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John Williams
Director General
Turks & Caicos Telecommunications Commission
Business Solutions Building
Leeward Highway
Providenciales
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Dear Mr. Williams,

Re: Review of Mobile Termination Rate Consultation Document

Digicel (TCI) Ltd ("Digicel") recognises and agrees with the Commission's desire for interconnection rates that, as required in section 23 of the Public Telecommunications Ordinance, are:

> *"cost-oriented subject to economic feasibility".*

As a part of any review of mobile interconnection rates, the fixed termination and transit/link[1] rates, as well as the impact of the very high fixed to mobile retail rate cap should also be analysed. If this is not done, any adjustment to the mobile termination rate would be akin to shortening one leg of a table without shortening the others. In other words, it would create a market distortion, as well as failing to deal with the existing distortion caused by the hugely inflated transit/link charge. That would lead, overall, to an unfair flow of revenues to some operators, and an undue burden of costs being imposed on others. This state of affairs would also lead inevitably to incorrect investment signals and inefficiencies.

The current interconnect arrangements between the operators were agreed as a part of an overall package and key individual elements should not therefore be addressed in isolation. A holistic rather than narrower approach needs to be taken.

We agree that any review of interconnection rates is best undertaken by means of a benchmark approach. But we also stress that the risks of investing in Caribbean islands like the Turks and Caicos Islands (TCI) must be taken in to account, whether that be risks stemming from political or natural factors.

The high price charged by the fixed operator for its fixed origination service is the largest pricing element for consumers who want to call mobile phones. In contrast, the price charged by mobile operators in terms of termination for receiving incoming calls from fixed lines represents only a minor part of the cost. We estimate that around three quarters of the true cost to consumers of fixed to mobile calls is due to the fixed origination charge, and only a quarter is due to the mobile termination charge. The situation in the TCI is therefore upside down. One would expect that fixed to mobile (FTM) calls would be significantly cheaper

[1] The tranist/link charge is allegedly levied for taking Digicel calls between LIME's fixed and mobile switch

than mobile to mobile (MTM) calls. However, the opposite is true. FTM calls, due to the high fixed origination cost, are in some cases nearly 5 times more expensive than MTM calls. This indicates that fixed origination costs to mobile phones are more in need of regulation than mobile termination rates.

The table provided in the consultation document in figure 8 illustrates not that the mobile termination rates are excessive but that the fixed origination retention by the fixed operator in many of these countries is high. In the majority of the examples the fixed retention makes up most of the FTM charge levied on the customer. Inevitably the high fixed retention rates levied by dominant fixed line operators are depressing call volumes to mobile operators which results in reduced mobile termination revenues. Contrary to many other countries globally very few Caribbean countries, if any, have much fixed service competition. In Europe for example, all countries have introduced competition in the fixed telephony market via e.g. carrier select or carrier pre-select. This does not exist in the Caribbean. Hence the FTM retail rates are in most Caribbean countries are highly inflated due to lack of competition on the retail side of the fixed market rather than, as stated in the consultation document due to high mobile termination rates. The Turks and Caicos is the most extreme example in terms of the level of the fixed retention and the detrimental impact this will have. Yet this fact seems to have been ignored in the analysis.

It is, as the Commission will be aware, considered to be regulatory best practice to provide as much market certainty to participants as is reasonably possible. Risk should not be inflated unnecessarily through regulatory intervention. We hope therefore that the Commission has not ruled out giving the industry at least a time limited opportunity to consider and propose their own revisions to interconnection rates as a package. Indeed we are encouraging the Commission to formally afford the industry that opportunity now.

Question #1: Please comment on whether the Commission has the authority to establish the maximum allowable level of the MTR that can be charged by licensed mobile operators in TCI on its own motion, without having received an interconnection dispute resolution request.

Digicel thinks it would be unreasonable to reduce the FTM termination rate unless the FTM retail price cap is dramatically reduced first. FTM call termination revenues are already significantly less than they should be due to the high fixed retail price cap which results in the dominant operator in fixed origination being able to charge very high prices for FTM calls by adding a very large fixed retention element (approximately 75% of the total call retail cost we estimate). Even greater market distortions would result if the mobile termination rate was reduced without first making much larger cuts in the FTM retail rates.

The current regime is heavily weighted in favour of rewarding LIME for the FTM wireline origination service, as opposed to the mobile only operators for the FTM termination service. This is in spite of the fact that most future benefits from telecommunications seem almost certain to come from investment in wireless and mobile services, and in spite of the fact that the large majority of the costs involved in an end-to-end FTM call are incurred by the mobile operator in providing the termination service.

In addition, LIME's fixed termination rate should be reduced if the mobile termination rate is being reviewed. The MTM transit/link charge should also be slashed as the actual cost involved is tiny. The current transit/link charge is in effect providing LIME with an asymmetric mobile termination rate in its favour, but this is simply "disguised" by referring to the asymmetric element as a "transit" charge.

