

Telecommunications Policy For The Turks And Caicos Islands

BACKGROUND

Globally, the demand for telecommunication services and the entities and technologies necessary to deliver those services has increased by extraordinary proportions over the past 5 years.

National development is now inextricably dependent upon the existence of a vibrant telecommunications industry, the establishment of modern telecommunications infrastructure and the satisfaction of the growing demand for affordable telecommunications services.

The Government of the Turks and Caicos Islands (TCI) is cognizant of the importance of telecommunications, the convergence and integration of communication networks and services, the explosive growth of the Internet and Electronic Commerce. Accordingly the Government has developed after extensive consultations the following telecommunications policy which is a blue print for the economic transformation of TCI through telecommunications. In its implementation, this policy will provide the requisite legal and regulatory framework as well as financial and social incentives, which will ensure that the people of TCI are active participants in the Global Village and reap the full rewards of globalisation.

VISION

Every citizen of TCI will have at affordable prices access to:

- *the Information Superhighway; and*
- *a wide variety of telecommunication services,*

Small enterprises will multiple exponentially through active participation in Electronic Commerce.

The national economy will achieve unprecedented growth through increasing employment and revenue inflows directly attributable to a vibrant telecommunications industry

POLICY OBJECTIVES

- 1) Telecommunications is to act as a catalyst for economic growth and development
- 2) The people of TCI are to have access to and become active participants in the global communications network.
- 3) A vibrant communications industry is to be developed within TCI that will provide mass employment opportunities and ensure that TCI benefits from the converging areas of telecommunications, broadcasting and information technology
- 4) A cadre of professionals is to be trained to provide the leadership and guidance in an expanding and diversified communications industry
- 5) Regional support for policies that are beneficial to small island states will be encouraged.
- 6) An independent telecommunications regulatory authority is to be created that will be mandated to regulate the telecommunications sector in a transparent, non-discriminatory and accountable manner and facilitate effective competition.
- 7) Information and communication technologies are to be used to achieve and enhance social objectives in education, health and national security.

GOVERNMENT COMMITMENT

The Government commits to the realization within 3 years of its vision of a TCI transformed by telecommunications through the expeditious implementation of this telecommunications policy.

The Government invites all the people of TCI to embrace this policy to ensure that TCI is a major beneficiary of the development occurring globally attributable to advances in information and communication technologies.

EXECUTIVE SUMMARY

OF PLAN OF ACTION

1. Telecommunications is to be regulated by an independent regulatory authority, that will operate in a transparent, accountable and non-discriminatory manner. The Regulator will be mandated to facilitate effective competition.
2. The licences issued to the incumbent Public Telephone Company (PTC) will be renegotiated to enable the introduction of full competition at the earliest possible time.
3. The laws relating to telecommunications will be modernised to facilitate competition and encourage the development of the information and communication industry.
4. A modern Universal Service policy will be implemented to ensure timely access to basic telecommunication services by all households, schools, libraries and hospitals.

5. A rate rebalancing strategy will be formulated to minimise the effects of falling accounting rates.
6. Interconnection will be mandated and access to public networks enabled in a fair and non-discriminatory manner, with recourse to the Regulator in cases of dispute.
7. Spectrum management and numbering administration will be carried out to ensure that these common telecommunications resources are exploited for the benefit of all the people of TCI.
8. The Government, will address convergence issues and develop a regulatory framework that fosters the safe use of the Internet and protects intellectual property in a digital environment.
9. The Government will develop an electronic commerce policy and regulatory framework to encourage the further growth of its off shore financial institutions and enable small and medium size enterprises to participate fully in electronic commerce.
10. Appropriate and adequate representation will be made internationally to safeguard the telecommunications interests of TCI.

TELECOMMUNICATIONS POLICY:

FRAMEWORK

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PLAN OF ACTION

1. REGULATING TELECOMMUNICATIONS

The Independent Regulator

Globally, an environment now exists in which competition in telecommunication services within a modern regulatory and policy framework has proven to be beneficial in developing and developed countries around the world. Undoubtedly, the introduction of competition in TCI will enhance consumer welfare and economic development.

