

Telecommunications Regulatory Reform In Bermuda

**Consultation document on proposed changes and the
potential impact for telecommunications users in Bermuda**

**Ministry of the Environment,
Telecommunications & e-Commerce**

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Table of Contents

1	Introduction and Background.....	1
1.1	Responding to this Consultation Document.....	2
1.2	Regulatory Objectives and Principles	2
1.3	Summary of the Proposed Reform	3
1.3.1	The Regulatory Authority	3
1.3.2	Staffing of the Regulatory Authority.....	4
1.3.3	Independence of the Regulatory Authority	4
1.3.4	Industry Structure	4
1.3.5	Technical Regulatory Tools and Principles	6

1 Introduction and Background

Today, Bermuda benefits from excellent telecommunications infrastructure and services. Technology is however changing rapidly and the structure of Bermuda's telecommunications industry does not lend itself easily to the new converged technology and service platforms emerging across the world.

Bermuda's telecommunications providers fall into four distinct groups:

Class A providers – these are the international service providers (TBI, Cable & Wireless and Brasil Telecom)

Class B providers – these are the fixed and wireless domestic service providers, including BTC, Quantum, the cellular providers and the Cable TV providers; and

Class C providers – these are the internet service providers, including Logic, North Rock, Fort Knox and Transact.

Cable TV providers – These are the Cable TV companies which have been authorized to provide limited telecommunication services and include Bermuda CableVision and World on Wireless.

Each of the entities licensed in one class is prohibited from offering services outside its specific licence area. This is now starting to cause problems as firms seek to expand into new markets but are constrained by regulations. Technology and service convergence is emerging internationally and the technologies and equipment that each of the different providers need to purchase to offer new and innovative services is capable of providing the full range of services (e.g. services in categories A, B and C), but the providers are not able to take advantage of these capabilities due to the restrictions in their respective licences.

The restrictions on services that can be provided by individual providers and small size of the customer base in Bermuda may mean that some providers do not make investments in advanced technology, or it may mean that those who do make the investments will need to charge higher prices for the telecommunications services they provide as compared to other countries since they will need to recover their investment on a smaller set of services than would be the case in those other countries.

Additionally, from a consumer perspective, it is currently necessary for users of telecommunications services to contract with several providers (e.g. for the services provided by the Class A, B and C providers) and this means a more complex and less user-friendly telecommunications environment than is seen in many other countries around the world.

Although Bermuda's current regulatory and licensing framework has served Bermuda well and has fostered competition and innovation in telecommunications services, the Ministry of the Environment, Telecommunications and E-Commerce (METEC) is now proposing a reform of the regulation of telecoms to bring Bermuda in line with international best practice and to ensure the continued investment in innovative services for telecommunications users in Bermuda.

The proposals in this consultation document aim to restructure the telecommunications industry in Bermuda to ensure that consumers of telecommunications services continue to benefit from state of the art services and technologies, and that consumers will get value for money when purchasing telecommunications services. Tangible benefits to consumers from the proposed reform include one-stop-shopping (being able to purchase all telecommunications services from a single provider), and increased competition which frequently results in improved quality of service and reductions in prices for services.

This Document is a consultation document and METEC would welcome comments from telecommunications users and other interested parties on the proposed reform.

1.1 Responding to this Consultation Document

METEC invites comments from all users of telecommunications services and other interested parties on the reform as set out in this document and its accompanying industry consultation document, which sets out in more detail the technical proposals comprised in the proposed reform. Interested parties are invited to access and respond to the industry consultation document and the consultation document issued in August 2006, to which the more recent consultation document refers. These documents can be downloaded from the METEC web portal¹ or a copy can be collected in person from the offices of the Department of Telecommunications (F.B. Perry Building, 2nd Floor, 40 Church Street, Hamilton)

In order to make sure all interested parties have the opportunity to ask questions about the proposed regulatory reform, MTEC will organise a Public Meeting which will be advertised in the print media no less than one week prior to it taking place. At that meeting representatives of METEC and its consultants will take questions on all aspects of the proposed reform.

Responses should be submitted c/o Ms. Patricia Deshields, no later than 19 February 2007. Please submit responses to the address set out below:

Department of Telecommunications
F.B. Perry Building (2nd Floor)
40 Church Street
Hamilton HM12

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1.2 Regulatory Objectives and Principles

METEC proposes that the new regulatory regime should be governed by the objectives and principles as set out below.