Overall Digicel has to question the legitimacy of reviewing mobile termination rates when the other rates outlined above are, absolutely in terms of FTM origination costs (as seen from Figure 8 of the consultation document), and relatively in terms of fixed termination and transit/link costs, far higher than the mobile termination rate. We explore these areas in more detail in answer to question 9.

Question #2: With the objective of promoting efficiency in mind, please comment on whether the MTR should be set a level that is reflective of the marginal or incremental cost of mobile call termination. If not, explain what alternative cost basis should be considered, with supporting rationale.

The policy must be to let operators recover costs where these are efficiently incurred. This would mean as a minimum allowing for the recovery of fixed and common costs where, for example, LRIC assessments are undertaken. Cost models may understate true costs unless they are carefully cross referenced with costs that have actually been incurred. Future events are uncertain and likewise efficient costs cannot be predicted perfectly in advance in the form of a model. There may therefore be significant differences between predicted and actual efficient costs.

In terms of assessing the cost of capital required to build a network, the higher risk of investing in small Caribbean island economies like the Turks and Caicos Islands must be taken in to account. Futhermore, cost of capital assessments which are an extremely important factor in terms of the final outputs from models are typically undertaken based on the costs of capital of surviving companies in telecommunications sector (ie they suffer from survivorship bias) and make no allowance for the companies that fail. Consequently they will tend to underestimate true risk and therefore what a reasonable return might be. A company cannot choose to earn a cost of capital based on an average of returns made by surviving market companies. Instead it is faced with an investment which may make a return or may fail. Every time a cost of capital return limit is imposed on a company by a regulator this caps upside success. But regulators clearly do not and cannot "cap" or more aptly, "limit", downside failure. This leads to potential inequity of treatment, and therefore indicates as a minimum that the upper range of possible reasonable estimates of regulated costs of capital must be applied.

Because of the gap between the real world, and the theoretical world of cost models, the latter in our view should only be used to help to guide discussions on termination rates but due to their inherent weaknesses, the outcomes from them must not be used to form decisions, unless real world factors are also taken in to account.

We note that the European Commission (EC) issued a non-binding recommendation to move to a pure LRIC approach, but this is simply bad policy as it is bad for investment, and ultimately bad for consumers. It is driven more by short term political factors in our view rather than being based on rational and comprehending assessments of what will deliver the most benefits. Even a cursory reading of the EC's non binding recommendation demonstrates that it has not substantiated why its recommended approach will promote efficient and effective development**.** The EC's, and other pure LRIC advocates state simply that fixed and common costs will have to be recovered elsewhere. In other words, somebody else will have to pay for the arbitrary allocation of all fixed and common costs to every other aspect of mobile services other than mobile termination. This has been recommended irrespective it appears to us of all sense of fairness and even-handedness. The advocates are interested in immediate cheaper calls to mobile phones and little else, and ignore the economics and indeed common sense approach of enabling a fair recovery of costs across the full range of network services. Fixed operators sometimes complain that mobile termination rates that are too high result in an unfair transfer of revenues to mobile operators. A pure LRIC approach would guarantee an unfair transfer of revenues to fixed operators who will gain retail revenues from allowing their customers to call mobile networks while, at the same time, not paying a fair rate for the use of the mobile network. Pure LRIC could also be applied to fixed networks, but that would cement a bad policy even further.

Overall, Digicel believes that spending the time and money required to build a full cost model or models for the Turks and Caicos, given the very large cost and the small customer base across which to spread that cost, would result in a cost to consumers and the industry that is greater than any possible benefits that can be gained. In that light we are firmly of the view that in the event of a failure of commercial negotiation to arrive at suitable outcomes that benchmarking approaches adjusted to take account of local circumstances are the best way forwards.

Question #3: With the objective of promoting sustainable competition in mind, please comment on whether the MTR should be set a level that is reflective of the marginal or incremental cost of mobile call termination. If not, explain why not, with supporting rationale.

Our response to question 2 answers much of this question. Any LRIC approach must include, as a minimum, an allowance for fixed and common costs. Without the same it will inevitably lead to market distortion. This distortion will become even more pronounced as termination rates decline, as the common and joint costs will represent a greater and greater proportion of the overall termination costs. Further, for reasons given in our answer to question 2 about the inevitable understatement from cost models of true costs, and the higher cost of capital for investing in smaller island economies, we believe that consideration must be given to applying the higher values if a possible range were outputted from a LRIC type exercise in the Turks and Caicos. That said, our strong recommendation, as indicated, is to use benchmarks, adjusted where appropriate.

Question #4: Please comment on whether the impact of reducing the MTR in TCI is likely to have a positive, negative or neutral effect on mobile and fixed end-users. To the extent possible, provide any supporting empirical available to support the views expressed in this respect.

