



COMMONWEALTH OF THE BAHAMAS

**TELECOMMUNICATIONS
SECTOR POLICY**

**JULY, 2001
REVISED OCTOBER, 2002**

CONTENTS

PREFACE

1. INTRODUCTION	5
<i>Need for Policy.....</i>	<i>5</i>
<i>Duration of Policy.....</i>	<i>5</i>
2. GLOBAL TRENDS IN TELECOMMUNICATIONS.....	6
<i>Global Telecommunications Market.....</i>	<i>6</i>
<i>Innovation.....</i>	<i>6</i>
<i>Changing Perceptions.....</i>	<i>7</i>
<i>Pressures to Cut Costs and Increase Efficiency.....</i>	<i>7</i>
3. THE PRESENT POSITION OF TELECOMMUNICATIONS IN THE BAHAMAS	8
<i>Present Unsatisfactory Structure for Regulation and Competition.....</i>	<i>8</i>
<i>High Costs.....</i>	<i>8</i>
<i>Poor Quality of Service.....</i>	<i>9</i>
4. THE GOVERNMENT’S OBJECTIVES AND VISION FOR THE FUTURE OF TELECOMMUNICATIONS IN THE BAHAMAS	9
<i>Government’s Policy Objectives.....</i>	<i>9</i>
<i>Government’s Vision for Telecommunications in The Bahamas.....</i>	<i>10</i>
5. GOVERNMENT STRATEGY TO ACHIEVE THE OBJECTIVES AND VISION	11
<i>Sector Reform.....</i>	<i>11</i>
<i>Private Sector Participation.....</i>	<i>11</i>
<i>Liberalisation and Competition.....</i>	<i>12</i>
<i>Separation of Policy Making, Regulation and Service Provision.....</i>	<i>14</i>
6. OUTLINE OF THE NEW LEGISLATIVE FRAMEWORK.....	15
<i>The Telecommunications Act, 1999.....</i>	<i>15</i>
<i>The Public Utilities Commission (Amendment) Act, 1999</i>	<i>16</i>

	<i>Roles of the Minister and the Commission and the Structure of the Commission</i>	16
	<i>Transparency and Objectivity</i>	18
7.	OUTLINE OF THE NEW REGULATORY ENVIRONMENT	19
	<i>Licensing</i>	19
	<i>Modification of Licences</i>	20
	<i>Fees</i>	20
	<i>Spectrum Management and Radiocommunications</i>	20
	<i>Numbering</i>	21
	<i>Industry Technical Standards</i>	22
8.	OUTLINE OF CERTAIN REGULATORY FEATURES	22
	<i>Universal Service</i>	22
	<i>Tariffs</i>	24
	<i>Access</i>	24
	<i>Satellite Matters</i>	26
	<i>Customer Premises Equipment</i>	27
	<i>Internet</i>	28
	<i>Network Construction and Management Rights</i>	28
	<i>Quality of Service and Consumer Protection</i>	29
	<i>Cellular Mobile Telephony</i>	29

PREFACE

Section 5 (1) (a) of the Telecommunications Act, 1999, requires the Minister responsible for telecommunications to determine, after consultation with the Public Utilities Commission, the sector policy which shall be published in the Official Gazette.

This document has been prepared in accordance with that requirement and is now published in the Gazette.¹

The policy will apply until the expiration of a period of twenty-four (24) months from the date of completion of the sale of shares in BTC to a strategic investor (the Fixed Exclusivity Period for BTC specified later in this document).

The document:

- < outlines the importance to The Bahamas of a telecommunications sector which provides easy and economical access to state-of-the-art telecommunications for persons, businesses and government;
- < sets out the fundamental objectives which the privatisation of BTC and the modernisation and liberalisation of the telecommunications sector are intended to achieve;
- < sets out the policy framework for the newly privatised and liberalised telecommunications sector in The Bahamas;

¹In this policy document, all references to legislation are intended for information purposes, and not as interpretations of the law; interested parties are invited to consult the legislation .

- < briefly describes the main outlines of the new regulatory structure within which the telecommunications sector will operate; and
- < outlines some major regulatory features of the new telecommunications sector.

The document was discussed in draft form in a Public Forum² in Nassau in September 2000 and at a second Public Forum in Grand Bahama in October 2000. Each Forum was open to all interested parties and to the general public. This document takes account, where appropriate, of views expressed at each Forum and of any other representations received in relation to the draft.

While the initial draft was prepared before the April 2001, Summit of the Americas in Quebec, the Policy is consistent with the Final Declaration on Connecting the Americas, which deals with such issues as telecommunications and the Internet.

² On each occasion, the meetings were chaired by the Hon. Carl Bethel M.P. (then Minister of Economic Development) and the Hon. Zhivargo Laing M.P. (then Minister of State, Ministry of Education and Youth) who were accompanied by the Financial Secretary, the Permanent Secretary, Ministry of Economic Development, senior officials of the Ministry of Finance, the Chairman of the Public Utilities Commission, the President/Chief Executive Officer of The Bahamas Telecommunications Corporation, now BTC, (Nassau Forum) and other officials of the Corporation.

