Cayman Limited

Response to ICTA FLLRIC Consultation

September 3, 2004

1 Introduction

Digicel wish to thank the ICTA ("the Authority") for an opportunity to respond to matters pertaining to the implementation of Forward Looking Long run Incremental Costing (FLLRIC).

On the issue of the timing of the FLLRIC process, we are sure that all parties agree on the importance of giving the market a sufficient period of time to mature so that the volatility in subscriber numbers, traffic and operating costs typically found in any newly liberalized market can stabilize to some extent and be properly reflected in the model. It is clearly not in any parties' interest, least of all that of Caymanian consumers, to construct a regulatory framework based on a cost model approach which is flawed as a result of pre-emptive presumptions about market behaviour. In simple terms, 'guesswork' must be kept to a minimum. Thus, it is surely a very welcome development that, in the agreement ("the agreement") signed on 27th July, 2004 between Cable & Wireless (Cayman Islands) Limited ("C&W"), Wireless Ventures (Cayman Islands) Limited ("AT&T") and Digicel Cayman Ltd ("Digicel"), the parties noted that;

> *The Parties hereby acknowledge, and wish to inform the Authority that in their view, the earliest feasible date by which a FLLRIC model could be completed (to include all of the items currently contemplated to be completed by 31 December 2005) is 30 June 2006.*

The Authority's acceptance, in its letter of 28th July, that this is not an unreasonable assumption for the three mobile operators in the Cayman Islands to make confirms the importance of allowing a reasonable period of time for the Authority to reach a decision on an appropriate FLLRIC model. Digicel clearly will play its full part by fully assisting in the process to achieve completion of the FLLRIC model within the 30 June 2006 timeframe if the Authority determines that the process will be to the benefit of the Cayman Islands.

2 Summary of Main points in Digicel's response

- It is vital that a cost-benefit analysis as to the value of the FLLRIC process needs to be conducted – Digicel have agreed to engage in the FLLRIC process in good faith but see the cost-benefit analysis as integral part of that process. No party acting in good faith could insist on proceeding with the implementation of the model if the Authority found there was no net benefit to all parties and the Cayman Islands as a whole.
- It is necessary to deal with the issue of how the costs of implementing the FLLRIC models is to be recovered. Digicel believe this issue must be resolved before any further resources are devoted to the process. The cost-benefit analysis may also assist the Authority in this regard e.g. if operators benefit/suffer disproportionately from the current market situation then this can be accounted for in the cost recovery mechanism.
- Digicel believes that the Authority's role in the process should be significantly more involved than appears to be suggested in the consultation and in the specific proposal as outlined by C&W. The Authority should be represented at every single meeting of the eventual consultant and C&W to ensure that the process is fair. In addition the Authority needs to take the lead in the capital cost reconciliation process.
- Digicel are very wary of the C&W proposals in relation to its Activity Based Costing (ABC) tool. Digicel are concerned this tool will allow C&W to misallocate costs in the manner that was discovered with respect to the adjusted FAC model.

Digicel has structured its response to deal with issues as they arose during the consultation process, i.e. we will first deal with the Authority's section of the consultation then deal with the proposal from C&W, before referring to interrogatory responses.

3 Response to the Authority's section of the consultation

As a general remark, Digicel would first point out that the liberalization agreement signed between the Cayman Islands Government, the ICTA and C&W ("liberalization agreement") is subordinate to the laws of Cayman Islands and indeed the agreement itself is cognisant of this fact.

3.1 Cost - benefit analysis

Digicel believes it is imperative that the Authority should conduct some form of cost benefit analysis on the implementation of FLLRIC costing models, in accordance with its intention to do so in paragraph 50 of the liberalization agreement. While Digicel does not object to the implementation of a FLLRIC model for the industry, it believes that it will be a significant waste of resources if the cost of the project is not substantially reduced from what is being proposed by C&W. The $550k estimated cost being proposed by C&W for completion of the project is entirely unacceptable in an economy the size of the Cayman Islands. This is a cost that ultimately must be paid for by consumers in a population of under 50,000 inhabitants. To give an idea of the scale of cost per head of population, one would have to aske themselves would such a project costing $660m for a country the size of the UK be worthwhile. Having reviewed C&W's proposal, Digicel is very concerned that the sum of $550K may even underestimate the eventual cost, since we question some of the assumptions made by C&W in arriving at that figure. Digicel believe that on the basis of a base case assumption of $550k, that final costs on a worst case scenario basis could be as high as $800k – $1m - a worrying prospect.

There is no guarantee that if interconnection costs fall after FLLRIC is introduced that the competitive benefits will accrue to the consumers any faster (if at all) than would be the case in the absence of FLLRIC being introduced e.g. C&W fixed line customers will probably get zero benefit on fixed to mobile calls regardless of the level of the mobile termination rate. This is because C&W are dominant and likely to remain dominant in the provision of fixed line services for some time to come and as such has no incentive to reduce the extraordinary level of its fixed to mobile retail charge. The Authority also need to take into account the effect a reduced mobile termination rate will have on all Caymanian operators' ability to negotiate settlement rates for incoming international traffic. If settlement rates are reduced, operator's availability of investment funds will also be greatly reduced particularly if settlement rates end up being lower than the cost of termination.