The short term impact, as the TCI Commission knows, as result of the legal requirement that FTM retail prices must decline by the same absolute amount that FTM termination prices decline, will be lower FTM prices for consumers. There may (or may not) also be some decline in MTM retail prices, and /or some convergence between MTM on and off net prices. However, this is difficult to judge in advance. We do feel that consumers will naturally welcome any price falls in the short term, but that no doubt, will lead to lower revenue collections for the TCI Government.

We would also like to mention the potential consequences that lowering of termination rates will have in terms of leading to an increase in retail rates as a result of the “the waterbed effect"[2]. This is even more critical in developing countries where access to telecommunications by people who are less well off is provided by means of mobile telephony. Any increase in retail rates could seriously impact their ability to access telecommunications.

As indicated above, reducing the mobile termination rate without first significantly reducing fixed to mobile retail prices (and in particular LIME’s disproportionately large retention for fixed origination) will create an even greater imbalance (in favor of LIME) between the proportion of revenues flowing to LIME for the fixed origination element of the service in comparison to the mobile termination revenues flowing to the mobile operators. The imbalance would grow in terms of the returns accruing to the fixed operator for the fixed origination service (which will be much greater) in contrast to returns for the mobile operator for the mobile termination service (which is already much less and which would become an even smaller proportion). Such a scenario would send out the wrong investment signals to operators, and most importantly hurt consumers in the long run.

Question #5: Please comment on the Commission’s preliminary view that the most cost-effective, timely and proportionate approach to set the MTR is a detailed and comprehensive benchmarking study, rather than FDC or LRIC/LRAIC-based costing approaches. If parties consider that a benchmarking approach is not appropriate for setting the MTR, please describe their preferred alternative approach, with supporting rationale.

[2] See Genakos and Valletti

We agree that a benchmarking exercise makes more sense for the Commission to adopt than attempting a detailed cost modeling exercise given the high costs of implementing the latter relative to the number of customers in the Turks and Caicos.

However there is no basis for alleging, as the consultants appear to have done, without any supporting argumentation, that the four lowest prices of anything represent "best practice" pricing. We do not believe for example that the consultants would claim that below cost prices represent "best practice". Conversely, nor is there any basis for alleging, unless supported, that the highest four prices represent "best practice". Unfortunately the consultation does, without support, make the former assertion. This is a major flaw in the consultation document. There are reasons why for example an incumbent operator might have chosen to reduce domestic mobile termination prices way below what it would have done otherwise, particularly if it believed the overall effect would provide it with a commercial advantage against a new entrant. We explain this below.

When costs were higher for building mobile networks, it was even more vital than now for a new mobile entrant to obtain full efficient cost recovery of its termination rates from an operator with a fixed and mobile network (combined fixed/mobile network). On the other hand it was in the interests of an operator with fixed network dominance and a mobile network (combined fixed/mobile operator) to keep the mobile termination rate lower as that helped to reduce the revenues available to the new entrant competitor mobile network. In contrast the level of the mobile termination rate makes no difference to the combined fixed/mobile operator's revenue stream for calls between its own fixed and mobile networks since all interconnect payments are simply notional internal transfers of cash which can be moved between the fixed and mobile parts of its businesses at will. The combined fixed/mobile operator's main concern is about any net payment it must make to send traffic to the new entrant mobile network and therefore to keep the domestic mobile termination rate down. Typically this narrows the main focus down to the cost of sending traffic from its fixed network to the third party mobile network (traffic between mobile networks tend to balance out so they are not usually a main factor). At the same time however the combined fixed/mobile operator is still interested in maintaining full cost recovery in respect of international incoming calls to its own mobile network. The combined fixed/mobile operator's position could therefore appear schizophrenic, wanting low domestic mobile termination rates whilst at the same time wanting to keep international mobile termination rates as high as possible. However, no schizophrenia is involved, as this financially makes sense for the combined fixed/mobile operator.

This is precisely what happened in the BVI for example where in anticipation of Digicel's market entry the incumbent reduced the domestic mobile termination rate heavily (by 50%) whilst keeping the international mobile termination rate at twice the domestic rate. Moreover the domestic decrease was notified to the regulator on 13th December 2007, just four days before Digicel was awarded a mobile licence to operate in the BVI. That price change was to an interconnect agreement which had another 4 and a half years to run and which had only been in place for 6 months. This can all be verified by reference to the regulator. Thus the BVI experience is anything but a "best practice" example for mobile termination rates. The BVI situation merely reflects one operator's commercial maneuverings with another existing operator to set the precedent of a below cost mobile termination rate which would help it to limit the amount of cash a new entrant had available to compete. To this day the international mobile termination rate remains twice the domestic mobile termination rate. The BVI is therefore not an example of "best practice" in this respect.