INTRODUCTION

Need for Policy

1.1 In the past decade, the telecommunications sector has experienced unprecedented growth. Telecommunications, in and of itself, has undergone a revolution, which has been brought on by technological changes, competitive forces, the privatisation of state monopolies and the emergence of new companies and consortia of global service providers.

1.2 The Government of The Bahamas (the Government) recognizes that the provision of a world-class telecommunications infrastructure is key to the rapid economic and social development of the country. It is critical not only for the transition to a digital economy and the development of electronic commerce, but also has widespread ramifications for the entire economy of the country. In accepting that a modernized telecommunications system is central to the economic development of the country, the Government also accepts that privatisation and liberalisation of telecommunications is a critical pre-condition for achieving the necessary objectives for this development.

1.3 Accordingly, it is vitally important that there be a comprehensive and forward-looking telecommunications policy, which creates an appropriate enabling framework. This document sets out the Government's future policy for the telecommunications sector in The Bahamas, and in doing so, is satisfying the requirements of Section 5 (1) (a) of the Telecommunications Act, 1999.

Duration of Policy

1.4 The characteristics of the telecommunications sector make it imperative for the policy to be reviewed regularly, thus, making the process of policy-making a dynamic one. Unless exceptional circumstances apply, the policy described in this document will apply until the expiration of a period of twenty-four (24) months from the date of completion of the sale of shares in BTC to a strategic investor, after which it will be reviewed.

GLOBAL TRENDS IN TELECOMMUNICATIONS

Global Telecommunications Market

2.1 Telecommunications are, today, considered to be the third largest sector of the global economy, behind only that of healthcare and banking. It is estimated that annual worldwide telecommunications equipment and service revenues will amount to approximately \$800 billion this year and will exceed \$1 trillion in the early years of this century. The telecommunications industry has made significant strides because market liberalisation, sector deregulation and new technology have combined to make communicating both cheaper and more efficient.

Innovation

2.2 Innovations in technology have led to the introduction of fibre optics, which significantly increases transmission capacity, the substitution of analogue switches by more efficient computer-controlled digital switches, the launch of a new generation of satellites, a new mass market for mobile telephones and pagers, and a surge in the range and the functionality of customer premises equipment. Services have proliferated and users now enjoy more effective data services, audiotext, videotext and network services such as call forwarding and conferencing. User demand for new services has soared.

2.3 Technical developments in fixed networks, television, cable networks, radio communications, cellular mobile phones and, above all, computers and the Internet, have enabled the convergence of computing, media and telecommunications and changed the way in which we communicate and work. Businessmen have access to PCs, personal data assistants and mobile phones which can be used across country borders and while on the move. Increasingly, the general public also uses PCs and e-mail to communicate with friends, obtain information, shop and play computer games. These developments have created significant needs and opportunities for investment, and have led to better quality of service, lower prices, and more choices for customers. The emergence of the Internet and

electronic commerce cannot and should not be ignored. Government intends to support and encourage further development in both of these areas so as to make The Bahamas a full member of the Information Society.

Changing Perceptions

2.4 Technology has also changed perceptions. Most countries in Europe have now concluded that there is no continuing reason for telecommunications to be owned or controlled by the state and thus have privatized the incumbent operator and opened their markets to competition. Governments in most parts of the developing world are following this lead. In the United States, where telecommunications have always been a private sector activity, markets that were previously segregated and protected have now been opened to full competition. A Report by the International Telecommunication Union (ITU) on trade in telecommunications noted that in emerging markets, international traffic per subscriber grew 11.7 per cent per annum from 1990 to 1995 where competition was allowed, compared with just 5.2 per cent per annum where there was a monopoly. Many countries have also reported annual increases of 50 percent in cellular mobile subscribers.

Pressures to Cut Costs and Increase Efficiency

2.5 Liberalisation has also undermined traditional payment arrangements for international calls which, for so long, provided a high proportion of the revenue of old telephone administrations in countries like The Bahamas and enabled the subsidisation of local calls. Tariffs for telecommunications services are being rebalanced the world over and made to relate more closely to real service costs. Real prices in telecommunications are continuing to tumble.

2.6 Mounting international pressure has led to a move towards cost-oriented accounting rates. The Bahamas has had to reduce its settlement rates for international calls (the amount that telecommunications operators charge each other for terminating the other's international calls) to and from the United States, its largest trading partner, by 50%, from 30 cents to 15 cents per minute with effect from 1st January 1999 as a result of a ruling by the United States Federal Communications

Commission (FCC). The Bahamas continues to face pressure to rebalance its tariffs so as to bring them in line with international tariffs for local, national and international calls.

