

# PRELIMINARY DETERMINATION

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

# CONSULTATION DOCUMENT ECS19/2009

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#### 1 Introduction

This document is issued under the terms of s. 116 of the Communications Act, 2009 ("Comms Act"), and contains a Preliminary Determination and a Draft Order, addressed to Cable Bahamas Ltd. ("CBL")¹. This is a public consultation and CBL and third parties are welcome to respond to this document.

The rest of the introduction provides:

- an overview of the regulatory framework and the transition framework (Sections 1.1 and 1.2);
- a basic explanation of what is the Preliminary Determination and Draft Order (Section 1.3);
- a description of the choice of procedure that URCA has adopted (Section 1.4)
- an explanation of how to respond to this consultation (Section 1.5); and
- an overview of the structure of the remainder of this document (Section 1.6).

### 1.1 Regulatory Framework

The Comms Act introduces a new regime for the regulation of networks and services in the electronic communications sector in The Bahamas. It provides guidelines to be followed for regulation and Government measures in s. 4 and s. 5 of the Comms Act.

The Comms Act gives powers to a new regulator, set up under the Utilities Regulation and Competition Authority Act, 2009 ("URCA Act"). The Utilities Regulation and Competition Authority, URCA, has wide-ranging powers, to be exercised in compliance with principles of good regulation.

URCA is required to introduce regulatory measures which are efficient and proportionate to their purpose and to introduce them in a manner that is transparent, fair and non-discriminatory. This means that where URCA believes that market forces alone are unlikely to achieve the policy objective within the required timeframe, it may introduce regulatory requirements, having due regard to the costs and implications for affected parties<sup>2</sup>.

As a general principle, market forces should be relied upon as much as possible and regulatory measures should be introduced by URCA only when necessary.

#### 1.2 The Transition Framework

The Comms Act provides a *transition framework* for the orderly move from the current regulatory regime which prescribes different systems of regulation for telecommunications operators, on the one hand, and cable companies and broadcasters, on the other, to a system of unified regulation under the supervision of URCA.

<sup>&</sup>lt;sup>1</sup> Under the terms of the Comms Act, s.116(2), URCA must consider what obligations are to be imposed on operators which are presumed to have Significant Market Power (SMP). In accordance with Schedule 4 of the Comms Act, the presumed SMP operators include "any affiliates". In the case of CBL, therefore, the presumption of SMP extends to other affiliates, including Caribbean Crossings Ltd. (CCL). This is explained under Methodology in Section 4 below.

<sup>&</sup>lt;sup>2</sup> As set out in the Comms Act, s. 5(b)(i), 5(b)(ii) and 5(c).

Consistent with s. 4(a) of the Comms Act, the transition framework is designed to ensure that the interests of consumers in The Bahamas are furthered by promoting sustainable competition, an objective that would be hindered if existing operators with Significant Market Power ("SMP") were allowed to operate in the absence of regulation immediately on the Comms Act coming into force. The introduction of competition allows for choice of different electronic communications services providers, to the benefit of all persons in The Bahamas.

Further, the transition regime is consistent with the overall guiding principles in s. 4 and s. 5 of the Comms Act, namely that obligations should only be imposed where there is a need for them and should be efficient and proportionate to their purpose and introduced in a manner that is transparent, fair and non-discriminatory.

As per s. 116, CBL and Bahamas Telecommunications Company Ltd.("BTC") are each presumed to have SMP in two high level markets. These interim presumptions are the basis for the imposition of obligations under s.116(2) of the Comms Act, which should be designed to achieve the objective of encouraging, promoting and enforcing sustainable competition.

Consistent with this framework, URCA should consider the products included in the high level SMP markets in order to identify those products that require the imposition of obligations. URCA should then identify obligations to be imposed on the SMP operators in relation to those products. URCA believes that the methodology (the "Methodology") described in Section 4 below, achieves this.

It should be noted that SMP is defined as the ability of an entity to act independently of its competitors and customers<sup>3</sup>. Thus SMP may exist in markets where more than one provider currently offers competing services to customers.

Due to the presumed SMP, CBL and BTC are not permitted to engage in the provision of networks and of carriage services which they were not already licensed to provide at the time that the Comms Act came into force, until such time as they have been confirmed compliant with the obligations imposed on them (s. 116(5)). This is consistent with a need to ensure that the transition to the new regime happens in an orderly manner and that existing operators do not have an ability to foreclose markets to prevent new market entry.

### 1.3 What is in the Preliminary Determination and Draft Order

The Preliminary Determination and Draft Order, together with the supporting information provided by URCA in this document, detail to CBL the obligations which must be adhered to within stated timeframes.

CBL is not permitted to engage in the provision of networks or of carriage services which it was not already licensed to provide at the time that the Comms Act came into force, until it is confirmed compliant with the following obligations:

- Accounting separation and cost accounting,
- Retail price regulation, and
- Reference access and interconnection offers.

<sup>&</sup>lt;sup>3</sup> Or for a group of entities to do this collectively.

The obligations are outlined in full in the Draft Order attached to this document and should be read in conjunction with guidelines published by URCA. The obligations proposed by URCA are designed to maintain the objective of encouraging, promoting and enforcing sustainable competition in accordance with s. 116(2). In addition, CBL must adhere to standard SMP obligations contained in the Individual Operating Licence issued by URCA (ECS 10/2009).

#### 1.4 Choice of Procedure

The timetable for the imposition of the obligations and the move towards the new regime is stringent on the regulator. According to s. 116(3):

- URCA has one month from the coming into force of the Comms Act to communicate
  in writing to the SMP operators the "types of obligations" that in URCA's view would
  be required to satisfy the requirements in s. 116;
- The relevant or existing licensee submits proposed obligations to satisfy the requirements; and
- URCA shall within 3 months make a final decision.

Whilst it is clear from s. 116 that consultation and engagement with the licensee is envisaged, the type of procedure to follow is not prescribed. URCA has carefully considered the possible options and has decided that the best procedure to be followed is that of issuing Determinations and Orders as set out in Part XVII of the Comms Act. This is because these procedures are designed to ensure clarity and transparency, and include a period of public consultation.

As explained in this document (and particularly in the Methodology under Section 4 below), URCA has throughout the process leading to the issue of this Preliminary Determination and Draft Order applied the principles in s. 5, namely to promote competition while recognising that market forces are to be relied upon as much as possible and that measures are only to be introduced when market forces are unlikely to achieve the objectives within a reasonable time frame, having due regard to the costs and other implications for affected parties.

In addition, in designing the obligations in the Draft Order, URCA applied the principles that the measures have to be efficient and proportionate to their purpose and introduced in a transparent, fair and non-discriminatory manner. URCA considers that the procedure for Preliminary Determinations and Draft Orders achieves these objectives.

The procedure for issuing a Determination as set out in s. 100 (and s. 95) of the Comms Act is outlined below:

#### Procedure for issuing a Determination (appending an Order)

- 1. URCA gives notice of a Preliminary Determination to the proposed addressee(s). This document constitutes the formal notice of a Preliminary Determination.
- 2. The Preliminary Determination specifies the obligations which are the subject of the Determination.
- 3. The Preliminary Determination is to enclose a copy of any Draft Order.
- 4. The addressee(s) of the Preliminary Determination and interested third parties have a period of no less than **one month** to make representations to URCA.
- 5. Within **one month** of the end of the consultation period, URCA can issue a Final Determination and a Final Order.

#### 1.5 How to Respond

#### 1.5.1 Timing and Process

URCA invites and welcomes comments and submissions from members of the public, licensees and other interested parties on this consultation document, using the proposed questions below as a guide and with reference to the contents of this document, associated guidelines<sup>4</sup> and any other information the respondent wishes to provide.

In line with the procedure outlined in Section 1.4 above, but reflecting the size, nature and importance of this consultation, the timetable for this consultation is extended beyond the standard one month period for responses, and will be as follows:

- All submissions to this consultation should be submitted by 5pm on 16 November 2009.
- URCA shall endeavour to publish these responses by 5pm on 17 November 2009.
- Interested parties then have an opportunity to comment on submissions made by other respondents by 7 December 2009.
- The date of 7 December 2009 marks the end of consultation period.
- URCA then has one month from the end of this consultation period to make a Final Determination and Final Order, which shall be issued 6 January 2010.

Note that by choosing to adopt the determination procedure, URCA agrees to be bound by a shorter timetable than the timetable for issuing a Final Determination under s. 116.

Persons may obtain copies of the public consultation document either:

- a. in printed booklet from URCA's office at Fourth Terrace, Collins Avenue, Nassau; or
- b. by downloading it from the URCA website at <a href="www.urcabahamas.bs">www.urcabahamas.bs</a>.

Persons may send their written submissions or comments on the public consultation document to the Chief Executive Officer, URCA either:

<sup>&</sup>lt;sup>4</sup> ECS 21/2009 on Accounting Separation and Cost Accounting Guidelines issued to CBL, and ECS 22/2009 on Access and Interconnection Guidelines.

- a. by hand, to URCA's office at Fourth Terrace, Collins Avenue, Nassau; or
- b. by mail to P.O. Box N-4860; or
- c. by fax, to 242 323 7288; or
- d. by email, to info@urcabahamas.bs.

#### 1.5.2 How to Structure Your Response to this Consultation

Please respond to points a) through d) below. Please provide full and detailed responses, including cross references to the obligation numbers in the Draft Order, Section numbers in the main document, supporting annexes and guidelines. Clarity and detail will enable URCA to analyse responses with greater consideration.

- a) Do you agree with:
  - i the exclusion of products from the high level SMP market?
  - ii the proposed obligation(s) imposed on specific products?
  - iii the proposed compliance deadline for the implementation of the obligation(s)?
  - iv the charging principles, where applicable, specified for the application of the obligations? Please refer to the relevant guidelines for further detail of the principles.
- b) If you answered "No" to any of the above, please state the reasons with reference to the background materials provided, relevant guidelines or any other evidence which you consider to be relevant.
- c) If you disagree with the obligation imposed on the specific product please submit alternative obligations which would satisfy the requirements as set out in Section 4.4.
- d) Any other comments on the consultation and supporting guidelines.

#### 1.6 Structure of the Remainder of this Document

The remainder of this document is structured as follows:

- Preliminary Determination; an overview of the objectives of the obligations to be imposed on CBL (Section 2);
- Draft Order; the types of obligations URCA proposes to impose on CBL (Section 3);
- Methodology; description of the general methodology followed by URCA in determining the types of obligations to be imposed on CBL (Section 4); and
- Appendices; background information for the Preliminary Determination and Draft Order for the high speed data and connectivity market and the pay TV market (Section 5).

# 2 Preliminary Determination

This is a Preliminary Determination issued under the terms of s. 100 of the Comms Act.

In accordance with s. 116(3) of the Comms Act URCA has one month from entry into force of the Comms Act to indicate in writing to SMP licensees listed in Schedule 4 the types of obligations that, in URCA's view, are designed to maintain the objective of encouraging, promoting and enforcing sustainable competition in accordance with s. 116(2).

Schedule 4 of the Comms Act imposes presumptions of SMP on CBL in the provision of the following services:

- the provision of high speed data and connectivity; and
- the provision of pay TV.

Accordingly, this document constitutes the formal notice of a Preliminary Determination to CBL that in URCA's preliminary view, the following types of obligations apply in the following defined high level markets:

#### High speed data and connectivity:

- Accounting separation and cost accounting across all products further guidance is provided in ECS 21/2009 Guidelines for Accounting Separation and Cost Accounting.
- Retail price regulation for broadband internet access.
- Reference access and interconnection offer for bitstream access for broadband internet, and national and international backhaul – further guidance is provided in ECS 22/2009 Guidelines for Access and Interconnection.

#### Pay TV Services:

- Accounting separation and cost accounting across all products.
- Retail price regulation for SuperBasic package and Digital Packages.
- Reference access and interconnection offer for bitstream access for content distribution, national and international backhaul, and wholesale access to the SuperBasic and/or Digital Packages.

The types of obligations set out above have been designed after careful review of the presumed SMP operator's products in each high level market, as more particularly explained in the appendices to this document and in accordance with the Methodology set out in Section 4. Further details of the full set of obligations can be found in the Draft Order at Section 3 of this document.

URCA is mindful that the interim SMP presumptions are intended to create a transition framework and that comprehensive market reviews will be conducted in the following years.

URCA considers that the time horizon for the types of obligations that should apply during the interim period should be about 12-24 months<sup>5</sup>.

Accordingly, URCA believes this Preliminary Determination and Draft Order to be proportionate in its approach. Whilst the end result may be that CBL may be regulated more lightly than would otherwise have been the case, URCA takes the view that light-touch regulation would allow it to observe the behaviour of CBL during this initial period. CBL's behaviour will be an important determinant of future decisions by URCA as to whether heavier regulation may be required.

URCA will issue a Final Determination and Final Order after careful consideration of all comments received in response to the consultation.

# 2.1.1 Summary of retail and wholesale products not subject to SMP obligations at this time

The presumption that CBL has SMP does not imply that URCA will necessarily impose wideranging regulatory obligations on CBL. On the contrary, in accordance with s. 4 and s. 5 of the Comms Act, URCA has considered in all cases the extent to which market forces can be relied upon as the means to achieving the electronic communications policy objectives.

Following the Methodology in Section 4, URCA has concluded that the following products should be excluded from the high-level SMP market<sup>6</sup>:

#### Retail

- Pay-per-view
- HDTV Packages

#### Wholesale

• Broadband resale

• All forms of access to the local loop (unbundled local loop)

In addition, URCA's analysis leads to the result that national and international leased lines, although not excluded from the SMP high level market, shall not at this time be subject to specific retail or wholesale regulation.

<sup>&</sup>lt;sup>5</sup> This is because the change to the new regime is a step change for The Bahamas and it is conceivable that future developments in the marketplace may require a medium term review of at least a review of some of the obligations being imposed now.

<sup>&</sup>lt;sup>6</sup> If a product is excluded from the SMP market, then URCA will not impose a regulatory obligation in relation to that product. See Methodology below.

#### 3 Draft Order

This Section outlines in more detail the standard and specific obligations to be imposed on CBL for a limited number of CBL's products. The products and obligations have been chosen in accordance with the Methodology set out in Section 4. Further information on URCA's analysis and conclusions can be found in the appendices to this document.

### 3.1 Standard obligations to be imposed on CBL

The obligations listed below, as specified in the standard Individual Operating Licence published by URCA on 1 September 2009, are not discretionary and will be applied for all products found to comprise the high-level SMP markets.

- For all retail and wholesale SMP products
  - Non-discrimination
- For all retail SMP products
  - Requirement to publish charges and terms and conditions
  - Consumer protection

## 3.2 Specific obligations to be imposed on CBL

The specific obligations to be adhered to by CBL are as follows:

#### **Table of specific obligations**

#	Retail/ Product		Retail/Wholesale	Deadlines	Charging
	Wholesale		Obligations to be applied		principle
1	Retail	SuperBasic Package	Retail price regulation*	Immediate	
2	Retail	Digital Packages	Retail price regulation*	Immediate	
3	Retail	National Leased Lines	No regulation	None	
4	Retail	International Leased Lines	No regulation	None	
5	Retail	Broadband Internet	Retail price regulation*  Delinking from  SuperBasic Pay TV  package	Retail price regulation immediate  Delinking from SuperBasic Pay TV package 2 months from final determination by URCA	
6	Wholesale	Bitstream access for content distribution	Include in published reference offer**	2 months from final determination by URCA	Cost oriented
7	Wholesale	Bitstream access for Broadband Internet	Include in published reference offer**	2 months from final determination by URCA	Cost oriented
8	Wholesale	National and international backhaul	Include in published reference offer**	2 months from final determination by	Cost oriented

				URCA	
9	Wholesale	Wholesale access to the	Include in published	2 months from final	Retail minus
		SuperBasic and/or Digital	reference offer**	determination by	
		Packages		URCA	
10	Wholesale	National leased lines	No regulation	None	
11	Wholesale	International Leased Lines	No regulation	None	

<sup>\*</sup> CBL shall comply with URCA's specific requirements for the retail prices for these products and for related products as URCA may require from time to time. URCA's requirements for retail pricing are set out below.

Under s. 116(2), Operators listed in Schedule 4 (including their affiliates) will be subject to obligations designed to maintain the objective of encouraging, promoting and enforcing sustainable competition. In accordance with s. 116(3)(a), URCA sets out in this draft Order:

- the types of obligations that in URCA's view would satisfy the requirements in s. 116(2); and
- the timeline by which Operators must submit draft obligations under s. 116(3).

If an Operator fails to submit proposed obligations in accordance with the timeline in the Final Order, URCA may impose a fine on that Operator under s. 109.

Compliance is achieved once URCA confirms that the SMP Operator has complied with each of the Obligation imposed upon that Operator (and its affiliates) in accordance with s.116(4)and (5).

#### **Accounting Separation and Cost Accounting**

In addition to the specific obligations in the table above, CBL is also obliged to implement accounting separation and cost accounting.

The retail services should be broken down into the following minimum set of categories (as a guidance, current retail names are mentioned in the following list; CBL needs to ensure that all retail services are captured and allocated to at least one of these categories):

- Basic Cable TV package (currently called SuperBasic Package)
- Digital Packages (add-on packages, Oceans Sport/ Movies/ Complete, premium addons such as NFL Sunday Ticket, NBA Season Pass, etc.)
- Remainder of TV services (all TV services not captured in the above categories, such as free-to-air broadcast TV, HDTV, pay-per-view, etc.)
- National Leased Lines
- International Leased Lines
- Broadband Internet

<sup>\*\*</sup> CBL 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 may include co-location at CBL's facilities for the wholesale customer, associated ancillary services to support co-location and other similar products. URCA's requirements for the reference access and interconnection offer are set out in the Access and Interconnection guidelines. Definitions of the enabling components to be included are set out below.

Remainder of retail business (any services not captured above).

The following list shows a minimum set of wholesale services for which separated accounts should be reported:

- Bitstream access for content distribution
- Bitstream access for Broadband Internet
- Remainder of access services (services not captured in Internet and content distribution services above)
- National and international backhaul
- Wholesale access to the SuperBasic and/or Digital Packages
- National leased lines
- International Leased Lines
- Remainder of wholesale transmission services (services not captured in backhaul or leased line reports above)

For the initial reporting under these guidelines, CBL must submit separated accounts for 2008 within three months of the publication of the Final Determination. These accounts may be unaudited and unpublished to allow CBL to establish a "test" year.

For 2009 and each subsequent year, CBL must submit audited and published separated accounts within six months of the end of their financial year.

The accounting separation and cost accounting guidelines as specified in ECS 21/2009 must be used when fulfilling any obligations that have a requirement for the development of cost-oriented rates.

#### 3.2.1 Access and Interconnection Enablers

#### 3.2.1.1 Component definitions

The components below represent those which, in addition to the wholesale products included in the high level SMP market, must be made available in the reference access and interconnection offer mandated in this Order.

#### 3.2.1.2 Co-location

Co-location is the provision of suitable equipment space to allow another operator to access CBL's network at CBL's location. The co-location facility could be provided by use of a dedicated space allocated to another operator at CBL's location (i.e. as a separate room or a cage facility) or by equipment space provided alongside existing CBL equipment<sup>7</sup>. In addition

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<sup>&</sup>lt;sup>7</sup> Commonly referred to as "co-mingling".

to making space available, CBL's co-location service should include the associated ancillary services that another operator will require to operate its equipment at CBL's location<sup>8</sup>.

#### 3.2.2 Cost of Capital

The cost of capital, as determined by URCA, must be used when fulfilling any obligations that have a requirement for the development of cost-oriented rates.

#### 3.2.3 Retail Price Regulation

CBL is deemed immediately compliant with the Retail Price Regulation obligations, and shall act in accordance with the framework set out below in order to remain so.

The detailed framework and obligations are specified in the following sections.

#### 3.2.3.1 Filing of Initial Tariffs/Prices

Within 30 days of URCA issuing the SMP operator with the Final Determination and Final Order of its obligations<sup>9</sup>, the operator shall file with URCA its existing tariffs/prices of each retail product and service subject to retail price regulation (see the table of specific obligations above, henceforth these services are referred to as "Price Regulated Services") and the terms and conditions upon which those services are provided. Where the product or service is offered as part of a bundle with other products or services, or is tied to other products or services, the bundled/tied prices should be provided as well.

The SMP operator shall at the same time file with URCA the volume of sales (number of subscribers, traffic volumes) and revenues relating to each Price Regulated Service for the previous two financial years, or such period as the service has been provided for if less than two years.

#### 3.2.3.2 Investigations

In exercise of its powers to conduct inquiries or investigations under s. 8(1)(j) of the Comms Act, URCA reserves the right to conduct an investigation into an SMP operator's prices and terms and conditions for a Price Regulated Service on its own motion, without receiving a complaint from another party.

Under the terms of s. 9 of the Comms Act, URCA may request that the SMP operator provide information to URCA during any such investigation. URCA shall state the purpose of the request, specify the information required and specify the time period within which the information is to be provided. Failure to provide timely and accurate information may lead to the imposition of a fine.

#### 3.2.3.3 Tariff/Price Changes

The following terms shall apply to both price increases and decreases.

The SMP operator shall not change the tariff/price of any Price Regulated Service without the prior written approval of URCA.

<sup>&</sup>lt;sup>8</sup> Such ancillary services should include, but are not necessarily limited to Handover Frame; Power; Earthing; Lighting; Racking, rack fixings and cable runways; Air conditioning; Fire & smoke detection; and Security.

<sup>&</sup>lt;sup>9</sup> If these are issued separately, the 30 day period applies from the date of the later issue.

The SMP operator shall submit to URCA an application for a tariff or price change, as appropriate, at least 30 days before the proposed effective date of the change.

Such application shall include:

- A description of the product or service for which the price change is being requested;
- Proposed effective date for the price change;
- Current tariffs/prices;
- Proposed tariffs/prices;
- Any proposed changes to the applicable terms and conditions that will result from the price change;
- Commercial rationale for making the proposed change;
- Pricing principle applied in developing the proposed price (cost-oriented, market pricing, etc.);
- Data relevant to the proposed change, including the following:
  - Volume of demand;
    - Number of existing subscribers or users that would be affected by the proposed tariff change;
    - Size of overall market/market share of the SMP operator;
  - Relevant revenues for the service;
  - Pricing of communications inputs to the service;
  - Volume of communications service inputs;
  - Costs of communications inputs for the service;
  - Direct costs of the service including capital costs and operating expenditures (e.g. network components and marketing costs);
  - Estimate of the incremental indirect costs of the service;
  - Total cost of the service; and
  - Estimates of the incremental Profit and Loss and Cash Flow resulting from the service; and
- The effect of the proposed tariff change on the SMP operator's regulated rate of return.

Where possible, this data should be provided in accordance with the Accounting Separation and Cost Accounting Guidelines issued by URCA (ECS 21/2009). URCA reserves the right to

request additional information from the SMP operator relating to the proposed tariff change.

In the absence of costing information in accordance with the Accounting Separation and Cost Accounting Guidelines, the SMP operator may provide URCA with other information to support its proposed price change including:

- Benchmark study of prices in comparable jurisdictions along with supporting information:
- Verifiable financial management information in respect of providing the service.

The SMP operator must submit a declaration signed by an authorised officer confirming that the proposed price decrease is not anticompetitive and, in particular, that the proposed price decrease:

- a. does not result in predatory pricing<sup>10</sup>;
- b. does not entail an unfair cross-subsidy<sup>11</sup>; and
- c. will not result in a margin squeeze<sup>12</sup> on other operators.

To the extent possible, this declaration should be supported with evidence, which should also be provided to URCA.

The SMP operator must submit a declaration signed by an authorised officer confirming that its application is in accordance with this Order, the Comms Act, its operating licence, the Sector Policy and any other relevant documents.

Based on the information provided to it, URCA may state that it has no objections to the proposed tariff/price changes or may block or propose suitable amendments to any tariff/price change for a Price Regulated Service.

URCA shall review an application for a tariff/price change as follows:

- a. Within 30 days of receipt of a completed application (all information is provided in accordance with the requirements of this Section), URCA shall respond with one of the following:
  - A statement of no objection;
  - A rejection of the application with reasons;

<sup>10</sup> This may occur when services are provided by the SMP operator at prices below cost so as to foreclose or be likely to foreclose actual or potential competitors. This can result in competitors being driven out of business, thereby increasing prices to uncompetitive levels in the long run.

<sup>11</sup> This may occur when an SMP operator allocates all or part of the costs of an activity in one geographical or product market to an activity in another geographical or product market.

<sup>12</sup> This may occur when a vertically integrated SMP operator in the upstream market charges a price for the product on the upstream market which, compared with the price it charges on the downstream market, would prevent an equally efficient competitor from trading profitably in that downstream market on a lasting basis.

- A notice that the application will go to public consultation and that therefore a final decision is withheld for the time being. URCA will consider whether there would be a need for public consultation based on factors such as the expected impact of the price change, in terms of number of customers affected; possible alternative products available to customers; revenue impact on the operator and expected impact on competition in the market place.
- b. If a notice that the application must go to public consultation is issued, as soon as practicable URCA will allow the public a minimum of 30 days to respond to the consultation, unless otherwise stated by URCA; and
- c. Within 30 days of the close of the public consultation, URCA will publish a final decision.

#### 3.2.3.4 Special Offers or Discounts ("Special Promotions")

Special Promotions for Price Regulated Services shall only be offered with the written consent or approval of URCA.