It seems to us that there can be one of three general approaches to benchmarking:

> 1/ either a simple average of every regional benchmark that can be obtained;
> 2/ a benchmark based on countries with similar characteristics;
> 3/ one of the above adjusted by an appreciation of the differences that might exist for an investor thinking of developing a network in a small developing country.

Our preference is to use an adjusted version of the second approach.

Question #6: Please comment on whether the upper limit on the MTR should be set on a uniform or symmetric basis for all mobile operators. If not, explain why not, and also describe and justify the basis for differentiating rates among mobile network operators.

As we have referred to above, and discuss in more detail in answer to question 9 below, the charge that LIME levies for taking Digicel mobile traffic to LIME's mobile network is hugely more than can be justified given the tiny cost involved, and is effectively a cleverly disguised top up to LIME's mobile termination charge. Thus effectively there is an asymmetric mobile termination rate in the Turks and Caicos Islands in LIME's favour. This asymmetry should cease. It is another example, in addition to the case of the huge fixed retention for calls to mobile, of the telecommunications landscape in the Turks and Caicos being back to front. If any operators deserved asymmetries in their favour it would be new entrant operators.

While there may have been a case for an explicit policy of asymmetry in the past for a new entrant, no such allowance was made for Digicel. Consequently it would be discriminatory to introduce such a policy now unless account could be taken of the net higher receipts Digicel should have received from LIME in the past under such a policy in the form of termination payments.

Question #7: Please comment on whether reductions in the MTR in TCI should be implemented on a flash cut basis or phased-in over the course of a multi-year period. Please describe and justify any alternative glide path or transitional arrangements that Respondents may consider appropriate to the case at hand.

One of the principles of best regulatory practice is to create market certainty. Making large sudden changes to the market place through regulatory intervention creates uncertainty and makes it difficult for investors to plan for the future and is therefore undesirable. Where it is felt necessary to act more quickly than might otherwise have been the case because it is felt that prices should have fallen earlier, then we suggest that an operator should not have its revenues cut until at least the following financial year as its planning, financing, and investment plans will have been set at least 12 months in advance. Indeed the wisdom of making price declines coincide with new financial years was recognised in the Commission's own price cap plan for LIME in the Commission's Decision 2009-4 issued on 18th February 2009. Abiding by price changes which coincide with the April to March financial year was also the approach that was for example adopted by the Eastern Caribbean regulator ECTEL when implementing changes to interconnection rates in its region.

Another reason for sticking with the financial year before changes are made is that since the retail fixed to mobile price cap changes take place in April, and given the legal requirement that there is also a decline in fixed to mobile retail prices with each reduction in mobile termination rates, there would, peculiarly, be a reduction in fixed to mobile retail rates on both 1st Jan and 1st April each year if the Commission's proposal in respect of the timing of mobile termination price reductions were adopted.

It should also be noted that the introduction of new regulated termination rates globally are regularly phased in via a 3 – 5 years glide path. Such phasing in of new rates is considered to best regulatory practice.

Question #8: Please comment on whether the observed levels and downward trends in average or best practice MTRs in the Caribbean are generally indicative of the underlying costs of terminating mobile calls by mobile network operators in TCI. If not, explain why not. In responding to this question, please provide any additional benchmarking information that may be available that is of relevance to this Consultation (fully explaining all data sources, assumptions and calculations).

Interconnect cost assessment remains an inexact science and subject to a wide number of variables. In general we expect that some aspects of network costs will decline for some time to come. However, some elements will become more expensive. Things may not be as straightforward as they seem. It might be expected for example that software would fall in price, but what may happen in some instances is that the price remains relatively unchanged because additional functionality is being added. The costs of towers and installing them will, in contrast, inevitably keep rising. In addition opex is, generally speaking, often an element which increases year on year due to e.g. increased labour costs. While overall network build costs still appear to be on a downwards trajectory, at some point this will cease to be the case. We do not know at this moment however when overall price declines will stop.

Additional Benchmarks

There are some notable absences from the benchmark. Aruba (population 104k), Bonaire (population 14k) and Curacao (population 38k) seem to be relevant benchmarks to us given their location and population. We have included these figures in the table we include below.

There are also a number of corrections and points we must put to the Commission about the benchmarks it has quoted.

The Commission did not provide the raw data used in its benchmarks but instead only graphed illustrations of the data that was used, so it is not easy to be sure of the exact figures it has relied on. We have therefore re-constructed the benchmarks used from scratch and placed them in our table.

British Virgin Islands

We have in answer to question 5 above illustrated why the domestic MTR in the BVI is not reliable. In our strong view it is unrelated to cost, even more so when first implemented, and was simply a commercial response to Digicel's imminent entry in to the BVI mobile market, in order to limit Digicel's ability to collect revenues and to compete. It was not a rate determined by the regulator. A more reliable measure of mobile termination cost is the rate the domestic rate was cut from, and which rate remains in place, for international to mobile termination. That rate is 10 US cents per minute.

