1.0 Opening Remarks

Mr. Chairman, I thank you for that kind introduction, fellow panellists, distinguished guests, ladies and gentlemen.

First, I wish to thank the University of Brasilia and ANATEL for inviting me to participate in this panel discussion at this most important International Conference. I will present the current scenario and perspectives with respect to telecommunications in Jamaica and the wider Caribbean.

I will first outline the present situation in Jamaica looking at the Pre-Liberalization and Post-Liberalization periods, then the present situation in some of the Caribbean islands and conclude with a brief look at the Technological, Regulatory and Political perspectives for the future.

2.0 Jamaica Macroeconomic Data

Jamaica has a population of 2.6 million with a Gross Domestic Product in 2003 of US$10.61 Billion, which gives a per capita GDP of approximately US$3,900. The inflation rate for 2003 was 10.3%.

3.0 Jamaica Pre-liberalization

Before looking at the current situation, it may be useful to consider the environment immediately before liberalization.

In 1988, the government privatized the state owned telephone company and issued five (5) licences to the new owners Cable and Wireless Jamaica, each for 25 years, expiring in 2013.

However, by 1999, due to widespread dissatisfaction amongst the public based on the poor state of the country’s telecommunications services, the government embarked on a liberalization process and entered into negotiations with the incumbent to break its 25-year monopoly licence. This resulted in the signing of a Heads of Agreement between the Government of Jamaica and Cable and Wireless, which essentially created the framework for the government to introduce competition to the sector on a phased basis.
4.0 Jamaica Phased Liberalization

March 2000 signalled the commencement of Phase I of a three-part liberalization process. The main component of this phase was the introduction of competition to the cellular market. Two spectrum licences were issued by auction grossing US$92.5M. In addition the Telecommunications Act, 2000 was promulgated.

October 2001 was the beginning of Phase II with licences issued for Fixed Wireless services, introducing competition to the fixed line services market. Also, licences were issued to existing Subscriber TV Operators to facilitate their entry into the Internet Service business.

4.1 Jamaica Phased Liberalization

At March 2003, Jamaica attained full liberalization with competition introduced in its international voice services market. It is noteworthy, that, Jamaica achieved this milestone 10 years earlier than its commitment under the WTO Protocol.

5.0 Current Status: Regulatory Framework

In looking at the current status, I will first outline the existing Regulatory Framework. There are four (4) separate bodies engaged in regulating the telecom sector.

The Office of Utilities Regulation, OUR, is a multi-sector regulator, including telecom, electricity, water and transport. Its primary responsibilities are telecommunications competition, economic regulation and consumer protection. It was established by the OUR Act, 1995, but uses as its principal legislation for the sector the Telecommunications Act, 2000.

The Spectrum Management Authority, SMA, is responsible for the management of the radio frequency spectrum. It was created by the Telecommunications Act, 2000 but became operational in 2001.

5.1 Current Status- Regulatory Framework

The third organization is the Broadcasting Commission, with the responsibility for broadcast content and technical regulation, except for spectrum. The other entity is the Fair Trading Commission, FTC, with responsibility for competition issues. They collaborate with the OUR on telecom matters.

5.2 Current status - Operators

Jamaica has two fixed-line services operators:

➢ The incumbent, Cable & Wireless Jamaica CWJ, with an estimated 450,000 lines; and

➢ Gotel, offering fixed wireless services, has less than 1% of that market.
The mobile market comprises:
- Digicel with 62% market share which is 1 Million subscribers. GSM technology @ 900/1800MHz;
- Cable & Wireless with 500,000 subscribers which is 31% of the market - GSM technology @ 1900MHz as well as TDMA @ 800 MHz; and,
- Oceanic Digital Jamaica, the last operator to commence operations with 7% of the market with CDMA technology.

A fourth licence was issued to AT&T in March 2004 but they are yet to commence operations.

5.3 Current status – Operators

Internet service is provided to approximately 100,000 subscribers, with high speed access accounting for less than 10%. It is estimated that over 600,000 persons access internet service.

Whereas, the government of Jamaica is satisfied with the universal nature of voice services (by virtue of the number of mobile subscribers), there are new policy initiatives being developed to achieve universal broadband data access.

There are nineteen (19) broadcast radio stations and three (3) free - to - air national television stations. Fifty-one (51) subscriber television operators are licensed on a regional basis. There is currently one company providing wireless subscriber television using the MMDS frequency band.

6.0 Caribbean: Current State of Telecommunications

Fourteen Caribbean countries are member states of the Caribbean Telecommunications Union, CTU. However, in the interest of time, I will present to you, in brief, the state of telecommunications in five of the member states of the Organization of Eastern Caribbean States, OECS, as well as briefly look at Barbados and Trinidad & Tobago.

ORGANIZATION OF EASTERN CARIBBEAN STATES

The five OECS countries established the first known regional telecommunications regulator known as the Eastern Caribbean Telecommunications Authority, ECTEL. They considered this approach as the most cost-effective strategy to provide regulation. Each member state has its own National Telecommunications Regulatory Commission. They achieved full liberalization of the sector as of May 2002.