The existence of exclusive telecommunications licences for several years will therefore necessitate negotiation and a movement from monopoly to competition on a phased basis. To oversee the transition, promote competition and protect consumer welfare the Government will follow international trends and establish an independent telecommunications regulator.

The Regulator will be sufficiently empowered to detect, prevent and curtail anti-competitive practices as well as ensure that the dominant telecommunications operator does not abuse its dominant position.

The Regulator will have responsibilities relating to licensing, tariffs, interconnection, technical standards and service quality.

2. TELECOMMUNICATIONS LEGISLATION

The laws relating to telecommunications will be modernised in conformity with this policy document to provide a legislative framework which addresses critical telecommunication issues such as :

- Licensing of telecommunication services and equipment
- Creation of an Independent regulator
- Universal Service
- Interconnection
- Spectrum Management
- Numbering
- Quality of Service Standards
- Consumer Protection

Stiff penalties will be introduced for breaches of the new legislation.

3. UNIVERSAL SERVICE

Background

One of the central points of modern telecommunications regulation is to ensure that telecommunication services are provided efficiently and that they are available widely at affordable prices.

Universal service may be described as a telephone in every household. The incumbent Public Telephone Company (PTC) has had the responsibility for ensuring that universal service is achieved. The PTC consistent with international trends has traditionally, at its sole discretion, set the targets for number of lines to be introduced per year and where these telephone lines are to be deployed. Until now the Government has not played an active role in this area. However, in this new globally competitive environment, universal service can no longer be left to the PTC to determine, the responsibility now rests with the Regulator in conjunction with the Government.

Towards a Modern Universal Service Policy

In countries moving towards the creation of a liberalized and competitive telecommunications market like TCI, the aim of more effective competition is seen as not only improving service levels and increasing choice, but also the stimulation of innovation and the development of new services, which respond to user needs. These aims are seen as complementary.

In that sense the guarantee of universal service is a means of extending market benefits to all and not something to inhibit the development of effective competition or to replace market mechanisms for innovation.

The Government with the implementation of this policy will ensure that basic telecommunications services are affordable, can be accessed by all the people of TCI and consumer rights are safeguarded.

Critical Information for the Creation of a Universal Service/Access Framework

The following information will be obtained:

- *Telephone Penetration Rates*
- *Penetration of Fixed and Cellular Subscribers per population*
- *Target Period for Network Connection and Supply Times*
- *Target Period for Fault Repair, Repair Times and Compensation Schemes*
- *Situation of low income or disabled users*

Access to Internet Services

The Government has determined that Internet access should form a part of basic telecommunication services and targets in particular Schools, hospitals libraries and Government offices. The policy will encourage the growth of access and usage levels and remove impediments.

4. RATE REBALANCING

Definition

Rate rebalancing is a change in the level of telephone prices, but not the overall structure (which is the subject of rate reviews). Economic efficiency is enhanced by rate levels that appropriately reflects the underlying structure of costs.

The Traditional International Accounting Rate System

Historically telephone service around the world have been priced so that local rates tend to be less than the true economic cost, while international rates far exceed the true economic cost. The changing international environment¹ and the rapid pace of technology forcing major price reductions has made it uneconomical to sustain this methodology of rate setting. Consequently companies and countries like TCI are now re-examining their tariff structures and levels. The vision of accessibility and affordability of telecommunication services however does not make increasing local rates and dropping international rates an acceptable solution.

¹ The Regulator for US telecommunications carriers, the Federal Communications Commission as unilaterally precipitated a change in the Accounting Rate System

Reform of the International Accounting Rate System

Internationally there is increasing pressure to achieve rate rebalancing due to the reduction in accounting rates, which govern the payments between operators on international calls. The reduction in accounting rates limits the extent to which the incumbent public telecommunications carrier will be able to continue to subsidize domestic telephone rates. Accordingly, the Government is carefully monitoring the reform of the international accounting rate system and a rate rebalancing strategy has been developed.

Rebalancing Strategy: The Basis

- The present rate of return enjoyed by the incumbent is not sustainable and must be lowered.
- The price of inter-island calls must be reduced. Currently, the price of a call between Grand Turk and Providenciales exceeds the price of a call between USA and Sweden by almost 5 times.
- The price of international calls must continue to fall.
- A phased approach to the level and structure of tariffs must be undertaken while ensuring to Universal Service.
- The inefficiencies of the incumbent must not be allowed to be passed on to the consumer.

