

**TRR**Telecommunications &
Radiocommunications
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**Order Revoking The Designation Of Dominance Of
Telecom Vanuatu Limited
In The Retail Mobile Service Market**

Background

This Order arises from:

- (i) The Order of 14 March 2008 designating TVL as being dominant in certain markets, including a market for retail mobile services; and
- (ii) TVL's request for review of the above designation of it as being dominant in the retail mobile services market.

Together with this Order, TRR has published a summary of its reasons and considerations relating to the making of this Order.

Order:

1. The portion of the Order of 14 March 2008 designating TVL as dominant in the retail mobile services market is hereby revoked.

Commencement

This Order shall come into force on the date it is made, and shall continue in effect until it is revoked or a modifying or superseding determination is made by the Regulator.

Made at Port Vila this 28th day of October 2013
Ronald Box
Telecommunications and Radiocommunications Regulator



Telecommunications &
Radiocommunications
Regulator

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**SUMMARY OF REASONS RELATING TO THE DECISION
TO REVOKE THE PRIOR DETERMINATION THAT
TELECOM VANUATU LIMITED (TVL) IS DOMINANT IN
THE RETAIL MOBILE SERVICES MARKET**

[28 October 2013]

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1 EXECUTIVE SUMMARY

The Telecommunications and Radiocommunications Regulator ("the Regulator") has conducted a review and analysis of whether TVL currently is dominant in the retail mobile services market in Vanuatu. A preliminary analysis was made available to TVL and Digicel Vanuatu Ltd ("Digicel") for comment. Comments have been received from both TVL and Digicel and have been taken into account in this final summary of reasons for the Regulator's decision.

Following the above review process, and having considered the comments submitted, the Regulator has concluded that TVL currently is not a dominant service provider and, accordingly, has decided to revoke that part of the March 2008 Interim Order that designated TVL as a dominant service provider in the retail mobile services market in Vanuatu.

2 BACKGROUND

2.1 Previous decisions

In an Interim Order dated 14th March 2008 (four days following the grant of TVL's current telecommunications licence), the Interim Telecommunications Regular designated Telecom Vanuatu Limited ("TVL") as a dominant service provider in the market for retail mobile services.

In a further Order on 18th June 2009, the Interim Telecommunications and Radiocommunications Regulator also designated Digicel as a dominant service provider in that market.

Following a review requested by Digicel, under clause 10.3 of its License, of the prior declaration of its dominance in this market, on 16th July 2012, the Regulator declined to revoke its prior dominance Determination against Digicel, which remains in effect.

In this proceeding, the Regulator has undertaken a review of the prior declaration of dominance of TVL in this market based on a written request dated 4 February 2013 from TVL to do so.

3 THE RELEVANT MARKET

In its 2012 review of Digicel's designation as a dominant service provider, the Regulator confirmed its earlier (2009) definition of a national market for retail mobile services that includes:

- a) all mobile-originated calls, including on-net and off-net calls, or national and international calls, and calls to voicemail (both for deposit and retrieval of voicemail messages);
- b) SMS messaging; and
- c) both pre-paid and post-paid mobile services and both residential and business services.

This definition was based on relevant factors, including that the pre-paid and post-paid mobile calls are the same service (although priced differently) and there is a high degree of demand and supply-side substitutability between the mobile call and the mobile SMS services. The mobile call and SMS services also are usually, if not invariably, provided in a single package or bundle in the sense that the customer is required to, and does, acquire the services together.

That definition also explicitly excluded:

- a) call/message termination services (which are wholesale services);
- b) data services other than SMS (which is regarded as a complementary service to voice calling);
- c) inbound and outbound services to roaming customers;
- d) value added services such as lotteries, ring tone sales and credit transfers; and
- e) the sale or lease of mobile handsets and other associated hardware items.