Barbados

The domestic interconnection regime in Barbados is unusual given that no termination payments are made in respect of calls from fixed to mobile phones in respect of which a receiving party pays system therefore applies. Call charges levied on customers for receiving FTM calls reach up 25 US cents per minute. This is in spite of the fact that there is no issue of dominance since this is a retail service. However, these domestic complexities can best be avoided by referring in this instance to the international mobile termination rate, which is not as prone to local market peculiarities. This cost is 13.75 US cents per minute.

Dominican Republic

The population of the Dominican Republic is 10 million people. In other words 400 times that of the Turks and Caicos. This makes it a very poor comparator due to the much higher scale economies available to an operator there and we have therefore excluded it from our revised set of the Commission's benchmarks.

ECTEL Member States

While ECTEL used a cost model for determining interconnection rates for its region it must be noted that this was a model created by the incumbent LIME in respect of which Digicel has never had full transparency, that LIME, given its dominance in fixed lines, had every incentive to create a model that favoured its business model (lower mobile termination rates and higher fixed rates), and that the model has no allowance for the cost of mobile interconnect billing. This means that: 1/ it was not created following best practice fully transparent consultation principles, 2/ is likely to be weighted in favour of the combined fixed/mobile operator since it will have been very difficult for someone other than a competing mobile operator to understand mobile costs as thoroughly and to catch cost biases against mobile operators; and 3/ due to the lack of account being taken of mobile billing costs alone it will understate the true costs of mobile termination. It is also noteworthy that the model was based on the fact that it was "one" mobile network only that being modeled with e.g. one mobile switch serving all 5 jurisdictions instead of as normally would be expected, one switch per country. In this light the ECTEL mobile termination rates must be seen at best as low end indicators in terms of a range of possible mobile termination rates.

French West Indies (FWI)

There are two points to note here:

1/ Martinique and Guadaloupe were priced as part of a single pricing analysis – therefore they represent one set of figures and not two when including them in a list of other benchmarks;
2/ Not all mobile termination rates in the FWI were included in the Commission's document.

The full list in Euro cents per minute is as follows for 2010:

Orange Caraïbe	5.5
Digicel	6.5
Only	9.0
Dauphin Telecom	12
UTS Caraïbe	12

The average of these figures is 9 Euro cents or about 12 US cents and not 5.5 Euro cents as listed in the consultation.

Trinidad and Tobago

The population of Trinidad and Tobago is 1.3 million. This is 52 times greater than the Turks and Caicos and therefore, similarly for the Dominican Republic, we think that this is another illegitimate comparator based on scale economies and we have excluded it.

Small Country Factors

The Commission in its consultation, and presumably on the basis of what was submitted by the consultants, has reviewed the average rates from a selection of countries against an average taken from a sub group of the same benchmarks. No explanation or basis has been given for choosing the 4 countries with the lowest cost as "best practice" example. This is because, in our view, there is no basis for such an arbitrary measure. We also have to question the legitimacy of a practice of adjusting the outputted average of a set of figures by reference to a sub set of the same figures. This seems likely to compound errors.

If the Commission wishes to use something other than the simple average then we would wish it to bear the following in mind (in general we believe that the following statements are incontrovertible):

- The smaller the country, the lower the economies of scale, and the more likely it is that unit costs (and therefore per minute termination costs) will be higher. For example, the mobile switch that Digicel purchased for its operations in the TCI was the minimum size it could buy but it is still nonetheless designed to handle 150,000 subscribers. This is clearly many times the size of

Digicel's actual and possible customer base in TCI. Such minimum cost factors mean that the costs in small countries are higher per subscriber;

- It is riskier to do business in a small developing island economy than a larger one, and more risky in a developing country than in a developed one eg in the case of natural catastrophe a larger economy may be less affected due to its size geographically. The full range of risk factors taken in to consideration in assessing the cost of capital will include political, inflation, interest rates, economic, catastrophic, and legal risks. Subsequently, the possible return necessary to attract investment to a small island nation may need to be higher than elsewhere.

It is also the case that the Turks and Caicos falls in to the group of countries within the list of country benchmarks which have the smallest populations and therefore the countries which have the lowest possible economies of scale.

Consequently, the only rational, and substantiated basis for picking a sub group from the country benchmarks would point to choosing the highest ones. Consequently from the 13 country benchmarks we have provided figures on below (as indicated for the reasons above Martinique and Guadeloupe must be considered as one benchmark along with the rest of the French West Indies) we have chosen the top 6 countries (although arguably given the odd number of countries we could use the top 7). We could abitrarily choose the top 4 which would take the consequent numbers higher but we have not done so. The table of rates we have assembled along with the average and average of the top 6 rates is below. As can be noted the Turks and Caicos is in the same ballpark of rates based on other countries close to it in terms of population. The mobile termination rate in the TCI is unremarkable by reference to relevant comparator countries.

