



# **ACHIEVING UNIVERSAL BROADBAND INTERNET ACCESS IN THE CARIBBEAN: WHICH POLICIES TO ADOPT?**

by

**Hallam Hope**

Managing Director

CARITEL

Telecommunications & Marketing Consultants

Email: [www.hallamhope.com](http://www.hallamhope.com); [caritel@hallamhope.com](mailto:caritel@hallamhope.com)

Tel.: 1 (246) 822-1414

*Presented at the Annual Review Seminar  
Research Department  
Central Bank of Barbados  
July 27-30, 2009*

**ACHIEVING UNIVERSAL BROADBAND INTERNET ACCESS IN THE  
CARIBBEAN: WHICH POLICIES TO ADOPT?**

By

**Hallam Hope**

**Introduction**

Broadband Internet access is recognised internationally to be essential in today's world for social and economic development to take place. The Millennium Development Goals (MDGs), which give prominent attention to the reduction of poverty, include as a critical action item providing rural and urban communities with access to the Internet. Research into access, particularly in rural communities but nationally as well, and identification of strategies to address access and consequently address poverty are therefore, in my view, critically interrelated. From a national strategic perspective, a living policy on Information and Communication Technology (ICT) in which affordable access to broadband Internet is clearly defined in terms of strategies and the relevance to economic development is essential.

Development agencies have noted that the absence of broadband Internet access in rural communities is hampering their work.

This paper will take a brief look at the challenge of achieving universal broadband Internet access with reference to Jamaica and Barbados. It will discuss what has worked, what has not and suggest additional options for policy implementation.

## **Defining Universal Service and Universal Access**

The Telecommunications Act of Barbados (2001) does not define either Universal Service or Access. Universal service policy is broadly defined at Section 32 of the Act as “ ... aimed at ensuring that every resident and every business enterprise of Barbados has access to reliable, affordable telecommunication services throughout Barbados on an equitable basis”.

### ***What does this mean?***

The Telecommunications Regulation Handbook (2000, Intven and Tetrault) notes that in some cases, the terms Universal Service, Universal Service Obligation and Universal Access are used interchangeably. The handbook uses the term universality to refer to both Universal Service and Universal Access.

“The overriding objectives of universality policies are to expand and maintain availability of affordable telecommunications services to the public. In particular, US and UA policies are aimed at providing or maintaining service to those who would not normally be served. This population includes those in high cost service areas, such as rural and remote regions, as well as lower income groups.” (2000, Telecommunications Regulation Handbook, Intven and Tetrault, Module 6, Universal Service).

Several years ago I read a comment by Dr. Delisle Worrell (Central Bank Governor in waiting) to the effect that we in the Caribbean need to find indigenous solutions for our problems. (my words in part). This is particularly the case with ICT and Telecoms policy where it is argued that in the constantly changing world of communications and convergence of communications countries that do not update their policies, implement these policies and re-think policy, simply fall behind. And I would dare say that Barbados has been in this boat, for a while.

During the life of the former Peoples National Party government in Jamaica then Minister of Commerce, Science and Technology Philip Paulwell declared that Universal Service obligations have been achieved in voice telephony.

What the former minister was referring to was some improvement in teledensity, meaning a per capita increase in the number of Jamaicans having access to a working telephone service and more importantly the explosion in the cellular phone uptake.

By contrast Barbados can state even more assertively that past governments achieved the vaguely defined Universal Service obligation, if this means access to working telephone service.

**Table 1.**  
**[1. Data is for 2005, presumably at January 4<sup>th</sup>, 2005]**

<b>ITU Yearbook of Statistics 2008 [January 4<sup>th</sup>, 2006]</b>	<b>JAMAICA</b>	<b>BARBADOS</b>
POPULATION	2.66 million	270, 000
Internet Subscribers	85, 400	16, 525 (1)
Fixed Broadband Internet	79, 000	55, 260
Cable Modem Internet Subscribers	1,000	-
DSL Internet Subscribers	41, 100 (1)	31, 838 (1)
Internet Users (Est.)	1, 300 000	250, 000
Main Telephone Lines in operation	342, 000	134, 878 (1)
Main Telephone Lines per 100 inhabitants	12.85	50.14

