Methodology for Assessment of Significant Market Power (SMP) under Section 39(2) of the Communications Act, 2009

Final Decision

ECS 20/2011

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UTILITIES REGULATION & COMPETITION AUTHORITY

UBS Annex Building, East Bay St | P.O. Box N-4860 Nassau, Bahamas | T 242. 393. 0234 | F 242. 393. 0153

www.urcabahamas.bs

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1. Introduction

The Utilities Regulation and Competition Authority ("URCA"), in accordance with Section 39(2)of the Communications Act, 2009 ("Comms Act") now publishes its Final Decision on "Methodology for the Assessment of Significant Market Power (SMP)", in which URCA establishes the criteria which URCA will use for the purpose of making a determination under section 39(1) of the Comms Act.

This Final Decision is informed by the consultation process which commenced on 18 May 2011, when URCA published a consultation document (ECS 09/2011) on the methodology it proposed to use for defining relevant economic markets, and assessing market power in those relevant markets. Section 39(2) of the Comms Act requires URCA to:

> *"…establish and publish criteria –*
>
> (a) *relating to the definition of markets in the electronic communications sector; and*
>
> (b) *against which market power may be assessed,…"*

The criteria specified in this Final Decision are for the sole purpose of making determinations of SMP under s.39(1)of the Comms Act which provides that:

> "*URCA may at any time determine that a licensee is an SMP licensee if the licensee, individually or with others, enjoys a position of economic strength which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of its competitors, consumers and subscribers."*

URCA may update/amend the methodology for SMP assessment from time to time to take account of new economic thinking, experience, international best practice, and developments in the Bahamian electronic communications sector. Any change to the methodology would be subject to consultation with interested parties and URCA, as required by s.11 of the Comms Act, shall have regard to submissions received.

1.1 Structure of the remainder of this Document

The remainder of this document is structured as follows:

Section 2: Overview of the Regulatory process for SMP assessment; and

Section 3: Methodology for SMP assessment– the criteria for defining relevant markets, and the criteria against which market power will be assessed for single SMP and Joint/Collective SMP.

Section 4: Regulatory and/or Other Measures

Section 5: Glossary of Terms.

2. Regulatory Process for SMP Assessment

In the conduct of an SMP assessment, URCA shall in general, adhere to the process as outlined below:

(i) URCA shall define the relevant markets that are under review for the purpose of SMP assessment (See Section 3.1 below).

(ii) URCA will then identify which licensee(s) has SMP in the relevant market or markets (See Section 3.2 for single SMP and Section 3.3 for Joint/Collective SMP below).

When conducting an SMP analysis, URCA shall invite and have regard to submissions received from interested parties prior to making a final decision or determination.

URCA at its sole discretion may combine the steps outlined above into a single regulatory proceeding.

URCA's overall objective in undertaking the process outlined above is to ensure compliance with the Comms Act, thereby fostering sustainable and efficient competition in electronic communications networks and services for the benefit of residents and businesses in The Bahamas and the wider national economy.

3. Methodology for Assessment of SMP

This Final Decision details URCA's forward looking methodology for the assessment of SMP under s.39(1) of the Comms Act.

URCA sets out below the criteria:

(i) for defining the relevant product and geographic market(s); and

(ii) against which single SMP and/or joint (collective) SMP will be assessed.

3.1 Market Definition

In defining relevant market(s), URCA shall give consideration to the relevant services/products that comprise that market and the geographic scope of that market. When defining the relevant product market, URCA will apply the (SSNIP[1] test, and have regard to the following criteria, inter alia:

- evidence of previous substitution;
- consumer preferences;
- barriers and switching costs; and
- quantitative studies (including surveys, studies of other markets) where relevant and available.

The non-transitory period for the SSNIP test shall be twelve (12) months. However, URCA reserves the right to adjust the time period for the SSNIP test to reflect economic and technological changes in the electronic communications sector of The Bahamas.

In defining the relevant geographic market, URCA will have regard to the following criteria:

- past evidence of customers diverting orders to suppliers in other areas;
- basic demand characteristics;
- views of third parties; and
- barriers and switching costs.