They have relatively small economies. The combined population of the five islands is 513,000 distributed as shown on the slide, St. Lucia has the largest population of 153,000 and St. Kitts & Nevis has 50,000. In terms of the teledensity the available data for 2003 indicates that for

- Fixed lines - St. Kitts & Nevis (smallest population) has 47 lines per 100 inhabitants whereas St. Lucia is ranked number 2 with 33.
- For mobile subscribers - Dominica is ranked first with 12 subscribers per 100 inhabitants.
The main provider of fixed line service is Cable & Wireless.

Since liberalization in 2002, new mobile operators have entered the market, a total of seventeen (17) licenses were issued by ECTEL.

The providers of the cellular services in that region include Cable & Wireless, AT&T Wireless, Orange, Digicel and Cariglobe in the respective countries as shown below.

- Dominica: AT&T, C&W, Orange
- Grenada: AT&T, C&W, Digicel, GNP, TWTC
- St. Kitts & Nevis: AT&T, Cariglobe, C&W
- St. Lucia: AT&T, C&W, Digicel
- St. Vincent & Grenadines: AT&T, C&W, Digicel

TRINIDAD & TOBAGO

Trinidad & Tobago has a population of 1.3 million with a Gross Domestic Product per capita of US$9,600 in 2003.

The provider of the fixed line services is the government owned Telecommunications Services of Trinidad & Tobago, TSTT, with a teledensity of 25 per 100 inhabitants.

TSTT also provides mobile service, with a current teledensity of 28 per 100 inhabitants. The government of Trinidad & Tobago will issue two additional cellular licenses in April 2005.

The single national telecom regulator is the Telecommunications Authority of Trinidad & Tobago, TATT. The sector is governed by the Telecommunications Act, 2001 (amended in 2004).

BARBADOS

Barbados with a population of 270,000 has a Gross Domestic Product per capita of US$16,200.

Fixed line service is provided by Cable & Wireless, having a teledensity of 50 per 100 inhabitants in 2003.

Cable & Wireless and the two new entrants since February 2004, Digicel and Cingular Wireless, now provide mobile service. Mobile teledensity is 52 per 100 inhabitants.

Three separate bodies are responsible for the regulation of the telecom sector:
- Ministry of Energy & Public Utilities (Spectrum)
- Barbados Broadcasting Authority (Broadcasting)
- Fair Trading Commission (Competition & Economic)
7.0 Digital Access Index

The Digital Access Index is a measure of the overall ability of individuals within a country to access and use ICT’s in general. The Digital Access Indices for those Caribbean countries in the top 10 in the Americas is show here. Note that Jamaica ranks 12th in the Americas and 57th among 178 countries across the world.

<table>
<thead>
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<th>Rank</th>
<th>Country</th>
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<tr>
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<td>5</td>
<td>Chile</td>
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<td>Antigua &amp; Barbuda</td>
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<tr>
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<tr>
<td>10</td>
<td>Argentina</td>
<td>0.53</td>
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8.0 Perspectives on the Future

Let us now look briefly on some perspectives for the future.

Technologically, one of the challenges will be the extent to which regulators and operators are able to extract maximum value for the subscribers of telecom services based on the convergence of the technology. I speak of maximum value with respect to price, quality, content and the wide availability of telecom services.

From a regulatory perspective, Jamaica is actively assessing the benefits to be derived, and will most likely follow the industry trend in establishing a single national telecom regulator. The other regulatory challenge facing Jamaica and other Caribbean States, is to give due consideration to declaring spread spectrum bands unlicensed, in order to promote the growth of wireless systems and ICT in general.

Also, depending on the state of liberalization of each market, regulators have the challenge to determine the optimum point for operation along the continuum between Regulation and Competition. Should there be less regulation, some may even say there is no need for regulation; we should just let the market decide. But is this the best approach?

Another issue of major concern to Caribbean regulators currently is the use of Foreign Mobile Country Codes, MCCs and Mobile Network Codes, MNC, by some of the new entrants in the mobile sector. For example, Digicel uses Jamaica’s MCC in all the other Caribbean territories and AT&T will like to use that of the United States.
8.1 High Cost of Internet Service

One major challenge is the high cost of internet service. A primary reason for this is that the International Gateway, the submarine fibre-optic cable linking Jamaica to the rest of the world is owned by the incumbent, Cable & Wireless.

The Government, in December 2004, amended two licences for new cable lending facilities for other companies to establish other fibre-optic gateways. We anticipate these cables will be in place by late 2005 or early 2006 and we anticipate up to 75% reduction in the cost of internet services.

The other strategy aimed at increasing broadband internet service is to establish a terrestrial wireless network at 450MHz using the CDMA technology.

Politically, the governments of the Caribbean have signalled their intent to establish a Caribbean Single Market & Economy, CSME in 2005; therefore, the onus will be on Telecom Regulators and Operators within the Caribbean to extract maximum value from the synergies this may bring.

Ladies & Gentlemen, I thank you.