The Regulator considered whether this market definition needed to be revised given technological changes and consequential changes in potential demand and supply-side substitution that can occur with time. The Regulator concluded that, with one exception, the rationale underpinning that definition remains sound: mobile voice and messaging services continue to have the supply and demand-side substitutability characteristics and other characteristics referred to above. Mobile services and devices also enable access to other types of services—such as mobile data and value added services—but such services are not substitutes for mobile voice and, although they may be included as part of a product bundle, they are also sold separately from mobile voice (unlike SMS).

The above-mentioned exception relates to MMS, which is effectively an extension of the SMS technology and substitutable for either mobile voice or SMS in some circumstances. Accordingly, the Regulator considers that MMS is part of the retail mobile services market for the same reasons that SMS is included. As the previous explicit exclusion of 'data services other than SMS' could be interpreted to mean that MMS is excluded, the Regulator wish to clarify the matter by rephrasing its existing definition of the market. The Regulator considers this to be a clarification of the existing definition rather than a change to the existing definition.

Accordingly, the Regulator determined that the relevant market remains the retail mobile services market, which (consistent with the Regulator's previous Determinations) comprises all mobile-originated voice calls and messages (SMS/MMS) except those to or from roaming parties, and excludes mobile data, VAS and customer equipment.

4 TVL'S POSITION IN THE RETAIL MOBILE SERVICES MARKET

4.1 General

Pursuant to the March 2008 Interim Order referred to above, TVL has since that time been designated dominant in the following telecommunication markets in Vanuatu:

- the retail market for local calling services;

- the retail market for national and fixed-to-mobile calling services;
- the retail market for international calling services;
- the retail market for cellular mobile services;
- the retail market for internet access services;
- the retail market for leased line services; and
- the wholesale market for termination of calls on TVL's network.

This review has been undertaken having regard to the general powers and functions of the Regulator under s7 of the Act, the other relevant provisions of the Act, including sections 20 and 21, and Clause 10 of TVL's License.

Section 21 of the Act states that: 'Subject to the terms of any prior licence, the Regulator may designate a service provider dominant within a telecommunications market if:

- (a) the service provider's gross revenues from that telecommunications market constitutes 40 percent or more of the total gross revenues of all service providers from that telecommunications market; or
- (b) the Regulator reasonably considers that, either individually or acting in concert with others, the service provider:
 - (i) enjoys a position of economic strength or controls a bottleneck facility in the relevant telecommunications market; and
 - (ii) such strength or control affords the service provider the power to behave to an appreciable extent independently of competitors, customers, end users or potential competitors in that telecommunications market.'

Clause 10.1 of TVL's licence (a 'prior licence' for the purposes of section 21 of the Act) states:

'TVL (and any other licensed operator) will be designated a dominant service provider by the Regulator in any telecommunications market in Vanuatu if its gross revenues in that market (including services provided using an international gateway) constitutes forty per cent (40%) or more of the total gross revenues of all license operators in that market (as determined by the Regulator)'

Clause 10.2 of TVL's licence further states:

'The Regulator may designate TVL (and any other licensed operator) to be a dominant service provider in any telecommunications market in Vanuatu with less than forty per cent (40%) or more of the total gross revenues in that market (including services provided using an international gateway) if the Regulator reasonably considers that, either individually or acting together with others, it enjoys a position of economic strength or controls an essential facility according it the power to behave to an appreciable extent independently of competitors or customers in that market'

Furthermore, clause 10.3 of TVL's Licence provides that if the Regulator designated TVL dominant under clause 10.1 of the Licence, TVL may request the Regulator to determine:

“whether it enjoys a position of economic strength or having a form of control over essential facility affording it the power to behave independently from its competitor or customer in that market”.