- To ensure that the people of Bermuda are provided with reliable and affordable access to quality public telecommunications services;
- To enhance Bermuda's competitiveness in the area of telecommunications so that Bermuda is well positioned to compete against its "real" global competitors in the tourism and international business markets;
- To encourage the development of a public telecommunications sector which is responsive to the requirements of users (both individuals and businesses) and which provides its users with choice, innovation, efficiency, and affordability;
- To encourage the development and rapid migration of innovative technologies to Bermuda;
- To promote the orderly development of Bermuda's public telecommunications sector;
- To encourage sustainable competition and create an invigorated public telecommunications sector which will lay the groundwork for the further development of telecommunications reliant industries;

¹ To download the Consultation Document entitled: [Reforming Telecommunications Regulation in Bermuda](http://www.gov.bm/) (dated 15th August, 2006) go to <http://www.gov.bm/> then open the pull-down menu by clicking on the word "GOVERNMENT" in the upper left hand corner of the page. On the pull-down menu scroll down to highlight "Envt., Telecoms., & E-Com..." then scroll right and all the way down to click on the word "Telecommunications". The file is located on the right hand side of the Telecommunications home page under the heading "Telecommunications Regulatory Reform".

- To encourage development and maintenance of resilient and fault-tolerant infrastructures;
- To promote investment in the public telecommunications sector and in telecommunications reliant industries thereby stimulating the economy and employment; and
- To promote local ownership and local employment at all levels of the industry.

1.3 Summary of the Proposed Reform

The main components of the reform can be categorised into three groups as set out below:

1. The Regulatory Authority, structure, powers and obligations;
2. The structure of the industry, licensing structure for telecommunications providers; and
3. The technical regulatory tools and principles used by the Regulatory Authority.

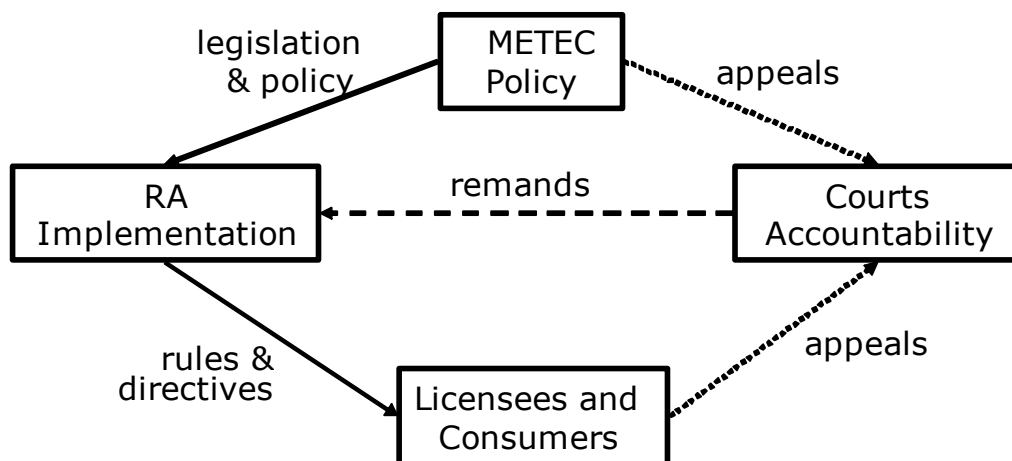
Below is a discussion of each of these and an overview of METEC’s proposals.

1.3.1 The Regulatory Authority

Today Bermuda’s telecommunications industry is overseen by METEC. This means that both the development of policy and legislation and the implementation and supervision of these policies are currently conducted by the Ministry.

METEC proposes to change the regulatory structure by creating an independent Regulatory Authority to implement and oversee the policies and legislation created by the Ministry.

It is also proposed that decisions made by the Regulatory Authority should be appealed to the courts, rather than to the Minister, as is currently the case with decisions made by the current Telecommunications Commission. The diagram below illustrates the roles and interrelations between the Ministry and the Regulatory Authority.



Duties of the Ministry

In the new structure, METEC’s primary responsibility will be the development of policy and legislation, setting the framework within which the RA will function and the principles the RA must abide by. METEC will be required to consult on its proposed policy and legislation, providing a transparent environment to increase

carriers' confidence in the regulatory framework in Bermuda to reduce regulatory uncertainty.

Additionally, METEC will be responsible for representing Bermuda in international contexts, including negotiations for satellite orbit slots, international spectrum assignment, and other similar international policy matters.

