

# MARKET DEFINITION AND SIGNIFICANT MARKET POWER

**Professor David Gabel  
Gabel Communications  
Newton, MA**

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# MARKET DEFINITION

- Identify Candidate Markets
- Define Markets
- Evaluate for Significant Market Power
- Remedies

# Purpose of Market Definition

- Identify markets so as to assess the competitive constraints faced by communications providers for the purposes of determining regulatory remedies.
- A finding that a given service is in a particular market does not mean that services outside of the market are irrelevant in considering the question of market power as they may still provide some competitive constraint on suppliers in the market under consideration

# Candidate Markets

- In accordance with section 22(1) of the Electronic Communications Act (EC Act), the RA will first publish a *Notice identifying the electronic communications markets susceptible to ex ante regulation* (“Markets Notice”). The Markets Notice will establish preliminary market definitions. Markets may be susceptible to the imposition of ex ante remedies if, per 22(2), there are barriers to entry, no anticipated changes that would make the market competitive in the future, and the application of ex post competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.

# Determining if one or more firms have SMP

- Section 23(4) of the EC Act requires that the RA conducts a consultation that includes an assessment of the definition of the Candidate Markets as part of the market review process. In particular, section 23(4) states that:
- The Authority shall conduct a public consultation to review those markets identified in accordance with section 22 that in its view are susceptible to ex ante regulation, if any, or pursuant to subsection (6), for the purposes of—
  - evaluating whether these relevant markets are, or continue to be, correctly defined based on an economic assessment of supply and demand;
  - analysing whether a communications provider, individually or with others, in fact possesses, or continues to hold, significant market power in one or more of these relevant markets based on the applicable facts and circumstances; and
  - deciding which obligations, if any, should be imposed in respect of each relevant market characterised by significant market power in order to promote or preserve effective competition, in accordance with section 24.

# Determining Markets

- The analysis has involved the definition of markets using internationally accepted methods of determining:
  - which products are sufficiently substitutable that they are in the same market – in doing so the standard tests for demand- and supply- side substitution have been applied;
  - whether there are distinct geographic markets within Bermuda; and
  - whether there are distinct customer markets.

# Key Analytical Issues

- Are retail access and local calling in the same market? (section III.A) This issue is relevant to both the fixed and mobile markets.
- Which technologies fall into the fixed access and calling markets? (section III.B) This discussion relates to the fixed access, local calling and international services. Mobile technologies are not discussed in this section (being discussed subsequently).
- Are fixed and mobile services sufficiently substitutable that they lie in the same market? (section III.C)
- Are there distinct markets for different customer types, and if so what are the customer market delineations? (section III.D) This issue is relevant to all retail markets considered.
- Are the markets national or are there distinct geographic markets? (section III.E) This issue is relevant to all markets considered.

# Fixed Access & Voice

## Table 1: Survey results regarding percentage of respondents that have a landline connection

Source: *Bermuda Omnibus*

Date	Percentage of Respondents that Have Landline Phone at home
September 2009	94%
December 2009	96%
March 2010	95%
June 2010	95%
December 2010	95%
March 2011	97%
December 2011	94%

- BTC – substantial market share today.
- Increase in wireless only households.



# Fixed Broadband

- Different technologies used by suppliers raises switching costs.
- Broadband take-up very high compared to other nations.
- Performance on speed is not very good. Bermuda ranks 91<sup>st</sup> out of 181 countries for measured download speeds.
- Ranks 63 out of 181 on upload speeds.

# Fixed Broadband

**Table 1: Comparative average download and upload speeds (Kbps)--2012**

<b>Country</b>	<b>Avg Download Speed (Kbps)</b>	<b>Avg Upload Speed (Kbps)</b>	<b>Download Rank</b>	<b>Upload Rank</b>
Jersey	10,550.86	3,992.63	43	39
Guernsey	6,906.61	708.10	61	152
Bermuda	4,322.92	2,471.36	91	63
Bahamas	3,676.01	1,685.21	100	83
Bahrain	3,640.37	1,211.96	101	112
Cayman Islands	3,476.51	1,056.63	109	127
British Virgin Is.	2,415.44	931.73	135	138

# Comparable Countries

## Comparable Countries

<b>Country</b>	<b>GDP - per capita (PPP) (US\$)</b>	<b>2010 population</b>	<b>2010 population density</b>
Bermuda	\$69,900	68,679	1,272
Jersey	\$57,000	94,161	812
Guernsey	\$44,600	65,068	834
Cayman Islands	\$43,800	51,384	195
Bahrain	\$40,300	1,214,705	1,598
British Virgin Islands	\$38,500	25,383	168
Bahamas	\$28,700	313,312	23

Source: <http://www.indexmundi.com>

# Broadband Prices

**Comparative per Mbps prices for 4 Mbps broadband service (current US\$)**

<b>Country</b>	<b>Monthly Per Mbps price (Download)</b>
Cayman Is.	\$38.11
Bermuda	\$33.74
British Virgin Is.	\$27.25
Baharain	\$23.19
World avg.	\$9.47
Bahamas	\$9.28
Jersey	\$7.50
50 wealthiest countries	\$5.58
Guernsey	\$2.45

# Mobile Markets

- Merger of M3 and BDC.
- Entry.
- Earnings.

# Mobile markets

- Comparative entry rate plans--various countries

Country	Plan	Monthly Rate	Local Anytime Minutes	Local Digicel Minutes	Total Minutes	Included Text Messages	Included Data	capacity price
Guernsey	Basic 400	\$38.37			400	400	10MB	\$0.10
British Virgin Islands	Digicel Select 325	\$41.00			325	150		\$0.13
Guernsey	Smart 400	\$53.13			400	400/unlimited <sup>1</sup>	Unlimited	\$0.13
Bermuda	Digicel 300	\$51.80	100	200	300	100		\$0.17
Bermuda	CellONE 300	\$54.76	100	200	300	100		\$0.18
Cayman	Digicel World 350	\$85.06			350	90		\$0.24

# Mobile Markets

- For top tier mobile plan customers Bermuda is, by and large, less expensive relative to what is observed in other countries of comparable size.
- Rate-of-return.

# Leased Line Services

- Divide market between slow (<1Mbs) and high-speed (>=1Mbs) leased lines.
- Division reflects Ethernet starting-point.
- At the present time there are four firms supplying these services in Bermuda. These are:
  - 1. BTC;
  - 2. Quantum;
  - 3. North Rock; and,
  - 4. Telecommunications Networks Limited (TNL).



# Infrastructure Access

- Poles, ducts, and towers.
- Central Hamilton—more than one owner of ducts.

# Subscription Television

- Shadow areas constrain WOW.
- BCV not serving all of Hamilton.
- Little countervailing buyer power.
- Earnings
- Entry

# Remedies

- Indicative