Overall Table of Mobile Termination Rates
(figures are rounded to the nearest two digits, and the nearest 3 for illustration of the averages)

Country and Population	**2009 US$**	**2010 US$**	**2011 US$**
Bonaire 14k	0.17	0.17	0.17
Aruba 104k	0.16	0.16	0.16
Curacao 38k	0.14	0.14	0.14
Barbados 294k	0.14	0.14	0.14
St. Kitts & Nevis 50k	0.14	0.12	0.10
FWI (Guad 460k, Mar 400k)	0.19	0.12	0.12
Dominica 67k	0.14	0.12	0.10
Grenada 106k	0.14	0.11	0.09
St Vincent 120k	0.11	0.11	0.09
Anguilla 13k	0.13	0.11	0.11
St Lucia 165k	0.11	0.11	0.08
Cayman Islands 47k	0.22	0.11	0.11
BVI 25k	0.10	0.10	0.10
Average	**0.145**	**0.125**	**0.116**
Top 6	**0.155**	**0.138**	**0.132**

A simple extrapolation of the top 6 rates would result in a decline to about 12 US cents per minute by April 2012 and to 11 US cents by April 2013.

The simple average by way of comparison if extrapolated would result in a decline to about 10 US cents per minute by April 2012 and to 9 US cents by April 2013.

Digicel advocates the use of the average of the top 6 rates for the MTM mobile termination rate. The FTM termination rate would then be brought in to line with this from April 2013 onwards provided that the FTM retail price was slashed significantly down to at least 20 US cents per minute.

In the alternative, if the Commission insists on a reduction to the FTM termination rates from 2011, and/or believes that it would be in breach of the legislation to have different FTM and MTM termination rates (we argue this is not the case below), then Digicel advocates that until March 2013 the rate should fall no faster than the percentage decline in FTM retail prices (as determined in the price cap and ignoring the additional cut in FTM retail prices that would result from a pass through of mobile termination rate declines). This would translate to 14 US cents from April 2011, 13 US cents from April 2012, and provided the FTM retail price cap is slashed to no more than 20 US cents per minute from April 2013, the mobile termination rate would be reduced to 11 US cents per minute from April 2013.

Question 9: Please comment on of the Commission's preliminary MTR Proposal that would reduce the upper limit of the MTR in TCI to USD $0.09, USD $0.07 and USD $0.05 over the course of the next three years, starting in January of 2011. To the extent parties believe an alternative MTR proposal would be more appropriate, please describe any such proposals in detail and include supporting rationale and data as may be relevant.

Given the circumstances within the TCI with respect to the very high fixed origination retention for calls to mobile phones, the level of fixed termination rates and the high transit/link prices, this approach is not appropriate.

Fixed to Mobile Retention

The vast majority of the FTM retail price is driven by the retention element of 46 – 15 cents = 31 cents per minute (although the effective fixed retention is even higher and is uplifted to about 60 cents which means that the retention is about 45 cents per minute as explained in the footnote[3]). This is significantly depressing fixed to mobile traffic volumes and consequently significantly reducing fixed to mobile termination revenues. Thanks to the very high price cap the gross profit margin (revenue minus cost of services/revenues) for LIME's fixed origination service for fixed to mobile calls is, extraordinarily, even ignoring the uplift, at least 90%[4]. Including the uplift this rises to 93%. This retail retention has to be taken in to account when considering whether and how to regulate FTM termination rates.

The TCI Commission chose, for reasons of which we remain unaware, to permit the high FTM retail rate in spite of the fact that this is very much to the detriment of mobile operators. Consequently we believe that the Commission should not intervene in FTM termination rates until the FTM retail price cap has been very much reduced first. We suggest that the FTM retail rate should at most be twice the mobile termination rate as a trigger (in fact the mobile termination element is very much more costly than the fixed origination cost). To cut the MTR before reducing the FTM significantly first would (in spite of the 1:1 legal link between mobile termination rate falls and FTM retail price falls) embed the market distortion even further. For example, based on a 5 cent fall in the MTR to 10 cents per minute the new fixed to mobile retail rate would be 41 cents (based on a reduction from the 46 cents FTM whole minute retail rate declare by LIME). The gross profit margin would therefore **rise** from its already very high level.

Fixed Termination Rates

LIME charges 3 US cents per minute for fixed termination. This should be adjusted in line with the fixed termination rates from whichever countries the Commission chooses to rely on for mobile termination rate benchmarking.