THE PRESENT POSITION OF TELECOMMUNICATIONS IN THE BAHAMAS

Present Unsatisfactory Structure for Regulation and Competition

3.1 The Bahamas Telecommunications Corporation Act, 1966, was enacted over 30 years ago and is now inappropriate as a framework for a modern, liberalized telecommunications sector. Under that Act, Batelco, the national telecommunications operator, acted as regulator as well as operator, issuing all licences, including radio frequency licences. Such a structure is out of line with world best practice, which has recognized that there are three distinct roles in telecommunications: sector policy-making, regulation, and operation, and that these should be clearly separated.

High Costs

3.2 This unsatisfactory regulatory structure in The Bahamas served also to impede the quality and variety of services available to users and has maintained artificially high prices for many services. Business users in particular have been hampered by the lack of high quality broadband services and cutting edge technology in customer premises equipment. The growth of the cellular mobile telecommunications sector in The Bahamas has suffered for similar reasons.

3.3 Batelco, now BTC, has, to date, enjoyed a near universal monopoly over the provision of telecommunications networks and services in The Bahamas. BTC not only owns the only public switched telephone network capable of offering voice services, but also provides the only cellular mobile service. It owns and operates the Internet service provider BatelNet, and also owned prior to the vesting in BTC, 10% of the shares in Cable Bahamas Limited, which has an extensive fibre optic network linking the majority of homes in The Bahamas.

Poor Quality of Service

3.4 A review carried out for the Government in 1998 by Deutsche Bank AG in association with Denton Wilde Sapte, Ernst and Young and National Economic Research Associates of the UK, has shown that, while there has been and continues to be a considerable growth in the demand for modern telecommunications services, Batelco, now BTC, has:

- < been slow to introduce new services when compared with operators in the markets in North America and Europe;
- < been slow to invest in infrastructure and technology;
- < allowed the quality of service to fall below international standards;
- < charged very high long distance tariffs, which are now well out of line with international benchmarks, and are under pressure to be made cost-oriented in accordance with international trends; and
- < suffered from excessive costs (in which area Government has already taken some corrective action).

3.5 The review also underlined the need for sector reform and demonstrated that, not only in North America and in Europe, but also in many other parts of the world, privatisation and liberalisation are now accepted as being clearly in the public interest.

THE GOVERNMENT'S OBJECTIVES AND VISION FOR TELECOMMUNICATIONS IN THE BAHAMAS

Government's Policy Objectives

4.1 The fundamental public policy objectives driving reform of the telecommunications sector are:

- (a) the provision of access, by persons throughout The Bahamas, to the most modern telecommunications services possible at reasonable and affordable prices;
- (b) the protection of the interests of the consumer;
- (c) the improvement of The Bahamas' position and competitive edge in global markets;
- (d) the strengthening of health and education infrastructure;
- (e) the transition of The Bahamas to a digital economy;
- (f) the enhancement of the economic development of the nation, particularly the expansion in sustainable high-quality employment opportunities throughout The Bahamas;
- (g) the promotion of competition;
- (h) the positioning of The Bahamas as an electronic commerce hub in the region;
- (i) the need to ensure that essential national interests are protected;
- (j) enhancement of the value of Batelco by measures that are consistent with other Sector Policy objectives;
- (k) reduction of the National Debt by utilizing the proceeds of the sale of shares in Batelco; and
- (l) providing Bahamians an opportunity to own, directly, an interest in the telecommunications sector.

Government's Vision for Telecommunications in The Bahamas

4.2 Having regard to the foregoing objectives, the Government has set the following as its vision for telecommunications in The Bahamas:

To develop and maintain the most modern cost-effective telecommunications sector possible, so as to enhance The Bahamas' competitive position in the global community, facilitate the country's transition to a digital economy, and improve the quality of life for the Bahamian people.

THE GOVERNMENT'S STRATEGY TO ACHIEVE THE OBJECTIVES AND VISION

Sector Reform

5.1 The review, which the Government commissioned in 1998, underlined the urgent need for sector reform and demonstrated that privatisation and liberalisation are now accepted as being clearly in the public interest. Therefore, the Government has established this new framework to enable additional improvements to telecommunications infrastructure and service delivery, and to encourage investment. The new framework involves:

- < introduction of private ownership and management in telecommunications in The Bahamas;
- < allowing new operators to enter the sector and encouraging competition in the provision of telecommunications services; and
- < separation of the regulatory functions from the operation of telecommunications systems and the provision of telecommunications services.

Private Sector Participation

5.2 Experience in other countries has shown that telecommunications services and networks are best provided by the private sector under competitive conditions because this leads to more investment, efficiency gains, increased quality of service, increased innovation, lower prices and customer satisfaction.

5.3 The Government has decided to divest itself of a 49% stake in BTC, together with the award of management rights to an international telecommunications operator, or a strategic partnership, which could also include Bahamian partners, with successful experience of operating internationally. Bahamians and/or Bahamians associated with international persons are encouraged to apply.

