, outside the coverage area referred to in paragraph (d)(iii), that may be caused by the operation of the station

or network;

- v. conditions specifying the frequency of the radio spectrum in which operation of a station or network is authorised;
- vi. the bandwidth or frequency range for which the licence authorises use;
- vii. conditions specifying the periods during which operation of a station or network is authorised;
- viii. conditions specifying that the person granted the authorisation to use the spectrum and persons authorised by that person to operate a station or network shall comply with the terms and conditions of the licence and the directions of the Authority;
 - ix. conditions requiring the relevant fees for the use of the spectrum as determined by the Authority to be paid to the Authority by the due date;
 - x. conditions requiring the person granted the licence to comply with the directions of the Authority concerning the use of the spectrum;
 - xi. designation of the service or type of network or technical parameters for which the licence has been granted;
- xii. conditions relating to the date by which the licensed service must commence;
- xiii. conditions relating to the transfer of rights under the licence to other parties;
- xiv. any commitments that arise as a result of a selection process;
- xv. conditions relating to minimum coverage requirements;
- xvi. obligations arising from any relevant international agreements relating to the licensed radio spectrum; and

any other conditions as the Authority considers appropriate in accordance with the Act.

Spectrum sharing	11. No person granted a licence may authorise another person to use the assigned spectrum, without the express permission of the Authority.
Transfer of licence	12. Any person granted a licence for use of spectrum shall require the approval of the Authority for any transfer of the licence or for any change of control of the licensed radiocommunication service or for any other form of agreement with a third party under which the third party would obtain any rights or privileges under the licence.

Amendment of licence

- 13. (1) Subject to this regulation, the Authority may amend any condition of any licence as it deems appropriate/necessary and subject to the following conditions:
 - (2) This regulation shall not apply to a resumption of any right to use spectrum under sections 14 or 15.
 - (3) Before varying the conditions of any licence under this regulation, the Authority shall give notice, in writing, to the licensee
 - i. stating that it proposes to make the amendments in the manner as specified in the notice; and
 - ii. specifying the time (not being less than 30 days from the date of the notice) within which written representations with respect to the proposed amendment may be made.
 - (4) Upon receipt of any written representation referred to in subsection (3), the Authority shall consider the representation and may
 - (a) reject the representation; or
 - (b) amend the licence in accordance with the representation, or in any manner as the Authority considers appropriate,
 - and, in either event, the Authority shall issue a direction in writing to the person granted the licence requiring that effect be given to the proposed variation specified in the notice or to the variation as amended by the Authority within a reasonable time and providing reasons for the Authority's decision.
 - (5) Any person aggrieved by the decision of the Authority under subsection 4 may, within 14 days of the date of the direction, appeal to the Authority in accordance with Section 83 of the Act.
 - (6) The Authority shall not enforce its decision
 - (a) during the period referred to in subsection 5; and
 - (b) whilst the appeal is under consideration by the Authority.
 - (7) If no written representation is received by the Authority within the time specified in subsection 3 (b) or if any

- written representation made under subsection 3 is withdrawn, the Authority may forthwith carry out the amendment as specified in the notice given under that subsection.
- (8) Notwithstanding subsections 3 to 7, the Authority may with the agreement of the licensee vary the conditions of any licence in such a manner as may be agreed.
- 14. Any request for an amendment to the licence by the licensee must be submitted to the Authority in writing. The Authority may at its discretion agree to the requested amendment in whole or in part, or may decline the request. The decision of the Authority in this regard will be final.

Suspension or cancellation of licence

- 15. (1) The Authority may suspend or cancel any licence, or a part thereof, if the Authority is satisfied that
 - i. the licence was obtained by fraud or misrepresentation; or
 - ii. the licensee, is contravening, or has contravened—
 - 1. any of the provisions of the Act or these Regulations;
 - 2. any condition of the licence; or
 - 3. any direction given to the person by the Authority under the Act or these Regulations.
 - (2) The Authority, before suspending or cancelling any licence, shall give to the licensee, notice in writing of its intention to do so and shall in such notice call upon the licensee to show cause within such time as may be specified in the notice as to why the licence under consideration should not be suspended or cancelled.
 - (3) If the licensee to whom a notice has been given under subsection (2)
 - (a) fails to show cause within the period of time given to them to do so or such extended period as the Authority may allow; or
 - (b) fails to show sufficient cause,

the Authority shall give notice in writing to that person of the date from which the suspension or cancellation of the licence under consideration, as the case may be, is to take effect.

