VIRGIN ISLANDS

DETERMINATION BY THE TELECOMMUNICATIONS REGULATORY COMMISSION UNDER SECTION 26 OF THE TELCOMMUNICATIONS ACT, 2006

DETERMINATION OF DOMINANCE FOR TERMINATION SERVICES ON INDIVIDUAL FIXED AND MOBILE NETWORKS 2011

[Gazetted 22 September, 2011]

The Telecommunications Regulatory Commission, in the exercise of the power conferred by Section 26 (3) of the Telecommunications Act, 2006 (No. 10 of 2006), issues this Determination.

Introduction

1. This Determination sets out the rationale for the proposed market definition and findings on dominance. The separate consultation document "Market Analysis of voice call and SMS termination on individual fixed and mobile networks" defines the position of the Telecommunications Regulatory Commission ("TRC") on the regulation of termination services.
2. This Determination applies to the following public suppliers who are licensed to provide telecommunications services in the Virgin Islands ("VI"):
    1. Cable and Wireless (BVI) Ltd[1] ("LIME") provides both fixed and mobile voice services and SMS services.
    2. Caribbean Cellular Telephone Ltd ("CCT") provides mobile voice and SMS services.
    3. Digicel (BVI) Ltd ("Digicel") provides mobile voice and SMS services.

Purpose of this Determination

3. The purpose of this determination is to define the wholesale market for voice call and short messaging service ("SMS") termination services on fixed and mobile networks and to assess whether any existing fixed and mobile network operator(s) is/are dominant in these markets.

[1] Cable and Wireless (BVI) Ltd trades as LIME

4. A dominance designation provides the legal basis whereby regulatory obligations are deemed necessary and/or mandated by the provisions of the Telecommunications Act ("Act") of 2006.
5. The process for the delivery of services and the market failure that arises in the context of voice call termination are similar for voice and SMS termination. Therefore, for ease of reference the TRC refers mostly to voice call termination in this discussion.

Market Review Framework

6. To determine whether a licensed public supplier or public suppliers are dominant in a relevant market, the TRC has carried out the following three stages of analysis:
    - Definition of the relevant market
    - Analysis of competition in the relevant market; and
    - Identification of dominant operator or operators, if any.
7. At each stage the TRC has relied upon well-established economic principles and tests to define markets, such as the Small but Significant Non-transitory Increase in Price ("SSNIP") test to assess demand and supply side substitution. It looks at relevant factors to determine the level of competition, such as barriers to entry and expansion, and market shares.
8. Throughout the three stage process, the TRC has applied an analytical framework which is set out in the TRC's Market Review[2] and is consistent with the Act and international best practice. The tools and principles employed by the TRC are similar to those employed by other regulators and competition authorities, including the European Commission ("EC") and the UK telecommunications regulatory authority, Ofcom.

Identification and determination of the relevant markets

9. A relevant market is a defined set of products or services and a defined geographic area in which competition occurs. It includes all goods and services that are considered to be close substitutes.
10. Market definition is undertaken with reference to the SSNIP test.

Product dimension

The Determination

11. Wholesale termination on fixed or mobile networks is a derived demand from retail services. The identification of the relevant market begins with the smallest service or set of services possible. In this case this is wholesale voice call termination to an individual subscriber of a fixed or mobile network.

