Our Ref: GRCR/GR 15.15
14 May, 2004

Mr. David Archbold
Managing Director
Information, Communications Technology Authority
P.O. Box 2502GT
3rd Floor Alissta Towers
Grand Cayman

Dear Mr. Archbold,

Re: C&W Cost Issues and Prepaid Hiptop Imputation Test

Confidentiality Claim

Pursuant to Regulation 3 of the *Information and Communications Technology Authority (Confidentiality) Regulations, 2003* ("Regulations"), C&W hereby requests that some of the information in this submission be designated "confidential". This information consists primarily of confidential and highly sensitive cost, vendor, network, customer and business relationship information.

Further to Regulation 3(b), the information is commercial information, the details of which are treated consistently in a confidential manner by C&W and are not otherwise publicly available. C&W notes that this letter and contains detailed information on C&W costs, vendors, network and volumes, in highly disaggregated and granular form as well as commercial negotiations with other businesses. C&W treats such information as confidential, and does not release it to any persons other than those within the company who strictly need to know.

Further to Regulation 3(d)(i), disclosure of the cost, network, vendor and billing information in this submission can reasonably be expected to result in significant financial loss to C&W, and significant financial gain to its competitors, if it were disclosed to the public. Disclosure would enable them to develop competitive and targeted marketing and pricing strategies, designed to "cherry-pick" customers in Cayman. The result would be to C&W's significant financial loss.

Further to Regulation 3(d)(ii), disclosure of the cost and billing information can reasonably be expected to prejudice the competitive position of C&W. C&W notes that disclosure of the information would provide to C&W's actual and potential competitors details of C&W's cost and revenue structure. C&W's competitors and potential competitors would use this information to create marketing strategies that would more effectively respond to C&W's marketing and pricing strategies, which would significantly impair C&W's competitive position in a highly competitive marketplace.

As noted above, the details of this submission and disclosure has been restricted to a limited number of key individuals in the company.

The confidential details in this submission relate to the market for various mobile and Internet services in the Cayman Islands. As the Authority is aware, that market is highly competitive, and disclosure of the confidential information in this submission would cause C&W specific direct harm. Because of the nature of the data, the extent of that harm is not limited by the currency of the information. Accordingly, C&W requests that the confidential information in this letter be treated as confidential on an on-going basis.

The public interest does not require disclosure of this confidential information (except to the Authority). As noted above, disclosure would significantly prejudice C&W. Further, disclosure to the public (other than the Authority) is not required, as the Authority is responsible for administering the imputation test under C&W's Licence.

Further to Regulation 4(1)(c) of the Regulations, C&W will be submitting a redacted version by Thursday, 22 April, 2004. All confidential information in this submission will be replaced by "###". Redacted versions of these spreadsheets too will be submitted with the redacted text.

Enhanced Features

In paragraph 108 of Decision 2004-1, the Authority asks for cost information on enhanced features, such as call waiting, caller ID, call forwarding and 3-way calling. The functionality that is provided for with these features is all embedded within the switch. Our mobile FAC model does not disaggregate those costs of the TDMA switch that are associated with these features, and we have no record of there being such a breakdown at the time of purchase of the switch.

What we can offer is a proxy. The incremental cost of service provision is the software as the usage driven hardware element would be negligible. In reflection of this fact, the vendor of our GSM switch sells this feature functionality on a per subscriber basis. In particular, C&W paid the vendor a flat ### US$ for costs associated with MSC-based features (see list attached in Appendix A) per user. The lifetime of the switch is ### years, so amortizing this cost over that period we get ###/###years/12 months= ### cents per subscriber per month. The Authority could use this figure in its imputation test, however, we emphasize that because the cost associated with enhanced features are already embedded in the aggregate value of the switch in the FAC, any allocation to

enhanced services would have to be accompanied by a one-for-one reduction in switching costs attributed to conveyance or call set-up.

Call records are not kept that would enable the Authority to quantify the volumes of how often these features are used, so we cannot give the Authority volume information by feature type, overall, let alone by plan.

Maintenance and additional support cost per additional handset

In paragraph 108, the Authority asks for information on the maintenance cost and additional support per additional handset. The support provided for additional handset sales are almost exclusively labour costs associated with sales and support staff. Sales representatives have estimated that on average it takes around ### minutes to support an additional handset. C&Ws Human Resources department reports than an average hourly wage for customer support staff is CI$ ### per hour. Assuming the average contract life for a handset is 2 years (estimated by our marketing department), the cost is therefore $###*(### hours)/24 months= ### cents per month over the average contract life. Note that our representatives report that customers very seldom return to C&W for maintenance of existing handsets. They return to upgrade their technology or plan.

Plan Migration Costs

The Authority also asks C&W for the additional costs associated with plan migration costs, including subscriber plan termination costs. It is not entirely clear what information the Authority is seeking. For example, if the question refers to cost incurred to implement the migration that took place on March 9, then the answer is that the cost per customer is negligible. If the question is how much cost is associated with a customer applying on an individual basis to migrate from one plan, then the answer depends on whether the customer is staying with the same technology or not.