Part III

REQUIREMENT FOR LICENSING

Requirement for licence

16. (1) No person shall-

- i. establish, operate or use a radiocommunication service;
- ii. install, operate or use any radio transmitting equipment; or
- iii. establish operate or use any radiocommunication service on board

any ship, aircraft or other vessel in the territorial waters of Trinidad and Tobago, other than a ship of war or a military aircraft or satellite registered in Trinidad and Tobago,

without a radiocommunications licence granted by the Authority.

- (2) Every application for, and renewal of, a licence shall be made in accordance with the application procedures for Applying for Concessions and Licences, as published by the Authority from time to time.
- (3) A licence shall be valid for any period as the Authority may determine unless cancelled or suspended in accordance with the provisions of the Act and shall be subject to such terms and conditions, restrictions and limitations as the Authority may determine.

The conditions of any licence imposed under these regulations shall be in addition to and not in derogation of any condition imposed and specified by the Authority in the licence under section 36 of the Act.

17. The grant of any licence referred to in these Regulations does not exempt the licensee from obtaining any other approval, permit, licence or other authorisation required by law for or in connection with the possession, establishment, installation maintenance, provision or operation of any radiocommunication service or transmitting device.

Types of Radiocommunication Licence

- 18. The Authority may issue any of the following types of Radiocommunications licences;
 - (a) spectrum licence;
 - (b) station licence; or
 - (c) class licence.

19. Where it is:

- a) necessary for the avoidance of harmful interference or to ensure the effective functioning of radiocommunication services to limit the number of users that can access specific radio frequencies, or
- b) the spectrum is being used to provide a public telecommunications or broadcasting service. this shall be done either by means of a spectrum licence or a station licence.

In other cases a class licence may apply

- 20. Spectrum or station licences will be granted on a first come, first served basis or by competitive process, depending upon whether demand for the frequencies concerned exceeds supply.
- 21. (1) All spectrum and station licensees shall keep an up-to-date record of the radiocommunication equipment comprised in the licensed station(s) or network.
 - (2) The record referred to in subsection (2) shall—
 - (a) contain such information;
 - (b) be kept in such form; and
 - (c) be submitted to the Authority at such intervals,

as the Authority may, from time to time, require.

(3) The licensee shall, at all reasonable times, permit an authorised officer to inspect and make copies of any entry in the record.

Licence Fees	22. (1) A holder of a station licence or a spectrum licence shall	
pay the relevant licence fees, calculated in		
	with the Fee Regulations in force from time to time.	
	(2) Licence fees that remain unpaid after the due date shall attract interest at the rate specified in the licence from the due date until the date on which payment is	
	received by the Authority.	

Power of Authority to change radio frequency

23. The Authority may, at its discretion and where there are compelling reasons, change any radio frequency assigned to the licensee under the spectrum licence or station licence without paying compensation. In such circumstances, the Authority will endeavour to provide adequate notice to affected users in order to ensure minimum disruption of services.

Spectrum Licence

- 24. (1) A spectrum licence will be granted to users to operate radiocommunications specified systems within frequency band on a technology neutral basis i.e. no restrictions will be placed on the type of technology used. Flexibility will also be provided on the range of services which can be provided within the given frequency band. A spectrum licence will be made available generally for the offering of public closed or user group telecommunications or broadcasting services.
 - (2) A spectrum licence authorises the licensee to use the radio frequencies or frequency bands specified in the licence in accordance with the Act, these Regulations and the conditions of the licence.
 - (3) A spectrum licence shall authorise a licensee to—
 - (a) install and operate fixed or mobile telecommunications equipment which only operates in the spectrum granted in the licence.
 - (b) re-use any part of the assigned spectrum in their network.
 - (4) A spectrum licence shall only be granted where all relevant technical standards are met and any other requirements which the Authority may, from time to time, stipulate.
 - (5) A licensee operating under a spectrum licence shall keep an up-to-date record of the assignment of

frequency/frequencies including but not limited to:

- (a) all the telecommunications equipment, including the antennae, operated under the licence and the equipment specifications;
- (b) the coverage area,
- (c) the effective radiated power of the transmitter,
- (d) the transmitter location and height and
- (e) the International Telecommunications Union (ITU) emission designation.
- (6) The record referred to in subsection (5) shall be submitted to the Authority at such intervals as the Authority may, from time to time, require within seven (7) days of the request being made.
- (7) The use of the spectrum granted shall not cause interference with other licensed radiocommunications services.
- (8) The use of the spectrum shall be restricted to the coverage area determined by the Authority, where this is specified in the licence.

Station Licences

- 25. (1) station licence will apply where radiocommunication service requires the use of a specific location, technical standard, equipment and/or frequencies within a frequency band in order to achieve the purpose of the radiocommunication service or to facilitate co-existence with other radiocommunication Station licences will include but will not be services. limited to:
 - a. Aeronautical Station Licence;
 - b. Amateur Station Licence;
 - c. Broadcasting Station Licence;
 - d. General Radiocommunication Station Licence;
 - e. Satellite Station Licence;
 - f. Maritime Station Licence;
 - g. Citizens Band (CB) Station Licence
 - h. Special Event Licence;
 - i. Test and Development Licence
 - (2) A station licence authorises the licensee to operate the station(s) specified in the licence in accordance with the Act, these Regulations and the conditions of the licence.
 - (3) A radiocommunication service operating under a station licence shall not be changed or modified in respect of any of the particulars mentioned in the licence, including the radiocommunication equipment comprised therein, the operating radio frequencies and the location at which the station or network is installed, except with the prior approval of the Authority.

Aeronautical Station Licence

- 26. (1)An Aeronautical Station Licence shall only be granted by the Authority in respect of an aeronautical ground station, radiolocation or radionavigation system or a station on a civil aircraft registered in the Republic of Trinidad and Tobago.
 - (2) All equipment comprised in a station on board an

aircraft shall meet the applicable requirements of the International Civil Aviation Organisation (ICAO) and be acceptable to the Civil Aviation Authority of Trinidad and Tobago. The acceptance document issued to this effect shall accompany the application to the Authority for the Aeronautical station licence.

- (3) An Aeronautical Station licensee shall observe the provisions of these Regulations and any other local or international rules and regulations applicable to the station.
- (4) No station fitted in an aircraft shall be operated or used while such aircraft is at rest on land or on water in Trinidad and Tobago except—
 - (a) in times of emergency or distress;
 - (b) for communication and navigation purposes relating to air navigation;
 - (c) for the purpose of carrying out experimental tests with the written approval of and subject to such conditions as may be determined by the Authority; or
 - (d) for the purpose of carrying out functional tests on frequencies other than on international distress frequencies to determine the serviceability of the station.

Amateur Station Licence

- 27. (1) The Authority may grant the following classes of Amateur Station Licence to qualified or approved persons for the operation of radiocommunication equipment solely for pleasure and for the furtherance of radiocommunication techniques and not for pecuniary gain:
 - (a) General Class (authorised to transmit Morse code);
 - (b) Restricted Class (not authorised to use Morse code) and
 - (c) any other class of licence which the Authority considers appropriate.
 - (2) An Amateur Station Licence shall not authorise the

