POSITION PAPER –

REGARDING TYPES OF OBLIGATIONS ON BAHAMAS TELECOMMUNICATIONS COMPANY LTD. AND CABLE BAHAMAS LTD. UNDER S.116(3) OF COMMUNICATIONS ACT, 2009

ECS 07/2010

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UTILITIES REGULATION & COMPETITION AUTHORITY

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Executive Summary

In accordance with its duties under the Communications Act, 2009 (the Comms Act), URCA is currently implementing an interim process of market review and *ex ante* regulation for operators presumed to have Significant Market Power (SMP) in The Bahamas. This short-term process is intended to support a 12 to 24 month transition period of liberalisation. Section 116(1) of the Comms Act sets out presumptions of SMP for Bahamas Telecommunications Company Limited (BTC) and Cable Bahamas Limited (CBL) for two high level markets respectively and URCA has a duty to determine the types of obligations which should be imposed on these two operators to satisfy the need to "maintain … the objective of encouraging, promoting and enforcing sustainable competition".

URCA appreciates the cooperation by the operators. It has considered the submissions made and data provided in response to separate data requests issued by URCA and as a consequence, URCA now has substantially more data than was available to it at the time of the Preliminary Determinations (ECS 18/2009 and ECS 19/2009). Consequently, URCA is now considering changes to the results of the analysis, which in turn mean possible changes to the selection of proposed obligations.

The purpose of this Position Paper is to set out URCA's current thinking on the types of obligations, and the reasons for possible changes to URCA's position. For the avoidance of doubt, this document is not a statement of results. It does not discuss all submissions and data received in detail, nor does it repeat the original analysis unless necessary: readers of this document should refer to the Preliminary Determinations and Draft Orders[1] where applicable and to the submissions by stakeholders for a full list of all non-confidential information received.

The main upcoming milestones are:

- Interested parties may submit comments on this Position Paper. Since URCA is not bound by the thirty (30) day time period for consultation, this is not a formal consultation and there is therefore no formal deadline for comments. However, URCA urges interested parties to submit any comments they have at the earliest possible time and ideally by 31 March 2010.
- The early submission of comments will enable URCA to incorporate those comments into URCA's final review and analysis of the obligations proposed by the operators on 22 January, before issuing its Final Decision on 22 April, regarding the products that remain in each of the high level SMP markets and the obligations to be applied to those products as indicated below.
- 22nd April – In accordance with section 116(3)(c) URCA will either:
    - Issue a decision accepting the operators' proposed obligations;
    - Issue a decision mandating obligations to some degree different from the operators' proposed obligations; or
    - Require an operator to modify its proposed obligations.

[1] Copies may be downloaded from URCA's website at **www.urcabahamas.bs**.

For each product in a high level SMP market deemed susceptible to *ex ante* regulation, URCA has followed the framework set out in Section 4 of this Position Paper. Where necessary, given the large number of products included in this review, URCA has presented aspects of this framework at a general level – for example, the discussion of the general costs and benefits of obligations irrespective of the SMP operator or product in Section 5 and Appendix 2.

The application of the framework to each product includes a discussion of the specific costs and benefits associated with the obligations considered to address identified (actual or potential) market failures and an assessment of the obligations which URCA considers:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate, having due regard to the costs and benefits.

As this has been done on a product-by-product basis, URCA considers whether the cumulative effect of the obligations identified places a disproportionate burden on CBL or BTC. URCA also considers whether there are risks or other possible unintended consequences that relate to the different options being considered.

CBL

The table below summarises the products and obligations proposed for CBL.

Product	**Obligation**
Broadband internet	Untying of services
SuperBasic package	Rules-based retail price regulation
Digital package	Standard SMP obligations in licence
Retail national and international leased lines	Standard SMP obligations in licence
Access to broadband network and services	CBL to propose specifics
Access to the transmission network	CBL to propose specifics
Wholesale national and international leased lines	Standard SMP obligations in licence
General obligation	Accounting separation

At the retail level, URCA is intending to impose obligations on CBL for its broadband internet and SuperBasic Package only. For wholesale access to the broadband network and services and access to the transmission network, URCA has requested CBL to propose an obligation that will ensure that the solution can be implemented in a timely and cost-effective manner. For the remaining products, URCA has concluded that no additional obligations (other than standard SMP obligations and accounting separation requirements) are required for the purposes of the interim SMP process.

URCA considers that the collective impact of these obligations is not likely to be disproportionate to the benefits expected to consumers and to the prospect of sustainable competition in The Bahamas. At the retail level, the obligations imposed are intended to provide added consumer protection during the interim SMP process and until sustainable competition has been established in The Bahamas for those products. URCA does not consider that they impose a disproportionate burden on CBL either standalone or collectively given that CBL has been subject to some price regulation in the past.

BTC

The table below summarises the products and obligations proposed for BTC.

Product	Obligation
Fixed access and local calling	Rules-based retail price regulation
Fixed DLD and ILD call products	Rules-based retail price regulation
Broadband internet access in specified areas	Geographic averaging
National and international leased lines	Standard SMP obligations in licence
Mobile voice and data services	Rules-based retail price regulation
Call transit (domestic, international and mobile), call termination services[1], directory enquiry and ancillary services[2]	RAIO with cost-based charges where possible
Incoming international calls to mobile customers	Specific one-time retail price adjustment
Wholesale national and international leased lines	Standard SMP obligations in licence
Access to transmission network	BTC to propose specifics
Access to broadband network and services	BTC to propose specifics
General obligation	Accounting separation

1. Includes call termination (domestic, international and mobile), termination of emergency calls to the police, termination of automated ancillary services, termination of calls to freephone/toll-free numbers, termination of calls to operator assistance facilities and termination of calls to directory enquiries.
2. BTC shall produce a reference offer for interconnection and access to its network for the products specified above and any additional enabling products that a wholesale customer may reasonably require in order to make use of the products listed. Such enabling products include joining circuits, points of interconnection and data management amendments.

On the face of it, the sum total of the proposed obligations could appear to impose a significant burden on BTC. However, in the context of the obligations (for example, price regulation on the fixed voice services) that BTC currently complies with and the fact that BTC already has an Interconnection Agreement (containing parts of what is required for the RAIO), URCA considers that the incremental burden is not disproportionate relative to the benefits they are expected to bring to consumers and competitors in The Bahamas.

At the retail level, the obligations imposed are intended to provide added consumer protection during the interim SMP process and until sustainable competition has been established for those products. URCA does not consider that they impose a disproportionate burden on BTC, either standalone or collectively, given that BTC has been subject to price regulation in the past. The obligations imposed on wholesale products are intended to enable competitors and potential new entrants access to infrastructure necessary for the development of sustainable competition. While development of Reference Access and Interconnection Offers (RAIOs) for those products may entail a high level of work on the part of BTC, URCA does not consider this to be disproportionate when weighed against the benefits of increased competition. The Accounting Separation Guidelines will support the obligations outlined above and should not create a significant additional burden.

1 Introduction

In accordance with its duties under the Communications Act, 2009 (the Comms Act), URCA is currently implementing an interim process of market review and *ex ante* regulation for operators presumed to have SMP[2] in The Bahamas. This short-term process is intended to support a 12 to 24 month transition period of liberalisation. Section 116(1) of the Comms Act sets out presumptions of SMP for Bahamas Telecommunications Company Limited (BTC) and Cable Bahamas Limited (CBL) for two high level markets respectively. URCA has a duty to determine the types of obligations which should be imposed on these two operators to satisfy the need to "maintain … the objective of encouraging, promoting and enforcing sustainable competition"[3].

The process for determining the types of obligations to impose on the presumed SMP operators has been underway since shortly after the Comms Act came into force in September 2009. Below is an overview of the main milestones in the process so far:

- 30th September – Preliminary Determinations and Draft Orders issued for public consultation under s.116 of the Comms Act.[4]
- 20th, 21st October – Workshops with BTC and CBL, respectively to present the Preliminary Determinations.
- 18th December – Submissions received from BTC, CBL and other stakeholders[5] discussing the Preliminary Determinations and Draft Orders.[6]
- 13th, 14th January – Workshops with BTC and CBL, respectively to present their submissions to URCA.
- 22nd January – Second round of submissions received from SMP operators, proposing alternative obligations and taking account of the 18th December submissions made by other operators.[7]
- 15th February – Final Determination issued terminating the process and timelines under section 100 of the Comms Act.[8]
- 22nd, 24th February - Workshops with BTC and CBL, respectively to discuss URCA's position based on the submissions and other information received.

URCA appreciates the cooperation by the operators. It has considered the submissions made[9] and data provided in response to separate data requests issued by URCA and as a consequence,

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[2] Operators with Significant Market Power (SMP).

[3] See s.116(2) of the Communications Act.

[4] "Types of obligations on Bahamas Telecommunications Company Ltd. under s.116(3) of Communications Act, 2009" (ECS 18/2009) and "Types of obligations on Cable Bahamas Ltd. under s.116(3) of Communications Act, 2009" (ECS 19/2009), both issued 30 September 2009

[5] BTC, CBL, SRG and Digicel

[6] These submissions are publicly available on the URCA website at http://www.urcabahamas.bs/publications.php?cmd=view&id=24&pre=y

[7] These submissions are publicly available on the URCA website at http://www.urcabahamas.bs/publications.php?cmd=view&id=27&pre=y

[8] http://www.urcabahamas.bs/publications.php?cmd=view&id=30&pre=y (ECS 04/2010)

URCA now has substantially more data than was available to it at the time of the Preliminary Determinations. Consequently, URCA is now considering changes to the results of the analysis, which in turn mean possible changes to the selection of proposed obligations.

URCA believes in the benefits of active, constructive engagement with industry, and indeed engagement with industry is one of the principles behind some important provisions of the Comms. Act, such as the provisions allowing for the creation of industry Working Groups in some cases.

The purpose of this Position Paper is to set out URCA's current thinking on the types of obligations, and the reasons for possible changes to URCA's position. For the avoidance of doubt, this document is not a statement of results. It does not discuss all submissions and data received in detail, nor does it repeat the original analysis unless necessary: readers of this document should refer to the Preliminary Determinations and Draft Orders where applicable and to the submissions by stakeholders for a full list of all non-confidential information received. In this Paper:

- In Sections 2 and 3, URCA highlights those changes to the analysis of products to be included in the high level SMP markets currently under consideration. In Section 2.1, URCA re-states the methodology used, with some clarifications and additions. In Section 2.2, URCA provides its current thinking on the products to be included in the high level SMP market, reflecting the information received from the stakeholders.
- In Sections 4 to 22, URCA provides details of its current thinking on the types of obligations that in its opinion at this stage of the review should be imposed on the 2 SMP operators in accordance with section 116(3) of the Comms Act.

The main upcoming milestones are:

- Interested parties may submit comments on this Position Paper. Since URCA is not bound by the thirty (30) day time period for consultation, this is not a formal consultation and there is therefore no formal deadline for comments. However, URCA urges interested parties to submit any comments they have at the earliest possible time and ideally by 31 March 2010.
- The early submission of comments will enable URCA to incorporate those comments into URCA's final review and analysis of the obligations proposed by the operators on 22 January, before issuing its Final Decision on 22 April, regarding the products that remain in each of the high level SMP markets and the obligations to be applied to those products as indicated below.
- 22nd April – In accordance with section116(3)(c) of the Comms Act, URCA will either:
    - Issue a decision accepting the operators' proposed obligations;
    - Issue a decision mandating obligations to some degree different from the operators' proposed obligations; or
    - Require an operator to modify its proposed obligations.

URCA hopes that this paper will help those interested in the process to understand URCA's thinking and analysis.

[9] BTC, CBL, SRG and Digicel responded to the consultations.

For emphasis this is a Position Paper and therefore is not binding on URCA. URCA is very mindful of the need not to fetter its discretion ahead of the 22nd April decision.

Written submissions or comments on this document should be sent to the Chief Executive Officer of URCA, either:

(a) by hand to URCA's office at Fourth Terrace East, Centerville, Nassau; or
(b) by mail to P.O. Box N-4860, Nassau, Bahamas; or
(c) by email, to **info@urcabahamas.bs**; or
(d) by facsimile to 1 242 323 7288

Contents

2 Product Analysis

2.1 Product analysis methodology

The Methodology employed by URCA in conducting its analysis is described in the original Preliminary Determinations. Because the purpose of this document is to present changes that URCA has made to the analysis and resulting obligations, only analysis which has changed is presented. This will help the reader already familiar with the Preliminary Determinations in identifying and focusing on what has changed since 30 September 2009.

However, URCA believes it is worthwhile to restate the Methodology here because it will aid the interpretation of the changes to the analysis. Furthermore, URCA has identified – partially through the contributions of the operators in the process – a small number of areas in the original description of the Methodology that would benefit from clarification. URCA has also been asked to provide further information on how the principle of proportionality has been applied. The updated Methodology also addresses this point.

Therefore what follows is what was previously presented as Section 4 of the Preliminary Determinations, with additions and small alterations. The main changes have been highlighted in bold text. The detailed Methodology employed for the selection of remedies is described in Section 4 of this document.

2.1.1 <u>Introduction to methodology</u>

This Section describes the methodology that has been applied to determine the products that should be included in the four high level markets for which the Comms Act states there is an interim SMP presumption on each of BTC and CBL and their "affiliates". The four markets with interim SMP presumptions and the corresponding SMP operators are:

- fixed voice services[10] - BTC;
- high speed data services and connectivity - CBL;
- mobile voice and mobile data services - BTC; and
- pay TV services - CBL.

URCA has an obligation under s. 116 of the Comms Act to define the types of obligations that should be applied to the operators presumed to have SMP. In accordance with s.116(2), these obligations are "designed to maintain….the objective of encouraging, promoting and enforcing sustainable competition".

URCA therefore starts this process with two pre-defined parameters:

- The general high level markets, and
- The operators presumed to have SMP in each of the general high level markets.

A standard market review has neither of these two parameters pre-determined and, therefore, it is not appropriate for URCA to conduct a full market review during the interim period.

[10] The Sector Policy (page 12, footnote 3) states that the market for fixed voice "…is intended to include the full product set delivered over BTC's fixed network including both voice and data services."

The analysis set out in the Preliminary Determinations did not therefore constitute, and was not designed to constitute, a full market review. Instead, the interim SMP framework was developed to enable an accelerated short-term process of allowing competition to be introduced as quickly as possible.

The Methodology described in this Section inevitably draws on some of the same regulatory tools and processes as used in full market review, but is specific to the legal framework in The Bahamas and to URCA's duties under the transitional provisions in the Comms Act.

Market reviews for *ex ante* obligations are always forward-looking as *ex ante* regulations are safeguard and seeks to reduce the possibility of abuse of market power. It is therefore important that the time period covered by the review is determined and set out clearly before the actual review is undertaken.

This interim review is conducted for a period of 12 to 24 months, which is a relatively short period and reflects that the purpose is to determine the types of obligations required as safeguards against abuse of market power when the electronic communications markets in The Bahamas are opened for competition. The period chosen is influenced by the fact that the interim SMP presumptions become rebuttable 12 months after the Comms Act came into force.

The differences between a full market review and the interim market review methodology employed in the Preliminary Determinations are shown below:

Table 1 – Methodology for Standard versus Interim Market Review Process

Standard Market Review Process	**Interim Market Review Process**
Market definition • Identify all products and services offered in the electronic communications markets • Demand/supply side substitutability: - SSNIP[11]test (hypothetical monopolist test based on quantitative data analysis to derive initial relevant markets) • EU three criteria test to derive the markets susceptible to *ex-ante* regulation	**Market definition** • High level markets pre-defined • Check which products should remain in the high level market (excluding those for which URCA considers that *ex ante* regulation is not required), determined by: - SSNIP test (but using the presumed SMP operator, based on available data, rather than hypothetical monopolist test) • EU three criteria test to derive markets susceptible to *ex-ante* regulation
SMP Analysis • Actual Monopolist test • Other criteria	**Interim SMP presumption already determined by Schedule 4 of the Comms Act**
Remedies (obligations)	**Remedies (obligations)**

[11] Small but Significant Non-transitory Increase in Price

• Total range of potential remedies to market failure • Criteria to identify which remedies required and proportionate • Identify recommended remedies	• Total range of potential remedies to market failure • Criteria to identify which remedies required and proportionate • Identify remedies for new market entry ("hurdle" remedies acting as competition safeguards across the markets)

The detailed regulatory process of a full market review will be developed in due course in The Bahamas. This will be developed through consultation with the industry and implemented as competition develops.

2.1.2 Methodology Overview

The following Section sets out the Methodological Steps employed in this interim review process to determine which of the products provided by the licensee (with the presumption of SMP) should remain in each high level SMP market and be subject to *ex ante* regulation.

The Steps of the Methodology used in this determination can be summarised as follows:

Step 1. Describe the products offered by the licensee with presumed SMP in the high level market and the possible substitutes for them

Approach

The first Step is to describe all the products offered by the licensee with presumed SMP in the high level market. Any possible substitutes for these products are also described. This includes both products already existing in The Bahamas and future products which URCA considers likely to be launched in the time period. The description should cover:

- Characteristics of products
- Prices
- Geographical reach of products
- Consumer behaviour around the products

Result

A description which enables a review of existing and future demand- and supply-side substitution for the products in question.

Step 2. Assess the products for substitutability and determine whether products should remain in the high level SMP market

Approach

Assess the substitutability of the products offered by the operator with presumed SMP, and the available substitutes, defined at Step 1 using the SSNIP test:

- Demand-side substitution considered first
- Supply-side substitution considered if relevant

For those products without effective demand- or supply-side substitutes, apply the EU "three criteria test" to the products to determine their susceptibility to *ex ante* regulation:

- **Whether there is the presence of high and non-transitory barriers to entry;**
- **Whether there is the presence of a market the structure of which does not tend towards effective competition during the timeframe of this review; and**

If both of the preceding criteria are met, then ask:

- **Whether the application of *ex post* competition law alone would not adequately address market failures that may arise.**

If the answer is "no", then the retail product should remain in the high level SMP market.

<u>Result</u>

List of retail products which should remain in the high level SMP market susceptible to *ex ante* regulation.

3. Repeat process for wholesale

<u>Approach</u>

Identify the wholesale products underlying the retail products identified through the analysis described above.

Subject these wholesale products to the same process of analysis (Step 2).

<u>Result</u>

List of wholesale products in the high level SMP market susceptible to *ex ante* regulation.

These Steps are discussed in more detail in the Section below.

Step 1: Describe the market

A profile of the SMP operator's portfolio is generated by identifying the products, their characteristics, price levels, geographic coverage, consumer behaviour and any other relevant information.

Additionally a portfolio of the possible substitutes for these products is built. The substitutes are grouped by provider and by whether URCA understands them to be current or future products. "Current" is defined as a product which is already available to consumers in The Bahamas and "future" is defined as a product which URCA considers could potentially be offered to consumers in The Bahamas within 12 to 24 months.

Step 2: Assess the products for substitutability and determine whether products should remain in the high-level SMP market

The default starting position is that all products offered by the SMP provider should be subject to *ex ante* regulation, but URCA considers that this could result in unnecessary regulatory intervention and therefore this Step seeks to evaluate whether any products can be excluded from the high level SMP market and thus not be subject to *ex ante* regulation.

This Step covers several aspects:

- substitution analysis using SSNIP[12] test, including comparisons of:
    - characteristics
    - price
    - coverage
- testing whether the product is susceptible to *ex ante* regulation,
- geographic reach.

The tests described in this Section are performed under the assumption that no regulatory intervention takes place. **This means that although URCA knows that future regulation may impact price levels or cause supply of a service that would otherwise not be offered, URCA does not consider these impacts at this stage.**

Substitution analysis using SSNIP test

This review takes as its starting point the statutory presumption of SMP for a particular licensee; hence the SSNIP test is not applied to a "hypothetical monopolist", but to the actual licensee (this form of the SSNIP test is conventionally used to assess market power rather than in the market definition stage).[13] It asks whether there are substitutes for each of the products provided by the presumed SMP operator in the sector under consideration.

The SSNIP test typically analyses substitutability between products by asking "Can the presumed SMP operator profitably raise prices for a particular product by a small amount over the period in question?" For this review the question becomes:

Can the SMP operator <u>profitably</u> raise prices for a particular product by 5-10% for 12 to 24 months?

If the answer to the question is "yes", then it indicates that there are no effective substitutes for that product in the market in the 12 to 24 month time period. If the answer is "no", then it indicates that there must be either demand- or supply-side substitutes available for that product.

However, the fact that some demand or supply-side substitution is found in the market does not automatically mean that the product in question is subject to *effective* competition. URCA uses the definition of effective competition as meaning that the level of substitutability is such that the price increase, as described above, is unprofitable to the SMP operator – i.e. that the likely loss of sales would be so high that the operator would not be compensated by the increased profits of the remaining sales.

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[12] The SSNIP test is performed using the operator with presumed SMP as the *hypothetical monopolist*.

[13] It should be stressed that the SSNIP test does not test for the presence of a monopoly in the market, and that monopoly does not have to exist in order for there to be SMP.

The 12 to 24 month period considered in this SSNIP test is assumed to commence on publication of the Preliminary Determinations.

Demand-side substitution

Demand-side substitution occurs when a consumer purchases an alternative product as a replacement for a product that has experienced the price increase. The price of a product is constrained on the demand side if the operator does not find it profitable in the 12-24 month time period to increase its price because of the threat of a substantial number of customers switching to an alternative product (i.e. substitute).

The three main factors considered in assessing whether there is effective demand-side substitution are:

- Characteristics. Here the characteristics of the possible substitutes are compared to the characteristics of the product being tested. Consumers are only likely to switch if the possible substitute matches the characteristics to a reasonable degree. URCA will use its discretion to make the judgment as to what is a reasonable match.
- Price. Here the prices of the possible substitutes, where available, are compared to the prices charged by the presumed SMP operator. As the analysis is based on the response to a price increase by the presumed SMP operator, consumers would probably only substitute to another product that would be cheaper than the increased price or which represents 'better value' overall for a similar price. This includes consideration of the Cellophane Fallacy.[14]
- Coverage. Possible substitutes can only be used by consumers where they are available. Therefore a possible substitute with considerably lower coverage than the product being tested is unlikely to be able to constrain the pricing of that product.

Other factors considered by URCA to be significant in the decision made by consumers to purchase a particular product, such as the bundling of services, are considered on a product by product basis as necessary.

URCA has presented the summary of this substitutability analysis at the end of each Section for a given product in the portfolio of products offered by the SMP operator. The summary shows a ranking of the possible substitutes, evaluating each based on the factors described above. When ranking the characteristics, pricing and coverage of the substitutes, URCA has taken into consideration the experience by the consumer of using this substitute, URCA's knowledge of the existing market and operators, the experience and developments in other countries and any other relevant evidence available to URCA.

Supply-side substitution

[14] The cellophane fallacy occurs when assessing the market power of a monopolist by applying the SSNIP at the monopoly price. Because a monopolist will rationally increase prices to a point where other goods or services become substitutable, the test would lead analysts to find more substitutability (broader product markets) than is warranted, and erroneously infer a lack of market power. This is called the "cellophane fallacy" as it was first identified in a case involving Du Pont, manufacturers of cellophane in the USA.

Only if URCA concludes that there is no effective demand-side substitution will supply-side substitution be considered.[15]

Supply-side substitution occurs when a company starts offering a product in response to a (5-10%) non-transitory price increase by the SMP provider. If the new competitor is successful, this would result in demand-side substitution (i.e. customers of the SMP operator will switch to the new product). The same principle applies if an existing supplier changes the nature of its current supply – for example launches an existing service in areas not previously covered. The price of a product is constrained if the SMP operator would not find it profitable to increase its price because of the threat of other producers switching their supply to products that would act as demand-side substitutes.

Determining whether each product is susceptible to *ex ante* regulation

If it has been found that there is not effective demand- or supply-side substitution for the product, the next stage is to determine whether that product is susceptible to *ex ante* regulation. This is established using the European Union's ("EU") "Three Criteria Test", a regulatory test that has been developed as best practice in the EU. It assesses whether markets are susceptible to *ex ante* regulation by asking three questions:

- Whether the product is subject to high and non-transitory barriers to entry (e.g. high sunk costs or regulatory barriers such as exclusivity);
- Whether the market does not tend towards effective competition during the timeframe of this review; and
- If either one, or both of the preceding criteria are met, whether *ex post* action by itself is insufficient to address these market failures without additional regulatory intervention.

If both of the first two criteria are met, and the answer to the final criterion is 'no', then the product is judged to be susceptible to *ex ante* regulation. The application of this test results in a final set of products which remain in the high level SMP market and are susceptible to *ex ante* regulation.

Geographic reach

The geographic reach of products is considered. It represents the geographic limits for the application of obligations for individual products.

The degree to which there are substitutes for products may vary by geography. The geographic boundaries are considered within the SSNIP test and the reach of any demand- or supply-side substitutes identified. This is done as the "Coverage" element of the SSNIP test, described above, and not in the "Geographic reach" step.

Step 3: Repeat process for wholesale

The high level SMP market incorporates both retail and wholesale products.

The analysis is first performed on the retail products and then on the wholesale products because of the relationship between retail and wholesale products in the electronic communications markets. Electronic communications markets are characterised by networks which are difficult to replicate because of their scale, costs and other barriers to entry, such as

[15] This is because only one type of effective substitution needs to exist and thus there is no need for testing for supply-side substitution if demand-side substitution has already been demonstrated.

access to land or the need for spectrum. In general these networks form the basis of the wholesale products offered by operators, for example access to infrastructure and interconnection. The retail products typically overlie these wholesale products – for example, a retail provider of voice calls relies on interconnection services in order to terminate calls on networks which they don't themselves operate. SMP for the retail product is often caused by barriers to entry in the provision of the wholesale product.

Therefore the wholesale products reviewed are those which support the retail products that have been found to be part of the high level SMP market susceptible to *ex ante* regulation. This is because the purpose of *ex ante* regulation is to protect consumer interests through competition or outcomes which replicate competition. If there is already effective and sustainable competition at the retail level for a product, there is often no need to regulate the underlying wholesale products.

Steps 1-2 which are described above are applied to the wholesale products in the same way as they were applied to retail; in the wholesale analysis the consumer becomes another provider of electronic communication services.

Due to the nature of the existing electronic communications markets in The Bahamas, summary tables of characteristics, price and coverage have not been included for the wholesale analysis.

Additionally, the nature of the products are such that for the majority of the high level markets there are no existing wholesale products offered to consumers. Therefore the analysis must be hypothetical in its nature and draw only on experience in other countries and URCA's knowledge of the market, rather than on consumer experience or preference.

The result is the set of wholesale products in the high level SMP market susceptible to *ex ante* regulation underlying the set of retail products susceptible to *ex ante* regulation.

2.2 Options for *ex ante* obligations

A finding of SMP does not necessarily imply that URCA will always impose additional obligations other than standard SMP obligations and accounting separation. The options available to URCA are:

- forbearance (i.e. 'do nothing');
- wait and see (i.e. commercial offering); and
- additional regulatory measures that are efficient and proportionate to their purpose and introduced in a manner that is transparent, fair and non-discriminatory.

3 New information and revision of the analysis of products in the high level SMP markets

In this Section, URCA sets out new information and data received and the impact on the retention of products in the SMP market. Where further analysis has been conducted, URCA has used the Methodology described in the previous Section.

3.1 Cable Bahamas Limited

The CBL products found to be susceptible to *ex ante* regulation in the CBL Preliminary Determination were:

- Broadband internet access
- SuperBasic package
- Digital packages
- Retail national and international leased lines
- Wholesale national and international leased lines
- Bitstream access for broadband internet
- Bitstream access for content distribution
- Wholesale access to the SuperBasic and/or Digital packages
- National and international backhaul

Both new data and/or new arguments pertinent to the analysis, and its impact, are described in the Sections below for each of these products.

It is important to note at the outset that CBL has indicated that an SMP determination in The Bahamas, particularly in the case of leased lines and backhaul, may lead to adverse regulatory consequences in the USA.[16] URCA is considering these issues of foreign regulation. URCA will work with any foreign regulator to clarify issues and help minimise any adverse consequences that may ensue from applicable regulation in The Bahamas, bearing in mind its overarching duty under the Comms Act to regulate electronic communications in The Bahamas so as to further the interests of consumers and persons in The Bahamas. This issue is not considered any further in this document.

3.1.1 **<u>Broadband internet access</u>**

<u>New information</u>

At the end of 2009, following the publication of the Preliminary Determinations, BTC made the following changes to its broadband product portfolio:

Products prior to October 2009			Products after October 2009		
Product name	Speed[1]	Price[2] (US$)	Product name	Speed[1]	Price[2] (US $)
AutoSpeed	384Kb/s	34.99	AutoSpeed	1Mb/s	29.99

[16] This is because the SMP designation relates to international leased lines and backhaul connecting to the USA.