So although our Telecommunication Acts are vague on Universal Service the ever-changing telecommunications landscape has changed and access to broadband communications as needs in business, education, health and other areas have accelerated. In this environment of change there is a huge policy lag. Barbados has been trying to pull together a policy on Information and Communication Technology since 2004 without closure on a document acceptable to Government. This is much the same situation in Jamaica and the rest of the Caribbean. ICT policies, where formulated, tend to be outdated, hence the HIPCAR project financed by the European Union to the tune of US\$3 million and run by the International Telecommunications Union. The buzz word these days is harmonisation so ICT policy harmonisation is at the forefront of the agenda of the HIPCAR project.

## **The need for a universal broadband policy**

### ***Jamaica***

Development agencies such as the H.E.A.R.T Foundation in Jamaica have found that development projects are hampered or undermined by an absence of broadband service, particularly in rural areas.

### ***Barbados***

In Barbados we do not have access to universal broadband service.

## **How is Universal Broadband Service defined?**

If there is no clear definition of Universal Service in Barbados and other parts of the Caribbean then there is a good chance that there is none of UBS in Barbados and elsewhere in the region.

Let's therefore come up with a definition of UBS for Jamaica and Barbados.

Dial-up is low speed Internet Access. 56 kilobytes per minutes, usually much less can be the norm. Broadband is anywhere up from 256 kilobytes upstream and downstream at a residential level as defined by the International Telecommunications Union.

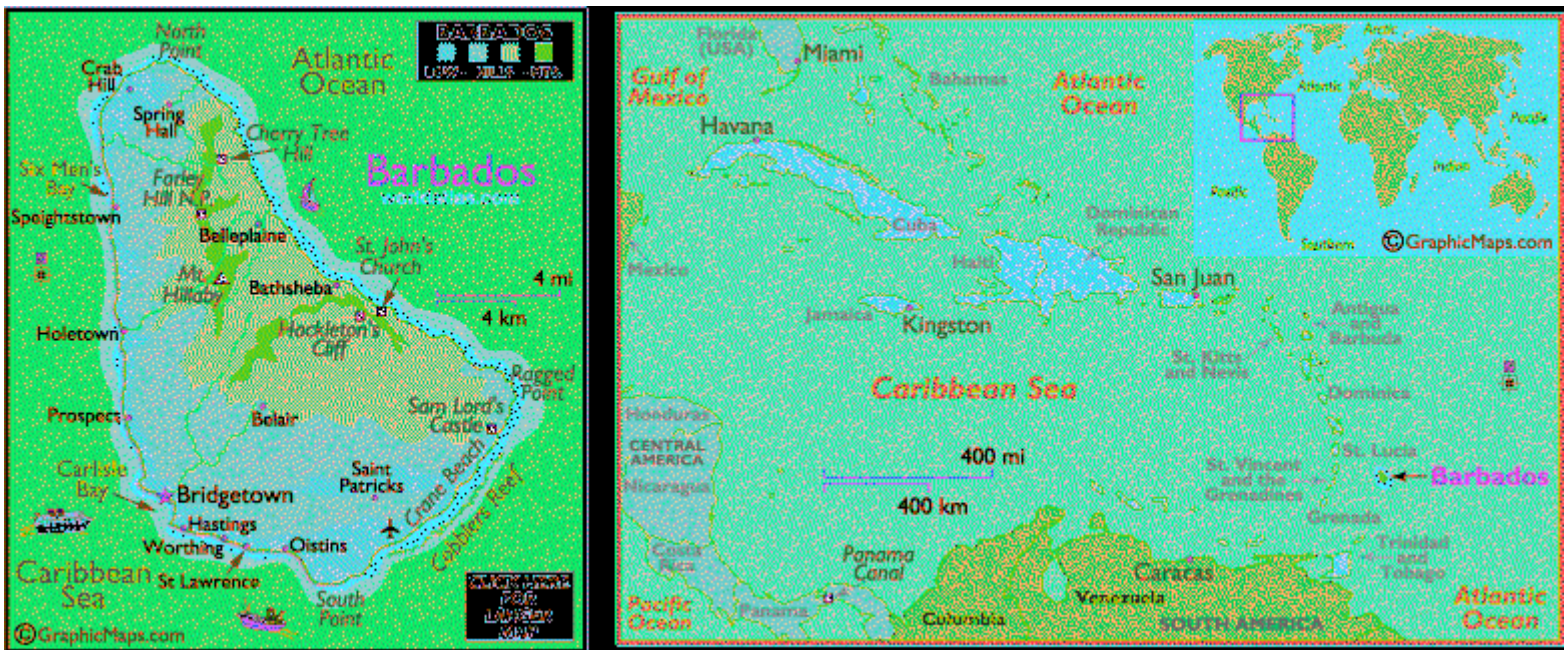
This is however not a realistic definition in my opinion. As telecommunication services continue to expand, driven by more services on the Internet, it is argued in the paper that there needs to be:

1. A definition of UBS
2. A policy for UBS and
3. A strategy to implement the UBS policy

## What has worked, some challenges and some ideas to move forward

Government backbencher Stephen Alleyne was quoted recently as being highly critical of the location for sometime of a wireless tower at South Point, I assume in his constituency. There is a reason for the choice of the location.

This cited because of the importance of information to location, location to access to service and access to service and the availability of broadband communications.



A map of Barbados

## Universal Service regulations

### Old policies and challenges and some new ideas

#### *Existing approaches*

(See Section 6.3.1, Module 6, Universal Service, in Telecommunications Regulation Handbook, Hank Intven and McCarthy Tetrault, 2000. InfoDev).

*Market-based reforms:* especially privatization, competition and cost-based pricing.

These will not work because liberalisation is under way and the environment, e.g for competition in landline telephony service, relevant to delivery of ADSL (high speed data service) does not exist. Ninety eight per cent of households already have access to telephone service.

*Mandatory Service Obligations:* imposed by licence conditions or other regulatory measures. The horse has already bolted. Licences are in place and would be difficult to re-negotiate and obligations imposed.

*Cross subsidies:* between or within services provided by incumbent operators.

Justification is fraught with difficulty in proving that such subsidies exist. The incumbent, namely LIME, can be expected to challenge what could be seen as an attempt to force their hand. The existence of competition in some areas has changed this.

*Access Deficit Charges:* paid by telecommunications operators to subsidise the access deficit by incumbents. Again, this is fraught with justification challenges. ADC's have lost credibility in some countries where they have either been reformed or dumped on the basis that they do not work.

*Universality Funds:* independently administered funds that collect revenues from various sources and provide targeted subsidies to implement universality programmes. Again, this is fraught with challenges of taxing citizens or service providers. There are also implementation challenges with these funds.

### ***Alternative approaches***

I submitted a skeletal strategy to Government a few months ago which recommends implementing concurrently and efficiently. Both require the full support of various government departments, Cabinet and the Prime Minister, who holds ultimate responsibility for Telecommunications.

### *Approach A*

This involves setting a target for the two full service licenced Telecommunications providers, LIME and TeleBarbados Inc. to eliminate the current waiting list for telephone service by providing the households of these citizens with access to the Internet, either in the form of ADSL or Fixed Wireless technology.

### *Approach B*

This involves actively facilitating co-location with government (including the Barbados Coast Guard) and other security-related forces, or with licenced telecommunication carriers, namely LIME, TeleBarbados Inc. and Digicel.

### **Approach A**

This requires the acquisition of the telephony waiting list from LIME, the network of LIME for ADSL and telephony service and the areas where wireless access to the Internet is provided by TeleBarbados. With this data a map is then produced which identifies where the network does not allow for Internet service and where such service is available. The three carriers would then be invited to extend service to areas where Internet service is unavailable due to network gaps or gaps in coverage.

### *Financing for Approach A*

The carriers would be offered a 20 per cent rebate on their annual licence fees in a calendar year if they achieve the network capacity to offer Internet service to 100 per cent of those persons waiting for telephone service. This creates a non-discriminatory, fair and transparent approach for the licenced carriers.

