



REGULATORY
AUTHORITY

Preliminary Identification of Markets Notice

In accordance with Section 22(1) of
the Electronic Communications Act
(2011)

Date: 17 October 2017

1 INTRODUCTION AND LEGISLATIVE CONTEXT

1. Section 22 of the Electronic Communications Act 2011 (“ECA”) requires the Regulatory Authority (the “Authority”) to issue a notice setting out its preliminary assessment of the relevant product and geographic markets which in the Authority’s view appear to be susceptible to the imposition of *ex ante* remedies, based on a forward-looking assessment.

2. Pursuant to section 23(4) of the ECA, the Authority must conduct a public consultation to review those markets to: (i) establish whether those markets are correctly defined; (ii) assess whether any communication providers possess significant market power (“SMP”); and (iii) decide which, if any, remedies should be imposed on operators in order to preserve or promote effective competition.

3. In accordance with section 22(1) of the ECA, the Authority hereby issues this Preliminary Identification of Markets Notice (the “Notice”).

4. Section 22(2) of the ECA specifies that the identified markets can include retail and wholesale markets and must satisfy all of the following criteria, as well as any other criteria that the Authority deems pertinent:

- A. the relevant market is characterised by high and non-transitory barriers to entry;
- B. taking into account actual and expected market circumstances during the period under review, the relevant market either—
 - 1. is not likely to be affected by technological changes or other developments that would render it effectively competitive, or
 - 2. is likely to cease to be effectively competitive; and
- C. the application of *ex post* competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.

5. The purpose of the Notice is to publish the Authority’s preliminary views on which markets appear to be susceptible to the imposition of *ex ante* remedies in accordance with section 22(1) of the ECA. The identification of a market in this Notice does not represent a finding that SMP necessarily exists in that market, but simply that it is a candidate market and requires further analysis through the market review process.

2 IDENTIFYING THE RELEVANT MARKETS - INTERPRETATION OF CRITERIA

2.1 Relevant services and market definition

6. The specific definitions of the markets identified in this Notice are preliminary only. These preliminary definitions are based on the observation and data reviewed by the Authority to date. During the market review process the Authority will be seeking to gather further data and information, and to conduct additional analysis (for example on demand and supply-side characteristics) to inform the most appropriate market boundaries for the upcoming market review period.

2.2 Interpretation of criteria

(a) High and non-transitory barriers to entry

7. The first criterion set out in section 22(2) of the ECA is that: “the relevant market is characterised by high and non-transitory barriers to entry”. Barriers to entry include legal, regulatory, economic, and technical barriers to a firm’s ability to viably enter, expand and compete effectively in a market. In the context of electronic communications, a key economic barrier can be the high level of sunk costs involved in deploying an electronic communications network. Sunk costs are those that are incurred upon entry and cannot be recouped if the firm exits the market. There would also be a legal barrier to the extent that a licence is required from the Authority before a service can be offered.

(b) Expected market developments

8. The second criterion in section 22(2) of the ECA relates to whether there are likely to be technological changes or other developments that would alter a conclusion as to whether or not the market is likely to trend towards effective competition. The ECA specifies that the relevant timeframe for considering technological changes and developments is over the period under review (no more than 4 years given the obligation to conduct new market reviews at least that often under section 23(6)).

9. An impending change that the Authority considered important and took into account in the prior market review on 2013 was the licensing change. It was hoped that the introduction of the Integrated Communications Operating License (“ICOL”) would reduce barriers across markets (for existing licence holders) and allow for further bundling and the attainment of economies of scope. However, at that time, the Authority was cognizant that the ICOL regime could potentially also allow for leveraging of market power across service markets.

10. Another factor that the Authority considers important is that there is ongoing technological innovation and change in respect of: (1) substitution and convergence between fixed and mobile services; (2) the deployment of fiber networks to provide ultrafast broadband; and (3) the substitution of subscription TV with content provided over the top (“OTT”) of IP.

(c) *Ex post* competition rules

11. The third criterion contained in ECA section 22(2) is that “the application of *ex post* competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.”

12. In general, *ex post* rules alone are, in the Authority's preliminary view, unlikely to be sufficient where a form of wholesale access (including interconnection) is required in order to promote effective competition in downstream markets.

13. Moreover, by the very nature of being *ex post*, the rules are enforced after an event. Therefore, where the extent of market power in a market is such that it was likely that consumers will be harmed in the absence of *ex ante* regulation or that there will be irreversible damage to competition, *ex post* intervention will likely not be sufficient to promote or preserve competition. While *ex-ante* regulation may be required in certain instances, the Authority is minded to consider how a combination of *ex-ante* and *ex-post* regulation can best achieve its objectives and duties.