The SMP operator shall submit to URCA an application for any Special Promotion with a full description of the Special Promotion, including:

- the information required under Section 0 as they relate to the Special Promotion and the normal rates for the relevant Price Regulated Service;
- the rates applicable to the Special Promotion;
- the period of duration of the Special Promotion and
- the terms and conditions applicable thereto.

URCA will review the submission for Special Promotions and notify the SMP operator of its decision, to not object to, or to block or propose amendments to a Special Promotion, within 10 working days of receipt of the submission. URCA may allow the Special Promotion for a trial period of 30 days before a final decision is issued.

A Special Promotion must cease within 90 days of the launch date.

A Special Promotion should not be similar to a Special Promotion that was available from the SMP operator at any time within the previous 120 days.

URCA may block a Special Promotion that is unlikely to be:

- transparent, non-discriminatory and objectively justifiable; or
- would have the effect of lessening competition in a relevant market.

A Special Promotion must be launched no later than 30 days from the date of URCA's written approval; otherwise the Special Promotion must be resubmitted for approval.

The SMP operator shall notify URCA in writing no less than 5 working days prior to the launch date of the Special Promotion.

The SMP operator shall for a period of 180 days maintain all relevant traffic data, revenue and marketing records pertaining to a Special Promotion and must provide these to URCA upon request.

Following a statement of no objection from URCA and prior to market introduction, the SMP operator shall publish in one or more newspapers with national circulation the eligibility criteria for any Special Promotion along with the permitted terms and conditions.

In some cases the operator may provide wholesale services which are used by other operators to compete with the operator in provision of the Price Regulated Service in question (for example, interconnection on a "retail minus" basis). In these cases, the operator must identify these and apply equivalent price decreases and associated changes to terms and conditions to the relevant wholesale services in such a manner that the competing operator could replicate the special promotion. Details of how the operator proposes to do this must be included in its submission.

#### 3.2.3.5 Bundling of Price Regulated Services

The SMP operator may bundle, tie or offer new packages including price regulated services as long as each Price Regulated Service included in such a bundle, tied purchase or package is also available on a standalone basis on reasonable terms and conditions<sup>13</sup>. A bundle, tied products or package that includes at least one price regulated service shall be subject to retail price regulation. The SMP operator shall provide URCA with the costing information of each service included in the bundle, tied purchase or package and demonstrate to URCA that the price of the bundle is not anti-competitive and would not have the effect of lessening competition in a relevant market.

#### 3.2.3.6 Introduction of New Services

An SMP operator that proposes to offer a new service shall at least 30 days before providing the new service file with URCA:

- a. The proposed effective date for the introduction of the new service;
- b. A description (commercial and technical) and name of the new service, including the tariffs/prices, terms and conditions applicable thereto; and
- c. Data including a business plan with the details as listed in Section 3.2.2.3 to show that the price of the new service is transparent and non-discriminatory and would not have the effect of lessening competition in a relevant market.

A new service that is a combination of services comprising at least one Price Regulated Service is a Price Regulated Service.

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<sup>&</sup>lt;sup>13</sup> Bundling is the practice of forcing ('pure bundling'), or economically inducing ('mixed bundling'), customers to buy a 'bundle' consisting of two or more technically distinct products. Tying is the practice of making the purchase of one product or service conditional upon the purchase of another product or service.

The SMP operator shall not repackage an existing service as a new service. A new service must be materially different to existing services. If the new service is similar to an existing service, the SMP operator must explain the rationale for the launch of the new service.

URCA shall review an application to introduce a new service as follows:

- a. Within 30 days of receipt of a completed (all information is provided in accordance with the submission requirements in this Section) application, URCA shall respond with one of the following:
  - A statement of no objection;
  - A rejection of the application with reasons;
  - A notice that the application will go to public consultation and that
    therefore a final decision is withheld for the time being. URCA will
    consider whether there would be a need for public consultation based
    on factors such as the expected impact of the proposed new service, in
    terms of number of potential customers; revenue impact on the
    operator and expected impact on competition in the market place.
- b. If a notice that the application must go to public consultation is issued, as soon as practicable URCA will allow the public a minimum of 30 days to respond to the consultation, unless otherwise stated by URCA; and
- c. Within 30 days of the close of the public consultation, URCA will publish a final decision.

#### 3.2.3.7 Withdrawal and Discontinuation of Price Regulated Services

The SMP operator shall not withdraw (to existing customers) and/or discontinue (to new customers) the provision of a Price Regulated Service without the prior written approval of URCA.<sup>14</sup>

The SMP operator shall submit to URCA, no less than 90 days prior to the proposed effective date, its proposal to withdraw and/or discontinue the provision of a Price Regulated Service.

The proposal shall include information such as:

- number and profile of current customers/users,
- sales revenue,
- volume of demand and costs,
- the proposed process to notify affected customers; and
- any proposed substitutes for the service.

<sup>&</sup>lt;sup>14</sup> For clarity, "withdraw" means to cease providing the service to existing or new customers. "Discontinue" means to cease offering the service to new customers whilst still providing it to existing customers.

Where appropriate this data should be provided for the last three (3) years, to allow URCA to assess the likely impact on the market of the withdrawal of the service.

URCA shall review an application to withdraw and/or discontinue a Price Regulated Service as follows:

- a. Within 30 days of receipt of a completed (all information is provided in accordance with submission requirements in this Section) application, URCA shall respond with one of the following:
  - A statement of no objection;
  - A rejection of the application with reasons;
  - A notice that the application must go to public consultation as it may
    be of public significance. URCA will consider whether there would be a
    need for public consultation based on factors such as the expected
    impact of the withdrawal or discontinuation of the Price Regulated
    Service, in terms of number of customers affected; possible alternative
    products available to customers; revenue impact on the operator and
    expected impact on competition in the market place.
- b. If a notice that the application must go to public consultation is issued, URCA will allow the public a minimum of 30 days to respond to the consultation unless otherwise stated by URCA; and
- c. Within 30 days of the close of the public consultation, URCA will publish a final decision.

The SMP operator shall give its current users at least 60 days' notice of its decision to withdraw the provision of a Price Regulated Service. The SMP operator shall also publish, no less than 30 days from the effective date of the withdrawal or discontinuation, a notice of its decision to withdraw or discontinue the provision of a Price Regulated Service in one or more newspapers with national circulation.

# 4 Methodology

#### 4.1 Introduction

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. The four markets with interim SMP presumptions and the corresponding SMP operators are:

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

URCA has an obligation in the Comms Act to define the types of obligations that should be applied to the operators presumed to have SMP. 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 it is therefore not possible (or appropriate) for URCA to conduct a full market review procedure in order to determine the types of obligation it should impose on each of the operators presumed to have SMP.

The analysis set out in this Preliminary Determination does not therefore constitute, and was not designed to constitute, a full market review.

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

Market reviews for *ex ante* obligations are always forward-looking as *ex ante* regulation is preventative 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 12-24 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 exact differences between a full market review and the interim market review methodology employed in this determination are shown below:

Standard Market Review Process	Interim Market Review Process		
Market definition	Market definition		
<ul> <li>Identify all products and services offered in the electronic communications markets</li> <li>Demand/supply side substitutability:         <ul> <li>SSNIP<sup>15</sup>test (hypothetical monopolist test based on quantitative data analysis to derive initial relevant markets)</li> </ul> </li> <li>EU three criteria test to derive the markets susceptible to ex ante regulation</li> </ul>	<ul> <li>High level markets pre-defined</li> <li>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:         <ul> <li>SSNIP test (but using actual monopolist, i.e. presumed SMP operator, based on available data, rather than hypothetical monopolist test)</li> </ul> </li> <li>EU three criteria test to derive markets susceptible to ex ante regulation</li> </ul>		
SMP	Interim SMP presumption already determined by the Comms Act		
Actual Monopolist test	,		
Other criteria			
Remedies (obligations)	Remedies (obligations)		
<ul> <li>Total range of potential remedies to market failure</li> <li>Criteria to identify level of remedies required</li> <li>Identify recommended remedies</li> </ul>	<ul> <li>Total range of potential remedies to market failure</li> <li>Criteria to identify level of remedies required</li> <li>Identify remedies for new market entry ("hurdle" remedies acting as competition safeguards across the markets)</li> </ul>		

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.

The following Section sets out the 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.

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<sup>&</sup>lt;sup>15</sup> Small but Significant Non-transitory Increase in Price.

# 4.2 Methodology Overview

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

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

#### <u>Approach</u>

The first Step is to describe all the products offered by the licensee with presumed SMP including any affiliates 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 it likely would be launched in the time period. The description should cover:

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

#### <u>Result</u>

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

# 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 either one or 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.

#### Result

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

#### 3. Repeat process for wholesale

#### Approach

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).

#### Result

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.

### 4.3 Description of the steps

#### 4.3.1 Step 1: Describe the market

A profile of the SMP licensee portfolio including the portfolio of its affiliates is generated through 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 believes could potentially be offered to consumers in The Bahamas within 12-24 months.

# 4.3.2 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 Section covers several aspects:

- substitution analysis using SSNIP<sup>16</sup> test, including comparisons of:
  - characteristics
  - o price

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<sup>&</sup>lt;sup>16</sup> The SSNIP test is performed using the operator with presumed SMP as the hypothetical monopolist.

- o 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.

#### 4.3.2.1 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)<sup>17</sup>. 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 but significant 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 12-24 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 12-24 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 has defined 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.

The 12-24 month period considered in this SSNIP test is assumed to commence on publication of this preliminary determination.

<sup>&</sup>lt;sup>17</sup> 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.

#### 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 the 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 likely only
  substitute to another product that would be cheaper than the increased price or which
  represents 'better value' overall for a similar price.
- 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 of review 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

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

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 competitor). The same principle applies if an existing supplier changes the nature of its current supply – for example, it may launch 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.

#### 4.3.2.2 Determining whether each product is susceptible to ex ante regulation

If URCA concludes 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 either or 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 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 demandor supply-side substitutes identified. The test is applied on a product by product basis, meaning that if individual products are offered in different geographic areas, the regulatory remedies applied may vary in geographic reach on the operator or any affiliate.

#### 4.3.3 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 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 do not 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 which 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.

The wholesale products included in the analysis are a subset of the total wholesale products that could be used to support the retail products in question. This is because URCA considers it would be inappropriate to include all possible wholesale products in this interim process. In general the wholesale products chosen (where several options exist for supporting a given retail product) is the simplest in terms of technical complexity and cost/time to implement for the SMP provider.

Steps 1 and 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' on the wholesale side would be 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 the 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.

### 4.4 Selection of the types of obligations

Once URCA has determined the products susceptible to *ex ante* regulation, obligations will be selected to enable competition to evolve or to result in outcomes which replicate competition.

Any obligations selected by URCA will be driven by the objectives of:

- Promoting competition,
- Proportionality,
- Contributing to the development of sustainable competition,
- Promoting the interest of persons in The Bahamas.

When selecting the types of obligations, URCA has also indicated the relevant parameters for the implementation of these, including the pricing or costing principle to be applied and the time the SMP operator has to demonstrate full compliance.

# Appendix 1 – Background to the high speed data and connectivity market

# 5 Description of retail products

In accordance with Step 1 of the Methodology, this Section will describe the products offered by the licensee with presumed SMP in the high speed data and connectivity market, in this case CBL. The description will cover:

- Characteristics of CBL's products
- Prices
- Geographical reach of the products; and
- Consumer behaviour around the products

This Section will also describe possible substitutes available to consumers for these products. This will include products already existing in The Bahamas and future products which URCA considers are likely to be launched in the 12-24 month period under consideration.

This will result in a list of products offered by CBL and its competitors to enable URCA to undertake the substitutability analysis considered in the next Section.

### 5.1 Products in the high level SMP market

This analysis has taken as its starting point the high speed data services offered by CBL, because it is the operator (together with its affiliates) presumed to have SMP in the market under the Comms Act. CBL offers a wide range of services with different specifications and prices. These can be grouped as follows:

- Broadband internet access
- National data circuits
- International data circuits

These services are described in more detail below.

#### 5.1.1 Broadband internet access

Broadband internet access is high data rate internet access, typically contrasted with dial-up access over a 56k modem. Higher speed broadband internet provides a considerably better user experience and functionality than low speed internet and is therefore likely to be more attractive to consumers.

#### 5.1.1.1 CBL's current offering

CBL offers a broadband internet service to both residential and business consumers. The residential service offers asymmetric and download speeds that range from 1.5Mbps to 9Mbps. The business service offers symmetric and speeds that range from 0.5Mbps to 1.5Mbps.

There are several packages differentiated by service level and price:

#### **CBL** internet packages and prices

	Speed Mbps				Costs \$			
Product	Download	Upload 18	Download limit per month	Webspace MB	Cable modem	Ethernet card (if applicable)	Monthly subscription	
Residential packages								
CoralWave Geo	1.5	0.25	75Mb or 10 hours	5	99.95	40-100	10.70	
CoralWave Jazz	1.5	0.25	50 hours	5	99.95	40-100	21.70	
CoralWave Lite	3	0.5	No limit	10	99.95	40-100	38.70	
CoralWave Groove	6	0.75	No limit	10	99.95	40-100	55.70	
CoralWave Rock	9	1	No limit	20	99.95	40-100	70.70	

Business packages							
CoralWave Pro	0.5-1.5	0.5-1.5	No limit	-	Free	N/A	Not published

Source: CBL website

In order to subscribe to a residential broadband service, customers **must** also subscribe to a CBL cable TV package. The minimum cost of this cable TV package is \$30 per month. Therefore the minimum monthly subscription payment to purchase internet from CBL can be thought of as **\$40.70** plus the installation costs, although many subscribers will also require the TV service and not view this as an additional cost.

#### **Characteristics**

URCA has identified the following characteristics as important to the consumer's experience of CBL's broadband access and relevant to the consumer's decision to choose between CBL broadband access and possible substitutes:

- The service is 'always on'; no dialling is required. This allows the user to maintain a permanent connection to the network.
- High downloads speeds are possible. CBL offers speeds ranging from 0.5Mps to 9Mps<sup>19</sup>.

<sup>18</sup> 1Mbps is equivalent to 1024Kbps.

<sup>&</sup>lt;sup>19</sup> International definitions of "high speed" broadband vary. The improvement in functionality is continuous and therefore there is no natural distinction between low speed and high speed

Broadband internet access is capable of carrying more than one type of service (i.e. internet, TV, voice<sup>20</sup>) simultaneously.

#### Coverage

CBL's broadband service is provided over its cable infrastructure. It requires both on-island cable infrastructure and inter-island backhaul capacity, which is provided by sub-sea cable. It currently has a geographic coverage of New Providence, Grand Bahama, Abaco, Eleuthera and partial coverage on other islands.

#### 5.1.2 National data circuits

This is private ("leased") capacity for businesses, providing either LAN-to-LAN or LAN-to-Internet connectivity within the country.

#### 5.1.2.1 CBL's current offering

CBL offers national data circuits to business consumers at speeds ranging from 1.5Mbps to 2.4Gbps<sup>21</sup>. It uses its cable network within The Bahamas to provide this service.

CBL does not publish prices for these services on its website.

#### **Characteristics**

At the retail level, the main distinguishing features of CBL's data circuits are that these:

- Are capable of carrying more than one type of service (i.e. internet, TV, voice<sup>22</sup>) simultaneously.
- Provide end-to-end capacity dedicated to the user's use.
- Provide symmetric bi-directional bandwidth.
- Provide speeds ranging from 1.5Mbps to 2.4Gbps.

#### Coverage

CBL's data circuit service is currently provided over CBL's cable infrastructure, meaning it has coverage of New Providence, Grand Bahama, Abaco and Eleuthera and partial coverage on other islands.

broadband. URCA has considered the range of speeds available from possible substitutes and compared them to CBL. Download speeds are considered to be more important than upload speeds for residential customers especially, as it is the download speed which is mainly experienced by the consumer as they draw content from the World Wide Web and access websites.

<sup>&</sup>lt;sup>20</sup> CBL is currently prohibited from providing voice service except to BTC (although URCA understands that it is technically capable of doing so). It does however provide TV and broadband on the same connection simultaneously.

<sup>&</sup>lt;sup>21</sup> Source: CBL website

<sup>&</sup>lt;sup>22</sup> CBL is currently prohibited from providing voice service except to BTC (although URCA understands that it is technically capable of doing so). It does however provide TV and broadband on the same connection simultaneously.

#### 5.1.3 International data circuits

This is private ("leased") capacity for businesses, providing either LAN-to-LAN or LAN-to-Internet connectivity within the country and to overseas locations.

#### 5.1.3.1 CBL's current offering

CBL offers international data circuits to business consumers at speeds ranging from 1.5Mbps to 2.4Gbps. It uses its cable network within The Bahamas and the international fibre link of its subsidiary, Caribbean Crossings Ltd. ("CCL") to provide these services.

CBL does not publish its prices for international data circuits on its website.

#### **Characteristics**

At the retail level, the main distinguishing features of CBL's international data circuits are that these:

- Are capable of carrying more than one type of service (i.e. internet, TV, voice<sup>23</sup>) simultaneously.
- Provide end-to-end capacity dedicated to the user's use
- Provide symmetric bi-directional bandwidth
- Provide speeds ranging from 1.5Mbps to 2.4Gbps
- Provide international connectivity

#### Coverage

CBL's data circuit service is currently provided over its cable infrastructure, meaning it has a geographic coverage of New Providence, Grand Bahama, Abaco and Eleuthera. It connects internationally via CCL's international fibre link to Boca Raton in Florida.

#### 5.2 Possible substitutes

This Section outlines the products which could be possible substitutes for CBL's products. It covers those products which:

- Are currently available; and
- Could become available within the 12-24 month time period under review.

Future products, including both new products and expansions or improvements in current products, have only been considered when URCA believes that there is a reasonably high probability of their being available to consumers to the extent that they could constrain CBL's prices in the 12-24 month period under review.

<sup>&</sup>lt;sup>23</sup> CBL is currently prohibited from providing voice service except to BTC (although URCA understands that it is technically capable of doing so). It does however provide TV and broadband on the same connection simultaneously.

The products are organised by provider:

- BTC
- Systems Resource Group Ltd. (SRG)
- Satellite Bahamas
- Various Internet Service Providers (ISPs)<sup>24</sup>
- New entrants

#### 5.2.1 **BTC**

BTC currently offers products which could substitute for the following CBL products:

- Broadband internet access
- National data circuits
- International data circuits

URCA has also considered possible future services within the relevant timescales which BTC could offer, which could be substitutes for CBL's broadband internet access.

These products are described in more detail below.

### 5.2.1.1 Current BTC products

#### **Broadband internet access**

BTC offers a range of ADSL<sup>25</sup> and sDSL<sup>26</sup> broadband products of up to 1Mbps to residential customers and 1.5Mbps to business customers over its fixed telecommunications network.

#### **BTC residential ADSL internet prices**

Speed Kbps						
Product	Download	Upload	Installation	Activation	Monthly subscription	E-mail addresses
AutoSpeed	384	128	30.00	24.99	34.99	1

<sup>&</sup>lt;sup>24</sup> The ISPs have been grouped because they have reasonably similar characteristics, price and coverage, and because URCA believes that grouping them does not affect the analysis.

<sup>&</sup>lt;sup>25</sup> Asymmetric Digital Subscriber Line (ADSL) is a form of DSL, a data communications technology that enables faster data transmission over copper telephone lines than a conventional voiceband modem can provide. The distinguishing characteristic of ADSL over other forms of DSL is that the volume of data flow is greater in one direction than the other, i.e. it is asymmetric. Providers usually market ADSL as a service for consumers to connect to the Internet in a relatively passive mode: able to use the higher speed direction for the "download" from the Internet but not needing to run servers that would require high speed in the other direction.

<sup>&</sup>lt;sup>26</sup> Symmetric Digital Subscriber Line (sDSL) refers to internet access technologies based on DSL that offer symmetric bandwidth upstream and downstream. It is contrasted with ADSL technologies, where the upstream bandwidth is lower than the downstream bandwidth.

CruiseSpeed	1024	384	30.00	24.99	54.99	1

Source: BTC website

#### **BTC business ADSL internet prices**

	Speed Kbps					
Product	Download	Upload	Installation	Activation	Monthly subscription	E-mail addresses
BizSpeed 1	256	128	75.00	24.99	75.00	3
BizSpeed 2	384	128	75.00	24.99	105.00	3
LightSpeed 1	512	256	75.00	24.99	300.00	5
LightSpeed 2	1.5Mbps	512	75.00	24.99	490.00	10

Source: BTC website

BTC also offers an sDSL service to business customers, with both download and upload speeds of up to 1.5Mbps.

#### BTC business sDSL internet prices

	Speed	l Kbps	Costs \$				
Product	Down	Up	Installation	Activation	Monthly subscription		
WARPSpeed 1	512	512	200.00	-	400.00		
WARPSpeed 2	1024	1024	200.00	-	590.00		
WARPSpeed 3	1.5Mbps	1.5Mbps	200.00	-	850.00		

Source: BTC website

Broadband can be bought together with BTC's standard phone line or separately. When purchased separately it is known as 'naked DSL'.

#### **BTC naked DSL internet prices**

	Speed Mbps		Costs \$		
Product	Down	Up	Security deposit	Activation	Monthly subscription
Autospeed	Up to 1	N/A	180	-	45.00
Cruisespeed	Up to 2	N/A	180	-	59.99

Source: Information provided by BTC

#### Leased lines<sup>27</sup>

BTC offers digital and analogue national and international leased lines.

<sup>27</sup> Please note that leased lines and data circuits are names for the same type of service – BTC calls its services leased lines and CBL calls its services data circuits.

#### **Analog Leased Lines**

BTC provides national and international leased lines between The Bahamas and most areas of the United States, Canada and the Caribbean countries.

The Analog Leased Line is commonly available and used in speeds of 9.6bps to 2,048Mbps for use in the transmission of voice and data.

#### **Digital Leased Lines**

The Digital Leased Line is sometimes referred to as IBS Services (International Business Satellite Service). Customers are charged an initial installation fee and a monthly fixed charge depending on the speed of the line, the contract period and the distance between the two ends of the line.

The Digital Leased Line transmits via fibre cable at speeds of 56kbps up to 2.048mbps. The services are termed as follows:

- 1. Digital Local Loop
- 2. Domestic Digital Circuit
- 3. International Digital Service

## 1. Digital Local Loop

The Digital Local Loop service within Nassau or The Bahamas, transmits over analog cable either through copper wire, T-screen or Fibre Optics. Once the circuit is within a 3-mile radius from BTC's Transmission Centre, digital connectivity can be accomplished.

#### 2. Domestic Digital Circuit

The Domestic Digital service represents the link between New Providence and the Family Islands. The service transmits via a Digital Micro-Wave Link.

#### 3. International Digital Service

The International Digital Circuit transmits via fibre cable between Nassau, The Bahamas and Vero Beach, Florida, using one of the registered International Carriers. The local customer is connected to BTC's Transmission Centre via Digital Local Loops.

BTC also offers a satellite service as part of its leased line offering, connecting via satellite rather than sub-sea cable. URCA believes this may be used for resilience and is likely to be at a lower quality than cable.

BTC Digital local loop leased line via cable prices

Prices

		Monthly charge \$				
Speed	Installation \$	Standard	1-year sign-up at 5% discount	3-year sign-up at 10% discount	5-year sign-up at 15% discount	
56kb	140.00	73.50	69.83	66.15	62.48	
128kb	140.00	98.00	93.10	88.20	83.30	
256kb	140.00	122.50	116.38	110.25	104.13	
384kb	140.00	147.00	139.65	132.30	124.95	
512kb	140.00	171.50	162.93	154.35	145.78	
786kb	140.00	196.00	186.20	176.40	166.60	
1,024Mb	140.00	220.50	209.48	198.45	187.43	
1,544Mb- T1/DS1	140.00	245.00	323.75	220.50	208.25	
2,048Mb	420.00	343.00	325.85	308.70	291.55	
3,066Mb	490.00	441.00	418.95	396.90	374.85	
45Mb	1,400.00	6,480.00	6,156.00	5,832.00	5,508.00	

Source: BTC website

Note: Termination equipment charged separately.

## **Domestic/Island to Island Line Charges with Discounts**

		Monthly charge \$			
Speed	Installation \$	Standard	1-year sign-up at 5% discount	3-year sign-up at 10% discount	5-year sign-up at 15% discount
64kb	350.00	343.00	325.85	308.70	291.55
128kb	350.00	392.00	372.40	352.80	333.20
256kb	350.00	441.00	418.95	369.90	374.85
384kb	350.00	490.00	465.50	441.00	416.50
512kb	350.00	539.00	512.05	485.10	458.15
786kb	350.00	588.00	558.60	529.20	499.80
1,024Mb	350.00	637.00	605.15	573.30	541.45
1,544Mb- T1/DS1	350.00	686.00	651.70	617.40	583.10
2,048Mb	420.00	784.00	744.80	705.60	666.40
3,066Mb	490.00	882.00	837.90	793.80	749.70
10Mb	650.00	2,876.71	2,732.88	2,589.04	2,322.95
45Mb	2,000.00	12,960.00	12,312.00	11,664.00	11,016.00
155Mb- STM1/OC3	5,000.00	44,738.63	42,501.70	40,264.77	38,207.84

Source: BTC website

Note: Local Loop charges included. Termination equipment charged separately.