Consequently, Digicel respectfully requests that the Authority proceeds with the issue of cost benefit analysis before implementing a FLLRIC model.

A scenario based cost-benefit analysis will also help identify what parties are likely to benefit most from engaging in this process and so should assist in determining how the recovery of project costs should be allocated. Without conducting this analysis, the Authority will be obliged to take an a priori position on this issue. As the dominant dual operator, it seems probable that the primary beneficiary of FLLRIC pricing will be C&W particularly given that in most other liberalised jurisdictions, most notably the EU, it is **only** dominant operators that are required to have cost oriented interconnect rates. Digicel therefore believes that the costs of building the model should be borne entirely by C&W. Indeed, as the estimated costs of the model appear to be excessively high, it would be wholly unreasonable that any other party should bear the cost of building the model. In addition, Digicel has already (and will in the future) devoted substantial resources to the project; these costs also need to be reflected in any cost-benefit analysis.

3.2 Economic Principles of the FLLRIC model

The Authority noted that the proposed LRIC model will be founded on the following principles;

- *Economic Efficiency*
- *Cost causation and complete accounting*
- *Transparency*
- *Model administration costs and benefits*

Economic Efficiency

Digicel believes the Authority needs to be extremely careful in the application of the first principle. Digicel absolutely agrees with the principle of economic efficiency but this must be balanced against a requirement that existing operators are allowed to remain viable. Digicel, C&W and AT&T have already agreed that interconnection costs should be reciprocal if a FLLRIC model is introduced . Consequently, the model will need to take account of the FLLRIC costs of the highest cost operator i.e. economies of scale and scope need to be taken into consideration. If for example one operator's traffic flows are half that of another operators its unit costs are inevitably going to be higher yet it could be significantly more efficient than the larger operator in deploying its network. If the principle of economic efficiency ignores scale and scope economies and the profile of the largest operator only is considered, it will ultimately mean that other operators will be forced to sell their services below cost which could have obvious and grave implications for the Caymanian Telecommunicaitons market. Consequently, Digicel believe the first principle should be revised to incorporate this point as follows: Economic Efficiency that takes account of economies of scale and scope.

Cost causation and Complete Accounting

On the second point the Authority has asked whether, in addition to considering all relevant and attributable costs, a cost exclusion principle should also be considered i.e. should a principle be added stating that the model excludes costs that would be avoided if the service is not provided. While Digicel does not object to the inclusion of such a principle *per se* we have difficulty envisaging where such incidents may arise because firstly, the physical network costs are calculated on the basis of a bottom-up cost methodology. Secondly, given the economies of scope and scale enjoyed by C&W there will need to be upward adjustments made to operating costs as mobile only operators do not enjoy such economies e.g. sharing customer care resources between fixed and mobile services, sharing engineering resources between fixed and mobile services etc. Consequently if the starting point is based on C&W figures for the purposes of top down modeling of opex, Digicel would envisage that an upward adjustment will be required to reflect the costs of an efficient, mobile only operator.

Nevertheless, if the Authority can show that as a starting point, before such an upward adjustment should be applied, that certain costs should be excluded from the C&W baseline then Digicel are satisfied with the Authority's proposed reflection of the concept of Cost Exclusion.

Transparency

On the third point, the Authority has asked if principle 3 should be modified to address the need for parties other than C&W to view the results of the FLLRIC model on an ongoing basis in order to provide transparency of the model's application to interested parties. Digicel would have assumed that this would automatically have been anticipated under the heading of transparency but we welcome the Authority's proposed clarification of this point for the avoidance of doubt going forward.

Digicel believes that the level of transparency proposed is absolutely required, particularly in light of Digicel's discovery of the complete misallocation of costs and general model deficiencies of C&W's adjusted FAC model at the ICTA hearing in May. Digicel also believes it is imperative that the Authority is represented at all meetings held between C&W and the eventual consultants hired to build the model to ensure the appropriateness of the process so that the consultants are not 'misguided' as to what is required of them. We strongly believe that the eventual consultants should be asked to formally undertake to keep the Authority abreast of all and any correspondence between C&W and themselves for the purposes of building the model. Absent such provisions a fair and transparent process cannot be guaranteed, particularly given C&W's well documented and tainted conduct in the market since liberalization last March.

In the event that the Authority determines that Digicel should in some way contribute to the cost of building the model then it is only reasonable that Digicel must also have a say in the tendering, interviewing and choosing of a consultancy.

Model and Administration costs and benefits

On the 4th point the Authority has sought comment on the appropriateness and practical effect of adopting a cost-benefit analysis. As previously stated, Digicel believes that such an analysis is vital particularly given the current estimation of the costs proposed by C&W. Digicel has given a commitment to engage in the FLLRIC process in good faith but believes that the cost-benefit analysis is a vital part of that process. Digicel believes it is incumbent on all parties, including the ICTA, to ensure that the work of developing a FLLRIC model is a worthwhile exercise for the Cayman Islands and not simply a costly exercise that could potentially see little or no benefit to Caymanian consumers. It would be highly irresponsible to engage in a process that costs several hundred thousands of dollars when there will be little net benefit to consumers or, even worse, if consumers are disadvantaged either by interconnect rates going up or if investment is significantly dis-incentivised as a result of the implementation of unnecessarily low FLLRIC interconnection rates.