3 LIST OF CANDIDATE MARKETS

14. Having assessed the criteria in section 22(2) of the ECA, the Authority has determined the following candidate markets:

Box 1: Markets susceptible to ex ante regulation

1. the Island-wide¹ provision of fixed broadband internet connectivity, provided over any technology, and for any speed
2. the Island-wide provision of mobile services (voice, text and data)
3. the Island-wide provision of voice call origination and termination from a fixed location
4. the Island-wide provision of subscription television services
5. the Island-wide provision of business connectivity services
6. the provision of off-island connectivity (i.e. international data transmission)
7. the provision of on-island submarine cable interconnection and backhaul

15. A detailed analysis of market definition, having regard to the principles of demand and supply side substitutability, will be carried out as part of the market review process, pursuant to the issuing of this Notice. The candidate markets identified in the Notice provide a starting point for that detailed market definition study. The detailed market definition to be carried out in the market review process may result in the above markets being further disaggregated by customer groups or geographic areas or service.

¹ Island-wide is defined as the entire land mass of Bermuda and its surrounding islands.

4 SUMMARY EXPLANATION OF VIEWS ON MARKETS SUSCEPTIBLE TO *EX ANTE* REGULATION

16. This section provides a summary discussion of the reasons for identification of the seven markets listed in Box 1, in accordance with section 22(4) of the ECA.

4.1 The Island-wide provision of fixed broadband internet connectivity, provided over any technology, and for any speed

17. This market comprises the provision of internet connectivity services (both to business and residential customers). This market is also likely to differ in terms of retail and wholesale service provision; the Authority will consider this point within the market review.

- a) **Barriers to entry:** There are high barriers to entry in this market. Entry barriers relate both to legal barriers (in terms of having an ICOL) and also economic barriers in relation to the high sunk costs of launching a fixed network. Furthermore, with two existing island wide broadband providers (BTC/Digicel and One)² and only a limited number of potential customers, there may be little incentive for new network entry. The Authority finally notes that this market has seen no material entry in recent years, and there has been little change to the competitive dynamics in the market since 2013.
- b) **Technological change and market developments:** The costs of rolling out a fixed broadband network are likely to remain significant, and anticipated technological advances are unlikely to materially change this over the course of this market review. Furthermore, market trends (e.g. persistent high market concentration) indicate that this market is not trending toward effective competition.
- c) **Ex-post competition rules:** The third criteria contained in section 22(2) is that “the application of ex post competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.” In the 2013 market review, it was deemed that ex-ante regulation was needed in this market. The Authority considers that in the absence of any ex-ante remedies going forward, SMP operators would have the ability and incentive to engage in anti-competitive and anti-consumer practices, including charging excessively high or excessively low prices, as well as refusing to provide wholesale access to retail competitors that are not network owners. Furthermore, *ex ante* regulation allows for the imposition of specific SMP remedies to address the competition problems identified and for the subsequent monitoring of those remedies, as well as scope for timely and efficient intervention to avoid adverse effects on consumers.

4.2 The Island-wide provision of mobile services (voice, text and data)

18. This market comprises the provision of mobile services, including mobile voice, text messaging and mobile data.

- a) **Barriers to entry:** There are high barriers to entry in this market. Entry barriers relate both to legal barriers (in terms of having an ICOL) and also economic barriers in relation to the high

² Including their respective ICOLs.

sunk costs of launching a mobile network. Furthermore, with two existing island wide broadband providers (in BTC/Digicel and One) and only a limited number of potential customers, there may be little incentive for such network investment. This market has seen no material entry in recent years, and there has been little change to the competitive dynamics in the market since 2013.

- b) **Technological change and developments:** The costs of rolling out a mobile network are likely to remain significant, and anticipated technological advances are unlikely to materially change this over the course of this market review. Furthermore, market trends (e.g. persistent high market concentration) indicate that this market is not trending toward effective competition.
- c) **Ex-post competition rules:** The third criteria contained in section 22(2) is that “the application of ex post competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.” In the 2013 market review it was deemed that ex-ante regulation was needed in respect to mobile services. The Authority considers that in the absence of any ex-ante remedies going forward, SMP operators would have the ability and incentive to engage in anti-competitive and anti-consumer practices, including charging excessively high or excessively low prices.

4.3 The Island-wide provision of voice call origination and termination from a fixed location

19. This market comprises the provision of fixed voice services (i.e. landline phone), and covers all calls made from or to a fixed landline, including to other fixed phones, to mobile phones, and to both domestic and international numbers.

- a) **Barriers to entry:** There are high barriers to entry in this market. The economic entry barriers are very similar to those in the broadband market, owing to the same underlying infrastructure (especially the civil works and cabling) being used to provide the services. Furthermore, there are also the legal barriers (in terms of having an ICOL). There has been no material entry in this market in recent years, and there has been little change to the competitive dynamics in the market since 2013.
- b) **Technological change and developments:** The costs of rolling out a fixed voice network are likely to remain significant, and anticipated technological advances are unlikely to materially change this over the course of this market review. Furthermore, market trends (e.g. persistent high market concentration) indicate that this market is not trending toward effective competition.
- c) **Ex-post competition rules:** The third criteria contained in section 22(2) is that “the application of ex post competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.” In the 2013 market review it was deemed that ex-ante regulation was needed in this market. The Authority considers that in the absence of any ex-ante remedies going forward, SMP operators may have the ability and incentive to engage in anti-competitive and anti-consumer practices, including charging excessively high prices. Ex-ante regulation is also a more effective route to prescribing and monitoring quality of service, in order to maintain minimum service standards.