METEC will be headed by the Minister of the Environment, Telecommunications and E-Commerce, who will be supported by professional staff. METEC will be funded by the Government consolidated fund.

Duties of the Regulatory Authority

The RA will be headed by a 3-person commission, tasked with making all decisions required by the RA. The Commissioners will work two full days per week and will be salaried at a senior professional level.

The Commissioners will be selected as follows:

- One Commissioner will be the head of staff of the RA, recruited based on a clear specification and technical skills and experience;
- The two remaining Commissioners will be nominated by representatives of business and labour, respectively, and confirmed by the Minister of the Environment, Telecommunications and e-Commerce.

The two nominated commissioners will be appointed for periods of three years with staggered terms to ensure continuity.

The Commissioner who is the head of staff will remain a Commissioner for the duration of his or her employment, but cannot hold the position as Chair of the Commission.

1.3.2 Staffing of the Regulatory Authority

The RA will be staffed by full-time professionals, covering skills including, economics, accountancy, engineering and law and will be headed by a full-time head of staff.

It is expected that the RA's full time staff will be of approximately seven to nine people, including administrative support.

1.3.3 Independence of the Regulatory Authority

It is important that the RA is independent from the political process and works in accordance with transparent objectives, powers and responsibilities. This framework should be stipulated by the policies and legislation developed by METEC. The RA should be funded directly from industry based on its projected annual work plan and budget.

1.3.4 Industry Structure

Domestic Providers

As set out in the introduction to this document, the Bermuda telecommunications industry is currently divided into 4 licensing categories: The Class A licensees, international carriers – The Class B licensees, Domestic wireline and wireless licensees – the Class C licensees, Internet Service Providers (ISPs) and the Cable TV licensees

METEC proposes that all domestic licensees should be offered a standard domestic licence that allows the licensees to offer a full service portfolio – that is, ISPs can enter the market for domestic wireless and wireline services and domestic providers can enter the ISP market. This will allow these licensees to use technology investments over a wider range of services and therefore increase incentives to

invest in innovative technologies and services. The licence these providers would be offered would be called a Unified Domestic Licence (UDL).

METEC proposes that no new domestic licences should be offered for a period of 1-3 years, depending on a market review by the Regulatory Authority. The purpose of this is to enable current providers to adjust to the new market conditions before further competitors are allowed into the market.

International Providers

Presently, the international providers in Bermuda fall into two categories

- Brasil Telecom operates an international sub-marine cable. Brasil telecom is restricted from doing business with retail customers and domestic telecommunications providers, it can only do business with the other international providers;
- Cable & Wireless Bermuda and TeleBermuda International (TBI) can continue to purchase international capacity from Brasil Telecom and they can sell international capacity and services to domestic providers and to retail customers. TBI does not operate a sub-marine cable that it owns exclusively; Cable & Wireless Bermuda operates two sub-marine cables that it owns. Both of these cables have been in use for a number of years and their capacity limits are inadequate for the future needs of the economy.

METEC believes it is important to encourage investment in new international connectivity for Bermuda and its proposals for the international providers are designed to achieve this.

METEC proposes that Cable & Wireless Bermuda and TBI be offered a UDL, so they can enter the domestic services markets. This offer will be made conditional upon these carriers offering wholesale international capacity and services to the domestic providers on non-discriminatory terms. This would mean that the international providers will not be able to use their access to international capacity to compete unfairly against the (smaller) domestic providers.

METEC also proposes that a new international licence should be offered to a party who will invest in a new international sub-marine cable as this will increase the resiliency of Bermuda's international connections. The proposal includes a temporary provision where the current structure, in which Brasil Telecom is prohibited from dealing with retail customers and domestic providers, is maintained, as this may improve the business case for making this substantial capital investment.

Currently, domestic providers are requesting the right to do business directly with Brasil Telecom, but METEC considers that if that is allowed in the immediate term, it could significantly damage the business case for building a new sub-marine cable and therefore it is proposed that, for a period to be determined by the Ministry on the advice of the Regulatory Authority, Brasil will remain prohibited from doing business with the domestic providers.

Foreign Ownership Restrictions

Currently, telecommunications providers in Bermuda are subject to the general foreign ownership rule of minimum 60% local (Bermudian) ownership and maximum 40% foreign ownership (the 60/40 rule). The reality, however is that several providers have obtained exemptions from the 60/40 rule and some are therefore allowed to have up to 60% foreign ownership and other are allowed 100% foreign ownership.