3.3 Key parameters and attributes of the FLLRIC model

1. The cost increment is to be based on the "total service" (TSLRIC) approach, as opposed to the "growth increment" (GLRIC) approach;

Digicel agrees with this approach in principle[1]. However, in the event that the TSLRIC costs, including termination of international traffic, for mobile termination interconnection is higher than the rates any of the operators is able to command on the international market[2], then the shortfall in cost recovery needs to be accounted for in the form of a mark-up to the cost of domestic termination services. This figure will be easy to calculate. If such an adjustment is not made, then the cost for mobile termination will, by definition, be below cost. Digicel believes it would be an optimal strategy for the Cayman Islands and its consumers if settlement rates are kept as high as possible by whatever means necessary. In this respect, one must disregard the United States' FCC benchmarks. Clearly, the FCC has no jurisdiction in the Cayman Islands and sets its benchmarks with regard only to the welfare of US consumers and US operators, without any consideration to the welfare of non-US consumers. For example the current US benchmark for Cayman Islands is US$0.15. Digicel is confident that this figure will prove to be substantially below the actual cost of TSLRIC mobile termination.

2. "Bottom up" approach to network capital costs for costing interconnection, with a reconciliation with current asset value of existing plant.

Digicel believes this is the correct approach provided reconciliation to existing plant is considered with direct mapping to capital costs for a GSM network. Digicel has no objection to C&W modeling FLLRIC costs for a TDMA network but, as all parties have agreed to reciprocal interconnection rates, this hardly seems necessary[3].

Ideally the model should adopt the scorched node methodology. However, this in itself will not take account of the fact that Digicel has been forced to collocate on some of these nodes (sites) with C&W. This has resulted in much higher opex than Digicel anticipated and so adjustments need to be made to reflect this fact otherwise Digicel will be forced to sell mobile termination at an artificially low price.

[1] Where of course the TSLRIC costs are calculated for the discrete fixed and mobile services.
[2] In another jurisdiction where Digicel operates, it has been forced to accept an international mobile termination rate below its costs because the large international carrier refuses to pay the cost based rate.
[3] This is because FLLRIC costs for a TDMA network would be lower than for a GSM network. Operators other than Digicel or AT&T however may seek to have this fact reflected in their interconnect costs. The cost therefore of considering this issue should be borne by these operators and/or C&W.

3. "Top Down" approach to network operating costs with forward-looking efficiency adjustments for costing interconnection costs.

Digicel is concerned about the implications a loose interpretation of this principle could have. Any forward looking efficiency adjustments must be attainable by all three mobile operators. Any efficiency adjustments must be consulted on and determined solely by the Authority following this consultative process rather than allowing C&W or its consultants to make assumptions. Otherwise, we have no doubt that the majority of efficiency adjustments will be made with respect to the mobile network, rather than the fixed side of the business. This would be consistent with C&W's approach to cost modelling as evidenced by its application to the adjusted FAC model, i.e. the cost of fixed termination tends to be inflated at the expense of costs on mobile termination.

4. "Top Down" approach for incremental costs of retail services for use in imputation tests.

Digicel agrees with this but again the Authority must be involved at every stage in the development of the model to ensure that these costs are properly accounted for and appropriately allocated.

5. An activity-based costing (ABC) methodology, excluding demonstrable inefficiencies, for purposes of assigning operating costs to interconnection and retail services.

Digicel are fervently opposed to this approach if the allocation is left to the discretion of C&W. We believe adopting this approach gives C&W *carte blanche* in terms of manipulating the model to the detriment of its competitors. C&W has noted that the ABC approach is currently used in its FAC model – this highlights exactly why Digicel is opposed to this methodology, given the complete misallocation of costs in that model.

Even if the determination on the allocation of activity based costing were put entirely in the hands of the Authority, Digicel would anticipate that it would be allowed full sight of such cost allocation in order that it can make as full and reasoned a response as possible on the issue with reference to its own opex. All three operators are likely to have very different views on the appropriate allocation of the costs and these opposing views may reflect the way that costs are actually incurred for the individual business. The Authority will therefore need to be the adjudicator in such instances.

The fact that C&W can benefit from economies of scope means that allocating the costs of C&W on the ABC basis will not reflect real world cost incurrence for other efficient mobile-only operators. The model should reflect the costs incurred by an efficient mobile-only market entrant and not the costs of an efficient integrated mobile and fixed line operator.

6. An equal proportionate mark-up (EPMU) of TSLRIC cost in order to recover the incumbents shared fixed and common costs, as opposed to a mark-up based on the Ramsey rule

As C&W themselves recognize that the inverse elasticity rule is preferable from an economic efficiency standpoint, Digicel believe that adopting this approach needs to be explored further. Simply because it is difficult to obtain reliable demand elasticities required for implementation of the Ramsey rule mark-up does not mean that some allowance cannot be made for an *a priori* expectation of relative elasticities e.g. one would expect *a priori* that the demand for termination services would be less elastic than for outgoing retail services. Furthermore, since there is no economic basis for adopting an EPMU approach, it would be far preferable to proceed on an estimated Ramsey basis than EPMU – better to be partially right than wholly wrong.