## BTC international leased line via cable prices

		Monthly charge \$			
Speed	Installation \$	Standard	1-year sign- up at 5% discount	3-year sign- up at 10% discount	5-year sign- up at 15% discount
64kb	1,050	501.20	476.14	451.08	426.02
128kb	1,050	1,003.10	952.95	902.79	852.64
256kb	1,050	1,836.10	1,744.30	1,652.49	1,560.69
384kb	1,050	2,507.40	2,382.03	2,256.66	2,131.29
512kb	1,050	3,265.50	3,102.23	2,938.95	2,775.68
786kb	1,050	3,731.70	3,545.12	3,358.53	3,171.95
1,024Mb	1,400	4,198.60	3,988.67	3,778.74	3,568.81
1,544Mb-T1/DS1	1,400	4,900.00	4,655.00	4,410.00	4,165.00
2,048Mb	1,400	5,597.90	5,318.01	5,038.11	4,758.22
3,066Mb	2,100	6,664.00	6,330.80	5,997.60	5,664.40
10Mb	4,000	21,735.16	20,648.40	19,561.64	18,474.89
45Mb	5,000	50,000.00	47,500.00	45,000.00	42,500.00
155Mb-STM1/OC3	5,000	85,000.00	80,750.00	76,500.00	72,250.00

Source: BTC website

Note: Local Loop charges included. Termination equipment charged separately.

#### BTC international leased line via satellite prices

		Monthly charge \$			
Speed	Installation \$	Standard	1-year sign-up at 5% discount	3-year sign-up at 10% discount	5-year sign-up at 15% discount
DS-3	3,000	50,000	47,500	45,000	42,500

Source: BTC website

#### Coverage

All the BTC products described above are currently available in New Providence, Grand Bahama, Abaco, Andros, Berry Islands, Bimini, Crooked Island, Eleuthera, Exuma, Inagua, Long Island and San Salvador<sup>28</sup>.

#### 5.2.1.2 Possible future BTC products

URCA understands that BTC is currently in the process of migrating to Next Generation Network ("NGN")<sup>29</sup>, the aim being to have an all-IP network within the next few years<sup>30</sup>.

NGN and advanced DSL technology such as ADSL2+ and VDSL should enable higher speed broadband (and leased lines). It could also enable IPTV, which would technically enable BTC to provide both TV and internet on its own network in a manner similar to CBL. However, BTC's ability to launch IPTV will be dependent upon its compliance with any *ex ante* regulation imposed on it due to its presumed SMP in other high-level markets. Consequently, URCA does not believe that BTC will be able to complete its roll-out of NGN and comply with its *ex ante* obligations within the time period considered in this review. BTC's NGN service will not be considered further in this review.

Developments in BTC's mobile infrastructure could allow it to offer services which would be possible substitutes for its broadband access service. URCA does not believe that BTC has any plans in the 12-24 month time period considered in this review to expand further its mobile infrastructure, therefore this service is not considered further in this review.

BTC may also be able to develop high speed mobile data products by upgrading its existing mobile infrastructure. URCA does not know BTC's plans but these products could theoretically include 3G and WiMAX.

3G would enable various data capabilities which could present alternatives to fixed broadband access. WiMAX is a telecommunications technology that provides wireless transmission of data using a variety of transmission modes, from point-to-multipoint links to

<sup>28</sup> Source: information provided by BTC.

<sup>&</sup>lt;sup>29</sup> Next Generation Networking, is the term given to describe a telecommunications packet-based network that handles multiple types of traffic (such as voice, data and multimedia)

<sup>&</sup>lt;sup>30</sup> Source: information provided by BTC indicates the first quarter of 2011 (response to the Access and Interconnection consultation).

portable and fully mobile internet access. The technology provides up to 3 Mbps broadband speed.

However, it is URCA's view that BTC is unlikely to launch 3G or WiMax within the 12-24 month time period under review, because of the considerable licensing and infrastructure requirements. Consequently 3G and WiMax services are not considered further in this review.

#### 5.2.2 **SRG**

URCA does not have detailed information about all of SRG's products, network and prices. Based on the information available, URCA considered whether SRG currently offers, or could possibly offer in the future, products which could substitute for the following CBL products:

- Broadband internet access
- National data circuits
- International data circuits

These products are described in more detail below.

#### 5.2.2.1 Current SRG products

#### Broadband internet access

SRG has access to 2.5GHz spectrum in The Bahamas, which can be used in delivering broadband services. However, SRG does not appear currently to focus on the deployment of broadband.

URCA does not have detailed information about SRG's broadband services but understands that it does offer wireless internet to business customers only, at speeds of around 1.5Mbps. URCA understands that SRG's market share for this product is low<sup>31</sup>. It is therefore not considered a core service for SRG. The SRG high-speed broadband products are therefore not considered within the substitution analysis.

## Leased lines

URCA understands that SRG offers high speed leased lines to business customers using wireless technology, which could possibly be substitutes for the CBL data circuits. However, SRG does not currently have a strong presence in the market. Its offered services include analog circuits and digital T1 trunks<sup>32</sup>. Leased lines do not appear to be a significant part of SRG's operations and therefore it is not considered within the substitution analysis.

## Coverage

SRG's licence was historically restricted to operations in New Providence, Grand Bahama and Abaco, but URCA is unclear of the exact coverage of its broadband internet access service.

<sup>&</sup>lt;sup>31</sup> Information provided by SRG.

<sup>&</sup>lt;sup>32</sup> A T1 circuit is made up of 24 8-bit channels, each channel being a 64 kbit/s multiplexed carrier circuit. A T1 circuit can also be a full-duplex circuit, which means the circuit transmits and receives up to 1.544 Mbps concurrently.

## 5.2.2.2 Possible future SRG products

URCA is not aware of any plans for new services, or expansions of current services, to be launched by SRG within the 12-24 month review period.

#### 5.2.3 Satellite Bahamas

Satellite Bahamas offers broadband access products which could substitute for CBL's broadband access product.

## Broadband internet access

Satellite Bahamas offers a range of broadband packages:

#### Satellite Bahamas internet packages and prices

	Speed	Mbps		Costs \$		
Product	Down	Up	Email addresses	Equipment – purchase	Equipment – monthly lease	Monthly subscription
	1	0.125	5	250	\$50 then \$10/month	60
Pro	1.2	0.2	5	250	\$50 then \$10/month	70
ProPlus	1.6	0.25	5	250	\$50 then \$10/month	80
Elite	2	0.3	10	250	\$50 then \$10/month	120
ElitePlus	3	0.3	10	250	\$50 then \$10/month	190
ElitePremium	5	0.3	10	250	\$50 then \$10/month	350

Source: Satellite Bahamas website, which links to Hughesnet website, the U.S. company that physically delivers the broadband service.

#### Coverage

These services are available throughout The Bahamas, although location and local obstruction can affect the quality of signal received in a very small number of homes<sup>33</sup>.

## 5.2.4 Internet Service Providers

A number of ISPs in The Bahamas offer internet products which could be substitutes for CBL's broadband access product.

## 5.2.4.1 Current ISP products

The ISPs offer wireless broadband and dial-up internet to residential and business consumers. Some of the products are at speeds above 1.5Mbps.

Speedway<sup>34</sup> is an example of an ISP providing speeds under 1.5Mbps only. It offers wireless internet at speeds of 256kbps for \$49 per month, 384kbps for \$59 per month, 512kbps for \$75 per month, and 1Mbps for \$99 per month.

<sup>&</sup>lt;sup>33</sup> The company website suggests 3% of homes attempting to use the service will be affected.

<sup>&</sup>lt;sup>34</sup> Trades as Future Net and Speedway Internet.

Pro's Wireless is an example of an ISP providing speeds of 1-2Mbps. URCA does not have access to detailed information about their network but understands that they offer speeds of 1-2Mbps for \$30 per month to residential customers, and \$50 per month to business customers. There is an internet activation fee of \$99 and the first month's subscription is free after installation<sup>35</sup>.

### Coverage

The geographic reach of the ISPs is currently limited to the most populated islands. Future Net, for example, only offers its services in New Providence.

#### 5.2.5 **New entrants**

URCA has considered whether there could be new entrants providing possible substitutes within the 12-24 month period under review. URCA believes this is unlikely absent regulation given the existing level of competition.

## 5.3 Consumer behaviour in the market

#### 5.3.1.1 **Broadband internet access**

Detailed subscriber data is unavailable, although the total number of internet subscribers in The Bahamas is believed to be in the region of 60,000<sup>36</sup>. From review of CBL and BTC financial statements, URCA believes that CBL and BTC have approximately 60-65% and 30-35% market share respectively of the overall internet market (all speeds). Satellite Bahamas and ISPs are thought to have around 5%<sup>37</sup> market share.

#### 5.3.1.2 National data circuits

URCA does not have detailed information on consumer behaviour in national data circuits. Information provided by the operators has allowed URCA to estimate that CBL's market share based on customer numbers is 3%<sup>38</sup> and its market share based on revenues is 3%. URCA understands that beyond BTC there are no other significant players in the market and therefore BTC's shares are in the region of ¾% and ¾% respectively.

#### International data circuits

URCA does not have detailed information on consumer behaviour in international data circuits. Information provided by the operators has allowed URCA to estimate that CBL's market share based on customer numbers is 3<% and its market share based on revenues is \$\lambda \text{... URCA understands that there are no other significant players beyond BTC in the market and therefore BTC's market shares are ¾% and ¾% respectively.

<sup>&</sup>lt;sup>35</sup> Source: Pros Wireless.

<sup>&</sup>lt;sup>36</sup> URCA estimate based on information from operators.

<sup>&</sup>lt;sup>37</sup> URCA estimate.

<sup>&</sup>lt;sup>38</sup> The information available to URCA is a snapshot rather than detailed historical picture and URCA recognises also that some of the data is confidential for commercial reasons. For these reasons the numbers are not presented.

## 6 Retail products in the high-level SMP market

This Section describes the analysis performed on the products identified in Section 5 above using the Methodology described previously.

The following products are examined in turn:

- Broadband internet access
- National data circuits
- International data circuits

URCA has first considered the demand- and supply-side substitutes for these products, in accordance with Step 2 of the Methodology.

Those products for which URCA has identified no effective demand- or supply-side substitutes within the defined period are then subjected to the so-called "EU three criteria test", in accordance with Step 2 of the Methodology: The three criteria are:

- the presence of high and non-transitory entry barriers;
- a market structure which does not tend towards effective competition during the timeframe of this review; and
- the application of competition law alone would not adequately address market failures that may arise.

The application of these criteria is used to determine whether to exclude a product from the high level market for which the operator is presumed to have SMP.

## 6.1 Broadband internet access

The product has first been tested for substitutability, in accordance with Step 2 of the Methodology. It was tested first for demand-side substitution and then for supply-side substitution.

Note on impact of tying of internet and TV by CBL

CBL ties its TV and internet services. This means that the purchase of CBL's internet services is conditional upon consumers also purchasing one of CBL's pay TV services, the least costly of which is the SuperBasic package. Prices for the CBL TV service start at \$30 per month.<sup>39</sup>

The tying of TV and internet complicates the comparison of CBL's prices to those of other providers, none of whom currently tie internet to other services in this way. For consumers who are already purchasing TV from CBL, the additional price of broadband is considerably lower than the price of all other internet services for comparable (although mostly lower) speeds. However, it is possible that some consumers buy the cheapest TV package from CBL only *in order* to buy CBL's internet (due to its characteristics, including available speed). For these consumers, the \$30 monthly price for TV should be added to the stated price for CBL broadband. The \$10.70 per month package, for instance, would then cost \$40.70 per month. The addition of \$30 to each of CBL's prices brings them closer to the prices of other providers. However CBL is still cheaper than its competitors for similar speeds.

## 6.1.1 Demand-side substitution for broadband internet access

The demand-side SSNIP test asks what would happen to demand over a 12-24 month period were CBL to increase its prices for broadband internet access by 5-10% for a non-transitory period of time. Would the price increase be profitable to CBL or not?

URCA has considered demand-side substitution from a number of sources:

• Current products: Broadband internet access from BTC (fixed network), Satellite Bahamas, Various ISPs.

BTC broadband on its fixed network

#### Characteristics

BTC's services have all but one of the characteristics of the CBL service as demonstrated by the summary table at the end of this Section. However, BTC does not offer a similar range of high download speeds. The maximum speed available to residential and business consumers is 1.5Mbps. A subscriber to CBL's higher speed services such as the 9Mbps product is unlikely to consider 1.5Mbps a good substitute.

### Coverage

BTC's coverage is greater than CBL's and coverage would therefore not be a barrier to switching.

<sup>&</sup>lt;sup>39</sup> See Pay TV background paper, below (Appendix 2).

#### **Price**

BTC's products are more expensive than CBL's for equivalent speeds. BTC, for example, offers an ADSL product with a download speed of 1Mbps for \$54.99 per month. This is higher than the \$40.70 tied price of CBL's minimum residential broadband package (1.5Mbps) with SuperBasic TV. A 5-10% price increase in the CBL service would not make BTC cheaper than CBL for equivalent speeds.

→Because of the price differences and the fact that BTC does not offer high download speeds, it is URCA's view that BTC's broadband is not an effective substitute for CBL's, in those areas where CBL's broadband is available. URCA therefore concludes that BTC's broadband services are unlikely to constrain CBL's ability to profitably increase its prices by 5-10% for a non-transitory period.

Satellite Bahamas broadband

#### Characteristics

Satellite Bahamas offers download speeds which are similar to CBL's, with a maximum download speed of 6Mbps compared to a CBL maximum of 9Mbps. URCA does not consider this difference to be significant. The service offered by Satellite Bahamas also has other characteristics similar to the CBL service, as shown in the summary table at the end of this Section.

### Coverage

Satellite Bahamas' coverage is greater than CBL's, although at present they do not actively market to as wide an area as CBL.

## **Price**

Satellite Bahamas' internet service costs considerably more than CBL's, starting at \$80 per month<sup>40</sup> compared to \$10.70 (or \$40.70 including the TV subscription component) for CBL. A 5-10% increase in the CBL price would therefore not make it more expensive than Satellite Bahamas', and in fact CBL's price would remain considerably cheaper.

→It is URCA's view therefore that the high price of Satellite Bahamas' broadband access products means that they are not an effective substitute for CBL's products, in those areas where CBL's products are available. URCA therefore concludes that Satellite Bahamas' broadband services are unlikely to constrain CBL's ability to profitably increase its prices by 5-10% for a non-transitory period.

Internet from various ISPs

#### Characteristics

Some ISPs offer broadband with some of the characteristics of the CBL service. However, URCA understands that they do not currently provide speeds above 1.5-2Mbps. The price

<sup>&</sup>lt;sup>40</sup> This is before the installation costs of \$275 for the purchase of a dish and receiver card, which are also high.

would need to be considerably lower than the price for broadband internet in order to provide a satisfactory alternative for users of CBL's higher speeds.

#### Coverage

The ISPs have narrower coverage than CBL and this limits their ability to provide overall effective substitution for CBL broadband.

## **Price**

ISPs do not offer prices which are significantly lower than CBL's.

→ While ISPs provide a service which is comparable in some respect to CBL's, they do not offer the same high speeds or the same level of coverage. The prices are also not significantly lower. For these reasons URCA believes that a large number of consumers are likely to pay a 5-10% higher price rather than switch to broadband from an ISP. It is URCA's considered view that internet access from ISPs is not a sufficiently good substitute for CBL's broadband access to constrain CBL's ability to raise prices profitably by a small amount.

## 6.1.2 Supply-side substitution for broadband internet access

The supply-side SSNIP test asks what would happen to supply over a 12-24 month period were CBL to increase its prices for broadband internet access by 5-10% for a non-transitory period of time. Would other suppliers enter the market and provide new substitutes, or would existing suppliers change the nature of their offerings? Would the resulting demand-side substitution mean that the price increase was unprofitable to CBL?

There are two main ways supply-side substitutes could be brought into the market: new entrants building new infrastructure and BTC or SRG launching a comparable high speed product.

There are high market entry barriers making the first option unlikely. The infrastructure investment required to provide broadband internet would be substantial. It is unlikely a new entrant would decide to build alternative infrastructure in response to a small CBL price increase when there are already two developed infrastructures.

URCA understands that BTC is planning to upgrade to an all-IP NGN network<sup>41</sup> within the next few years. Details have not been made available, but this could enable it to offer new high speed data products in response to a CBL price increase. URCA does not believe that a 5-10% increase in CBL's price would significantly affect BTC's existing plans for rollout of new data products, as it has already committed to the investment. Therefore this does not represent supply-side substitution as BTC's activity is not related to CBL's pricing and is already considered under the demand-side substitution above.

URCA believes it is possible that SRG could also launch a broadband internet product. The fact that SRG can already offer connection speeds of 1.5Mbps suggests it may be able to offer higher speeds within 12-24 months. SRG could use its existing 2.5GHz spectrum to deploy significant WiMax internet. However, SRG is already technically able do so but has not done so, possibly because of the high cost of rolling out extra infrastructure. URCA

<sup>&</sup>lt;sup>41</sup> Enabling advanced DSL services such as ADSL2+ including the provision of fibre to the curb in some areas, enabling VDSL services.

thinks it unlikely that a 5-10% change in the price of CBL broadband would affect this position.

→ Based on the information available it is unlikely that there will be effective supply-side substitution for CBL's broadband internet access product within the period under review.

#### 6.1.2.1 Conclusion of substitutability test

It is unlikely that there will be effective substitutes for CBL's broadband internet access product within the 12-24 month time period that would make a non-transitory 5-10% price rise unprofitable for CBL. Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation.

#### 6.1.3 **EU three criteria test**

#### 6.1.3.1 Barriers to entry

It would be difficult for a new entrant to The Bahamas to replicate CBL's network. Alternative platforms such as satellite and WiMax are also costly to deploy, although less costly than a cable-based network, and difficult to construct. All require significant investment. Additionally, mobile platforms require access to spectrum that is difficult to obtain and would take time to roll out.

## 6.1.3.2 Emergent competition at the retail level

As set out in the demand-side substitutability Section above, there is some existing competition for this product already. However, CBL has significant market share which seems stable and when combined with the service being tied to the SuperBasic Pay TV service, it is difficult to envisage substantial competition absent regulatory intervention. URCA is therefore of the view that there may be insufficient emergent retail competition to place significant constraints on CBL.

#### 6.1.3.3 Sufficiency of ex post competition law

URCA has considered whether the possibility of *ex post* competition law to tackle abuses of a dominant position would be sufficient to address the market failures.

When considering this question, it is important to understand the nature of the market and products in question. Electronic communications services are provided through electronic communications networks, all of which require substantial investment and of which the local access infrastructure is considered the most difficult component to replicate by potential competitors. This product relies upon the access infrastructure. Precedents indicate that access to infrastructure controlled by another provider is best achieved by recourse to regulation (rather than the application of competition law). If an SMP provider of services based on the local access infrastructure were to abuse its market power in the provision of these products it could cause long-term damage to the prospect of competitive provision of the products as well as short-term damage to consumers, businesses and the overall Bahamian economy through the imposition of anti-competitive trading conditions.

URCA therefore does not consider that *ex post* competition law measures on their own would be sufficient to address potential problems arising from an abuse of market power in this area.

## 6.1.3.4 Conclusion of EU three criteria test

None of the three criteria were met for CBL's broadband internet access product. Therefore the conclusion of the EU three criteria test is that this product is susceptible to *ex ante* regulation and belongs in the relevant market.

## 6.1.4 Geographic reach

The geographic reach of this product is defined as the area in which CBL has facilities to provide the product.

The table below summarises the SSNIP test and EU three criteria test for Broadband internet access.

## **SSNIP** test results for Broadband Internet Access

	Possible Substitu		stitutes
	Fixed network + DSL	Satellite	Various
	ВТС	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

## EU three criteria test results for Broadband internet access

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

## Key:

Note for the SSNIP test: When assessing the characteristics, pricing and coverage of the substitutes, CBL broadband internet access package has been used as the benchmark. When a criterion is demonstrated to a greater or equal degree as CBL, URCA indicates this with a mark of three (and so on, see the key below). The review of future products makes use of URCA's knowledge of the market and operators, the experience of other countries and any other relevant evidence available to URCA.

•••	Demonstrates the criterion to the greater or equal degree as CBL
••	Adequately demonstrates the criterion compared to CBL
•	Poorly demonstrates the criterion compared to CBL
-	Does not demonstrate the characteristic
?	Insufficient information available to URCA
Italics	Used for products not currently available in The Bahamas

## 6.2 Data circuits (national and international)

These products have first been tested for substitutability, in accordance with Step 2 of the Methodology. They were tested first for demand-side substitution and then for supply-side substitution.

#### 6.2.1.1 Demand-side substitution for data circuits

The demand-side SSNIP test asks what would happen to demand over a 12-24 month period were CBL to increase its prices for data circuits by 5-10% for a non-transitory period of time. Would it be profitable to CBL or not?

URCA has considered possible demand-side substitution from BTC leased lines.

BTC leased lines

#### **Characteristics**

BTC's products appear to have the same characteristics as CBL's as demonstrated by the summary table at the end of this Section. They therefore appear to be a good substitute in this respect.

#### **Price**

URCA does not have CBL's price data for these services, therefore URCA is unable to compare BTC's prices $^{42}$  to those of CBL $^{43}$ .

#### Coverage

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<sup>&</sup>lt;sup>42</sup> BTC's prices for its leased lines product are set out in detail in URCA's Preliminary Determination for BTC (ECS 18/2009) at <a href="https://www.urcabahamas.bs">www.urcabahamas.bs</a>.

<sup>&</sup>lt;sup>43</sup> This is a common problem faced by regulators when conducting market reviews of leased line markets, because it is rare for leased line prices to be published by non-SMP operators. Most contracts are tailored to the customer's needs, to reflect distance between locations and scope of services to be provided. Regulators often rely on comparison of characteristics in these circumstances.

BTC's services have wider coverage than CBL's.

→BTC is the only possible demand-side substitute for CBL's data circuits, and it would appear to be a reasonable substitute in terms of characteristics and coverage although without pricing information for CBL, it is not possible for URCA to do a complete analysis.

Although BTC appears to be a reasonable substitute, URCA has concerns as to whether a duopoly between BTC and CBL will provide long-term effective competition in the market for national and international data circuits, given that CBL and BTC are the only two operators with extensive networks and that they both have vertically integrated network and service provision. These concerns arise from evidence from other markets where the existence of a vertically integrated duopoly does not result in price levels achieved in countries with more than two providers.

Based on these considerations, URCA believes that it is unlikely that there is effective demand-side substitution for CBL's data circuits.

## 6.2.2 Supply-side substitution for data circuits

The supply-side SSNIP test asks what would happen to supply over a 12-24 month period were CBL to increase its prices for data circuits by 5-10% for a non-transitory period of time. Would other suppliers enter the market and provide new substitutes, or would existing suppliers change the nature of their offerings? Would the resulting demand-side substitution mean that the price increase was unprofitable to CBL?

Barriers to entry in this market are high because of the need for extensive and expensive infrastructure. URCA therefore believes it is unlikely that other suppliers would enter the market in response to a 5-10% retail price increase by CBL.

BTC already has greater coverage than CBL and offers a similar range of speeds. Therefore it is unlikely it would alter its supply of services in response to a 5-10% increase in the price of CBL's services.

→ Based on the evidence available, URCA does not feel confident that there will be supplyside substitution for CBL's data circuits in the time period under review.

## 6.2.3 Conclusion of substitutability test

The SSNIP test found that it is unlikely that there will be effective substitutes for CBL's data circuits within the 12-24 month time period that would make a non-transitory 5-10% price rise unprofitable for CBL.

Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and consequently belongs in the SMP market.

## 6.2.4 EU three criteria test

#### 6.2.4.1 **Barriers to entry**

In the timescale considered in this review, URCA believes that it is very unlikely that further operators would roll-out the physical networks required to provide this service in order to compete with CBL. Roll-out of a third network would represent considerable investment both in terms of cost and time. The barriers to entry to this product are considered very high.

## 6.2.4.2 Emergent competition at the retail level

URCA has no evidence of emergent competition in this area beyond BTC's services, and without price information for CBL it is not possible to gauge how effective that competition is or is likely to be. Further, as discussed above, URCA has concerns that the existence of a duopoly of vertically integrated network and services providers is unlikely to generate effective competition and deliver the benefits of competition to the users of leased lines services.

URCA is therefore of the view that there may be insufficient emergent retail competition to place significant constraints on CBL.

### 6.2.4.3 Sufficiency of ex post competition law

For the reasons discussed in relation to broadband internet access *ex post* intervention is unlikely to be sufficient.

## 6.2.5 Conclusion of EU three criteria test

None of the three criteria were met for CBL's data circuits. Therefore the conclusion of the EU three criteria test is that this product is susceptible to *ex ante* regulation and belongs in the relevant market.

## 6.2.6 **Geographic reach**

The geographic reach of this product is defined as the area in which CBL has facilities to provide the product.

The table below summarises the SSNIP test and EU three criteria test for national and international data circuits.

#### SSNIP test results for national and international data circuits

	Possible Substitutes
	Fixed network
	ВТС
Characteristics	
More than one service possible on one line	•••
Dedicated, end-to-end capacity	•••
Symmetric bi-directional bandwidth	•••
Speeds of 1.5Mbps - 2.5Gbps	••
Price	?
Coverage	•••
Likely to be an effective substitute within the time period under review?	?N

#### EU three criteria test results for national and international data circuits

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

**Key:** Please reference summary table for Broadband Internet Access

<u>Note for the SSNIP test</u>: When assessing the characteristics, pricing and coverage of the substitutes, CBL's data circuits have been used as the benchmark. When a criterion is demonstrated to a greater or equal degree as CBL, URCA indicates this with a mark of three (and so on). The review of future products makes use of URCA's knowledge of the market and operators, the experience of other countries and any other relevant evidence available to URCA.