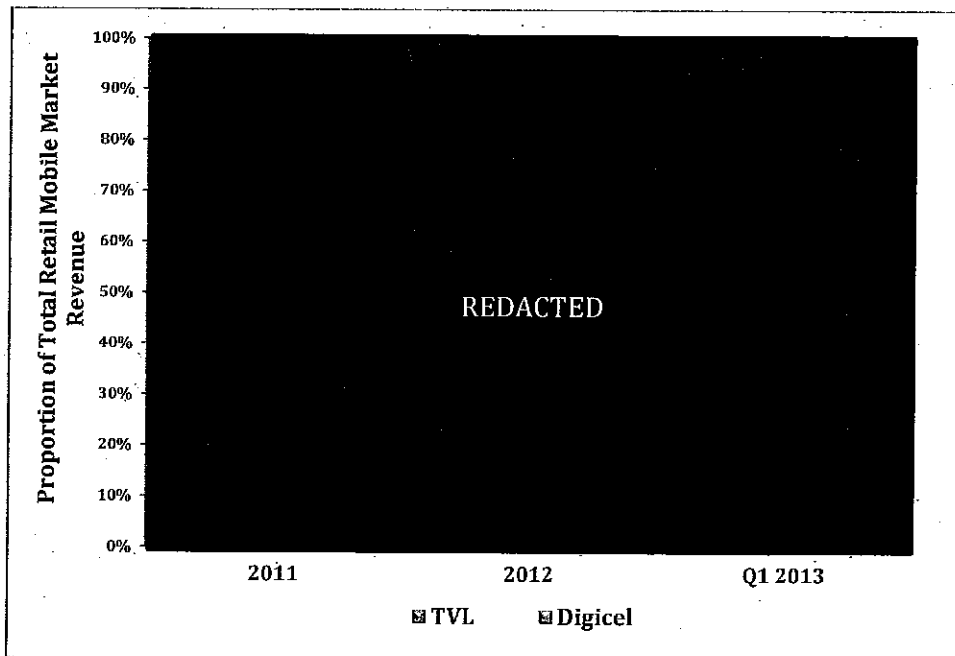
Clause 10.3 further provides that:

“if the Regulator determines that TVL does not have that strength or control, then (notwithstanding that TVL may have a greater than forty per cent (40%) of the total gross revenue of that market), TVL shall not be dominant service provider in that market.

4.2 Consideration of TVL's share of total market revenues

There are two suppliers in the retail mobile services market: TVL and Digicel. The Regulator has analysed gross revenue data relating to TVL's and Digicel's activities in the retail mobile services market. From the data available it appears that TVL's proportion of market revenues currently is materially or significantly less than 40%, has been declining for a number of years, and has not been at or above 40% for several years.

Figure 1: Distributions of gross revenue in the retail mobile services market



4.3 Consideration of whether TVL enjoys a position of economic strength

The Regulator's analysis also considered whether, notwithstanding the above market revenue data, TVL still has or may have a position of economic strength and thus warrant continuing to be designated as a dominant service provider. Consistent with the Act, the Licenses and the Regulator's *Competition Guidelines*, this analysis involved consideration of the following factors:

- a. the market shares of individual service providers as indicated by total active services;
- b. constraints from existing competitors;
- c. constraints from potential competitors;
- d. barriers to entry;
- e. the degree of countervailing buying power;
- f. the ownership or control of access to a relevant bottleneck facility;
- g. large capacity relative to total market demand;
- h. existence of significant network effects;
- i. economies of scale;
- j. economies of scope; and
- k. evidence on behaviour and performance.

4.3.1 Market shares of total active services in operation

In addition to the abovementioned revenue market share information, the Regulator considered the market shares of total (active) services in operation in the retail mobile services market. That data is consistent with the revenue market share data referred to above. In particular, TVL does not currently appear to have total active services in operation above 40%, or to have recently had such a share of total services in operation, and, in fact, appears to have a materially or significantly lower share of total active services.