7. A mark-up of TSLRIC cost in order to recover a reasonable rate of return on its forward looking capital base, equal to the weighted average cost of capital agreed to in Schedule 4, paragraph 53 (f) of the liberalization agreement.

As all mobile parties have agreed that the interconnection rates following the implementation of FLLRIC must be reciprocal, then it is necessary that the Authority use the highest WACC of the three mobile operators in Cayman. Digicel has already provided extensive evidence to the Authority that it has a very different cost of capital to C&W. C&W has conceded that, if mobile operators face difference costs of capital to fixed operators, it is willing to use two different costs of capital. Digicel believes it has provided strong evidence that this is the case. In the event that the Authority does not use the highest cost of capital of the three mobile operators in the Cayman Islands, then it is '*de facto'* not allowing such operators to recover their legitimate costs.

8. A scorched node network topology, which takes as given the existing location of the incumbents switch nodes, as opposed to a scorched earth or existing network topology.

Digicel generally agrees with this approach, provided a provision (mark-up) is made in the model for the fact that Digicel (or AT&T) cannot possible replicate this network given that it is forced to collocate on sites with C&W. Digicel's costs therefore will be different than would otherwise have been the case had it been permitted to pursue an optimal capex program. There is no point making unrealistic assumptions about the optimal deployment of capital at nodes in Cayman if the planning laws of the country simply do not allow for such a replication.

9. A "static" demand forecast for mature services, such as fixed interconnection and access services, and a "dynamic" demand forecast for new services, such as mobile services.

Digicel believes it is neither prudent nor necessary to make a decision on this matter at this stage. It makes sense to wait and see the developments in the market over the next year or so before deciding on this issue. If, for example, fixed line traffic is steadily in decline over the next year then taking a static approach would not make sense. It is possible that the Authority will wish to intervene on the current retail fixed to mobile rate which Digicel believes is excessive. If this rate is reduced or is forced down due to competitive pressure, then it could have significant implications for traffic flows of the service. Consequently, no rash decision needs to be made on demand forecasts at this time. If the model is robust (as it should be), then this will not be a problem at the completion stage of the model.

3.4 Specific Questions from the Authority in relation to proposed attributes of FLLRIC model

i. Digicel agrees with the Authority that the forward looking costs should be calculated as if the service is being provided for the first time and should reflect planned adjustments in the firm's plant and equipment[4]. However, in doing so, the Authority needs to be cognizant of points already raised by Digicel in this regard, e.g. new entrants in Cayman cannot necessarily pursue optimal capex-opex programmes for reasons other than inefficiencies, and the Authority must recognise that new mobile-only entrants cannot benefit from the economies of scale or scope that C&W, as an integrated (fixed and mobile) operator can. To ignore such fundamental issues would be to knowingly (and unjustifiably) force Digicel and AT&T to sell mobile termination services below cost.

ii. Digicel would like it made clear that when the Authority refers to 'least cost technology' it is referring to least cost GSM network technology – TDMA technology is cheaper but this is a technology that is likely to become obsolete on a forward looking basis. In assessing the cost of a GSM network, the Authority should seek quotations from vendors including those that currently provide equipment in Cayman. Digicel recommends that the Authority use an independent third party to seek this information to avoid a situation whereby vendors could be accused of providing quotations to suit their clients' 'needs'. If a third party (eg. a consultant hired by the Authority) is provided with the specific requirements for a network in Cayman, they can simply seek a quotation on

[4] Consequently, all relevant start up costs also needs to be considered

the network elements without the vendor being aware of the jurisdiction for which the information is required. This approach will also remove the possibility that discount prices will be quoted based on volume sales associated with jurisdictions outside Cayman. The model is supposed to reflect optimal new entrant costs not optimal costs of an operator with an extensive global footprint.

The Authority also asked for comments on specific proposals in relation to:

i. *Long-run costs are the economic costs*

Digicel has no objection to this proposal provided there is there is an open and frank discussion on appropriate economic lives of assets.

ii. *The planning horizon used to evaluate long-run costs should span a time period sufficient to treat all inputs as variable; that is the horizon should be long enough that there are no sunk costs*

If Digicel understands this proposal correctly, the Authority is suggesting that the planning horizon is equivalent to the life of longest life asset. Digicel would point out that it is inevitable in reality that there will always be sunk costs where asset lives of key components vary. Maintaining quality of service and remaining competitive will also contribute to this fact. Digicel believes it might be more appropriate therefore to consider the average life of the network with regard to individual component asset lives and opening gross book values. However, Digicel would prefer to use the planning horizon proposed by C&W of 2 years in its response to interrogatories issued by the Authority. Of course, it is not relevant (despite an apparent insinuation from C&W) what specific "plans" C&W have over this period because the model needs to reflect the build out of a GSM network for a stand alone new entrant GSM mobile operator and, as proposed by the Authority, the model should be calculated as if the service is being provided for the first time, i.e. should also include startup costs.

The Authority seeks specific comment on the reconciliation process contemplated in C&W attribute no. 2.

Digicel believes the correct reconciliation process will involve agreement among the operators and the ICTA as to the optimal network based on a scorched node methodology of C&W's network (with the necessary mark-up adjustments to be made later where collocation and capital expenditure on site upgrade is required by new entrants). Then, the Authority should seek quotations from vendors for the network through a third party as discussed above. The technology that should be considered is a standard for 'best in use' technology rather than absolutely the latest technology for a GSM network which might be impractical to achieve.