## 6.3 Conclusion on retail products in the SMP market

Following the analysis of the demand- and supply-side substitutability of the retail products and EU three criteria tests applied above, URCA has concluded that the following products are part of the relevant market for high speed data and connectivity services in which CBL has SMP:

- 1) Broadband internet access
- 2) Data circuits (national and international)

The geographic reach of each product is defined as the area in which CBL has facilities to provide the product.

## 7 Description of wholesale products

The products covered in this Section would enable a competing provider to purchase services from CBL to replicate CBL's retail services in this high level market. Other wholesale products could be considered<sup>44</sup> but for the purpose of the SMP presumptions and the safeguard SMP obligations, URCA has limited the scope of wholesale products discussed at this stage.

The previous analysis has determined the retail products which should remain in the high speed data and connectivity market in which CBL is presumed to have SMP.

This Section identifies the underlying wholesale products and interfaces which enable CBL to offer the retail products included in the high level SMP market. Although there are currently no formal wholesale products for the high speed data and connectivity market readily available in The Bahamas, CBL in effect provides these products informally to its own retail business and therefore it can be considered as currently having 100% market share in the provision of each of these products.

The characteristics, pricing and other relevant parameters of CBL's wholesale products are discussed below. The sections following that description discuss any existing and potential substitutes for these products.

## 7.1 Products in the high level SMP market

The underlying wholesale products for the retail products included in the SMP market are set out below:

Mapping of high speed data and connectivity retail products to wholesale products

	Retail Produc	ts	
Wholesale Products	Broadband	National leased lines	International leased lines
Bitstream access for broadband			
internet	x		
Backhaul (national)	х		
Backhaul (international)	х		
Wholesale leased lines (national)		х	х
Wholesale leased lines			
(international)			x

These wholesale products are described in more detail in the following sections.

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<sup>&</sup>lt;sup>44</sup> Other wholesale products are listed in the recent consultation on Access and Interconnection and may be included in future analysis and determinations by URCA.

#### Overview of CBL's network

CBL has a high capacity fibre network in The Bahamas which it currently uses to provide high speed data and connectivity and Pay TV services.

CBL's local access network is constructed from coaxial cable, which can be used for a range of services and which can offer very high bandwidths<sup>45</sup>.

CBL operates a domestic fibre-optic transmission network which connects its local access nodes<sup>46</sup> with its Cable TV Head-end locations<sup>47</sup>. This part of CBL's network is referred to in this paper as CBL's national backbone.

To connect internationally, CBL uses the fibre-optic network operated by its subsidiary, CCL, as well as a "satellite farm" (a location in which it has a number of large satellite receiver dishes installed) to receive TV content distributed via satellite. The CCL fibre-optic network connects CBL's domestic backbone to the USA. The CCL network and the satellite farms are collectively referred to in this paper as CBL's international backbone.

#### Bitstream access for broadband internet 7.1.1

This is a wholesale product consisting of access to the local loop and to "backhaul" services. If CBL made a bitstream product available, alternative providers would be able to provide high speed data services to customers. This type of access does not entail any third party access to the physical cable in the network. The service has the following characteristics:

- High speed access link to the customer premises (end user part) provided by the SMP provider and transmission capacity for broadband data in both directions enabling new entrants to offer their own, value-added services to end users;
- New entrants have the possibility to differentiate their services by altering some of the technical characteristics and/or the use of their own network.

## 7.1.2 Backhaul (national)

locations.

Backhaul is the transmission facilities in CBL's network between the core, or backbone, of the network and the access network at the "edge" of the hierarchical network. A backhaul product would mean that CBL provides another operator with capacity between a point in the other operator's network to a point either on the other operator's network or to a point on CBL's or a third party's network. Backhaul differs from leased lines in that leased lines connect to locations outside the provider's networks – e.g. typically to one or two customer

<sup>&</sup>lt;sup>45</sup> CBL's coaxial cable access network is designed using an 'N + 3' node architecture, and passes an average of 200 homes per node. Each node connects to the central Head End location through three optical fibres.

<sup>&</sup>lt;sup>46</sup> Local nodes are where the coaxial cable is deployed between these nodes and the customers' premises.

<sup>&</sup>lt;sup>47</sup> CBL has twelve head-ends in total situated on various islands across The Bahamas; of these, eight are analogue and four are digital.

## 7.1.3 Backhaul (international)

This product is the international transmission facilities connecting CBL's national backbone network to international destinations.

## 7.1.4 Wholesale leased lines (national and international)

This product is wholesale access to national (within The Bahamas) and international links offering high-quality symmetric and dedicated transmission capacity (from 1.5Mbps to 2.4Gbps) between two or more specific locations. It is effectively a wholesale version of CBL's existing retail product of national and international data circuits. Wholesale leased lines differ from backhaul services in that backhaul is used for the provider's network business whereas leased lines provide connection to, or between, end customers. CBL may lease capacity to another operator to enable provision of dedicated connectivity.

A CBL wholesale national and international leased lines product would enable other providers to rent lines from CBL and then provide these at the wholesale level to retail customers.

## Coverage

CBL has both an analogue and a digital transmission network. The analogue local access network is available on the following islands: Abaco, Andros, Berry Islands, Bimini, Eleuthera, Exuma, Grand Bahama, Inagua, Long Island, New Providence and San Salvador<sup>48</sup>.

The digital local access network is available on the following islands: Abaco, Eleuthera, Grand Bahama, and New Providence<sup>49</sup>.

CBL's national and international backbones have coverage on the following islands: Abaco, Eleuthera, Grand Bahama, and New Providence<sup>50</sup>.

#### 7.2 Possible substitutes

There is currently no wholesale market for high speed data and connectivity in The Bahamas. Consequently this review of substitutes only looks at hypothetical products.

This Section outlines the products which could be possible substitutes for CBL's wholesale products. It covers those products which:

- Are currently available; and
- Could become available within the time period under review.

Future products, including new products and expansions or improvements in current products, have only been considered when URCA believes that there is a reasonably high probability of their being available in the 12-24 month period under review.

The products are organised by provider as follows:

<sup>49</sup> Source: CBL's website

<sup>&</sup>lt;sup>48</sup> Source: CBL's website

<sup>&</sup>lt;sup>50</sup> Source: response by CBL to a data request

- SRG
- BTC
- Other future providers.

#### 7.2.1 **SRG**

### 7.2.1.1 SRG's current offering

SRG currently operates a fixed wireless network offering voice and data services to selected parts of The Bahamas. SRG has access to 2.5GHz spectrum. SRG has until now focused its marketing and network roll-out on serving business customers rather than residential customers. URCA does not have detailed information about SRG's network, although the reach of SRG's infrastructure is understood to be New Providence and Freeport.

Given the limited reach of its network, URCA takes the view that SRG is not likely to provide a viable wholesale substitute for CBL's broadband and data circuits products. URCA believes that this situation is unlikely to change in the time period under review. SRG is therefore not considered further in the substitution analysis.

#### 7.2.2 **BTC**

URCA believes that BTC will be able to offer a substitute for all backhaul and wholesale leased line products identified in Section 7.1, but presently URCA understands that BTC could not offer the Bitstream service at all of the access speeds offered on the CBL network.

#### 7.2.2.1 BTC's current offering

BTC operates a three-tier network, similar to that of CBL, separated into the local access network, the domestic backbone, and the international backbone.

BTC's local access network is constructed primarily from twisted copper pairs. It was originally designed to carry voice services only but in recent years ADSL<sup>51</sup> technology has been developed which enables broadband provision on the copper pairs, using the higher frequency bandwidth, reserving the lower frequency for the voice services. BTC currently offers up to 2Mbps speed Internet access on its twisted copper pair local access network.

BTC's domestic backbone connects BTC's local offices (concentrators and switch locations) to each other and to the international backbone network. BTC's domestic backbone is a fibre-optic network that is deployed extensively throughout The Bahamas, although BTC also uses microwave links in some cases between islands.

BTC's domestic backbone has the following characteristics:

- It is a high capacity fibre network connecting BTC's local access network and switches, either on-island or inter-island; and
- It has the capacity and is technically suitable for double and triple play provision.

BTC's international backbone has the following characteristics:

<sup>&</sup>lt;sup>51</sup> Asynchronous Digital Subscriber Line

- It is a high capacity fibre network connecting BTC's domestic network to the USA.
- It has the capacity and is technically suitable for double and triple play provision.
- BTC's international backbone connects its domestic backbone to international networks for sending and receiving electronic communications messages between The Bahamas and locations in the rest of the world. BTC's international backbone consists of a fibre-optic submarine cable between The Bahamas and Jupiter Inlet, Florida<sup>52</sup>.

#### Prices

BTC has an interconnection agreement in which it offers some of the products listed above. The prices are confidential and are not disclosed in this document.

#### Coverage

BTC's local and domestic backbone networks cover the vast majority of the inhabited islands in The Bahamas. The fixed access network reaches 99% of inhabitants and the remainder is covered with fixed wireless<sup>53</sup>.

## 7.2.2.2 BTC's future offering

URCA understands that BTC is rolling out Fiber to the Curb (FTTC)<sup>54</sup> as part of its NGN<sup>55</sup> upgrade, which would mean that it could deploy VDSL<sup>56</sup> on the twisted copper pairs running from the street cabinet to the customer's premises <sup>57</sup> VDSL could substantially increase the internet access speeds that BTC could offer. URCA has no details of the progress of this project but does not expect that it will have substantial impact on BTC's retail service portfolio over the coming 12-24 months.<sup>58</sup>

## 7.2.3 Other future providers

URCA has considered the possibility of a new provider entering the market and rolling out its own infrastructure to provide fixed voice and data services. URCA considers this unlikely give the small overall market size in The Bahamas. It is helpful to compare The Bahamas to similar jurisdictions. For example, in the Netherlands (where there are already two infrastructures) no other operators have invested in a further third network, despite there being no regulatory barriers to doing so.

Therefore URCA has not considered further the possibility of new infrastructure providers within the following substitution analysis.

<sup>54</sup> Fibre to the Curb (FTTC), is a telecommunications system based on fibre-optic cables run to a platform that serves several customers. Each of these customers has a connection to this platform via coaxial cable or twisted pair.

<sup>52</sup> http://www1.btcbahamas.com/aboutus/history.php

<sup>&</sup>lt;sup>53</sup> Source: BTC data provided to URCA

Next Generation Networking, is the term given to describe a telecommunications packet-based network that handles multiple types of traffic (such as voice, data, and multimedia).

<sup>&</sup>lt;sup>56</sup> Very High Bit Rate DSL.

<sup>&</sup>lt;sup>57</sup> Source: information provided by BTC.

<sup>&</sup>lt;sup>58</sup> BTC indicates a date of 2011 in its response to the public consultation on Access & Interconnection.

## 8 Wholesale products in the relevant SMP market

This Section describes the analysis performed on CBL's wholesale products and the potential substitutes that were described in Section 7, using the Methodology described in Section 4.

The following CBL products will be considered:

- Bitstream access for broadband internet
- Backhaul (national)
- Backhaul (international)
- Wholesale leased lines (national)
- Wholesale leased lines (international)

In the following sub-sections URCA considers whether BTC could provide demand- and supply-side substitutes for these products.

## 8.1 Bitstream access for broadband internet

The product has first been tested for substitutability, in accordance with Step 3 of the Methodology. It was tested first for demand-side substitution and then for supply-side substitution.

#### 8.1.1 Demand-side substitution for bitstream access for broadband internet

Here URCA has considered whether users of a CBL wholesale bitstream access service could and would switch to alternative providers if CBL were to increase the price of the service by 5-10% for a non-transitory period of time, to the extent that the price increase would be unprofitable to CBL.

There are currently no available substitutes for this product. URCA does not believe it is likely that an alternative provider would be able to launch a wholesale bitstream access service in the period under review. Most of the alternatives to CBL's bitstream access are inferior in terms of characteristics or coverage and therefore are unlikely to be able to form the basis of an effective substitute for wholesale bitstream product. Furthermore, URCA considers it unlikely that an alternative provider would wish to supply these services voluntarily, because retail provision is generally more profitable than wholesale and wholesale services can cannibalise retail services. There is little international precedent for broadband providers offering wholesale bitstream services absent of regulation.

The most viable alternative provider of this service identified by URCA is BTC. BTC's network would allow it to provide bitstream access, although not to the same high speeds as CBL.

Although BTC appears to be a reasonable substitute, URCA has concerns as to whether a duopoly between BTC and CBL will provide long-term effective competition in the market for bitstream access, given that CBL and BTC are the only two operators with extensive networks and that they both have vertically integrated network and service provision.

Provision of the wholesale service would cannibalize profits in the retail market. Therefore URCA does not believe that BTC would be an effective substitute.

→ URCA therefore considers that if CBL were to increase its bitstream service prices by 5-10% for a non-transitory period of time, a hypothetical operator purchasing access from CBL would be unable to switch away from CBL to another provider of an access network in the 12-24 month timescale. Therefore, there is unlikely to be effective demand-side substitution for these products.

## 8.1.2 Supply-side substitution for bitstream access for broadband internet

URCA considers whether, if CBL were providing bitstream services and raised its price by 5-10%, other suppliers would switch to provision of a substitutable product.

URCA has concluded that alternative providers are unlikely to launch this service, and does not believe that a 5-10% increase in the price of CBL's services would be likely to alter the alternative providers' business case for launching this service.

→ URCA therefore considers that if CBL were to increase its hypothetical bitstream access services prices by 5-10% for a non-transitory period of time, no other operator would switch to provision of these services in the 12-24 month timeframe.

### 8.1.2.1 Conclusion of substitutability test

The substitutability test found that it is unlikely that there will be effective substitutes for CBL's bitstream access services within the 12-24 month time period that would make a non-transitory 5-10% price rise unprofitable for CBL.

Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and therefore belongs in the SMP market.

#### 8.1.3 EU three criteria test

#### 8.1.3.1 Barriers to entry

It would be costly and a long term project for a new entrant to develop a network able to replicate the CBL infrastructure to the extent that it could offer a reasonable substitute. BTC possesses the necessary infrastructure already, but as discussed above, cannot replicate the speeds of CBL and is considered unlikely to launch services absent regulatory intervention. Therefore the barriers to entry to provide this service are high.

## 8.1.3.2 Emergent competition

There is currently no competition in the market for bitstream services. Evidence from international precedent suggests that there is unlikely to be another provider of wholesale broadband within the time horizon, and therefore this market does not tend towards competition.

#### 8.1.3.3 Sufficiency of ex post competition law

URCA has considered whether *ex post* competition law would be sufficient to prevent market failures in future provision of this wholesale service. Given that CBL controls the only infrastructure enabling the provision of this service and that the failure to provide the service on reasonable terms could cause market foreclosure, URCA believes that *ex post* competition law will be insufficient.

#### 8.1.3.4 Conclusion on EU three criteria test

URCA concludes that bitstream access for broadband internet remains within the scope of the high-level SMP market for CBL.

## 8.2 Backhaul (national and international)

National and international backhaul are grouped for simplicity in the following analysis because the arguments are the same for each.

These products have first been tested for substitutability, in accordance with Step 3 of the Methodology. They were tested first for demand-side substitution and then for supply-side substitution. The following SSNIP analysis is applied to a hypothetical situation in which CBL provides the wholesale services at a cost-oriented price.

#### 8.2.1.1 Demand-side substitution for backhaul

Here URCA has considered whether users of a CBL backhaul service could and would switch to alternative providers if CBL were to increase the price of the service by 5-10% for a non-transitory period of time, to the extent that the price increase would be unprofitable to CBL.

URCA believes that BTC could offer these services on its current network, but given the substantial barriers to entry for retail competitors, URCA considers it unlikely that BTC would offer these wholesale services voluntarily as this would increase retail competition in the market where BTC and CBL would otherwise operate a vertically integrated duopoly.

→ URCA therefore considers that if CBL were to increase its backhaul services prices by 5-10% for a non-transitory period of time, a hypothetical operator purchasing access from CBL would be unable to switch away from CBL to another provider of an access network in the 12-24 month timescale. Therefore, there is unlikely to be effective demand-side substitution for these products.

## 8.2.2 Supply-side substitution for backhaul

URCA has considered whether a 5-10% increase in the price of backhaul would affect the supply of backhaul. It has concluded that this is unlikely, because a small price increase is unlikely to affect the rationale summarised in the demand-side substitution analysis set out above.

→Therefore UCRA believes that it is unlikely there could be supply-side substitution for BTC's backhaul services in the time period under review.

## 8.2.2.1 Conclusion of substitutability test

The SSNIP test found that it is unlikely that there will be effective substitutes for CBL's backhaul services within the 12-24 month time period that would make a non-transitory 5-10% price rise unprofitable for CBL.

Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and therefore belongs in the SMP market.

#### 8.2.3 EU three criteria test

#### 8.2.3.1 Barriers to entry

In the timescale, it would seem very unlikely that there would be new physical network providers in The Bahamas. Given that BTC and CBL are already in the market, the risk involved in developing a new network for wholesale services would be considerable, which combined with the high capital cost of building networks would constitute a high barrier to entry.

## 8.2.3.2 Emergent competition

There are only two providers who are able to provide these services, BTC and CBL, and as discussed previously they operate vertically integrated service and network businesses and have little incentive to make wholesale services available to potential competitors and thus create increased retail price competition. URCA therefore does not believe that this market tends towards emergent competition.

## 8.2.3.3 Sufficiency of ex post competition law

URCA has considered whether *ex post* competition law would be sufficient to prevent market failures in future provision of this wholesale service. BTC and CBL have near ubiquitous networks. URCA considers that these parties will have an incentive to charge high access prices for use of this service, or not provide access at all. Failure to provide the services on reasonable terms could result in a serious market failure. Therefore *ex post* competition law is considered insufficient.

#### 8.2.3.4 Conclusion on EU three criteria test

URCA concludes that backhaul services remain within the scope of the high-level SMP market for CBL.

## 8.3 Wholesale leased lines (national and international)

National and international wholesale leased lines are grouped for simplicity in the following analysis because the arguments are the same for each.

These products have first been tested for substitutability, in accordance with Step 3 of the Methodology. They were tested first for demand-side substitution and then for supply-side substitution. The following SSNIP analysis is applied to a hypothetical situation in which CBL provides the wholesale services at a cost-oriented price.

#### 8.3.1 Demand-side substitution for wholesale leased lines

URCA has considered whether users of a CBL wholesale leased lines service would switch to alternative providers if CBL were to increase the price of the service by 5-10% for a non-transitory period of time, to the extent that the price increase would be unprofitable to CBL.

BTC is the only possible viable alternative provider. Absent of regulation, BTC is unlikely to launch these services, for the reasons discussed above in relation to backhaul services.

→Therefore UCRA believes that it is unlikely there will be effective demand-side substitution for CBL's wholesale leased lines in the time period under review.

## 8.3.1.1 Supply-side substitution for wholesale leased lines

URCA has considered whether a 5-10% increase in the price of backhaul would affect the supply of wholesale leased lines. It has concluded that this is unlikely, because a small price increase is unlikely to affect the rationale set out in the demand-side substitution analysis set out above.

→Therefore UCRA believes that it is unlikely there will be effective supply-side substitution for a CBL wholesale leased line service in the period under review.

## 8.3.1.2 Conclusion of substitutability test

The SSNIP test found that it is unlikely that there will be effective substitutes for CBL's leased lines services within the 12-24 month time period that would make a non-transitory 5-10% price rise unprofitable for CBL.

Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and therefore belongs in the SMP market.

#### 8.3.2 EU three criteria test

### 8.3.2.1 Barriers to entry

In the timescale, it would seem very unlikely that there would be new physical network providers in The Bahamas. Given that BTC and CBL are already in the market, the risk involved in developing a new network for wholesale services would be considerable, which combined with the high capital cost of building networks would constitute a high barrier to entry.

### 8.3.2.2 Emergent competition

There are only two providers who are able to provide these services, BTC and CBL, and as discussed previously they operate vertically integrated service and network businesses and have little incentive to make wholesale services available to potential competitors and thus create increased retail price competition. URCA therefore does not believe that this market tends towards emergent competition.

## 8.3.2.3 Sufficiency of ex post competition law

URCA has considered whether *ex post* competition law would be sufficient to stop the market failures in future provision of this wholesale service. CBL and BTC have extensive coverage and well-developed networks. URCA considers that these parties will have an incentive to charge high access prices for use of this service, or not provide access at all. As wholesale leased lines services could be critical to any potential new competitor in the retail markets, refusal to provide on reasonable terms could cause market foreclosure and thus URCA considers that *ex ante* regulation is necessary.

#### 8.3.2.4 Conclusion on EU three criteria test

URCA concludes that wholesale national and international leased lines remain within the scope of the high-level SMP market for CBL.

## 8.4 Geographic reach of wholesale products in the SMP market

The geographic reach of these products is defined as the area in which CBL has facilities to provide the products.

## 8.5 Conclusion on wholesale products

URCA has concluded that the following products are part of the relevant market for high speed data and connectivity for which CBL has SMP:

- 1) Bitstream access for broadband internet
- 2) Backhaul (national)
- 3) Backhaul (international)
- 4) Wholesale leased lines (national)
- 5) Wholesale leased lines (international).

# Appendix 2 – Background to the pay TV market

## 9 Description of retail products

In accordance with Step 2 of the Methodology, this Section will describe the products offered by the licensee with presumed SMP in the Pay TV market, in this case CBL. The description will cover:

- Characteristics of CBL's products
- Prices
- Geographical reach of the products; and
- Consumer behaviour around the products

This Section will also describe all possible substitutes available to consumers for these products. This will include both products already existing in The Bahamas and future products which URCA considers are likely to be launched in the 12-24 month period under consideration.

This will result in a full portfolio of products to enable URCA to undertake the substitutability analysis considered in the next Section.

## 9.1 Products in the high-level SMP market

This analysis has taken as its starting point the Pay TV services offered by CBL, because it is the operator presumed to have SMP in the market under the Comms Act. CBL offers a wide range of services with different specifications and prices. These can be grouped as follows:

- SuperBasic Package
- Digital Packages
- HDTV Package
- Pay-per-view Package

Pay TV services in The Bahamas are predominantly provided by CBL. According to the terms of CBL's franchise agreement, dated 13 October 1994, CBL has a legal monopoly in the establishment, maintenance and operation of cable TV services. The exclusivity period in the franchise agreement lasts until 13 October 2009. Other providers of Pay TV services include Satellite Bahamas and internet streaming providers. These are discussed in detail in later sections along with any potential future providers.

It is important to note at this stage that CBL ties its sales of internet services to its Pay TV services. A consumer is only able to purchase broadband internet by first purchasing one of the Pay TV packages but can purchase Pay TV packages independently of internet services. This could cause some customers to purchase Pay TV from CBL in order to get access to the internet service even if those customers may have preferred a different Pay TV provider or did not wish to subscribe to Pay TV services at all.

## 9.2 SuperBasic Package

The 'SuperBasic TV' analogue package consists of 39-54 channels<sup>59</sup>, depending on which island the service is being provided. Due to the existing legal requirements in CBL's licence<sup>60</sup> the price of this package is capped at \$30 per month regardless of the customer's location.

Clause 20 of CBL's licence allows CBL to charge installation fees of \$50 and fees for each additional television set connected to the cable system of \$15. URCA believes that these are being applied to consumers purchasing the SuperBasic or digital packages.

## SuperBasic package offered by CBL

CBL's Packages	Cost	Number of Channels	Estimated subscriber numbers, June 2009
SuperBasic package (analogue)	\$30	39 - 54	80,000 <sup>61</sup>

Source: CBL website

#### **Characteristics**

URCA has identified the following characteristics as important to the consumer's experience of CBL's SuperBasic package and relevant to the consumer's decision to choose between the SuperBasic package and possible substitutes:

- Real time viewing;
- Multi channel broadcasting;
- The ability to purchase the service without having to install an external dish as they
  would with satellite TV;
- Availability of selected local Bahamian channels;
- Availability of additional foreign channels providing a range of news and entertainment services;
- No requirement to have access to a high speed internet connection to be able to receive the service; and
- High quality of service with minimal disruptions and a high picture quality.

#### Coverage

The SuperBasic package is available on the following islands: Abaco, Andros, Berry Islands, Bimini, Eleuthera, Exuma, Grand Bahama, Inagua, Long Island, New Providence and San Salvador<sup>62</sup>.

<sup>&</sup>lt;sup>59</sup> These are offered in Standard Definition TV.

<sup>&</sup>lt;sup>60</sup> Licence issued by the Bahamas Government on 13<sup>th</sup> October, 1994.

<sup>&</sup>lt;sup>61</sup> Source: CBL, response to data request, rounded to the nearest 10,000.

<sup>&</sup>lt;sup>62</sup> Source: CBL's website

## 9.3 Digital Packages

CBL's Digital packages include the SuperBasic package channels and build on content from there with premium movie and sports<sup>63</sup> channels.