- licensee to allow use of the radiocommunication equipment by any other person not holding a valid licence.
- (3) The Authority may approve an Amateur Station as a fixed, portable or mobile station, subject to such conditions as the Authority may impose.
- 28. (1) Any application for an Amateur Station Licence by an applicant below the age of 18 shall be countersigned by the applicant's parent, guardian or by any other person approved by the Authority and that person shall be responsible for ensuring compliance with the licence conditions and these regulations until the licensee reaches the age of 18.
 - (2) An applicant for an Amateur Station Licence shall, unless exempted by the Authority
 - (a) have passed the Radio Amateur Examination set by the Authority or any other Body recognised by the Authority for this purpose; or
 - (b) be in possession of an Amateur Radio Certificate acceptable to the Authority
 - (c) must, in order to qualify for a general licence, provide evidence of proficiency in the use of Morse code.
 - (3) An Amateur Station licensee shall observe the following conditions:
 - (a) the station shall not be operated at any locations or in any geographic areas that are explicitly prohibited in the licence;
 - (b) the station shall in all cases be operated by the licensee
 - (c) the licensee shall ensure that no harmful interference to other radiocommunications services is caused by any equipment operated under the licence and shall immediately cease transmission if requested to do so by a representative of the Authority or other authorised person.

- (d) the licensee shall identify himself by the transmission of the call sign assigned to him by the Authority at the beginning and end of each communication and every five (5) minutes during any given communication;
- (e) the licensee shall obtain the approval of all relevant authorities before erecting any mast or antenna to be used in connection with the operation of the station; and
- (f) the licensee shall
 - (i) keep a log of all transmission periods showing the date and time of each period of transmission and the radio frequency and type of emission employed;
 - (ii) preserve the record of each entry made for one year; and
 - (iii) make the record mentioned in sub-paragraph (ii) available for inspection at all reasonable times by an authorised officer of the Authority
- 29. An Amateur Station Licence shall include, but may not be limited to, the following conditions:
 - (a) messages transmitted through an Amateur Station shall be in plain language and shall relate solely to the licensee's experiments or personal affairs (not being business affairs), or to the personal affairs of the person with whom the licensee is communicating;
 - (b) the Amateur Station shall not be used for transmitting news, advertisements, communications of a business or non-experimental character, messages for pecuniary reward or messages for or on behalf of a third party;
 - (c) except with the written permission of the Authority, no licensee of an Amateur Station shall call or transmit to any station other than an

Amateur Station;

- (d) messages may only be exchanged with another Amateur Station, except where prohibited by law; and
- (e) transmission shall not commence without listening in on the radio frequency to be used in order to ascertain that no interference is likely to be caused to any other station which may be functioning.
- (f) the licensee may not make use of encryption devices or equipment in the operation or use of the licensed station.
- (g) It is a condition of every Amateur Station Licence that the licensee shall, if required by the Authority by notice in writing, transmit any message provided by the Authority by means of his licensed Amateur Station

Broadcast Station Licence

- 30. The Authority shall grant Broadcast Station Licences for the operation of—
 - (a) Radio; and
 - (b) Television;

to any party that is granted a concession to provide the respective broadcasting service.

- 31. Each Broadcast Station licensee must comply with the Broadcasting Code and failing to do so may result in a revocation of the said licence.
- 32. (1) When an applicant is granted a Broadcast station licence, prior to broadcasting to the public, they must inform the Authority in writing, of the exact date that they intend to go live, at least fourteen (14) days prior to the expected date.
 - (2) Subject to subsection (1) a licensee shall notify the Authority, in writing if they do not begin broadcasting on the intended date within seven (7) days of the intended date.

- 33. (1) A licensee shall inform the Authority if they intend to cease their broadcast for a period of time as indicated by the Authority.
 - (2) The licensee shall also give their reasons for ceasing their broadcast, and shall not cease operations unless the reasons given are acceptable by the Authority.
 - (3) Subject to subsection (2), the Authority may revoke the said licence, after giving the licensee a reasonable period of time in which the broadcast service should be restarted.
- 34. (1) The licensee shall provide the Authority with a site map of their transmitters, the effective radiated power, the radiated pattern and any other information as determined by the Authority.
 - (2) The licensee shall keep an up-to-date record of the information stipulated in subsection 1 and shall make the record available to the Authority on paper or any other form as the Authority may determine, from time to time as the Authority may require.
- 35. The licensee shall not significantly change the location or any technical parameters of any transmitter without prior approval of the Authority.