By way of background we note that the latest information from the European Union on fixed termination rates, which is readily available in the form of its regular progress reports on the European Electronic Communications Market[5], states that fixed termination costs 0.0052 euros per minute on average, or about US$0.0067[6] which equates to 0.7 US cents per minute. Even if we were to double the figure to allow for local cost and risk factors in the Turks and Caicos that would still only raise the termination rate to 1.4 cents per minute.

LIME's Charge for Taking Traffic From Its Fixed to Mobile Switch

LIME receives inbound traffic from Digicel's mobile network at LIME's fixed switch at Leeward Highway, Providenciales, Turks & Caicos Islands. LIME then moves that traffic to its mobile switch. We understand that the mobile switch is either in the same building or in a building on the same complex. In either case it can be seen that the distance is minimal and measured in metres. The cost involved must therefore be tiny.

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[3] The true average cost to consumers of FTM retail prices is higher than the headline rate since they are charged at the start of each minute irrespective of call duration instead of per second. For example, LIME charges its customers 46 cents for a sixty second call but it also charges 46 cents for a one second call. While we do not have access to LIME's average call durations the impact of this is that there can be a 30% uplift to a fixed operator's FTM retail revenues (if the average call duration is used) compared to a situation where it bills per second. In other words LIME will collect as much revenue from FTM calls in the Turks and Caicos Islands by charging 46 cents at the start of each minute, as if it charged 30% more for FTM calls (ie 60 cents per minute) but billed them per second. We estimate therefore that its effective FTM retail rate is about 60 US cents per minute.

[4] For the purposes of the calculation the revenue is 31 cents, cost is 3 cents (the fixed origination cost is the same as the fixed termination cost)

[5] http://ec.europa.eu/information_society/policy/ecomm/library/communications_reports/annualreports/15th/index_en.htm

[6] See page 126 of the above report

LIME has given the name transit service to this function it carries out. That name is highly misleading as transit services carry traffic tens or hundreds of kilometres and not metres. What LIME does is more accurately described simply as providing a fixed to mobile switch link. For ease of reference we have referred to it here as the MTM transit/link service.
The transit/link charge of 1.5 US cents imposed on MTM traffic is unrelated to costs and effectively a top up to LIME's mobile termination rate (but which has been disguised under the name of another service). Therefore LIME's true mobile termination rate should be considered to be about 16.5 US cents per minute. LIME has effectively got an asymmetric mobile termination rate in its favour.

The closest analogue to LIME's transit/link service that we have available to obtain is the price of intra building charges for 2 MB/s circuits from BT[7] in the UK which is £92.88 per year. So the cost for six of these circuits[8] divided by the traffic volumes flowing from Digicel to LIME mobile would be about US$0.00015 or 0.02 cents per minute. The closest example we have from the Caribbean (but even this represents a cost for transporting traffic between a fixed and a mobile switch separated by several kilometres) is the transit/link rate determined by the regulator in Trinidad and Tobago which determined it to be about 0.06 US cents per minute[9].

Overall

Given that the first opportunity to significantly cut the fixed to mobile retail price cap appears to be from April 2013 onwards we believe that in order to avoid further market distortion that the FTM termination rate must diverge from the MTM termination rate if necessary. Thus the FTM termination rate would remain at US$0.15 until March 2013 and could then be reduced. In contrast, the MTM termination rate could be reduced earlier.

We underline that this does not amount to a breach of the non-discrimination rules as the Commission would remain consistent and non–discriminatory with respect to the treatment of FTM termination rates given the impact that its price cap decision directed only at FTM retail rates is having on revenue flows to mobile operators. Separately, the Commission would remain consistent and non-discriminatory with respect to the treatment of MTM termination rates which would be the same for call termination from all other mobile operators. Barbados is, for example, another country where the non-discrimination rules were in no way a barrier to its establishment of a 0 cents rate for FTM termination (instead allowing mobile operators to recover commercial rates for receiving FTM calls which range up to 25 cents per minute), and 12.75 US cents for MTM termination. This is because the Fair Trading Commission in Barbados is treating the retail side of FTM calls differently, and FTM retail rate regulation impacts what is reasonable in terms of FTM termination, versus what is reasonable in terms of MTM termination.

Unless the price cap can be adjusted earlier the first opportunity to decrease FTM retail rates would occur when the current price cap on LIME expires. Digicel's first and second proposals in respect of FTM retail and FTM termination rates are as detailed below. As indicated we have proposed appropriate decreases in fixed termination and to the transit/link cost to run in parallel. Fixed termination rates should be decreased at the same intervals as MTM termination rates. We believe that the transit/link service cost should be cut at the first opportunity since the mobile operators competing with LIME are unjustifiably, and have been for a considerable period of time paying, a huge price for a very minimal service resulting an estimated gross profit margin of 99% (the charge levied on Digicel is about 7,500% of the cost to LIME).