With respect to number 6, parties are asked to comment on whether the EPMU applied to pricing wholesale services should be the same as applied to costing services for imputation tests.

Digicel is concerned that this questions appears to make an assumption that agreement has been reached on the EPMU methodology being employed with respect to wholesale services. Digicel has expressed a preference for a Ramsey mark-up or at least some variation this methodology. However with respect to using EPMU for costing on imputation tests, Digicel does not have any objection at this stage to that approach.

With respect to C&W proposal number 8 (scorched node) is it sufficient to treat only C&W's switch as fixed or is it appropriate to expand the specification to include other facilities.

While Digicel believes that 'scorched node' is an accepted approach in LRIC modeling, it would be imprudent for the Authority to ignore information that it knows would result in the model, which is a hypothetical network recreation in any case, digressing further than necessary from the real world situation. However, any deviation from an agreed scorched node needs to consider the implications that new outcomes in the model might have for other operators in the market. This is why it is essential that the model is 'fit for purpose' so that it is robust enough to test numerous scenarios that can be tested by all parties – unlike the adjusted FAC model.

3.5 Attributes of a bottom-up approach to measuring interconnection services costs

C&W has presented 8 attributes to be considered for Bottom Up cost modeling.

1. Minimum set of services

Digicel believes that the minimum set of applicable interconnect services must also include leased lines for reasons later discussed.

2. C&W propose two network specific cost models – fixed and mobile.

Digicel absolutely agrees that this is the approach that should be taken. However, it is of paramount importance that, in building a stand alone model for the mobile network, all costs that a stand alone mobile operator would incur must be included in this model. Excluding relevant costs due to scope economies enjoyed with the fixed network will underestimate the cost incurred by mobile only operators.

3. Static v Dynamic

Digicel has already commented on this issue earlier in the document. There is no need to consider this matter at this juncture.

4. Scorched node

Digicel agrees that the scorched node approach be adopted with the caveats already referred to.

5. Allocating operating expenditures by constructing cost volume relationship

Digicel has reservations about certain aspects of this proposal which we discuss in greater detail below

6. ABC costing

Digicel has already expressed serious concerns about the use of C&W ABC methodology given the company's history of misallocation of costs to the benefit of C&W and to the detriment of its competitors.

7. Methodology for valuations of assets.

Digicel believe the merits of the argument for or against static or dynamic assets can only be judged on a case by case basis. Consensus must be reached by all operators on such a basis or adjudicated on by the Authority, based on the evidence available or put forward by the operators where opinions differ.

8. Asset valuation reconciliation – C&W proposes a current cost accounting analysis to ensure that the assets' cost used in the model are accurate.

Digicel is broadly in agreement with this approach, provided reconciliation is done in the manner suggested by Digicel in above.

Specific comments sought by the Authority on:

The Authority seeks comments on Static v Dynamic asset valuation approach

Digicel has already outlined its views on this matter above. This is not the proper forum in which to make a decision on this matter as each case needs to be dealt with on a case by case basis. As stated, Digicel believes the Authority should have all inclusive talks on an issue such as this at the appropriate time.

Whether the reconciliation process as proposed in 8 is consistent with the Authority's proposed treatment of 'forward looking'

Digicel does not see where any inconsistency could result unless C&W are permitted to manipulate the reconciliation process by including discounted equipment prices or other factors which would artificially depress a LRIC based mobile termination rate. Concerns about this can be alleviated by the Authority engaging in a process with a third party as already suggested in this document.

3.6 Attributes of top down approach to measuring retail costs

1. Digicel agrees with the services included by C&W as being likely to be subject to an imputation test. However, we believe that mobile calling should more properly be

defined as 'mobile calling – domestic' i.e. the service excludes international direct dialing and roaming.

2. Digicel has no objection to using a top-down approach to measuring retail costs provided all operating costs for the stand alone mobile operator model are included to reflect the fact that a mobile-only operator cannot benefit from economies of scope in the way that an integrated fixed-mobile operator can.

3. An efficiency adjustment based on C&W's costs needs to be followed by a mark-up adjustment based on the point already raised in 2 above.

3.7 Time frame and cost of implementing the FLLRIC model

1. Digicel believes 12 months is too short a timeframe in which to operate. Attempting to operate in this timeframe is likely to mean an excessive strain on resources given the complexity of the issue at hand. Consequently, Digicel welcomes the Authority's view that it is a reasonable assumption to make that the earliest the process could be completed is June 30, 2006. This is also in keeping with the process in other countries where LRIC prices are being introduced – for example in Ireland, ComReg's (then ODTR) first consultation on costing methodologies for mobile markets was issued in mid-2002 and a final model has yet to be completed despite the fact that ComReg has considerably more regulatory resources than the Authority or any of the operators in the Cayman Islands.