CruiseSpeed	1024Kb/s	54.99	CruiseSpeed	2Mb/s	39.99

Source: CBL's December 09 submission, verified on BTC's website
1. This is the maximum download speed advertised; there are no download limits
2. This is the monthly charge for subscribing to the product. One-off installation charges are not included

Comparable CBL products:

Product name	Speed[1]	Price[2] (US$)	Download limits per month
CoralWave Geo	1.5Mb/s	10.70	75Mbs or 10 hours
CoralWave Jazz	1.5Mb/s	21.70	50 hours
CoralWave Lite	3Mb/s	38.70	No limit

Source: CBL's website
1. This is the maximum download speed advertised; there are download limits
2. This is the monthly charge for subscribing to the product; one-time installation charges are not included

URCA notes that the majority of CBL's available packages are residential broadband products, although CBL offers one business package, CoralWave Pro. A chart provided by CBL in Annex 2 of its December 2009 submission showed that it has not significantly changed the prices of any of its residential broadband products since 2001, other than slight (approximately less than $5) increases in the CoralWave Groove, CoralWave Lite and CoralWave Jazz products. URCA has taken this information into account but in the context of the interim SMP process, considers that, while this information can be interpreted as showing the existence of a constraint, it is equally an example of the operator pricing at a level that the market would bear. Therefore URCA has not changed its views.

At the end of 2009, URCA awarded a licence to IP Solutions International Ltd. (IPSI) to operate in The Bahamas. IPSI is planning to offer a triple-play product (internet, IPTV, VoI).

<u>Impact of new information</u>

URCA has considered whether this new information affects the SSNIP test and EU three criteria test that was conducted for broadband internet access. The revised analysis is summarised below:

SSNIP test results

Analysis from the Preliminary Determination

	Possible substitutes		
	Fixed network + DSL	Satellite	Various
	BTC	**Satellite Bahamas**	**Various ISPs**
Characteristics			
Always on	●●●	●●●	●●●
High download speeds, up to 9Mbps	●	●●	●●
More than one service possible on one line	●●●	●●●	●●●
Price	●●	●	●●
Coverage	●●●	●●●	●
Likely to be an effective substitute within the time period under review?	N	N	N

Analysis following new information

	Possible Substitutes		
	Fixed network + DSL	Satellite	Various
	BTC	**Satellite Bahamas**	**Various ISPs**
Characteristics			
Always on	●●●	●●●	●●●
High download speeds, up to 9Mbps	●●	●●	●●
More than one service possible on one line	●●●	●●●	●●●
Price	●●●	●	●●
Coverage	●●●	●●●	●
Likely to be an effective substitute within the time period under review?	?	N	N

A key consideration of the original SSNIP analysis for broadband was that BTC's products were unlikely to be effective substitutes for CBL's products due to higher prices and lower download speeds.

The changes BTC has made to its AutoSpeed and CruiseSpeed products means their characteristics have moved closer to those of CBL's products. In principle, if Internet packages provided by CBL were to be available separately from CBL's pay TV packages, consumers may switch to BTC if CBL increased the prices of its comparable Internet products by 5-10% for a non-transitory period. However, the current tying of broadband packages to pay TV packages by CBL and the relatively low incremental price of broadband once the consumer subscribes to a pay TV service, results in URCA considering it unlikely that a significant number of subscribers would switch. Additionally, some of CBL products have download limits as compared to BTC's unlimited offers, which again reduce URCA's ability to compare these products directly.

Although some substitution may occur if CBL were to de-link its broadband services from its pay TV services, URCA has some concerns that competition between CBL and BTC may not be sufficient to serve consumers interests. The main reason for this is that CBL and BTC own and operate the only two infrastructures currently able to deliver broadband services to large parts of The Bahamas. Any new market entrant would either have to invest in a third infrastructure (whether wire-line or wire-less) or would need access to one of the two existing infrastructures in order to deliver its competing services. Therefore BTC and CBL would face relatively low risks of further competition. International experience suggests that network and service providers with SMP are unlikely to provide access to new entrants on terms that enable retail competition on a voluntary basis.

As previously mentioned, at the end of 2009 URCA awarded a licence to IPSI, a new entrant to the market. IPSI is planning to offer a triple-play package of internet, IPTV and VoI. However, URCA considers that at this early stage of development it is difficult to gain a clear view about IPSI's proposed products such as specifications, prices or coverage, nor any certainty as to when these may become available. Based on the information available to it, URCA is unable to determine whether IPSI's products, when available, would be considered by consumers to be substitutes to CBL's (or BTC's) products and hence if they would act as a constraint on CBL.

Based on this information, URCA's current thinking is that the potential demand-side substitution presented by IPSI is too uncertain to be considered an effective competitive constraint in the period under review.

Due to the uncertainty of the level and timing of competition that CBL may face in the provision of broadband services, and the substantial barriers to entry a new market player would face, URCA concludes that there is unlikely to be sufficient demand side substitution to produce an effective competitive constraint on CBL for the period in question.

URCA also reviewed the EU three criteria test and, as can be seen from the comparative table below, the new information provided has not caused URCA to change the analysis.

EU three criteria test results

Analysis from the Preliminary Determination

Criteria	Present?
Low barriers to entry	N
Emergent competition at the retail level	N
Sufficiency of *ex post* competition law	N
Susceptible to *ex ante* regulation?	Y

Analysis following new information

Criteria	Present?
Low barriers to entry	N
Emergent competition at the retail level	N
Sufficiency of *ex post* competition law	N
Susceptible to *ex ante* regulation?	Y

URCA's current thinking is, therefore, that the conclusion from the CBL Preliminary Determination should be maintained – none of the three criteria are met, so broadband internet access should remain in the SMP high level market susceptible of *ex ante* regulation.

The original assessment of this product can be reviewed at Section 6.1 of the CBL Preliminary Determination.

3.1.2 SuperBasic Package

URCA has read the submissions received but concluded that there were no new substantive arguments presented or new information provided which would make it necessary to analyse this product further.

The original assessment of this product can be reviewed at Section 10.1 of the CBL Preliminary Determination.

The conclusion from the CBL Preliminary Determination should be maintained: the SuperBasic package remains in the SMP market susceptible to *ex ante* regulation.

3.1.3 Digital Packages

New information

CBL has provided new information on each of the following areas: (i) survey data to indicate that its market share is lower than that estimated by URCA; (ii) a report providing estimates of digital satellite TV market shares; (iii) comparable pricing of satellite packages offered by US operators; and (iv) information on content available. Each of these issues will be considered below.

Survey Data
In its December 2009 submission to URCA, CBL provided data taken from a survey conducted in 2005 which indicated that digital satellite TV was estimated to capture approximately 40% of the Bahamian pay TV market. Satellite TV included what CBL termed the “grey” and “black” markets[17]. URCA’s understands that this survey was conducted prior to CBL offering any digital packages to Bahamians. It therefore appears that the survey is not representative of the market structure in existence in The Bahamas today. Additionally, the underlying survey data subsequently provided in response to URCA’s request for more details did not support the 40% market share figure.

Report
CBL also provided URCA with a report about the Bahamian pay TV market produced by SNL Kagan[18] published in 2009. HBO Latin America commissioned the report. The report estimated the following for 2009:

- 103,510 TV households

[17] CBL did not provide a definition of these markets. However, URCA understands that CBL considers the grey market to represent those consumers purchasing satellite packages from US based providers by registering using a US address. Whilst this is a legal distribution channel, the package providers believe that they are providing services to a user in the US. URCA understands that CBL considers the black market to represent those consumers importing satellite television decoder boxes from outside The Bahamas without an activated authorisation card. Consumers then purchase satellite programming from sources in The Bahamas who activate the authorisation cards by various means that have included “cloning” activated authorisation cards. This represents an illegal distribution channel.

[18] A US based company integrating online research, data and projections for the media and communications industry.

- 91,745 pay TV subscribers
- 16,616 DTH subscribers (white, grey and black market)
- 75,128 CBL subscribers, 30,000 on digital and the remaining on analogue

Based on the information contained in this report, CBL would have approximately 64% of the digital pay TV market. URCA has been unable to verify the source data for the Kagan report.

Pricing of satellite packages by providers based in the US

Satellite packages offered by providers based in the US (DirecTV) do not offer local Bahamian content but are more comparable with CBL's packages in terms of price than Satellite Bahamas' packages and CBL has argued that these prices represent a competitive constraint on CBL's pricing of digital packages.[19] Below is a table summarising the relevant prices:

Direct TV packages	
Program packs	**Price**
50+ channels – The Family Pack Over 50 digital quality channels. No equipment to buy or start up costs	$29.99 per month
150+ channels – Choice Pack 100 more channels than family package. Save $21 per month for 1 yr. Free HD, DVR or receiver	$55.99 per month
200+ channels – Choice Extra 50 more channels than choice package. Save $21 per month for 1 yr. Free HD, DVR or receiver	$60.99 12 months
200+ channels – Choice Extra + DVR package Over 200 all digital channels. Save $21 per month for 1 yr. Free HD receiver upgrade + HD access	$70.99 12 months
200+ channels – Choice Extra + DVR package Everything in the Choice Extra package plus HD access and DVR service. Save $21 per month for 1 yr. Free HD receiver upgrade + HD access	$75.99 12 months

Cable Bahamas Limited packages	
Program	**Price**
Basic Over 51 digital video channels	$30 per month
70+ channels – Oceans Digital 125 20 more digital video channels than basic, 50 music channels, 21 radio channels	$35.95 per month
170+ channels – Oceans Pacific Over 100 digital video channels, 50 music channels, 21 radio channels and the interactive programme guide	$43.95 per month
195+ channels – Oceans Atlantic Over 33 extra channels than the Oceans Pacific package	$56.95 per month
200+ channels – Oceans Complete Over 200 additional video channels plus HBO, STARZ, SHOWTIME, MAX and SPORT	$100 per month

Content exclusivity

CBL has expressly stated in its December 2009 submission to URCA that it does not have exclusive access to any of the channels that it provides, including local content and resale is prohibited.

Emerging competition

Since the date of publication of the Preliminary Determinations, URCA has licensed IPSI. CBL has argued that this potential market entry will impose a competitive constraint on CBL's pricing for the period in question. URCA considers it as conceivable that IPSI may launch a competing

[19] Please reference Section 9.6.1.1 of the CBL Preliminary Determination.

service in the next 12 to 24 months. URCA has no certainty of when this may occur nor any specific information regarding the content, price, potential demand for or quality of IPSI's IPTV product offering.

CBL indicated that, in selected countries where IPTV services have been established for a number of years, IPTV's share of the pay TV market can exceed 20%.[20]

<u>Impact of new information</u>

URCA has considered whether this new information affects the SSNIP test and EU three criteria test conducted for the digital packages.

SSNIP test results

Analysis from the Preliminary Determination

	Satellite TV **Satellite Bahamas**	Internet Streaming **Various international**	*IPTV* ***Other Provider***
Characteristics			
Real-time	●●●	●	●●●
Multi channel broadcasting	●●●	●	●●●
Does not require a satellite dish	-	●●●	●●●
Availability of selected local Bahamian channels	?	?	?
Availability of additional foreign channels providing a range of news and entertainment services and premium content channels	●●●	●●	●●●
No requirement for a high speed internet connection	●●●	-	-
Signal quality and resilience to weather disruptions	●●	●	●●
Price	-	?	?
Coverage	●●●	?	?
Likely to be an effective	N	N	N

Analysis following new information

	Satellite TV **Satellite Bahamas**	Internet Streaming **Various international**	*IPTV* ***Other Provider***
Characteristics			
Real-time	●●●	●	●●●
Multi channel broadcasting	●●●	●	●●●
Does not require a satellite dish	-	●●●	●●●
Availability of selected local Bahamian channels	●	?	●
Availability of additional foreign channels providing a range of news and entertainment services and premium content channels	●●●	●●	●●●
No requirement for a high speed internet connection	●●●	-	-
Signal quality and resilience to weather disruptions	●●	●	●●●
Price	●●	?	?
Coverage	●●●	?	?
Likely to be an effective	N	N	N

[20] Data provided by Analysys Mason at the request of CBL. Benchmark countries include Belgium, Denmark, France, Greece, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Czech Republic, Estonia, Lithuania, Slovakia, Slovenia, and Hong Kong. In four of these countries the pay TV market share of IPTV was in excess of 20%.

substitute within the time period under review?			

substitute within the time period under review?			

When URCA conducted the original analysis, a key consideration was that Bahamians valued local content and that, due to price and lack of existing products, satellite TV and IPTV would not act as competitive constraints.

As noted in the CBL Preliminary Determination, CBL's packages currently include four local channels. Based on CBL's statement that it does not have exclusive access to any of its content, URCA is not aware of any reason that would prevent other licensed pay TV operators from providing local channels.

Content exclusivity
DirecTV packages (offered by US-based providers) do not include local Bahamian channels (and these channels would be unlikely to be included in the future, given that The Bahamas is not the target market for the service provider). The unavailability of local content makes US satellite digital TV packages less comparable to CBL's products. The prices shown in the table above for DirecTV packages further show that in any event in most cases DirectTV packages are more expensive than the CBL packages.

URCA considers that satellite packages, including both US based providers and Satellite Bahamas, are unlikely to act as effective competitive constraints on CBL. If CBL were to increase the prices of the majority of its digital TV packages by 5-10%, the resulting price would still be less than the comparable DirecTV package. Consumers would be unlikely to switch away from CBL's products. It is URCA's view that there is limited demand-side substitution for the digital packages. This view is further strengthened by CBL's practice of tying broadband services to pay TV services, at relatively low incremental prices. Presently, consumers would not be able to purchase broadband services from CBL without also purchasing pay TV services. This makes the pay TV market less contestable by a provider of pay TV services only.

Emerging competition
URCA has no certainty as to when IPSI may enter the market or any specific information regarding the content, price, potential demand for or quality of IPSI's IPTV product offering.

Whilst the information from CBL regarding demand for IPTV in predominately European countries showed that customers may switch away from cable TV to such services, it demonstrated that IPTV only achieves a significant share of the market (that is, over 20%) approximately three years after the launch of the service. IPTV has yet to be launched in The Bahamas and is still very much a prospective competitive challenge.

Consequently, URCA considers that IPTV is unlikely to be an effective demand-side constraint in the period of this review.

Although there is some demand-side substitution for CBL's digital product from satellite TV, URCA considers it too limited and future competition too uncertain for URCA to remove the digital packages from the SMP market.

It is therefore URCA's current view that the conclusion from the CBL Preliminary Determination should be maintained: the digital packages remain in the SMP market and susceptible to *ex ante* regulation.

The original assessment of this product can be reviewed at Section 10.2 of the CBL Preliminary Determination.

3.1.4 <u>Retail national and international leased lines</u>

<u>New Information</u>

<u>National leased lines</u>
Following the submissions by operators, it has come to URCA's attention that a further leased line product exists. This is CBL's Axel Fiber product, which provides a dedicated leased line for businesses combined with an internet connection facility with speeds up to 1Gbps.

CBL has stated that SRG has capacity in and between New Providence, Grand Bahama and Abaco and that IPSI will have access to inter-island connectivity from other licensees. As such, CBL considered that national leased lines offered by these operators should be considered as substitutes for its own product offering.

BTC commented that URCA should consider the geographic market as well as the product market. BTC stated that, given CBL's market share in the areas where it has a network, URCA should consider defining the geographic market for BTC to the Family Islands and other islands outside the reach of CBL's network.

BTC also stated that, due to common pricing, CBL's offering and pricing does impose a competitive constraint on BTC's pricing in all areas.

<u>International leased lines</u>
Neither BTC nor CBL provided any comments that directly related to retail international leased lines. URCA has considered their comments on international connectivity, but it considers that these issues would be more appropriately addressed in relation to wholesale international leased lines.

<u>Impact of new information</u>

URCA does not refute that SRG has national capacity to provide leased lines as a product. However, URCA does not consider that SRG's offering constitutes an effective demand- or supply-side constraint on CBL, given the size of SRG's capacity and its market share.

IPSI is not currently operational in the market and any assertions about products that it may provide are speculative. Without further information on when IPSI may be active in the market and the nature (including price, specifications and coverage) of its likely products, IPSI's ability to constrain CBL's pricing remains too uncertain for URCA to rely on it as factoring in this analysis.

URCA has considered BTC's suggestion that the geographic market should distinguish between those areas where both BTC and CBL are active and those areas where only BTC is present. However, BTC does offer products throughout The Bahamas. It seems to URCA that, historically, BTC may not have competed strongly with CBL in the leased lines market, leading to the higher market share for CBL. Further, as stated in the BTC Preliminary Determination, URCA has serious concerns regarding the ability of new competitors to enter the market for leased lines (national and international). This is due to the substantial market entry barrier of needing to develop physical infrastructure in The Bahamas (even international leased lines will need local connectivity to one or more customer sites) or to gain access to the infrastructure of one of the two SMP network providers.

URCA's current thinking is, therefore, that the conclusion from the CBL Preliminary Determination should be maintained. Retail national and international leased lines remain in the high level SMP market and susceptible to *ex ante* regulation.

The original assessment of this product can be reviewed at Section 6.2 of the CBL Preliminary Determination.

3.1.5 <u>Wholesale national and international leased lines</u>

<u>New information</u>

Both BTC and CBL provided more information on the ownership of international networks; however, data was not provided on the overall capacity of the networks, specifically on how much spare capacity exists. URCA has requested further clarification from both operators.

Both BTC and CBL also provided pricing data for wholesale international leased lines. CBL only have a limited range of wholesale leased lines available according to its December 2009 submission. Below is a table comparing CBL's and BTC's prices where they both offer a specific product/capacity. For a full review of BTC's prices, Section 5.2.1.1 of the CBL Preliminary Determination should be reviewed.

Bandwidth (Kbps)	**BTC (wholesale)**	**CBL/CCL (wholesale)**
384	$2,507.40	$3,635
512	$3,265.50	$4,076
1544 (T1)	$4,900	$7,331
DS3 (45Mbps)	$50,000	$26,380

Source: BTC prices – BTC response to a data request sent in January, CBL prices – CBL's December 2009 submission

<u>Impact of new information</u>

URCA has reviewed the submissions but considers that insufficient data has been provided by the operators for any conclusions to be drawn that would differ from the conclusions in the CBL Preliminary Determination.

The price information provided by both operators is inconclusive, with BTC charging lower prices for the lower capacity lines but higher prices for the higher capacity lines.

URCA's current thinking therefore is to maintain the conclusion from the CBL Preliminary Determination that wholesale national and international leased lines should remain in the SMP market and be susceptible to *ex ante* regulation.

URCA will monitor the leased lines products closely for developments in competition.

The original assessment of this product can be reviewed at Section 8.3 of the CBL Preliminary Determination.

3.1.6 Bitstream access for broadband distribution

New Information

CBL has stated that bitstream access for broadband distribution on a cable TV network could be provided by using a policy-based router (PBR) located in the head-end behind the CMTS.[21] CBL noted that this would incur two main costs: the procurement and installation of the PBR and the upgrade to its OSS[22] and BSS[23].

CBL also stated that the quality of service for potential wholesale users and CBL's retail users would be impaired due to the finite bandwidth capacity on HFC networks, and that the scope for differentiation of the services by OLOs[24] would be limited.

CBL suggested that a conservative estimate of the time to implement this solution would be over a year.

Impact of new information

In the CBL Preliminary Determination, URCA considered specific wholesale products which would enable a competing provider to purchase services from CBL that could be used to replicate CBL's retail services in the broadband market.

As noted in the original analysis of broadband internet, key concerns for URCA were that at present broadband services in The Bahamas are provided by two network and service providers and that new entrants would face substantial market entry barriers. New entrants would either have to invest in access infrastructure (whether wire-line or wire-less) or gain access to the infrastructure of one of the current infrastructure providers. Based on international experience, it is unlikely that SMP operators would offer access to new entrants voluntarily.

The specific product that was identified in the Preliminary Determination to enable access to CBL's broadband network was 'bitstream access for broadband internet'. The new information

[21] Cable Modem Termination System
[22] Operational Support System
[23] Billing Support System
[24] Other Licensed Operators

provided to URCA has raised uncertainty about whether this product solution is the most appropriate obligation to impose in the interim period, as more particularly indicated below.

However, URCA does not consider that the new information provided changes its assessment of CBL's SMP for access to its broadband network.

Based on the information provided, URCA's current thinking is that the specific mention of 'bitstream access for broadband distribution' would be removed from the considerations of the high level SMP market. Instead, URCA currently considers that its concerns can be addressed if the SMP access product in question is broadened from bitstream specifically to a wider 'Access to the Broadband Network and Services'. URCA is not at this stage proposing a specific product to replace the bitstream access and would welcome constructive suggestions from CBL to propose specifications of this 'Access to the Broadband Network and Services' product (or obligation).

The original assessment of this product can be reviewed at Section 8.1 of the CBL Preliminary Determination.

3.1.7 Bitstream access for content distribution and Wholesale access to the SuperBasic and/or Digital packages

New Information

CBL asserts that it does not have exclusive access to any of the channels shown on its platform, including both local and international content, and URCA understands that potential new entrants would likely be able to negotiate directly with content providers.

CBL expressed concerns regarding capacity issues that could result from the provision of bitstream access for content distribution and also highlighted that this would be incompatible with the nature of an analogue system (as this is not coded with bits). CBL were also unable to estimate the possible cost and timescale for implementation due to the lack of precedent internationally for such a product.

Impact of new information

In the CBL Preliminary Determination, URCA noted its concerns that the provision of content and exclusive rights could prove to be a substantial bottleneck to new entrants. However, CBL has provided information to URCA that shows it has no exclusive access to any of its content, and in such a case, URCA can no longer consider access to content as a bottleneck as initially presumed. A new entrant should be able to negotiate access to content directly with the content providers.

URCA has evaluated CBL's concerns about the technical complexity, potential costs and time required to provide these products.

This information has caused URCA to re-evaluate the inclusion of bitstream access to content distribution and wholesale access to the SuperBasic and/or digital packages in the SMP market. It is therefore URCA's current view to remove both wholesale products from the SMP market.

The original assessment of this product can be reviewed at Sections 12.1 and 12.3 of the CBL Preliminary Determination.

3.1.8 National and international backhaul

New information

Both BTC and CBL provided new information on the ownership of international networks; however, data was not provided on the overall capacity of the networks, specifically how much spare capacity exists. URCA has requested further clarification to be provided from the operators to date.

URCA has provided below a summary of the information that has been received from the operators to date.

	Owner	Total capacity	Used by	Capacity used by operator	Spare capacity	Notes
ARCOS	Columbus Networks	?	BTC for international voice and voice traffic SRG CBL	BTC has 9 STM-1 or 1.37 Mbps	?	BTC states that it would only be able to sell capacity to another operator if it did so on a resale basis (BTC would buy from ARCOS and sell on)
BICS	CBL	25 Gbps	CBL SRG (CBL claim that SRG only uses a small proportion of its available international capacity to carry voice traffic)	<25%	?	Provides retail leased lines and capacity services to corporate clients, ISPs and overseas operators If there is sufficient spare capacity, SRG may resell international capacity to third parties provided its agreement with CBL allows this
Bahamas II	BTC	2.5 Gbps	BTC	BTC has 2 STM-1 or 311.04 Mbps or 12% of total capacity	?	Only carriers that are part of the Bahamas II consortium are allowed to access the cable

Source: Collated from CBL and BTC's December 2009 submissions and responses to a data request from URCA in January 2010

Impact of new information

URCA has reviewed the submissions but considers that, to date, insufficient data has been provided by the operators for any conclusions to be drawn that would differ from the CBL Preliminary Determination.

As stated in the CBL Preliminary Determination, backhaul is an enabling wholesale product for bitstream services.

It would consist of the relevant operator (in this case CBL) providing capacity between a point on an operator's network to a point:

- elsewhere on the operator's network, or
- on CBL's network, or
- on a third party's network.

Backhaul is an underlying wholesale product which, together with bitstream access, would be needed to allow new entrants, without their own networks, to replicate broadband and pay TV retail products.

Following URCA's current thinking as detailed above, URCA would not be mandating the imposition of a specific access product but the specification for the broadband access product would be broadened. A specific access product is yet to be defined. This means that URCA presently does not know whether backhaul (national and/or international) will be required to support that new broadband access product. URCA therefore proposes that 'Access to the Transmission Network' should be the relevant product in the high level SMP market as this provides increased flexibility for the detailed product (if required) to be tailored to complement the broadband access product.

URCA is inviting CBL to propose the specifications of this 'Access to the Transmission Network' product (or obligation), in conjunction with the specifications to be proposed for Access to the Broadband Network and Services.

The original assessment of this product can be reviewed at Section 8.2 of the CBL Preliminary Determination.

SUMMARY ON CBL PRODUCTS IN THE HIGH LEVEL SMP MARKET

In summary, the CBL products remaining in the SMP market and susceptible to *ex ante* regulation are:

- Broadband internet access
- SuperBasic package
- Digital packages
- Retail national and international leased lines
- Wholesale national and international leased lines
- Access to broadband network and services
- Access to the transmission network

The CBL products removed from the SMP market are:

- Bitstream access for broadband internet (subsumed into Access to the broadband network and services);
- Bitstream access for content distribution;
- National and international backhaul (subsumed into Access to the transmission network); and

- Wholesale access to the SuperBasic and/or Digital packages

3.2 The Bahamas Telecommunications Company Limited

BTC's products found to be susceptible to *ex ante* regulation in the BTC Preliminary Determination were:

- Fixed telephony access and local calling
- Domestic fixed long distance calling, domestic fixed calls to rated numbers and international long distance fixed calling
- Broadband internet access in specified areas
- National and international leased lines
- Mobile access, local mobile calling, domestic long distance mobile calling and international long distance mobile calling
- Mobile data services
- Incoming international calls to mobile customers
- Call transit (domestic, international and mobile), call termination services and wholesale directory enquiry and ancillary services (call termination and service provision)
- Wholesale national and international leased lines
- Bitstream service
- Wholesale national and international backhaul

Both new data and/or new arguments pertinent to the analysis, and its impact, are described in the Sections below for each of these products.

3.2.1 <u>Fixed telephony access and local calling</u>

<u>New information</u>

BTC asserted that fixed telephony access and calling services to business and residential customers should be reviewed as separate products. It presented two main reasons:

- Competition from SRG in the provision of fixed telephony services for business customers is strong.
- A significant decrease in the number of business customers for this service.

BTC provided some business customer information to URCA. This was aggregate data covering customers for leased lines, PABX[25] systems, MTC contracts and POTS[26] customers. URCA notes, however, that for the purposes of determining the decline in business customers for fixed access and local calling, the only relevant data to consider is for the POTS customers. URCA has requested more detailed data from BTC as there are certain discrepancies within the data supplied.

BTC also asserted that URCA incorrectly stated that SRG's fixed access products are only available to business customers.

[25] PABX – Private Automatic Branch Exchange
[26] Plain Old Telephone Services

Impact of new information

URCA considers the statement that SRG's fixed access products are only available to business customers is correct. SRG offers a fixed access product for business customers only called 'IndiGO for business'. SRG also offers a voice over internet (VoI) service known as 'Onephone' for business and residential customers. As URCA has indicated throughout, VoI services have distinctly different characteristics from fixed access services. The Onephone service is therefore not the same as the IndiGO for business service.

URCA therefore maintains that its original analysis of the substitutability of SRG's fixed access product is correct.

URCA considers that the data provided by BTC to evidence a decline in business customers is inconclusive. URCA is unable to confirm whether a decrease has occurred based on the information provided and is seeking further clarification from BTC.

Information provided by BTC to date also suggests that they do not distinguish between business and residential customers to a level of certainty that would support the assertion that business and residential products should be viewed separately. Rather, BTC distinguishes between single line and multi-line customers. URCA considers that, although BTC attempts to identify business customers in order to charge the monthly rental for a business line, this distinction results in some overlap between business and residential customers.

URCA's current thinking is, therefore, that business and residential customers should continue to be considered together in the same market, although URCA will of course review any further data that BTC may provide. Presently, URCA therefore considers that the conclusion from the BTC Preliminary Determination should be maintained: fixed access and local calling remain in the SMP market and susceptible to *ex ante* regulation.

The original assessment of this product can be reviewed at Section 6.1 of the BTC Preliminary Determination.

3.2.2 Domestic long distance (DLD) and international long distance (ILD) calling and domestic fixed calls to rated numbers

New information

BTC asserted that business and residential customers should be reviewed as separate products for two main reasons:

- Competition from SRG in the provision of fixed telephony services for business customers is strong.
- A significant decrease in the number of business customers for this service.

BTC provided some business customer information to URCA. This was aggregate data covering customers for leased lines, PABX systems, MTC contracts and POTS customers. URCA notes, however, that for the purposes of determining the decline in business customers for fixed access and local calling, the only relevant data to consider is for the POTS customers. URCA has requested more detailed data from BTC as there are certain discrepancies within the data supplied.

First, BTC repeated its assertions as previously discussed in Section 3.2.1 above regarding fixed telephony access and local calling and provided the same business customer information as mentioned in that Section. As previously stated in Section 3.2.1, URCA has requested more detailed data from BTC as there are certain discrepancies within the data supplied.