There are several packages differentiated by content and price:

## Digital packages offered by CBL

CBL's Packages	Cost	Number of Channels	Estimated subscriber numbers, June 2009
Digital packages			70,000 <sup>64</sup>
Set top box – lowest cost option <sup>65</sup>	\$149.95		
Oceans 125 – all the SuperBasic channels plus a range of additional channels (sport, movies and news)	\$ 35.95	125+	
Oceans 150 – all the SuperBasic channels plus a range of additional channels (sport, movies and news)	\$ 43.95	150+	
Oceans 175 – all the SuperBasic channels plus a range of additional channels (sport, movies and news)	\$ 53.95	175+	
Oceans complete – over 225 channels available including all premium movie channels	\$ 99.00	225+ including premium channels	
Oceans Sports – only available with purchase of Oceans 125 package or above	\$9.95 on top of minimum \$35.95	12 premium+ minimum 125	
Oceans Movies — only available with purchase of Oceans 125 package or above	\$38.50 on top of minimum \$35.95	31 premium + minimum 125	
NBA league pass / NFL football/ Major league baseball (MLB)	\$189 / \$249 / \$199	Up to 40 matches a week / 15 channels / full season of matches	
Premium packages: HBO / Cinemax / Starz / Showtime	\$13.25 / \$8.50 / \$8.50 / \$11.75	8/7/7/8	

Source: CBL website

<sup>&</sup>lt;sup>63</sup> This practice is known as bundling. In this case, bundling is taking place because the higher valueadd channel prices are not separated out and are only sold in packages that include the SuperBasic channels. URCA is unable to determine how much the additional channels would cost to provide or purchase on a standalone basis as CBL may be using cross subsidisation between the packages.

<sup>&</sup>lt;sup>64</sup> Source: CBL, response to data request, rounded to the nearest 10,000.

<sup>&</sup>lt;sup>65</sup> Installation cost assume ownership of the set-top box rather than rental

## Characteristics

URCA has identified the following characteristics as important to the consumer's experience of CBL's digital packages and relevant to the consumer's decision to choose between the digital packages and possible substitutes:

- Real time viewing;
- Multi channel broadcasting;
- The ability to purchase the service without having to install an external dish as they would with satellite TV;
- 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 to have access to a high speed internet connection to be able to receive the service; and
- High quality of service with minimal disruptions and a high picture quality.

#### Coverage

Digital packages are only available in four locations: New Providence, Grand Bahama, Eleuthera and Abaco. 66

## 9.4 HDTV Package

CBL's current HDTV offering in The Bahamas consists of 12 high definition channels, which costs an additional \$9.95. This package is only available after purchasing at a minimum the SuperBasic Pay TV package.

The installation and monthly costs are set out below<sup>67</sup>:

## **HDTV** packages offered by CBL

Cable Bahamas Packages	Cost	Number of Channels	Estimated subscriber numbers, June 2009 <sup>68</sup>
SuperBasic package (analogue)	\$30	39 / 48/54	80,000
HDTV package			
Set top box – lowest cost option	\$599		

<sup>&</sup>lt;sup>66</sup> Source: CBL's website

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<sup>&</sup>lt;sup>67</sup> For installation of HDTV, URCA understands that CBL charge \$40 as installations fees and \$20 for each additional television set connected to the cable system (CBL customer services).

<sup>&</sup>lt;sup>68</sup> Source: CBL, response to data request, rounded to the nearest 10,000

(consumers can purchase or lease the set top box)			
Oceans HD - including NBC, Fox, The	\$9.95	12	
Discovery Channel, National Geographic			
and Sports Channels			

Source: CBL website

#### Characteristics:

URCA has identified the following characteristics as important to the consumer's experience of CBL's HDTV package and relevant to the consumer's decision to choose between the HDTV package and possible substitutes:

- Real time viewing;
- Multi channel broadcasting;
- The ability to purchase the service without having to install an external dish as they would with satellite TV;
- Availability of additional foreign channels providing a range of news and entertainment services;
- No requirement to have access to a high speed internet connection to be able to receive the service,
- Offers a picture quality that is superior to standard definition; and
- High quality of service with minimal disruptions and a high picture quality.

## Coverage

The HDTV package is only available in four locations: New Providence, Grand Bahama, Eleuthera and Abaco<sup>69</sup>.

## 9.5 Pay-per-view Package

CBL's Pay per view service is limited to selected sports and movies channels and is only offered currently as an add-on to, at a minimum, the SuperBasic Package.

The installation and monthly costs are set out below:

## Pay-per-view products offered by CBL

Cable Bahamas Packages	Cost	Number of Channels	Estimated subscriber numbers, June 2009 <sup>70</sup>
SuperBasic package (analogue)	\$30	39 - 54	80,000
Pay-per-view			5,825

<sup>69</sup> Source: CBL's website

 $<sup>^{70}</sup>$  Source: CBL, response to data request, rounded to the nearest 10,000.

Movies & Sports	Approx \$4	n/a, n/a	
	per movie,		
	Approx \$30		
	per match		

Source: CBL website, CBL customer services

#### Characteristics:

URCA has identified the following characteristics as important to the consumer's experience of CBL's Pay per view package and relevant to the consumer's decision to choose between the Pay per view package and possible substitutes:

- Real time viewing;
- The ability to purchase the service without having to install an external dish as they
  would with satellite TV;
- Availability of additional foreign channels providing a range of news and entertainment services;
- No requirement to have access to a high speed internet connection to be able to receive the service; and
- High quality of service with minimal disruptions and a high picture quality.

# Coverage

Pay-per-view packages are only available in four locations: New Providence, Grand Bahama, Eleuthera and Abaco<sup>71</sup>.

## 9.6 Possible substitutes

This Section outlines the products which could be possible substitutes for CBL's products. It covers those products which:

- Are currently available; and
- Could become available within the 12-24 month time period under review<sup>72</sup>.

In the next sections, URCA has reviewed the following possible substitutes:

- Currently available: Satellite Bahamas Limited (Satellite Bahamas), internet streaming
- Emerging substitutes: Fixed Wireless Pay TV, IPTV

The products are organised by provider:

-

<sup>&</sup>lt;sup>71</sup> Source: CBL's website

<sup>&</sup>lt;sup>72</sup> CBL has had a legal monopoly in the provision of cable Pay TV services in The Bahamas since 1994 due to the conditions of its licence. This legal monopoly will expire in October 2009.

- Satellite Bahamas
- Internet streaming
- Fixed Wireless Pay TV
- IPTV

#### 9.6.1 Satellite Bahamas Limited

In this document, URCA considers whether Satellite Bahamas' products could be considered as potential substitutes for the following of CBL's products:

- SuperBasic package
- Digital packages
- HDTV package
- Pay-per-view package

#### 9.6.1.1 Current Satellite Bahamas products

URCA believes that Satellite Bahamas is the main provider of satellite TV in the Bahamian market today. Satellite Bahamas uses satellite infrastructure to broadcast US-based Direct Broadcast Satellite (DBS) services to residents in The Bahamas.

Satellite broadcast television allows for good quality reception throughout the majority of the country<sup>73</sup>. URCA believes that direct to the home (DTH) satellite broadcast systems are the main alternative to cable TV services available in The Bahamas at the present time.

The reception of DBS television services in The Bahamas falls into two categories: the legitimate use of the signal; and illegitimate use of the signal. Quite apart from the legality issues, URCA understands that the use of signal gives rise to quality issues with the available service<sup>74</sup>.

The table below sets out the prices of purchasing the dish, the receiver card and a channel package. Satellite Bahamas charges an installation fee of \$199, but consumers could potentially purchase this service from any provider. A minimum three month subscription is required:

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<sup>&</sup>lt;sup>73</sup> The more southern islands compensate for reducing signal strength with the use of larger aperture dish antenna systems.

<sup>&</sup>lt;sup>74</sup> URCA understands that some residents import satellite television decoder boxes from outside The Bahamas without an activated authorisation card. These decoder boxes are subject to various quality of service issues, including a need to repeatedly search for new access codes when the original code is deactivated. This is not considered a legitimate substitute for URCA's consideration in this document.

## Pay TV offered by Satellite Bahamas

Product / Package	Cost (monthly apart	Number of
	from start-up package)	Channels
Equipment: Dish + Receiver Card	\$595	
Start up package: Dish, Receiver card & basic package for	\$695	
3 months		
The Choice (Over 155 digital channels with a mix of	\$70	155+
movies, sports and music)		
The Choice Xtra (additional channels)	\$77	200+
The Premier (includes all channels in The Choice Xtra	\$140	265+
package and the five premium packages listed below)		
Premium packages: HBO (7 channels), Starz (12)	\$17-\$20 each	3 – 25+
Showtime Unlimited (9), Cinemax (3), Sports Pack (25+)		
Pay-per-view movies	Starts at \$7 per view	n/a
Pay-per-view sports	Starts at \$75 per view	

#### Coverage

Satellite TV packages can be purchased and used anywhere in The Bahamas. However, URCA understands that the service is predominately used in areas where CBL's network does not reach. Consequently, residents on the smaller islands and cays are more likely to use DTH satellite TV services than residents on the larger islands.

## 9.6.2 Internet Streaming

URCA believes that internet streaming products could be considered as potential substitutes for the following of CBL's products:

- SuperBasic package
- Digital packages
- Pay-per-view package

# 9.6.2.1 **Current offering**

Internet streaming allows content to be compressed and distributed to the viewer through Internet Protocol (IP) technology. In this document "internet streaming" refers to video and audio that is available from the internet on request by the user. The content is sent upon demand from a content storage system. It differs from IPTV (discussed in the next Section) in that IPTV involves the broadcast (or multicast) of programming that has been arranged by the person that propagates the programmes. Typically, IPTV provides a higher quality service and picture, rendering it more suitable to being viewed on a television set than internet streaming (where users select the programmes on demand and the programmes are of variable quality).

For a consumer to experience a high quality of service from internet streaming he requires broadband access with speeds above 1.5Mbps (ideally above 2Mbps<sup>75</sup>). Internet speeds

<sup>&</sup>lt;sup>75</sup> Ofcom's report on Digital Britain, Chapter 2, paragraph 8 (2009).

below this can result in delaying, buffering and viewing interruptions. CBL is the provider with presumed SMP in the market for high speed data.

Internet streaming is more likely to be used for specific programming such as movies or sports events as opposed to the general programming that is expected on a network channel. The service may be free or incur a charge depending on the content. It may therefore share some characteristics with pay-per-view or on-demand TV.

Consumers are not limited to using an internet streaming service based in The Bahamas and are able to access content from web sites hosted in any country.

The quality of internet streaming means that it is not considered as a substitute for HDTV.

#### Coverage

Internet streaming requires consumers to have access to the internet to receive this service, consequently URCA believes that its coverage is limited to those areas with internet access. Although programmes could be received over both dial-up and broadband internet connections, it would take much longer using dial-up and therefore streaming tends to be used mostly by consumers with a high speed broadband internet connection

# 9.6.3 Fixed wireless Pay TV

#### 9.6.3.1 Future offering

Fixed wireless Pay TV works by directing internet access from an underground fibre-optic cable to an antenna attached to tower facilities, from which the signal is then directed through the air to rooftop antennas on the consumer's premises.

Potential providers of this service have two options for deployment. Firstly they could build their own network towers which would be a costly option and would take a considerable amount of time to complete (URCA believes full roll out may not be achievable within the 12-24 month timeframe considered in this review).

Secondly, providers could use an existing network/set of towers, assuming that they were granted access. This network could be either BTC's tower facilities or, for inter-island transmission, through CBL's sub-marine network. Either option would reduce the provider's roll out time and costs for providing the service but would be dependent on the availability of suitable wholesale products being available on reasonable terms and conditions.

URCA does not believe that fixed wireless pay TV will be able to provide effective competition to CBL's pay TV services in the time period considered in this review, consequently it has not been considered further in this review.

## 9.6.4 **IPTV**

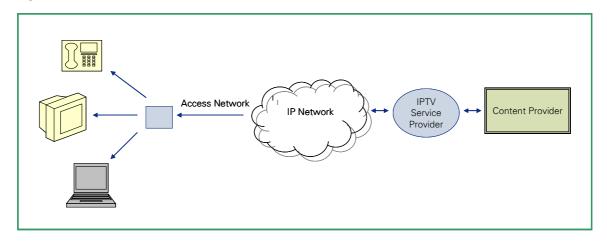
URCA believes that IPTV products could be considered as potential substitutes for the following CBL products:

- SuperBasic package
- Digital packages

- HDTV package
- Pay-per-view package

#### 9.6.4.1 Future Offering

Figure 1: How IPTV works



IPTV technology has developed to the extent that it has become possible to view real time broadcasts in a high quality format. For the consumer to experience fast download speeds, a high quality picture and an undisrupted service, they must have access to high speed internet with a minimum capacity of 4-6 Mbps<sup>76</sup>. An IPTV provider can choose to provide its service by either rolling out its own network or by ensuring access to third party provision of a high speed internet connection.

URCA is aware of interest from existing and potential operators to provide this service. The cost to a new provider of rolling out its own network would be substantial in terms of time and investment. To be able to immediately provide this service in The Bahamas the provider would need to gain access to another operator's network. However, a major bottleneck to this is the limitations of the existing local access networks. BTC's network does not currently offer ADSL above 2Mbps which leaves CBL's network as the only option which would allow for consumers to receive the type of service described above.

URCA understands that BTC is currently in the process of investing in the deployment of NGN which URCA believes could allow BTC to support ADSL2+ or VDSL with download speeds up to 20Mbps. This would potentially provide an alternative network for an IPTV provider wishing to distribute throughout The Bahamas. Whilst BTC's plans are currently in progress, URCA does not believe that roll-out will be completed in time to make a substantial market impact within the 12-24 month timeframe under consideration and consequently it is not considered further in this review.

High speed internet access is currently available from CBL only as part of a package (combining both Pay TV and internet). The least cost option to a consumer would be to purchase the SuperBasic Pay TV package and an internet package.

<sup>&</sup>lt;sup>76</sup> Source: http://www.iptvinformation.net/IPTV+FAQ.aspx

As previously stated, URCA does not believe that a new entrant to the Pay TV market would be able to roll-out its own network within the 12-24 month timeframe considered for this review. Consequently, in the analysis which follows, URCA reviews IPTV services provided over a third party network.

# 9.7 Consumer behaviour in the Pay TV market

URCA does not have detailed data about consumer behaviour as regards the Pay TV market.

As can be seen from the subscriber numbers in the preceding sections, the majority of CBL's customers subscribe to the SuperBasic package, which is the lowest priced of CBL's packages.

URCA understands that Satellite Bahamas' service is mainly purchased by inhabitants of areas where CBL's network does not have coverage. From anecdotal evidence, URCA understands that the use of DTH in New Providence is currently very low, whereas it is higher on the islands where CBL has no cable coverage, such as on the smaller cays and resorts. When comparing the price of the CBL SuperBasic and the Satellite Bahamas service it would appear that Satellite is not pricing its service to compete directly with the CBL service.

# 10 Retail products in the SMP market

This Section describes the analysis performed on CBL's products and the potential substitutes that were identified in Section 9 using the Methodology described in Section 4Error! Reference source not found.

As stated the following CBL products will be considered:

- SuperBasic Package
- Digital packages
- HDTV package
- Pay-per-view package

In the following sub-sections URCA will consider the following demand and supply-side substitutes for these products:

- Current products: Satellite TV, Internet streaming
- Emerging products: Fixed wireless, IPTV

The analysis of each of these potential substitutes will be conducted in terms of how well the characteristics of these products are likely to match the characteristics of CBL's products and by applying the SSNIP test described in Step 2 of the Methodology of whether a substitute would be so attractive to consumers that, a non-transitory price increase of 5-10% by CBL would be unprofitable.

Those products for which URCA concludes that there are not effective demand- and/or supply-side substitutes available within the 12-24 month timeframe, are then subjected to the EU three criteria test, in accordance with Step 3 of the Methodology:

- the presence of high and non-transitory entry barriers;
- the presence of a market the structure of which does not tend towards effective competition during the timeframe of this review; and
- the application of competition law alone would not adequately address market failures that may arise.

The application of these tests determines whether each product is susceptible to *ex-ante* regulation.

# 10.1 SuperBasic Package

The product has first been tested for substitutability, in accordance with Step 2 of the Methodology. It was tested first for demand-side substitution and then for supply-side substitution. The summary of the substitutability analysis for the SuperBasic package is shown in the table below.

# 10.1.1 Demand-side substitution for the SuperBasic Package

The demand-side SSNIP test asks what would happen to demand for CBL's SuperBasic product over a 12-24 month period were CBL to introduce a non-transitory price increase of 5-10%. The objective is to consider whether this would be profitable for CBL or not.

URCA has considered demand-side substitution from a number of sources:

- Current products: Pay TV services from Satellite Bahamas, Internet Streaming,
- Emerging products: Pay TV services from IPTV

SuperBasic Package from Satellite Bahamas

#### Characteristics

Satellite Bahamas services do not match the following characteristics demonstrated by CBL's SuperBasic package, as shown in the summary table at the end of this Section.

- Does not require a satellite dish
- Availability of local Bahamian channels

Satellite services require the purchase and installation of a satellite dish. This has a cost impact (discussed in the following Price Section) as well as an additional inconvenience to consumers. Consumers who do go to the trouble of having one installed may not like the appearance of the dish on their property.

URCA understands that satellite TV suffers more from disruptions to the service and quality of service degradation due to extreme weather than would CBL's Pay TV service. CBL receives content through satellite farms and cable. Whilst the dish farm would still be impacted by extreme weather, there would be significantly less disruption than for satellite customers, with small, individual dishes attached to their homes compared to the much larger dishes used by a cable company. Consequently Satellite Bahamas is thought to possibly have a lower overall quality of service than CBL.

Satellite Bahamas' service does not currently carry any local content as it acts as a reseller of mainly US-based content packaged by its provider, Direct TV. As it is simply reselling the channel package from Direct TV it is not able to change the content that it receives or negotiate directly to modify it. This makes the service an imperfect substitute for the SuperBasic Pay TV package and may affect local consumers' choice of service provider.

Satellite Bahamas may be seen as a substitute for CBL's SuperBasic package, but this is likely to be an imperfect substitute as it does not match all of the characteristics of that package.

Anecdotal evidence suggests that Satellite Bahamas is more focused on attracting consumers on the outlying islands than the highly populated areas, such as New Providence<sup>77</sup>. URCA has not seen any evidence that suggests Satellite Bahamas would change its strategy following a 5-10% increase in the price of CBL's SuperBasic package.

## **Price**

The cost of installing Satellite Bahamas' system includes \$199 for the installation fee, \$595 for the dish and receiver card and then \$70 for its basic channel package. To receive CBL's SuperBasic package there is currently an initial installation charge of \$50. URCA believes that if CBL were to increase this by 5-10% consumers would be unlikely to switch to the satellite service, with more substantial set up costs, as a result.

The monthly charges for the satellite TV packages are also higher than CBL's, as demonstrated by reference to the pricing tables. If CBL were to increase its prices by 5-10%, the current satellite service would still be more expensive than CBL. Hence URCA believes that it is unlikely that consumers would switch from cable to satellite following a price increase.

## Other factors

Consumers cannot currently purchase a high speed internet connection<sup>78</sup> from CBL independently of CBL's Pay TV packages. Consequently, if consumers switch to Satellite Bahamas' service following a 5-10% increase in the price of CBL's SuperBasic package, they would need to purchase an additional internet package which is likely to be of a lower speed given the existing providers in the Bahamian market<sup>79</sup>.

→ Based on the information available URCA does not believe that Satellite Bahamas is likely to provide an effective demand-side substitute to consumers due to the additional cost and loss of local Bahamian channels.

SuperBasic Package from Internet Streaming

## **Characteristics**

As shown in the summary table at the end of this Section, internet streaming services do not match the following characteristics demonstrated by CBL's SuperBasic package:

- Real time
- No requirement for a high speed internet connection, depending on the quality of service offered.

URCA notes that it is currently unclear as to whether an internet streaming provider would be able to secure agreements to provide local Bahamian content. If the operator were

<sup>78</sup> High speed internet (or broadband) is defined as a download speed of over 1.5Mbps: http://www.itu.int/osg/spu/publications/birthofbroadband/faq.html.

<sup>&</sup>lt;sup>77</sup> Source: Conversations with Satellite Bahamas' customer services

<sup>&</sup>lt;sup>79</sup> For discussion of the high speed internet market, please refer to the relevant section in Appendix 1 of this consultation.

unable to, then this would be a further characteristic that the internet streaming service would not match.

Internet streaming would allow for consumers to watch some real time broadcasting, particularly sports and news programmes. However, as it does not provide all of its programmes on a real-time basis and can have picture quality and reliability issues, if the high speed connection is not of sufficient capacity, consumers may not see it as an adequate substitute for the SuperBasic package.

CBL's current practice of tying the purchase of Pay TV to high speed internet access has further consequences for the ability of internet streaming Pay TV to act as a realistic substitute for consumers. In the present market, CBL is the main provider of broadband with speeds sufficient enough to allow consumers to view internet streaming with minimal disruptions and fast download speeds.

However, consumers are very unlikely to purchase both a Pay TV package from CBL, which is the only way they can currently purchase the high speed internet access required, and an internet streaming service. This would result in significant duplication of channels and would result in additional cost to the consumer which they could avoid by purchasing CBL's package alone.

Overall, URCA considers that it is unlikely that Bahamian consumers would use internet streaming as a substitute for CBL's SuperBasic package.

## **Price**

Consumers can access internet streaming from any country, consequently URCA is unable to determine an average price against which to compare the impact of a 5-10% increase of CBL's prices on consumers' behaviour.

→ Due to the potential for poor quality of service, CBL's current practice of tying internet and pay TV services and insufficient real time programming, URCA does not believe that internet streaming is likely to provide an effective demand-side substitute to consumers.

#### SuperBasic Package from IPTV

IPTV is currently not available in The Bahamas, but URCA believes that there may be potential for it to be provided within the review period of 12-24 months. To use IPTV services, consumers would need a high speed internet connection, a PC or set-top box (with a TV set) and a subscription to the service.

#### Characteristics

IPTV Pay TV services would not match the following characteristics demonstrated by CBL's SuperBasic package:

- No requirement for a high speed internet connection.

URCA notes that this discussion of the characteristics is purely hypothetical as IPTV is not currently available in The Bahamas. As with internet streaming, URCA is unclear as to whether an IPTV provider would be able to secure agreements to provide local Bahamian content.

The importance to consumers of the requirement to have a high speed internet connection has already been discussed in relation to internet streaming. The arguments are the same and URCA has not repeated them here. Note that in other countries IPTV has demonstrated a higher quality of service for the consumer than internet streaming.

#### **Price**

As previously stated, to receive IPTV consumers would require a high speed internet connection. The main provider of this is CBL so the consumer would incur the 5-10% price increase whether or not they substituted pay TV service with IPTV. Consequently, URCA believes that price would be a barrier to switching.

→ For the reasons outlined above URCA does not believe that IPTV is likely to provide an effective demand-side substitute to consumers.

# 10.1.2 Supply-side substitution for the SuperBasic package

The supply-side SSNIP test asks what would happen to supply over a 12-24 month period were CBL to increase its prices for the SuperBasic package by 5-10% for a non-transitory period of time. Below URCA considers whether other suppliers would enter the market and provide new substitutes and if so, whether the resulting demand-side substitution would mean that the price increase was unprofitable to CBL.

## Satellite Bahamas

As set out in the demand-side substitutability analysis, Satellite Bahamas' services are more expensive (i.e. would be greater than CBL's price after the hypothetical 5-10% increase) than CBL's. This relates to both the cost of installation and the prices of the packages. Therefore, URCA believes that few or no consumers would switch to Satellite Bahamas following a hypothetical price increase of 5-10% by CBL unless Satellite Bahamas were to reduce its prices substantially. URCA does not believe that a 5-10% increase by CBL would be likely to change Satellite Bahamas' current market strategy which appears to be to not compete directly with CBL's services. Whilst the price increase would reduce the existing differential between Satellite Bahamas and CBL's prices it is unlikely to be sufficient to trigger a change of the market strategy.

For the reasons stated above, URCA does not believe that Satellite Bahamas would represent a supply-side substitute.

#### New entrants

Satellite Bahamas is currently the only provider offering a service similar to CBL's SuperBasic package. The following analysis determines the potential competition that may evolve from new entrants operating on any of the alternative platforms discussed previously (internet streaming or IPTV). URCA believes that these new entrants wishing to provide a substitute to the SuperBasic package would likely face the following barriers to entry:

**Availability of infrastructure**: This specifically relates to IPTV-based Pay TV. There are two options for a hypothetical operator to gain access to infrastructure:

- The provider could build its own infrastructure; this is likely to be of considerable cost and is unlikely to be completed in time to impose a competitive constraint on CBL within the 12-24 month timeframe considered in this document
- The provider could use existing infrastructure; if access is granted, there are two options:
  - CBL's network
  - BTC's network and tower facilities

Access to high speed internet: Both IPTV and higher quality internet streaming require the consumer to have access to a high speed internet connection (whether through CBL's network, BTC's network or otherwise). Currently, new providers would be reliant on the consumer having some form of CBL's internet broadband service to allow them to access a high speed internet connection on which to view its content. However, as mentioned in the demand-side substitution analysis, it is unlikely that a consumer would purchase both the SuperBasic package (which they must purchase in order to purchase broadband) and a further Pay TV service as this would duplicate their requirements and result in additional cost.

There would be no regulatory barriers to entering the Pay TV market once CBL's exclusivity expires<sup>80</sup>.

→ Based on the information available it is unlikely that there will be effective supply-side substitution for CBL's SuperBasic package within the period under review due to the barriers outlined above.

# 10.1.3 Conclusion of substitutability test

The SSNIP test found that there are unlikely to be effective demand or supply substitutes for CBL's SuperBasic package within the defined time period which would make a non-transitory 5-10% price rise unprofitable for CBL.

Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and consequently belongs in the relevant market.

