Submission
In Response to the OUR's
Consultation Document

"Estimate of the Weighted Average Cost of Capital for Cable and Wireless Jamaica"

20th June, 2008

1 Introduction

The succeeding comments are not exhaustive and Digicel's decision not to respond to any particular issue raised by the OUR or any party does not necessarily represent agreement, in whole or in part with the OUR's position on these issues; nor does any position taken by Digicel in this document mean a waiver of any sort of Digicel's rights in any way. Digicel expressly reserves all its rights. Any questions or remarks that may arise as a result of these comments by Digicel may be addressed to:

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2 Price caps and the WACC

Digicel notes that the OUR's weighted average cost of capital (WACC) paper derives from it responsibility for the application of price caps to "prescribed services". Digicel wishes to note the in regard to retail prices, price caps should only be placed on services which fall within a market which is largely monopolised. That is, there is primarily one supplier and entry barriers suggest that competition / entry is unlikely over the medium term, and there is no less onerous regulation that can deal with the problem in a way that is more beneficial to society.[1]

In other words, dominance in the relevant retail market falls well short of being a "necessary condition" for a retail price cap to be applied. Price caps are in general not favoured because they are an effective way of preventing competition from developing and undermining the timely replacement of old technologies by new ones. Digicel is concerned about this because we increasingly compete with C&W in the provision services to end users in Jamaica.

3 WACC is characterised by uncertainty

3.1 Cost of equity

CAPM is generally accepted as the best available means we have for estimating the cost of equity. It is known, however, to have significant theoretical and empirical shortcomings and thus WACC estimates which are derived from the use of CAPM methodology need to be viewed as (possibly biased) estimates that are subject to a significant margin for error.[2] This is one reason why a range of WACC figures is usually used to identify a range within which the cost of capital will likely fall. In its in-depth study into the cost of capital for mobile operators, the UK Competition Commission wrote,

"Inputs to the WACC formula are continually changing, not only as a result of movements in financial markets, but also as a result of continuing work by financial and academic analysts. This can result in changes over time to the WACC of an individual company. In addition there can be considerable uncertainty over the appropriate value of some parameters".

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[1] The most common remedy that is considered before price capping of a dominant firm in a retail market is for access to an upstream essential facility to be provided to licensees. In such cases where access to an essential facility is provided, a retail price cap is not necessary and is in fact counter productive.

[2] For example, it assumes that returns are normally distributed and the investors are mean variance optimisers. Both assumptions have been shown empirically to be false – some of this work subsequently resulted in Nobel prizes in economics (Daniel Kahneman and Vernon Smith in behavioural and experimental economics, and Myron Scholes in financial economics).

Digicel suggests that the use of forward-looking projections of beta rather than estimates provided with multiple regressions using historical data implicitly recognises the unreliability of some of the estimated parameters since forecasted future values introduce their own uncertainty (they involve non-parametric estimates and thus lack statistical rigor).

In theory the equity beta should be estimated for the specific C&W Jamaica's price capped service. Where this is not possible a broader measure of the equity beta for C&W Jamaica would need to be chosen, and then the OUR would consider whether an adjustment was necessary to represent the beta of the price capped services. The OUR has stated some of the difficulties in getting suitable equities beta for any Jamaican company. However, equity betas in the same sector of countries with 'thick' financial markets can and do vary almost 100%. In these countries the range of beta chosen unavoidably involves a substantial degree of judgement.[3] Comparison of C&W Jamaica with such other firms from abroad, even those considered relatively similar will add substantial uncertainty to the outcome.

3.2 Comparability Issues

Comparability of WACCs or WACC components between any two for more firms is always a challenge. There are numerous reasons for WACC to differ between firms that operate in the same sector of the same country including:

- differences in ownership structure
- differences in the mix of services provided
- differences in the size of the operator
- differences in the value of 'real options'
- Structural differences operators cannot avoid due to regulatory, legislative or technological restrictions.

Moreover, WACC figures are often presented with insufficient explanatory information about how they were derived or what exactly they represent. Before figures can be compared we should know whether all the figures represent pre-tax or post tax WACC, or whether the figures refer to real and nominal WACC, or whether arithmetic or geometric means have been used to estimate the third party equity risk premiums (ERPs) which are a

[3] Having said this, typically incumbents will have a significantly lower beta than would a new entrant.

part of any WACC. WACC figures that are used and presented should be investigated carefully in order to see the degree to which comparisons would be invalid. The information would then need to be presented with the figures.[4]

Cross country comparisons add a range of additional factors (e.g. political and macroeconomic risk) that such comparisons challenging to say the least.

3.3 Real Options and WACC

The issue of real options and the WACC largely centres on the fact that firms face quite different situations at the time of investing. Some of these differences are outside of the firm's control, such as the number of previous entrants. Deciding on the moment at which to commit to make an investment (i.e. the time at which the investment can not be abandoned except at substantial cost) is, however, under the control of the firm. In the last 10-15 years the economics profession has come to understand that at the moment of sinking costs into an investment project, a firm extinguishes a valuable option to invest – a value that needs to be included in the WACC.[5] These arguments have recently been accepted by Ofcom.[6] The OUR has not mentioned this aspect of C&W's WACC cost in Jamaica.

3.4 Financial market figures are unstable over time

3.4.1 WACCs change over time

Long time series data shows that a firm's WACC varies over time. While internationally, rates in recent times have been low in relation to historic figures, the evidence suggests that we have entered a period where this no longer applies. Moreover, WACC is in theory and practice both country as well as company specific. For all these reasons Digicel considers that reliance on benchmarking with existing international WACC data may lead analysts to an incorrect impression.

3.4.2 The cost of debt changes over time

Digicel considers that the world has entered a riskier period with the cost of debt likely to move up from here. Over much of the last decade or more debt has been artificially cheap

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[4] In Digicel's experience the most common form for WACC to be expressed in is pre-tax nominal terms. However, Ofcom has in recent years sometimes published WACC figures in real pre-tax terms.

[5] This draws on the theory of "real options" in which the seminal work was by Dixit and Pindyck and synthesised in, Dixit, A. and Pindyck, R, (1994), *Investment under uncertainty*, Princeton University Press.

[6] A common cause of such option values is technical change. If the investor waits the risks reduce due to better information about the technology and the business case for using it. In order to extinguish the option to invest at an earlier stage of technology development when there is much greater uncertainty associated with early investment, will require a greater expected future payback, otherwise the investor will wait. The value the option forgone at the investment must be factored into the cost of capital.

due in part to the policies of the monetary authorities to provide unusually high levels of liquidity in order to keep already low interest rate economies from recessing. Poor quality loans and inflationary pressures have built up because of it. In terms of the costs of debt Digicel believes the risk is to the upside and this need not be reflected in existing long-term debt. The cost of debt is presently low by historical standards but rising, and in this changing environment cost of debt measure that is only 3 months old will likely be out of date. We suspect this may be the case regarding the cost of debt figures sited in the OUR’s consultation paper.

4 Conclusion

There are numerous junctures in a WACC calculation where estimation and sometimes adjustment is required. Digicel notes that the OUR is proposing to estimate equity risk for C&W Jamaica by making ‘adjustments’ to the risk premia estimates for a range of international telecommunications companies and then making ‘adjustments’ for C&W Jamaica. Digicel notes the OUR’s quite reasonable reasons for taking this approach, however, in our view the end result will be subject to even more uncertainty than usually applies to such estimates. Digicel urges the OUR to make special note of this.