Second, BTC stated that VoI should be considered as a demand-side constraint on its DLD and ILD calls because:

- The quality of VoI has increased over time and will continue to improve once its network is upgraded.
- Broadband services are available in most settlements in The Bahamas.
- Revenues from DLD and ILD calls have declined over time due to competition from VoI providers.

BTC also stated that mobile calling should be considered as an effective substitute for fixed DLD and fixed ILD calling:

- BTC stated that there are no quality of service issues with mobile calls, and that mobile calls are comparable to fixed line calls in terms of quality.
- Low usage customers may actually find prepaid mobile services cheaper than fixed calling.
- The exclusivity period for mobile may be reduced.

Impact of new information

URCA's analysis of the business and residential customer information provided by BTC is outlined in Section 3.2.1 above with reference to fixed telephony access and local calling and is not repeated here.

Substitution by VoI
Whilst BTC states that the quality of service of VoI has increased over time, it also states that "subscribers could in any case switch to VoI, because the price differential compensates for the difference in quality." It is URCA's current thinking that the quality of VoI is still not comparable to a fixed service. Further, quality was also just one of the product characteristics that URCA considered to be different from the fixed services. URCA considers that it is important to be careful when drawing conclusions in relation to any switching to VoI by consumers as described by BTC. Without more information, the situation between quality and a significant price differential could easily constitute an example of what in market definition is sometimes referred to as the "cellophane fallacy"[27], whereby consumers are willing to accept a lower

[27] US v du Pont, U.S 377 (1956)

quality service because the price differential is substantial. That is, customers would be willing to switch away from a fixed service and use the lower quality VoI service because the prices for the VoI service are sufficiently lower.

In any event, as noted in the BTC Preliminary Determination, any comparisons between the price of a VoI service and that of a fixed telephony service will only be meaningful if the analysis also considers that consumers need to have access to broadband internet before they can use a VoI service.

BTC states that broadband services are available in most settlements in The Bahamas. However, according to the Department of Statistics in 2009, only 58% of Bahamian households own a computer and only 51% of these households have access to internet services (inclusive of dial-up and broadband). It follows that VoI is unavailable to almost 50% of Bahamian households.

BTC claims that DLD and ILD revenues have declined over time due to competition from VoI providers. During its analysis of BTC's data, URCA found some inconsistencies and has engaged with BTC to seek greater clarity. At this time, URCA is unable to confirm or deny BTC's assertion and, as such, cannot comment on whether BTC has suffered from declines in DLD and ILD revenues due to competition from VoI providers. As described above, however, even if some substitution has taken place, this would not necessarily support a conclusion that VoI services should be included as part of the DLD and ILD call products for the purpose of the SMP analysis.

As stated in the BTC Preliminary Determination, URCA considers that the differences in characteristics between the two services are too great for them to be considered as substitutes. URCA's research has supported this view: internationally, regulators have continued to differentiate between fixed and unmanaged VoI services based on characteristics such as number portability, security, access to emergency services and quality of service.

URCA's current thinking is that it does not consider the new information BTC has presented, nor the arguments that BTC has articulated, would cause URCA to reconsider its conclusion in the BTC Preliminary Determination for the substitutability of VoI. URCA therefore continues to consider VoI not to be an effective substitute as it does not have similar characteristics to the fixed DLD and ILD products. The original assessment of this product can be reviewed at Section 6.2.1 of the BTC Preliminary Determination.

Substitution by mobile

URCA has reviewed BTC's arguments regarding the substitutability of mobile voice services, and notes that BTC believes that this may be a future constraint on fixed services.

Data provided to URCA by BTC showed that some key performance indicators[28] for quality of mobile services have improved during 2009.

Although the quality of service provided by BTC's mobile services might have improved, based on the information provided by BTC, URCA does not, however, consider that the quality is yet equivalent to a fixed line service. Mobile voice services are not considered by URCA to be an effective substitute as they do not have similar characteristics to the fixed DLD and ILD products.

[28] Provided as confidential information in BTC's response to URCA's data request in January 2010.

The degree of substitution may differ between customer segments and URCA accepts in principle BTC's view that for low usage customers, prepaid mobile services may be a cheaper option compared to fixed voice services.

Approximately 85% of mobile subscribers in The Bahamas use a prepaid service. Low usage customers may view prepaid services as more suitable when controlling spending than fixed services. To receive the fixed service a consumer must pay a fixed monthly line rental charge and may not be able to monitor the costs of usage as closely or set a predefined budget lower than the line rental charge. With a prepaid mobile service, consumers can pay upfront and control spending more effectively even if the actual cost of calls on a mobile service are more expensive. While this may appear to suggest that prepaid mobile services are being used as a substitute for fixed services, the higher price of fixed access and local calling and the lower quality of service (equivalent to a fixed line service) attributed to prepaid mobile services implies to URCA that this is not actually the case.[29]

BTC expressed a concern as to the duration of its exclusivity in mobile services. URCA has no information which would suggest that there was any substance to BTC's concerns and considers that its analysis should continue to be based on the assumption that the exclusivity period will be for two years (either from the date that the Comms Act came into force or, if the Act is amended as proposed in the electronic communications Sector Policy, from the date of the privatisation of BTC).

URCA is aware that there is increasing convergence between fixed and mobile services at the retail level. However, there is very little evidence of regulators actually determining that fixed and mobile services should be part of the same market and hence substitutes even in markets where liberalisation and competition have been operating for a long time. URCA's research has shown that regulatory decisions to include fixed and mobile services in one 'voice' market are the exceptions rather than the rule and are particular to the specific geographic and/or socio-economic conditions of the territory concerned. For example, in Bangladesh the services are considered to be close substitutes. This conclusion was based on the very specific conditions of the Bangladeshi market where the mobile operators have a position of market power as compared to the 'incumbent' fixed-line provider, and because there is limited coverage of the fixed-line network.

URCA considers that such characteristics do not exist in The Bahamas. Given the penetration rates of both fixed and mobile voice services and BTC's view that the quality of mobile service has improved, it is likely to be the case for the majority of consumers that the services are complements to each other and not substitutes. The penetration rates in The Bahamas for fixed and mobile were 40% and 73% respectively in 2008; however, it should be noted that fixed penetration is calculated on a per capita basis rather than a per household basis. A large number of people live in multi-occupancy households where one fixed telephone subscription serves all household members. Therefore URCA expects the fixed line penetration on a per household basis to be at least at the same level as that for mobile.

[29] This is commonly referred to as the 'cellophane fallacy' and has previously been discussed in relation to fixed and VoI substitution.

Having addressed each of BTC's concerns in turn for both VoI and mobile services, URCA does not consider at this time that these should cause it to review the analysis conducted in the BTC Preliminary Determination. There is no change to the level of effective demand or supply-side substitution.

Therefore, URCA's current view is that the conclusion from the BTC Preliminary Determination should be maintained: DLD and ILD calling should remain in the SMP market and susceptible to *ex ante* regulation.

The original assessment of this product can be reviewed at Section 6.1 of the BTC Preliminary Determination.

3.2.3 Broadband internet access in specified areas

CBL provided the following new information about the broadband market which is relevant to the assessment of BTC's position.

New information

At the end of 2009, after publication of the Preliminary Determinations, BTC made the following changes to its broadband product portfolio:

Products prior to October 2009			Products after October 2009		
Product name	Speed[1]	Price[2] (US$)	Product name	Speed[1]	Price[2] (US $)
AutoSpeed	384Kb/s	34.99	AutoSpeed	1Mb/s	29.99
CruiseSpeed	1024Kb/s	54.99	CruiseSpeed	2Mb/s	39.99

Source: CBL's December 09 submission, verified on BTC's website
1. This is the maximum download speed advertised
2. This is the monthly charge for subscribing to the product; one-time installation charges are not included

Comparable CBL products:

Product name	Speed[1]	Price[2] (US$)	Download limits per month
CoralWave Geo	1.5Mb/s	10.70	75Mbs or 10 hours
CoralWave Jazz	1.5Mb/s	21.70	50 hours
CoralWave Lite	3Mb/s	38.70	No limits

Source: CBL's website
1. This is the maximum download speed advertised
2. This is the monthly charge for subscribing to the product; one-time installation charges are not included

URCA understands that BTC's Next Generation Network (NGN) roll-out is scheduled to be completed within the 12 to 24 month time period considered in this review. However, experience from other countries has shown that NGN roll-outs are likely to suffer from delays and that completion of the roll-out does not necessarily mean the network is fully operational.

In addition, at the end of 2009, URCA awarded IPSI with a licence to operate in The Bahamas. IPSI is planning on offering a triple-play product (internet, IPTV, VoI).

Impact of new information

URCA has considered if these points affect the SSNIP test and EU three criteria test conducted for broadband internet access.

SSNIP test results

Analysis from Preliminary Determination

	Possible substitutes		
	CBL Cable	**Satellite Bahamas** Satellite	**Various ISPs** Various
Characteristics			
Always on	●●●	●●●	●●●
More than one service possible on one line	●●●	●●●	●●●
Price	●●●	●	●●●
Coverage	●●	●●●	●
Likely to be an effective substitute within the time period under review?	N	N	N

Analysis following new information

	Possible substitutes		
	CBL Cable	**Satellite Bahamas** Satellite	**Various ISPs** Various
Characteristics			
Always on	●●●	●●●	●●●
More than one service possible on one line	●●●	●●●	●●●
High download speeds, up to 9Mbps	●●	●●	●●
Price	●●●	●	●●●
Coverage	●●	●●●	●
Likely to be an effective substitute within the time period under review?	N	N	N

The changes BTC has made to its AutoSpeed and CruiseSpeed products means their characteristics are more comparable to CBL's products. In principle, if internet packages provided by CBL were to be available separately from CBL's pay TV packages, consumers may switch to BTC if CBL increased the prices of its comparable products by 5-10% for a non-transitory period. However, CBL's current tying of broadband packages to pay TV packages at relatively low incremental prices, means that it is unlikely that a significant number of subscribers would switch to another supplier of broadband.

Additionally, BTC's product offerings are currently not as extensive as CBL's (in terms of the range of packages offered at the higher speeds) and are slightly more expensive. Based on these factors, URCA's latest thinking is that there is at this time only limited demand-side substitution for BTC's products.

URCA awarded a licence to IPSI, a new entrant to the market. IPSI is planning to offer a triple-play package of internet, IPTV and VoI. However, IPSI is not currently operational in the market and any assertions about products that it may provide are speculative. Without further information on when IPSI may be active in the market and the nature (including price, specifications and coverage) of its likely products, IPSI's ability to constrain BTC's pricing remains uncertain. URCA therefore considers that there is unlikely to be demand-side substitution in the 12-24 month period considered.

Due to the concerns about the level of effective competition from CBL and the uncertainty of future demand-side substitution, URCA's current thinking is that BTC's broadband internet access should remain in the high level SMP market, for those areas where BTC is the only provider of services.

URCA also reviewed the EU three criteria test and, as the comparison in the two tables below show, it does not currently consider that there would be a reason to change its position set out in the BTC Preliminary Determination.

EU three criteria test results

Analysis from the Preliminary Determination

Criteria	**Present?**
Low barriers to entry	N
Emergent competition at the retail level	N
Sufficiency of *ex post* competition law	N
Susceptible to *ex ante* regulation?	Y

Analysis following new information

Criteria	**Present?**
Low barriers to entry	N
Emergent competition at the retail level	N
Sufficiency of *ex post* competition law	N
Susceptible to *ex ante* regulation?	Y

URCA does not currently consider that any information or argument was provided by BTC that would result in a change to URCA's original analysis. Barriers to entry remain high, there is much uncertainty about future competition and *ex post* competition law would be insufficient to deal with URCA's concerns regarding abuses of dominance.

Therefore, URCA's current thinking is that the conclusion from the BTC Preliminary Determination should be maintained: broadband internet access in those areas where BTC is the sole provider should remain in the SMP market and susceptible to *ex ante* regulation.

Further analysis of this product is set out in Section 6.5.3 of the BTC Preliminary Determination.

3.2.4 Retail national and international leased lines

New Information

National leased lines

BTC commented that URCA should consider the geographic market as well as the product market. It stated that, given CBL's market share in the areas where it has a network, URCA should consider defining the geographic market for BTC to the Family Islands and other islands outside the reach of CBL's network.

BTC also stated that, due to common pricing, CBL's offering and pricing does impose a competitive constraint on BTC's pricing in all areas.

As previously noted above, CBL stated that SRG has capacity in and between New Providence, Grand Bahama and Abaco and that IPSI will have access to inter-island connectivity through Columbus Communications. As such CBL believed that national leased lines offered by these operators should be considered as substitutes.

International leased lines
Neither BTC nor CBL provided any comments that directly related to retail international leased lines. URCA has considered their comments on international connectivity. However it considers that these comments would be more appropriate to address in relation to international leased lines.

Impact of new information
URCA does not refute that SRG has some capacity to provide leased lines, as a product, at the national level. However, SRG's available capacity and its market share causes URCA to consider that the SRG offering does not constitutes an effective demand- or supply-side constraint on CBL or BTC.

IPSI is not currently operational in the market and any assertions about products that it may provide are speculative. Without further information on when IPSI may be active in the market and the nature (including price, specifications and coverage) of its likely products, IPSI's ability to constrain BTC's pricing remains too uncertain for URCA to rely on it in this analysis.

URCA has considered BTC's suggestions regarding the definition of the geographic market. However, BTC does offer products throughout The Bahamas and has the infrastructure to do so. It seems to URCA that, historically, BTC may not have competed strongly with CBL in the leased lines market, leading to the higher market share for CBL. Further, as stated in the BTC Preliminary Determinations, URCA has severe concerns regarding the ability of new competitors to enter the market for leased lines (national and international). This is due to the substantial market entry barrier of new entrants needing to develop physical infrastructure in The Bahamas (even international leased lines will need local connectivity to one or more customer sites) or gain access to the infrastructure of one of the two SMP network providers. International experience suggests that competition between two vertically integrated network and service providers may not result in effective competition and therefore may not be in the interests of the people of The Bahamas.

URCA therefore proposes to retain BTC's interim SMP designation for all of The Bahamas.

URCA's current thinking therefore suggests that the conclusion from the BTC Preliminary Determination that BTC has SMP for all of The Bahamas should be maintained. Retail national and international leased lines should remain in the SMP market and susceptible to *ex ante* regulation.

The original assessment of this product can be reviewed at Section 6.6 of the BTC Preliminary Determination.

3.2.5 Mobile access, local, domestic and international long distance mobile calling

No comments were made about the inclusion of these products in the SMP market by either BTC or CBL.

BTC suggested that lighter touch regulation should be adopted for retail mobile services as additional mobile licences may be issued within the next two years. It stated that evidence from other Caribbean countries suggest that entry is likely to be aggressive with the markets quickly becoming competitive.

BTC expressed a concern as to the duration of its exclusivity in mobile services. URCA has no information which would suggest that there was any substance to BTC's concerns and considers that its analysis should continue to be based on the assumption that the exclusivity period will be for two years.
Mobile access, local, domestic and international long distance mobile calling would therefore remain in the SMP market and susceptible to *ex ante* regulation.

The original assessment of these products can be reviewed at Sections 10.1 – 10.3 of the BTC Preliminary Determination.

3.2.6 Mobile data services

URCA has read the submissions received but concluded that there were no new substantive arguments presented or new information provided which would make it necessary for URCA to analyse this product further.

The original assessment of this product can be reviewed at Section 10.3 of the BTC Preliminary Determination.

The conclusion from the BTC Preliminary Determination should be maintained: mobile data services remain in the SMP market and susceptible to *ex ante* regulation.

3.2.7 Incoming international calls to mobile customers

No comments were made about the inclusion of this product in the SMP market by either BTC or CBL.

Consequently, URCA does not have any new information which would result in further analysis of this product.

Incoming international calls to mobile customers remains in the SMP market and susceptible to *ex ante* regulation.

The original assessment of this product can be reviewed at Section 8 of the BTC Preliminary Determination.

3.2.8 Call transit (domestic, international and mobile), call termination services and wholesale directory enquiry and ancillary services (call termination and service provision)

No comments were made about the inclusion of these products in the SMP market by either BTC or CBL.

Consequently, URCA does not have any new information which would result in further analysis of this product.

Call transit (domestic, international and mobile), call termination services (domestic, international and mobile) and wholesale directory enquiry and ancillary services (call termination and service provision) remain in the SMP market and susceptible to *ex ante* regulation.

The original assessment of these products can be reviewed at Section 8 of the BTC Preliminary Determination.

3.2.9 Wholesale national and international leased lines

New information

In this Section, URCA repeats the reasoning in Section 3.1.5 above, carried out for CBL. Both BTC and CBL provided information on the ownership of international networks; however data was not provided on the capacity of the networks, specifically how much spare capacity exists. URCA has requested further clarification from both operators.

URCA has provided a summary of the information that has been received from the operators in Section 3.1.8 above for national and international backhaul.

Both BTC and CBL also provided pricing data for wholesale international leased lines. CBL only have a limited range of wholesale leased lines available according to its December 2009 submission. Below is a table comparing CBL's and BTC's prices where they both offer a specific product/capacity. For a full review of BTC's prices, Section 5.1.7 of the BTC Preliminary Determination should be reviewed.

Bandwidth (Kbps)	BTC (wholesale)	CBL/CCL (wholesale)
384	$2,507.40	$3,635
512	$3,265.50	$4,076
1544 (T1)	$4,900	$7,331
DS3 (45Mbps)	$50,000	$26,380

Source: BTC prices – BTC response to a data request sent in January, CBL prices – CBL's December 2009 submission

Impact of new information

URCA has reviewed the submissions but considers that insufficient data has been provided by the operators for any conclusions to be drawn that would differ from the BTC Preliminary Determination.

The price information provided by both operators is inconclusive, with BTC charging lower prices for the lower capacity lines but higher prices for the higher capacity lines.

URCA's current thinking is that it is appropriate to maintain the conclusion from the BTC Preliminary Determination: wholesale national and international leased lines remain in the SMP market and susceptible to *ex ante* regulation.

URCA will monitor BTC's wholesale national and international leases lines products closely for developments in competition.

The original assessment of this product can be reviewed at Section 8.4 of the BTC Preliminary Determination.

3.2.10 Bitstream services for broadband services

New Information

BTC stated in its December 2009 submission to URCA that providing bitstream access to broadband services would be technically complex due to the ongoing deployment of NGN. The NGN roll-out will change the topology of the network and therefore BTC would be unable to implement this obligation prior to completion of the deployment.

Impact of new information

In the BTC Preliminary Determination, URCA considered specific wholesale products which would enable a competing provider to purchase services from BTC that could be used to replicate BTC's retail services in the broadband market.

As noted in the original analysis of broadband internet, key concerns for URCA were that at present broadband services in The Bahamas are provided by two network and service providers and that new entrants would face substantial market entry barriers with the need to either invest in access infrastructure (whether wire-line or wire-less) or gain access to the infrastructure of one of the current SMP infrastructure providers. Based on international experience, it is unlikely that the SMP providers would offer access to new entrants voluntarily.

The specific product that was identified to enable access to BTC's broadband network was 'bitstream access for broadband internet'. The new information provided to URCA has raised uncertainty about whether this product solution is the most appropriate obligation to impose in the interim period, as more particularly indicated below.

However, URCA does not consider that the new information provided changes its assessment of BTC's SMP for access to its broadband network.

Based on the information provided, and URCA's wish to apply light touch regulation as much as possible in respect of the types of obligations during the interim period, URCA's current thinking is that the specific mention of 'bitstream access for broadband distribution' would be removed from the considerations of the high level SMP market. Instead, URCA currently considers that its concerns can be addressed if the SMP access product in question is broadened from bitstream specifically to a wider 'Access to the Broadband Network and Services'. URCA is not at this stage proposing a specific product to replace the bitstream access and would welcome constructive suggestions from BTC to propose specifications of this 'Access to the Broadband Network and Services' product (or obligation).

The original assessment of this product can be reviewed at Section 8.5 of the BTC Preliminary Determination.

3.2.11 National and international backhaul

New information

Both BTC and CBL provided more information on the ownership of international networks, however data was not provided on the capacity of the networks, specifically how much spare capacity exists. URCA has requested further clarification to be provided from the operators.

URCA has provided below a summary of the information that has been received from the operators to date.

	Owner	Total capacity	Used by	Capacity used by operator	Spare capacity	Notes
ARCOS	Columbus Networks	?	BTC for international voice and voice traffic SRG CBL	BTC has 9 STM-1 or 1.37 Mbps	?	BTC states that it would only be able to sell capacity to another operator if it did so on a resale basis (BTC would buy from ARCOS and sell on)
BICS	CBL	25 Gbps	CBL SRG (CBL claim that SRG only uses a small proportion of its available international capacity to carry voice traffic)	<25%	?	Provides retail leased lines and capacity services to corporate clients, ISPs and overseas operators If there is sufficient spare capacity, SRG may resell international capacity to third parties provided its agreement with CBL allows this
Bahamas II	BTC	2.5 Gbps	BTC	BTC has 2 STM-1 or 311.04 Mbps or 12% of total capacity	?	Only carriers that are part of the Bahamas II consortium are allowed to access the cable

Source: Collated from CBL and BTC's December 2009 submissions and responses to a data request from URCA in January 2010

Impact of new information

URCA has reviewed the submissions but considers that insufficient data has been provided by the operators for any conclusions to be drawn that would differ from the BTC Preliminary Determination.

As stated in the BTC Preliminary Determination, backhaul is an enabling wholesale product for bitstream services.

It would consist of the relevant operator (in this case BTC) providing capacity between a point on an operator's network to a point:

- elsewhere on the operator's network, or
- on BTC's network, or
- on a third party's network.

Backhaul is an underlying wholesale product which, together with bitstream access, would be needed to allow new entrants, without their own networks, to replicate broadband services.

Following URCA's current thinking as detailed above, URCA would not be mandating the imposition of a specific access product but the specification for the broadband access product would be broadened. A specific access product is yet to be defined. This means that URCA presently does not know whether backhaul (national and/or international) will be required to support that new broadband access product. URCA therefore proposes that 'Access to the Transmission Network' should be the relevant product in the high level SMP market as this provides increased flexibility for the detailed product (if required) to be tailored to complement the broadband access product.

URCA would welcome the initiative from BTC to propose the specifications of this 'Access to the Transmission Network' product (or obligation), in conjunction with the specifications to be proposed for Access to the Broadband Network and Services.

The original assessment of this product can be reviewed at Section 8.3 of the BTC Preliminary Determination.

3.2.12 Wholesale mobile services

All mobile wholesale products except mobile call termination are discussed in this Section.

As stated in the BTC Preliminary Determination, BTC has exclusivity for the provision of mobile voice services (and thus the underlying mobile network to support the mobile access and data services as well) for two years from the date when shares in BTC are sold to a private investor. Consequently it is not possible for any other operators to offer substitutes for mobile wholesale services, nor will a need arise for BTC to offer such products and services to competitors in the 12 to 24 month period considered in this review.

CBL asserted that it believed that mandating an MVNO[30] access obligation on BTC would not be incompatible with the Government's Sector Policy. URCA considers the introduction of competition in mobile services by means other than issuing spectrum licences for mobile voice services to be contrary to the spirit and intent of the Government's policy.

[30] Mobile Virtual Network Operator

Based on this URCA does not consider that the conclusions from the BTC Preliminary Determination should be reconsidered: wholesale mobile services will remain subject to *ex ante* regulation at this time.

The original assessment of this product can be reviewed at Section 9.4.7 of the BTC Preliminary Determination.

SUMMARY ON BTC PRODUCTS IN THE HIGH LEVEL SMP MARKET

In summary the BTC products remaining in the SMP market and found to be susceptible to *ex ante* regulation are:

- Fixed telephony access and local calling
- Domestic long distance calling, domestic fixed calls to rated numbers and international long distance fixed calling
- Broadband internet access in specified areas
- National and international leased lines
- Mobile access, local, domestic and international long distance mobile calling
- Mobile data services
- Incoming international calls to mobile customers
- Call transit (domestic, international and mobile), call termination services and wholesale directory enquiry and ancillary services (call termination and service provision)
- Wholesale national and international leased lines
- Access to the broadband network and services
- Access to the transmission network

The BTC products removed from the SMP market are:

- National and international backhaul
- Bitstream service

4 Selection of types of obligations

SELECTION OF OBLIGATIONS

URCA set out its approach to the selection of remedies in Section 4 of the Preliminary Determinations. In their responses to the consultation on the preliminary determinations, the operators have requested that URCA provide more information, specifically on:

- Identification of the specific market failures being addressed;
- Proportionality of obligations applied to those market failures; and
- Review of alternative obligations available to URCA.

URCA therefore sets out its approach to selection of remedies in more detail below.

Policy objective

In selecting the types of obligations to be imposed, URCA is guided by the objectives of the interim SMP process which requires that licensees with interim presumptions of SMP "…be subject to obligations designed to maintain…the objective of encouraging, promoting and enforcing sustainable competition".[31] Ultimately the obligations should be selected to facilitate a smooth and orderly transition to a liberalised electronic communications market and should meet the primary objectives of the Comms Act[32], specifically to:

> "*Further the interests of consumers by promoting competition…in particular…to encourage, promote and enforce sustainable competition*."

URCA's selection of regulatory remedies is also guided by section 5 of the Comms Act, which sets out the following guidelines for regulation and government measures:

(a) Market forces shall be relied upon as much as possible as the means of achieving the electronic communications policy objectives;
(b) Regulatory and other measures shall be introduced –
  (i) Where in the view of URCA market forces are unlikely to achieve the electronic communications policy objective within a reasonable time frame, and
  (ii) Having due regard to the costs and implications of those regulatory and other measures on affected parties;
(c) Regulatory and other measures shall be efficient and proportionate to their purpose and introduced in a manner that is transparent, fair and non-discriminatory; and
(d) Regulatory and other measures that introduce or amend a significant government policy or regulatory measure (including, but not limited to, the sector policy) –
  (i) Shall specify the electronic communications policy objective that is advanced by the policy or measure; and
  (ii) *Shall demonstrate compliance with the guidelines set out in paragraphs (a), (b) and (c).*

[31] Section 116(2) of the Comms Act.
[32] Section 4 of the Comms Act.

The remainder of this Section discusses URCA's approach to meeting these objectives and sets out the framework used to select appropriate types of obligations for the interim SMP process.

Encouraging, promoting and enforcing sustainable competition

In a period of transition and liberalisation, URCA believes that the primary concern in encouraging, promoting and enforcing sustainable competition is the protection of consumer interests, through the prevention of market foreclosure and any abuse of dominant position by an SMP operator.

Effective *ex ante* regulation of SMP operators is critical in giving effect to the policy framework applicable in The Bahamas. Operators with market power, in the absence of *ex ante* regulation may engage in anticompetitive behaviour, limiting the development of competitive markets, with negative effects on competitors and ultimately consumers.

Foreclosure is a particularly serious form of anticompetitive behaviour. It refers to the situation where an SMP operator engages in a variety of exclusionary practices aimed at deterring entrants. An SMP operator may attempt to drive competitors out of the market in which it has been deemed to have SMP or a related market (for example, a dominant firm may seek to extend its market power from a wholesale market to a vertically related retail market). The result of such behaviour, and other attempts to remove or prevent entry of competitors, is known as market foreclosure. Market foreclosure may take a number of forms:

- Vertical leveraging – as described above, this occurs where a dominant firm seeks to extend its market power from a wholesale market to a vertically related wholesale or retail market. For example, denial of access to a critical input.
- Horizontal leveraging – this applies where an SMP operator seeks to extend its power to another market that is not vertically integrated. For example, bundling or tying products.

Behaviour that leads to market foreclosure has a detrimental effect on the development of competition which, in turn, impacts on the interests of consumers who may face (among other things) higher prices, lower quality products and less product differentiation. As noted above, URCA's primary objective in determining whether to impose obligations on SMP operators is to further the interests of consumers through the promotion of sustainable competition.

In addition to seeking to prevent market foreclosure through the imposition of regulatory obligations, URCA is concerned with the ability of an SMP operator to abuse its position of dominance to the detriment of consumers. This is particularly relevant in retail markets in which an SMP operator has exclusivity or a very strong market position and is therefore not subject to constraints caused by competition or potential new market entry. In these circumstances, an SMP operator may have an incentive to engage in behaviour that exploits its position of market power by, for example, charging excessive prices to consumers who have no choice but to accept those prices or discontinue using the product in question. Here, URCA is seeking to prevent the (actual or potential) ability of an SMP operator to engage in behaviour that constitutes an abuse of its market power position.

In the process of identifying the appropriate types of obligations for the interim SMP process, URCA has focused on the prevention of abuse of market power (specifically market foreclosure) and protection of consumer interests in markets where little or no competitive activity is likely in the period under review.