3.2 Criteria for Assessing Market Power (Single SMP)

URCA sets out below the thresholds with respect to market share for the purposes of assessing SMP:

[1] Small, but Significant Non-transitory Increase in Price. See section 5 for definition and scope of the SSNIP test

1. a licensee with less than 40% market share will not generally be presumed to have SMP; and
2. a licensee with a market share of 40% and above may be presumed to be an SMP licensee.

For purposes of SMP analysis, URCA may adopt one or more measures of market share, including total gross revenues in the relevant market in question, total subscribers, total traffic volumes (bulk or otherwise) and/or total capacity.

URCA will not confine its analysis to a static market share but would also consider trends in market share, provided such information is readily available to URCA.

At the outset of any assessment of SMP in a defined market, URCA will review the relevant market shares to decide whether it could be appropriate to apply a presumption based on the above thresholds. In conducting such a review, URCA shall have regard to the criteria set out in s.39(3) of the Comms Act and, to the extent URCA considers necessary to ensure that the presumption is appropriate in all the circumstances, to the more detailed criteria set out below.

Where a licensee has a market share of less than 40% of the relevant market, no presumption of SMP will be made by URCA, and in such circumstances URCA would not likely consider that licensee to be an SMP licensee unless compelling evidence based on the detailed criteria set out below is presented to URCA demonstrating otherwise.

Where a licensee has a market share of 40% and above in the relevant market, URCA may make a presumption of SMP based on the market share, the other criteria listed in s.39(3) of the Comms Act, and such of the detailed criteria set out below as URCA in its sole discretion considers necessary or appropriate in the circumstances. In the event that URCA makes a presumption of SMP in respect of a licensee in a market, the licensee may by way of representations to URCA's consultation rebut the presumption by demonstrating that it is not in a position of economic strength to behave to an appreciable extent independently of other licensees, consumers or subscribers. Such demonstration should, have regard to the following relevant criteria:

- Licensee's market share;
- Licensee's ability to influence market conditions;
- Licensee's access to financial resources;

- Licensee's experience in providing products to the market;
- Barriers to entry and expansion;
- Number of active competitors
- Extent of countervailing power among buyers;
- Prices and profitability;
- Vertical relationships;
- The influence of other members of the licensee's group;
- Economies of scale and scope;
- Overall size of the undertaking;
- Control of infrastructure not be easily duplicated;
- Technology advantages or superiority;
- Highly developed distribution and sales network; and
- Product/services diversification.

3.3 Criteria for Assessing Market Power (Joint/Collective SMP)

Joint (collective) SMP refers to a situation where a position of SMP is held by two or more licensees that are legally and economically independent of each other but are able to coordinate their behaviours (tacitly or otherwise) to behave to an appreciable extent independently of other licensees, consumers or subscribers. In keeping with best practice regulation, URCA will carefully examine relevant criteria to determine whether the licensees in question have an incentive to converge to a coordinated market outcome and refrain from reliance on competitive conduct.

In assessing Joint SMP, URCA shall be guided by local conditions and international best practice when seeking to ascertain whether the characteristics of the market make it conducive to collusion, tacit or otherwise. In assessing Joint SMP URCA shall have regard to all applicable criteria listed below:

- Market concentration as measured by the HHI (see below);

- Homogeneous services/products;
- Mature market;
- Stagnant or moderate growth on the demand side;
- Low elasticity of demand;
- Similar cost structures;
- Similar market shares;
- Lack of technical innovation, mature technology;
- Absence of excess capacity;
- High barriers to entry;
- Lack of countervailing buyer's power;
- Lack of potential competition;
- Existence of informal or other links between the licensees concerned;
- Retaliatory mechanisms; and
- Lack or reduced scope for price competition.

When assessing Joint SMP, URCA shall have regard to the thresholds of market concentration as represented by the Hirschman-Herfindahl Index (HHI):

- Un-concentrated if the HHI is less than 1000;
- Moderately concentrated if the HHI is between 1000-1800; and
- Highly concentrated if the HHI is greater than 1800.