Figure 2: Market shares of services in operation in the retail mobile services market

Operator	2009	2010	2011	2012	2013 (Q1)
TVL	█%	█%	█%	█%	█%
Digicel	█%	█%	█%	█%	█%

4.3.2 Constraints from existing competitors

Competition from Digicel is likely to be a major constraint on TVL's behaviour. This arises in part from the fact, as referred to above, that Digicel has a materially or significantly larger share of revenues and services in operation, and a larger network coverage area. Also of importance is that Digicel appears to be an active, sophisticated and well-resourced competitor that is both capable of, and willing to, constrain TVL by competitive activity.

For these reasons, it seems likely that TVL is significantly constrained by the presence and capabilities of Digicel, and that TVL would have substantial regard to those circumstances in any marketing and sales initiatives that TVL may consider introducing. The presence of this constraint on TVL's behaviour therefore would be consistent with a view that TVL does not have a position of economic strength in the retail mobile services market.

4.3.3 Barriers to entry

Mobile telecommunications markets generally are characterised by two significant structural barriers to entry in the form of the large sunk costs of network construction and significant

economies of scale. There are also regulatory barriers to entry in the form of licensing requirements and the need for spectrum; however, the Regulator does not consider these regulatory barriers to be significant in Vanuatu.

Although it is possible for a new entrant to overcome the structural barriers, it does not appear that this is likely to occur within the foreseeable future (of the next 2–3 years). In support of this conclusion the Regulator took account of the size of the market and the manner in which the existing operators are effectively addressing the market. There are no significant market segments apparent to the Regulator that a new entrant might address which are not already being addressed by TVL and/or Digicel. Therefore, in order to gain traction in the market a new entrant would be largely dependent on existing customers switching from TVL and Digicel, and would therefore need to offer a material or significant price and/or service advantage to entice those customers to switch. The capacity that both Digicel and TVL have to respond with reduced prices within their current operations is not known. However, it is reasonable to assume that the capacity that the existing operators have to offer special price offers in competition with each other would be available if they wished to address any aggressive pricing by a new entrant.¹ Thus, a new market entrant may not envision sufficient economic returns to seek to enter the market.

The Regulator has also considered the possibility of a service-based competitor entering the market. Such a competitor would not be deterred by the need for large investments to construct its own network. However, other investments would be needed, and this is small market with two network-based operators with established customer bases and competitive advantages arising from that. Such an entrant also would need to take account of the uncertainty attending the terms and conditions on which it would or could obtain agreement to resell services of the existing operators. In light of these circumstances, and the fact that no resale operator has attempted to enter the Vanuatu retail mobile services market, the chance of such entry being attempted in the future is unlikely to currently place a significant, or perhaps any material, constraint on the conduct in this market of TVL.

The above circumstances associated overall with entry barriers taken together, also do not support a conclusion that TVL currently is dominant in this market, as they do not negate or diminish the impact of the other matters considered in this analysis, which support, or strongly support, a conclusion that TVL is not dominant in this market.

4.3.4 Countervailing buying power

Countervailing buying power is more likely to be found in situations where a customer accounts for a large proportion of a licensee's total traffic or revenue and is able to switch between suppliers with relative ease and minimal cost. Countervailing buying power is thus more likely to be found in wholesale markets than in retail markets. If it exists in the retail mobile services market at all, it would be most likely to exist only in relation to the business

¹ The Regulator does not have specific information about the spare or unused capacity that either TVL or Digicel may have to support a strategy of responding to aggressive entrant pricing with lower priced offers on their part. However, the Regulator considers it reasonable to assume that both TVL and Digicel have dimensioned their networks to meet expected traffic demand in the busy hour with a blocking standard factor of 2%. If that is the case then both licensees will have spare capacity outside the busy hour and have the ability to channel traffic to such periods through price measures. This approach could 'free up' capacity at busy hour to support lower peak pricing, and could also support lower off-peak pricing as a direct competitive response.

customer segment, which is characterised by fewer customers with larger usage. However, most businesses in Vanuatu would be unlikely to be large enough to act as a constraint on a licensee's use of a position of economic strength.