Principles for *ex ante* regulation

As outlined above, in selecting appropriate regulatory remedies, URCA is guided by the Comms Act, which requires that URCA must:

- Consider whether market forces may be relied upon to achieve policy objectives;
- Have due regard to the costs and implications of regulatory measures on affected parties; and
- Ensure that regulatory measures are efficient and proportionate to their purpose and introduced in a manner that is transparent, fair and non-discriminatory.

URCA's approach to the above is discussed below. It is important to note at the outset that any market reviews, including interim market reviews such as this, are data intensive. Detailed information about operators' financial and operational performance is required but may not be available until such time as proper information, notably on accounting separation, is available to URCA.

Market forces

In the case where operators are subject to an interim presumption of SMP, URCA is obliged to consider imposing obligations that maintain the objective of encouraging, promoting and enforcing sustainable competition. As part of this process, URCA recognises that it is important to consider whether the option of not imposing specific obligations is appropriate and explore different ways in which the obligation to regulate can be fulfilled. For example, in some instances it may be more appropriate to adopt a 'wait and see' approach to regulation. This may mean no new specific intervention immediately[33], but a commitment to monitoring the situation and reviewing the situation at a later time on the basis of further evidence and data collated as part of the on-going review of separate accounts, for example. This may also mean, therefore, the imposition of obligations to provide information and supply data to enable URCA to analyse and monitor the market carefully and respond quickly to any allegations of anticompetitive behaviour. These examples of very light regulation of SMP operators form a crucial part of the framework for selection of remedies that is described in more detail below. In any event, URCA will in all cases adopt the principle that any obligation imposed is proportionate to the problem that the obligation is designed to solve.

Costs and benefits

Choosing the most appropriate obligation will necessarily involve having due regard to the costs and benefits of each option identified. In theory, the expectation is that the benefits of an imposed obligation will exceed its costs and have the greatest net benefit of all alternative

[33] Other than the standard SMP obligations as set out in the Individual Operating Licences held by the two operators with presumptions of SMP and proposed accounting separation requirements.

approaches considered. However, it may not always be practical to prove this as the costs and benefits considered will not always be quantifiable, nor may it be an efficient use of resources for URCA to attempt to quantify them. Nevertheless, every obligation considered will result in costs and benefits which should be described and taken into account. As much as possible, URCA will, in the context of the data available to it, try to minimise the costs of regulatory intervention. So, if there are different remedies that could be adopted to deal with the issue identified, URCA will favour the remedy that involves less intervention.

URCA has a general obligation under section 5 of the Comms Act to have due regard to the costs and implications of its regulatory intervention, in light of all applicable legislation.

- Under section 8 of the URCA Act, URCA must ensure that it uses its resources efficiently. Accordingly, URCA considers that it has a duty not to spend a disproportionate amount of time and resources analysing relatively minor costs.
- Only costs and benefits that would be incurred as a result of a remedy being implemented will be taken into account (as opposed to costs and benefits that would be incurred anyway).
- Where appropriate in light of the above, the cost of complying with *ex ante* regulation (e.g. of providing regulatory information or adopting new technical requirements) should be identified if possible, as well as any possible negative impacts of regulation.

It is, however, important to note that, while a consideration of the costs and benefits associated with selected obligations form an important part of the selection of remedies process, this generally informs rather than determines the final decision.[34] This is because URCA must have primary regard to meeting its statutory obligations which will often mean taking account of issues that fall outside a narrow consideration of costs and benefits.

Efficiency and proportionality

URCA considers that a regulatory remedy will be efficient and proportionate when it is the minimum intervention required to achieve the objective set out. URCA, therefore, should not take action exceeding that which is necessary to achieve the objective. The objective of regulation is to mimic competition in those markets in which competition has not yet emerged and to put remedies in place where there is the potential for SMP operators to abuse their market position ("market failures"). In theory, the principle of proportionality is fairly straightforward – measures should match objectives. In practice, the application of the proportionality principle in *ex ante* regulation and the selection of a proportionate obligation require a degree of judgment, in light of the information available and the uncertainty associated with a forward-looking process.

Decisions should include, for any given problem, a consideration of alternative remedies wherever relevant, so that the least burdensome effective remedy can be selected that best meets URCA's objectives. In doing so, it is important to acknowledge that the obligations examined may meet URCA's objectives to varying degrees and the selected proportionate obligation, but the least burdensome effective remedy that meets the objective may

[34] For this reason, s.5(b)(ii) of the Comms Act states that URCA should have "due regard to the costs". See also Ofcom, Guide to Better Policy Making

nonetheless have impacts beyond the achievement of those objectives. Again, ensuring that selected obligations are proportionate will involve having due regard to the associated costs and benefits of imposing those obligations.

In addition to the above, when selecting the most proportionate obligation URCA will also have regard to the following:

- Whether the interaction of obligations applied as part of the interim SMP process lead to any unintended consequences that frustrate regulatory objectives or lead to a disproportionate burden being placed on market players.
- Consistency between obligations, so that the introduction of additional obligations does not unintentionally undermine the effectiveness of others.
- Finding a balance between general and specific obligations. Highly specific obligations may be inflexible and time consuming, whereas more general obligations may enable an SMP operator to exploit uncertainties.

URCA's intention in selecting obligations is primarily to ensure that its objective of furthering the interests of consumers through the promotion of sustainable competition is met. At the same time, it is mindful that such obligations should be proportionate and not place an undue burden on SMP operators. This consideration is taken into account in the framework described below.

Framework for selection of obligations

The selection of regulatory obligations is the final stage in a typical market review process. Where an operator is designated as having SMP in a relevant market, it is generally accepted that one or more appropriate *ex ante* regulatory remedy (or remedies) should be applied.[35] Nevertheless, as noted earlier in this Section, URCA recognises that it is important that it seeks to consider whether the option of not imposing specific obligations is appropriate and explore different ways in which the obligation to regulate can be fulfilled. For example, URCA may consider that the existing regulatory framework, which includes standard SMP obligations, is sufficient to meet URCA's objectives and that additional obligations are not therefore required.[36] This is described as the 'do nothing' option in the following analysis.

In line with international best practice, the selection of remedies is based on a framework that seeks to choose the most appropriate option for resolving the identified problem having due regard to the costs and benefits and taking into account URCA's objectives and statutory obligations as discussed above. This framework consists of the following steps, which are described in more detail below.

1) Define the objective – market failure identification
2) Identify options to address the objective

[35] ERG Common Position – EU framework

[36] This is particularly important in the context of the current Interim SMP process, where URCA is particularly concerned to ensure that the principle of light touch regulation is applied. This is based on the principle that the interim SMP review is for the imposition of basic safeguard obligations to prevent market foreclosure during the liberalisation process and protect consumers' interests until competition develops.

3) Impact analysis – costs, benefits and risks
4) Assess impacts and identify preferred solution

Define the objective – market failure identification

The first stage of the selection of remedies process involves defining the objective that URCA is seeking to achieve. As previously mentioned, URCA has a general duty to further the interest of consumers by encouraging, promoting and enforcing sustainable competition.

For the interim SMP process, this involves considering whether to impose obligations in those markets where there is no foreseeable prospect of effective competition developing over the period under consideration, to deal with any (actual or potential) market failures that create a risk of market foreclosure or other (actual and potential) abuses of market power by SMP operators in relevant markets.

In order to apply this stage to the market in question, URCA will seek to identify the (actual or potential) market failure that needs to be addressed. The market failures identified by URCA in this process are:

- Predatory pricing;
- Excessive pricing;
- Tying; and
- Refusal to deal/Denial of access.

A description of all the market failures (actual and potential) URCA has identified in this interim SMP analysis process is set out in **Appendix 1** to this document.

Identify options

Having identified the market failure(s) for a product in the high level SMP market, the next step is to consider the different ways in which the market failure(s) could be remedied. This stage will start by considering the option of not regulating or relying on existing regulation (for example, standard SMP conditions in individual operating licences), adding only accounting separation requirements in order that URCA would have sufficient information about the SMP operator's products to react quickly and efficiently to any alleged anti-competitive behaviour.

In considering the imposition of regulatory obligations, a guiding principle to which URCA adheres is that of "light touch" regulation. This is the principle that in situations where competition may be emerging, URCA's main focus would be on straightforward consumer protection. In the context of the interim analysis, this is an important consideration. Lighter obligations will allow SMP operators to demonstrate compliance more quickly, such that they could enter new markets, which should benefit consumers through increased competition.

For the interim SMP process, this stage will, therefore, involve identifying the range of possible obligations that could be used to effectively prevent or limit the (actual or potential) market failure, including 'do nothing' or alternative regulatory approaches. Generally speaking, regulatory measures range from the relatively less intrusive, such as those intended for increased transparency (e.g. publish tariffs) to the relatively more intrusive, such as obligations to set prices on the basis of costs.

When evaluating obligations, URCA will also take account of international precedent. URCA believes that international experience can act as a guide to what level and type of regulation is proportionate and effective in different situations. While all countries are different, the comparison can act as a sense check.

URCA has taken into account international precedent where appropriate.

Impact analysis

Having identified the possible obligations, the next stage of the process is for URCA to assess their likely impact, underpinned by a consideration of costs and benefits. URCA's approach to costs and benefits is discussed in some detail above.

In practice, URCA will, as far as possible, seek to identify the impact of obligations on all stakeholders – SMP operators, existing market players, new market entrants, consumers, government – and have due regard to the costs and benefits associated with those impacts (regardless of whether the resulting costs and benefits can be quantified).

The costs and benefits to be considered as part of this analysis can be broad given that the objective is to think widely about the possible impacts, taking account of the whole value chain and knock-on effects across the electronic communications sector. Broadly, the costs and benefits to be considered by URCA are given in the table below.

Cost/Benefit	**Examples**
Implementation	• Cost of implementation – regulatory and stakeholder • Timeliness of implementation • Practicality – ease of implementation, decision-making
Product	• Price • Quality • Product choice/differentiation • Revenue
Compliance	• Ongoing cost of compliance • Commercial confidentiality concerns • Cost of regulation
Distributional	• Consumers • Retailers • Other markets
Opportunity cost	• Related markets • Investment • Innovation

For the interim SMP process, the aim is to impose obligations that encourage, promote and enforce sustainable competition in electronic communications markets, which will in turn ensure that consumers benefit in terms of lower prices, wider choice of supplier, product differentiation and higher quality services. URCA will seek to identify any impacts that the different options will have on competition. This will include, for example, the ability of new entrants to enter the market and the ability of SMP operators to respond to competition.

For each product and each market failure identified for such product, the first potential obligation to be reviewed is the 'do nothing' option, which would mean that URCA relies on the basic SMP obligations as set out in the Individual Operating Licence, without imposing any additional obligations other than accounting separation requirements (see Section 5 for more detail). Where the 'do nothing' option is found to meet URCA's objectives, URCA will not proceed to perform an impact analysis for the other potential options identified. This is due to URCA's commitment to apply light touch regulation wherever and whenever possible, which would necessitate the use of the 'do nothing' option in situations where this is found to meet URCA's objectives and effectively address the potential market failure.

Identify preferred solution

The final stage in the selection of remedies process involves an assessment of the costs and benefits which would flow from the options considered as identified through the previous stage and selecting that option which:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate, having due regard to the costs and benefits.

At this stage, URCA will also consider whether there are risks or other possible unintended consequences that relate to the different options being considered. For example, URCA will take into consideration the risk of regulatory failure, where the option chosen may not achieve the objectives, or any risk of regulatory or commercial uncertainty resulting in disputes, challenges or appeals.

For retail markets, an additional consideration is whether the market failures identified have been adequately addressed at the wholesale level. If measures at the wholesale level are not capable of addressing the market failures identified, then obligations at the retail level may be applied. Although it is not standard to include this at the conclusion of the selection of obligations process, we do so here for ease of inclusion.

Application of the framework

The remainder of this document applies the framework for the selection of obligations to the following markets which have been determined as susceptible to *ex ante* regulation.

CBL

- SuperBasic package
- Digital packages

- Retail national and international leased lines
- Broadband internet
- Access to the broadband network and services
- Access to the transmission network
- Wholesale national and international leased lines

BTC

- Fixed telephony access and local calling
- Domestic long distance fixed calling (DLD), domestic fixed calls to rated numbers and international long distance fixed calling (ILD)
- Broadband internet access in specified areas
- National and international leased lines
- Wholesale national and international leased lines
- Mobile voice and data services
- Incoming international calls to mobile customers
- Call transit (domestic, international and mobile), call termination services[37], directory enquiry and ancillary services
- Access to the broadband network and services
- Access to the transmission network

[37] Includes call termination (domestic, international and mobile), termination of emergency calls to the police, termination of automated ancillary services, termination of calls to freephone numbers, termination of calls to operator assistance facilities and termination of calls to directory enquiries. Further this includes enabling services such as interconnection links, points of interconnection, co-location where required and other such services required to implement the services listed here.

5 Obligations

The second stage of the selection of obligations process requires identifying the options available to address the specific market failures identified for a product in an SMP market susceptible to *ex-ante* regulation. Then, having identified the possible obligations, the next stage of the process is for URCA to assess their likely impact, underpinned by a consideration of costs and benefits.

As some obligations available to URCA may apply to several of the SMP products, their general costs and benefits (independent of the product or operator concerned) are first discussed, followed by specific costs and benefits relevant to the specific product and/or operator being considered.

Range of obligations considered

URCA has wide ranging powers to impose *ex ante* obligations, including retail price regulation, access and/or interconnection obligations and accounting separation. There are also varying degrees of flexibility in how these different obligations may be applied. For example, retail price regulation involves a number of options such as rate of return control, price caps and revenue caps, whereas an obligation to untie services is less flexible. Where flexibility exists, URCA can adapt the obligation as much as possible to match the objectives and reflect the interim nature of the obligation.

The table below summarises the main potential obligations considered by URCA. As more particularly described below, URCA's analysis has been very wide ranging, from considering the option of not adding any obligations on the SMP operators to more onerous obligations.

Obligation	**Levels**	**Further levels**
1. Retail price regulation	a) Price caps (incentives based) b) Rules based approach	
2. Untying	a) Untying for all customers b) Untying for new and existing customers but on demand c) Untying for new customers only	
3. Access and Interconnection obligations	RAIO: a) RAIO – product-related Non-RAIO a) Resale obligation b) Commercial offerings with non-discriminatory terms	Prices: 1. Cost orientated 2. Retail minus 3. Benchmarking 4. Commercial
4. Accounting separation	Costing Methodology: a) Incremental costing (Bottom-up) b) Incremental costing (top-down)_ c) FDC: CCA d) FDC: HCA	Verification of Outputs: 1. Independent audit to 'Fairly Present in accordance with' (FPIA) standard 2. Independent audit to 'Properly Prepared in

		accordance with' (PPIA) standard 3. CFO Responsibility Statement and URCA Review 4. CFO responsibility Statement 5. URCA Review

5.1 Matching obligations to objectives identified

The table below shows which obligations can be applied to address specific market failures. The identification of market failures for specific SMP products is discussed in subsequent Sections. More detailed information on the market failures listed below and referred to in subsequent Sections is given in **Appendix 1**.

Potential market failure	**Proposed obligation**			
	Retail price regulation	**Untying of services**	**Access and/or Interconnection obligations**	**Accounting separation**[1]
Predatory pricing	✓			✓
Excessive pricing	✓			✓
Tying and bundling		✓		✓
Refusal to deal/denial of access			✓	✓

1. Accounting Separation is by itself unlikely to correct market failures. While the need to produce separated accounts may encourage operators to charge prices which are more cost-reflective, accounting separation is primarily intended as a tool to support the successful application of other remedies and competition law. This is because the implementation of many remedies relies on having accurate costing and revenue information about an operator's services. Without separated accounts, this is very difficult to achieve.

These obligations are all supplementary to the standard SMP obligations of non-discrimination and, for retail markets only, publishing charges, terms and conditions and complying with SMP-specific consumer obligations set out in Condition 36 of the individual operating licence.

5.2 Costs and benefits of identified options

The remainder of this Section discusses the general costs and benefits associated with the obligations identified above irrespective of the product or operator concerned.

5.2.1 <u>Retail price regulation – rules-based</u>

One option for the regulator – when confronted with potential market failures such as predatory pricing or excessive pricing – is to impose retail price regulation such as a rules-based obligation. This would involve requiring an SMP operator to submit justification for any price changes it plans to make as well as allowing URCA to initiate investigations into current pricing levels and practices. This would provide URCA with information necessary to monitor an SMP operator's pricing practices and assess whether an SMP operator was engaging in anti-competitive behaviour such as predatory or excessive pricing. This obligation could give URCA the ability both to prevent such behaviour and, in conjunction with *ex post* competition law, to address any instances of such behaviour.

Table 1 of Appendix 2 summarises the main costs and benefits associated with rules-based retail price regulation.

5.2.2 <u>Retail price regulation – price cap (incentive-based)</u>

To prevent market failures such as predatory or excessive pricing strategies, URCA could impose retail price regulation in the form of a price cap. This is often referred to as incentive-based price regulation. This would involve the imposition of a price cap, whereby changes in price would be set according to a 'retail price index minus x' formula, where the retail price index is a measure of the level of inflation. The 'x' represents an efficiency factor used to adjust prices over time according to, for example, efficiency improvements or changes in cost. The obligation would provide incentives for the SMP operator to price its products on an efficient cost-oriented basis. This would assist URCA in identifying and potentially preventing an SMP operator from engaging in anti-competitive pricing practices.

The principle of incentive-based regulation stems from the fact that if the operator achieves the efficiencies more quickly than assumed by the regulator, or achieves higher efficiency improvements than assumed, then the SMP operator can keep the extra profits earned.

Table 2 of Appendix 2 summarises the main costs and benefits associated with price cap retail regulation.

5.2.3 <u>Untying of services</u>

An SMP operator may engage in a tied sales practice whereby the sale of a product is conditional on the customer purchasing another product. It is important to note that this may not necessarily be an abuse of the operator's market power: for example, if it was done in order to protect consumer safety. However, when an operator offers a tied sale, with the effect of increasing its own margin and/or preventing market entry, there is clear cause for regulatory concern. In this case, URCA might impose an untying obligation.

Table 3 of Appendix 2 summarises the main costs and benefits associated with untying regulation.

5.2.4 <u>Access and Interconnection obligations</u>

Access and Interconnection obligations can be mandated by regulators to prevent market failures such as refusal to deal and/or denial of access to the network. These obligations are designed to ensure access is provided on a transparent and non-discriminatory basis. If the possibility to replicate the SMP operator's facility is limited, a refusal to deal may lead to foreclosure of the retail market. When a regulator has identified the potential market failure of refusal to deal or denial of access there are two areas that are appropriate to consider when determining the access obligation:

1. Ensuring access to the necessary input on reasonable terms and conditions, and
2. Setting an appropriate price for the input.

There are many possible access and/or interconnection obligations which are available to the regulator in electronic communications. A short description of a number of these is set out below.

RAIO

A Reference Access and Interconnection Offer (RAIO) is a standard offer document in the form of a contract, setting out the access and/or interconnection services and matters relating to the price and terms and conditions (technical and financial) under which the SMP operator will provide such services upon request to another licensed operator. The types of terms and conditions which may be considered are discussed in the Draft Access and Interconnection Guidelines that URCA published on 30 September 2009 (ECS22/2009). The appropriate wholesale access and/or interconnection price may be specified as follows:

- Cost orientation: Linking prices to cost information derived from cost accounting models/systems, such as, e.g., LRIC (long-run incremental costs) or FDC/FAC (fully distributed/fully allocated costs).
- The ‘retail-minus’ approach, in which the “minus” may be calculated on the basis of deducting from the SMP operator’s retail price the costs that are related to the retail provision of the services which would not be incurred by the SMP operator if the services were sold to other operator. These costs are known as avoidable costs.
- Benchmarking, e.g. collecting pricing and costing information from other countries and using this information to set prices until more specific local information is available.

Resale obligation

Resale obligations require the SMP operator to make its retail services available for resale by other operators subject to, for example, standard service level agreements. Competitors gain access to a wholesale version of the retail service which can then be resold directly or combined or bundled together with the competitor’s other products. The appropriate wholesale prices can be specified as part of the resale obligation. The approaches to determining these prices are set out previously for the RAIO.

The main difference between a RAIO obligation and a general resale obligation is that the RAIO would include access to network elements or require exchange of electronic communications signals and messages between the two operators, whereas the resale obligation would simply be a wholesale supply of a retail service.

Commercial offering

The SMP operator is left to negotiate access and/or interconnection arrangements with other licensed operators, subject to competition law. An SMP operator who receives requests for access and/or interconnection should, in principle, conclude such agreements on a commercial basis, and negotiate in good faith. In instances where commercial negotiations are unsuccessful, dispute resolution processes would be available (the only point at which the regulator would take part in the commercial offering process).

Operators with SMP in The Bahamas are subject to a non-discrimination obligation which would require non-discriminatory supply of service to other operators of services provided by the SMP operator to its own retail business.

General costs and benefits of the options explained above

Table 4 of Appendix 2 summarises the main costs and benefits associated with a **RAIO** obligation.

Table 5 of Appendix 2 summarises the main costs and benefits associated with a **resale** obligation.

Table 6 of Appendix 2 summarises the main costs and benefits associated with a **commercial offering** obligation.

Table 7 of Appendix 2 considers the main costs and benefits associated with the different options for determining the **wholesale price for access and/or interconnection services**.

5.2.5 Accounting separation

Accounting separation is a requirement to be imposed on both CBL and BTC. URCA considers that the cost and revenue information obtained under the proposed accounting separation requirements is necessary for it to be able to discharge the functions and duties laid out in the Comms Act and other relevant documents. **In this Paper, the accounting separation obligation across all SMP products and the rest of the SMP operators' businesses is taken as a given and therefore forms part of the 'do nothing' option considered by URCA in subsequent Sections.**

The objectives of the accounting separation requirements are:

- To support retail price regulation where applied;
- To promote transparency and non-discrimination, especially between an SMP operator's retail business and its downstream competitors;
- To support any setting or assessing of cost-oriented wholesale charges, such as those required by a RAIO;
- To overcome the information asymmetry between the regulator and regulated entities;
- To provide for audit independence and objectivity; and
- To support any *ex-post* assessment under the competition provisions of the Act (e.g. margin squeeze, predatory pricing and excessive pricing).

A service cost model is a key input to a set of separated regulatory accounts, because the accounts require the SMP operator to allocate operating and capital costs to individual services and business units. However, a service cost model can also be prepared on a standalone basis.

That is, it is possible to impose a requirement for an operator to develop a cost model without also requiring it to prepare separated accounts.

Some of the objectives of accounting separation, as described above, can also be met through requiring an SMP operator to prepare only a cost model. However, as set forth below, full accounting separation provides a number of benefits to the market on top of those arising from the implementation of an obligation only to prepare a cost model.

Table 8 of Appendix 2 **compares** the main costs and benefits associated with a **standalone cost model and accounting separation**.

When establishing a cost model it is necessary to consider how the model attributes costs to individual services. This is important because, in electronic communications, many cost items can only be indirectly attributed to individual services. Generally, cost models can take one of two approaches:

- Fully allocated (or distributed) cost (FAC/FDC) models estimate the average cost of individual services, by allocating all costs to individual services, including those costs which are fixed and common between services.
- Long run incremental cost (LRIC) models estimate the additional costs that an operator incurs to provide an additional service or increment of demand. Fixed and common costs are not included in estimates of LRIC, but may be recovered (in the setting of regulated prices) through a mark-up on LRIC.[38]

FAC models can be prepared on a historic cost accounting (HCA) or current cost accounting (CCA) basis. Under CCA, the SMP operator's assets are valued at current market prices, thus meaning the model more closely approximates the costs an operator would incur if entering the market today. HCA models take asset values from the SMP operator's fixed asset register.

CCA costs are used as the basis for LRIC models. However, as well as taking the SMP operator's costs and network as the starting point for the model (i.e., a top-down approach), LRIC models can also be built using a bottom-up approach. Bottom-up models estimate the costs of a hypothetical reasonably efficient operator and are not restricted to modelling the actual network of the SMP operator.

Typically, separated accounts are based on either a HCA or CCA FAC model. However, the transfer charges between different business units shown within a set of regulatory accounts can also be calculated using either a top-down or a bottom-up LRIC models.

Table 9 of Appendix 2 compares the costs and benefits of these four types of cost models.

Reviewing accounting separation results

[38] LRIC models often estimate the costs that an operator saves by no longer providing a service / increment of demand.

It is important that the finalised separated accounting documentation and statements are reviewed. This gives the market additional confidence in the outputs of the accounting separation system and supports transparency in regulation.

Table 10 of Appendix 2 presents the relative costs and benefits of each option. These options are not mutually exclusive. For example, it is commonplace for accounts to include both a CFO responsibility statement and an independent audit statement. In the initial years of the accounts, a regulator may also conduct its own review of the statements.

In developing its proposals, URCA has been mindful of the costs and benefits associated with a standalone cost model and accounting separation and has sought to minimize the cost of complying with URCA's cost and revenue information. URCA's current thinking also seeks to address the substantive concerns during the consultation period.

Table 11 compares URCA's current thinking with the preliminary determinations:

Table 11

Preliminary Determinations	URCA's current thinking
FDC-HCA	FDC-HCA
Prepare accounts for 2008 and 2009	2009 accounts only
2009 accounts to be audited to FPIA standard	No audit for 2009 but going onward audit requirements will apply to a PPIA standard URCA reserves the right to move to a higher standard of auditing in subsequent years
No requirement for CFO Responsibility Statement	CFO Responsibility Statement is required for 2009 and subsequent sets of accounts.

6 CBL broadband internet

Introduction

As noted in Section 3.1.1 above, despite the additional information that URCA received relating to CBL's broadband internet, the conclusion that the product remains in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

Broadband internet is a retail product offered by CBL for which URCA is concerned about the threat of abuse of market power. URCA has identified the following actual or potential market failures:

- Predatory pricing – URCA considers that CBL may be able to engage in predatory pricing given its position of SMP in the provision of broadband packages.
- Tying - CBL ties its TV and internet services such that the purchase of broadband internet is conditional upon consumers also purchasing one of CBL's pay TV services (e.g. SuperBasic or digital packages).

URCA therefore considers the appropriateness of obligations available to address these market failures.

2) Identify options

Predatory pricing

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations applied to all operators with SMP in the provision of a retail product.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with broadband access) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[39] These obligations do not include provisions that would enable URCA to address instances of predatory pricing which URCA considers to be a particular threat in relation to the broadband access. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA may consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP

[39] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

market being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour.

Ordinarily, emerging competition would actually provide an SMP operator with the incentive to engage in predatory pricing and effectively foreclose the market to competition (short-term loss for long-term gain). However, for broadband access, the prospect of emerging competition comes primarily from BTC, which is also well placed to engage in price competition (due to it having an existing network and thus low incremental costs), thus suggesting that predatory pricing would not be profitable in either the short or long term. URCA therefore concludes that abstaining from imposing additional obligations should be considered in more detail in relation to the threat of predatory pricing.

Given URCA's commitment to light-touch regulation, this Paper examines the 'do nothing' option in more detail below before considering the use of alternative options. This is because in situations where the 'do nothing' option meets URCA's objectives and addresses the (actual or potential) market failure, it would be disproportionate to consider imposing additional obligations.

Tying

URCA has considered whether abstaining from the imposition of additional obligations would be appropriate in the case of tying.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with broadband access) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[40] These obligations do not include express provisions that would enable URCA to address tying such as CBL currently requires with broadband access and pay TV services.

URCA does not consider that tying of broadband access to CBL's pay TV services is in the consumers' interests. As a result, URCA concludes that abstaining from imposing additional obligations would not address the market failure identified and is therefore not considered further as an appropriate option.

For tying, the following obligations are considered:

- Untying of services
    - For all customers
    - For new and existing customer (on demand)
    - For new customers only

The envisaged design of the obligations referred to above has largely been described and discussed in other URCA documents and is not repeated here. Please refer to the URCA website for more information.

[40] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

3) Impact analysis

Predatory pricing

As noted previously, URCA considers that CBL could engage in predatory pricing by setting charges below cost for the broadband internet access product in order to deter market entry or competitive expansion. However, as discussed above, URCA considers that the 'do nothing' option could meet URCA's objectives and address this market failure. We therefore consider this option in more detail below.

1. 'Do Nothing'

URCA considers that the prospect of emerging competition from BTC, the potential for new market entrants and the potential for BTC to match any below cost pricing by CBL, may deter CBL from entering into predatory pricing of its broadband internet packages.

Under this option, URCA would still retain its ability to review this position and add specific retail price regulation obligations for the broadband internet packages should CBL's behaviour cause URCA to consider this necessary during the period until the full market review for this product.

URCA considers that the option of relying on the basic SMP obligations is likely to meet URCA's objectives of preventing market foreclosure through predatory pricing (providing that it has access to the necessary market and accounting information to deal with any issues arising in this market).

URCA does not propose to undertake impact analysis of the other options for the purpose of addressing the potential market failure of predatory pricing. This is due to URCA's commitment to apply light touch regulation wherever and whenever possible, particularly for this interim SMP review. Imposition of, for example, a retail pricing obligation would by definition be more intrusive than the imposition of no additional obligations.