5.4 The Government vested Batelco's assets (excluding those which were vested in the Public Utilities Commission and the Treasurer) in a new company, called The Bahamas Telecommunications Company (BTC), to enable it to continue to operate the telecommunications network and offer services under a new licence. At a date to be determined additional shares in this company will be offered for sale to the public. Following the conclusion of the international bidding process, the Government will select and transfer 49% of the shareholding to the strategic partner which must be financially and technically capable, and which must have submitted the most beneficial proposal to the Government. The Government will enter into a series of agreements with the strategic partner allowing it to direct and manage the operations of BTC.

5.5 The Share Sale and Subscription Agreement between the Government and the strategic partner will regulate the sale transaction and payment of the price for BTC's shares. The Shareholders Agreement will describe the way in which BTC will be managed and the services that the strategic investor will need to provide to BTC to improve its operations and enable it to comply with its licence obligations.

Liberalisation and Competition

5.6 Experience elsewhere has shown that the greatest gains in efficiency, cost reduction and quality and variety of services are achieved from competition, not merely privatising a monopoly. It is, therefore, the Government's policy to move towards liberalisation of all telecommunications services in The Bahamas. However, it recognises the need to be pragmatic. A short delay in introducing full competition in limited areas indicated below, will allow BTC time to prepare for a multi-carrier environment, to modernise and restructure, and to rebalance its tariffs while ensuring that BTC can continue to operate a sustainable business and therefore remain an attractive proposition for future investors.

5.6.1 Before and since the issue of the Telecommunications Sector Policy in July 2001, the Public Utilities Commission has undertaken a number of measures to implement that policy as required by it under Section 6 (1) (b) of the Telecommunications Act 1999. In particular:

- < on 26th February 2002, the Public Utilities Commission, after a competitive process, determined that it would award a Fixed Radiocommunications System Licence with the right to provide fixed voice telephony from 1 January 2004;
- < on 9th April, 2001 Caribbean Crossing Limited was authorised to construct and operate a new fibre-optic cable link between the US and The Bahamas with landing points in Boca Raton, Grand Bahama, New Providence, Eleuthera and Abaco;
- < under a Licence dated 1 October, 2000 Cable Bahamas Limited was authorised to lease circuits and provide public Internet services in New Providence in direct competition to BTC, and this licence has now been extended to the whole of The Bahamas.

5.6.2 Because privatization of BTC has been delayed and more work is needed to prepare BTC for full competition, the Government has decided that:

- < competition in the provision of cellular mobile services will be deferred until the expiration of a period of twelve (12) months from the date of completion of the sale of shares in BTC to a strategic investor;
- < any further competition in the provision of international, inter-island and local public voice services over a fixed network and the leasing of circuits for voice services will be deferred until the expiration of a period of twenty-four (24) months from the date of completion of the sale of shares in BTC to a strategic investor ("the Fixed Exclusivity Period");
- < the status of the telecommunications sector will be reviewed by the PUC with a view to opening the sector to further competition after the expiry of the Fixed Exclusivity Period in accordance with section 6 (1) (i) of The Act;

- < in all other areas, including satellite, microwave and other wireless means of telecommunication, value-added services, customer premises equipment and Internet access (but not voice over IP or voice over the Internet as discussed in Section 8 below), competition will be introduced immediately.

5.7 As a counter-balance to the award of the exclusive rights, BTC will be required to provide universal service in The Bahamas and progressively improve the quality of its services. This is more fully described in Section 8. BTC will also be required to take steps to rebalance its tariffs, which are out of line with international benchmarks, over a suitable period of time.

Separation of Policy Making, Regulation and Service Provision

5.8 In order to protect the interests of all parties - consumers and service providers - effectively, the regulatory system will be characterised by:

- < clarity of roles of the Minister responsible for telecommunications, and the regulator, respectively;
- < adequate resources including qualified staff and funding to engage expert assistance on technical and economic regulatory issues; and
- < autonomy, allowing the regulator to focus on its own duties and functions, to have authority in its dealings with operators, and to control the day to day conduct of regulation.

5.9 Regulation will be objective, consistent and transparent. Operational decisions will be left to the telecommunications operators themselves. In the interest of consumer protection, however, the sector will be regulated within a framework that is independent of the operators of networks and suppliers of services.

5.10 Sector policy and issues of national security will remain in the hands of the Government to ensure consistency with its objectives. The day-to-day regulation of the industry will be entrusted to the Public Utilities Commission (the Commission).

OUTLINE OF THE NEW LEGISLATIVE FRAMEWORK³

The Telecommunications Act, 1999

6.1 In order to give effect to the Government's vision of telecommunications in The Bahamas and to support the Commission in carrying out its new duties, the Government has enacted new legislation governing the provision of telecommunications services. The Telecommunications Act, 1999 repeals and replaces The Bahamas Telecommunications Corporation Act, 1966. The Telecommunications Act, 1999, applies to the regulation of telecommunications throughout The Bahamas.