4. Regulatory and/or Other Measures

Under the Comms Act the introduction of *ex ante* remedies on any licensee must be based on a finding of SMP. Under s.39(1) of the Comms Act:

> *"a licensee is an SMP licensee if the licensee, individually or with others, enjoys a position of economic strength which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of competitors, consumers and subscribers."*

Ex ante measures are primarily intended to address the problems associated with market power. The existence of market power indicates the absence of effective competition. The problems associated with the absence of effective competition may include excessive pricing, undue discrimination, amongst others. 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. Consequential to that, URCA may introduce regulatory measures, having due regard to the costs and implications for affected parties[2] where URCA is of the view that market forces alone are unlikely to achieve the core policy objectives within a reasonable timeframe.

[2] See s.5(b)(i), 5(b)(ii) and 5(c) of the Comms Act.

5. Glossary of Terms

Ability to Influence Market Conditions

A licensee's ability to influence market conditions can be indicative of that licensee having a position of SMP. That ability to influence market conditions may be manifested in the licensee's ability to set prices in the relevant market independently of market conditions, competitors, customers and consumers, to set prices in the relevant market consistently and significantly higher than the competitive level, or to limit the ability of customers to switch to other licensees. The focus is on the licensee's ability to shape the structure of the market and provide that licensee with an unfair competitive advantage.

Absence of Excess Capacity

Absence of excess capacity would lend itself to the adherence to an anti-competitive agreement, as licensees would not have an incentive to break the agreement by using their excess capacity to produce at a lower price and in so doing increase overall profits.

Access to Financial Resources

The ease or privilege whereby a licensee can access financial resources on a scale that places that licensee at an advantage over other licensees, may represent a barrier to entry as well as an advantage over existing licensees. The ability to procure outside capital, the licensee's capital structure, the licensee's ability to access equity capital and its internal sources (cash flow or revenues) may be considered. Access to capital might also be an influence if a licensee has links with other companies that are favourable to its activities in the market in question.

Barriers to Entry

The ease with which potential competitors may enter the relevant market and compete effectively against established operators may prevent licensees from raising prices above competitive levels. In electronic communications, entry is very frequently restricted by the availability of licences to potential entrants to facilitate these entrants competing against the incumbent. But even in markets in which entry is not barred by legal restrictive arrangements, there may be economic and strategic barriers which deter entry or make entry unfeasible. Economic barriers to entry may be derived from incumbency advantage, for example customer inertia, the large sunk cost to establish electronic communications systems, cost of switching from the incumbent operator to a competing operator, uncertainty of a new entrant's service quality, and unfair access by competitors to the electronic communications systems operated by an incumbent operator. Incumbency advantages also arise through control over essential network components. In some markets the finite nature of the radio frequency spectrum imposes a restriction on the number of operators in the cellular mobile telephony market and other wireless technologies. Strategic barriers of existing market players, as manifested through unfair pricing behaviours (e.g., predatory pricing, price squeezing, cross-subsidization and price discrimination) or through non-price behaviours (increased investment, promotion and distribution) can deter market entry.

Barriers and Switching Costs

These refer to the extent to which there are barriers or costs associated with diverting demand to companies located in other areas or prevent similar products/services from being considered effective substitutes. These may include regulatory (e.g., licensing for particular territories or absence of measures, such as number portability or indirect access), technical barriers (such as the reach or footprint of particular networks) and physical barriers (such as between islands). There may also be switching costs associated with changing from one network supplier to another (for example, additional equipment or upgrade costs).

Barriers to Expansion

Active competition is often greater where there are lower barriers to growth and expansion. While growth and expansion is easier to be achieved by licensees in embryonic or growth markets, it might be inhibited in mature, saturated markets, where customer are locked into an existing licensee and have to be induced to switch. The higher the barriers to entry the more significant barriers to expansion will be in assessing potential competition as higher entry barriers largely limit competition to existing market participants.

Basic Demand Characteristics

This refers to the nature of demand by end users for the relevant product/service in question.