### *Alternative financing approaches. (See earlier comments)*

A Universal Access Fund, financed either by licenced carriers or taxpayers was considered. Market competition was also considered as an option to achieve the objective of this strategy. The author considered both options to have challenges in effectiveness and their ability to ensure a speedy implementation of the stated objectives. Universal Service Funds have shown through experience to have flaws. The author considered the

timing of additional taxation of citizens to be in appropriate. It was also noted that plans to pay for free transportation for school children have apparently had some challenges in implementation.

### **Approach B**

This involves a pro-active approach to permitting interested licenced companies to co-locate with other carriers or government security systems. The author considers this approach to have considerable potential for achieving the stated objective but notes that Competing carriers tend to go separate ways and resist co-location or charge fees that are above cost to either deter or undermine competitors who may need access to their towers.

### **Alternative C**

This involves encouragement of Triple Play and may require partial divestment of state-run Caribbean Broadcasting Corporation (CBC). While there may be sounds reasons for encouraging Triple Play as Jamaica, Trinidad and Tobago, and some OES countries recognise and are implementing, tampering with the CBC might be politically unattractive. The technology dinosaur that is CBC will most likely remain.

### **Australia**

“Australia unveils public national broadband scheme” (CAPACITY magazine, Vol. 9, issue 7, May 2009).

The Australian Government is investing US\$31 billion in a national broadband network which will provide every household with 100 Mbts. The strategic goal is to support a new digital economy and will be implemented over eight years.

The state-owned National Broadband Corporation (NBC) will supply high-speed links to all sectors of the economy and end the monopoly held by Telestra on national access networks.

So why would a developed country way ahead of Barbados with a liberalized telecommunications market and competition in telecommunication services conceive a 31 billion US dollar plan to provide access which can be provided by a private company? And at this time of global fiscal difficulty?

The answer may be found in the statement by Paul Budde, Managing Director at research firm Buddecomm: “The accompanying regulatory documentation doesn’t give Telestra any room to manoeuvre. It can continue its obstructive behaviour and launch new court cases or it can look at the business opportunities that are now available to it. It can work with the new corporation and establish working relationships based on the new rules set by the government.”

Here in Barbados probably the best residential service available is a one Megabites per second Internet access, guaranteed uplink from TeleBarbados. ADSL offered by Cable & Wireless Barbados Ltd fluctuates below the quality of bandwidth with ADSL is more dependent on the number of customers online at any particular time and other considerations.

## **Conclusions**

Caribbean Governments are today distracted from ICT and Telecommunications policy by economic challenges.

Jamaica is contemplating returning to the IMF (to borrow money) and associated with that might be conditionalities which may include further reductions in public spending.

Jamaica has re-imposed taxes on computer imports and there are deep concerns in the society that imports for social purposes, the individual, the community project will be affected negatively.

Hence the cost of Internet access, which includes owning a computer, would go up. While more Barbadians presumably go online for movies, online education, watching Tiger Woods in action or using the Internet in a myriad of other ways, including for business there remain scores of Barbadians who do not have access to a working telephone or Internet service.

The question, therefore for us, is is this acceptable? If not, then does Barbados need to design and implement a Universal Broadband Internet policy and strategy that would enhance the competitiveness of not only the haves but the have nots?

Even more important, I suggest, do we need a strategic broadband plan and strategy which would position Barbados, as Australia is moving to do, to be a centre that attracts truly global services and gives citizens the opportunity to be part of a global economy with businesses that are locally-based but globally focused?

## **References**

1. Telecommunications Act of Barbados (2001).
2. Telecommunications Regulation Handbook (2000, Intven and Tetrault).
3. ITU Yearbook of Statistics 2008 [January 4<sup>th</sup>, 2006] (See Table 1).
4. Correspondence with Elizabeth Terry, Executive Director, H.E.A.R.T Foundation, Jamaica on lack of Internet access and impact on development programmes.
5. Article appearing in the Barbados Advocate, citing comments from DLP parliamentarian Stephen Lashley on tower location in Christ Church.
6. Universal Internet Access Version 1, February 20<sup>th</sup>, 2009 (A skeletal paper presented to the Barbados government on strategies to achieve Universal Broadband Service).
7. Map of Barbados.
8. Online article quoting former Jamaica Minister of Commerce and Industry Philip Paulwell on Jamaica achieving Universal Access in voice telephony.
9. CAPACITY magazine, Vol. 9, issue 7, May 2009).