6.2 In summary, the Telecommunications Act, 1999:

- < lays down the Government's objectives for telecommunications and defines the functions and powers of the Minister and of the Commission in relation to telecommunications;
- < requires every person who establishes or operates a telecommunications system or provides telecommunication services⁴ in The Bahamas (with limited exceptions) to have a licence and it also confers the power to grant and enforce the conditions of licences on the Commission;
- < provides for conditions to be included in licences to foster competition, and protect consumers;

³This is not intended to be an interpretation of the law, but rather a general summary of the main features of the Telecommunications Act, 1999.

⁴ Atelecommunication service@s defined in the Telecommunications Act, 1999 as a service consisting of emitting, transmitting, switching, conveying or receiving messages within, into or from The Bahamas by means of any telecommunications system. (the Act also defines "telecommunications system").

- < provides for the approval of customer premises equipment and of installers of such equipment;
- < provides for vesting in BTC of assets and liabilities of Batelco as envisaged in Section 24 (and the First Schedule) of the Telecommunications Act, 1999, and for the eventual winding up of Batelco;
- < introduces a new regime for the authorisation of radio communications in The Bahamas;
- < creates new offences and provides for penalties to apply; and
- < creates appeal and review procedures which can be used by aggrieved parties in relation to decisions of the Commission.

The Public Utilities Commission (Amendment) Act, 1999

6.3 As a result of the repeal of the licensing and regulatory provisions of The Bahamas Telecommunications Act, and the promulgation of the Public Utilities Commission (Amendment) Act, 1999, the regulatory rights and functions of Batelco in relation to telecommunications have been vested in the Public Utilities Commission.

The Roles of the Minister and the Commission, and the Structure of the Commission

The Minister

6.4 The functions of the Minister in relation to telecommunications are those set out in Section 5 of the Telecommunications Act, 1999, and include the following:

- < to determine the Sector Policy after consultation with the Commission;
- < to determine the circumstances in which, and the terms on which, qualified **licensees** may purchase or obtain public land or easements over public land or enter upon and remain on public land after consultation with the Commission and with the approval of the relevant governmental authority;

- < to ensure that public security and the investigation of criminal activities and enforcement of public policy are safe-guarded;
- < to ensure that The Bahamas is able to comply with its international obligations;
- < to determine when the radio frequency spectrum or numbers should be auctioned or licensed at an uplifted fee; and
- < to determine whether fees payable for telecommunications licences should include an element to reflect the market value of the licences.

The Commission

6.5 The functions of the Commission as set out in Section 6 of the Telecommunications Act 1999, include the following:

- < to advise the Minister generally in relation to the telecommunications sector;
- < to implement the Sector Policy;
- < to issue, modify, enforce and revoke licences in a manner consistent with the Sector Policy;
- < to regulate the interconnection of telecommunications systems and the management of numbers for telecommunications services;
- < to formulate and implement standards in relation to the technical regulation of telecommunications systems, telecommunications equipment and customer premises equipment;
- < to determine the criteria on which an operator may be designated as being dominant and to designate that operator accordingly;⁵
- < to regulate the prices that may be charged by dominant operators;
- < to regulate, allocate and manage the use of the radiocommunications spectrum;
- < to facilitate, maintain and promote effective and sustainable competition in telecommunications services in The Bahamas; and

⁵ A dominant operator will have the ability to materially or significantly affect price or terms of supply in a telecommunication market because it has control over essential facilities (which cannot easily be duplicated) or because it can use its position of strength or control of a particular market to its own advantage.

< to exercise the other functions and powers set out in the Telecommunications Act, 1999.

The Structure of the Commission

6.6 The Commission consists of a minimum of 3 but not more than 5 members, appointed by the Governor General on the advice of the Prime Minister following consultation with the Leader of the Opposition. The Members are appointed for a term of office not exceeding 5 years, but Members are eligible for reappointment. The Executive Director of the Commission is appointed by the Commission after consultation with the Minister. The Secretary to the Commission and other staff are appointed by the Commission.

Funding of the Commission

6.7 The operating costs of the Commission will be funded by fees charged to licensed telecommunications operators, the holders of radiocommunications licences and operators in the other utility sectors. The Commission will publish annual reports containing details of its activities, which will be submitted to Parliament every year.

Transparency and Objectivity

6.8 The regulatory framework of the Telecommunications Sector in The Bahamas will be strengthened by increasing the flow of information between the Commission, industry operators, and consumers. As envisaged under the Telecommunications Act, 1999, the Commission is required to act in a transparent and objective manner. Before adopting any significant procedure or issuing general instructions, the Commission will therefore publish its proposals and allow a period of public consultation. If an operator is dissatisfied with certain specified decisions of the Commission, the Telecommunications Act, 1999, provides an appeals mechanism through the courts.