As with additional handset support, the costs of migrating from one plan to another are, as a rule, exclusively labour related. In the case of changing plans but keeping the existing TDMA or GSM technology, the customer support staff can effect the changes in under ### minutes. Using the same methodology as above we get a cost of $###*(### hours)/24 months= ### cents per month over the contract life.

If the customer is changing technology, staff must access the billing database, cease the customer on the TDMA system and reprovision in the GSM system. In this latter case, our staff reports that this can be done within ### minutes. Again, taking the same wage and contract life assumptions as above, we can estimate the costs as $###*(### hours)/24 months= ### cents per month over the contract life.

Explanation for proportions of minutes used in plans in C&W imputation tests

In paragraph 108, the Authority asks for information on costs referred to paragraph 90. Although not strictly speaking "cost" information, the Authority questions the source of the proportions of minutes used in the plans for mobile to fixed or mobile to mobile. In the attached Appendix B, we include the minutes that lie behind those proportions.

These volumes are pulled from the same billing period as the imputation test data submitted by C&W and are fully consistent with that data. The only additional comment is that for b350 GSM postpaid plan there was no prior analogous plan, so C&W had to introduce an assumption. We used what we feel is a reasonable assumption of the overall ###%-###% GSM postpaid split.

Cost input numbers

In paragraph 108, the Authority asks for information on "other costs" identified in paragraph 90. We understand that this to be a reference to the references in paras 90b and 90c, both of which deal with data found in Appendix 9 of our response to mobile imputation interrogatory 6. With respect to Section 90c, the Authority states that C&W did not provide sufficient explanation for why it had changed costs associated with certain call types. Para 90c cites the fact that C&W did not provide links to the FAC model, presumably because this would have enabled the Authority to see clearly where the unit costs originated from. In response to these problems, C&W has amended its Appendix 9 (attached as Appendix C) to identify clearly where each of these costs come from. We also provide a narrative below.

Call Type a) Origination on C&W Mobile in CI terminating on C&W fixed line in CI

i. Mobile to Radio Tower –Origination. This sources the C&W mobile origination cost from a disaggregation carried out within the adjusted mobile FAC model, in which routing factors were used on the end-to-end mobile cost to identify separate origination and termination costs for C&W mobile. In Appendix C, we include the relevant sheet "network service unit costs" from the mobile FAC with the disaggregation. It can be seen from rows ### and ### and ### and ### what the conveyance and signaling/set-up unit costs for, respectively origination and termination. The unit cost for associated with mobile origination on the radio segment is given in cell ###. There is only a conveyance cost here and no signaling/set-up.

ii. Tower to Mobile Switch –Origination. As above, with the unit conveyance cost given at ###.

iii. Switch processing-Origination. As above but in addition to the conveyance portion found in ###, there is also a signaling/set-up portion to unit costs, ###. We have "minutized" the call-driven signaling/set-up portion, by dividing by the average duration of calls found in the mobile FAC ###. We have assumed that the overall routing for the processing portion of ### is divided up as ### for the

origination portion and ### for the terminating portion. This is because it is assumed that termination requires more processing power than origination.[1]

iv. Prepaid platform. As the Appendix deals with the costs associated with both prepaid and postpaid plans. The cost from the FAC cost model for the prepaid platform is included. Mobile FAC model ### at cell ###.

v. Digital Trunk Channels-Interconnect. As the mobile to fixed traffic crosses the interconnect between the mobile and fixed network, the DTC costs must be included: FAC model ### at ###.

vi. Mobile Switch-to-Fixed Switch link. The mobile FAC does not generate the cost for the interexchange link between mobile and fixed switches necessary for interconnect. That data is held in the fixed FAC model. For the interexchange link, we chose the RSS to Host exchange link costs (###), we believe that these costs are likely to be overestimate the true costs as the distance between a typical RSS and its Host exchange is longer than the distance between the TDMA MSC and the Fixed switch in Georgetown (as they are located in the same area).

vii. Interconnect Specific costs are found in the fixed FAC model in interconnect costs (###). This is because the fixed FAC model was the source for financial information to establish C&W costs associated with 3rd party interconnect. These costs must be imputed to C&W mobile just as they are borne by another interconnecting network.

viii. The fixed termination charge is once again found in the fixed FAC model (###). Note to "minutize" the call-driven portion of the fixed termination, we have used the average call duration found in the mobile FAC model (###).

ix. Fixed National transit. Not Applicable in this case.

x. Fixed International Transit. Not applicable in this case.

xi. International Outpayment. Not applicable in this case.

xii. Roaming Partner Network. Not applicable in this case.

xiii. 3rd Party mobile termination. Not applicable in this case.

xiv. Voicemail platform. Not applicable in this case.

xv. Mobile Switch Processing-Termination. Not applicable in this case.