The Government of Vanuatu could potentially be the one customer most likely to have some or a material degree of countervailing buying power. To the extent the Government has and exercises such power, this may to some extent constrain the ability of Digicel or TVL to charge the Government unduly high prices. However, this is not likely to be a significant factor in the context of the total size of the retail mobile services market.

Substantial countervailing market power therefore provides only limited, or perhaps no, support of itself for a conclusion that TVL does not have economic strength in the retail mobile services market. The other factors considered in this paper, including share of revenues and services, and constraints provided by Digicel, do provide substantial support for such a conclusion.

4.3.5 Ownership or control of access to a bottleneck facility

Subsection 2(1) of the Act defines a bottleneck facility as a 'facility essential for the production of telecommunications services, which, for technical reasons or due to economies of scope and scale, and the presence of sunk costs, cannot practicably be duplicated by a would-be competitor'.

A key facility operated by both TVL and Digicel that may be considered to be a bottleneck facility involves the access to the portions of their respective networks that are required to supply the other operator with terminating access to the other operator for their retail mobile services customers.²

TVL's operation of this facility does not appear to be likely to be a cause of, or contribute to, it being dominant for three main reasons.

First, TVL is not able to impose prices or terms and conditions on a party seeking mobile terminating access services because such terms and conditions are, under the Act, subject to supervision and regulation by the Regulator. Thus, either Digicel or a new entrant could obtain access to this service on fair terms by recourse to the Regulator.

Second, TVL is not able to impose terms on Digicel for terminating access to TVL's mobile service customers because TVL requires reciprocal access to the same terminating access service from Digicel.

Third, Digicel has a materially or significantly greater share of revenues and active services in the retail mobile services market, and its network coverage is currently greater than that of TVL. This indicates that access to terminating access from TVL is not as significant a market factor as it would be if TVL's share of services or revenues was greater than it is.

² Note that the facility in this case is the network that is able to support the provision of a call termination service.

Figure 3: Network coverage area (proportion of population covered)

	2008	2009	2010	2011	2012
TVL	█%	█%	█%	█%	█%
Digicel	█%	█%	Est. █%– █%	█%	█%

Figure 4: Number of towers

	2008	2009	2010	2011	2012
TVL	██████	██████	██████	██████	██████
Digicel	██████	█	██████	██████	██████

4.3.6 Large capacity relative to total market demand

This criterion relates to scale economies. If a network operator has large capacity relative to total market demand and if there are significant economies of scale available, that network operator will be able to achieve greater scale economies than its competitors and thereby gain a position of economic strength in the market.

The Regulator understands that TVL increments its mobile network capacity in response to current growth and forecasts of near term growth. Consequently, even though TVL pre-supplies the capacity that it needs for the near term, there is no evidence that TVL has substantial capacity available at any given time, nor does it have capacity that is large relative to total demand.

This consideration is based on a concept of manufacturing capacity and the further notion that if a competitor is to exercise power in a market through a price reduction strategy, it must have the capacity to meet the increased demand that will be switched to it to gain the benefit of lower prices. The concept does not translate quite as well to a mobile network environment where parts of the capacity measure must be at times of peak demand. At other (off-peak) times TVL's network would have capacity. However, off-peak capacity is not a comparative advantage for TVL, because Digicel has capacity available at effectively the same times. TVL therefore is unlikely to derive material or significant market power from having excess network capacity. Therefore, the Regulator has concluded that the above matters are not indicative of TVL having a position of economic strength.

4.3.7 Existence of significant network effects

The Regulator considers that there are significant potential network effects operating in the retail mobile services market. One aspect of this is that that all customers benefit when new



customers join the market, because they now are able to connect with those customers. A further type of network effect can arise for a given operator or operators through on-net/off-net retail price discrimination. In retail mobile markets, on-net pricing strategies can serve to unwind the market-wide benefits of network effects and reinstate them as network-specific advantages for particular operators. Depending on the extent of the difference between on-net and off-net prices, this may be a matter for regulatory intervention, and/or can be indicative of some degree of economic strength on the part of the operator implementing such price discrimination.