Tying

1. Untying of services

This obligation would not prevent CBL from bundling or packaging its products (including price regulated services) so long as each product included in a bundle or package is also available on a standalone basis on reasonable terms and conditions. Requiring CBL to offer broadband internet on a standalone basis would address the tying market failure identified and provide consumers with choice regarding the purchase of broadband internet from CBL with or without pay TV.

The general costs and benefits associated with an untying of services obligation are given in Table 3 of Appendix 2. Here, URCA considers only those costs and benefits that are specific to the tied broadband access service provided by CBL.

As proposed by URCA, the untying obligation would not prevent CBL from bundling its products so long as it also provides them on a standalone basis. This would enable CBL to continue to differentiate its products from any competitors through the provision of bundled packages.

For consumers, the untying obligation would offer a significant benefit as they would be able to either purchase broadband access separately or create a bundle that meets their own specific preferences (thereby maximising consumer welfare). Potential new entrants to the broadband access market would also benefit from being able to compete with CBL's broadband access product on a standalone basis.

The impact on CBL of imposing untying would also vary depending on the number of customers for which the standalone products are to be made available. URCA has identified three levels, and has set out the impact of each below:

Untying for all customers
This option would maximise consumer welfare as the choice of purchasing standalone products would be available to all. However, it would also represent the highest cost of implementation for CBL.

The benefits of this version would be no confusion between what would be available to existing customers and new customers, and competitors would be able to compete for CBL's existing customer base as well as customers not currently purchasing CBL's tied product.

A potential drawback may be the disruption caused to customers currently taking the tied services who would be faced with changes in the form of, for example, revised contracts and price changes.

Untying for all customers (on demand only)
This option is likely to produce reduced consumer welfare as the need to specifically request the untying may be seen as an inconvenience and thus a barrier to taking broadband services from other suppliers. This would also reduce the benefits to potential competitors as they would only be able to access customers who had chosen to request untying.

Untying for new customers only
This option would be unlikely to optimise consumer welfare. Existing CBL customers would be disadvantaged and would be discriminated against relative to any new customers wishing to purchase broadband or pay TV service from CBL. Given that the majority[41] of CBL's customers currently subscribe to a tied package it is likely that a significant number of customers would be affected.

Costs of untying options
At this time, URCA has no detailed information about CBL's costs of untying. This paper therefore does not attempt to estimate the different cost levels to CBL of the three options described above.

[41] This assessment has been derived from information provided to URCA by CBL in response to a data request made by URCA in January 2010.

4) Identify preferred solution

In this Section, URCA assesses the costs and benefits of the options identified in the previous Section in order to identify the obligation which:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

Predatory pricing

URCA considers that where prospective emerging competition has been identified, its objectives should focus on the protection of consumer interests.

URCA considers that the option of relying on the basic SMP obligations is likely to meet this objective by preventing market foreclosure and addressing the potential market failure of predatory pricing. The measure is also proportionate and efficient in light of this being an interim SMP review.

Untying

URCA's assessment is that consumer welfare is likely to be maximised if untying is implemented for all customers and not just on demand. However, as URCA does not have access to any detailed costing information relating to the implementation of untying by CBL, it is not possible for URCA to put forward a firm view regarding the most proportionate obligation at this time.

URCA is expecting more information from CBL in this regard and will form its final view once it has been able to review that information.

7 CBL SuperBasic package

Introduction

As noted in Section 3.1.2 above, no new substantive arguments or new information has been presented to URCA in relation to the SuperBasic package offered by CBL. The conclusion that the SuperBasic package remains in the high level SMP market and susceptible to *ex ante* regulation has therefore been maintained.

1) Define the objective – market failure identification

The SuperBasic package is a retail product offered by CBL. Due to the regulatory regime which was in place until the entry into force of the Comms Act, the price which CBL can charge for the SuperBasic package has been fixed at $30 per month. CBL has indicated that this price is low and potentially below cost. URCA has the following concerns: potential market foreclosure and protection of consumer interests.

URCA has identified the following actual or potential market failures:

- Predatory pricing – Although CBL has indicated that the price of SuperBasic is low, URCA considers that should CBL face competition in this area, it may in fact be able to engage in predatory pricing given its position of dominance in the provision of the SuperBasic package, and the potential for cross-subsidisation from other activities of CBL, including the digital packages.
- Excessive pricing – URCA's current thinking is that if CBL continues to not face competition in the provision of its SuperBasic services, and if the current price cap of $30 per month is removed, the opposite issue could arise, namely that CBL would have the incentive to increase the price of Super Basic to the point where the price may well be excessive.

URCA therefore consider the appropriateness of obligations available to address these market failures.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations applied to all operators with SMP in the provision of a retail product.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with SuperBasic) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[42] These obligations do not include provisions that would

[42] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

enable URCA to address instances of predatory or excessive pricing which URCA considers to be a particular threat in relation to the SuperBasic package. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA could consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP market being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour. However, there is no evidence that this is the case with the SuperBasic package during the period to which the interim SMP process applies.

While consumers may benefit in the short-term from predatory pricing due to lower prices, they would be likely to suffer in the long-run due to the absence of sustainable competition. In the case of excessive pricing, consumers would suffer in both the short-term and long-run as they would continue to pay prices above that which would apply in a competitive market. As a result, URCA concludes that abstaining from imposing additional obligations would not address either of the market failures identified and is therefore not considered further as an appropriate option.

For both predatory pricing and excessive pricing, URCA considers that both retail price regulation and accounting separation may be appropriate obligations. As discussed in Section 5 above, these obligations involve varying levels and degrees of flexibility in how they may be applied. URCA therefore considers:

- Retail price regulation – rules-based
- Retail price regulation – price cap (incentive-based)

3) Impact analysis

Having identified the possible options for addressing the (actual or potential) market failures of predatory and excessive pricing, URCA now consider the likely impact of these options.

Predatory pricing

As noted previously, URCA considers that CBL could engage in predatory pricing by pricing the SuperBasic package below cost in order to deter market entry.

1. Retail price regulation – rules-based

This would involve the imposition of a retail price regulation obligation that requires CBL to submit justification for any price changes it plans to make as well as allowing URCA to initiate investigations into current pricing levels and practices. This would provide URCA with information necessary to monitor CBL's pricing practices and assess whether CBL was engaging in predatory pricing. This obligation would give URCA the ability both to prevent predatory pricing and, in conjunction with *ex post* competition law, to address any instances of predatory pricing behaviour.

The general costs and benefits associated with rules-based retail price regulation are given in Table 1 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to the SuperBasic package and predatory pricing.

Rules-based retail price regulation would require CBL to submit information to enable URCA to monitor its pricing practices and ensure that it is not engaging in predatory pricing. This would place a cost of implementation on CBL by requiring it to establish a data collection framework (based on URCA specifications). However, based on previous data requests, URCA believes that CBL already has some data collection processes in place such that this requirement may not represent a disproportionate burden.

Requirements to give URCA prior notice to make price changes could place some restrictions on CBL's ability to make price adjustments at short notice. However, given that CBL has not been able to change the price of the SuperBasic package for 15 years, URCA does not consider that this is a significant additional cost to be borne by CBL. Maintaining the price regulation on SuperBasic would also further the interests of consumers by protecting them from unexpected price changes.

2. Retail price regulation – price cap (incentive-based)

This would involve the imposition of a price cap, whereby CBL would be able to set its prices freely providing that it complied with the overall cap. Efficiency improvements would be reflected in the "x" value within the price cap.

The general costs and benefits associated with a retail price cap obligation are given in Table 2 (Appendix 2). Here URCA considers only those costs and benefits that are specific to the SuperBasic package and predatory pricing.

Developing a price cap would require CBL to produce a business plan for the price cap period, forecasting costs, revenues and customer numbers for the period. A price cap obligation would also impose costs on URCA in establishing the price cap process, as well as undertaking regular reviews and ensuring that the price charged by CBL was compliant with the price cap. URCA considers that the costs associated with a price cap approach would exceed that of a rules-based retail price obligation.

Excessive pricing

As noted previously, CBL could engage in excessive pricing for the SuperBasic package in the absence of present or emerging competition.

1. Retail price regulation – rules-based

As with predatory pricing, this would involve the imposition of a retail price regulation obligation that requires CBL to submit justification for any price changes it plans to make as well as allowing URCA to initiate investigations into current pricing levels and practices. This would provide URCA with information necessary to monitor CBL's pricing practices and assess whether CBL was engaging in excessive pricing.

The general costs and benefits associated with rules-based retail price regulation are as detailed in Table 1 (Appendix 2) and as for predatory pricing, and are not repeated here.

2. Retail price regulation – price cap (incentive-based)

As with predatory pricing, this would involve the imposition of a price cap whereby CBL would be able to set its prices freely, providing that it complied with the overall cap. Efficiency improvements would be reflected in the “x” value within the price cap.

The general costs and benefits associated with retail price cap regulation are as detailed in Table 2 (Appendix 2) and as for predatory pricing, and are not repeated here.

4) Identify preferred solution

URCA’s review of the potential market failures for the SuperBasic product has resulted in the preliminary conclusion that a form of retail price regulation is required to remedy potential predatory or excessive pricing initiatives by CBL, depending on how the market develops.

Based on the relative costs and benefits of the two retail price regulation options discussed above (rules based and price-cap regulation), URCA concludes that rules-based retail price regulation is the most appropriate obligation for the interim SMP review. The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA’s objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA’s objectives with regards to the SuperBasic product are the prevention of anti-competitive pricing either in the form of predatory pricing or excessive pricing, with the intention of protecting consumer interests and preventing market foreclosure.

As the time and up-front costs associated with the development and implementation of price caps would be considerable, URCA does not consider this type of price regulation appropriate for the interim SMP obligations.

Rules-based price regulation, on the other hand, can be focused on reviewing prices changes and involve no substantial set-up costs or resources. It would act to protect consumers and potential competitors from anti-competitive pricing strategies and thus meet URCA’s objectives. URCA has therefore concluded that rules-based price regulation is the most appropriate retail price regulation obligation for the SuperBasic product.

8 CBL Digital packages

Introduction

As noted in Section 3.1.3 above, despite the additional information that URCA received relating to CBL's digital packages, the conclusion that the digital packages remain in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

The digital packages are retail products offered by CBL for which URCA is concerned about the threat of market foreclosure. URCA has identified the following actual or potential market failures, which are to an extent mutually exclusive:

- Predatory pricing – URCA considers that, if faced with the threat of competition, CBL may be able to engage in predatory pricing given its position of SMP in the provision of the digital packages and ability to cross-subsidise with its other activities, including the provision of broadband packages or the SuperBasic package; and
- Excessive pricing – URCA further considers that, if competition were to develop at a slower pace than currently envisaged, CBL could potentially engage in excessive pricing.

URCA therefore considers the appropriateness of obligations available to address this market failure.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations applied to all operators with SMP in the provision of a retail product.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with broadband access) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[43] These obligations do not include provisions that would enable URCA to address instances of predatory pricing or excessive pricing which URCA considers to be a particular threat in relation to digital packages. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA may consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP product being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour.

[43] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

Ordinarily, emerging competition would actually provide an SMP operator with the incentive to engage in predatory pricing and effectively foreclose the market to competition (short-term loss for long-term gain). However, at least one of the potential competitors for digital packages (BTC) could also be well placed to engage in price competition due to it having an existing network, thus suggesting that predatory pricing may not be attractive to CBL. URCA therefore concludes that abstaining from imposing additional obligations should be considered in more detail in relation to the threat of predatory pricing.

Given URCA's commitment to light-touch regulation, this Paper examines the 'do nothing' option in more detail below before considering the use of alternative options. This is because in situations where the 'do nothing' option meets URCA's objectives and addresses the (actual or potential) market failure, it would be disproportionate to consider imposing additional obligations.

3) Impact analysis

As noted previously, URCA considers that CBL could engage in predatory pricing by charging for the digital packages below cost in order to deter market entry. In the absence of emerging competition, CBL could also potentially engage in excessive pricing. However, as discussed above, URCA considers that the 'do nothing' option could meet URCA's objectives and address these market failures. URCA therefore consider this option in more detail below.

1. 'Do Nothing'

URCA considers that the prospect of emerging competition from BTC, the potential for new market entrants and the potential for BTC to match any below cost pricing by CBL, may deter CBL from entering into predatory pricing of its digital packages product. In addition, URCA considers that the proposed price regulation of the SuperBasic package may provide disincentive for CBL to engage in predatory pricing as it would effectively be acting predatorily against its own product, which would not be a profit-maximising strategy.

URCA also considers that the proposed price regulation of the SuperBasic package may also provide a disincentive against CBL engaging in excessive pricing. This is because it may not be in CBL's interest to increase the prices for digital packages materially above the regulated price of the SuperBasic package, assuming that CBL would prefer to migrate as many of its customers from SuperBasic over to digital packages.

Under the 'do nothing' option, URCA would still retain its ability to review this position and add specific retail price obligations for the digital packages should CBL's behaviour cause URCA to consider this necessary during the period until the full market review for this product.

URCA considers that the option of relying on the basic SMP obligations is likely to meet URCA's objectives of preventing market foreclosure through predatory pricing (providing that URCA has access to the necessary market and accounting information to deal with any issues arising in this market), and indeed, excessive pricing and thus does not discuss any specific retail pricing obligations in response to this potential market failure.

URCA does not propose to undertake impact analysis of the other options for the purpose of addressing the potential market failure of predatory pricing and excessive pricing. This is due to URCA's commitment to apply light touch regulation wherever and whenever possible, particularly for this interim SMP review. Imposition of a retail pricing obligation would by definition be more intrusive than the imposition of no additional obligations.

4) Identify preferred solution

URCA's review of the potential market failures for the digital packages has resulted in the current conclusion that abstaining from additional obligations, and relying on the basic SMP obligations, would be sufficient to remedy potential predatory pricing or excessive pricing initiatives by CBL, depending on how the market develops. URCA will, however, keep the market under review, with a view to intervening should it appear that there is a need for the introduction of more wide-ranging regulatory options.

The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA considers that where prospective emerging competition has been identified its objectives should focus on the protection of consumer interests.

URCA considers that the option of relying on the basic SMP obligations is likely to meet this objective by preventing market foreclosure and addressing the potential market failure of potentially predatory pricing. The measure is also proportionate and efficient in light of this being an interim SMP review and when compared to the other options of retail price regulation.

9 CBL national and international leased lines

Introduction

As noted in Section 3.1.4 above, despite the additional information that URCA received relating to CBL's national and international leased lines, the conclusion that the products remain in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

National and international leased lines are retail products offered by CBL for which URCA is concerned about the protection of consumers from an abuse of market power. URCA has identified the following actual or potential market failure:

- Excessive pricing – URCA considers that there is unlikely to be effective competition in the provision of national and international leased lines during the period of this review and therefore considers that CBL could potentially engage in excessive pricing.

URCA therefore considers the appropriateness of obligations available to address this market failure.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations applied to all operators with SMP in the provision of a retail product.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with national and international leased lines) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[44] These obligations do not include provisions that would enable URCA to address instances of excessive pricing which URCA considers to be a particular threat in relation to these products. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA may consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP product being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour.

Ordinarily, emerging competition would actually provide an SMP operator with the incentive to engage in excessive pricing and effectively foreclose the market to competition (short-term loss

[44] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

for long-term gain). However, for national and international leased lines, the prospect of emerging competition from new entrants (potentially through access to wholesale international and national leased lines as discussed in the following Section) and existing limited competition from BTC suggests that excessive pricing may not be desirable for CBL. Excessive pricing may indeed increase the likelihood of competitive market entry due to the high profit levels. URCA therefore concludes that abstaining from imposing additional obligations should be considered in more detail in relation to the threat of excessive pricing.

Given URCA's commitment to light-touch regulation, this Paper examines the 'do nothing' option in more detail below before considering the use of alternative options. This is because in situations where the 'do nothing' option meets URCA's objectives and addresses the (actual or potential) market failure, it would be disproportionate to consider imposing additional obligations.

3) Impact analysis

As noted previously, CBL could engage in excessive pricing by charging for national and international leased lines below cost in order to deter market entry. However, as discussed above, URCA considers that the 'do nothing' option could meet URCA's objectives and address this market failure. URCA therefore consider this option in more detail below.

1. 'Do Nothing'

URCA considers that the limited competition from BTC and the prospect of emerging competition from potential new market entrants may deter CBL from entering into excessive pricing of leased line products.

Under this option, URCA would still retain its ability to review this position and add specific retail price obligations for leased lines, should CBL's behaviour cause URCA to consider this necessary during the period until the full market review for this product.

URCA considers that the option of relying on the basic SMP obligations is likely to meet URCA's objectives of preventing excessive pricing (providing that it has access to the necessary market and accounting information to deal with any issues arising in this market) and thus does not discuss any specific retail pricing obligations in response to this potential market failure.

URCA does not propose to undertake impact analysis of the other options for the purpose of addressing the potential market failure of excessive pricing. This is due to URCA's commitment to apply light touch regulation wherever and whenever possible, particularly for this interim SMP review. Imposition of a retail pricing obligation would by definition be more intrusive than the imposition of no additional obligations.

4) Identify preferred solution

URCA's review of the potential market failures for national and international leased lines has resulted in the current conclusion that abstaining from additional obligations would be sufficient to remedy potential excessive pricing initiatives by CBL, depending on how the market develops.

The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA considers that where prospective emerging competition has been identified its objectives should focus on the protection of consumer interests.

URCA considers that the option of relying on the basic SMP obligations is likely to meet this objective by preventing market foreclosure and addressing the potential market failure of potentially excessive pricing. The measure is also considered proportionate and efficient in light of this being an interim SMP review.

10 CBL Wholesale national and international leased lines

Introduction

As noted in Section 3.1.5 above, despite the additional information that URCA received relating to CBL's wholesale national and international leased lines, the conclusion that the product remains in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

CBL's national and international leased lines are wholesale products that CBL could offer to third parties. URCA understands that CBL offers leased lines to some other licensees but that these are provided on standard retail terms rather than as a wholesale product. At present, CBL is effectively self-supplying this product to the retail services arm of its business. URCA has identified the following actual or potential market failure:

- Refusal to deal and/or denial of access – URCA considers that CBL would be able to engage in refusal to deal or denial of access to wholesale national and international leased lines given its ownership of one of only two networks in The Bahamas.

URCA therefore considers the appropriateness of obligations available to address these market failures.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to those which already exist (i.e. standard SMP obligations in licence conditions and proposed accounting separation requirements).

The SMP obligations that apply to an SMP operator in a wholesale market (as is the case with national and international leased lines) relate to non-discrimination only.[45] The non-discrimination obligation could enable URCA to directly address instances of refusal to deal/denial of access which URCA considers to be a particular threat in relation to national and international leased lines. This is because CBL is self-providing the wholesale leased lines to its retail business and therefore, in principle, would be under an obligation to offer that service to other operators on non-discriminatory terms compared to the terms on which it is being self-supplied.

URCA may consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP market being subject to

[45] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

ex ante regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive behaviour.

For wholesale national and international leased lines, the prospect of emerging competition from new entrants is limited and the only other operator that controls infrastructure over which to offer these services is BTC.[46] Presently, neither BTC nor CBL offers wholesale leased lines.

Given the existence of two infrastructures, there is the potential for emerging competition, although URCA does not consider that the two SMP network operators would voluntarily offer access to their networks to other operators on wholesale terms. URCA does, however, consider that the non-discrimination provision in the standard individual operating licence is likely to be sufficient for URCA to intervene, should CBL refuse the supply of wholesale national and international leased lines.

Given URCA's commitment to light-touch regulation, this Paper examines the 'do nothing' option in more detail below before considering the use of alternative options. This is because in situations where the 'do nothing' option meets URCA's objectives and addresses the (actual or potential) market failure, it would be disproportionate to consider imposing additional obligations.

3) Impact analysis

As noted previously, CBL could refuse to deal with competitors or deny access to its wholesale national and international leased lines in order to deter market entry. However, as discussed above, URCA considers that the 'do nothing' option could meet URCA's objectives and address this market failure. URCA therefore considers this option in more detail below.

1. 'Do Nothing'

URCA considers that the standard non-discrimination obligation could be sufficient for it to address the market failure of refusal to supply/denial of access should CBL not respond reasonably to a request for wholesale international and national leased lines.

Further, should URCA find the non discrimination obligation to be insufficient, then URCA would still retain its ability to review this position and add specific access obligations for leased lines should CBL's behaviour cause URCA to consider this necessary during the period until the full market review for this product.

URCA considers that the option of relying on the basic SMP obligations is likely to meet URCA's objectives of preventing market foreclosure through refusal to deal and/or denial of access (providing that it has access to the necessary market and accounting information to deal with any issues arising in this market).

[46] URCA notes that SRG has some capacity which it could in principle resell to other operators. However, URCA does not consider this as a significant source of potential market entry for wholesale national and international leased lines.

URCA does not propose to undertake impact analysis of the other options for the purpose of addressing the potential market failure identified. This is due to URCA's commitment to apply light touch regulation wherever and whenever possible, particularly for this interim SMP review. Imposition of access obligations would, by definition, be more intrusive than the imposition of no additional obligations.

4) Identify preferred solution

URCA's review of the potential market failures for national and international leased lines has resulted in the current conclusion that abstaining from additional obligations would be sufficient to remedy potential refusal to deal and/or denial of access initiatives by CBL, depending on how the market develops.

The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA's predominant objectives in the wholesale market are to prevent foreclosure of the market through "enduring bottlenecks", such as the cost of replicating an SMP operator's network, and to promote sustainable competition in the corresponding retail markets.

URCA has identified the prospective emerging competition and some limited competition from BTC. Given this market structure, URCA considers that the option of relying on the basic SMP obligations is likely to be sufficient to meet URCA's objectives of preventing market foreclosure. The measure is proportionate and efficient in light of this being an interim SMP review and when compared to the other options that could be imposed to address the market failure identified.

11 CBL Access to the broadband network and services

Introduction

As noted in Section 3.1.6 above, the new information provided, and URCA's wish to apply light touch regulation as much as possible in the interim period, has resulted in URCA broadening the specific access product from 'bitstream access for broadband distribution' to 'access to the broadband network and services'. The conclusion that access to CBL's broadband network remains in the high level SMP market and subject to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

Access to CBL's broadband network and services is a hypothetical wholesale product that CBL could offer to third parties. At present, CBL is effectively self-supplying this product to the retail services arm of its business. URCA has identified the following actual or potential market failure:

- Refusal to deal and/or denial of access – URCA considers that CBL would be able to engage in refusal to deal or denial of access to its broadband access network given its ownership of one of only two networks in The Bahamas.

URCA therefore considers the appropriateness of obligations available to address these market failures.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' or abstaining from imposing additional obligations is appropriate. In this case, abstaining involves deciding not to apply any obligations in addition to those which already exist (i.e. standard SMP obligations in the licence conditions and proposed accounting separation requirements).

The SMP obligations that apply to an SMP operator in a wholesale market (as is the case with access to the broadband network and services) relate to non-discrimination only.[47] These obligations are very similar to those of an obligation to negotiate commercially for the supply of the wholesale service, although a commercial offering may include more structure around, for example, timeframes and dispute resolution processes.

As a result, URCA concludes that abstaining from imposing additional obligations will be considered as an appropriate option in the context of a commercial offering.

For refusal to deal/denial of access, URCA considers the appropriateness of access obligations. As discussed in Section 5 above, there are various forms of access obligation that could be applied. URCA therefore considers:

[47] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

- Commercial offering
- Resale obligation
    - Cost orientation
    - Retail minus pricing
    - Benchmarking
- RAIO[48]
    - Cost orientation
    - Benchmarking

3) Impact analysis

Having identified the possible obligations for addressing the (actual or potential) market failures of refusal to deal/denial of access, URCA now considers the likely impact of these obligations.

As noted previously, CBL could refuse to deal with third parties or deny access to its broadband network in order to deter market entry and to strengthen its position of SMP in the retail market.

1. Obligation to negotiate commercially

This option would mandate that CBL negotiate with any parties seeking access to its broadband network and services, but such negotiations could take a considerable time and the resulting technical specifications of the offering, the access price and terms and conditions may not maximise consumer welfare. In many cases, URCA would be required to intervene in the process if an agreement satisfactory to all parties could not be concluded.

The general costs and benefits associated with commercial negotiation obligation are given in Table 6 in Appendix 2. Here, URCA considers only those costs and benefits that are specific to a commercial offering for access to the broadband network and services and refusal to deal/denial of access.

If new entrants were unable to negotiate access to CBL's network, they would be required to build their own infrastructure to support the supply of services. Whilst URCA wishes to encourage investment and development of sustainable competition, the need to build an access infrastructure (whether wire-line or wireless) in advance of being able to launch services would constitute a substantial barrier to market entry, particularly given the size and topology of the market in The Bahamas.

The impact on consumers of access to CBL's broadband network and services is dependent on CBL's willingness to negotiate access in good faith. If agreements are arrived at successfully and in a timely manner then consumers could benefit from increased competition. Dependent on the access products made available through commercial offerings, there may be limited scope for other licensed operators to compete with CBL in terms of offering a differentiated service. Consumers may not benefit from a choice of products in the long-run and consumer welfare may not be maximised.

[48] Note that 'retail minus' is not considered with reference to a RAIO as a RAIO pertains primarily to wholesale products.

2. Resale obligation

This option would involve the imposition of an obligation on CBL to make its broadband retail services available for resale by any competitor. It would allow competitors to gain access to the retail service on wholesale terms – effectively allowing the other operator to either resell CBL's service or to bundle CBL's service with the operator's own products to create new and differentiated products. The terms and conditions and the access price for the obligation would be specified in a contract, ensuring that services are provided on a transparent and non-discriminatory basis.

The general costs and benefits associated with a resale obligation and specified wholesale access prices are given in Tables 5 and 7 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to a resale obligation for access to the broadband network and services and refusal to deal/denial of access.

A resale obligation is likely to require less technical development and specification of interfaces than the development of a RAIO product. Resale effectively enables service competition but, if combined with other services, could also form part of an infrastructure-based competition policy. As a resale obligation would entail no requirement to provide access to specific wholesale components of the broadband network, a resale obligation is likely to be less costly to implement to both URCA and CBL.

Other licensed operators would be able to compete with CBL, but there would be limited scope to compete in terms of a differentiated service offering. Consumers would benefit from short-term competition but may not benefit from a choice of products in the long-run. Consumer welfare may not be maximised unless competitors either gain RAIO-based access or develop their own broadband access networks.

3. RAIO

The need to develop a RAIO for this service would create maximum transparency, reduce the time required to establish individual agreements, and reduce uncertainty for new operators and risks for new investors. A RAIO would provide URCA with the ability to mandate that other licensed operators have access to CBL's network on acceptable and transparent terms.

The general costs and benefits associated with a RAIO and specified wholesale access prices are given in Tables 4 and 7 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to a RAIO for access to the broadband network and services and refusal to deal/denial of access.

URCA is not aware of any examples internationally for URCA to understand what the technical specifications of the RAIO for access to the broadband network and services of a cable TV network operator might be, how this could be implemented practically and what the relevant terms of provision should be. Mandating CBL to provide a RAIO with pre-specified access products could cause CBL to incur substantial costs. Further, if the development of a RAIO by

CBL were to take a considerable time then this could delay competitive market entry and not be in the interests of consumers overall.

4) Identify preferred solution

In this Section, URCA assesses the costs and benefits of the options identified in the previous Section in order to identify the obligation which:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA's predominant objectives in the wholesale market are to prevent foreclosure of the market through "enduring bottlenecks", such as the cost of replicating an SMP operator's network, and to promote sustainable competition in the corresponding retail markets.

URCA considers that although its objectives may be best met through the development and implementation of a RAIO, the lack of international experience in RAIO products in this area, and the likely time and costs involved in developing and implementing a RAIO, may make this option disproportionate in the context of this interim SMP review.

URCA has requested that CBL proposes an obligation that CBL considers would satisfy URCA's objective of providing as much transparency and predictability for potential competitors to CBL, balanced with the desire to ensure that the solution can be implemented in a timely and cost-effective manner. URCA considers that CBL's proposed obligation should not include an obligation to negotiate commercially, for the reasons previously explained in this Section.

12 CBL Access to the transmission network

Introduction

As noted in Section 3.1.8 above, the new information provided, and URCA's wish to apply light touch regulation as much as possible in the interim period, has resulted in URCA broadening the specific access product from 'national and international backhaul' to 'access to the transmission network'. This product supports the access to the broadband network and services product as explained in Section 3.1.8 above. The conclusion that access to CBL's transmission network remains in the high level SMP market and subject to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

Access to CBL's transmission network is a hypothetical wholesale product that CBL could offer to third parties. At present, CBL is effectively self-supplying this product to the retail services arm of its business. URCA has identified the following actual or potential market failure:

- Refusal to deal and/or denial of access – URCA considers that CBL would be able to engage in refusal to deal or denial of access to its transmission network given its ownership of one of only two networks in The Bahamas.