4.4 The Island-wide provision of subscription television services

20. This market comprises subscription television services.

- a) **Barriers to entry:** There are high barriers to entry in this market. The economic entry barriers are very similar to those in other fixed markets, owing to the high cost of infrastructure, for example in a fixed network (for providing cable TV or IPTV) or a satellite infrastructure for providing satellite TV. Furthermore, there are high sunk costs in regard to acquiring premium content rights (such as premium sports) which may be essential in order to effectively compete for customers.
- b) **Technological change and developments:** The costs of rolling out a subscription television network, either provided over a fixed network or satellite solution are likely to remain significant, and anticipated technological advances are unlikely to materially change this over the course of this market review.
- c) **Ex-post competition rules:** The third criteria contained in section 22(2) is that “the application of ex post competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.” In the 2013 market review it was deemed that ex-ante regulation was needed in the subscription television market, which indicates that such services are susceptible to ex-ante regulation. The Authority considers that in the absence of any ex-ante remedies going forward, SMP operators in subscription television (especially those with premium and exclusive content) may have the ability and incentive to engage in anti-competitive and anti-consumer practices.

4.5 The Island-wide provision of business connectivity services

21. This market comprises the provision of business connectivity services, including leased lines. Within this market it may be appropriate to define separate local (sub-island wide) markets, as well as separate product markets for different types (and speeds) of services.

- a) **Barriers to entry:** There are high barriers to entry in this market. The economic entry barriers are the same as for other fixed markets; furthermore, there remain the legal entry barriers in relation to holding an ICOL.
- b) **Technological change and developments:** The costs of rolling out a fixed network are likely to remain significant, and anticipated technological advances are unlikely to materially change this over the course of this market review period.
- c) **Ex-post competition rules:** The third criteria contained in section 22(2) is that “the application of ex post competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.” In the 2013 market review it was deemed that ex-ante regulation was needed on leased line services, which indicates that such services are susceptible to ex-ante regulation. The Authority considers that in the absence of any ex-ante remedies going forward, SMP operators may have the ability and incentive to engage in anti-competitive and anti-consumer practices.

4.6 The provision of off-island connectivity (including international data transmission)

22. This market comprises the provision of connectivity services to off-island locations. Predominantly, this relates to the link between Bermuda and some other mainland, which allows the service providers in Bermuda to offer services such as access to the internet and international phone calling.

- a) **Barriers to entry:** There are high barriers to entry in this market. The economic entry barriers are significant owing to the very high cost of installing submarine cables (over the long distance) from Bermuda to another mainland (for instance Bermuda is approximately 700 miles off the eastern coast of the United States of America, and a key driver of costs is the length of the required cabling). Furthermore, given the existing submarine cables (and associated surplus bandwidth that is available), and the limited number of people in Bermuda, it may not be commercially attractive for an entrant to build a new submarine cable.
- b) **Technological change and developments:** The costs of laying a submarine cable are likely to remain significant, and anticipated technological advances are unlikely to materially change this over the course of this market review.
- c) **Ex-post competition rules:** The third criteria contained in section 22(2) is that “the application of ex post competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.” Ex-post rules alone will not be able to provide the same level of safeguards around service continuity as can ex-ante regulation. Additionally, in the absence of ex-ante remedies, SMP operators in this market may have the ability and incentive to charge excessive prices to domestic service providers, to their detriment, and ultimately the detriment of Bermudan consumers (in the form of high retail prices).

4.7 The provision of on-island submarine cable interconnection and backhaul

23. This market comprises the provision of interconnection and backhaul services, between domestic service providers’ point of presence and the point of interconnection to the submarine cable landing station. These services are similar to domestic business connectivity services, in that they provide on-island connectivity. However, unlike standard business connectivity, these services are likely to be many of orders of magnitude larger in terms of bandwidth. These services are ultimately used by domestic service providers who wish to provide domestic communications services that require international connectivity (for example internet service providers) however who do not own their own domestic network. For these entities, the only way to achieve international connectivity is to buy (submarine cable) interconnection and backhaul services from others.

- a) **Barriers to entry:** There are high barriers to entry in this market. The economic entry barriers are the same as for other domestic fixed markets such as business connectivity and broadband, owing to the same underlying infrastructure (especially the civil works and cabling) being used to provide the services. Furthermore, there remain the legal entry barriers in relation to holding an ICOL.
- b) **Technological change and developments:** The costs of rolling out a fixed network are likely to remain significant, and anticipated technological advances are unlikely to materially change this over the course of this market review period.

- c) **Ex-post competition rules:** The third criteria contained in section 22(2) is that “the application of ex post competition rules alone would not be sufficient to promote or preserve effective competition in the relevant market.” The Authority considers that in the absence of any ex-ante remedies going forward, SMP operators in the provision of these services may have the ability and incentive to engage in anti-competitive practices, for example by refusing to provide such services, or by doing so in a discriminatory way (in order to favour their own downstream arm).