# 10.1.4 EU three criteria test

## 10.1.4.1 Barriers to entry

To provide the SuperBasic package across all the islands currently covered by CBL, a new entrant would require a platform for transmission and a range of foreign and local Bahamian channels allowing it to replicate the package. URCA considers therefore that there are substantial barriers to entry in the provision of a product similar to the CBL SuperBasic package.

The barrier to entry of requiring a platform for transmission has been discussed in detail previously and URCA has not repeated the analysis here; Section 10.1.2 should be referenced.

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<sup>&</sup>lt;sup>80</sup> Exclusivity is due to end in October 2009.

Access to content: URCA understands that a significant barrier to early provision of the service might be the commercial negotiation of rights to provide similar content. Negotiating local and US network content may be time consuming, but should not be insurmountable for an operator wishing to create a package comparable to CBL's SuperBasic package. However, there may be greater barriers to obtaining premium sports content due to the exclusivity of sports rights. In relation to IPTV, URCA understands that some companies interested in the Bahamian market may have already started such negotiations or have access to a wide range of channels via IPTV content aggregators and could be ready to launch within a year.

## 10.1.4.2 Emergent competition at the retail level

The demand and supply-side substitution analysis above demonstrated that currently there are no perfect substitutes to CBL's Pay TV packages across the majority of The Bahamas. A large part of this has been due to CBL's exclusivity, which will cease in October 2009. However, the lack of competition may continue going forward given the current lack of access to the existing networks and wholesale interfaces. Without *ex ante* regulation to mandate access, the only option to an alternative provider would be to roll-out its own network which URCA has already identified as constituting a significant barrier to entry.

Satellite Bahamas is currently able to offer a partial alternative to CBL's SuperBasic package, but URCA does not consider that it offers effective competition in the Pay TV market (due to price differentials and availability of local content), nor does URCA consider that this situation is likely to change.

While IPTV is likely to be an emerging form of competition in the future, it is unclear whether this will provide a sufficient alternative to consumers purchasing the SuperBasic package within the next 12-24 months.

Therefore, URCA concludes that the market structure of the SuperBasic package does not lend itself towards effective competition during the period of this review.

# 10.1.4.3 Sufficiency of ex post competition law

URCA has considered whether the use of *ex post* competition law to tackle abuse of an SMP position would be a sufficient to address failures in the high-level market.

URCA believes that the main barrier to competition that may arise in this market, deterring new entrants, is related to the provision of access to viable transmission and access networks. From the analysis above it is unlikely that either CBL or BTC would provide wholesale access to their respective networks on reasonable terms and conditions without *ex ante* regulation.

URCA concludes that *ex post* competition law is unlikely to be sufficient to address potential competition problems that may arise in this market.

# 10.1.4.4 Conclusion of EU three criteria test

None of the three criteria were met for CBL's SuperBasic package. Therefore the conclusion of the EU three criteria test is that this product is susceptible to *ex ante* regulation and belongs in the relevant market.

# 10.1.5 Geographic reach

The geographic reach of this product is defined as the area in which CBL has facilities to provide the product

The table below summarises the SSNIP test and EU three criteria test for the SuperBasic package.

# SSNIP test results for SuperBasic package

	Possible Substitutes		
	Satellite TV	Internet Streaming	IPTV
	Satellite Bahamas	Various international	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	•••	••	•••
No requirement for a high speed internet connection	•••	ı	-
Signal quality and resilience to weather disruptions	••	•	••
Price	-	?	?
Coverage	•••	?	?
Likely to be an effective substitute within the time period under review?	N	N	N

# EU three criteria test results for the SuperBasic package

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?	Υ

# Key:

Note for the SSNIP test: When assessing the characteristics, pricing and coverage of the substitutes, CBL's SuperBasic package has been used as the benchmark. When a criterion is demonstrated to a greater or equal degree as CBL, URCA indicates this with a mark of three points (and so on, see the key below). The review of future products makes use of URCA's knowledge of the market and operators, the experience of other countries and any other relevant evidence available to URCA.

•••	Demonstrates the criterion to the greater or equal degree as CBL	
••	Adequately demonstrates the criterion compared to CBL	
•	Poorly demonstrates the criterion compared to CBL	
-	- Does not demonstrate the characteristic	
?	Insufficient information available to URCA	
Italics	Used for products not currently available in The Bahamas	

# 10.2 Digital Packages

These products have first been tested for substitutability, in accordance with Step 2 of the Methodology. They were tested first for demand-side substitution and then for supply-side substitution.

## 10.2.1 Demand-side substitution for the Digital Packages

The demand-side SSNIP test asks what would happen to demand over a 12-24 month period were CBL to increase its prices for its digital packages by 5-10% for a non-transitory period of time. URCA considers whether this would be profitable to CBL or not.

URCA has considered demand-side substitution from a number of sources:

- Current products: Pay TV services from Satellite Bahamas, Internet Streaming,
- Emerging products: Pay TV services from IPTV

Digital Packages from Satellite Bahamas

#### **Characteristics**

As set out in the summary table at the end of this Section, the characteristics that are matched and not matched by satellite Pay TV for the digital package are identical to those of the SuperBasic package. Consequently, URCA's understanding of the ability of satellite Pay TV to act as a demand-side substitute can be referenced to Section 10.1.1 and is not repeated here.

#### Price

Switching to Satellite Bahamas would cost at a minimum \$199 for the installation fee, \$595 for the dish and receiver card and then \$70 for its basic channel package. This is significantly greater than the initial set-up cost for CBL's digital service, which is currently \$149.95 for the digital set-top box and \$50 for installation. URCA believes that this price differential may deter consumers from switching to satellite services. If CBL were to increase installation costs by 5-10%, they would still be substantially cheaper than Satellite Bahamas.

However, URCA notes that the digital packages offered by CBL are more comparable to Satellite Bahamas' services in terms of the number of channels included and the monthly subscription prices; this can be seen in reference to the pricing tables in Section 10.1.1. For example, CBL's Oceans Complete package which has 225 channels is priced at \$99, this compares reasonably, in terms of the number of channels, to Satellite Bahamas' 200+ package which is priced at \$77. Looking at the pricing of individual packages alone it is feasible that, following a 5-10% increase in prices, consumers may switch from CBL's services to Satellite Bahamas.

#### Other factors

The other factors of importance when considering satellite Pay TV as a demand-side substitute for the digital packages are the same as for the SuperBasic package, consequently URCA has not repeated them here and Section 10.1.1 should be referenced.

→ Based on the information available URCA does not believe that Satellite Bahamas is likely to provide an effective demand-side substitute to consumers due to the substantial additional costs and loss of local Bahamian channels. Therefore URCA does not believe that Satellite Bahamas would constrain CBL's ability to profitably raise its prices for its digital packages by 5-10% for a non-transitory period.

Digital Packages from Internet Streaming

#### Characteristics

The characteristics that are matched and not matched by internet streaming Pay TV for the digital packages are identical to those of the SuperBasic package. Consequently, URCA's understanding of the ability of internet streaming to act as a demand-side substitute can be referenced to Section 10.1.1 and is not repeated here.

# **Price**

Consumers can access internet streaming from any country, consequently URCA is unable to determine an average price against which to compare the impact of a 5-10% increase of CBL's prices on consumers' behaviour.

→ Due to the potential for poor image quality and limited real time programming URCA does not believe that internet streaming is likely to provide an effective demand-side substitute to consumers. Therefore URCA does not believe that internet streaming would constrain CBL's ability to profitably raise its prices for its digital packages by 5-10% for a non-transitory period.

## Digital Packages from IPTV

IPTV is currently not available in The Bahamas, but URCA believes that there may be potential for it to be provided within the next 12-24 months over a third party network. To use IPTV services, consumers would need a high speed internet connection, a PC or set-top box and a subscription to the service.

# **Characteristics**

As shown in the summary table at the end of this Section, the characteristics that are matched and not matched by IPTV pay TV for the digital packages are identical to those of

the SuperBasic package. Consequently, URCA's understanding of the ability of IPTV to act as a demand-side substitute can be referenced to Section 10.1.1 and is not repeated here.

## **Price**

As previously stated, to receive IPTV consumers would require a high speed internet connection. The main provider of this is CBL so the consumer would incur the 5-10% price increase whether or not they substituted pay TV service with IPTV. Consequently, URCA believes that price would be a barrier to switching.

→ Due to the requirement for a high speed internet connection URCA does not believe that IPTV is likely to provide an effective demand-side substitute to consumers. Therefore URCA does not believe that IPTV competition would constrain CBL's ability to profitably raise its prices for its digital packages by 5-10% for a non-transitory period.

## 10.2.2 Supply-side substitution for the Digital package

In this Section URCA considers whether, if CBL raised the price of the digital packages in The Bahamas by 5-10%, existing and potential Pay TV providers would attempt to supply this service on a large scale across The Bahamas.

The supply-side substitution analysis is mainly the same for the digital packages as it was for the SuperBasic package, with the same barriers to entry impacting existing and potential entrants. Consequently, URCA has not repeated the analysis here and Section 10.1.2 should be referenced.

The key differences compared to the SuperBasic package are that the digital packages include some premium content and broadcast from a digital transmission network. URCA believes that this would result in increased barriers to a new entrant wishing to compete with CBL's digital packages.

Access to content: URCA understands that a significant barrier to early provision of the service might be commercial negotiation of rights to provide similar content. Premium content is likely to be more challenging to negotiate, as exclusive rights may be in existence and there could be issues with copyright agreements. URCA understands that some companies interested in the Bahamian market may have already started such negotiations or have access to a wide range of channels via content aggregators and could be ready to launch within a year.

→ Based on the information available it is unlikely that there will be effective supply-side substitution for CBL's digital packages within the period under review.

## 10.2.3 Conclusion of substitutability test

The SSNIP test found that there is unlikely to be effective substitution for CBL's digital package within the defined time period that would make a non-transitory 5-10% price rise unprofitable for CBL. Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and therefore belongs in the SMP market.

#### 10.2.4 EU three criteria test

#### 10.2.4.1 Barriers to entry

URCA believe that CBL's digital packages face the same barriers to entry for a new entrant to the market as the SuperBasic package. Consequently, URCA has not repeated the analysis here.

An additional barrier to entry is the need to negotiate access to premium content. This may prove a more substantial barrier for a new entrant, particularly where exclusive rights to sporting events exist.

URCA concludes that there are substantial barriers to entry for this product.

# 10.2.4.2 Emergent competition at the retail level

URCA considers that CBL's digital packages face the same level of existing and emerging competition at the retail level as the SuperBasic package. Consequently, URCA has not repeated the analysis here and concludes that there is no emerging competition for this product.

## 10.2.4.3 Sufficiency of ex post competition law

URCA believe that the regulatory characteristics of CBL's digital packages are the same as for the SuperBasic package. Consequently, URCA has not repeated the analysis here. URCA concludes that *ex-post* regulation would be insufficient for this product.

#### 10.2.4.4 Conclusion of EU three criteria test

As the analysis of the three criteria was the same for the digital packages as for the SuperBasic package URCA has determined that none of the three criteria are met. Therefore the conclusion of the EU three criteria test is that this product is susceptible to *ex ante* regulation and belongs in the relevant market.

#### 10.2.5 Geographic reach

The geographic reach of this product is defined as the area in which CBL has facilities to provide the product

The table below summarises the SSNIP test and EU three criteria test for the digital packages.

# SSNIP test results for digital packages

	Possible Substitutes		
	Satellite TV	Internet Streaming	VTAI
	Satellite Bahamas	Various international	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	•••	ı	-
Signal quality and resilience to weather disruptions	••	•	••
Price	-	?	?
Coverage	•••	?	?
Likely to be an effective substitute within the time period under review?	N	N	N

# EU three criteria test results for the digital packages

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

# Key:

Please reference the summary table for the SuperBasic package.

**Note for the SSNIP test:** When assessing the characteristics, pricing and coverage of the substitutes, CBL's digital packages have been used as the benchmark. When a criterion is

demonstrated to a greater or equal degree as CBL, URCA indicates this with a mark of three (and so on). The review of future products makes use of URCA's knowledge of the market and operators, the experience of other countries and any other relevant evidence available to URCA.

# 10.3 HDTV Package

The product has first been tested for substitutability, in accordance with Step 2 of the Methodology. It was tested first for demand-side substitution and then for supply-side substitution.

#### 10.3.1 Demand-side substitution for the HDTV Package

The demand-side SSNIP test asks what would happen to demand over a 12-24 month period were CBL to increase its prices for HDTV by 5-10% for a non-transitory period of time. URCA considers whether this would be profitable to CBL or not?

URCA has considered demand-side substitution from a number of sources:

- Current products: Pay TV services from Satellite Bahamas, Internet Streaming,
- Emerging products: Pay TV services from IPTV

HDTV Package from Satellite Bahamas

## **Characteristics**

As shown in the summary table below, the service offered by Satellite Bahamas includes high definition channels as standard within all of its packages. The remaining characteristics that are matched and not matched by satellite Pay TV for the HDTV package are identical to those of the SuperBasic package. Consequently, URCA's understanding of the ability of satellite Pay TV to act as a demand-side substitute can be referenced to Section 10.1.1 and is not repeated here.

## **Price**

Installing Satellite Bahamas' system would include \$199 for the installation fee, \$595 for the dish and receiver card and then \$70 for its basic channel package, which includes HD channels. To receive an HD service from CBL the consumer would have to buy an HD enabled set-top box, the cheapest advertised by CBL is \$599<sup>81</sup>, an HD ready TV and pay installation costs of \$50. The consumer would then have to purchase at a minimum the SuperBasic package and the HDTV package, this would cost a total of \$39.95 a month. Due to the cost of the HD set-top box from CBL, URCA believes that some consumers may switch to Satellite Bahamas following a non-transitory 5-10% price increase by CBL. Both Satellite Bahamas and CBL offer HDTV to consumers on a leased basis which may reduce the initial cost to the consumer.

# Other factors

<sup>81</sup> http://www.cablebahamas.com/television/settop/index.html

The other factors of importance when considering satellite Pay TV as a demand-side substitute for the HDTV package are the same as for the SuperBasic package, consequently URCA has not repeated them here and Section 10.1.1 should be referenced.

→ Based on the information available URCA believes that Satellite Bahamas may provide an effective demand-side substitute to consumers.

## HDTV Package from Internet Streaming

Internet streaming is unable to provide a high definition service to consumers, therefore URCA has not considered it here as it would not act as a demand-side substitute.

#### HDTV Package from IPTV

IPTV is currently not available in The Bahamas, but URCA believes that it is possible that it could be provided within the next 12-24 months. To use IPTV services for HD services, consumers would require a high speed internet connection, a PC or HD enabled set-top box and an HD-ready TV as well as a subscription to the IPTV service.

## **Characteristics**

Any potential IPTV service is likely to offer high definition television, therefore the characteristics that are matched and not matched by IPTV Pay TV for the HDTV package are the same as for the other Pay TV services and have been described in the SuperBasic package Section. Consequently, URCA's understanding of the ability of IPTV to act as a demand-side substitute for HDTV can be referenced to Section 10.1.1 and is not repeated here.

#### Price

As previously stated, to receive IPTV services, consumers would require a high speed internet connection. The main provider of this is CBL so the consumer would incur the 5-10% price increase whether or not they substituted pay TV service with IPTV. Consequently, URCA believes that price would be a barrier to switching.

→Based on the information available, URCA believes that IPTV could possibly provide an effective demand-side substitute to consumers in the future. However it is unclear if this service will become available to consumers in order to become an effective substitute in the 12-24 month time period considered in this review.

## 10.3.2 Supply-side substitution for the HDTV package

URCA concluded in the previous Section that there could be effective demand-side substitution for CBL's HDTV product in the period under review. In accordance with the Methodology in Section 4, demand-side substitution is the most important to consider because it directly relates to the choice available to consumers. Consequently, having concluded that there is demand-side substitution, URCA does not believe that it is necessary to consider supply-side substitution for the HDTV package.

## 10.3.3 Conclusion of substitutability test

The SSNIP test found that there are likely to be effective substitutes for CBL's HDTV package available within the defined time period that would make a non-transitory 5-10% price rise unprofitable for CBL.

#### 10.3.4 EU three criteria test

Following the analysis of the retail market conditions carried out above, URCA has concluded that CBL's HDTV package should not remain in the high-level SMP market for CBL.

The HDTV package is not considered in relation to the EU three criteria test because URCA found that substitutes are likely to exist for this product from Satellite Bahamas.

The table below summarises the SSNIP test and EU three criteria test for the HDTV package.

# SSNIP test results for HDTV package

Soldin test results for fibry package	Possib	le Substi	itutes
	Satellite TV	Internet Streaming	IPTV
	Satellite Bahamas	Various international	Other Provider
Characteristics			
Real-time	•••	•	•••
Multi channel broadcasting	•••	•	•••
Does not require a satellite dish	-	•••	•••
Availability of additional foreign channels providing a range of news and entertainment services	•••	••	•••
No requirement for a high speed internet connection	•••	-	-
Superior picture quality as compared to Standard Definition	•••	-	•••
Signal quality and resilience to weather disruptions	••	•	••
Price	••	?	?
Coverage	•••	?	?
Likely to be an effective substitute within the time period under review?	Υ	N	N

## EU three criteria test results for the HDTV package

URCA has determined that effective demand-side substitutes exist for this product, the EU three criteria test has not been applied.

**<u>Key:</u>** Please reference the summary table for the SuperBasic package.

<u>Note for the SSNIP test</u>: When assessing the characteristics, pricing and coverage of the substitutes, CBL's HDTV package has been used as the benchmark. When a criterion is demonstrated to a greater or equal degree as BTC, URCA indicates this with a mark of three (and so on). The review of future products makes use of URCA's knowledge of the market and operators, the experience of other countries and any other relevant evidence available to URCA.

# 10.4 Pay-per-view

The product has first been tested for substitutability, in accordance with Step 2 of the Methodology. It was tested first for demand-side substitution and then for supply-side substitution.

## 10.4.1 Demand-side substitution for Pay-per-view

The demand-side SSNIP test asks what would happen to demand over a 12-24 month period were CBL to increase its prices for pay-per-view services by 5-10% for a non-transitory period of time. Would the price increase be profitable to CBL or not?

RCA has considered demand-side substitution from a number of sources:

- Current products: Pay TV services from Satellite Bahamas, Internet Streaming,
- Emerging products: Pay TV service from IPTV

Pay-per-view from Satellite Bahamas

# Characteristics

As set out in the summary table at the end of this Section, those of CBL's characteristics that are matched and not matched by Satellite Pay TV for the pay-per-view package are identical to those of the SuperBasic package. Consequently, for the reasons set out in Section 10.1.1, URCA considers that Satellite Bahamas would be an imperfect substitute for the pay-per-view package.

#### Price

Installing Satellite Bahamas' system would include \$199 for the installation fee, \$595 for the dish and receiver card and then \$70 for its basic channel package, which includes HD channels. The current satellite TV packages offer pay-per-view services costing on average \$7 for a movie (the price varies depending on the movie in question) as compared to CBL's which are \$4<sup>82</sup>. For sports events, satellite prices start at \$75 per pay-per-view event as compared to CBL's which start at \$30. The significant price differentials shown here, particularly for the installation of the services, mean that it is unlikely that a 5-10% increase in CBL's prices would cause consumers to switch to Satellite Bahamas.

#### Other factors

Switching pay-per-view from cable to satellite is only likely to be an option where the satellite system is already installed in a user's home (to avoid installation costs) and where, for example, the user has specific sports or movie preferences not offered by CBL. URCA considers that these conditions are unlikely to apply to a large proportion of CBL's current customer base.

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<sup>82</sup> Source: CBL

→ Based on the information available, URCA does not believe that Satellite Bahamas is likely to provide an effective demand-side substitute to consumers. Therefore URCA does not believe that Satellite TV competition would constrain CBL's ability to profitably raise its prices for its pay-per-view packages by 5-10% for a non-transitory period.

Pay-per-view from Internet Streaming

#### Characteristics

Internet streaming does not match the following characteristic of CBL's pay-per-view service:

- No requirement for a high speed internet connection.

Internet streaming would allow for consumers to watch some real-time broadcasting, particularly sports events. However, as it does not provide a full real-time service and can have picture quality and reliability issues, consumers may not see it as an adequate substitute for the pay-per-view package.

CBL's current system of tying the purchase of its Pay TV to high speed internet access has further consequences for the ability of internet streaming to act as a realistic substitute for consumers. The impact of this practice has already been discussed in Section 10.1.1in relation to the SuperBasic package.

However, it is possible that a consumer would purchase a SuperBasic package from CBL, which would provide a minimum number of channels and enable them to purchase high speed internet access. The customer could then augment this with their specific preferences using internet streaming pay-per-view. URCA believes that consumers would only be attracted to this substitute for some programming such as sports, if the internet streaming provider could supply the content at a competitive price following a 5-10% increase in CBL's prices.

# **Price**

Consumers can access internet streaming from any country, consequently URCA is unable to determine an average price against which to compare the impact of a 5-10% increase of CBL's prices on consumers' behaviour.

→ Based on the information available URCA believes that internet streaming may provide demand-side substitute for consumers for some programming, but would not be an effective substitute for all of CBL's product offerings. URCA does not believe that pay-per-view TV from internet streaming would be an effective substitute.

#### Pay-per-view from IPTV

IPTV is currently not available in The Bahamas, but URCA believes that there may be potential for it to be provided within the next 12-24 months. To use IPTV services, consumers would need a high speed internet connection, a PC or set-top box and a subscription to the IPTV service.

# **Characteristics**

The following characteristics of CBL's pay-per-view service would not be matched by an IPTV Pay TV service:

- No requirement for a high speed internet connection.

The consequences for consumers of CBL's current system of tying the purchase of pay TV to high speed internet access have already been discussed. However, it is possible that consumers would purchase a SuperBasic package from CBL, which would provide them with a minimum number of channels and access to the high speed internet access service, and then augment this service to meet their specific preferences using IPTV pay-per-view. URCA believes that consumers would only be attracted to this substitute if the IPTV provider could supply the content at a competitive price following a 5-10% increase in CBL's prices. As noted in the next Section, the level of pricing of a potential IPTV provider is unknown.

## Price

Consumers can access internet streaming from any country, consequently URCA is unable to determine an average price against which to compare the impact of a 5-10% increase of CBL's prices on consumers' behaviour.

→Based on the information available URCA believes that IPTV could provide an effective demand-side substitute to consumers in the future, however it is unclear if this service would be available to consumers in the 12-24 month time period considered in this review.

## 10.4.2 Supply-side substitution for the Pay-per-view product

In this Section URCA considers whether, if CBL raised the price of the pay-per-view package in The Bahamas by 5-10%, existing and potential Pay TV providers would attempt to supply pay-per-view services across The Bahamas.

## Satellite Bahamas

In response to a 5-10% increase in CBL's pay-per-view price, URCA does not believe that Satellite Bahamas would be able to compete sufficiently to provide a substitute that replicates the characteristics of CBL's services to the extent that it would be considered an acceptable substitute.

The supply-side substitution analysis of the pay-per-view package is the same as for potential entrants as it was for the SuperBasic package. Consequently, URCA has not repeated the analysis here and Section 10.1.2 should be referenced.

→ Based on the information available URCA does not believe that there is likely to be effective supply-side substitution for CBL's pay-per-view package from Satellite Bahamas within the period under review.

## 10.4.3 Conclusion of substitutability test

The SSNIP test found that there is unlikely to be effective substitution for CBL's pay-per-view package within the defined time period that would make a non-transitory 5-10% price rise unprofitable for CBL. Satellite Bahamas is likely to be considered by consumers to be an imperfect substitute and result in insufficient competition. Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and therefore belongs in the SMP market.

#### 10.4.4 EU three criteria test

#### 10.4.4.1 Barriers to entry

URCA believes that CBL's pay-per-view packages face the same barriers to entry, in terms of infrastructure roll-out, for a new entrant to the market as the SuperBasic package, with the exception of the need to secure local Bahamian content. Consequently, URCA has not repeated the analysis here.

An additional barrier to entry is the need to negotiate access to premium content. This may prove more a substantial barrier for a new entrant, particularly where exclusive rights to sporting events exist.

URCA concludes that there are barriers to entry for this product.

# 10.4.4.2 Emergent competition at the retail level

URCA considers that CBL's pay-per-view packages face the same level of emerging competition at the retail level as the other Pay TV services and is described with the SuperBasic package Section. Consequently, URCA has not repeated the analysis here and concludes that there is no emerging competition for this product in the time period under consideration.

#### 10.4.4.3 Sufficiency of ex post competition law

URCA understands that the pay-per-view package is presently only purchased by a limited number of Bahamian consumers. In the interest of proportionality and maintaining 'light touch' regulation, URCA believes that *ex post* competition law would be sufficient to regulate this product and encourage competition. Consequently, URCA does not believe that the pay-per-view package belongs in the relevant market and hence will not be subject to *ex ante* regulation.

#### 10.4.5 Conclusion of the EU three criteria test

Through the analysis of the EU three criteria test, URCA has determined that *ex post* competition law is sufficient for regulating CBL's pay-per-view package. URCA has concluded that CBL's pay-per-view products are not part of the relevant market for Pay TV in which CBL has SMP.

The table below summarises the SSNIP test and EU three criteria test for the pay-per-view package.