URCA therefore considers the appropriateness of obligations available to address these market failures.

As noted, this product supports the access to the broadband network and services product. URCA has requested that CBL proposes the specifications of this access product and, dependent on what this product includes, access to the transmission network may not be required as separate product. For the purposes of this Paper, URCA will assume that access to CBL's transmission network service would be provided under the same principle as that applied to access to the broadband network and services. URCA therefore does not consider it productive to enter into a speculative discussion of the options for this product at this time.

13 BTC fixed telephony access and local calling

Introduction

As noted in Section 3.2.1 above, despite the additional information that URCA received relating to BTC's fixed telephony access and local calling, the conclusion that the product remains in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

Fixed access and local calling are retail products offered by BTC for which URCA has the following concerns: potential market foreclosure and protection of consumer interests. URCA has identified the following potential market failures:

- Predatory pricing – URCA considers that, faced with the threat of competition, BTC may be able to engage in predatory pricing given its position of SMP in the provision of fixed access and local calling, and potential for cross-subsidisation from other voice services.
- Excessive pricing – URCA, however, considers it uncertain whether there will be effective competition in the provision of fixed access and local calling during the period of this review. In that case, BTC could potentially engage in, or have the incentive to engage in, excessive pricing.

URCA therefore considers the appropriateness of obligations available to address these market failures.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations applied to all operators with SMP in the provision of a retail product.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with fixed access and local calling) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[49] These obligations do not include provisions that would enable URCA to address instances of predatory or excessive pricing both of which URCA considers as particular threats in relation to this product. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA could consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP market being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator

[49] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

not to engage in anti-competitive pricing behaviour. However, there is no evidence that this is likely to be the case for fixed access and local calling during the period to which the interim SMP process applies.

While consumers may benefit in the short-term from predatory pricing due to lower prices, they would suffer in the long-run due to the absence of sustainable competition. In the case of excessive pricing, consumers would suffer in both the short-term and long-run as they would continue to pay prices above that which would apply in a competitive market. As a result, URCA concludes that abstaining from imposing additional obligations would not address either of the market failures identified and is therefore not considered further as an appropriate option.

For both predatory pricing and excessive pricing, URCA considers that both retail price regulation and accounting separation may be appropriate obligations. As discussed in Section 5 above, these obligations involve varying levels and degrees of flexibility in how they may be applied. URCA therefore considers:

- Retail price regulation – rules-based
- Retail price regulation – price cap (incentive-based)

3) Impact analysis

Having identified the possible options for addressing the (actual or potential) market failures of predatory and excessive pricing, URCA now consider the likely impact of these options.

Predatory pricing

As noted previously, URCA considers that BTC could engage in predatory pricing by pricing fixed access and local calling below cost in order to deter market entry.

1. Retail price regulation – rules-based

This would involve the imposition of a retail price regulation obligation that requires BTC to submit justification for any price changes it plans to make as well as allowing URCA to initiate investigations into current pricing levels and practices. This would provide URCA with information necessary to monitor BTC's pricing practices and assess whether it was engaging in predatory pricing. This obligation would assist URCA in preventing predatory pricing and, in conjunction with *ex post* competition law, addressing any instances of predatory pricing behaviour.

The general costs and benefits associated with rules-based retail price regulation are given in Table 1 (Appendix 2). Here URCA considers only those that are specific to fixed access and local calling and predatory pricing.

Rules-based retail price regulation would require BTC to submit information to enable URCA to monitor BTC's pricing practices and ensure that BTC is not engaging in predatory pricing. This would place a cost of implementation on BTC by requiring it to establish a data collection framework (based on URCA specifications). Based on URCA's understanding of BTC's existing data collection systems, URCA considers that this may be a substantial cost to BTC.

2. Retail price regulation – price cap (incentive-based)

This would involve the imposition of a price cap, whereby BTC would be able to set its prices freely providing that it complied with the overall cap. Efficiency improvements would be reflected in the “x” value within the price cap.

The general costs and benefits associated with a retail price cap obligation are given in Table 2 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to fixed access and local calling and predatory pricing.

Developing a price cap would require BTC to produce a business plan for the price cap period, forecasting costs, revenues and customer numbers for the period. A price cap obligation would also impose costs on URCA in establishing the price cap process, as well as undertaking regular reviews and ensuring that the price charged by BTC was compliant with the price cap. URCA considers that the costs associated with a price cap approach would exceed that of a rules-based retail price obligation.

Excessive pricing

As noted previously, BTC could engage in excessive pricing for fixed access and local calling in the absence of present or emerging competition.

1. Retail price regulation – rules-based

As with predatory pricing, this would involve the imposition of a retail price regulation obligation that requires BTC to submit justification for any price changes it plans to make as well as allowing URCA to initiate investigations into current pricing levels and practices. This would provide URCA with information necessary to monitor BTC’s pricing practices and assess whether BTC was engaging in excessive pricing.

The general costs and benefits associated with rules-based retail price regulation are as detailed in Table 1 (Appendix 2) and as for predatory pricing, and are not repeated here.

2. Retail price regulation – price cap (incentive-based)

As with predatory pricing, this would involve the imposition of a price cap whereby BTC would be able to set its prices freely providing that it complied with the overall cap. Efficiency improvements would be reflected in the “x” value within the price cap.

The general costs and benefits associated with retail price cap regulation are as detailed in Table 2 (Appendix 2) and as for predatory pricing, and are not repeated here.

4) Identify preferred solution

URCA's review of the potential market failures for fixed access and local calling has resulted in the current conclusion that a form of retail price regulation is required to remedy both potential predatory or excessive pricing initiatives by BTC, depending on how the market develops.

Based on the relative costs and benefits of the two retail price regulation options discussed above (rules based and price-cap regulation), URCA concludes that rules-based retail price regulation is the most appropriate obligation for the interim SMP review. The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA's objectives with regards to fixed access and local calling are the prevention of anti-competitive pricing either in the form of predatory pricing or excessive pricing, with the intention of protecting consumer interests and preventing market foreclosure.

As the time and up-front costs associated with development and implementation of price caps would be considerable, URCA does not consider this type of price regulation appropriate for the interim SMP obligations.

Rules-based price regulation, on the other hand, can be focused on reviewing prices changes and involve no substantial set-up costs or resources. It would act to protect consumers and potential competitors from anti-competitive pricing strategies and thus meet URCA's objectives. URCA has therefore concluded that rules-based price regulation is the most appropriate retail price regulation obligation for fixed access and local calling.

14 BTC Domestic long distance fixed calling (DLD), domestic fixed calls to rated numbers and international long distance fixed calling (ILD)

Introduction

As noted in Section 3.2.2 above, despite the additional information that URCA received relating to BTC's DLD and ILD call products, the conclusion that the products remain in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

DLD and ILD calling are retail products offered by BTC for which URCA has the following concerns: potential market foreclosure and protection of consumer interests. URCA has identified the following actual or potential market failures:

- Predatory pricing – URCA considers that BTC may be able to engage in predatory pricing given its position of SMP in the provision of DLD and ILD calling, and potential for cross-subsidisation from other voice services.

URCA therefore considers the appropriateness of obligations available to address this market failure.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations applied to all operators with SMP in the provision of a retail product.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with DLD and ILD calling) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[50] These obligations do not include provisions that would enable URCA to address instances of predatory pricing which URCA considers to be a particular threat in relation to the products. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA could consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP market being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour. However, there is no evidence that this is the case with DLD and ILD calling during the period to which the interim SMP process applies.

[50] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

Indeed, if BTC anticipated competitive market entry it would have increased incentives to practice predatory pricing such that new competitors could not profitably enter the market.

While consumers may benefit in the short-term from predatory pricing due to lower prices, they would suffer in the long-run due to the absence of sustainable competition. As a result, URCA concludes that abstaining from imposing additional obligations would not address the market failure identified and is therefore not considered further as an appropriate option.

For predatory pricing, URCA considers that both retail price regulation and accounting separation may be appropriate obligations. As discussed in Section 5 above, these obligations involve varying levels and degrees of flexibility in how they may be applied. URCA therefore considers:

- Retail price regulation – rules-based
- Retail price regulation – price cap (incentive-based)

3) Impact analysis

As noted previously, URCA considers that BTC could engage in predatory pricing by pricing DLD and ILD calling below cost in order to deter market entry.

1. Retail price regulation – rules-based

This would involve the imposition of a retail price regulation obligation that requires BTC to submit justification for any price changes it plans to make as well as allowing URCA to initiate investigations into current pricing levels and practices. URCA considers that the impact of this obligation on DLD and ILD calling would be similar to the impact on fixed access and local calling for predatory pricing.

The general costs and benefits associated with rules-based retail price regulation are given in Table 1 (Appendix 2). The Section above on fixed access and local calling should be referenced for the specific costs and benefits that URCA considers to relate to DLD and ILD calling and predatory pricing.

2. Retail price regulation – price cap (incentive-based)

This would involve the imposition of a price cap whereby BTC would be able to set its prices freely providing that it complied with the overall cap. Efficiency improvements would be reflected in the "x" value within the price cap. URCA considers that the impact of this obligation on DLD and ILD calling would be similar to the impact on fixed access and local calling for predatory pricing.

The general costs and benefits associated with a retail price cap obligation are given in Table 2 (Appendix 2). The Section above on fixed access and local calling should be referenced for the specific costs and benefits that URCA considers relate to DLD and ILD calling and predatory pricing.

4) Identify preferred solution

URCA's review of the potential market failure for DLD and ILD calling has resulted in the current conclusion that a form of retail price regulation is required to remedy potential predatory pricing initiatives by BTC.

Based on the relative costs and benefits of the two retail price regulation options discussed above (rules based and price-cap regulation), URCA concludes that rules-based retail price regulation is the most appropriate obligation for the interim SMP review. The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA's objectives with regards to DLD and ILD calling are the prevention of anti-competitive pricing in the form of predatory pricing, with the intention of protecting consumer interests and preventing market foreclosure.

As the time and up-front costs associated with development and implementation of price caps would be considerable, URCA does not consider this type of price regulation appropriate for the interim SMP obligations.

Rules-based price regulation, on the other hand, can be focused on reviewing prices changes and involve no substantial set-up costs or resources. It would act to protect both consumers and potential competitors from anti-competitive pricing strategies and thus meet URCA's objectives. URCA has therefore concluded that rules-based price regulation is the most appropriate retail price regulation obligation for DLD and ILD calling.

15 BTC broadband internet access in specified areas

Introduction

As noted in Section 3.2.3 above, despite the additional information that URCA received relating to BTC's broadband internet access in specified areas, the conclusion that the product remains in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

Broadband internet is a retail product offered by BTC for which URCA is concerned about the threat of market foreclosure. URCA has identified the following actual or potential market failure:

- Excessive pricing – URCA considers that there is unlikely to be effective competition in the provision of broadband internet access during the period of this review and therefore considers that BTC could potentially engage in excessive pricing.

URCA therefore considers the appropriateness of obligations available to address this market failure.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations applied to all operators with SMP in the provision of a retail product.

The SMP obligations that apply to an SMP operator in a retail market relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[51] These obligations do not include provisions that would enable URCA to address instances of excessive pricing which URCA considers to be a particular threat in relation to broadband access in specified areas. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA may consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP market being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour.

However, there is no evidence that this is the case with broadband internet access in specified areas during the period to which the interim SMP process applies. There is no prospect of emerging competition known to URCA for those areas in which BTC alone operates.

[51] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

URCA's concern for BTC's broadband internet access in specified areas is that BTC will employ excessive pricing in these areas only, while acting more competitively in the remaining areas where there is emerging competition. Whilst URCA does not consider that the option to 'do nothing' would be sufficient to prevent BTC from engaging in anti-competitive behaviour, in the interests of light touch regulation URCA will also consider a commitment to national geographic averaging of broadband prices.

In addition to national geographic averaging of prices, URCA also considers the appropriateness of retail price regulation and accounting separation. As discussed in Section 5 above, these obligations involve varying levels and degrees of flexibility in how they may be applied. URCA therefore considers national geographic averaging of prices.

URCA considers that the option of national geographic averaging is likely to meet URCA's objectives of preventing abuse of SMP through excessive pricing (providing that it has access to the necessary market and accounting information to deal with any issues arising in this market). URCA does therefore not discuss any specific retail pricing obligations in response to this potential market failure.

3) Impact analysis

URCA now considers the likely impact of an obligation for national geographic averaging of prices.

As noted previously, BTC could engage in excessive pricing for the broadband internet access in specified areas product in the absence of present or emerging competition.

1. National geographic averaging of prices

This option would mandate that BTC charge the same prices for broadband internet access in all areas of The Bahamas. Any price changes would have to be reflected across its geographic coverage. BTC faces prospective emerging competition for broadband internet access in those islands where CBL is present. URCA considers that this is likely to be sufficient to constrain BTC's ability to adopt an excessive pricing strategy in those areas. An obligation to have national geographic averaging of prices would ensure BTC charged the same prices in all areas of The Bahamas. As a result the constraint imposed by CBL in some areas would effectively be extended to include all areas of The Bahamas. URCA considers that this option would be sufficient to prevent excessive pricing of broadband packages by BTC.

Under this option, URCA would still retain its ability to review this position and add specific retail price regulation obligations for the broadband internet packages should BTC's behaviour cause URCA to consider this necessary during the period until the full market review for this product.

4) Identify preferred solution

URCA's review of the potential market failures for broadband internet access in specified areas has resulted in the current conclusion that an obligation for national geographic averaging of prices would be sufficient to remedy potentially excessive pricing initiatives by BTC, depending on how the market develops.

The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA considers that where prospective emerging competition has been identified its objectives should focus on the protection of consumer interests.

URCA considers that the option of national geographic averaging of prices is likely to meet URCA's objectives by preventing market foreclosure in the specified areas and it addresses the market failure of potentially excessive pricing. The measure is proportionate and efficient in light of this being an interim SMP review and when compared to the other options of more onerous forms of retail price regulation.

16 BTC national and international leased lines

Introduction

As noted in Section 3.1.4 above, despite the additional information that URCA received relating to BTC's national and international leased lines, the conclusion that the products remain in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

National and international leased lines are retail products offered by BTC for which URCA is concerned about the threat of profit maximising. URCA has identified the following actual or potential market failure:

- Excessive pricing – URCA considers that there is unlikely to be effective competition in the provision of national and international leased lines during the period of this review and therefore considers that BTC could potentially engage in excessive pricing.

URCA therefore considers the appropriateness of obligations available to address this market failure.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to those which already exist (i.e. standard SMP obligations in licence conditions and proposed accounting separation requirements).

The SMP obligations that apply to an SMP operator in a retail market (as is the case with national and international leased lines) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[52] These obligations do not include provisions that would enable URCA to address instances of excessive pricing which URCA considers to be a particular threat in relation to these products. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA may consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP product being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour.

Ordinarily, emerging competition would actually provide an SMP operator with the incentive to engage in excessive pricing and effectively foreclose the market to competition (short-term loss

[52] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

for long-term gain). However, for national and international leased lines, the prospect of emerging competition from new entrants (potentially through access to wholesale international and national leased lines as discussed in the following Section) and existing limited competition from CBL suggests that excessive pricing may not be desirable for BTC. Excessive pricing may indeed increase the likelihood of competitive market entry due to the high profit levels.

URCA therefore concludes that abstaining from imposing additional obligations should be considered in more detail in relation to the threat of excessive pricing.

Given URCA's commitment to light-touch regulation, this Paper examines the 'do nothing' option in more detail below before considering the use of alternative options. This is because in situations where the 'do nothing' option meets URCA's objectives and addresses the (actual or potential) market failure, it would be disproportionate to consider imposing additional obligations.

3) Impact analysis

As noted previously, BTC could engage in excessive pricing by charging for national and international leased lines below cost in order to deter market entry. However, as discussed above, URCA considers that the 'do nothing' option could meet URCA's objectives and address this market failure. URCA, therefore, considers this option in more detail below.

1. 'Do Nothing'

URCA considers that the limited competition from CBL and the prospect of emerging competition from potential new market entrants may deter BTC from entering into excessive pricing of leased line products.

Under this option, URCA would still retain its ability to review this position and add specific retail price obligations for leased lines should BTC's behaviour cause URCA to consider this necessary during the period until the full market review for this product.

URCA considers that the option of relying on the basic SMP obligations is likely to meet URCA's objectives of preventing excessive pricing (providing that it has access to the necessary market and accounting information to deal with any issues arising in this market) and thus does not discuss any specific retail pricing obligations in response to this potential market failure.

URCA does not propose to undertake impact analysis of the other options for the purpose of addressing the potential market failure of excessive pricing. This is due to URCA's commitment to apply light touch regulation wherever and whenever possible, particularly for this interim SMP review. Imposition of a retail pricing obligation would, by definition, be more intrusive than the imposition of no additional obligations.

4) Identify preferred solution

URCA's review of the potential market failures for national and international leased lines has resulted in the current conclusion that abstaining from additional obligations would be sufficient to remedy potential excessive pricing initiatives by BTC, depending on how the market develops.

The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA considers that where prospective emerging competition has been identified its objectives should focus on the protection of consumer interests.

URCA considers that the option of relying on the basic SMP obligations is likely to meet this objective by preventing market foreclosure and addressing the potential market failure of potentially excessive pricing. The measure is also considered proportionate and efficient in light of this being an interim SMP review.

17 BTC Wholesale national and international leased lines

Introduction

As noted in Section 3.1.5 above, despite the additional information that URCA received relating to BTC's wholesale national and international leased lines, the conclusion that the product remains in the high level SMP market and susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

BTC's national and international leased lines are wholesale products that BTC could offer to third parties. URCA understands that BTC offers leased lines to some other licensees but that these are provided on standard retail terms rather than as a wholesale product. At present, BTC is effectively self-supplying this product to the retail services arm of its business. URCA has identified the following actual or potential market failure:

- Refusal to deal and/or denial of access – URCA considers that BTC would be able to engage in refusal to deal or denial of access to wholesale national and international leased lines given its ownership of one of only two networks in The Bahamas.

URCA therefore considers the appropriateness of obligations available to address these market failures.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to those which already exist (i.e. standard SMP obligations in licence conditions and proposed accounting separation requirements).

The SMP obligations that apply to an SMP operator in a wholesale market (as is the case with national and international leased lines) relate to non-discrimination only.[53] The non-discrimination obligation could enable URCA to directly address instances of refusal to deal/denial of access which URCA considers to be a particular threat in relation to national and international leased lines. This is because BTC is self-providing the wholesale leased lines to its retail business and therefore, in principle, would be under an obligation to offer that service to other operators on non-discriminatory terms compared to the terms on which it is being self-supplied.

URCA may consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP market being subject to

[53] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

ex ante regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive behaviour.

For wholesale national and international leased lines, the prospect of emerging competition from new entrants is limited and the only other operator that controls infrastructure over which to offer these services is CBL.[54] Presently, neither BTC nor CBL offers wholesale leased lines.

Given the existence of two infrastructures, there is a potential for emerging competition, although URCA does not consider that the two SMP network operators would voluntarily offer access to their networks to other operators on wholesale terms. URCA does, however, consider that the non-discrimination provision in the standard individual operating licence is likely to be sufficient for URCA to intervene should BTC refuse the supply of wholesale national and international leased lines.

Given URCA's commitment to light-touch regulation, this Paper examines the 'do nothing' option in more detail below before considering the use of alternative options. This is because in situations where the 'do nothing' option meets URCA's objectives and addresses the (actual or potential) market failure, it would be disproportionate to consider imposing additional obligations.

3) Impact analysis

As noted previously, BTC could refuse to deal with its competitors or deny access to its wholesale national and international leased lines below cost in order to deter market entry. However, as discussed above, URCA considers that the 'do nothing' option could meet URCA's objectives and address this market failure. URCA, therefore, considers this option in more detail below.

1. 'Do Nothing'

URCA considers that the standard non-discrimination obligation could be sufficient for it to address the market failure of refusal to supply/denial of access should BTC not respond reasonably to a request for wholesale international and national leased lines.

Further, should URCA find the non-discrimination obligation to be insufficient then URCA would still retain its ability to review this position and add specific access obligations for leased lines should BTC's behaviour cause URCA to consider this necessary during the period until the full market review for this product.

URCA considers that the option of relying on the basic SMP obligations is likely to meet URCA's objectives of preventing market foreclosure through refusal to deal and/or denial of access (providing that it has access to the necessary market and accounting information to deal with any issues arising in this market).

[54] URCA notes that SRG has some capacity which it could, in principle, resell to other operators. However URCA does not consider this as a significant source of potential market entry for wholesale national and international leased lines.

URCA does not propose to undertake impact analysis of the other options for the purpose of addressing the potential market failure identified. This is due to URCA's commitment to apply light touch regulation wherever and whenever possible, particularly for this interim SMP review. Imposition of access obligations would, by definition, be more intrusive than the imposition of no additional obligations.

4) Identify preferred solution

URCA's review of the potential market failures for national and international leased lines has resulted in the current conclusion that abstaining from additional obligations would be sufficient to remedy any potential refusal to deal and/or denial of access initiatives by BTC.

The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA's predominant objectives in the wholesale market are to prevent foreclosure of the market through "enduring bottlenecks" such as the cost of replicating an SMP operator's network, and to promote sustainable competition in the corresponding retail markets.

URCA has identified the prospect of emerging competition and some limited competition from CBL. Given this market structure, URCA considers that the option of relying on the basic SMP obligations is likely to be sufficient to meet URCA's objectives of preventing market foreclosure. The measure is proportionate and efficient in light of this being an interim SMP review and when compared to the other options that could be imposed to address the market failure identified.

18 BTC mobile voice and data services

Introduction

As noted in Sections 3.2.5 and 3.2.6 above, no new substantive arguments or new information has been presented to URCA in relation to the mobile voice and data services offered by BTC. The conclusion that mobile voice and data services remain in the high level SMP market and susceptible to *ex ante* regulation has therefore been maintained.[55]

1) Define the objective – market failure identification

Mobile voice and data services are retail products offered by BTC for which URCA is concerned about profit maximization and consumer interest. URCA has identified the following actual or potential market failure:

- Excessive pricing – URCA considers that there is unlikely to be effective competition in the provision of mobile voice and data services during the period of this review, given the exclusivity BTC has in the mobile market, and therefore considers that BTC could potentially engage in excessive pricing.

URCA therefore considers the appropriateness of obligations available to address this market failure.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations which apply to all products for which an operator has SMP.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with mobile voice and data services) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[56] These obligations do not include provisions that would enable URCA to address instances of excessive pricing which URCA considers to be a particular threat in relation to the mobile voice and data services. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA could consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP

[55] The impact on mobile voice and data services of proposed obligations is believed to be similar; hence URCA's considerations have been consolidated into one Section for ease of reference. Mobile voice and data services include mobile access, local mobile calling, domestic long distance mobile calling, international long distance mobile calling and mobile data services.

[56] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

market being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour. However, there is no evidence that there will be any emerging competition in the mobile market due to BTC's exclusivity period of two years as stated in the Government's Sector Policy.

As a result, URCA concludes that abstaining from imposing additional obligations would not address the market failure identified and is therefore not considered further as an appropriate option.

For excessive pricing, URCA considers that both retail price regulation and accounting separation may be appropriate obligations. As discussed in Section 5 above, these obligations involve varying levels and degrees of flexibility in how they may be applied. URCA therefore considers:

- Retail price regulation – rules-based
- Retail price regulation – price cap (incentive-based)

3) Impact analysis

Having identified the possible options for addressing the (actual or potential) market failure of excessive pricing, URCA now consider the likely impact of these options.

As noted previously, BTC could engage in excessive pricing for mobile voice and data services in the absence of present or emerging competition.

1. Retail price regulation – rules-based

This would involve the imposition of a retail price regulation obligation that requires BTC to submit justification for any price changes it plans to make as well as allowing URCA to initiate investigations into current pricing levels and practices. This would provide URCA with information necessary to monitor BTC's pricing practices and assess whether it was engaging in excessive pricing. This obligation would assist URCA in preventing excessive pricing and, in conjunction with *ex post* competition law, to addressing any instances of excessive pricing behaviour.

The general costs and benefits associated with rules-based retail price regulation are given in Table 1 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to mobile voice and data services and excessive pricing.

Rules-based retail price regulation would require BTC to submit information to enable URCA to monitor BTC's pricing practices and ensure that BTC is not engaging in excessive pricing. This would place a cost of implementation on BTC by requiring it to establish a data collection framework (based on URCA specifications). Based on URCA's understanding of BTC's existing data collection systems, URCA considers that this may be a substantial cost to BTC.

Requirements to give URCA prior notice to make price changes could place some restrictions on BTC's ability to make price adjustments at short notice. However, given that BTC will not be subject to competitive challenges in the mobile market for the duration of its two year exclusivity period, URCA does not consider that this is a significant additional cost to be borne by

BTC. Price regulation on mobile voice and data services would also further the interests of consumers by protecting them from unexpected price changes.

2. Retail price regulation – price cap (incentive-based)

This would involve the imposition of a price cap, whereby BTC would be able to set its prices freely providing that it complied with the overall cap. Efficiency improvements would be reflected in the 'x' value within the price cap.

The general costs and benefits associated with a retail price cap obligation are given in Table 2 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to mobile voice and data services and excessive pricing.

Developing a price cap would require BTC to produce a business plan for the price cap period, forecasting costs, revenues and customer numbers for the period. A price cap obligation would also impose costs on URCA in establishing the price cap process, as well as undertaking regular reviews and ensuring that the price charged by BTC was compliant with the price cap. URCA considers that the costs associated with a price cap approach would exceed that of a rules-based retail price obligation.

4) Identify preferred solution

URCA's review of the potential market failure for mobile voice and data services has resulted in the current conclusion that a form of retail price regulation is required to remedy potential excessive pricing initiatives by BTC, depending on how the market develops.

Based on the relative costs and benefits of the two retail price regulation options discussed above (rules based and price-cap regulation), URCA concludes that rules-based retail price regulation is the most appropriate obligation for the interim SMP review. The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA's objectives with regards to mobile voice and data services are the prevention of anti-competitive pricing in the form of excessive pricing, with the intention of protecting consumer interests.

As the time and up-front costs associated with development and implementation of price caps would be considerable, URCA does not consider this type of price regulation appropriate for the interim SMP obligations.

Rules-based price regulation, on the other hand, can be focused on reviewing prices changes and involve no substantial set-up costs or resources. It would act to protect consumers from anti-competitive pricing strategies and thus meet URCA's objectives. URCA has, therefore, concluded that rules-based price regulation is the most appropriate retail price regulation obligation for mobile voice and data services.

19 BTC call transit (domestic, international and mobile), call termination services[57] and wholesale directory enquiry and ancillary services (call termination and service provision)

Introduction

As noted in Section 3.2.7 above, despite the additional information that URCA received relating to BTC's wholesale calls services and directory enquiry services, the conclusion that these products remain in the high level SMP market and are susceptible to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

Access to BTC's switched network for interconnection of calls, transiting of calls to other networks (including BTC's mobile network, international networks and the networks of other operators in The Bahamas) and the termination of calls to BTC's directly connected customers are wholesale products, several of which are currently provided by BTC. The services are described in URCA's draft Access and Interconnection Guidelines and that document should be referenced for detailed descriptions of the products. URCA has identified the following actual or potential market failure:

- Refusal to deal and/or denial of access – URCA considers that BTC would be able to engage in refusal to deal or denial of access to call transit, call termination and wholesale directory enquiry and ancillary services. This is based on the fact that BTC controls the only pan-Bahamas switched network, controls access to its directly connected customers and also controls the country's only directory enquiry database and service provision.

URCA therefore considers the appropriateness of obligations available to address this market failure.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to those which already exist (i.e. standard SMP obligations in licence conditions and proposed accounting separation requirements).

[57] Includes call termination (domestic, international and mobile), termination of emergency calls to the police, termination of automated ancillary services, termination of calls to freephone/toll-free numbers, termination of calls to operator assistance facilities and termination of calls to directory enquiries.

The SMP obligations that apply to an SMP operator in a wholesale product (as is the case with wholesale calls services and directory enquiry services) relate to non-discrimination only.[58] These obligations do not include provisions that would enable URCA to directly address instances of refusal to deal/denial of access which URCA considers to be a particular threat in relation to the wholesale calls services and the directory enquiry services discussed in this Section.

URCA does not consider the non-discrimination provision to be sufficient in relation to the services described here, as interconnection of basic voice services is critical to the development of any competition in the provision of voice services at all. Further, BTC is under historic obligations to provide a standard contract for many of the services covered here.