General Radiocommunication Station Licence

- 36. The Authority may grant the following types of General Radiocommunication Station Licence—
 - (a) Point to Point fixed link
 - (b) Point to Multi-point fixed link
 - (c) Private mobile radio
 - (d) Trunked mobile radio
 - (e) Radio-navigation and radiolocation systems
 - (f) any other type of licence which the Authority considers appropriate.
- 37. The Authority may grant a General Radiocommunication Station Licence to successful applicants for the purpose of enabling radiocommunication.

38. It shall be a condition of every General Radiocommunication Station Licence that the licensee shall, if required by the Authority in the interest of the efficient use of radio spectrum or for any other reason, make use of existing radio transmission sites or share a radio frequency with other stations, subject to any condition which the Authority may impose.

Satellite Communication Station Licence

- 39. The Authority may grant the following classes of Satellite Communication Station Licences to enable the licensee to transmit, receive or transmit and receive messages by means of satellite communication for such purposes as may be authorised by the Authority:
 - i. [Satellite space station licence]
 - ii. Very Small Aperture Terminal (VSAT) Licence;
 - iii. Tracking, Telemetry and Command (TT&C) Earth Station Licence;
 - iv. Earth Station Licence; and
 - v. Portable Satellite Communication Terminal Licence.
- 40. It is a condition of every Satellite Communication Station Licence that the licensee
 - (a) must seek the approval of the Authority for access to any space segment and shall comply with the relevant rules, regulations and procedures imposed by the satellite operator for station access, booking and fees;
 - (b) may only use or work within the radio frequencies or radio frequency bands approved by the Authority for his/her or its use; and
 - (c) must not use any satellite communication equipment for the provision of a public telecommunications or broadcasting service, without having applied for, and been granted the appropriate concession by the Authority.
- 41. Unless exempted by the Authority, a Satellite

Communication Station licensee shall at all times comply with the provisions of the International Telecommunication Union and all regulations and recommendations annexed thereto or made thereunder as are applicable to Trinidad and Tobago.

Maritime Station Licence

- 42. A Maritime Station Licence shall be granted in respect of coastal maritime stations, Maritime Stations, maritime radionavigation or radiolocation systems or stations installed on a ship's lifeboats, where the ship is registered or licensed by the relevant authority in Trinidad and Tobago.
- 43. (1) A Maritime Station Licence may be granted by the Authority if—
 - (a) the ship on which the station is to be carried (referred to in this regulation as the ship) has a valid internationally recognised Safety Radio Certificate as required under the Safety Of Life At Sea (SOLAS) convention;
 - (b) the station is operated by an appropriate number and category of radio operators holding a Certificate of Competency granted by a locally recognised Authority or a competent foreign authority recognised by the Authority, except where the vessel is used solely or principally for pleasure purposes;
 - (c) the ship has an accounting authority acceptable to the Authority; and
 - (d) the ship complies with such other requirements as may be determined by the Authority from time to time.
 - (2) A person who is unable to furnish all the information required by the Authority in the application form for a Maritime Station Licence may, upon payment of the prescribed fee and upon satisfying such other requirements as may be determined by the Authority, be granted a Provisional Maritime Station Licence which shall be valid for such period and subject to such conditions as may be determined by the Authority.

- 44. A Maritime Station licensee shall
 - (a) provide on board the ship all documents either considered necessary by the Authority or required under the Spectrum Regulations for the efficient and effective operation of the station carried on board the ship; and
 - (b) comply with the working procedures set out in the Spectrum Regulations and with such other requirements as the Authority may determine.
- 45. A station on board a ship, whether licensed by the Authority or by a relevant foreign authority, may be used while the ship is within the territorial waters of Trinidad and Tobago, subject to compliance with International Maritime Organisation (IMO) and ITU regulations, for the purposes of—
 - (a) safety of navigation, life or property or for any other purposes that may be authorised by the Authority; and
 - (b) communication on such radio frequency bands as may be specifically authorised by the Authority, including internationally designated maritime frequencies, subject to such conditions as may be determined by the Authority, where the use of the station does not cause interference to the working of any other station or network licensed under these Regulations.