# SSNIP test results for pay-per-view package

	Possible	e Substi	tutes
	Satellite TV	Internet Streaming	VTAI
	Satellite Bahamas	Various international	Other Provider
Characteristics			
Real-time	•••	••	•••
Does not require a satellite dish	-	•••	•••
Availability of additional foreign channels providing a range of news and entertainment services	•••	••	•••
No requirement for a high speed internet connection	•••	-	-
Signal quality and resilience to weather disruptions	••	-	••
Price	-	?	?
Coverage	•••	?	?
Likely to be an effective substitute within the time period under review?	N	N	N

# EU three criteria test results for the pay-per-view package

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

# Key:

Please reference the summary table for the SuperBasic package.

**Note for the SSNIP test:** When assessing the characteristics, pricing and coverage of the substitutes, CBL's pay-per-view package has been used as the benchmark. When a criterion is demonstrated to a greater or equal degree as CBL, URCA indicates this with a mark of three (and so on). The review of future products makes use of URCA's knowledge of the

market and operators, the experience of other countries and any other relevant evidence available to URCA.

# 10.5 Conclusion on retail products in the high-level SMP market

Following the analysis of the demand- and supply-side substitutability of the retail products and EU three criteria tests carried above, URCA has concluded that the following products should remain in the high-level SMP market for CBL:

- 1. The analogue SuperBasic TV package on the islands where CBL has cable TV coverage
- 2. Digital packages on the islands where CBL has cable TV coverage.

The Pay-per-view and HDTV products are not considered here. URCA found that substitutes are likely to exist for HDTV from Satellite TV and internet streaming and *ex post* competition law will be sufficient to regulate Pay-per-view.

# 11 Description of wholesale products

The products covered in this Section would enable a competing provider to purchase services from CBL to replicate CBL's retail services in this high level market. Other wholesale products could be considered<sup>83</sup> but for the purpose of the SMP presumptions and the safeguard SMP obligations, URCA has limited the scope of wholesale products discussed at this stage.

The previous analysis has determined the retail products which belong in the Pay TV market in which CBL has presumed SMP.

This Section identifies the underlying wholesale products and interfaces which enable CBL to offer the retail products included in the SMP market. Although there are currently no formal wholesale products for the Pay TV market in The Bahamas, CBL in effect provides these products informally to its own retail business and therefore it can be considered as currently having 100% market share in the provision of each of these products.

The characteristics, pricing and other relevant parameters of CBL's wholesale products are discussed below. The sections following that description discuss any existing and potential substitutes for these products.

# 11.1 Products in the high-level SMP market

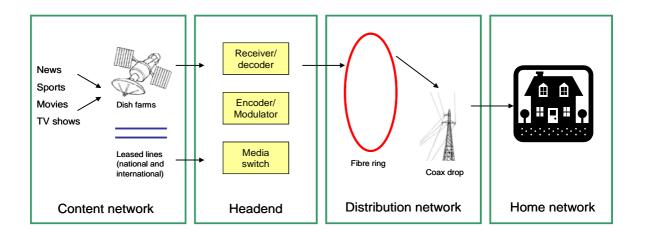
The underlying wholesale products for the retail products included in the SMP market are set out below:

	Retail Products	
	SuperBasic	Digital
Wholesale Products	Package	Packages
Bitstream access for content distribution	х	х
Backhaul (national)	x	x
Backhaul (international)	х	x
Wholesale access to the SuperBasic package	х	
Wholesale access to the Digital packages		х

Each of these wholesale products is described in more detail in the following sections.

At a very high level, CBL's Pay TV service operates as follows. CBL receive content through both satellite farms and national and international cable connections. The content is then delivered to the head-ends where it is distributed to the end-user through fibre optic transmission cables and hybrid coaxial cable.

<sup>&</sup>lt;sup>83</sup> Other wholesale products are listed in the recent consultation on Access and Interconnection and may be included in future analysis and determinations by URCA.



#### 11.1.1 Bitstream Access

Bitstream access refers to a high speed data interface within the local access network that allows CBL to distribute data over the network to the end user<sup>84</sup>. Assuming that CBL provided bitstream access as a wholesale product to a third party it would allow some opportunity for the operator to differentiate its service in quality terms and, to some extent, the range of services offered. CBL would retain control of the technical characteristics of the service (such as maximum downstream and upstream speeds, standards used, etc.).

# 11.1.1.1 CBL's current offering

CBL's Pay TV network represents a single network that is used for the provision of internet access, Pay TV and leased lines (domestic and international), but for the purpose of this document URCA only consider how it is used for the supply of Pay TV services.

CBL's local access network is constructed from coaxial cable, which can be used for a range of services and can offer very high bandwidths.<sup>85</sup>

#### Characteristics

The key characteristics of CBL's bitstream access are:

- A high capacity<sup>86</sup> connection to each customer's premises;
- Provides an access link that is directly connected to CBL's national backbone network;
- Has the capacity and is suitable for double and triple play provision;<sup>87</sup>

<sup>&</sup>lt;sup>84</sup> ETP Recommendations on High Speed Bitstream Services in the Local Loop, June 2001, ETP

<sup>&</sup>lt;sup>85</sup> HFC access network is designed using an 'N + 3' node architecture, and passes an average of 200 homes per node, it is designed to maintain bandwidth of 870 MHz.

<sup>&</sup>lt;sup>86</sup> Capacity must be sufficient to carry multi-channel TV signals as well as pay-per view services.

<sup>&</sup>lt;sup>87</sup> Double and triple-play refer to the provision of more than one type of service – presently BCL offers Pay TV and internet access (double-play), if it were to offer fixed voice services then it would be triple-play.

 Allows content to be distributed to provide Pay TV services to end users connected to the network.

As previously mentioned, there is currently no real market for this wholesale product, and hence there is no market price. For the purposes of this review, it has been assumed that CBL is pricing the products at the level which would prevail in a competitive market. This is consistent with the principles of the hypothetical monopolist test<sup>88</sup>.

## Coverage

CBL have both an analogue and a digital transmission network.

The analogue local access network is available on the following islands: Abaco, Andros, Berry Islands, Bimini, Eleuthera, Exuma, Grand Bahama, Inagua, Long Island, New Providence and San Salvador<sup>89</sup>.

The digital local access network is available on the following islands: Abaco, Eleuthera, Grand Bahama, and New Providence<sup>90</sup>.

## 11.1.2 National backhaul

Backhaul service can be defined as services which constitute a 'core transmission network' or a 'national backbone network' linking the head-ends, or switching nodes, of the network to the network elements at the edge of a network such as the access network and any international connectivity. It includes facilities used by the Pay TV provider to transport aggregate services from the head-end offices to various nodes in the distribution network towards the end-user. This infrastructure may be intra-island as well as providing links for distribution between islands.

#### 11.1.2.1 CBL's current offering

CBL operates a domestic fibre-optic transmission network which connects its local access nodes<sup>91</sup> with its cable TV head-end locations<sup>92</sup>. This network is referred to in this paper as CBL's national backbone and if CBL were the customer of its network business it would need to purchase capacity on this network in the form of backhaul.

# Characteristics

CBL's national backbone has the following characteristics:

 High capacity fibre network connecting CBL's local access network nodes with CBL's head-ends for the transmission of content, either intra-island or inter-island,

 $<sup>^{88}</sup>$  Office of Fair Trading, Market definition – understanding competition law, 2004 para 2.7.

<sup>&</sup>lt;sup>89</sup> Source: CBL's website

<sup>&</sup>lt;sup>90</sup> Source: CBL's website

<sup>&</sup>lt;sup>91</sup> Local nodes are where the coaxial cable is deployed between these notes and the customers' premises.

<sup>&</sup>lt;sup>92</sup> CBL has twelve head-ends in total situated on various islands across The Bahamas, of these eight are analogue and four are digital.

• It has the capacity and is technically suitable for double and triple play service provision<sup>93</sup>.

As previously mentioned, there is currently no real market for this wholesale product, and hence there is no market price. For the purposes of this review it will be assumed that CBL is pricing the products at the level which would prevail in a competitive market; that is, covering its efficiently incurred marginal costs including a reasonable rate of return.

## Coverage

CBL's national backbone has coverage on the following islands: Abaco, Eleuthera, Grand Bahama, and New Providence<sup>94</sup>.

#### 11.1.3 International backhaul

International backhaul allows the Pay TV provider to be connected to overseas providers of content; it provides the connection between the national backbone and international locations from which content is collected.

#### 11.1.3.1 CBL's current offering

To receive programming content, CBL uses the fibre-optic network operated by its subsidiary CCL, as well as a location in which it has a number of large satellite receiver dishes installed to receive content distributed via satellite (a 'satellite dish farm'). These two facilities are collectively referred to in this paper as CBL's international backbone.

The CCL fibre-optic network connects CBL's domestic backbone to the USA, from where CBL transports program feeds.

#### **Characteristics**

CBL's international fibre-optic backbone has the following characteristics:

- It is a high capacity fibre network connecting CBL's national network to Florida,
- Satellite dish farms allowing for the transmission of content to CBL from satellite sources,
- It has the capacity and is technically suitable for double and triple play service provision.<sup>95</sup>

As previously mentioned, there is currently no real market for this wholesale product, and hence there is no market price. For the purposes of this review it will be assumed that CBL is pricing the products at the level which would prevail in a competitive market; that is, covering its efficiently incurred marginal costs including a reasonable rate of return.

<sup>&</sup>lt;sup>93</sup> Double and triple-play refer to the provision of more than one type of service – presently CBL offers Pay TV and internet access (double-play), if it were to offer fixed voice services then it would be triple-play.

<sup>&</sup>lt;sup>94</sup> Source: response by CBL to a data request

<sup>&</sup>lt;sup>95</sup> Double and triple-play refer to the provision of more than one type of service – presently CBL offers Pay TV and internet access (double-play), if it were to offer fixed voice services then it would be triple-play.

#### Coverage

CBL's international backbone links The Bahamas and the USA.

# 11.1.4 Wholesale access to the SuperBasic and/or Digital packages service (content and distribution)

Access to CBL's service represents a wholesale product that allows for CBL's content and distribution services to be made available to consumers by another provider. If a competitor wants to replicate CBL's SuperBasic or digital packages it would require access to content and to a distribution platform. If the competitor does not wish to self-provide either, then the availability of this wholesale product would enable the provider to add the CBL SuperBasic or digital packages to its portfolio.

# 11.1.4.1 CBL's current offering

Based on the retail products remaining in the high-level SMP market for CBL, this wholesale product would cover the following:

- SuperBasic Package includes between 39-54 channels with a mix of local Bahamian content and foreign news, sports and entertainment channels; and
- Digital packages includes a range of packages which differ in terms of the number of channels available and the degree of premium content (such as sports and movies) included.

#### **Characteristics**

Access to CBL's service has the following characteristics:

- High capacity fibre network connecting CBL's local access network nodes with CBL's head-ends, either intra-island, inter-island or internationally;
- Access to both analogue and digital transmission networks; and
- A range of real-time channels including local Bahamian content and additional foreign news, sports and entertainment.

As previously mentioned, there is currently no real market for this wholesale product, and hence there is no market price. For the purposes of the analysis in this determination it will be assumed that CBL is pricing the products at the level which would prevail in a competitive market that is, covering its marginal costs including a reasonable rate of return.

# Coverage

As already noted, CBL have both an analogue and a digital transmission network.

The analogue transmission network is available on the following islands: Abaco, Andros, Berry Islands, Bimini, Eleuthera, Exuma, Grand Bahama, Inagua, Long Island, New Providence and San Salvador<sup>96</sup>.

The digital transmission network is available on the following islands: Abaco, Eleuthera, Grand Bahama, and New Providence<sup>97</sup>. The wholesale services would cover the same geographic areas as CBL's network and retail services.

The SuperBasic services would be available across the majority of The Bahamas whereas the digital packages would only be available where CBL had digital network coverage.

## 11.2 Possible substitutes

As previously stated, a wholesale market for high speed data and connectivity does not exist at this time in The Bahamas, consequently this review of substitutes only looks at hypothetical products.

This Section outlines the products which could be possible substitutes for CBL's wholesale products. It covers those products which:

- · Are currently available; and
- Could become available within the time period under review.

URCA has not covered in this Section the possibility of a new entrant to the wholesale market as it believes that the investment costs and timeframes associated with deploying a new transmission network are too high and too prohibitive to be considered relevant within the 12-24 month timeframe considered in this determination.

The future products considered in the analysis represent any new products, expansions or improvements in current products that might be offered by existing operators.

The products are organised by provider as follows:

- BTC
- SRG

# 11.2.1 BTC

URCA believes that BTC's products could be considered as potential substitutes for the following CBL wholesale products:

- National Backhaul
- International backhaul

## 11.2.1.1 Current BTC products

BTC operates a three-tier network, similar to that of CBL, separated into the local access network, the domestic backbone, and the international backbone. We describe each of these in turn.

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<sup>&</sup>lt;sup>96</sup> Source: CBL's website

<sup>&</sup>lt;sup>97</sup> Source: CBL's website

BTC's local access network is constructed primarily from twisted copper pairs. It was originally designed to carry voice services only but in recent years ADSL<sup>98</sup> technology has been developed which enables broadband provision on the copper pairs, using the higher frequency bandwidth, reserving the lower frequency for the voice services. BTC currently offers up to 1.5Mbps speed internet access on its network. The current access network does not offer sufficient capacity to provide cable TV, and the capacity is such that at present BTC cannot offer any form of double- or triple-play, beyond relatively low speed broadband and voice services.

BTC's domestic backbone connects BTC's local offices (concentrators and switch locations) to each other, to the local access nodes and to the international backbone network. BTC's domestic backbone is a fibre-optic network that is deployed extensively throughout The Bahamas, although BTC also uses microwave links in some cases between islands. URCA does not have detailed information about the maximum capacity on BTC's domestic backbone network, but does not anticipate there to be severe capacity limitations restricting BTC's business ambitions over the coming 12-24 months.

BTC's domestic backbone has the following characteristics:

- It is a high capacity fibre network connecting BTC's local access network and switches, either on-island or inter-island; and
- It has the capacity and is technically suitable for double and triple play service provision.

BTC's international backbone has the following characteristics:

- It is a high capacity fibre network connecting BTC's domestic network the USA.
- It has the capacity and is technically suitable for double and triple play service provision.
- BTC's international backbone connects its domestic backbone to international networks for sending and receiving electronic communications messages between The Bahamas and locations in the rest of the world. BTC's international backbone consists of a fibre-optic submarine cable between The Bahamas and Jupiter Inlet, Florida<sup>99</sup>.

#### 11.2.1.2 Possible future BTC products

URCA understands that BTC is rolling out Fiber to the Curb (FTTC)<sup>100</sup> as part of its NGN upgrade, which would mean that it could deploy VDSL<sup>101</sup> on the twisted copper pairs running from the street cabinet to the customer's premises. VDSL could substantially increase the internet access speeds that BTC could offer. URCA has no details of the progress of this

99 http://www1.btcbahamas.com/aboutus/history.php

<sup>&</sup>lt;sup>98</sup> Asynchronous Digital Subscriber Line.

Fibre to the Curb (FTTC), is a telecommunications system based on fibre-optic cables run to a platform that serves several customers. Each of these customers has a connection to this platform via coaxial cable or twisted pair

<sup>101</sup> Very High Bit rate DSL

project but does not expect that it will have substantial impact on BTC's retail service portfolio over the coming 12-24 months. <sup>102</sup>

## Coverage

BTC's local and domestic backbone networks cover the vast majority of the inhabited islands in The Bahamas.

BTC's ADSL services are available in Abaco, Acklins, Andros, Berry Islands, Bimini, Cat Island, Crooked Island, Eleuthera, Exuma, Grand Bahama, Harbour Island, Inagua, Long Island, Mayaguana, New Providence, Ragged Island, San Salvador and Spanish Wells.

#### **Prices**

BTC has an Interconnection Agreement in which it offers some of the products described in this Section. The prices are confidential and are not disclosed in this document.

#### 11.2.2 SRG

# 11.2.2.1 Current SRG Offering

SRG currently operates a fixed wireless network offering voice and data services to selected parts of The Bahamas. The fixed wireless network allows them to connect two fixed locations through a wireless link. SRG have the rights to spectrum of frequency 2150-2162 MHz and 2500-2690 MHz.

SRG presently focuses its marketing and network roll-out at serving business customers rather than residential customers.

SRG's local access network has the following characteristics:

- Connects fixed locations through wireless links using tower facilities and spectrum;
- It may have the capacity and may be technically suitable for double and triple play service provision, (SRG currently provides voice and data services predominately to business customers).

URCA does not believe that SRG currently has either a domestic or international backbone.

URCA notes that SRG has historically been prohibited from offering a cable TV service. SRG's licence under the Comms Act will not include such prohibitions and thus, if CBL's exclusivity is no longer applicable, SRG would be free to enter this market should it wish to do so.

## Coverage

SRG is currently only licensed to cover the following islands: Abaco, Grand Bahama and New Providence. At this time and for the coming 12-24 months, URCA does not believe that SRG's network could be considered as a potential substitute for CBL wholesale products and it is therefore not considered further in this analysis.

<sup>&</sup>lt;sup>102</sup> Information provided to URCA by BTC indicates that roll-out will not be completed until 2011 (BTC's response to the Access and Interconnection consultation).

## 12 Wholesale products in the SMP market

This Section describes the analysis performed on CBL's wholesale products and the potential substitutes that were identified in Section 6 using the Methodology described in Section 4.

As stated the following CBL products will be considered:

- Bitstream access for content distribution
- Wholesale national backhaul
- Wholesale international backhaul
- Wholesale access to the SuperBasic and/or Digital packages (content and distribution)

In the following sub-sections URCA will consider the demand and supply-side substitutes from BTC

The analysis of each of these potential substitutes will be conducted in terms of how well the characteristics of its products are likely to match the characteristics of CBL's wholesale products and by applying the SSNIP test described in Step 3 of the Methodology of whether a substitute would be attractive to consumers (i.e. another Pay TV operator) if CBL were to increase the prices of its wholesale services by 5-10% for a non-transitory period of time. URCA will consider whether a price increase by CBL of 5-10% for a non-transitory period is likely to be profitable for CBL.

Those products for which URCA concludes that there are not effective demand- or supplyside substitutes available within the 12-24 month timeframe, are then subjected to the EU three criteria test, in accordance with Step 3 of the Methodology:

- the presence of high and non-transitory entry barriers;
- the presence of a market the structure of which does not tend towards effective competition during the timeframe of this review; and
- the application of competition law alone would not adequately address market failures that may arise.

The application of these tests determines whether each product belongs in the SMP market.

## 12.1 Bitstream Access for content distribution

The product has first been tested for substitutability, in accordance with Step 3 of the Methodology. It was tested first for demand-side substitution and then for supply-side substitution.

# 12.1.1 Demand-side substitution for the bitstream access for content distribution product

The demand-side SSNIP test asks what would happen to demand over a 12-24 month period were CBL to increase its prices for bitstream access for content distribution by 5-10% for a

non-transitory period of time. The objective is to consider whether it would be profitable to CBL or not.

URCA has considered demand-side substitution from BTC.

Bitstream Access from BTC

#### Characteristics

Whilst BTC's current offering does include the operation of a local access network, its capacity is significantly lower than that of CBL and would not allow it to replicate CBL's service. Consequently, URCA does not believe that an end user (i.e. other pay TV operator) would be able to switch to BTC to distribute its content.

→Based on the information available URCA does not believe that there will be an effective demand-side substitute for CBL's bitstream access for content distribution, following a 5-10% increase in price, within the 12-24 month timeframe considered in this preliminary determination.

# 12.1.2 Supply-side substitution for the bitstream access for content distribution product

In this Section URCA considers whether, if CBL raised the price of the bitstream access for content distribution product in The Bahamas by 5-10%, existing and potential operators would attempt to supply this service on a large scale across The Bahamas.

As previously noted, BTC is presently unable to provide this service. However, BTC's planned NGN deployment would allow it to provide a bitstream access service which matches the majority of the characteristics demonstrated by CBL's service.

Whilst BTC's plans are currently in progress, URCA does not believe BTC would change the timing of this in response to a non-transitory price increase by CBL.

→ Based on the information available URCA does not believe that there will be an effective supply-side substitute for CBL's bitstream access for content distribution service within the 12-24 month timeframe under consideration.

### 12.1.3 Conclusion of substitutability test

The SSNIP test found that there are unlikely to be effective substitutes for CBL's bitstream access for content distribution product within the defined time period that would make a non-transitory 5-10% price rise unprofitable for CBL. Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and therefore belongs in the relevant market.

#### 12.1.4 EU three criteria test

#### 12.1.4.1 Barriers to entry

Provision of local access network facilities in electronic communications networks has conventionally been considered by regulators to be an enduring bottleneck; that is one in which facility competition is unlikely to take place due to the substantial capital investment required and the fact that the investment would represent a sunk cost as it is not possible to relocate the assets physically, nor reallocate the asset to a different use.

In Bahamas there are two existing local access infrastructures (CBL's and BTC's) but as discussed above, BTC's access network is not currently able to support the bitstream access service that could be offered by CBL.

Given the level of cost required to build an access network and the existence of two access networks, URCA considers that the barriers to entry of a potential third access network provider would be very high.

URCA therefore considers that the barriers to entry to the market remain high, absent regulatory intervention. This means that the product should be passed through to the next stage of the EU three criteria test.

#### 12.1.4.2 Emergent competition

URCA considers that the only emerging competition in the bitstream access market is likely to be from BTC. BTC's NGN deployment should allow it to provide a bitstream access for content distribution service able to compete with CBL's service, as URCA believes that it would result in sufficient capacity and coverage. However, as already stated, BTC's NGN deployment is not likely to be completed within the 12-24 month timeframe of this review.

Therefore, given the substantial barriers to entry as discussed above, absent regulatory intervention, URCA does not consider the market as having emergent competition at the wholesale level in the period covered by this review.

#### 12.1.4.3 Sufficiency of ex post competition law

URCA has considered whether the possibility of *ex post* competition law to tackle the abuse of an SMP position would be sufficient to address the market failures.

When considering this question, it is important to understand the nature of the market and products in question. Electronic communications services are provided through electronic communications networks, all of which require substantial investment and of which the local access infrastructure is considered the most difficult component to replicate by potential competitors. Therefore, if an SMP provider of services based on the local access infrastructure were to abuse its market power in the provision of these products it could result in long-term damage to the prospect of competitive provision of the products, as well as short-term damage to consumers, businesses and the overall Bahamian economy through imposition of anti-competitive trading conditions.

Although there are two current access networks and the BTC network is in the process of being upgraded, URCA considers it unlikely that BTC and CBL will compete in the provision of wholesale services which would enable competition at the retail level. The two operators are vertically integrated services and network providers and have little incentive to enable further competition which would likely decrease the retail profit levels often achieved in duopoly markets.

URCA, therefore, does not consider that *ex-post* competition law measures on their own would be sufficient to address potential problems arising from abuse of market power in this area.

#### 12.1.4.4 Conclusion of EU three criteria test

Based on the analysis above, URCA concludes that the provision of bitstream access services for content distribution is a product susceptible to *ex-ante* regulation.

#### 12.1.5 Geographic reach

The geographic reach of this product is defined as the area in which CBL has facilities to provide the product

## 12.2 Backhaul (national and international)

The substitutability and EU three criteria test analysis is the same for both national and international backhaul and consequently the arguments have been combined. The products were first tested for substitutability, in accordance with Step 3 of the Methodology. They were tested first for demand-side substitution and then for supply-side substitution.

#### 12.2.1 Demand-side substitution for backhaul

The demand-side SSNIP test asks what would happen to demand over a 12-24 month period were CBL to increase its prices for wholesale national and international backhaul for content distribution by 5-10% for a non-transitory period of time. The objective is to consider whether this would be profitable for CBL or not.

The substitution analysis is performed assuming no regulatory intervention.

URCA has considered demand-side substitution from national and international backhaul service from BTC

#### Backhaul from BTC

If CBL were to raise its prices by 5-10%, it may be possible for a Pay TV provider to switch from using CBL's national and international backhaul service to using a national backhaul service from BTC.

BTC's existing national and international backbone does match many of the characteristics of CBL's service allowing it to offer a similar wholesale national backhaul service.

The BTC backbone is a high capacity fibre network, but it is not currently connected to CBL's local access nodes, or to CBL's head-end locations. BTC's willingness to offer these wholesale services would depend on its perception of the business opportunity both in terms of charges for access to its network and the time horizon during which these charges were likely to be sustained.

As discussed elsewhere in this document, however, BTC and CBL enjoy a duopoly situation and are both vertically-integrated services and network operators. Based on this URCA considers it unlikely that BTC would offer wholesale services, including backhaul services, to potential retail competitors, absent regulatory intervention. BTC has stated its intention to enter the Pay TV market and it is therefore unlikely to offer services to enable other competition in this market.

→ Based on the information available URCA does not believe that following a 5-10% increase in price there would be effective demand-side substitution for CBL's national or international backhaul service within the 12-24 month timeframe.

### 12.2.2 Supply-side substitution for national and international backhaul

In this Section URCA considers whether, if CBL raised the price of the backhaul product in The Bahamas by 5-10%, existing and potential suppliers would commence the supply of this service on a large scale across The Bahamas.

As previously stated, BTC's existing national backbone would allow for it to offer a backhaul service that may compete with CBL's within the 12-24 month timeframe, provided that it could connect to CBL's local access network and head-end locations.

URCA considers that BTC is unlikely to voluntarily move into the wholesale market for national or international backhaul services, should CBL increase its prices for such services by 5-10%. This is primarily because, as discussed above, BTC would not wish to encourage further competition in this retail market as it is interested in entering the market itself and any further competition would simply erode any potential profits.