OUTLINE OF THE NEW REGULATORY ENVIRONMENT

Licensing

7.1 Under the Telecommunications Act, 1999, the Commission is empowered to issue, modify, enforce, and revoke licences. Persons who wish to operate a network or offer services are required to apply to the Commission for a licence to do so. Persons may appeal a refusal to grant an individual licence, classifying an operator as Dominant or certain acts of enforcement. Certain networks are exempted from the licensing requirements under the Act, including networks within single premises that are not connected with any other network, broadcasting networks and networks used by the Police, the Defence Force or the Prison Service. Separate or additional licences will be required to install and use radiocommunications apparatus.

7.2 The Commission may issue both individual licences and class licences. Individual licences are unique licences individually granted to an applicant on the basis of certain specified characteristics. Individual licences are specific to the applicant. Class licences, on the other hand, are licences that are available to all persons who satisfy the criteria for that licence.

7.3 Licences will be issued subject to a number of conditions, which will vary according to the type of licence. Additional conditions will be imposed on any operator with significant market power or control over essential facilities. Such operators are termed Dominant. Initially, and probably for the duration of the Exclusivity Period and sometime thereafter, BTC will be designated a Dominant operator.

7.4 The Telecommunications Act, 1999, contains transitional provisions under which persons claiming to enjoy licences to operate telecommunications systems or provide telecommunications services under a licence duly issued by Batelco under the previous Act, should notify the Commission within three months of the coming into operation of the Act.

Modification of Licences

7.5 The Commission is empowered to modify licence conditions of an operator after granting it if it obtains the consent of the licensee or, in the absence of the consent of the licensee, if the amendment is required to further the objectives of the Telecommunications Act, 1999, pursuant to the exercise of the Commission's powers and obligations. In the latter case modifications must be justified as being in the public interest or necessary to implement international obligations of The Bahamas, and modifications will be made only after a public consultation. If more than one licensee is involved with respect to the licence modification, specific procedures based on the Telecommunications Act, 1999, will be utilised to obtain the consent of the affected licensees.

Fees

7.6 Under the Telecommunications Act, 1999, the Commission may set fees only so as to recover from licensees on an equitable basis, the aggregate amounts required to defray costs incurred or anticipated by the Commission in connection with its functions and powers in relation to telecommunications. The Minister may by regulations direct the Commission to recover an amount in excess of that set by the Commission to reflect the market value of the licence granted and such amounts shall be paid by the Commission into the Consolidated Fund. However, it is intended for the policy period that this power will only be used on the licensing of scarce resources such as frequency spectrum and numbers. The Commission will publish a schedule of standard fees.

Spectrum Management and Radiocommunications

7.7 Radio frequency is widely used for television and radio broadcasts, in telecommunications, for emergency services and in a variety of other business and social applications. Radio frequency spectrum is also a scarce resource and misuse can lead to damaging interference.

7.8 Under the Telecommunications Act, 1999, it is an offence for any person to establish a radiocommunications station or to communicate by radio in The Bahamas without a licence. The

Commission is empowered to issue radiocommunications licences and to regulate, allocate and amend the use of radio frequency spectrum including fees payable, conditions of surrender and revocation of a licence.

7.9 The Act provides for replacing current licences by the issuance of new licences in accordance with the Commission's spectrum plan and the Act.

7.10 In most cases, spectrum will be allocated (subject to availability) for a fee based on the cost of administering the award. The Minister, after consultation with the Commission, may direct the Commission to allocate radio frequency spectrum by way of an auction, or to charge fees reflecting the market value of the spectrum. In doing so, the Minister will have regard to the amount of spectrum available to users, current demand and likely future demand, the need to promote efficient use of spectrum and competition in the provision of radio-based services, and likely economic benefits available to users of the spectrum concerned.

Numbering

7.11 Like spectrum, numbers are limited and therefore responsibility for managing numbers rests with the Commission, which is empowered to create a national numbering plan. In the management of numbers the Commission will have regard to the recommendations of international organizations including the International Telecommunication Union.

7.12 The management of the national numbering plan will include the assignment of access codes for newly liberalized telecommunications networks and services. Special numbers will be dedicated to emergency calls and should be accessible to any telecommunications network or any user.

7.13 If it appears necessary to the Commission, it may, in accordance with the particular licence of an operator, withdraw numbers allocated to that operator in order to administer the national numbering plan more efficiently.

7.14 The Commission will provide guidance on number portability requirements in due course.

Industry Technical Standards

7.15 In order to ensure the integrity and interoperability of telecommunications systems, and to protect the health and safety of persons, the Commission will establish technical standards for telecommunications systems, equipment, customer premises equipment and radiocommunications apparatus. The Commission will also establish a system for the approval of installers of customer premises equipment and radiocommunications apparatus.

OUTLINE OF CERTAIN REGULATORY ISSUES

Universal Service

8.1 The provision of basic telecommunications services, including emergency services and public pay apparatus, networked information services and access to the Internet, is an important public service and Government wishes to ensure the availability of these basic services in all populated areas, including settlements of 10 or more households.