The Authority may at any time instruct a qualified radio surveyor to inspect the installation of a ship's radio and the qualifications of the operator when the ship is located in the territorial waters of Trinidad and Tobago, to verify compliance with IMO and ITU regulations.

Citizen's Band (CB) Station Licence

46. The Authority may grant a licence on application for the operation of Citizens Band (CB) radio equipment conforming to approved technical standards and subject to the maximum radiated power level stipulated by the Authority.

- 47. A CB Station Licence may only be granted to a person and shall not authorise the use of radiocommunication equipment by any other person not holding a valid licence.
- 48. A CB Station licensee shall observe the following conditions:
 - (a) the station shall not be operated at any locations or in any geographic areas that are explicitly prohibited in the licence;
 - (b) A CB Station Licence shall not authorise the licensee to allow use of radiocommunication equipment by any other person not holding a valid licence.
 - (c) the licensee shall ensure that no harmful interference to other radiocommunications services is caused by any equipment operated under the licence and shall immediately cease transmission if requested to do so by a representative of the Authority or other authorised person.
 - (d) the licensee shall obtain the approval of all relevant authorities before erecting any mast or antenna to be used in connection with the operation of the station;
 - (e) The licence should be kept at all times with the licensed equipment and made available on request to any authorised person.
- 49. A CB Station Licence shall include, but may not be limited to, the following conditions:

—

- (a) messages transmitted through a CB Station shall be in plain language;
- (b) the CB Station shall not be used for transmitting advertisements, music or other copyright material, messages for pecuniary reward.;
- (c) no licensee of a CB Station shall call or transmit

to any station other than a CB Station;

- (d) messages may only be exchanged with other CB Stations
- (e) transmission shall not commence without listening to the radio frequency to be used in order to ascertain that no interference is likely to be caused to any other station which may be functioning.
- (f) the licensee may not make use of encryption devices or equipment in the operation or use of the licensed station.
- (g) It is a condition of every CB Station Licence that the licensee shall, if required by the Authority by notice in writing, transmit any message provided by the Authority by means of his licensed CB Station

Special Event Station Licence

- 50. (1) The Authority may grant a Special Event Station Licence for the installation and operation of any special event station.
 - (2) For the purposes of paragraph (1), a "special event station" is a station not otherwise defined in these Regulations that is established exclusively for use in connection with a specific special event and upon such conditions as the Authority may specify.
- 51. The fee payable for such a licence shall be determined by the Authority on a case-by-case basis taking into account, the frequency band/bands required, the period of time for which the licence is required and the economic value of the spectrum, as determined by the Authority.
- 52. Before such a licence is granted, it shall be the responsibility of the applicant to monitor the assigned frequency band/bands for any potential interference and provide the results to the Authority.

Test and Development Licence

53. (1) The Authority may grant a Test and Development licence for the purpose of conducting tests or trials new

radiocommunication technologies or services.

- (2) Test and development licences may not be used to provide public telecommunication services on a commercial basis or to provide any service to the general public other than as authorised in the licence conditions.
- (3) A test and development licence shall confer no entitlement on the part of the licensee to any station or spectrum licence in the future.
- 54. The fee payable for such a licence shall be determined by the Authority on a case-by-case basis taking into account, the frequency band/bands required, the period of time for which the licence is required and the economic value of the spectrum, as determined by the Authority.
- 55. Before such a licence is granted, it shall be the responsibility of the applicant to monitor the assigned frequency band/bands for any potential interference and provide the results to the Authority.

Class Licences

- 56. (1) A class licence is an open authorisation for persons to use specific radiocommunications devices which are to be used within specific technical and operational parameters. This licensing regime will be applied to a variety of low power, short range, mass consumer market devices which utilise specific bands of spectrum on a shared basis.
 - (2) These devices will generally be for personal use.
 - (3) No protection from interference is provided under a class licence.
- 57. (1) A person who possesses or uses radiocommunication equipment that is defined within the scope of a class licence that is currently in force and who is operating the equipment fully in accordance with the conditions specified in the class licence shall be deemed to be licensed accordingly by the Authority and will not require an individual station or spectrum licence.
 - (2) A class licence shall be subject to the conditions specified by the Authority.