Control of Infrastructure not Easily Duplicated

In certain circumstances the control of infrastructure not easily duplicated can make it feasible for a licensee to behave independently of other licensees and consumers. This may exist in specific situations in which the availability of certain infrastructure is:

- Necessary to produce a particular service/product;
- The required infrastructure is exclusively or overwhelmingly under the control of a licensee; and
- There are high and non-transitory barriers to substitute the infrastructure in question.

Control of infrastructure in these instances allows the licensee to leverage its market position horizontally in adjacent markets or vertically in upstream/downstream markets.

Demand-side Substitution

This refers to the instance where consumers switch from one product to another in response to a change in the relative prices of the products, even if many other end-users do not, thereby making a price increase unprofitable for the hypothetical monopolist.

Economies of Scale

Economies of scale arise when increasing output results in declining average costs per unit of output. Undeniably economies of scale lend itself to lower market prices as unit cost decreases with the expansion of output and the size of the firm. However, economies of scale may lend itself to reduction in effective competition in the long run and in some instances in the electronic communications sector, towards monopoly market equilibrium. In those instances economies of scale can act as a barrier to entry as well as an advantage over existing competitors.

Economies of Scope

Economies of scope exist where average costs for one service/product are reduced as a result of the service/product being jointly produced with other services/products by the same licensee. The reduction of average costs from economies of scope should ideally lead to lower prices to end users. However, economies of scope may serve as a barrier to entry as well as an advantage over competitors where it requires an entrant to enter into more than one market simultaneously, or encourages a licensee to bundle its services in a manner that potentially retards competition.

Evidence of Previous Substitution

This refers to instances where recent past events or shocks in the market may have been facilitated by substitution between similar services/products. By way of illustration, instances where changes in relative prices induced appropriate changes in quantity may be highly indicative of substitutability. Additionally, past launches of new services/products may be indicative of services/products intended to replace or substitute existing ones.

Experience in Providing Products to the Market

The experience derived from introducing new, and providing existing, services/products to the market can be invaluable to the development and sustainability of a competitive advantage by a licensee. The advantage derived from the concept of 'learning-by-doing' can improve productivity and economic efficiencies, which should inevitably lead to lower wholesale and retail rates. However, learning-by-doing may not be easily replicated by new licensees and the inability to transfer technical 'know-how' and 'know-why' may restrict effective competition in the short to medium terms. An established licensee may be able to leverage its experience and knowledge to secure and maintain an economic position of strength that enables it to, an appreciable extent, behave independently of other licensees, consumers or subscribers. This may be manifested in the established licensee's control (implicit or otherwise) over distribution and supply channels, advertising and access to the electronic and print media, and over key human capital resources.

Extent of Countervailing Power among Buyers

Under certain circumstances buyers with a strong negotiating position that is exercised to produce a significant impact on competition, may impose constraints on the price setting behaviour of licensees. This may exist in a number of ways, inclusive of instances:

- where the buyer's share of purchases constitutes a sizeable proportion of the supplier's output;
- where the buyer's share of purchases constitutes a sizeable proportion of the supplier's total cost;
- where the buyer has alternative sources of supply; and
- where the buyer can switch between suppliers easily but the supplier has invested in assets specific to that buyer.

In retail markets, buyer power is usually limited to large business customers such as multinational corporations. However, buyer power in intermediate markets, (for example, interconnection and wholesale) is only beneficial to end-users when it exerts downward pressure on retail suppliers' prices which in turn lead to lower prices to end-users.

Highly Developed Distribution and Sales Network

Well-developed distribution systems are often costly to replicate and maintain, and may even be incapable of duplication. The existence of a well-developed distribution and sales network may represent a barrier to entry and provide the licensee with an advantage over existing and potential competitors.

High Barriers Entry

See **Barriers to Entry** (above) for an explanation.

Hirschmann-Herfindal Index (HHI).

The HHI reflects the size, distribution and number of firms in a given industry. The HHI is calculated by squaring the relevant market share of each firm competing in the relevant market and then summing the resulting numbers. For the purposes of market concentration the following HHI parameters will be used to gauge market concentration:

- Un-concentrated if the HHI is less than 1000;
- Moderately concentrated if the HHI is between 1000 and 1800; and
- Highly concentrated if the HHI is greater than 1800.