2. Implementation costs estimated at $550k are exorbitant in Digicel's view. If C&W is willing to incur the full cost of such an undertaking, then Digicel would not have any concerns about such costs. However, Digicel believes that a cost – benefit analysis is imperative particularly in a country the size of the Cayman Islands. The authority needs to consider factors such as: (i) the extensive resources that will be need to be engaged in the process from all sides; (ii) the likelihood that consumers may not see the benefit from lower (or higher) termination rates than is in the market at present; (iii) the likelihood that operators and/or the Authority do not agree with the views of other parties to the point

that legal action may ensue on the part of one or more operators; and (iv) the worrying fact that the $550k estimate appears to be based on a 'best case' scenario and may seriously underestimate final costs.

Digicel notes that the $550k estimate submitted by C&W "*excludes costs incurred by C&W necessary to assist the consultants in completing the project*". Digicel is vehemently opposed to any suggestion that the industry should make any contribution to such costs. Indeed, Digicel believes that, since $550k + represents a massive commitment within an economy the size of the Cayman Islands, no further progress should be made on this project until the issue of how such costs are to be recovered is discussed and agreed on by all parties.

Specific comments sought by the Authority

Digicel appreciates the constructive argument put forward by the Authority in its attempt to curb costs by implementing a model already used in another jurisdiction where 'best practice' costing principles has already been applied. While, on the face of it, such an argument makes perfect sense, Digicel does not believe that the 'best practice' as viewed by one particular regulator necessarily mirrors the concept as viewed by a regulator in another jurisdiction[5]. However, if the Authority were willing to provide all parties with such a model (with all background assumptions and model handbook) for critical review, Digicel would be willing to consider such a novel approach purely from the practical perspective of saving on costs.

Digicel fails to see how it is only after model implementation that the Authority considers there will be sufficient information to determine whether costs for developing and implementing a FLLRIC methodology were reasonably incurred. Such an a priori assumption defeats the purpose of ever conducting a cost benefit analysis in any field. It is true that it is only after the event that a true and accurate appreciation of the value of the exercise can be determined but there must be some understanding of the benefits of the project prior to its inception. Therefore, Digicel believes it is vital that a cost-benefit

[5] This point is echoed by C&W in paragraph 2.2 of its full proposal

analysis is conducted prior to implementation of the model. Digicel for its part will assist the Authority in whatever way it can to ensure that as robust as possible a scenario-based study can be constructed to see if what is being carried out is worthwhile or ultimately a waste of money that consumers end up paying for e.g. if there is zero benefit to consumers in reducing the fixed to mobile termination rate, there will be no reduction in retail charges for the service and prices for this or other services may have to be increased to recover the costs of the FLLRIC project.

4 C&W: Follow-up Proposal for Forward-Looking Long-Run Incremental Costing Modelling & Response to Interrogatories.

Section 1

Digicel would reiterate that all aspects of the July 10th liberalization agreement are subordinate to the law of the Cayman Islands and indeed the agreement itself is cognizant of this fact.

Section 2 – Principles & Dig – CW 1-1)

In response to a Digicel interrogatory (referenced by C&W as *Dig-CW 1-1*), C&W states that "*The European Commission requires that member states implement regulation stating that mobile operators are dominant in the market for calls terminating on their own networks and therefore must charge cost orientated rates*".

Although it is not entirely relevant to the current discussion, Digicel is forced to address this issue as it has been raised by C&W. Digicel would point out this comment is a complete falsehood and misrepresentation of very public facts. At no stage in public hearings nor in any public document issued by the European Commission (EC) has any such requirement been made by the EC. The EC did issue a recommendation on market definition[6] for markets that might be "susceptible" to *ex ante* regulation. However, the decision as to whether or not an operator was dominant in any of those markets was ultimately for the national regulatory authorities (NRA) to decide based on the national circumstances. In addition, NRAs are free to digress from the market definition recommendation as proposed by the EC, based on national circumstances, through established procedures and following consultation with the Commission. Finally, even if regulators find operators to be dominant in the market as defined by the EC, the NRA is

[6] http://europa.eu.int/information_society/topics/telecoms/regulatory/maindocs/documents/recomen.pdf

not obliged to introduce cost orientated rates (e.g. Germany has rejected the need for cost orientated termination rates).

Digicel has agreed to engage in the LRIC process in the Cayman Islands in good faith with all parties concerned but believe it is important that statements of "fact" made by any party in the process are just that and not mere fabrication or gross exaggerations made to support a particular point of view.

Section 2.1 (e) and Digi-CW 1-4

We are pleased to note that C&W accepts that that a quote from a major international supplier in written form can verify current costs. As suggested earlier, we believe that the Authority is the appropriate body to acquire such cost information through a third party so that international vendors are not aware of the jurisdiction from which the quote is being sought and consequently they are not aware of the entities operating in the jurisdiction.

Section 2.3

C&W has quite rightly pointed out that, in both the US and Canada, small carriers are often exempted from having to undertake a LRIC study because of the relatively high costs and little commercial benefit accruing to the regulated firm. It should be noted that by US and Canadian standards, all operators in the Cayman Islands are tiny by comparison even to the 'small carriers' in those jurisdictions. However, C&W still seems to believe that $550k (which represents partial best case costs) is 'reasonable' in the Cayman Islands. Digicel believe the reasonableness of this cost can only be ascertained through some form of a cost-benefit analysis. On the face of it, $550k to Digicel seems wholly excessive and unreasonable. In terms of size of population and at current spending levels, this figure would represent more than 5 years of the Irish regulator's total budget, for regulating all telecommunications and postal markets and with a staff in excess of 100 employees. Consequently, it is not clear to Digicel what C&W's basis for 'reasonable' is in this case.