- (3) A class licence shall permit the operation without an individual licence of the following radiocommunication equipment:
 - (a) any terminal connected to a network operating under a spectrum licence and that can only communicate via the licensed network;
 - (b) low powered, short range transmission devices as specified by the Authority in the relevant class licence; and
 - (c) any other radiocommunication system that the Authority deems suitable for this type of licensing and is specified in the relevant class licence.

Where the Authority considers it appropriate, users operating under a class licence may be required to provide the Authority with details of the stations operating under the licence, in accordance with the conditions specified in the licence, and the Authority may levy a charge in order to recover the costs involved.

- 58. The Authority shall prescribe the manner in which such equipment licensed under a class licence shall operate.
- 59. The Authority shall maintain a list of all telecommunications equipment that require a class licence and shall make the list available to the public in a suitable manner.

Part IV DUTIES AND GENERAL OBLIGATIONS

Inspection of Radiocommunication Equipment 60. (1) It is a condition of every licence that the licensee shall permit or ensure that permission is granted to any authorised officer(s) of the Authority, upon production of proof of identity, to enter any building, premises, compound or other place, vehicle, vessel or aircraft where any radiocommunication service or transmitting device is

installed, or is being installed, to enable the officer(s) to inspect, examine or test any equipment comprised in the station or network, in order to ensure compliance with licence conditions or these regulations or any other legal requirement that may be applicable

(2) Where the owner or user of a radiocommunication service or transmitting device requests the Authority to inspect, for a second or subsequent time, any station or network licensed or to be licensed under these Regulations to verify that the station or network or any equipment comprised therein is designed, constructed, installed, established, maintained or operated in accordance with any of the provisions of the Act, these Regulations or any conditions of the licence, the Authority may impose a fee for the inspection.

Inspection of Licence

61. Any station or spectrum licensee shall permit any authorised officer(s) of the Authority or any police officer(s), upon production of proof of identity, to examine their licence, or if not immediately available, produce the licence at the office of the Authority within a period of seven (7) days.

Protection of Transmitted Information

- 62. (1) Except as may be provided by section 75 of the Act, no person shall intercept or acquaint himself with the contents of any radiocommunication other than those intended for reception by the general public, transmissions by licensed amateur operators transmissions a licensed private or from telecommunications network that the licensee intends to be received by the person concerned.
 - (2) Except as otherwise provided in these Regulations or by the conditions of a licence granted under these Regulations, every person having access to radiocommunication shall hold strictly secret all radiocommunication, other than those specified in paragraph (1), which may pass through his hands or come to his knowledge.
 - (3) Every person referred to in paragraph (2) shall not:
 - (a) directly or indirectly, disclose the contents of

the radiocommunication referred to in that paragraph except to a person entitled to become acquainted with the radiocommunication or to an authorised officer or to a court; or

- (b) make any other use of such radiocommunication.
- (4) No person having unauthorised access to radiocommunication shall print or publish or cause to be printed or published in any newspaper, pamphlet, book or document, any radiocommunication that may pass through his hands or come to his knowledge, whether such radiocommunication is for private or general reception.

Restrictions on Transmitted Information

- 63. No person shall operate or use any radiocommunication service for or in furtherance of any unlawful purpose.
- 64. (1) The transmission of signals other than for the purpose for which the licence is intended by a station or network is prohibited.
 - (2) No test, trial or practical transmission shall be permitted except in such circumstances as to preclude the possibility of interference with any other radiocommunication service.
 - (3) All tests, unless prior approval from the Authority has been obtained, shall be conducted on dummy load.
 - (4) No person shall transmit
 - (a) any message containing indecent, obscene or offensive language or other improper or illegal content:
 - (b) any message which interferes with the operation of any authorised station or network; or
 - (c) any message which, to his knowledge, is false or misleading or likely to prejudice the efficiency of any life-service or endanger the safety of any person or of a place or premises, vessel, aircraft or vehicle.
 - (5) A licensee shall ensure that his or its

radiocommunications service is operated and maintained in a manner which is safe and which does not impair or interfere with