Homogenous Services/Products

Price competition is often more robust where services/products are similar or perceived to be similar by end users. However similarity of products may provide an incentive to collude in the medium- to long term as prices equate over time. Differentiated products/services do not focus on prices alone but take place along multiple dimensions and collusive behaviours are more difficult to reach.

Influence of Other Members of the Licensee's Group

A licensee may be able to leverage market power from closely related markets, especially where the licensee's affiliates may be involved in the markets in question. The potential influence of other members of the licensee's group may be indicative of SMP if the licensee and its affiliates can act together to exclude competitors.

Lack of Countervailing Buyer's Power

The existence of customers with a strong negotiating position which is exerted to influence competition can tend to restrict the ability of a licensee to act independently of their customers. See **Extent of Countervailing Power among Buyers** (above) for a more detailed explanation.

Lack of Potential Competition

This refers to the prospect of new licensees entering the market within the timeframe considered by the review.

Lack or Reduced Scope for Price Competition

Where competition is effective, there would exist a general expectation to see prices close to, or moving towards, costs. A potential result of collective dominance is evidence of a history of market price movement within a narrow range.

Lack of Technical Innovation, Mature Technology

The more mature the technology, the lower the scope for a licensee to compete by being differentiated on technology. Conversely, technological innovation facilitates product differentiation and ultimately competition among multiple dimensions, ease of entry to and rapid growth in market share.

Low Price Elasticity of Demand

Price elasticity of demand measures the responsiveness of demand to change in product/service own price. Low elasticity of demand may enforce collusive behaviours, specifically in instances where consumer demand does not change much in response to price changes (i.e., demand is inelastic). Where low elasticity of demand exists there is typically less incentive by licensees to compete on prices and the change in price must be substantially great to stimulate further demand.

Market Share

Market share may be assessed either on the basis of total gross revenues in the market, total subscriber numbers or total volumes (capacity, minutes, number of termination points, etc.). The specific measure of market share of the licensee concerned will depends on the characteristics of the relevant market.

Market share as an indicator for the assessment of single SMP is derived from economic theory and empirical evidence on the relationship between market share and profitability. Although theory and empirics indicate that there is a positive correlation between market share and individual price-cost margin, there is no clear-cut relation between a certain market share and the existence of SMP. Accordingly, a licensee with a small market share is unlikely to have SMP unless barriers to entry are high and competition from other licensees in the market was ineffective. Alternatively, a licensee that has substantial market share in the relevant market might be constrained in its price setting behaviour by the fact that entry barriers are low or non-existent. Conversely, in a small market like The Bahamas, a licensee with a persistently high market share may enjoy a position of SMP even when entry barriers are low.

Market Concentration

Market concentration is a function of the number of firms in a market and their respective market share. When evaluating market concentration consideration will be given to the Hirschmann-Herfindal Index (HHI).

Joint/Collective SMP is more likely in a highly concentrated market with licensees having relatively similar market share. In such a situation the potential for tacit co-ordination, or otherwise, between licensees may arise to restrict new market entrants or to hasten the exit of existing licensees. However, a highly concentrated market may not necessarily give rise to a finding of joint SMP.

Mature Market

It is harder to enter the market and attract new customers in mature markets. Therefore, competition is primarily amongst existing licensees and this may provide an incentive to collude.

Number of Active Competitors

The number of active licensees in a relevant market provides an indication of the level of competition in that market. The ease with which licences are obtained, the costs of establishing, maintaining and operating the licensed systems in a particular geographic area, and specific obligations attached to licences are important factors to consider. In general, the larger the number of operators in a market, the less likely it is that any individual operator will possess significant market power.

Overall Size of the Undertaking

This refers to the potential advantages and the sustainability of those advantages arising from the large size of the licensee relative to its competitors. These advantages may accrue in part due to other activities of the licensee outside the market under consideration but by and large these advantages may arise from economies of scale, access to finance, purchasing, production capacities, distribution and marketing.

Past Evidence of Customers Diverting Orders to Suppliers in Other Areas

This refers to evidence of changes in prices between different geographic areas and the consequential reactions by customers.