Rebalancing Strategy: Implementation

Step 1

A costing system that can measure subsidies will be developed.

Step 2

The flow of these subsidies will be determined and quantified.

Step 3

Address the following issues:

- Whether the incumbent remains profit neutral or revenue neutral.
- The pace for the introduction of competition
- The method of regulation whether rate of return or price -caps
- Affordability
- Current and future requirements for subsidies
- The fulfillment of social policies such as subsidies to emergency services, special rates for certain institutions, service for the disabled etc

Step 4

Establish a rate re-balancing plan that sets out how re-balancing will occur, the exact dollar amounts and the speed at which re-balancing will take place.

5. INTERCONNECTION

Definition

Interconnection can be defined as the physical and/or logical linking of suppliers providing public telecommunications transport networks or services in order to allow the users of one supplier to communicate with users, and to access services of another supplier. There are three types of Interconnection as defined by the International Telecommunications Union (ITU) are:

Type I connection or interconnection of equipment such as PABX or private networks to the public switched network.

Type II interconnection of local and Long Distance carriers to the public switched network

Type III interconnection of wireless networks to the public switched network.

Guidelines

- (I) The Government's policy objectives for development of TCI's telecommunications sector;
- (II) The role that telecommunications is expected to play as a support service to all sectors;
- (III) The commitments made by the government with respect to the licences held by the incumbent telecommunications operator; and
- (IV) The World Trade Organization (WTO) regulatory paper on telecommunications

The Objectives

- Achieve sustainable competition in the telecommunications sector.
- Facilitate expansion of the telecommunications sector through the entry of new providers for products and services.
- Safe guard against anti-competitive practices.
- Ensure that the terms and conditions of interconnection arrangements are based on principles elaborated by the WTO

Adopted WTO Principles of Interconnection

A Interconnection to be Ensured

Interconnection with the incumbent and therefore generally the major supplier will be ensured at any technically feasible point in the network.

Such interconnection is provided:

- I. Under non-discriminatory terms, conditions (including technical standards and specifications) and rates and of a quality no less favorable than that provided or its own like services or for like services of non-affiliated service suppliers or for its subsidiaries or other affiliates;

- II. In a timely fashion, on terms, conditions (including technical standards and specifications) and cost oriented rates that are transparent, reasonable, having regard to economic feasibility, and sufficiently unbundled so that the supplier need not pay for network components or facilities that it does not require for the service to be provided; and

- III. Upon request, at points in addition to the network termination points offered to the majority of users, subject to charges that reflects the cost of construction of necessary additional facilities.

B. Public availability of the procedures for interconnection negotiations

The procedures applicable for interconnection to a major supplier will be made publicly available.

C. Transparency of interconnection arrangements

It is ensured that a major supplier will make publicly available either its interconnection agreements or a reference interconnection offer.

D. Interconnection dispute settlement

A service supplier requesting interconnection with a major supplier will have recourse, either:

- (i) at any time or
- (ii) after a reasonable period of time which has been made publicly known to an independent domestic body, which may be a regulatory body, to resolve disputes regarding appropriate terms, conditions and rates for interconnection within a reasonable period of time, to the extent that these have not been established previously.

Strategy

The Government will develop and make available guidelines that should be used in the commercial negotiation of the terms and conditions of interconnection contracts between the entrant and the incumbent PTC. If an agreement cannot be reached, either of the parties will be able to refer the matter to an arbiter for resolution.

Regard will be had to the following:

1. **Non-discrimination.** To ensure fair competition, there should be non-discrimination in the charges for and quality of interconnection that the incumbent PTC offers to itself and to others.