[2] http://www.trc.vg/attachments/014_TRC_Market%20Review_Final.pdf

12. Fixed or mobile termination is a wholesale service provided by operator A which operates a fixed or mobile network which is distinct to a fixed or mobile network operated by operator B. Wholesale termination is necessary for a communication between two customers of different networks (i.e. an “off-net” communication). In the case of communications between subscribers that belong to the same network operator (i.e. an “on-net” communication) equivalent termination is self-supplied.
13. Whilst it may appear that wholesale voice or SMS call termination to an individual subscriber represents the correct market definition, the TRC is of the view that it is appropriate to aggregate call or SMS termination to all the subscribers of a specific operator. Termination to a subscriber or a number is not substitutable with termination to another subscriber or number but is offered in a homogenous manner and is subject to a common pricing constraint. On this basis, the TRC takes the view that the relevant market includes termination to all the subscribers of a network operator.
14. The TRC considers that there are no effective demand-side wholesale substitution services for termination on individual networks at the wholesale level. Faced with a SSNIP, the buyer of termination services (Operator A in the example above), that is the operator whose customer is calling a subscriber of Operator B, cannot substitute wholesale call termination services supplied by Operator B with an equivalent service from another operator.
15. The TRC also considers that there are no effective demand side substitutes at the retail level. The TRC considers that a call to a fixed number is not substitutable with a call to a mobile number. The fact that a mobile customer can be reached at any location and more immediately than a fixed line customer is an important distinguishing feature of calls to mobile.
16. Similarly, the TRC considers that a call to a mobile or a fixed line cannot be substituted by an SMS. By definition, SMS are written short messages that do not allow a real time dialogue between the called and calling parties; SMS are sent only after messages have been composed. SMS may be delivered in real time but this is not guaranteed. Hence the TRC is of the view that SMS do not provide a competitive constraint on voice call termination rates.
17. The TRC considers that there are no supply-side substitutes. Faced with an increase in the termination rate, another network operator cannot step into the provision of call termination services on another network as presently only the terminating operator is able to locate the called party, identify the number and terminate the call to that number.
18. Overall, the TRC considers that there are no demand or supply side substitutes to fixed voice call termination, mobile voice call termination or mobile SMS termination on individual networks.

Geographic dimension

19. The geographic scope of the licences of the public suppliers is the territory of the Virgin Islands. Competitive conditions on termination services are homogenous throughout the territory. Accordingly, the TRC considers the geographic dimension of the markets to be national.

Conclusion on the relevant markets

20. For the reasons set out above, the TRC considers that the relevant markets are:
    i) The wholesale market for fixed-line call termination on LIME
    ii) The wholesale market for mobile call termination on CCT
    iii) The wholesale market for mobile call termination on Digicel
    iv) The wholesale market for mobile call termination on LIME
    v) The wholesale market for SMS termination on CCT
    vi) The wholesale market for SMS termination on Digicel
    vii) The wholesale market for SMS termination on LIME

Identification and determination of dominance in the relevant markets

21. Having defined the relevant markets, the next stage is to analyse the extent of competition. The Act provides the following definition of dominance, "a public supplier is dominant with respect to a telecommunications network or a telecommunications service where, individually or jointly with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors and users".
22. As dictated by the Act and outlined in the Market Review document, the following factors shall be considered in the determination of dominance:
    - The relevant market;
    - Technology and market trends;
    - The market share of the public supplier;
    - The power of the public supplier to introduce and sustain a material price increase independently of competitors;
    - The degree of differentiation among networks and services in the market; and
    - Any other matters that the Commission deems relevant.

As the analysis in the Consultation on the Market Analysis of wholesale call and SMS termination on individual fixed and mobile networks sets out:

a) **The relevant market** inlcudes voice call and SMS termination on fixed and mobile networks as follows;
    i. Wholesale mobile voice call termination provided by Caribbean Cellular Telephone (Ltd)
    ii. Wholesale mobile voice call termination provided by Digicel (BVI) Ltd

iii. Wholesale mobile voice call termination provided by Cable and Wireless (BVI) Ltd
iv. Wholesale fixed voice call termination provided by Cable and Wireless (BVI) Ltd
v. Wholesale SMS termination provided by by Caribbean Cellular Telephone (Ltd)
vi. Wholesale SMS termination provided by Digicel (BVI) Ltd
vii. Wholesale SMS termination provided by Cable and Wireless (BVI) Ltd