Section 3.1 and Dig-CW 1-5

Digicel is pleased that C&W recognizes that (a) every company has its own cost of capital and (b) if it can be demonstrated that fixed and mobile operators face different costs of capital, it is appropriate to have two different costs of capital for the different models. In addition, Digicel agrees that a single WACC can be used in the mobile model given the agreement of the three mobile operators to have reciprocal rates. However, for fixed operators different WACCs may have to be used depending on their different costs of capital as reciprocal rates obviously could not apply to such operators where no agreement on reciprocity has been reached, given that reciprocity and cost orientation are mutually exclusive concepts.

However, it is obvious that the WACC of the company with the highest cost of capital is used, otherwise using a lower cost of capital will force certain operators to sell interconnection below cost. Alternatively and consistent with the approach to the entire project, perhaps the Authority could hire an independent consultant to estimate an appropriate cost of capital for a new entrant in the Cayman market (this estimate should not take account of ability to raise finance in other jurisdictions etc if it is to be consistent with the overall approach to the model). Of course, the latter approach may be more time consuming and costly and, given that all three operators have already raised funds in other jurisdictions (all know their cost of capital), our first proposal seems to be the best approach and, incidentally, the one which is likely to come out with the lowest figure of the two alternatives.

Whichever approach is taken, simply choosing C&W's WACC is totally unacceptable as this will clearly be lower than that of either Digicel or AT&T. Simply because these operators have a higher cost of capital than C&W is not evidence that they have entered the market on inefficient terms. To make such a suggestion is ludicrous as it is effectively arguing that, unless an operator has the same cost of capital or lower than existing operators, market entry is inefficient. In nearly all cases in all markets, new entrants have a higher cost of capital than incumbents but this hardly makes a case for monopolistic regimes being allowed to persist.

Section 3.3

C&W makes the point that, for a Top Down LRIC approach, existing costs of the regulated firm are taken as the starting point. Digicel would point out that all three mobile operators are being regulated and so account needs to be taken of all their costs. It is incumbent on the Authority to ensure that this is the case if it is to fulfill its functions in accordance with the Telecommunications Act.

Section 3.5 & Dig-CW 1-6

Digicel agrees that the construction of cost volume relationships (CVRs) might be an appropriate means for assessing movement in certain aspects of non-network capital costs and opex. However, making certain elements from either cost base somehow dependent on CVRs seems to have no theoretical merit apart from creating symmetrical niceties e.g. capital costs like vehicles and buildings are likely to be non-volume related fixed costs while opex such as legal costs also seems wholly independent of volume increments.

Consequently, Digicel is willing to agree to the use of CVRs subject to more detail on the matter, including giving consideration to experiences and figures from other jurisdictions where such a methodology has been employed.

Section 3.6 & Dig -CW 1-7

While it is now clearer to Digicel what is meant by "dimensioning" in C&W's response to interrogatories, we believe it is essential that a more open discussion takes place as to what components should or should not be subject to such dimensioning. For instance, while dimensioning of spectrum might make sense, making adjustments to physical infrastructure like switches or towers makes no sense. Whether you have 100% market share or 10% market share in Cayman, you cannot hope to operate in the market unless you have full population and geographic coverage. In addition, Digicel would be surprised if any of the three operators in Cayman could somehow dimension their switch capacity downwards, given modern GSM switch capabilities in terms of facilitating subscribers and taking this in conjunction with the overall size of the Cayman Islands market.

With respect to the calculation of routing factors, Digicel would expect to able to comment on these and their derivation prior to commencement of phase II. We believe it is also necessary that C&W should compare and contrast the routing factors it calculates on its own network with those calculated in other jurisdictions, highlighting reasons for differences or similarities with those jurisdictions. For example, if routing factors are skewed in a manner that ultimately depresses the cost of mobile termination but increases the costs of other services due to some innate inefficiency in the C&W network (or internal traffic routing policy), this will need to be accounted for in the model.

Section 3.42 & Dig-CW 1-12

Digicel is not satisfied with the vague manner in which C&W proposes to deal with the issue of adjusting for economies of scale and scope in the model – these are essential elements if (Digicel and AT&T) are_to be allowed to recover costs under a reciprocal regime. C&W suggested it may be the case that it would be more efficient for a mobile operator to purchase leased lines or other services from the fixed network rather than to build a backbone network to support the mobile network. Digicel believes it would be helpful if C&W indicated what its own mobile division currently does in this regard.

This also raises the issue that, in the event that the purchase of leased lines is found to be the optimal solution for mobile operators, this wholesale service must also be made available on a FLLRIC cost orientated and non-discriminatory basis. If current leased line prices are above cost orientated levels (which is undoubtedly the case), then it will be in C&W's interest to promote a solution as proposed above whereby other mobile are encouraged to purchase above cost leased lines allowing C&Ws fixed line division to earn super-normal profits in the provision of leased lines. No such incentive will exist if leased line prices are cost-oriented.