8.2 Government supports the principle identified by the 1995 United Nations Social Summit, that universal access to basic education and lifelong educational opportunities are preconditions for economic and human development. It is proposed therefore that as part of universal service, Internet access will be provided free of charge to:

- (a) all public and church-operated schools, public libraries, the College of The Bahamas, The Bahamas Technical and Vocational Institute, The Bahamas Hotel Training College, the Eugene Dupuch Law School; and
- (b) all public hospitals, clinics, senior citizens' homes, and orphanages.

8.3 The cost of Universal Service will be funded by means of contributions from all licensed telecommunications operators on a proportionate basis. These contributions will be placed into an account, a Universal Service Fund, which will be managed by the Public Utilities Commission.

8.4 Initially, and for the duration of the Exclusivity Period, any obligation to provide universal service will be imposed upon BTC as the dominant provider. Additionally the Public Utilities Commission may impose the obligation to provide universal service on any other telecommunications service provider in such circumstances as it may deem necessary. Initially BTC will be obliged to:

- < extend and upgrade its network to facilitate the provision of Internet services to all inhabited settlements of 10 or more households in The Bahamas;
- < provide an adequate number of public pay apparatus in public places such as shopping centres, airports, health and community centres, major public highways, public parks and in densely populated areas;
- < install a line at a standard single price to any applicant living within a specified distance of the network;
- < provide free calls to emergency services to all subscribers and at all public pay apparatus, and to distress, emergency and safety services for shipping and aircraft in accordance with the Radio Regulations of the International Telecommunication Union;
- < provide special equipment required by persons with hearing, sight or other disabilities to enable them to access voice telephone services at no extra cost or as instructed by the Commission;
- < provide telecommunications services at reduced cost to support the provision of Internet services to designated places in the Family Islands;
- < provide Internet access, inclusive of the supporting telecommunications services, to all schools free of charge⁶;
- < make the same schedule of tariffs available to all users regardless of location throughout The Bahamas; and

⁶This does not include the provision of customer premises equipment or any computers, hardware or other such equipment, that would enable use of the Internet service, but is limited to the necessary telecommunications services and the subscription for the Internet service.

< offer affordable tariffs for basic services.

Tariffs

8.5 Tariff policy is an essential element of telecommunications regulation and will be particularly important during the Exclusivity Period. The Public Utilities Commission will be required to create a reasonable balance between the interests of the Dominant operators, and other licensed operators, service providers and users. Tariff regulation will be used to control the pricing of certain services offered by Dominant operators, to prevent unfair competition and abuse of market position by Dominant operators, to protect users, and to minimize cross-subsidisation. The key principles of the tariff policy are:

- (a) the regulation of only the tariffs of Dominant providers, and only for so long as the provider remains Dominant in a relevant market;
- (b) the allocation of separate tariffs to separate services;
- (c) the targeting by regulation of the gradual rebalancing of tariffs towards cost orientation (where practical); and
- (d) the setting of tariffs at a level that enables an efficient Dominant provider to fund network and services development.

8.6 Government is mindful of the need to effect re-balancing of tariffs over a suitable period of time. Due account will be taken of the need to reduce and minimize the impact of the increases on low residential users.

8.7 The Public Utilities Commission will be required to have public consultations on tariffs and the formula that will control how they are changed.

Access

8.8 The Commission will take steps to ensure adequate access to telecommunications networks,

including leased circuits and satellite services, by users, other operators and service providers on a transparent and non-discriminatory basis. An operator enjoying Dominance in the relevant market will be required to offer interconnection to other qualified operators on cost-based terms.

8.9 The Commission intends to carry out further consultation on the scope of interconnection rights during the Exclusivity Period, and will do so in consultation with operators and the public. In the meantime, however, a number of principles may be stated:

- < Purely private systems will not enjoy interconnection rights
- < BTC will have the right to connect its system to all other public telecommunications systems and operators of public telecommunications systems will have the right to connect their systems to BTC's system and each other's systems;
- < operators of systems will be obliged to respond to all and any requests for interconnection and to negotiate commercial terms promptly and in good faith;
- < unless points of interconnection and other issues are determined by the Commission, systems will be interconnected at points of interconnection agreed between the operators concerned and at prices and on other terms agreed between them; and
- < where a licensee enjoys a Dominant position in the relevant market then charges for interconnection must be orientated to the cost of provision.

8.10 Interconnection agreements involving Dominant operators must be submitted to the Commission prior to the date on which they come into effect. If the Commission believes that the terms are incompatible with the relevant licences of the operators or the Telecommunications Act, 1999, or any instructions issued by the Commission, then the Commission may, at any time, require modification of the agreements. If operators who are required to interconnect are unable to reach agreement, the dispute may be referred to the Commission, or the Commission may intervene on its own motion.