[7] http://www.btwholesale.com/pages/cmsjsps/service_and_support/service_support_hub/online_pricing_hub/cpl_hub/cpl_pricing_hub/cpl_browsable_sections/cpl_browsable_sectionb_2.jsp

[8] [6 E1] circuits carry traffic from Digicel to LIME across the point of inerconnection

[9] http://www.tatt.org.tt/RegulatoryFramework/RegulatoryDecisions.aspx, March 7 2008 Decision, page 58

Digicel's First Proposal

Note: the impact of the Commission's combined FTM retail price cap and the mobile termination reductions listed in the consultation are in blue. Digicel's figures and proposals are in red.

Price Cap Year (prices in US cents per minute, billed per second)	Maximum Fixed-to Mobile Retail Calling Rate	Fixed to Mobile Retail Rate based on Commission's MTR proposal (although Commission suggests implementation on 1 Jan each year for MT reductions)	Mobile to Mobile Termination Rate: Digicel's Proposal	Fixed to Mobile Retail Rate: aggregate impact based on Digicel's first FTM termination rate Proposal (billed per second)	Fixed to Mobile Termination Rate: Digicel's proposal	Mobile to Mobile Link Price	Fixed Termination
2. Effective as of April 1, 2011	***40***	***34***	***13***	***40***	***15***	***0.02***	***Same benchmark approach as MTM***
3. Effective as of April 1, 2012	***37***	***29***	***12***	***37***	***15***	***0.02***	***Same benchmark approach as MTM***
4. Effective as of April 1, 2013			***11***	***20***	***11***	***0.02***	***Same benchmark approach as MTM***

If, in spite of everything above, the Commission still wants to reduce FTM termination rates at this stage we believe that any reductions should match the current anticipated percentage falls in the fixed to mobile retail rates under the price cap. Subsequently, in the year of the new fixed to mobile price cap we would propose slashing FTM retail rates unless there was significant competition in fixed origination by that time. Although, as indicated, we believe that a reduction in FTM termination rates should await a large reduction in FTM retail prices, if there were a reduction starting next year, the reduction would be as indicated in the table below:

Digicel's Second Proposal

Price Cap Year (prices in US cents per minute, billed per second)	Maximum Fixed-to Mobile Retail Calling Rate	Fixed to Mobile Retail Rate based on Commission's MTR proposal (although Commission suggests implementation on 1 Jan each year for MT reductions)	Mobile to Mobile Termination Rate: Digicel's second proposal	Fixed to Mobile Retail Rate: aggregate impact based on Digicel's second FTM termination rate Proposal (billed per second)	Fixed to Mobile Termination Rate: Digicel's second proposal	Mobile to Mobile Link Price	Fixed Termination
2. Effective as of April 1, 2011	***40***	***34***	***13***	***39***	***14***	***0.02***	***Same benchmark approach as MTM***
3. Effective as of April 1, 2012	***37***	***29***	***12***	***35***	***13***	***0.02***	***Same benchmark approach as MTM***
4. Effective as of April 1, 2013			***11***	***20***	***11***	***0.02***	***Same benchmark approach as MTM***

International to Mobile rates

While the Commission has made no mention of international to mobile (ITM) termination rates, we believe that these should continue to be commercially negotiated. The benefits from reductions in ITM termination rates are very unlikely to flow to Turks and Caicos consumers and are more likely to be pocketed by overseas carriers. If there were to be any controls on ITM rates therefore they would have to be set at the higher end of the range and in this case be no less than as indicated in Digiciel's first FTM termination rate proposal above.

Question 10: Please provide comments on the Commission's proposed Directive assuming on the Proposal or a modified version of the Proposal is adopted. Also, please provide any changes to the Directive parties consider appropriate based on the Proposal or, if applicable, Respondents' own MTR proposals.

Whether or not the Commission has the ability to override a pre-existing contract between two interconnecting parties such as LIME and IslandCom we believe that it would be bad policy to do so. A five year interconnect contract is typical and unremarkable in length. If the Commission wishes to make adjustments to the termination rate, it should, in the absence of the agreement of the contracting parties seek to make those changes after the contract has expired. Equal treatment would then be afforded to Digicel.

Question 11: Please provide comments on the Commission's proposed future review of MTRs.

As indicated previously we believe that the better policy is that if MTRs are revised this occurs on the 1st April of any particular year to enable sensible and effective financial and investment planning by the industry.

Question 12: Please provide comments on any other issues relevant to the Commission's review of the MTR in TCI.

We believe that the Commission should be mindful generally that the Turks and Caicos Islands represents a small, and higher cost place to invest with lower scale economies and more risks than in large established economies. Therefore its benchmarking approach, should as indicated, look to the higher end of the scale in an attempt to arrive at decisions which provide the incentives for large network investments.

Yours truly,
Digicel (Turks & Caicos) Limited

E Jay Saunders
General Manager
Digicel (TCI) Limited.