In addition to abstaining from the imposition of additional obligations, URCA also considers the appropriateness of access obligations and accounting separation. As discussed in Section 5 above, these obligations involve varying levels and degrees of flexibility in how they may be applied. URCA therefore considers:

- Commercial offering
- Resale obligation
    - Cost orientation
    - Retail minus pricing
    - Benchmarking
- RAIO
    - Cost orientation
    - Benchmarking

3) Impact analysis

1. Commercial offering

International experience suggests that leaving the provision of wholesale calls/interconnection services to be addressed through commercial negotiation rarely results in the timely development of suitable solutions which supports the development of sustainable competition. Where commercial negotiations have been used as the first step of the process of developing the obligations to address these products and market failures, the negotiations have almost invariably failed and the matter subsequently referred to the regulator for resolution.

The general costs and benefits associated with a commercial offering are given in Table 6 (Appendix 2).

URCA therefore considers that, given that no competition could be introduced in voice services without an interconnection agreement in place, it is unlikely that commercial negotiations would meet URCA's objectives or would effectively address the market failure identified.

2. Resale obligation

[58] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

Resale obligations are particularly suitable when the product for which a market failure has been identified is a retail product. This is because a resale obligation effectively sets the terms for the provision of specified retail service(s) on wholesale terms. The wholesale terms may include specific service level agreements as well as different pricing structures that apply to the retail product.

The general costs and benefits associated with a resale obligation and specified wholesale access prices are given in Tables 5 and 7 (Appendix 2).

The products specified in this Section are not retail services; they are specific products which are only useful for an operator that controls a switched electronic communications network over which voice services are (or are planned to be) offered to retail customers. URCA, therefore, does not consider the resale obligation as a suitable obligation to meet URCA's objectives and URCA considers it unlikely that a resale obligation would effectively address the market failures identified.

3. RAIO

A RAIO is a specific regulatory tool that has evolved over a period of time based on the experiences of introducing competition into the markets for electronic communications services and networks across the world.

RAIOs would typically cover the provision of wholesale services which are not resale versions of retail services but consist of network-to-network interfaces or the provision of access to a specific network component or a functionality/service which the non-SMP provider would need or wish to incorporate into its own network and service officering.

The general costs and benefits associated with a RAIO and specified wholesale access prices are given in Tables 4 and 7 (Appendix 2).

International experience has shown that for the provision of wholesale calls services (interconnection), the provision of services such as directory enquiry facilities and the inclusion of another operator's customer details into the directory database are best provided in the context of a RAIO.

URCA considers that the provision of the services discussed in this Section within a RAIO is likely to meet URCA's objectives and effectively address the market failures identified. Additionally, URCA considers that the development and publication of a RAIO in line with the contents set out in URCA's draft Access and Interconnection Guidelines (ECS22/2009) is a proportionate obligation to address the market failures. BTC already has an existing interconnection agreement which covers several of the services discussed in this Section, and URCA will work with BTC to develop a suitable RAIO for publication as early as possible.

Charging principles for services in the RAIO

As mentioned above and discussed in URCA's draft Access and Interconnection Guidelines, charges for RAIO services could be set in a number of different ways, falling into two categories:

- cost-based charges, and/or
- charges based on benchmarking information.

It is widely recognised across the world that cost-based charges for RAIO services are the most suitable platform. This is because cost-based charges comply with some important principles, including:

- Cost recovery – e.g. the operator providing the RAIO service can recover the costs it incurs in the provision of that service (subject to these costs being representative of an efficient operator). Costs would be full costs including a rate of return on capital employed.
- Transparency – operators seeking to purchase RAIO services would know the charging principles.
- Efficient investment incentives – if the charges for RAIO services are set at the costs incurred by an efficient operator, then the operator seeking to purchase those services can assess whether:
    - it could itself build and operate the relevant network components more efficiently (and thus not need to purchase the RAIO service), or
    - it would be more cost efficient for the operator to purchase the RAIO services. This therefore discourages inefficient network replication.

Based on the principles set out above, URCA considers that RAIO services should be cost-based. However, the development of cost-based charges may not be feasible in time for the launch of the RAIO. In that situation, URCA would look to international benchmarking information to either supplement any costing information available, or as the only source of charging information until such time that reliable costing information could be provided.

4) Identify preferred solution

In this Section, URCA assesses the costs and benefits of the options identified in the previous Section in order to identify the obligations which:

- Meet URCA's objectives;
- Effectively address the market failure identified; and
- Are considered to be the most efficient and proportionate.

URCA's predominant objectives in the wholesale market are to prevent foreclosure of the market through "enduring bottlenecks" such as the cost of replicating an SMP operator's network, and to promote sustainable competition in the corresponding retail markets.

Based on the analysis set out above, URCA considers that the most appropriate obligation for the products discussed is the development and publication of a RAIO document. URCA considers that this would address its objectives and it should effectively address the market failure identified. URCA also considers this to be a proportionate obligation given the importance of the services for the development of sustainable competition in The Bahamas, and given the fact that the other options were considered to neither meet URCA's objectives nor effectively address the market failures identified.

Further URCA, considers that the RAIO to be developed and published should include standard charges for the services included and, to the extent feasible at the time of publication, those charge should be cost-based – reflecting the costs incurred by an efficient operator.

For the avoidance of doubt, although not described and discussed in detail in this Section, the provision of the services discussed above require the provision of a series of ‘enabling’ services and interfaces. URCA considers it critical that, for the RAIO to be fit for purpose, those enabling services must also be included, described in detail and charges for those enabling services should also be cost-based where possible.

20 BTC incoming international calls to mobile customers

Introduction

As noted in Section 3.2.7 above, BTC's international incoming calls to mobile customers product remains in the high level SMP market susceptible to *ex ante* regulation.

1) Define the objective – market failure identification

Incoming calls to mobile customers in The Bahamas is effectively both a wholesale and a retail product.

- The wholesale product is provided to international operators wishing to terminate calls to mobile customers in The Bahamas. As BTC currently has a legal monopoly on the provision of mobile voice services in The Bahamas, such calls would need to be routed through the BTC network.
- The retail product is the provision of the incoming international calls to the recipient customers using mobile phones.

This review of incoming international calls to mobile customers is concerned with the activities of BTC in The Bahamas; it does not include any relationships that BTC may have with organisations outside The Bahamas or services offered to operators or customers based outside of The Bahamas. This Section, therefore, discusses any existing or potential market failures relating to the BTC provision of incoming calls to mobile customers in The Bahamas. URCA has identified the following potential and actual market failure:

- Excessive pricing – URCA considers that there is unlikely to be effective competition in the provision of mobile voice and data services during the period of this review, given the exclusivity BTC has in the mobile market, and therefore considers that BTC is engaging in excessive pricing. Further, URCA has concluded that the present practice of charging retail customers to receive calls for which BTC has already received a wholesale payment from an international operator is a current excessive pricing market failure.

URCA therefore considers the appropriateness of obligations available to address this market failure.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' is appropriate. In this case, 'do nothing' involves deciding not to apply any obligations in addition to accounting separation and those obligations applied to all operators with SMP in the provision of a retail product.

The SMP obligations that apply to an SMP operator in a retail market (as is the case with incoming calls to mobile customers) relate to non-discrimination, the requirement to publish charges and terms and conditions, and consumer protection.[59] These obligations do not include provisions that would enable URCA to address instances of excessive pricing. All SMP operators will also be subject to accounting separation requirements, which are therefore also considered as part of the 'do nothing' option.

In some circumstances, URCA could consider that the prospect of emerging competition (distinct from the presence of emerging competition, which would affect the assessment of the SMP product being subject to *ex ante* regulation) would place sufficient incentive on an SMP operator not to engage in anti-competitive pricing behaviour. However, there is no evidence that there will be any emerging competition in the mobile market due to BTC's exclusivity period of two years as stated in the Government's Sector Policy.

As a result, URCA concludes that abstaining from imposing additional obligations would not address the market failure identified and is therefore not considered further as an appropriate option.

For excessive pricing, URCA considers that both a retail price adjustment and price regulation may be appropriate obligations. As discussed in Section 5 above, these obligations involve varying levels and degrees of flexibility in how they may be applied. URCA therefore considers:

- Specific one-off retail price adjustment;
- Retail price regulation – rules-based; and
- Retail price regulation – price cap (incentive-based)

3) Impact analysis

Having identified the possible options for addressing the (actual or potential) market failure of excessive pricing, URCA now consider the likely impact of these options.

As noted previously, BTC could engage in excessive pricing for incoming calls to mobile customers in the absence of present or emerging competition.

1. Specific one-off retail price adjustment

As the market failure identified appears to be one of pricing structure rather than of pricing levels, URCA considers that a remedy of requiring that BTC removes the retail charge for its mobile customers to receive incoming international calls would address the market failure of excessive pricing.

URCA considers that this one-off adjustment would meet URCA's objectives as well as effectively address the market failure. The adjustment could be implemented by either not including incoming international calls on customers' bills, or (if that were not possible in the immediate term) simply by setting the charge level for those calls at zero.

2. Retail price regulation – rules-based

[59] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

This would involve the imposition of a retail price regulation obligation that requires BTC to submit justification for any price changes it plans to make as well as allowing URCA to initiate investigations into current pricing levels and practices. This would provide URCA with information necessary to monitor BTC's pricing practices and assess whether BTC was engaging in excessive pricing. This obligation would give URCA the ability both to prevent excessive price levels, but may not enable URCA to require that the specific charge for incoming international calls is removed.

The general costs and benefits associated with rules-based retail price obligation are given in Table 1 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to incoming international mobile calls and the dual charging by BTC for this service (wholesale and retail).

As rules-based price regulation is designed to address pricing levels rather than pricing structures, it is not considered an appropriate solution for the market failure, and therefore its specific costs and benefits are not discussed here.

3. Retail price regulation – price cap (incentive-based)

This would involve the imposition of a price cap, whereby BTC would be able to set its prices freely providing that it complied with the overall cap. Efficiency improvements would be reflected in the 'x' value within the price cap.

The general costs and benefits associated with a retail price cap obligation are given in Table 2 (Appendix 2). Here URCA considers only those costs and benefits that are specific to incoming international mobile calls and the dual charging by BTC for this service (wholesale and retail).

Price caps are designed to emulate competitive pressures and encourage efficiency improvements in SMP operators so that price levels can be reduced to the benefit of consumers where competitive pressures are unlikely to achieve this in the period considered. However, as the market failure identified is related to pricing structure rather than price levels and as it is likely that it would take some considerable time to develop a suitable price cap regime, URCA does not consider that price cap regulation would be likely to meet URCA's objectives, nor would it be likely to effectively address the market failure identified.

Retail price caps are usually designed to address pricing levels rather than pricing structures and are therefore not considered an appropriate solution for the market failure; its detailed costs and benefits are not discussed further here.

4) Identify preferred solution

URCA's review of the current market failure for international incoming mobile calls has concluded that the most appropriate obligation would be a requirement for a one-off change to BTC's pricing structure, effectively to abandon the retail charging for incoming international calls to mobiles.

The parameters used by URCA to reach this conclusion are whether the selected obligation:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate.

URCA considers that this obligation meets its objectives and that the obligation would effectively address the market failure. URCA considers it a proportionate and efficient obligation which could be implanted through a simple adjustment to BTC's billing systems.

21 BTC Access to the broadband network and services

Introduction

As noted in Section 3.1.6 above, the new information provided, and URCA's wish to apply light touch regulation as much as possible in the interim period, has resulted in URCA broadening the specific access product from 'bitstream access for broadband distribution' to 'access to the broadband network and services'. The conclusion that access to BTC's broadband network remains in the high level SMP market and subject to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

At present, BTC is effectively self-supplying access to its broadband network and services to the retail services arm of its business. URCA has identified the following actual or potential market failure:

- Refusal to deal and/or denial of access – URCA considers that BTC would be able to engage in refusal to deal or denial of access to its broadband access network given its ownership of one of only two networks in The Bahamas.

URCA therefore considers the appropriateness of obligations available to address these market failures.

2) Identify options

As noted previously, URCA has undertaken to consider whether the option of 'do nothing' or abstaining from imposing additional obligations is appropriate. In this case, abstaining involves deciding not to apply any obligations in addition to those which already exist (i.e. standard SMP obligations in the licence conditions and proposed accounting separation requirements).

The SMP obligations that apply to an SMP operator in a wholesale market (as is the case with access to the broadband network and services) relate to non-discrimination only.[60] These obligations are very similar to those of an obligation to negotiate commercially for the supply of the wholesale service.

As a result, URCA concludes that abstaining from imposing additional obligations will be considered as an appropriate option in the context of a commercial offering.
For refusal to deal/denial of access, URCA considers the appropriateness of access obligations. As discussed in Section 5 above, there are various forms of access obligation that could be applied. URCA therefore considers:

- Commercial offering
- Resale obligation

[60] For more information refer to Part G of Individual Operating Licence on the URCA website: http://www.urcabahamas.bs/download/002164400.pdf

- Cost orientation
  - Retail minus pricing
  - Benchmarking
- RAIO
  - Cost orientation
  - Benchmarking

3) Impact analysis

Having identified the possible obligations for addressing the (actual or potential) market failures of refusal to deal/denial of access to the broadband network and services, URCA now considers the likely impact of these obligations.

As noted previously, BTC could refuse to deal with third parties or deny access to its broadband network in order to deter market entry and to strengthen its position of SMP in the retail market.

1. Commercial offering

This option mandates that BTC negotiate with any parties seeking access to its broadband network and services on a commercial basis. URCA considers that such negotiations could take a considerable time and the resulting technical specifications of the offering, the access price and terms and conditions may not maximise consumer welfare. In many cases, URCA would be required to intervene in the process if an agreement satisfactory to all parties could not be concluded.

The general costs and benefits associated with a commercial offering obligation are given in Table 6 (Appendix 2). Here URCA considers only those costs and benefits that are specific to a commercial offering for access to the broadband network and services and refusal to deal/denial of access.

If new entrants were unable to negotiate access to BTC's network, they would be required to build their own infrastructure to support the supply of services. Whilst URCA wishes to encourage investment and development of sustainable competition, the need to build an access infrastructure (whether wire-line or wireless) in advance of being able to launch services would constitute a substantial barrier to market entry.

The impact on consumers is dependent on BTC's willingness to negotiate access to the broadband network and services in good faith. If agreements are arrived at successfully and in a timely manner then consumers could benefit from increased competition. Dependent on the access products made available through commercial offerings, there may be limited scope for other licensed operators to compete with BTC in terms of offering a differentiated service. Consumers may not benefit from a choice of products in the long-run and consumer welfare may not be maximised.

2. Resale obligation

This option would involve the imposition of an obligation on BTC to make its broadband retail services available for resale by any competitors and it would allow competitors to gain access to the retail service on wholesale terms. This would effectively allow the other operator to either resell BTC's service or to bundle BTC's service with the operator's own products to create new and differentiated products. The terms and conditions and the access price for the obligation would be specified in a contract, ensuring that services are provided on a transparent and non-discriminatory basis.

The general costs and benefits associated with a resale obligation and specified wholesale access prices are given in Tables 5 and 7 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to a resale obligation for access to the broadband network and services and refusal to deal/denial of access.

A resale obligation is likely to require less technical development and specification of interfaces than the development of a RAIO product. Resale effectively enables service competition but, if combined with other services, could also form part of an infrastructure-based competition policy. As a resale obligation would entail no requirement to provide access to specific wholesale components of the broadband network, a resale obligation is likely to be less costly to implement to both URCA and BTC.

Other licensed operators would be able to compete with BTC, but there would be limited scope to compete in terms of a differentiated service offering. Consumers would benefit from short-term competition but may not benefit from a choice of products in the long-run. Consumer welfare may not be maximised, unless competitors either gain RAIO-based access or develop their own broadband access networks.

3. RAIO

The need to develop a RAIO for this service would create maximum transparency, reduce the time required to establish individual agreements and reduce uncertainty for new operators and risks for new investors. A RAIO would provide URCA with the ability to mandate that other licensed operators have access to BTC's network on acceptable and transparent terms.

The general costs and benefits associated with a RAIO and specified wholesale access prices are given in Tables 4 and 7 (Appendix 2). Here, URCA considers only those costs and benefits that are specific to a RAIO for access to the broadband network and services and refusal to deal/denial of access.

Mandating BTC to provide a RAIO-style access offer with pre-specified access products could cause BTC to incur substantial costs. Further, if the development of a RAIO-style offer by BTC were to take a considerable time, then this could delay competitive market entry and not be in the interests of consumers overall.

4) Identify preferred solution

In this Section, URCA assesses the costs and benefits of the options identified in the previous Section in order to identify the obligations which:

- Meet URCA's objectives;
- Effectively address the market failure identified; and
- Are considered to be the most efficient and proportionate.

URCA's predominant objectives in the wholesale market are to prevent foreclosure of the market through "enduring bottlenecks" such as the cost of replicating an SMP operator's network, and to promote sustainable competition in the corresponding retail markets.
URCA considers that although its objectives may be best met through the development and implementation of a RAIO, the likely time and costs involved in developing and implementing a RAIO may make this option disproportionate in the context of this interim SMP review.

URCA has requested that BTC proposes an obligation that BTC considers would satisfy URCA's objective of providing as much transparency and predictability for potential competitors to BTC, balanced with the desire to ensure that the solution can be implemented in a timely and cost-effective manner. URCA considers that BTC's proposed obligation should not include an obligation to negotiate commercially, for the reasons previously explained in this Section.

22 BTC Access to the transmission network

Introduction

As noted in Section 3.1.8 above, the new information provided, and URCA's wish to apply light touch regulation as much as possible in the interim period, has resulted in URCA broadening the specific access product from 'national and international backhaul' to 'access to the transmission network'. This product supports the access to the broadband network and services product as explained in Section 3.1.8 above. The conclusion that access to BTC's transmission network remains in the high level SMP market and subject to *ex ante* regulation has been maintained.

1) Define the objective – market failure identification

At present, BTC is effectively self-supplying access to its transmission network to the retail services arm of its business. URCA has identified the following actual or potential market failure:

- Refusal to deal and/or denial of access – URCA considers that BTC would be able to engage in refusal to deal or denial of access to its transmission network given its ownership of one of only two networks in The Bahamas.

URCA therefore considers the appropriateness of obligations available to address these market failures.

As noted, this product supports the access to the broadband network and services product. URCA has requested that BTC proposes the specifications of this access product and, dependent on what this product includes, access to the transmission network may not be required as separate product. For the purposes of this Paper, URCA will assume that the access to BTC's transmission network service would be provided under the same principle as that applied to the access to the broadband network and services. URCA, therefore, does not consider it productive to enter into a speculative discussion of the options for this product at this time.

23 Overall assessment and conclusions

For each product in a high level SMP market deemed susceptible to *ex ante* regulation, URCA has followed the framework set out in Section 4 above. Where necessary, given the large number of products included in this review, URCA has presented aspects of this framework at a general level – for example, the discussion of the general costs and benefits of obligations irrespective of the SMP operator or product in Section 5 above.

The application of the framework to each product includes a discussion of the specific costs and benefits associated with the obligations considered to address identified (actual or potential) market failures and an assessment of the obligations which URCA considers:

- Meets URCA's objectives;
- Effectively addresses the market failure identified; and
- Is considered to be the most efficient and proportionate, having due regard to the costs and benefits

As this has been done on a product-by-product basis, URCA now considers whether the cumulative effect of the obligations identified places a disproportionate burden on CBL or BTC. In this Section, URCA also considers whether there are risks or other possible unintended consequences that relate to the different options being considered (as discussed in the final stage of the framework for assessing obligations).

CBL

The table below summarises the products and obligations proposed for CBL.

Product	**Obligation**
Broadband internet	Untying of services
SuperBasic package	Rules-based retail price regulation
Digital package	'Do nothing' - no additional obligation
Retail national and international leased lines	'Do nothing' - no additional obligation
Access to broadband network and services	CBL to propose
Access to the transmission network	CBL to propose
Wholesale national and international leased lines	'Do nothing' – no additional obligation
General obligation	Accounting separation

At the retail level, URCA is intending to impose obligations on CBL for its broadband internet and SuperBasic Package only. For wholesale access to the broadband network and services and access to the transmission network, URCA has requested CBL to propose an obligation that meets URCA's objective of providing as much transparency and predictability for potential competitors to CBL, balanced with the desire to ensure that the solution can be implemented in a timely and cost-effective manner. For the remaining products, URCA has concluded that no additional obligations (other than standard SMP obligations and accounting separation requirements) are required for the purposes of the interim SMP process.

URCA considers that the collective impact of these obligations is not likely to be disproportionate to the benefits expected to consumers and to the prospect of sustainable competition in The Bahamas. At the retail level, the obligations imposed are intended to provide added consumer protection during the interim SMP process and until sustainable competition has been established in The Bahamas for those products. URCA does not consider that they impose a disproportionate burden on CBL either standalone or collectively given that CBL has been subject to price regulation in the past.

As with any obligations imposed by a regulator, there is always a risk of regulatory failure – specifically that the obligation either does not have the intended consequence (that is, does not address the market failure) or has unintended consequences. URCA does not consider that this risk is high for the obligations set out above for the interim SMP process. URCA will, however, continue to monitor the obligations in question.

BTC

The table below summarises the products and obligations proposed for BTC.

Product	**Obligation**
Fixed access and local calling	Rules-based retail price regulation
Fixed DLD and ILD call products	Rules-based retail price regulation
Broadband internet access in specified areas	Price regulation – geographic averaging
National and international leased lines	'Do nothing' – no additional obligation
Mobile voice and data services	Rules-based retail price regulation
Call transit (domestic, international and mobile), call termination services[1], directory enquiry and ancillary services[2]	RAIO with cost-based charges where possible
Incoming international calls to mobile customers	Specific one-off retail price adjustment
Wholesale national and international leased lines	'Do nothing' – no additional obligation
Access to transmission network	BTC to propose
Access to broadband network and services	BTC to propose
General obligation	Accounting separation

1. Includes call termination (domestic, international and mobile), termination of emergency calls to the police, termination of automated ancillary services, termination of calls to freephone/toll-free numbers, termination of calls to operator assistance facilities and termination of calls to directory enquiries.
2. BTC shall produce a reference offer for interconnection and access to its network for the products specified above and any additional enabling products that a wholesale customer may reasonably require in order to make use of the products listed. Such enabling products include joining circuits, points of interconnection and data management amendments.

On the face of it, the sum total of the proposed obligations could appear to impose a significant burden on BTC. However, in the context of the obligations (for example, price regulation on the fixed voice services) that BTC currently complies with and the fact that BTC already has an Interconnection Agreement (containing parts of what is required for the RAIO), URCA considers that the incremental burden is not disproportionate relative to the benefits they are expected to bring to customers and competitors in The Bahamas.

At the retail level, the obligations imposed are intended to provide added consumer protection during the interim SMP process and until sustainable competition has been established for those products. URCA does not consider that they impose a disproportionate burden on BTC, either standalone or collectively, given that BTC has been subject to price regulation in the past. The obligations imposed on wholesale products are intended to enable competitors and potential new entrants access to infrastructure necessary for the development of sustainable competition. While development of RAIOs for those products may entail a high level of work on the behalf of BTC, URCA does not consider this to be disproportionate when weighed against the benefits of increased competition. The accounting separation guidelines support the obligations outlined above and do not create significant additional burden.

Appendix 1: Market failures

Introduction

This Appendix provides a brief summary of the various potential or actual market failures that are of concern to URCA, and which are referred to in the body of the main position paper. The types of issues are familiar from economic analysis of competition law concepts. More detailed information is available in URCA's published Competition Guidelines (ECS COMP. 4 to ECS COMP. 9). If there is a discrepancy between the high level summary provided below and the forthcoming guidance, then the Guidelines take priority over this summary.

Matching obligations to objectives identified

The table below shows the potential market failures that have been identified for each product market.

Market	Potential Market Failures			
	Predatory pricing	**Excessive pricing**	**Tying**	**Refusal to deal/denial of access**
CBL Products:				
Broadband internet access	✓		✓	
SuperBasic package	✓	✓		
Digital packages	✓	✓		
Retail national and international leased lines		✓		
Wholesale national and international leased lines				✓
Access to broadband network and services				✓
Access to the transmission network				✓
BTC Products:				
Fixed telephony access and local calling	✓	✓		
Domestic long distance calling, domestic fixed calls to rated numbers and international long distance fixed calling	✓			
Broadband internet access in specified areas		✓		
National and international		✓		

Market	Potential Market Failures			
	Predatory pricing	**Excessive pricing**	**Tying**	**Refusal to deal/denial of access**
leased lines				
Mobile access, local mobile calling, domestic long distance mobile calling and international long distance mobile calling				✓
Incoming international calls to mobile customers		✓		
Call transit (domestic, international and mobile), call termination services and wholesale directory enquiry and ancillary services (call termination and service provision)				✓
Wholesale national and international leased lines		✓		
Access to the broadband network and services				✓
Access to the transmission network				✓

Predatory Pricing

Predatory pricing (or predation) is where an SMP operator incurs short-term losses or foregoes profits in the short term so as to foreclose (or be likely to foreclose) a competitor (or a potential competitor), with a view to strengthening or maintaining its market power, thereby causing consumer harm. The below cost pricing is often only temporary – once market exit takes place, the SMP operator can raise prices, often above the competitive level. The success of predatory pricing (from the perspective of the SMP operator) typically relies on the SMP operator having sufficient funds (whether from capital reserves or through cross-subsidisation) to sustain below-cost pricing for as long as necessary to defend its market share, increase its market share or cause market foreclosure.

Excessive Pricing

Excessive pricing occurs when the dominant licensee is able to earn greater profits than would otherwise be possible in a competitive market. It has been held that '*charging a price which is excessive because it has no reasonable relation to the economic value of the product supplied…would be…an abuse*'.[61]

61 Case C-27/76 *United Brands v Commission* [1978] ECR 207, [1978] 1 CMLR 429

Tying of Services

‘Tying’ is where an SMP operator requires those customers who wish to purchase one product (the tying product) to purchase an ancillary product (the tied product) from it as well. Tying can either be contractual or technical. Contractual tying arises where the customer is obliged by agreement to purchase the ancillary goods from the dominant licensee. Technical tying occurs where the key product is manufactured in such a way that it would only work with ancillary goods produced by the same manufacturer. A practice will amount to tying if the tied product is distinct from the tying product.

Tying occurs where a licensee makes the supply of one product (the ‘tying product’) conditional upon the buyer also buying a product that could be supplied separately (the ‘tied product’). Tying may infringe section 69 of the Comms Act where the licensee holds a dominant position in the market for the tying product. As a result of the dominant licensee ‘leveraging’ its position in relation to the tying product to achieve increased sales in the market for the tied product, competitors may be foreclosed from the market.

Refusal to deal/denial of access

Refusal to deal and/or denial of access (referred to below as refusal to supply) is where an operator with SMP in a wholesale product attempts to leverage its market power by denying access to, or refusing to deal with, competitors in the retail (downstream) market. This could amount to anti-competitive behaviour if, for example, the SMP operator controls a wholesale input or inputs which are essential for other players to be able to operate and/or compete in the downstream market and which are technically or economically difficult to replicate. If the ability to replicate the SMP operator’s wholesale product is limited, a refusal to deal may lead to foreclosure of the retail market.

Refusal to supply - general

Provided that the terms of their agreements are not anticompetitive and provided that companies comply with all relevant provisions of law, companies should be free to negotiate and enter into agreements with whichever customers they choose. However, a refusal to supply by a licensee with SMP may constitute an abuse of SMP if it results in the reduction in or elimination of competition or stifles the emergence of a new product.

The concept of refusal to supply covers a wide range of practices, including a refusal to supply products to existing or new customers, a refusal to provide interface information, in some circumstances a refusal to license intellectual property rights, or a refusal to grant access to an essential facility or network.

Refusal to supply also includes offering trading conditions so unreasonable that they amount to a constructive refusal to supply. Constructive refusal could, for example, take the form of unduly delaying or degrading the supply a product, or involve the imposition of unreasonable conditions in return for the supply or charging unreasonably high prices for the products and services.