2. **Fair terms and conditions.** Technical standards and specifications should be reasonable and appropriate points of interconnection should be made available. Charges should be cost oriented, and interconnection services should be sufficiently unbundled that the purchaser need not pay for components or facilities that it does not require.
3. **Inclusion of relevant elements in the charge.** In addition to the cost of provision of interconnection services, the Regulator may also take into account, as appropriate, the net cost to the PTC in providing Universal Service and requirements to provide free access to the emergency services, and constraints on the rebalancing of rates.
4. **Transparency.** Interconnection agreements or a reference interconnection offer by the incumbent PTC should be made publicly available, setting out the basis on which interconnection will be provided. All elements of the charges to be paid for interconnection should be explicitly identified, and sufficient information should be made available to justify the charges, within the reasonable bounds of commercial confidentiality.

6. SPECTRUM MANAGEMENT

Background

Wireless communications provide powerful tools for public safety, defense, business development, and entertainment. Fundamental to wireless communications is the radio frequency spectrum. The radio frequency spectrum is the invisible electronic highway that carries radio waves. It is a very valuable finite natural resource that must be carefully managed to ensure that it is exploited to the maximum benefit of the people of TCI.

Spectrum management, or radio spectrum management, is the process of providing for efficient use of the radio spectrum and the most important technique for attaining efficiency is controlling interference. Effective management of the spectrum resource is now critical to the success of modern economies.

Spectrum Management Techniques

Traditionally, spectrum management in TCI like elsewhere in the world, has been viewed as a system of frequency allocations, allotments, and assignments. In this system, the entire range of the useful spectrum is divided (in the frequency dimension) into blocks or bands of frequencies

called allocations. These frequency allocations determine the type of use allowed within the block or band of frequencies. For example, separate allocations are made for broadcasting, land mobile radio, point-to-point microwave, and amateur radio services.

These allocations are further subdivided into allotments. Broadly, the term refers to the subdivision of bands already allocated to a particular service for specific user and/or provider groups within that service. Within an allocation for the land mobile radio service, for example, allotments could be made for public cellular mobile telephone, specialized mobile radio ("closed user group"), and public safety services.

An assignment, on the other hand, is a grant of a licence for a specific party to operate a radio transmitter on a specific channel at a particular location under a specific set of conditions. The frequency or channel assignment is the final subdivision of the spectrum. Note that assignments may or may not be made on an exclusive basis. For example, because broadcast assignments are made on an exclusive basis, the licensee obtains some protection against interference from other users. On the other hand, certain types of private land mobile radio licenses are issued on a nonexclusive basis. In such cases, there is little or no protection against interference, and users must share the spectrum on an informal basis.

There is now unprecedented demand for the use of the spectrum due to the :

- desire to transmit a larger quantity and a greater variety of information;
- need for more diverse types of communications systems to meet specialized needs;
- falling costs and increased functionality of electronic equipment that make radio communications more attractive;
- rapid overall changes in the technology and the marketplace;
- desire to create competition with incumbent wireline and wireless providers;
- wider recognition of the potential value of radio licenses (for example, from the publicity surrounding the award of cellular radio licenses); and
- pressures to reduce, or at least contain, increases in the costs of administering the process.

The radio spectrum is therefore a very important economic resource which must be effectively managed and efficiently used. Modern Spectrum management requires:

- 1) The creation of a professional regulatory authority mandated to allocate and manage the spectrum;

- 2) Development and maintenance of a strategic legal and technical framework that ensures;
 - (i) the timely access to spectrum for new services and technologies; and
 - (ii) spectrum use which is economically and technically efficient manner; and
- 3) Consultations with the users of the spectrum and the wider public on the development of the strategic framework; and
- 4) Compliance with the ITU standards;

Core Objectives of TCI Spectrum Allocation

- 1) Administration and licensing of spectrum for commercial purposes, public safety services, aeronautical and maritime navigation services.
- 2) Identification of new services for specific bands that can be efficiently and effectively allocated using varying methodologies such as auctions.
- 3) Minimization of interference with the use of the spectrum and the

protection of the environment

7. NUMBERING

The Importance of Numbering

A key component to the emergence of the Information Society and the creation of the Global village is efficient telecommunication service. Such service is dependent on the efficient allocation of numbers which are a scarce resource. Numbers are used to identify Network Termination points and these points are used to:

- Connect Customer Premise Equipment (eg. telephone, fax machine, etc.)
- Provide access to Network Services.
- Interconnect with other private networks.