The exemptions from the 60/40 rule provided to telecommunications providers have largely followed the licence category boundaries so that all Class A (international)

providers are allowed up to 100% foreign ownership, Class B (domestic) providers are a mixture of 60/40, 40/60, although some have been granted exemptions. All Class C (ISP) providers are subject to the 60/40 rule and no exemptions have been granted. The arguments presented by providers seeking exemptions are often based on the lack of availability of funds in Bermuda for investment and expansion. Also an issue is that raising financing for telecommunications facilities in Bermuda is generally more expensive than in international financial markets.

As the proposed reform would abandon the three different licence categories, all providers would be able to offer all services and thus compete with each other. It could therefore disadvantage providers who are currently subject to the 60/40 rule without exemptions if they would be restricted to limited and more costly financing than their internationally owned competitors. METEC therefore proposes that all telecommunications providers should receive a full exemption from the 60/40 rule as this will create a more level playing field in the new converged services markets.

Regulatory Fees

It is proposed that telecommunications licensees shall pay two separate fees; a licence fee, payable to the Government of Bermuda; and a regulatory fee to cover the costs of the independent regulatory authority. Both fees will be set as a percentage of the licensees' revenues, structured as outlined below:

The proposed fee structure is set to encourage Bermudian ownership and employment in the telecommunications industry.

Licence Fee – this fee will be a percentage of the licensees' revenues and the percentage payable by each licensee will vary depending on the level of Bermudian ownership and the percentage of Bermudian workers employed. The higher the Bermudian ownership and the Bermudian staff percentage, the lower the licence fee.

Regulatory Fee – This fee will be a percentage of the licensees' revenues – the percentage will be the same for all licensees and will be set to reflect the forecast costs of the regulatory authority. This percentage may therefore vary year-on-year. A cap may be introduced to ensure the regulatory fee does not exceed an upper limit.

1.3.5 Technical Regulatory Tools and Principles

The tools the Regulatory Authority requires in order to do its job fall into four categories as set out below:

- Analysis to decide which providers need to be regulated;
- A series of potential remedies that can be applied to providers that need to be regulated;
- General tools to ensure customers of telecommunications services are protected in terms of how much they pay for services, how the providers treat customers information and other consumer protection issues;
- Management of Bermuda's resources, including numbering and frequencies.

Each of these categories is discussed below

Determining what providers need to be regulated

METEC proposes that only providers that are deemed to be *dominant* through an analysis carried out by the regulator should be subject to direct regulation by the Regulatory Authority.

Dominance is determined through a series of tests including the market share providers have in individual markets – for example the market for international calls – as well as other complimentary tests.

If a provider is deemed dominant in a specific market, the Regulatory Authority can impose certain remedies on that provider for the specific market in which it is dominant – not on all services offered by the provider.

The analysis undertaken to determine which providers are dominant will be conducted through consultation with interested parties and the providers will have the opportunity to argue for or against the Regulatory Authority's findings. Dominance findings will be for periods between 2 and 4 years, but can be reviewed during that period if necessary.

Remedies that can be applied to dominant providers

Providers found to be dominant may be subjected to direct regulation in both the retail and the wholesale areas

In the retail area, dominant providers are likely to have to notify the Regulatory Authority of any new services or prices or changes to prices to ensure they are not abusing the position of dominance by charging fees for services that are either too high or potentially too low and thus potentially anticompetitive towards non-dominant competitors.

In the wholesale area, dominant providers may be subject to obligations to provide access to their networks and services to other providers so that those providers can use the dominant provider's network and services to enable them to compete with the dominant provider.

Tools to protect consumer interests

In addition to the obligation on dominant providers, all providers will need to provide information to the Regulatory Authority to ensure that it has information about the market as well as information about the quality of service each provider delivers. The Regulatory Authority will issue regular data requests for all providers to complete (and some extra data requests for dominant providers) and will publish summary data for consumers to see and help consumers make informed choices when selecting telecommunications providers.

Providers will also be obliged to comply with Data Protection and any other relevant legislation.

Managing Bermuda's resources

National resources such as numbering and spectrum will be managed by the Regulatory Authority. The Regulatory Authority will be responsible for ensuring that these resources are managed effectively and in accordance with international standards and best practice, it will consult with interested parties on how this can best be done. The Regulatory Authority will publish its policies and how and to whom resources are allocated on its website for public inspection.