Appendix 2: Costs and Benefits of Identified Options

Retail Price Regulation

Table 1: Costs and benefits of Rules-based price regulation

Implementation	*The operator* • The SMP operator would be required to provide data to meet the rules-based obligation, such as volume, sales and price data. *The regulator* • The implementation cost to URCA would be relatively small as the onus is on the SMP operator to provide information.
Product	*The operator* • Requirements to give prior notice to URCA would place some restrictions on the SMP operator's ability to make price adjustments at short notice in response to changes in market conditions • However, this obligation still allows the SMP operator to make reasonable changes in price in response to genuine market or product changes. *Existing market players and new entrants* • Competitors to the SMP operator would know that price changes have to be approved by URCA, thus reducing the risk of anticompetitive pricing. *Consumers* • Consumers would be protected from anti-competitive pricing to the extent that the regulator is able to detect such strategies and effectively prevent such pricing under the rules it enforces. • Consumers could directly benefit from an increase in product choice and differentiation, if the imposition of this obligation were to encourage more competitive market entry
Compliance	*The operator* • The SMP operator would be required to provide data to URCA when considering any change to its pricing, which would cause it to incur costs it may otherwise not incur. *The regulator* • URCA would be required to analyse the data received to ensure that the proposed pricing was not anti-competitive. This would cause URCA to incur costs.
Distributional	*The operator* • Depending on the form of the rules, this form of price regulation may redistribute pricing information (and therefore market power) away from the SMP operator and towards URCA and other players. *Existing market players and new entrants* • New and potential market entrants benefit from the knowledge that the SMP operator cannot unilaterally raise or lower prices without prior approval by URCA. *Consumers* • In the absence of a detailed review, rules-based price regulation may result in operator inefficiencies being passed on to consumers. • In the medium to longer term consumers may benefit from increased choice, quality of service and product development.
Opportunity cost	*The operator* • The opportunity cost of *not* being able to price and sell its products freely is the possible loss of profit-maximising potential. *Existing market players and new entrants* • The opportunity cost of rules-based price regulation to existing and potential market players is

	likely to be negative (i.e. a positive impact) as they enjoy a degree of protection and are able to deploy the profits made from entering the regulated marketplace.
Impact on competition	*The operator* • Rules-based price regulation may impact on the SMP operator's ability to respond quickly to a competitive challenge. • The SMP operator may find the regulations a disincentive to change its prices (as it would not be required to submit any information if it did not wish to change their existing pricing) *Existing market players and new entrants* • It is likely that, with a reduction in the SMP operator's ability to successfully exclude new entrants, more operators would be attracted to The Bahamas (or fewer players would exit). With more players in the market competition in the sector would increase. *Consumers* • Consumers are likely to benefit from increased market competition in The Bahamas.
International precedent	• Rule-based price regulation has been widely used in electronic communications[62], although increasingly regulators move to the application of incentive-based price regulation (price caps) as this is considered to emulate competitive market pressures better and often gives the SMP operator more pricing freedom within the price cap framework. • Implementation of price caps requires the development of a forward-looking market model for the SMP operator and often takes several months to implement (see below).

Table 2: Costs and benefits of price caps Regulation

Implementation	*The operator* • It would be necessary to develop a business plan including forecasts for individual products, changes to technologies, systems changes, efficiencies and other relevant factors. This business plan is often developed by the operator and provided to the regulator for analysis and then, once any issues identified have been resolved, the regulator will develop the price cap framework based on that business plan. The SMP operator would incur potentially significant costs in developing and documenting the business plan. This includes costs of consultation and responding to industry engagement. *Existing market players, new market entrants and consumers* • No costs or benefits of implementation (other than time required to respond, if necessary, to any consultation). *The regulator* • The regulator would need to review the business plan developed by the SMP operator, or in some instances actually develop the business plan. It would need to review all the SMP operator's assumptions and identify where it considers efficiency improvements could be made and design the price cap framework to incentivise the operator to achieve these efficiency improvements. • The regulator will also incur costs involved with conducting consultation processes and engaging with industry and other stakeholders.
Product	*The operator* • Individual prices and price changes would not need to be approved by URCA. This means that the operator would have pricing flexibility within the price cap. It would therefore be able to make quicker price adjustments than under a rules-based price regulation. *Existing market players and new entrants*

[62] See, for example, Germany's approach to the regulation of PSTN access (Deutsche Telekom must notify BNetzA of tariffs two months in advance): http://www.bundesnetzagentur.de/enid/92f8c39321f24b9ede5899f0f0e6d2f9,0/Telecommunications/Telecoms_Regulation_17g.html

	• Price-cap regulation may help to prevent market players from being excluded from the market due to predatory pricing. • It may allow entrants to the market to compete more effectively on price and also encourage greater choice in the market if new players enter the market as a result of the price regulation. *Consumers* • Consumers would be protected from anti-competitive pricing to the extent that the regulator is able to detect such strategies. • If new entrants were attracted to the market, due to the reduced risk of foreclosure, it is likely that consumers would directly benefit from an increase in product choice and differentiation.
Compliance	*The operator* • The operator would need to produce compliance reports to URCA in the format and at the times required by URCA. *The regulator* • URCA would need to review the compliance reports submitted and decide how to address any issues arising.
Distributional	*The operator* • As the SMP operator will be rewarded for efficiency improvements (e.g. reducing costs or expanding demand) it is incentivised to improve its operations and become more productive. • However, given that the SMP operator would only be able to change its prices within the rules of the price cap, it could be disadvantaged should the competitive environment change dramatically or should costs increase beyond its control (e.g. external wage pressure). *Consumers* • Distributional impact on consumers depends on how the SMP operator changes the basket of prices under the price cap – some prices may rise more than others to the detriment of some groups of consumers (while others may benefit). • Price cap provides some certainty over future prices, albeit on an average basis.
Opportunity cost	*The operator* • There would likely be an opportunity cost associated with the time and materials necessary to comply with the price cap regulations. • There may also be opportunity costs associated with the reduction in profit that a price cap implies. • However, depending on the appropriateness of the chosen X factor, these costs may be outweighed by the incentive to innovate and reduce costs. *Existing market players and new entrants* • The opportunity cost of price cap regulation to existing and potential market players is likely to be negative (i.e. a positive impact) as they enjoy a degree of protection against anticompetitive pricing behaviour by the SMP operator. *Consumers* • The opportunity costs facing consumers are likely to relate to any short-term loss of the money saved when faced with (for example) predatory pricing – which is less likely to occur in a market with price-cap regulation.
Impact on competition	*The operator* • The SMP operator should be rewarded for efficient behaviour, i.e. if it reduces costs or expands demand beyond expectations. *Existing market players and new entrants* • It is likely that with a reduced risk of anti-competitive pricing and less chance of the SMP operator being able to successful exclude new entrants, that more operators would be attracted to The Bahamas. *Consumers* • Consumers may benefit from a market in which players are protected from anti-competitive pricing and thus can compete on factors such as choice, quality of service and innovation.

International precedent	• Price caps are widely deployed in electronic communications markets across the world.[63] They are considered preferable to rules based regulation as they offer more pricing flexibility and efficiency incentives to the SMP operator. The time and cost of implementation of price caps can however be substantial.

Untying of Services

Table 3: Costs and benefits of untying regulation

Implementation	*The operator* • The SMP operator would have to provide information on any tied products. • The SMP operator may have to make technical changes to enable the delivery of products on a standalone basis. • There may be some costs associated with providing products on a standalone basis (e.g. developing pricing, marketing). *The regulator* • URCA would incur time and resource costs in implementing this obligation.
Product	*The operator* • The SMP operator's pricing and packaging flexibility would be reduced and this could impact the operator's revenues and profit levels. *Existing market players and new entrants* • Other operators would be able to compete with each individual product rather than having to offer all the tied products (which they may not be able to offer anyway). *Consumers* • Consumers would be able to purchase products separately, if offered by an operator, and combine products according to their own preferences.
Compliance	*The operator* • The SMP operator would be required to provide data to URCA when wanting to offer tied products. *The regulator* • URCA would be required to analyse the data received to ensure that the proposed tying and reselling strategies were not anti-competitive. This would result in resource and time costs.
Distributional	*The operator* • The SMP operator loses its exclusivity advantage with respect to certain tied products or packages). *Existing market players and new entrants* • New and potential market entrants benefit from the knowledge that an SMP operator cannot engage in tied sales without complying with regulatory safeguard rules. *Consumers* • Making products available separately, as well as through ties, increases consumer choice.
Opportunity cost	*The operator* • The opportunity cost for the SMP operator is the investment it could have made from any supernormal profits enjoyed had it been able to make tied sales or in avoiding competitive market entry if the tying of products would have resulted in market foreclosure. *Existing market players and new entrants* • The opportunity cost of untying of services regulation to other market players is likely to be negative (i.e. a positive impact) as they would be able to compete against individual products

[63] In the United States, retail price cap regulation began to replace rate of return regulation in 1989. In Europe, regulators which impose retail price cap regulation on SMP operators include those in Germany, Austria, Norway, and Sweden amongst many others.

	offered by the SMP operator rather than having to replicate tied products.
Impact on competition	*Existing market players and new entrants* • More players may be able to enter (and stay) in the market, as the obligations imposed should reduce the SMP operator's exclusivity advantage. *Consumers* • Consumers benefit from increased market choice – perhaps even more sellers offering similar tied sales packages.
International precedent	• Such an obligation has been imposed in a number of countries including Belgium, Canada, Singapore and the USA.[64]

Access and Interconnection

Table 4: Costs and benefits of RAIO Obligation

Implementation	*The operator* • To provide a RAIO, the SMP operator may need to invest in the network to be able to be able offer sufficient capacity, relevant ancillary services or support systems to allow for interconnection to other players (although they may be able to recoup such costs through the pricing agreements reached). • The SMP operator will incur costs relating to the development of the RAIO. *Existing market players and new entrants* • Interconnection is a critical necessity for competition in voice services. Operators needing to interconnect would need to prepare their networks and comply with testing and other technical parameters in order to use services set out in the RAIO. *Consumers* • Access and interconnection obligations are the foundation of competition in electronic communications. Hence, consumers benefit through the introduction of increased choice, lower prices and other benefits associated with the introduction of competition. *The regulator* • Specific RAIOs can be technically complex and in some instances URCA may not have sufficient information or knowledge about the SMP operator's network and infrastructure to assess the costs involved. URCA would then require external expert advice as well as cooperation by the SMP operator to analyse the options available. • The regulator will incur costs relating to the development of the RAIO.
Product	*The operator* • Before launching new retail products, the SMP operator may need to ensure that it can offer corresponding access and interconnection products to competing operators. *Existing market players and new entrants* • Other market players are given two options to provide services: o develop their own infrastructure, or o use the SMP operator's infrastructure to offer a similar or differentiated product. • Other operators are able to interconnect with the SMP operator and therefore compete in the voice market.

[64] For example, Belgium - http://www.ibpt.be/GetDocument.aspx?forObjectID=1014&lang=en; Canada- http://www.crtc.gc.ca/eng/publications/reports/osborne07.htm;
Singapore - http://www.ida.gov.sg/doc/Policies%20and%20Regulation/Policies_and_Regulation_Level3/TCC/TCC_2005.pdf; US - http://www.fcc.gov/wcb/cpd/triennial_review/

	Consumers • By encouraging more new entrants to the market, and increasing the range of products available, consumer choice is likely to be increased.
Compliance	*The operator* • Complying with a RAIO could have substantial costs for the SMP operator, particularly where further investment in the network is required to allow for the obligation to be met. • As a RAIO is a 'living document', there will be ongoing costs associated with change management processes and associated consultation. *The regulator* • There would be a cost of monitoring the behaviour of the SMP operator to ensure it is providing access on a transparent and non-discriminatory basis. • As a RAIO is a 'living document', there will be ongoing costs associated with change management processes and associated consultation.
Distributional	*The operator* • The SMP operator loses its exclusivity advantage of having access to the wholesale inputs. *Existing market players and new entrants* • New and potential market entrants benefit from the knowledge that an SMP operator cannot use its exclusive access to the network to gain a dominant position in the market.
Opportunity cost	*The operator* • One opportunity cost for the SMP operator is the investment it could have made from any supernormal profits enjoyed had it been able to preserve its monopoly or market power in retail markets through refusal to supply in wholesale access & interconnection to competitors. • There is also an opportunity cost of any investment that is required in the network to allow for compliance with the obligation, which could otherwise have been used to invest in the network to allow for the provision of other retail services. • Further there may be opportunity costs in the resourcing required to serve wholesale customers, although wholesale customers would produce incremental revenues so these costs are likely to be offset. *Existing market players and new entrants* • The opportunity cost to other market players is likely to be negative (i.e. a positive impact) as they are potentially able to make profits from providing retail services without having to make the costly investment of rolling out their own infrastructure.
Impact on competition	*The operator* • The SMP operator would no longer be able to leverage its market power in the wholesale market into the potentially competitive retail market. *Existing market players and new entrants* • Provision of a RAIO would allow other market players to become more active in the market and offer services quicker than would be the case if they were required to build their own infrastructure. • Further, other operators may benefit through not having to invest in their own, competing, infrastructure (at least until they build up their customer base to a critical mass). *Consumers* • By encouraging more new entrants to the market, consumer choice is likely to increase. *The regulator* • No costs or benefits of competitive impacts

International precedent	• There is precedent from across the world for access & interconnection obligations on PSTN operators, set out in reference offers.[65] There is more limited precedent for such obligations on cable operators, but these have been used in countries such as the Netherlands and Malta.

Table 5: Costs and benefits of Resale Obligation

Implementation	*The operator* • To allow for resale, the SMP operator may need to make some investment in the relevant ancillary and support services to allow for wholesale interfaces to other players. Such costs should be lower than those required for RAIO-type service, though. *Existing market players and new entrants* • Resale access services tend to offer a low cost and low risk market entry option for new market players and can also play an important long-term role in competing players long-term product portfolios. *Consumers* • Consumers should benefit from the introduction of increased choice of provider, lower prices and other benefits associated with the introduction of competition. It should be noted that the increase in choice arising from resale products is likely to be less than that which could be achieved through a RAIO.
Product	*The operator* • Before launching new retail products, the SMP operator may need to ensure that it can offer corresponding access and interconnection products to competing operators. *Existing market players and new entrants* • Other market players are given two options to provide services: o develop their own infrastructure and offer similar or differentiated products, or o purchase the SMP operator's resale product to offer a similar retail product. *Consumers* • By encouraging more new entrants to the market, and increasing the number of products available, consumer choice is likely to be increased.
Compliance	*The operator* • Complying with a resale obligation may result in the SMP operator incurring costs. *The regulator* • There would be a cost of reviewing and approving the resale offer as wells as of monitoring the behaviour of the SMP operator to ensure it is providing access on a transparent and non-discriminatory basis.
Distributional	*The operator* • The SMP operator loses its exclusivity advantage of being able to offer the corresponding retail product. *Existing market players and new entrants* • New and potential market entrants benefit from the knowledge that an SMP

[65] For example see, Turkey - http://www.tk.gov.tr/pdf/ordinance_access_interconnection.pdf;
Belgium -
http://www.ibpt.be/en/614/DocAndContentsListPub/LLU_and_Bitstream/DocAndContentsListPub.aspx?_themeID=231+232+233+234&_view=date;
Malta - http://www.mca.org.mt/filesystem/pushdocmgmtfile.asp?id=978&source=3&pin=

	operator cannot use its exclusive access to the network to gain or maintain a dominant position in the market.
Opportunity cost	*The operator* • One opportunity cost for the SMP operator is the investment it could have made from any supernormal profits enjoyed had it been able to preserve its monopoly or market power in retail markets through refusal to supply in wholesale products to competitors. • There may also be an opportunity cost of any investment that is required in the network to allow for compliance with the obligation, which could otherwise have been used to invest in the network to allow for the provision of other retail services. • Further there may be opportunity costs in the resourcing required to serve wholesale customers, although wholesale customers would produce incremental revenues so these costs (and others) are likely to be offset. *Existing market players and new entrants* • The opportunity cost of resale obligations to other market players is likely to be negative (i.e. a positive impact) as they are potentially able to make profits from providing retail services without having to make the costly investment of rolling out their own infrastructure.
Impact on competition	*The operator* • The ability of the SMP operator to leverage its market power in the wholesale market into the potentially competitive retail market would be reduced, but the position held by the SMP operator would likely be substantially stronger than if a RAIO-type obligation were to be imposed. *Existing market players and new entrants* • It would allow other market players to become more active in the market and offer services quicker than would be the case if they were required to build their own infrastructure. • It would, however, not enable competing operators to differentiate the services they offer from the retail services offered by the SMP provider, so the competitive benefits are likely to be limited and may not create a foundation for sustainable competition. • A resale obligation is likely to be quicker to develop and implement than a RAIO-based obligation, therefore it may assist faster development of competition for the product in question. *Consumers* • By encouraging more new entrants to the market, consumer choice is likely to increase, although products may not be substantially differentiated.
International precedent	• There is precedent from across the world for the implementation of wholesale products in the electronic communications sector. This precedent is primarily from the PSTN part of the sector, rather than the Cable TV part of the sector. [66]

[66] A notable exception to this is in the Netherlands, where 80% of households receive their radio and TV services from cable operators. The Dutch regulator, OPTA, is imposing resale obligations on the four largest cable operators in order to allow alternative platforms (satellite, digital, DSL and fibre) to compete more effectively.
http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/245&format=HTML&aged=0&language=EN&guiLanguage=en

Table 6: Costs and benefits of Commercial Offering

Implementation	*The operator* • The SMP operator would be able to influence the service produced rather than have to comply with any service specification mandated by the regulator. *Existing market players and new entrants* • There would be no certainty as to what services would be offered by the SMP provider and what the terms of those services would be. This could substantially increase the risk of market entry and maybe deter market entry. • A potential benefit for market entrants could be that they could have more direct influence on the detailed specification of the product offered by the SMP provider as the product would be a direct result of the bilateral negotiations. *Consumers* • Consumers may benefit if the negotiations result in the successful introduction of competition. This would, however, be dependent on the ability of the two operators to agree an acceptable solution to the competing operator's needs. *The regulator* • One of URCA's objectives is to create a transparent regulatory regime. As there would be no transparency in the process of commercial negotiation, this obligation may not be sufficient. • If commercial negotiation were to be undertaken in a constructive manner by the SMP provider, then this would allow the regulator to interfere less in the market and thus reduce the cost of regulation.
Product	*The operator* • The SMP provider could benefit from the first mover advantage in being able to launch new retail services and only need to respond to requests for access once the retail product is launched and in the market. *Existing market players and new entrants* • Competing operators may be disadvantaged through the delay in needing to negotiate access to wholesale services after the corresponding retail services have been launched by the SMP provider. *Consumers* • Consumers would likely benefit less than in the cases of RAIO-style or resale products due to the likely time-lag between the SMP provider launching products and the competing operators being to replicate those products. • Further if negotiations were to fail for the access then this could further delay competitive challenge to the SMP provider, to the detriment of consumers.
Compliance	*The operator* • There are likely to be some compliance costs incurred by a commercial offering. The SMP operator may need to make network or system investments in order to make wholesale access products available to third parties (although likely to be offset by wholesale revenue). *The regulator* • The regulator may be required to assist where negotiations between operators breakdown or where agreement cannot be reached. • There would also be a cost of monitoring the behaviour of the SMP operator to

	ensure it is providing access on a transparent and non-discriminatory basis.
Distributional	*The operator* • The SMP operator loses its exclusivity advantage of being able to offer the corresponding service. *Existing market players and new entrants* • New and potential market entrants may benefit from the access arrangements, if these are successfully negotiated to meet the requirements of the operators.
Opportunity cost	*The operator* • The opportunity cost for the SMP operator would be any investment it could have made from any supernormal profits enjoyed had it been able to preserve its monopoly or market power in retail markets through refusal to supply in wholesale access & interconnection to competitors. *Existing market players and new entrants* • The opportunity cost of access obligations to other market players may be negative (i.e. a positive impact) if the negotiations result in effective options for the operators to make profits from providing retail services without having to make the costly investment of rolling out their own infrastructure.
Impact on competition	*The operator* • The SMP operator's ability to lever its market power in the wholesale market into the potentially competitive retail market may be reduced, although this is by no means certain due to the lack of the transparency of the process. *Existing market players and new entrants* • Subject to successful and timely conclusion of commercial negotiations, this may allow other market players to become more active in the market and offer services quicker than would be the case if they were required to build their own infrastructure. *Consumers* • Consumers would probably benefit less than in the cases of RAIO-style or resale products due to the likely time-lag between the SMP launching products and the competing operators being to replicate those products. • Further if negotiations were to fail for the access then this could further delay competitive challenge to the SMP provider, to the detriment of consumers.
International precedent	• There is only limited precedent across the word for the successful introduction of implementation through reliance on commercial negotiations between SMP operators and competing operators and potential market entrants.[67]

Table 7: Wholesale Price for Access and/or Interconnection

Costs	*Benefits*
Cost orientation	
• This is the most complex form of price setting and hence is the most costly option for both the regulator and the operators. • Detailed cost models and accounting separation are required in order to develop cost-based charges for access and interconnection services. • In order to provide efficient make/buy signals to competing operators It may be necessary to revalue the SMP operator's asset-base – for	• This method is the most appropriate where the market power at the upstream level allows the SMP undertaking to charge prices above costs and where it is unlikely that this market power will be constrained in the medium term by competition. • Prices set based on efficiently incurred costs provide efficient make/buy signals to competing operators so as to reduce inefficient replication of infrastructure but still encourage investment and innovation at both network and service levels.

[67] For example, aspects of the telecommunications access regime in Australia are subject to commercial negotiation. See http://www.accc.gov.au/content/index.phtml/itemId/356715 for more information.

example the operators may need to report using Current Cost Accounting to ensure that inefficient investments are not incorporated in the access price set. Even if the operators report using CCA instead of HCA there is no guarantee that they would not be compensated for inefficient investments. • As all cost modelling will include assumptions, there is a risk that the access price set may be inappropriate. It may be too low or too high – allowing the incumbent to exploit its market power, resulting in excessive prices for consumers and allowing the SMP operators to earn excessive returns.	
Retail minus	
• If there are excessive retail prices then this may automatically feed through to excessive wholesale prices, as wholesale prices are simply calculated as retail prices minus the costs of an SMP operator's retail costs. • The SMP operator is believed to have economies of scale and, to an extent, scope on the retail side, as competing operators may not be able to compete with the SMP operators if their retail costs exceed those incurred by the SMP operators.	• If the competitor is more efficient in the retail market it may be able to undercut the SMP operator and take a margin on the cost of wholesale access. • By linking the retail and the wholesale price, retail-minus may reduce the risk of SMP operators employing anti-competitive pricing behaviour such as margin squeeze.
Benchmarking	
• Benchmarking would by definition introduce unknown factors from other operators and jurisdictions into the price setting process in the Bahamas. • Relevant comparators may be difficult to find. URCA would need to identify comparators with relevant prices, similar market conditions and similar cost standards.	• Benchmarking is often used in the initial period after market liberalisation as it takes time to develop and implement other pricing methods, which require costing information. • Benchmarking other operators that already have cost orientation obligations would be less onerous to both the SMP operators and URCA. • Benchmarking can be a useful cross checking mechanism to ensure cost-orientated or retail minus pricing is reasonable.

Accounting Separation

Table 8: Costs and benefits of standalone cost model and Accounting Separation

	Obligation to prepare a cost model only	*Obligation to prepare and publish separated accounts*
Implementation	*The operator* • It would be necessary to develop a cost model in line with principles specified by the regulator, but this would vary depending on the structure and scope of the model. • Continuous improvements to the model would be necessary to ensure that it remains relevant and fit for purpose. *Existing market players, new market entrants and*	*The operator* • Implementation costs similar to that for a cost model, although additional costs could arise through: • Cost of developing and documenting a suitably detailed and disaggregated accounting system; and • Cost of verifying accounting separation results. The different options available for

	consumers • No costs of implementation (other than time required to respond, if necessary, to any industry engagement) *The regulator* • The regulator would need to carry out rigorous reviews, and investigations of the cost model, periodically, to ensure integrity and that its outputs remain fit for purpose.	verifying results are described further below. *Existing market players, new market entrants and consumers* • No costs of implementation (other than time required to respond, if necessary, to any consultation) *The regulator* • Depending on the level of review, costs to monitor accounting separation results and documentation could be relatively lower than the cost of the regulator reviewing a cost model prepared without independent review. • Regulator will need to review annual documentation and periodically review guidelines.
Product	*The operator* • A cost model will generally stop at the allocation of network costs and not attribute retail costs to individual products. For this reason it offers limited support for reviewing a request for a price change *Existing market players and new entrants* • Cost model may help to prevent market players from being excluded from the market due to excessive or discriminatory pricing. *Consumers* • Consumers may be protected from excessive pricing to the extent that the regulator is able to detect such strategies. • If new entrants were attracted to the market, due to the reduced risk of anticompetitive conduct such as excessive pricing for upstream products/services, it is likely that consumers would directly benefit from an increase in competition.	*The operator* • Expedite approval process for price regulated services; minimize the incidence of anti-competition complaints since the regulator will be able to determine early whether there is any merit to such complaints. *Existing market players and new entrants* • Will prevent market players from being excluded from the market due to predatory pricing and other forms of anti-competitive conduct. • Give entrants confidence that appropriate tools are in place to deter anti-competitive behaviour and enable them to invest and compete more effectively if new players enter the market as a result of the accounting separation requirements. *Consumers* • Consumers would be protected from anti-competitive pricing as the regulator is able to detect such strategies and take preventative steps to curtail their impact. • If new entrants were attracted to the market, due to the reduced risk of foreclosure, it is likely that consumers would directly benefit from an increase in product choice and differentiation.
Compliance	*The operator* • The operator would need to provide a cost model and supporting information to URCA. • Demonstrate to URCA that the model is fit for purpose and meets expectations *The regulator* • URCA would need to review scope/structure of cost model components and verify its	*The operator* • The operator would need to produce and publish regulatory financial statements and documentation in the format and at the times required by URCA. *The regulator* • URCA would need to monitor the financial statements and documentation submitted to

	inputs/outputs. • As cost models are rarely subject to independent audit assurance more rigorous review and investigation must be carried out by the regulator.	ensure compliance with the accounting separation framework.
Opportunity cost	*The operator* • There is likely to be an opportunity cost associated with the time and materials necessary to develop and implement a cost model.	*The operator* • There is likely to be an opportunity cost associated with the time and materials necessary to comply with accounting separation obligation.
Impact on competition	*The operator* • The operator would have an idea of its cost for only a limited set of products. *Existing market players and new entrants* • It is likely that with a reduced risk of anti-competitive pricing and less chance of the SMP operator being able to successfully exclude new entrants, that more operators would be attracted to The Bahamas. *Consumers* • Consumers may benefit from a market in which players are protected from anti-competitive conduct and thus can compete on factors such as choice, quality of service and innovation.	*The operator* • The operator would have an idea of its costs across the product range. *Existing market players and new entrants* • It is likely that with a reduced risk of anti-competitive conduct and less chance of the SMP operator being able to successfully exclude new entrants, that more operators would be attracted to The Bahamas. *Consumers* • Consumers may benefit from a market in which players are protected from anti-competitive pricing and thus can compete on factors such as choice, quality of service and innovation.
International precedent	• Service costing obligations are commonplace, often alongside accounting separation. • Where price regulation focuses on a single product and an operator does not have SMP in downstream markets, an obligation to develop a service cost model may be more typical than an obligation to prepare separated accounts	• Accounting separation obligations are common where an SMP operator has market power in both upstream and downstream markets.

Table 9: Costs and Benefits of Types of Cost Models

Costs	*Benefits*
FAC-HCA	
• Does not estimate the economic cost of services • Any capital or operating cost inefficiencies in the operator's business will remain in the unit cost estimates	• FAC-HCA is the simplest form of cost model to develop, meaning the cost of implementation is relatively low and service cost estimates can be derived reasonably quickly
FAC-CCA	
• Relatively more costly to implement than HCA FAC, depending on the availability of current cost data and approach taken • Only estimates the average cost of services – for the purposes of price setting and regulatory inquiries, information on incremental costs can be important	• Compared to a HCA model, more closely approximates the costs a new entrant would face when entering the market • Conversion from HCA to CCA asset costs may remove some inefficiencies in capital costs from the model • Depending on approach taken to CCA conversion, additional implementation costs over FAC-HCA may be limited.
LRIC (Top-down)	

• Relatively more costly to implement. Can require detailed data on operator's network and an understanding of how costs vary with volumes • Some cost inefficiencies may remain in the unit cost estimates	• Provides separate estimates of incremental costs and fixed and common costs. This information can be important during regulatory inquiries and in setting prices for regulated products.
LRIC (Bottom-up)	
• Can be relatively costly to implement, given the amount of data that is required • Models can sometimes 'oversimplify' cost volume relationships, meaning that models exclude some costs that even a reasonably efficient operator would incur.	• Provides an estimate of the costs an efficient operator would incur in providing the services.

Table 10: Reviewing accounting separation results

Costs	*Benefits*
CFO Responsibility Statement	
• Does not give third party review of the accounts, resulting in limited transparency and potentially less market confidence in the results	• Relatively minimal costs – does not incur the cost of third party review • Ensures that a board member takes responsibility for the accounts, so should lead to internal review before the statement is signed
Regulator-led review	
• Relatively higher costs than CFO statement • Regulator does not have access to all the operator's underlying systems (e.g., financial accounting systems), so the review is likely to focus on methodology, rather than checking that the methodology has been correctly implemented	• Third party review increasing transparency and confidence in the accounts
Independent audit to PPIA standard	
• Potentially relatively higher costs than regulator led review • Audit focuses on implementation, comparing actual model and accounts to documentation and guidelines. Does not consider if the documented approach is a fair presentation of the business, in line with the guidelines. Therefore, could also require regulatory review of documentation.	• Third party review increasing transparency and confidence in the accounts
Independent audit to FPIA standard	
• Relatively higher costs than audit to PPIA standard	Third party review increasing transparency and confidence in the accounts Review considers whether documentation/approach is a fair presentation of the business, in line with the guidelines. Likely, therefore, to give greatest level of confidence to market participants over reasonableness of the accounts.