Number codes are important as they are used by Network Operators to:

- Route calls to the exact customer premise equipment.
- Associate prices with the type of service.
- Callers recognize links with the charges.
- Association with geographic locations.

Consequently an appropriate numbering policy is an essential element to facilitate the access to telecommunication services for all

business and its citizens. Numbering is the key enabler of

developments for both commercial and competitive factors for the telecommunications industry. A numbering policy should be based on defined political and social policies. These objectives should be driven by the need to provide a competitive environment and objectives resulting from a rapidly changing economic and technological environment.

The TCI numbering policy will take into account of the following issues:-

1. **Flexibility to meet future needs.** Increasing demand for numbers will arise from the introduction of new telecommunications services as well as the growth of existing services.
2. **Facilitation of effective competition.** All telecommunications providers will receive fair and non-discriminatory treatment in the allocation of numbers. Number portability will be introduced where appropriate.
3. **Cost effectiveness.** The development of the numbering plan will take account of the costs that may be imposed on consumers, operators and service providers.
4. **Provision of information to consumers.** Where possible, numbers will indicate meaningful information to callers, such

as the type of call and the price band.

Framework of the Numbering Policy

The Policy will address the:

- anticipated growth in demand for telecommunications services and coping with the rapidly changing telecoms marketplace
- demand of new and yet unknown services
- existing supply of numbers and provision for reasonable reserves,
- the facilitation of the move up the value-added chain from basic voice telephony to higher levels of service without needing a number change.

All new numbering arrangements will be required to support effective competition. The companies that have rights to the numbering resource should receive fair and equal treatment with respect to access and allocation to numbers. Additionally, number portability should be supported by any numbering arrangements. Branding of numbers by operators will be forbidden, as this can be an impediment to competition

and lead to customer confusion.

Operators should ensure that their numbering plans are compatible with standard conventions used in the industry to ensure compatibility among operators.

All changes in the numbering plan will be reasonable, with changes being justified and the management and development of the numbering plan will be cognizant of the cost to customers, operators and all service providers.

The numbering plan should ensure that there are sufficient numbers to meet customer's needs. Any changes that may occur with the numbering plan would be done in such a way that causes minimum disruption, costs and inconvenience for the customers.

The Numbering Administrator will be required to:

1. Create a numbering plan which makes available adequate numbers for all telecommunication services. The numbering plan should contain:
 - a. Designated codes and number ranges
 - b. Details of all allocations
 - c. Details of all reservations
 - d. Details of protected numbering capacity

e. Relationship with routing and charging

2. Allocate numbers in an objective, non-discriminatory, proportionate and transparent manner, and on the basis of individual applications by service providers.

3. Make available adequate numbering ranges for all publicly accessible telecommunication services, and facilitate number portability. Number portability is the transfer of a number from one operator to another which allows a customer to change operators while retaining their number, this removes the single most important barrier to competition.

4. Maintain an accurate database of status records

5. Prepare forecast of demand

6. Conserve capacity where necessary

7. Identify and solve potential shortages

8. Publish annual report on numbering

9. Periodic review and update of Plan

8. The Internet

The convergence of telecommunications, information technology and media services is resulting in a blurring of the distinctions between the forms of delivery used to carry different types of content. The Government intends to promote the use of the internet and electronic commerce, but is mindful of the potential dangers inherent in interactive media, such as abuse of privacy, infringement of copyright and computer hacking.

9. Digital Tourism

Information and communication technologies are now playing a pivotal role in engineering new, more flexible and quality driven tourism. The Government intends to maximise on TCI being an exceptional tourist attraction by facilitating the telecommunications needs of its tourists.

Hotels and small and medium size enterprises in the tourism sector will be encouraged to establish a presence on the internet and to engage in electronic business. Cybercentres will be developed in tourist areas.

By encouraging investment in information and communication technologies in tourism the Government intends to position TCI to effectively competing in the increasingly growing and competitive international tourist trade.

10) Regional Representation

Telecommunications is a truly global industry that thrives on competition and multilateral co-operation. For TCI to benefit from developments in telecommunications, it must actively participate in the formulation of telecommunication policy and regulations regionally.