Other things being equal, the larger the subscriber base then the larger is the potential network-specific network effects and potential for the operator to manifest economic strength through such pricing tactics.³ As TVL has a smaller mobile network in terms of customers, traffic and coverage compared to Digicel, TVL has a limited ability, within the context in which it operates, to take advantage of significant operator-specific network effects. The relatively limited benefits that are available do not appear to put TVL into a position to exercise significant market strength.

4.3.8 Economies of scale

Significant economies of scale are a characteristic of mobile telecommunications markets generally. The existence of some economies of scale, thus, does not of itself establish a position of economic strength. In order for that to be likely or possible, an operator would need to have economies of scale significantly greater than its competitors and/or well above the minimum efficient scale.

Accordingly to the European Commission, the minimum efficient scale of a mobile network operator (in Europe) requires a market share of between 15% and 20%.⁴ However, that conclusion is in the context of European markets, which are obviously much larger than the retail mobile services market in Vanuatu. It is likely the minimum efficient scale in Vanuatu is greater, in part, because the available customers and revenue are smaller than in European countries. In light of this, the observations above concerning TVL's share of revenue and active services, and the constraints provided by Digicel, economies of scale considerations do not appear to support a conclusion that TVL has sufficient economic strength to be dominant in the market for retail mobile services.

4.3.9 Economies of scope

The Regulator considered whether the existence of economies of scope may afford TVL a position of dominance but concluded that, as both TVL's and Digicel's networks have the ability to provide the full suite of services that make up the retail mobile service market, economies of scope did not provide an indication one way or the other about the potential existence of market dominance. It is possible that TVL may derive some advantage from

³ Laffont, J.J. and Tirole, J. (2001) *Competition in Telecommunications*, MIT Press, page 201.

⁴ European Commission, *Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU*, paragraph 17.

sharing the cost of common functions and assets between its mobile and fixed businesses. For example, its vehicle fleet could operate across both business units, its maintenance staff could be shared, and its sites might be multi-functional. However, in the absence of specific evidence to the contrary, the Regulator is inclined to the view that such benefits, to the extent to which they do exist, are likely to be marginal and unlikely to deliver TVL any greater cost advantage than Digicel receives from its greater mobile market share. Therefore, economies of scope are not considered to be sufficient to provide TVL with a clear cost advantage sufficient to enable it to wield power in the market.

4.3.10 Evidence on behaviour and performance

The Regulator has no evidence that suggests that TVL's behaviour as a competitor reflects the exercise of dominance or economic strength in the retail mobile services market or is able to exercise such power in that market. The Regulator has had regard to TVL's pricing and marketing behaviour and cannot detect any pattern or instances that are consistent with TVL exercising such power or seeking to take advantage of power in the market. Indeed, with a declining market share in both subscription and revenue terms, TVL appears to be concerned to maintain its position rather than adopt dominant competitor behaviour patterns.

4.4. Consideration of whether TVL controls a bottleneck facility

The Act enables the Regulator to designate TVL as dominant if TVL controls a bottleneck facility in the relevant telecommunications market which gives TVL the power to behave independently of competitors and customers. The Regulator considered whether TVL controls any bottleneck facilities in the retail mobile services market and concluded that it does not (see discussion in section above).

5 CONCLUSION

After considering all of the above mentioned factors in aggregate, the Regulator has concluded that TVL:

- a) does not earn more than 40% of total gross revenues in the retail mobile services market and has not done so for the last two years; and
- b) does not enjoy a position of economic strength in the retail mobile services market.

The Regulator therefore has determined to revoke that part of the interim Regulator's March 2008 Order that designated TVL as a dominant service provider in the market for retail mobile services, and not alter the other aspects of that March 2008 Order involving dominance of TVL in the other markets specified in that Order.