b) **Technology and market trends** do not offer any alternative form of termination
c) **The market shares of the public suppliers** are high enough (100%) to represent market power with respect to termination on each individual public supplier. As set out in section 7.3 of the Market Review, market shares over 50% are evidence of dominance.
d) **The power of the public supplier to introduce and sustain a material price increase independently of competitors**; the TRC is of the view that each public supplier of termination could increase price by 5-10% without a negative impact on termination profitability (based on the SSNIP test) because there is no other alternative of reaching numbers controlled by that provider and because consumers, who make a choice on which network to subscribe to, do not pay for termination of calls.
e) **The degree of differentiation among networks and services in the market**; the three public suppliers, CCT, Digicel and LIME operate separate networks with separate termination services, however the type of service that they offer is essentially the same and therefore the same designation shall apply to all.
f) Any other matters that the TRC deems relevant:
   - **Structural indicators** – In a defined market with high and sustained market shares, only the public supplier can terminate voice calls to the fixed or mobile numbers it has been allocated, and which are held by its subscribers. In effect, each public supplier has 100% share of the relevant termination market.
   - **Barriers to market entry**: the combination of high market shares held by public suppliers in each of their proposed markets, together with the existence of high barriers to entry (both in terms of the likelihood of actual entry and threat of entry and the fact that any new entrant could not provide termination services on another public supplier's network) leads us to a strong presumption that each public supplier holds SMP.

The TRC sees that there are no other factors prevailing in the VI which would suggest that the public suppliers do not have significant market power in the termination of voice calls and SMS. Given the characteristics of the markets under consideration, the most determinant factors are: market share, barriers to entry including the control of infrastructure not easily duplicable and countervailing buyer power.

The Determination

Market share

23. The network of the calling party must use the network of the termination network operator. Therefore, each network operator has 100% market share and has therefore a monopoly in each relevant market. Consequently, there is a strong presumption of

monopoly power. There are no (existing or forthcoming) substitution possibilities to terminate a call to a called party.

Barriers to entry and expansion

24. The calling party pays ("CPP") principle gives rise to the termination monopoly problem. Termination is an enduring bottleneck characterized by the absence of potential competition. Since a call can only be terminated using the receiving subscriber's host network this infrastructure cannot be duplicated to offer a substitutable service. The monopoly problem is caused by virtue of the fact that the subscriber is connected to a network and only that network can be used to terminate the call. Consequently, the relevant markets display absolute barriers to entry.

Countervailing buyer power ("CBP")

25. Consideration of the two preceding elements point to a dominant position of CCT, Digicel and LIME mobile and LIME fixed in their respective termination markets. Another relevant element to be taken into account is CBP. CBP could limit the ability of providers of termination services to raise prices above the competitive level and hence to behave independently of buyers and ultimately of consumers. In other words, it may constrain the market power of providers of termination services.
26. CBP is not an absolute concept but refers to the relative strength of the buyer in negotiations with prospective sellers. For CBP to be effective, buyers must be able to exert a sufficiently strong influence on the seller preventing the latter to behave independently of its competitors and consumers to an appreciable extent. In doing so, CBP can prevent excessive prices and constrain prices at a level consistent with effective competition. Hence, it can benefit the buyers of termination services and ultimately retail customers.
27. The obligation to interconnect set out in Section 26 of the Act ensures that an operator cannot exercise countervailing buyer power. CBP depends upon the ability of one operator to refuse to interconnect which is contrary to Section 26.

Summary and conclusions on dominance

28. The monopolistic structure of the relevant markets, combined with an absolute barrier to entry provides a strong presumption of dominance of each public supplier in their respective termination markets.
29. The TRC considers that in the absence of regulation the potential CBP of the public suppliers is not sufficient to prevent the terminating MNO from behaving independently of its competitors, subscribers and ultimately of users such that prices are constrained. Hence, CBP does not overcome the presumption of dominance based on the consideration of market shares and barriers to entry.

30. Having regard to the above, in accordance with section 26 of the Act, the TRC hereby determines that:
    - Cable and Wireless (BVI) Ltd ("LIME") is dominant in the wholesale market for voice call termination on its fixed network
    - Cable and Wireless (BVI) Ltd ("LIME") is dominant in the wholesale market for voice call termination on its mobile network
    - Caribbean Cellular Telephone Ltd ("CCT") is dominant in the wholesale market for voice call termination on its mobile network
    - Digicel (BVI) Ltd ("Digicel") is dominant in the wholesale market for voice call termination on its mobile network
    - Caribbean Cellular Telephone Ltd ("CCT") is dominant in the wholesale market for SMS termination on its mobile network
    - Digicel (BVI) Ltd ("Digicel") is dominant in the wholesale market for SMS termination on its mobile network

Issued by the Telecommunications Regulatory Commission on the 8th day of September, 2011.

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