We also note that C&W has not considered the other obvious option for a mobile only operator i.e. microwave links, a technology currently employed by Digicel. Not only does this technology incur capital costs and standard operational costs but also attracts spectrum fees. However, Digicel believes this is the optimal technology to employ in the current market environment for a stand alone mobile operator given that current C&W prices for leased lines are excessive, so much so that Digicel could not even consider the possibility to build fibre out to the fixed network from greenfield sites.

(Note: This is one example where C&W is likely to engage in misallocation of costs if all parties are not fully informed at all stages of the model build, e.g. it is obvious that fibre build out from mobile cell sites to the fixed network should be considered part of the mobile network, especially where microwave links are not employed, but Digicel is concerned that C&W will attempt to allocate some or all these costs to the fixed network).

Fibre links costs are notably absent from the mobile list included by C&W in interrogatory ICTA – CW 1-5. There also appears to be no account of interconnect billing systems, pre-pay and SMS platforms, international gateway, enhanced services, network management systems or license fee costs.

Section 3.52 & Dig – CW 1-14

Digicel notes that a proper assessment of C&W's WACC has never been conducted by either the Authority or by C&W itself. Digicel therefore fails to comprehend the basis for the 13.5% WACC included in the legislation. However, as all mobile parties have now agreed to reciprocal rates for interconnection on a FLLRIC basis, Digicel believes that the answer to this interrogatory no longer relevant as it is clear the WACC that should be used in the mobile model must be the highest among the three mobile operators in the market in order that no party is forced to sell termination below cost.

Section 3.54 & Dig-CW 1-15

Digicel are very concerned by insinuations from C&W that it is being forced to maintain an access deficit given comments made in response to this interrogatory. While Digicel suspects that no such deficit exists, in the event that it does, this can have a number of serious implications for the market, not least that it makes it very difficult for the Authority to effectively encourage infrastructure investment in the fixed market.

We note also that C&W now believes that, due to the prolongation of the FLLRIC proceedings, the access network should be costed contemporaneously with the fixed conveyance and mobile networks. Digicel does not concur with this view in the context of the current exercise, as the cost of maintaining the access network is of no relevance to interconnection charges (any notion to the contrary has long since been dismissed in regulation and indeed it is a view expressed by C&W in other jurisdictions (UK)). If, however, it is the Authority's intention to unbundle the fixed local loop, then this procedure should be carried out in a separate exercise.

Section 4.6 & Dig-CW 1-17

While Digicel does not necessarily disagree that the bulk of interconnection costs are driven by the value of assets used to provide the service, as suggested by C&W, we are at a loss to understand what C&W's basis is for this assumption, given that this certainly was not the case in C&W's adjusted FAC model with respect the bulk of the costs.

Section 4.7 & Dig-CW 1-18

Digicel has already expressed its serious reservations about C&W's ABC tool. Operating cost allocation will be one of the key drivers of interconnection costs. Allowing C&W to arbitrarily determine how such costs are allocated will ultimately give it a license to inflate fixed termination costs and reduce mobile termination costs. We note that C&W admits to the need for making the ABC tool more sophisticated. Digicel is fervently opposed to the use of this tool for cost allocation purposes until full details of the tool are made available for scrutiny by all parties.

Section 5.3 & Dig – CW 1-21

Digicel notes that C&W did not include handset subsidies in its indicative list of retail costs to be considered in the model. In addition, there is no discussion elsewhere in the document as to how such costs are to be dealt with. Digicel is aware that C&W offers very substantial handset subsidies and indeed for a number of its corporate customers we are aware that the entire cost of the handset has been subsidized. The principle of how these costs are to be treated is vital to both the eventual level of the mobile interconnect rates and the portion allocated to be recovered as retail costs (which will be relevant to imputation tests). Digicel believes that in phase I of the FLLRIC process a principle needs to be established as to the treatment of these costs, particularly given the significant disparity in relative market shares between post and pre paid subscribers of C&W and its competitors.

(Note: Perhaps it is C&W intention to deal with the issue in the next phase of the process but it is also worth pointing out that no mention has been made anywhere in the document as to how the model will deal with the issue of working capital. Digicel recommends that working capital be treated as some equivalent number of days opex at any one time.)

Interrogatory Dig-CW 1-23

Digicel believes that the answer provided by C&W to this interrogatory is totally unacceptable. If other affected parties are not aware of the consultancies screened or of the eventual consultant assigned to the project, the entire process could breakdown at a later stage, e.g. if there is discovery of some conflict of interest. Consequently, Digicel demands that C&W should seek agreement from the consultants to allow full disclosure of their submissions, including cost estimates, to all concerned parties in the Cayman Islands. Any consultancy opposed to this approach should be excluded from the list. If elements of the proposals are confidential, Digicel would have no problem in agreeing to sign an NDA to ensure that the interests of the consultants are protected.

Dig – CW 1-24

Digicel believes that it is quite clear to C&W what Digicel was referring to when it stated that it believed the C&W proposed model was flawed on many levels. However, for the avoidance of doubt, we now clearly state that the methodology (the foundations on which a model is built) proposed by C&W appears to be flawed on many levels. By definition, any model borne out of so flawed a methodology must itself be fundamentally flawed.

Consequently, we are again asking for scenario-based cost estimates of the model which will also assist the Authority in conducting a comprehensive cost-benefit analysis of proceeding further with this process.