Prices and Profitability

In examining market power, and by extension the extent of market competition, focus is usually directed on the process of price formation in the relevant market. This requires an examination of the way in which prices are set which might include predation, price leadership, and parallel pricing. The profitability of firms operating in the relevant market can be an indication of the extent to which market power is influencing price formation. A licensee's ability to establish and maintain profits persistently and consistently above competitive levels or in excess of the minimum return required to compensate investors, is an important indicator of market power. In a competitive market, a licensee should not be able to persistently raise prices above costs and sustain excess profits. As costs fall, prices should similarly fall, if competition is effective. Factors that may explain higher prices, such as greater innovation and efficiency, would be considered in interpreting high profit margins.

Product/Services Diversification

In general there is a positive relationship between product/service diversification and market power, (i.e., increased differentiation in general will hamper switching between licensees, where a licensee is sufficiently able to differentiate its product/service from other licensees and those licensees are not able to imitate the differentiation). Product or service differentiation may be observed particularly in mature markets and is characterised by the ability of the licensee to provide a suite of products/services that cannot be replicated by competitors and consequently reducing the competitive threat emanating from competitors.

Retaliatory Mechanisms

Retaliatory mechanisms can deter action by licensees that might break a collective agreement.

Similar Cost Structures

It is easier for firms to collude where they have similar cost structures, similar production capacity, or similar ranges of products. Cost asymmetry tends to rule out a 'focal point' for pricing policies and so negates the potential for firms to coordinate behaviours. It is therefore more likely that licensees may have different marginal cost functions which will render individual price preferences dis-similar for any given output levels.

Similar Market Share

Similar market shares have the potential to limit competition especially where those market shares are static over time. The converse is typically true – a large imbalance of market share makes joint dominance less likely.

SSNIP or Hypothetical Monopolist Test

The SSNIP test is a standard conceptual approach used to identify demand- and supply-side factors constraining the price setting behaviour of a 'hypothetical monopolist'. The initial reference point for the application of the SSNIP test is captured in the following question: "if there was only one provider of a defined set of services/products in a defined geographical area, would that 'hypothetical monopolist' find a small but significant (and permanent) price increase (say 5-10%) profitable?" If so, then a relevant market can be defined for *ex ante* regulatory purposes. The underpinning logic is that a profitable price increase can only be had where the competitive restraint of other services/products and other geographical areas is non-existent. The reason why a small but significant price increase might not be profitable is that the ‘hypothetical monopolist’ could lose a sufficiently large volume of business because of demand-side or supply-side substitution or both.

Application of the SSNIP test, firstly, from the narrowest set of services/products and geographical area, and gradually widens the scope of the products/services, until the answer to the question is in the affirmative. The services/products and geographical area included at that stage would be considered to be within the market.

Stagnant or Moderate Growth on the Demand Side

The faster demand is growing, the more likely licensees are to compete aggressively. This is due primarily to the potentially higher returns available in terms of future market share and profits. Conversely, future (long-term) profits from collusive behaviour increases with growing demand, whereas short-term profits are independent of demand growth. Careful consideration would be given to both perspectives in an assessment of joint SMP.

Supply-side Substitution

This refers to the existence of one or more prospective competitors that can quickly enter the relevant market, thereby acting as a constraining influence on the pricing behaviour of the hypothetical monopolist.

Technological Advantage or Superiority

Technological advantages or superiority may represent a barrier to entry as well as an advantage over existing competitors due to lower production costs or product differentiation.

Various Kinds of Informal or Other Links between the Undertakings Concerned

Evidence of such links will inform an assessment of the potential for collusion. However, due care is required as such evidence is not necessarily a pre-requisite for finding a collective SMP position.

Vertical Relationships

Vertical integration exists where a licensee operates at both the downstream (retail) and upstream (wholesale/interconnection) segments of the electronic communications industry. Arguably, vertical relationships can bring some benefits to the licensee. However, vertical relationships make it possible for the licensee to leverage its market power into upstream or downstream markets as that licensee has control over downstream and upstream markets.