

VIRGIN ISLANDSDETERMINATION BY THE TELECOMMUNICATIONS REGULATORY COMMISSION UNDER
SECTION 26 OF THE TELECOMMUNICATIONS ACT, 2006DETERMINATION OF DOMINANCE FOR THE PROVISION OF INTERNATIONAL
CONNECTIVITY SERVICES 2013

[Gazetted x 2013]

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

Introduction

1. This Determination defines the position of the Telecommunications Regulatory Commission (“TRC”) on market power in the provision of international connectivity services in the Virgin Islands and sets out findings of dominance. The separate consultation document “Market Analysis of International Connectivity” (“the Market Analysis”) sets out the rationale for the proposed market definition, findings of dominance and proposed regulation.
2. This Determination applies to the following public supplier, which is licensed to provide and which provides international connectivity services from the Virgin Islands:

Cable and Wireless (BVI) Ltd¹ (“LIME”)**Purpose of this Determination**

3. The purpose of this Determination is to define the market for international connectivity and define if any public suppliers in the Virgin Islands (“VI”) are dominant in this market.
4. A determination of dominance provides the legal basis for the imposition of regulatory obligations under section 26(4) of the Act on the public supplier determined dominant.

Market Review Framework

5. To determine whether a licensed public supplier or public suppliers are dominant in the 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.

¹ Cable and Wireless (BVI) Ltd trades as LIME

6. 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.
7. Throughout the three stage process, the TRC has applied an analytical framework which is set out in the TRC’s Market Review² and is consistent with the Act and with international best practice in areas in which the Act might be silent. 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 OFCOM, the telecommunications regulatory authority of the United Kingdom.

Identification and determination of the relevant markets

8. As set out in the Market Review, the 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.
9. Market definition was undertaken with reference to the SSNIP test.

Product dimension

10. For the purposes of the Market Analysis, international connectivity services include the provision of International Private Leased Circuits (“IPLCs”) and International Managed Data Services (“IMDS”) including Multi-protocol Label Switching (“MPLS”).
11. IPLCs are used to provide international voice and data communications from the Virgin Islands through the conduit of a submarine cable.
12. IMDS are used to provide specific international voice and data communication services from the Virgin Islands such as MPLS which allows dedicated data connections between offices of multinational corporations.
13. The TRC considers that there are no effective demand-side substitution services for IPLCs. Faced with a SSNIP, the buyer of an IPLC, that is the operator who is providing retail international services to its customers, cannot entirely substitute another product such as VSAT or a microwave connection for an IPLC due to the lower levels of system reliability provided by VSAT or a microwave connection. Therefore the TRC does not consider that VSAT or microwave connections offer viable demand side substitutes to IPLCs.
14. The TRC also considers that there are no supply-side substitutes for IPLC’s. Faced with an increase in the price of an IPLC, another public supplier cannot step into the provision of international connectivity services without undertaking long-term investment in a submarine cable.

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

15. Similarly, the TRC considers that there are no effective demand-side substitution services for MPLS services. Faced with a SSNIP, the buyer of an MPLS service, such as a bank, would be unable to substitute into an IPLC without undertaking investment to set up the IPLC connection.
16. The TRC also considers that there are no supply-side substitutes for MPLS services. Faced with an increase in the price of MPLS, another network operator cannot step into the provision of international connectivity services without undertaking long-term investment in a submarine cable.
17. Overall, the TRC considers that there are no demand or supply side substitutes to the provision of IPLCs and MPLS.

Geographic dimension

18. The geographic scope of the licences of all public suppliers of telecommunications services in the Virgin Islands is the Territory of the Virgin Islands. Competitive conditions on international connectivity services are homogenous throughout the Territory. Accordingly, the TRC considers the geographic dimension of the markets to be national.

Conclusion on the relevant markets

19. For the reasons set out above, the TRC considers that, for the purpose of this Determination, the relevant markets are:
 - i) The market for international connectivity provided via IPLC's.
 - ii) The market for IMDS including MPLS.

Identification and determination of dominance in the relevant markets

20. Having defined the relevant markets, the TRC then proceeded to analyse the extent of competition in each market. Section 26(3) of the Act refers to a public supplier as 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".
21. As dictated in Section 26(3) of the Act and as outlined in the Market Review, the following factors were 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 Market Analysis sets out:

The IPLC market was assessed for market power as follows:

- The relevant market** was identified as the market for the supply of international connectivity via IPLCs.
- Technology and market trends** - As set out in the Market Analysis, international connectivity is primarily provided throughout the world via submarine cables. The optimum technology for transmitting voice and data internationally is fibre-optic cable. This technology is faster and more reliable than microwave and satellite connections, which can only be used as a back-up.
- The market share of the public supplier** - The public supplier, LIME, is the only wholesale provider of IPLC's in the Virgin Islands. Whilst it is possible for operators in the Virgin Islands to buy an IPLC connection from a third party provider, ultimately provision of that IPLC must come from LIME as LIME controls the cable landing station in the Virgin Islands. If a third party provider sells an IPLC connection to an operator based in the Virgin Islands, this would suggest that the third party provider has access to LIME's IPLC service at a lower price than the operator based in the Virgin Islands. It does not make any economic sense for this margin to be paid outside of the Virgin Islands when LIME must, by definition, be the most efficient supplier of this service. Therefore, as LIME controls the cable landing station, whether the other operators purchase IPLC's directly from LIME or from a third party provider, LIME has 100% monopoly over IPLC connections from the Virgin Islands.
- The power of the public supplier to introduce and sustain a material price increase independently of competitors** - As set out in the SSNIP tests in the Market Analysis, LIME has the ability to increase prices without losing market share. Despite the existence of third party providers who resell IPLC's, LIME can sustain a price increase because it can pass on this price increase to the third party providers.
- The degree of differentiation among networks and services in the market:** LIME is the sole provider of international connectivity services in the Virgin Islands because it owns and controls access to the cable landing station and the cable itself. The other public suppliers of telecommunications services i.e., CCT and Digicel, only operate mobile networks and not fixed networks. CCT and Digicel both require international connectivity to be able to offer their customers international voice, data and internet services. All operators require the same inputs (international connections) to offer the same outputs (international voice, data and internet service). However, for a market the size of that which exists in the Virgin Islands, it does not make economic sense for each operator to build its own submarine cable. It would make sense for operators to own a share in the submarine cables and to be able to access these cables on the same terms, but

this is not the case and is not the way the cables were set up and financed in the first place. Therefore, in order to be able to provide international voice, data and internet services on competitive terms, all operators need to access international connectivity on the same terms.

f) Any other matters that the TRC deems relevant -

- a. **Barriers to market entry:** The combination of the high market share held by LIME BVI in the IPLC market, together with the existence of high barriers to entry in terms of the high cost of setting up a submarine cable leads the TRC to a strong presumption that LIME BVI is dominant in that market.
- b. **Economies of scale:** The four submarine cables connected to the Virgin Islands provide an excess of international bandwidth to the Virgin Islands for a territory with a population of only 30,000 persons. The Territory does not have the economies of scale to merit the supply of alternative submarine cables purely to circumvent the use of the cables owned by LIME BVI.

The IMDS market was assessed for market power as follows:

- a) **The relevant market** is the market for the supply of international managed data services including the supply of MPLS.
- b) **Technology and market trends** - As set out in the Market Analysis, international connectivity is primarily provided throughout the world via submarine cables. The optimum technology for transmitting voice and data internationally is fibre-optic cable. This technology is faster and more reliable than microwave and satellite connections, which can only be used as a back-up.
- c) **The market share of the public supplier** - LIME BVI is the only operator in the Virgin Islands that owns access to submarine cables and is the only operator to offer IMDS including MPLS. No other public supplier has a direct vertical relationship from the supply of wholesale international connectivity to the delivery of a retail product such as MPLS.
- d) **The power of the public supplier to introduce and sustain a material price increase independently of competitors** - As set out in the Market Analysis, when the SSNIP test is applied, it is shown that LIME BVI has the ability to increase prices without losing market share.
- e) **The degree of differentiation among networks and services in the market** - As outlined above, LIME BVI is the sole provider of international connectivity services in the Virgin Islands because it owns and controls access to the cable landing station and the cable itself. As the sole provider of international connectivity services, LIME BVI is the sole provider of IMDS in the Virgin Islands as it is able to access the submarine cables on the lowest cost basis.
- f) Any other matters that the TRC deems relevant of which none are identified.

The TRC sees that there are no other factors prevailing in the Virgin Islands which would suggest that LIME BVI is not dominant in the provision of international connectivity services. Given the characteristics of the markets under consideration, the most determinant factors are: market share and barriers to entry, including the control of infrastructure not easily duplicable.

The Draft Determination

Market share

22. LIME has 100% of the wholesale market for supplying IPLC connections to consumers in the Virgin Islands. LIME has a very high market share of the market for supplying IMDS to the VI.
23. The TRC sees that there are no other factors prevailing in the Virgin Islands which would suggest that LIME does not have significant market power in the provision of international connectivity services via IPLCs and IMDS. The TRC therefore proposes to designate LIME BVI as dominant in the following markets respectively:
 - LIME BVI is dominant in the market for the provision of IPLCs in the VI
 - LIME BVI is dominant in the market for the provision of IMDS in the VI

Summary and conclusions on dominance

24. The monopolistic structure of the relevant markets, combined with potential barriers to entry provides a strong presumption of dominance on the behalf of LIME BVI in the markets for the provision of IPLCs and IMDS.
25. The TRC considers that, in the absence of regulation, LIME BVI is incentivized to charge monopoly prices for the provision of international connectivity services, which could be contrary to the principles of fair competition underlined by the Act.
26. Having regard to the above, in accordance with section 26 of the Act, the TRC hereby determines that:
 - LIME BVI is dominant in the market for the provision of IPLCs in the VI
 - LIME BVI is dominant in the market for the provision of IMDS in the VI

Issued by the Telecommunications Regulatory Commission on the xth day of x, 2013.

(Sgd.) Ayana Hull

Chairman of the Board