- (a) any National Security communications; or
- (b) the efficient and convenient working or maintenance of any other station or network, or telecommunication system or service in Trinidad and Tobago authorised by the Authority under the Act or these Regulations.
- (6) A licensee shall cease operating his or its station or network and shall take any other immediate action which the Authority stipulates as soon as the licensee observes, or when the licensee has been informed by the Authority or any other competent authority, that the operation of the station or network causes harmful interference to other radiocommunication services.
- (7) The licensee shall, where so directed by the Authority in writing, cease to operate all or any of the equipment comprised in his or its station for such period or periods of time as may be required by the Authority for the purposes of investigation of interference to radiocommunication.
- 65. (1) The provisions of the International Telecommunication Convention under the ITU and the regulations currently in force thereunder shall, so far as they are applicable, apply to any station or network established or operated in Trinidad and Tobago and to any message transmitted or received by such station or network.
 - (2) The Authority may, in its discretion, waive the application of any of the provisions or regulations referred to in subsection 1 to any station, network or message.
- 66. Any owner or user of electrical, electronic or radiocommunication equipment, whether subject to licensing under these regulations or not, found to be causing or suspected of causing harmful interference to any authorised radiocommunication service shall permit an authorised officer to inspect said equipment in order to determine whether the interference is in fact caused by the

equipment.

- 67. (1) The Authority may, where requested by any person to:
 - (a) investigate, for the second or subsequent time, the cause of electrical or radiated interference or disturbance to telecommunication equipment, stations, networks or systems; or
 - (b) measure and compute the field strength of radiated electromagnetic energy of any electrical, electronic or radiocommunication equipment, charge a fee determined by the Authority per hour or part thereof for work done.
 - (2) Where the Authority undertakes to measure and compute the field strength of radiated electromagnetic energy under subsection 1, the Authority shall determine the measuring device to be used, the method by which and the conditions under which tests are to be conducted and the manner in which the field strength from readings afforded by the measuring device is computed.
- 68. (1) Where the Authority determines that interference or disturbance to telecommunication equipment, stations, networks or systems is or may be caused by any particular electrical, electronic or radiocommunication equipment, whether subject to licensing or not, the Authority may, by notice in writing, direct the owner or user of that electrical, electronic or radiocommunication equipment to do, at his or its own expense, any one or more of the following:
 - (a) take suitable measures to eliminate or reduce the interference or disturbance;
 - (b) remedy a fault in or the improper operation of the equipment;
 - (c) modify or alter the equipment; or
 - (d) disconnect the equipment.
 - (2) The Authority may require any action required to be taken under subsection 1 to be effected within such period of time as the Authority may determine having regard to the circumstances of each case.

- (3) In addition to any action the Authority may take under this regulation, the Authority may
 - (a) by notice in writing, prohibit the installation or use of that equipment unless and until the directions under subsections 1 and 2 are complied with; and
 - (b) where it considers it necessary, seal or remove the electrical, electronic or radiocommunication equipment or any part thereof referred to in subsection 1.

Made this day of 2005.

Chairman
Telecommunications Authority of
Trinidad and Tobago

Approved by the Minister this day of 2005.

Minister of Public Administration and Information

Passed by the House of Representatives this day of 2005.

Clerk of the House

Passed by the Senate this day of 2005.

Clerk of the Senate

3 References

- [1] National Information and Communications Technology Plan http://www.fastforward.tt
- [2] Telecommunications Act 2001 and Telecommunications Amendment Act of 2004
- [3] General Agreement in Trade in Services: Reference Paper and Schedule of Commitment by Trinidad and Tobago
- [4] Procedures for Public Consultations Telecommunications authority of Trinidad and Tobago http://www.tatt.org.tt