8.11 Leased and virtual private circuits can play a strategic role in the development and expansion of telecommunications services in two principal ways. Firstly, large companies with high volumes of traffic or unique telecommunications problems can build or create private or virtual networks using leased circuits or capacity to satisfy their own service needs more economically than using the public network. Secondly, leased or virtual private circuits can be used by communications companies, like Internet service providers, to provide services that compete with the Dominant operator.

8.12 Dominant network operators will therefore be required to make leased circuits or capacity available at controlled prices, on non-discriminatory terms and within a reasonable period. The Commission will sympathetically consider a request to self-provide circuits if other operators are not able to or fail to meet capacity requirements in a timely manner. Dominant operators' technical and commercial terms and conditions for leased circuits or capacity must be published to ensure a high level of transparency.

8.13 After the Exclusivity Period other operators will be allowed to self-provide their own voice circuits.

Satellite Matters

8.14 BTC is currently signatory and the sole representative party for The Bahamas in the following international satellite organizations:

- (a) The International Telecommunications Satellite Organization (Intelsat)- Batelco had an investment share as at 30th July 1999 of 0.118957. Intelsat will be privatized in July 2001, and Government intends that BTC will retain its shareholding in the privatized company.
- (b) International Mobile Satellite Organization (IMSO formerly INMARSAT)- Batelco acceded to the Operating Agreements in April 1994, and with the privatisation of

INMARSAT on the 1 April, 1999, BTC is now a shareholder of 14,792 shares in Inmarsat Holdings Limited.

8.15 BTC has also signed Satellite Agreements with other external entities including the PanAmSat Corporation Operating Agreement on 28 December, 1989, and as amended on 16 April, 1997. The duration of the Agreement is estimated at 12 years ending in 2001 or until the PAS-1 is otherwise taken out of commercial service.

8.16 Under the fixed network licence, BTC will be obliged, on commercial terms, to provide uplink and downlink satellite services and to re-sell capacity on each of these satellites to any person in The Bahamas who requires these services provided BTC is satisfied that access is permitted under the applicant's license and that there will be no breach of BTC's exclusive rights to voice telephony. BTC will take over any contractual obligations of Batelco in relation to the provision of satellite services.

8.17 Once Intelsat is privatized any person will be able to access satellite services from the company directly. (Note that BTC is no longer offering VSAT licences).

Customer Premises Equipment

8.18 The market for customer premises equipment or office and domestic apparatus intended for connection to public networks, has been liberalised. This means that any party may, without a licence, manufacture, distribute and sell customer premises equipment in The Bahamas. Equipment intended to be connected directly or indirectly to a telecommunications system must, however, meet technical standards established by the Commission in order to ensure that attachment will not adversely impact safety, integrity or the functionality of the network and, in the case of wireless equipment, that it will not cause harmful radio interference.

Internet

8.19 The Internet represents vast opportunities for businesses, education and the nation at large. In this context, the use of the Internet in The Bahamas is strongly encouraged. Competition in this market segment has proven to be a powerful strategy to reduce prices and stimulate demand. In doing so, the Commission must evaluate the potential benefits and threats of voice telephony over the Internet when determining the licence terms and conditions.

8.20 Presently, Internet Service Providers are licensed to operate under The Bahamas Telecommunications Corporation Act and lease capacity from BTC, or use VSAT links, for international data connections. The provision of Internet Services (including Internet access) has been liberalised but persons offering Internet services will be required to apply for an individual licence.

8.21 Since BTC's Exclusive Rights will include voice telephony, irrespective of the network used, it will not be permissible for any company other than BTC to provide voice services over the Internet or voice over Internet Protocol Networks for the duration of the Exclusivity Period.

Network Construction and Management Rights

8.22 Until now, only the public utility corporations have enjoyed the right to lay wires, cables and infrastructure on public land and to dig up public highways. This right will now be extended to all qualifying public network operators.

8.23 Government is presently reviewing its planning and environment protection legislation. In line with this review, and consistent with international best practice in this area, Government intends to require that all qualifying public telecommunications operators comply with certain minimum standards for the protection of the environment, including public safety and all customary statutory and regulatory requirements.

Quality of Service and Consumer Protection

8.24 The Commission will have responsibility for ensuring that the national quality of telecommunications services is improved over time to match the international best practices.

8.25 The Commission will also be required to safeguard the interests of consumers by regulating the terms and conditions of supply and the quality of service provided, and to ensure that adequate machinery exists for the resolution of complaints against service providers.

Cellular Mobile Telephony

8.26 Introducing competition in the cellular mobile telephony market will stimulate the market which in turn will lead to improved services, better products, a reduction in fraud, and reduced tariffs. Bundled tariff packages offer the user convenience, which can increase usage and lower the cost to the user. The Commission will make available radio frequency spectrum to other applicants by 2001 or soon thereafter. The Commission will review the market and the demand for mobile telephony before entering into public consultation and making a decision on the number of mobile telephony licences to be issued and the amount of radio frequency spectrum available.