→ Based on the information available URCA does not believe that it is likely that there will be an effective supply-side substitute within the 12-24 month timeframe.

## 12.2.3 Conclusion of substitutability test

The SSNIP test found that there are unlikely to be effective demand- or supply-side substitutes for CBL's national and international backhaul product within the defined time period that would make a non-transitory 5-10% price rise unprofitable for CBL.

URCA therefore proceeds to apply the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and therefore belongs in the SMP market.

### 12.2.4 EU three criteria test

#### 12.2.4.1 Barriers to entry

In the timescale, it would seem very unlikely that there would be new physical network providers in The Bahamas. Given that BTC and CBL are already in the market, the risk involved in developing a new network for wholesale services would be considerable, which combined with the high capital cost of building networks would constitute a high barrier to entry.

#### 12.2.4.2 Emergent competition

There are only two providers who are able to provide these services, BTC and CBL, and as discussed previously they operate vertically integrated service and network businesses and have little incentive to make wholesale services available to potential competitors and thus create increased retail price competition. URCA therefore does not believe that this market tends towards emergent competition.

## 12.2.4.3 Sufficiency of ex post competition law

URCA has considered whether *ex post* competition law would be sufficient to prevent market failures in future provision of this wholesale service. BTC and CBL have near ubiquitous networks. URCA considers that these parties will have an incentive to charge high access prices for use of this service, or not provide access at all. Failure to provide the services on reasonable terms could result in a serious market failure. Therefore *ex post* competition law is considered insufficient.

#### 12.2.4.4 Conclusion of EU three criteria test

Based on the analysis set out above, URCA concludes that the provision of backhaul services in The Bahamas is susceptible to *ex-ante* regulation.

## 12.2.5 Geographic reach

The geographic reach of this product is defined as the area in which CBL has facilities to provide the product

# 12.3 Wholesale access to the SuperBasic and/or Digital packages (content and distribution)

The product has first been tested for substitutability, in accordance with Step 3 of the Methodology. It was tested first for demand-side substitution and then for supply-side substitution.

# 12.3.1 Demand-side substitution for wholesale access to the SuperBasic and/or Digital packages

The demand-side SSNIP test asks what would happen to demand over a 12-24 month period were CBL to increase its prices for wholesale access to the SuperBasic and/or Digital packages by 5-10% for a non-transitory period of time. The objective is to consider whether it would be profitable to CBL or not.

URCA has considered demand-side substitution from BTC.

Wholesale access to the service from BTC

BTC's ability to offer an effective substitute to CBL's bitstream access service is discussed in Section 12.1 above, concluding that BTC cannot offer effective substitution in the period considered.

The analysis above also considers the need for *ex-ante* regulation for the bitstream access service and concludes that *ex-ante* regulation is required.

# 12.3.2 Supply-side substitution for wholesale access to the SuperBasic and/or Digital Packages

As for bitstream access, which is the only part of this service where potential substitution exists, URCA does not consider that a non-transitory increase in price by CBL would or could cause supply-side substitution as the investment decisions and time to implement such network investment would not likely be influenced by a price change in the range of 5-10%.

→ Based on the information available, URCA does not believe that there is likely to be effective supply-side substitution available for the wholesale access of the SuperBasic and/or digital packages following a 5-10% increase in the price of this service.

## 12.3.3 Conclusion of substitutability test

The SSNIP test found that there are unlikely to be effective demand- or supply-side substitutes for CBL's wholesale access to the SuperBasic and/or digital packages within the defined time period that would make a non-transitory 5-10% price rise unprofitable for CBL. Therefore URCA applied the EU three criteria test to this product to assess whether the product is susceptible to *ex ante* regulation and therefore belongs in the relevant market.

#### 12.3.4 EU three criteria test

URCA considers that none of the three criteria apply and therefore *ex ante* regulation would be required, for the same reasons as given above for bitstream access.

#### 12.3.4.1 Conclusion of EU three criteria test

Based on the analysis set out above, URCA concludes that the provision of wholesale access to the SuperBasic and digital package in The Bahamas is susceptible to *ex ante* regulation.

## 12.3.5 Geographic reach

The geographic reach of this product is defined as the area in which CBL has facilities to provide the product

## 12.4 Conclusion on wholesale products in the high-level SMP market

URCA has concluded that the following products remain part of the relevant market for Pay TV in which CBL has SMP:

- 1) Bitstream access for content distribution
- 2) Wholesale national backhaul
- 3) Wholesale international backhaul
- 4) Wholesale access to the SuperBasic and/or Digital packages (content and distribution)

Appendix 3 – Proposed Types of Obligations to be imposed on CBL for the High Speed Data and Pay TV high level markets

## 13 Types of obligations to be imposed on CBL

In the sections preceding, the products in the high-level SMP markets for CBL have been identified. The portfolio of products in the high-level SMP markets for CBL was found to be:

#### Retail

- SuperBasic package
- Digital packages
  - National Leased Lines
  - International Leased Lines
  - Broadband Internet access<sup>103</sup>

#### Wholesale

- Bitstream access for content distribution
- Bitstream for Broadband Internet service
- Wholesale international backhaul
- Wholesale national backhaul
- Wholesale access to the SuperBasic and Digital Packages
- Wholesale national Leased Lines
- Wholesale international Leased Lines

URCA concluded that the following products should be excluded from the high-level SMP markets:

#### Retail:

- HDTV services
- Pay-Per-View services

#### Wholesale

- Broadband resale
- All forms of access to the local loop (unbundled local loop)

In addition, URCA's analysis leads to the result that national and international leased lines, although not excluded from the SMP high level market, shall not at this time be subject to specific retail or wholesale regulation.

In accordance with the Methodology, when products have been identified as remaining in the high-level SMP markets, appropriate *ex ante* remedies should be applied.

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<sup>&</sup>lt;sup>103</sup> In areas not covered by BTC

Any remedies selected by URCA will be driven by the objectives of:

- Promoting competition,
- Proportionality,
- Contributing to the development of sustainable competition, and
- Promoting the interest of persons in The Bahamas.

For those products in the high level SMP markets, URCA reviewed possible obligations which could be applied to CBL to meet these objectives. URCA then limited the number of obligations to impose in order to be proportional in its approach.

## 13.1 Standard SMP Obligations

The obligations listed below are not discretionary and they will be applied for all products found to remain in the high-level SMP markets.

- For all SMP products
  - Non-discrimination
- For all retail SMP products
  - Requirement to publish charges and terms and conditions
  - Consumer protection

## 13.2 Specific SMP Obligations

The specific obligations to be adhered to by CBL are as follows:

## **Table of specific obligations**

#	Retail/	Product	Obligations to be applied	Deadline	Charging
	Wholesale				principle
1	Retail	SuperBasic Package	Retail price regulation*	Immediate	
2	Retail	Digital Packages	Retail price regulation*	Immediate	
3	Retail	National Leased Lines	No regulation	None	
4	Retail	International Leased Lines	No regulation	None	
5	Retail	Broadband Internet	Retail price regulation*	immediate	
				Retail price	
			Delinking from	regulation	
			SuperBasic Pay TV	immediate	
			package		
				Delinking from	
				SuperBasic Pay TV	
				package 2 months	
				from final	
				determination by	
				URCA	
6	Wholesale	Bitstream access for content	Include in published	2 months from final	Cost
		distribution	reference offer**	determination by	oriented
				URCA	
7	Wholesale	Bitstream access for	Include in published	2 months from final	Cost
		Broadband Internet	reference offer**	determination by	oriented

				URCA	
8	Wholesale	National and international	Include in published	2 months from final	Cost
		backhaul	reference offer**	determination by	oriented
				URCA	
9	Wholesale	Wholesale access to the	Include in published	2 months from final	Retail minus
		SuperBasic and/or Digital	reference offer**	determination by	
		Packages		URCA	
10	Wholesale	National leased lines	No regulation	None	
11	Wholesale	International Leased Lines	No regulation	None	

<sup>\*</sup> CBL shall comply with URCA's specific requirements for the retail prices for these products and for related products as URCA may require from time to time. URCA's requirements for retail pricing are set out above

Despite national and international leased lines remaining within the relevant high-level SMP market, URCA considers that it is possible that BTC could compete with CBL in the provision of these services. URCA retains its rights to mandate the introduction of retail price regulation for national and international leased lines in the future should it consider this to be necessary. URCA will observe the developments in the leased lines market and any future decisions to impose retail price regulation will take into account the behaviour of CBL and BTC in the market.

The nature of these obligations is discussed below.

### **Accounting separation and Cost Accounting**

Accounting separation and cost accounting are complex areas and can be achieved at different levels of complexity. URCA is proposing that CBL shall implement separated accounts based on fully allocated historic costs, in accordance with the guidelines issued by URCA.

The retail services should be broken down into the following minimum set of categories (as a guidance, current retail names are mentioned in the following list; CBL needs to assure, that all retail services are captured and allocated to at least one of these categories):

- Basic Cable TV package (currently called SuperBasic Package)
- Digital Packages (add-on packages, Oceans Sport/ Movies/ Complete, premium addons such as NBA Season Pass, NFL Sunday Ticket, etc.)
- Remainder of TV services (all TV services not captured in the above categories, such as free-to-air broadcast TV, HDTV, pay-per-view etc)
- National Leased Lines
- International Leased Lines
- Broadband Internet
- Remainder of retail business (any services not captured above)

The following list shows a minimum set of wholesale services for which separated accounts should be reported:

Bitstream access for content distribution

<sup>\*\*</sup> CBL shall produce a reference offer for interconnection and access to its network for the products as specified above and any additional enabling products that a wholesale customer may reasonably require in or to make use of the products listed. Such enabling products may include co-location at CBL's facilities for the wholesale customer, associated ancillary services to support co-location and other similar products. URCA will issue a detailed list of products and facilities to be included in the reference offer.

- Bitstream access for Broadband Internet
- Remainder of access services (services not captured in Internet and content distribution services above)
- National and international backhaul
- Wholesale access to the SuperBasic and/or Digital Packages
- National leased lines
- International Leased Lines
- Remainder of wholesale transmission services (services not captured in backhaul or leased line reports above)

For the initial reporting under these guidelines, each SMP operator must submit separated accounts for 2008 within three months of the publication of the Final Determination. These accounts may be unaudited and unpublished to allow CBL to establish a "test" year.

For 2009 and each subsequent year, each SMP operator must submit audited and published separated accounts within six months of the end of their financial year.

The accounting separation and cost accounting guidelines as specified in ECS 21/2009 must be used when fulfilling any obligations that have a requirement for the development of cost-oriented rates.

Further, URCA proposes that CBL shall calculate cost-oriented prices for the products to be included in the reference offer and for which cost-oriented pricing is required. Cost-oriented prices shall be based on the separated accounts.

For products where the pricing principle of 'retail minus' applies, URCA requires CBL to calculate its avoidable retail costs based on the separated accounts and use these to set the prices.

The form of separated accounts and cost oriented prices proposed is the simplest version used by regulators and represents URCA's intention to regulate with a light touch and to achieve results as quickly as possible for the benefit of consumers and the country as a whole.

#### 13.2.1 Reference Offer for Access and Interconnection

The establishment of reference offers is considered the most critical building block for the introduction of competition in the electronic communications sector.

The consultation document issued in June 2009 on the potential content of a reference access and interconnection offer ("RAIO") discusses many of the services that regulators around the world have considered necessary to enable competition and prevent the abuse of control of critical infrastructure or interfaces. URCA believes that at a minimum the following contents should be included:

- Specification of services and facilities offered for access and interconnection;
- Charges for access and interconnection services and facilities;
- Technical requirements including Joint Working Manual, Operations & Maintenance Manual;

- Information exchange;
- Procedures (pre- and post- agreement);
- Processes to support the setting up of the RAIO including processes for the forecasting, ordering, installation, maintenance, repair and billing of the RAIO services; and
- Service Level Agreements (SLAs) for the forecasting, ordering, installation, maintenance, repair and billing and quality of service parameters for the RAIO services including penalties for failing to meet SLAs.

#### The components to be included are:

- Connectivity based interconnection products: leased circuits, joining circuits, points of interconnection (POIs)
- Wholesale Broadband Access: broadband resale service, broadband bitstream Access
- Access to the local loop: unbundled access to the local loop full local loop unbundling, unbundled access to the local loop – sub-loop unbundling, unbundled access to the local loop – shared access
- Access to cable TV networks
- Backhaul (national and international)
- Facility sharing / Co-location

URCA is conscious that some of the components listed above may be time-consuming and costly to implement and it wishes to apply regulatory obligations only where it considers these to be proportionate to the benefits they are likely to generate. Further, given that the interim SMP presumptions are intended to create a transitional framework and that comprehensive market reviews will be conducted in the following years, URCA has erred on the side of caution about whether to impose obligations. This will provide a period of time where SMP Licensees may be regulated more lightly than would otherwise have been the case and thus provide URCA with the opportunity to observe the behaviour of the SMP Licensee. Such behaviour will be an important input to future decisions by URCA on whether heavier regulation is required.

URCA therefore proposes to include only the following components in CBL's RAIO:

- bitstream for content delivery
- bitstream for broadband internet
- national backhaul
- international backhaul
- wholesale access to SuperBasic and digital packages
- enabling components including co-location and the associated ancillary services to support co-location

Despite national and international leased lines also remaining within the relevant high-level SMP market, URCA considers that it is possible that BTC could compete with CBL in the provision of these services. URCA retains its right to mandate the introduction of leased lines

into the RAIO in the future should it consider this to be necessary. In the meantime, URCA will encourage CBL to enter into negotiations with potential wholesale customers for national and international leased lines and will monitor the progress of such negotiations. The success of commercial negotiations will be a significant contribution to URCA's future decision regarding whether to include leased lines in future RAIOs.

#### 13.2.2 Retail Price Regulation

CBL is deemed immediately compliant with the Retail Price Regulation obligations, and shall act in accordance with the framework set out below in order to remain so.

The detailed framework and obligations are specified in the following sections.

#### 13.2.2.1 Filing of Initial Tariffs/Prices

Within 30 days of URCA issuing the SMP operator with the Final Determination and Final Order of its obligations<sup>104</sup>, the operator shall file with URCA its existing tariffs/prices of each retail product and service subject to retail price regulation (see the table of specific obligations above, henceforth these services are referred to as "Price Regulated Services") and the terms and conditions upon which those services are provided. Where the product or service is offered as part of a bundle with other products or services, or is tied to other products or services, the bundled/tied prices should be provided as well.

The SMP operator shall at the same time file with URCA the volume of sales (number of subscribers, traffic volumes) and revenues relating to each Price Regulated Service for the previous two financial years, or such period as the service has been provided for if less than two years.

#### 13.2.2.2 Investigations

In exercise of its powers to conduct inquiries or investigations under s. 8(1)(j) of the Comms Act, URCA reserves the right to conduct an investigation into an SMP operator's prices and terms and conditions for a Price Regulated Service on its own motion, without receiving a complaint from another party.

Under the terms of s. 9 of the Comms Act, URCA may request that the SMP operator provide information to URCA during any such investigation. URCA shall state the purpose of the request, specify the information required and specify the time period within which the information is to be provided. Failure to provide timely and accurate information may lead to the imposition of a fine.

#### 13.2.2.3 Tariff/Price Changes

The following terms shall apply to both price increases and decreases.

The SMP operator shall not change the tariff/price of any Price Regulated Service without the prior written approval of URCA.

The SMP operator shall submit to URCA an application for a tariff or price change, as appropriate, at least 30 days before the proposed effective date of the change.

Such appl	ication s	hal	l inc	lud	le:
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<sup>&</sup>lt;sup>104</sup> If these are issued separately, the 30 day period applies from the date of the later issue.

- A description of the product or service for which the price change is being requested;
- Proposed effective date for the price change;
- Current tariffs/prices;
- Proposed tariffs/prices;
- Any proposed changes to the applicable terms and conditions that will result from the price change;
- Commercial rationale for making the proposed change;
- Pricing principle applied in developing the proposed price (cost-oriented, market pricing, etc.);
- Data relevant to the proposed change, including the following:
  - Volume of demand;
    - Number of existing subscribers or users that would be affected by the proposed tariff change;
    - Size of overall market/market share of the SMP operator;
  - Relevant revenues for the service;
  - Pricing of communications inputs to the service;
  - Volume of communications service inputs;
  - Costs of communications inputs for the service;
  - Direct costs of the service including capital costs and operating expenditures (e.g. network components and marketing costs);
  - Estimate of the incremental indirect costs of the service;
  - Total cost of the service: and
  - Estimates of the incremental Profit and Loss and Cash Flow resulting from the service; and
- The effect of the proposed tariff change on the SMP operator's regulated rate of return.

Where possible, this data should be provided in accordance with the Accounting Separation and Cost Accounting Guidelines issued by URCA. URCA reserves the right to request additional information from the SMP operator relating to the proposed tariff change.

In the absence of costing information in accordance with the Accounting Separation and Cost Accounting Guidelines, the SMP operator may provide URCA with other information to support its proposed price change including:

- Benchmark study of prices in comparable jurisdictions along with supporting information;
- Verifiable financial management information in respect of providing the service.

The SMP operator must submit a declaration signed by an authorised officer confirming that the proposed price decrease is not anticompetitive and, in particular, that the proposed price decrease:

- a. does not result in predatory pricing<sup>105</sup>;
- b. does not entail an unfair cross-subsidy 106; and
- c. will not result in a margin squeeze<sup>107</sup> on other operators.

To the extent possible, this declaration should be supported with evidence, which should also be provided to URCA.

The SMP operator must submit a declaration signed by an authorised officer confirming that its application is in accordance with this Order, the Comms Act, its operating licence, the Sector Policy and any other relevant documents.

Based on the information provided to it, URCA may state that it has no objections to the proposed tariff/price changes or may block or propose suitable amendments to any tariff/price change for a Price Regulated Service.

URCA shall review an application for a tariff/price change as follows:

- a. Within 30 days of receipt of a completed application (all information is provided in accordance with the requirements of this Section), URCA shall respond with one of the following:
  - A statement of no objection;
  - A rejection of the application with reasons;
  - A notice that the application will go to public consultation and that therefore a final decision is withheld for the time being. URCA will consider whether there would be a need for public consultation based on factors such as the expected impact of the price change, in terms of number of customers affected; possible alternative products available

This may occurs when an SMP operator allocates all or part of the costs of an activity in one geographical or product market to an activity in another geographical or product market.

<sup>&</sup>lt;sup>105</sup> This may occur when services are provided by the SMP operator at prices below cost so as to foreclose or be likely to foreclose actual or potential competitors. This can result in competitors being driven out of business, thereby increasing prices to uncompetitive levels in the long run.

geographical or product market to an activity in another geographical or product market.

This may occur when a vertically integrated SMP operator in the upstream market charges a price for the product on the upstream market which, compared with the price it charges on the downstream market, would prevent an equally efficient competitor from trading profitably in that downstream market on a lasting basis.

to customers; revenue impact on the operator and expected impact on competition in the market place.

- b. If a notice that the application must go to public consultation is issued, as soon as practicable URCA will allow the public a minimum of 30 days to respond to the consultation, unless otherwise stated by URCA; and
- c. Within 30 days of the close of the public consultation, URCA will publish a final decision.

## 13.2.2.4 Special Offers or Discounts ("Special Promotions")

Special Promotions for Price Regulated Services shall only be offered with the written consent or approval of URCA.

The SMP operator shall submit to URCA an application for any Special Promotion with a full description of the Special Promotion, including:

- the information required under Section 0 as they relate to the Special Promotion and the normal rates for the relevant Price Regulated Service;
- the rates applicable to the Special Promotion;
- the period of duration of the Special Promotion; and
- the terms and conditions applicable thereto.

URCA will review the submission for Special Promotions and notify the SMP operator of its decision, to not object to, or to block or propose amendments to a Special Promotion, within 10 working days of receipt of the submission. URCA may allow the Special Promotion for a trial period of 30 days before a final decision is issued.

A Special Promotion must cease within 90 days of the launch date.

A Special Promotion should not be similar to a Special Promotion that was available from the SMP operator at any time within the previous 120 days.

URCA may block a Special Promotion that is unlikely to be:

- transparent, non-discriminatory and objectively justifiable; or
- would have the effect of lessening competition in a relevant market.

A Special Promotion must be launched no later than 30 days from the date of URCA's written approval; otherwise the Special Promotion must be resubmitted for approval.

The SMP operator shall notify URCA in writing no less than 5 working days prior to the launch date of the Special Promotion.

The SMP operator shall for a period of 180 days maintain all relevant traffic data, revenue and marketing records pertaining to a Special Promotion and must provide these to URCA upon request.

Following a statement of no objection from URCA and prior to market introduction, the SMP operator shall publish in one or more newspapers with national circulation the eligibility criteria for any Special Promotion along with the permitted terms and conditions.

In some cases the operator may provide wholesale services which are used by other operators to compete with the operator in provision of the Price Regulated Service in question (for example, interconnection on a "retail minus" basis). In these cases, the operator must identify these and apply equivalent price decreases and associated changes to terms and conditions to the relevant wholesale services in such a manner that the competing operator could replicate the special promotion. Details of how the operator proposes to do this must be included in its submission.

#### 13.2.2.5 Bundling of Price Regulated Services

The SMP operator may bundle, tie or offer new packages including price regulated services as long as each Price Regulated Service included in such a bundle, tied purchase or package is also available on a standalone basis on reasonable terms and conditions<sup>108</sup>. A bundle, tied products or package that includes at least one price regulated service shall be subject to retail price regulation. The SMP operator shall provide URCA with the costing information of each service included in the bundle, tied purchase or package and demonstrate to URCA that the price of the bundle is not anti-competitive and would not have the effect of lessening competition in a relevant market.

#### 13.2.2.6 Introduction of New Services

An SMP operator that proposes to offer a new service shall at least 30 days before providing the new service file with URCA:

- a. The proposed effective date for the introduction of the new service;
- b. A description (commercial and technical) and name of the new service, including the tariffs/prices, terms and conditions applicable thereto; and
- c. Data including a business plan with the details as listed in Section 13.2.2.3 to show that the price of the new service is transparent and non-discriminatory and would not have the effect of lessening competition in a relevant market.

A new service that is a combination of services comprising at least one Price Regulated Service is a Price Regulated Service.

The SMP operator shall not repackage an existing service as a new service. A new service must be materially different to existing services. If the new service is similar to an existing service, the SMP operator must explain the rationale for the launch of the new service.

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<sup>&</sup>lt;sup>108</sup> Bundling is the practice of forcing ('pure bundling'), or economically inducing ('mixed bundling'), customers to buy a 'bundle' consisting of two or more technically distinct products. Tying is the practice of making the purchase of one product or service conditional upon the purchase of another product or service.

URCA shall review an application to introduce a new service as follows:

- a. Within 30 days of receipt of a completed (all information is provided in accordance with the submission requirements in this Section) application, URCA shall respond with one of the following:
  - A statement of no objection;
  - A rejection of the application with reasons;
  - A notice that the application will go to public consultation and that therefore a final decision is withheld for the time being. URCA will consider whether there would be a need for public consultation based on factors such as the expected impact of the proposed new service, in terms of number of potential customers; revenue impact on the operator and expected impact on competition in the market place.
- b. If a notice that the application must go to public consultation is issued, as soon as practicable URCA will allow the public a minimum of 30 days to respond to the consultation, unless otherwise stated by URCA; and
- c. Within 30 days of the close of the public consultation, URCA will publish a final decision.

#### 13.2.2.7 Withdrawal and Discontinuation of Price Regulated Services

The SMP operator shall not withdraw (to existing customers) and/or discontinue (to new customers) the provision of a Price Regulated Service without the prior written approval of URCA.<sup>109</sup>

The SMP operator shall submit to URCA, no less than 90 days prior to the proposed effective date, its proposal to withdraw and/or discontinue the provision of a Price Regulated Service.

The proposal shall include information such as

- number and profile of current customers/users,
- sales revenue,
- volume of demand and costs,
- the proposed process to notify affected customers; and
- any proposed substitutes for the service

Where appropriate this data should be provided for the last three (3) years, to allow URCA to assess the likely impact on the market of the withdrawal of the service.

<sup>&</sup>lt;sup>109</sup> For clarity, "withdraw" means to cease providing the service to existing or new customers.

<sup>&</sup>quot;Discontinue" means to cease offering the service to new customers whilst still providing it to existing customers.

URCA shall review an application to withdraw and/or discontinue a Price Regulated Service as follows:

- a. Within 30 days of receipt of a completed (all information is provided in accordance with submission requirements in this Section) application, URCA shall respond with one of the following:
  - A statement of no objection;
  - A rejection of the application with reasons;
  - A notice that the application must go to public consultation as it may
    be of public significance. URCA will consider whether there would be a
    need for public consultation based on factors such as the expected
    impact of the withdrawal or discontinuation of the Price Regulated
    Service, in terms of number of customers affected; possible alternative
    products available to customers; revenue impact on the operator and
    expected impact on competition in the market place.
- b. If a notice that the application must go to public consultation is issued, URCA will allow the public a minimum of 30 days to respond to the consultation unless otherwise stated by URCA; and
- c. Within 30 days of the close of the public consultation, URCA will publish a final decision.

The SMP operator shall give its current users at least 60 days' notice of its decision to withdraw the provision of a Price Regulated Service. The SMP operator shall also publish, no less than 30 days from the effective date of the withdrawal or discontinuation, a notice of its decision to withdraw or discontinue the provision of a Price Regulated Service in one or more newspapers with national circulation.