[1] See Monopolies and Mergers Commission. Cellnet and Vodafone. Reports on references under section 13 of the Telecommunication Act 1984 on the charges made by Cellnet and Vodafone for terminating calls from fixed-line networks.

xvi. Tower to Mobile Switch-Termination. Not applicable in this case.

xvii. Radio Tower to Mobile Switch-Termination. Not applicable in this case.

xviii. Total is simply the sum of the preceding columns.

xix. Network Opex. The mobile FAC model establishes network opex as a ratio of network capital costs. In particular, the ratio is ###. It appears that there was an error in the original costing where network was treated as ### of network capital costs, but applied to too many network element costs. In creating the link, we have simplified the presentation by embedding the appropriate network cost figure directly: ### in the mobile FAC, cell ###.

xx. Direct Retail costs are determined by summing the Own network costs and Network Opex and multiplying by the ratio of support costs that is discussed in the response to Mobile Imputation Test Interrogatory 8. There may have been an error here as ### appears to have been applied across too few network elements.

xxi. Summation of all the cost components.

Call Type b) Origination on C&W mobile in CI terminating on C&W mobile in CI

i.-iv. are the same as in Call Type a)

v. Digital Trunk Channels-Interconnect. Not applicable in this case as there is no interconnect within the same network

vi. Mobile Switch to Fixed Switch link. Not applicable in this case.

vii. Interconnect Specific Cost. Not applicable in this case.

viii. Fixed National transit. Not Applicable in this case.

ix. Fixed International Transit. Not applicable in this case.

x. International Outpayment. Not applicable in this case.

xi. Roaming Partner Network. Not applicable in this case.

xii. 3rd Party mobile termination. Not applicable in this case.

xiii. Voicemail platform. Not applicable in this case.

xiv. Mobile Switch Processing-Termination. Here the analogous to the Processing-Origination except the processing receives a different routing. We

source with the mobile FAC with disaggregation at ### and ### and utilizing the termination routing factor ### discussed above. Again to minutize the setup/signaling cost the average duration of calls found in the mobile FAC "assumption" sheet D146 is used

xv. Tower to Mobile Switch-Termination. These costs are analogous to Tower to Mobile Switch-Origination.

xvi. Mobile to Radio Tower -Termination. These costs are analogous to Mobile to Radio Tower -Origination.

xvii. As in Call Type a)

xviii. As in Call Type a)

xix. As in Call Type a), but sourced from the mobile FAC model ###

xx. As in Call Type a)

xxi. As in Call Type a)

Call Type c) Origination on C&W mobile in CI terminating on C&W Mobile outside CI

i.-vii. are the same as in Call Type a)

viii. Fixed termination. Not applicable as interconnect is used to gain access to international transit, not domestic termination.

ix. Fixed National Transit. Not applicable as interconnect is used to gain access to international transit, not national transit.

x. Fixed International Transit. C&W imputed the Fixed international transit fee from the fixed FAC model. This includes the per minute conveyance cost (###) as well as the minutized call set-up/signaling cost ###. To "minutize" we use the average duration of an outbound international call.

xi. International Outpayment denotes the settlement payment C&W would pay to terminate traffic in a foreign destination. This varies between on average ### and ### cents CI$ depending on destination region.

xii. Roaming Partner Network. Between ### and ### depending on country partner. See original C&W imputation submission proposal dated 10 March 2004.

xiii. 3rd party mobile termination. Not applicable in this case

xiv. Voicemail platform. Not applicable in this case

xv. Mobile Switch Processing-Termination. Not applicable in this case

xvi. Tower to Mobile Switch-Termination. Not applicable in this case

xvii. Mobile to Radio Tower -Termination. Not applicable in this case

xviii. As in Call Type a)

xix. As in Call Type a)

xx. As in Call Type a)

xxi. As in Call Type a)

xxii. As in Call Type a)

Call Type d) Originating on C&W Mobile terminating on 3rd party mobile in CI

i.-vii. are the same as in Call Type a)

viii. Fixed termination. Not applicable as interconnect is used to gain access to national transit, not domestic termination.

ix. Fixed National Transit. C&W imputed the Fixed international transit fee from the fixed FAC model. This includes the per minute conveyance cost (###) as well as the minutized call set-up/signaling cost ###. We note that we have "minutized" the call-driven signaling/set-up portion, by dividing by the average duration of calls found in the mobile FAC ###.

x. Fixed International Transit. Not applicable as interconnect is used to gain access to national transit, not international transit.

xi. International Outpayment. Not applicable in this case.

xii. Roaming Partner Network. Not applicable in this case.

xiii. 3rd party mobile termination. We have assumed the highest interim termination rate paid to 3rd party mobile networks

xiv. Voicemail platform. Not applicable in this case.

xv. Mobile Switch Processing-Termination. Not applicable in this case.

xvi. Tower to Mobile Switch-Termination. Not applicable in this case.

xvii. Radio Tower to Mobile Switch-Termination. Not applicable in this case.

xviii. Same as in Call Type a)

xix. Same as in Call Type a)

xx. Same as in Call Type a)

xxi. Same as in Call Type a)

Call Type e) Originating on C&W Mobile terminating on 3rd party mobile outside CI

i.-vii. are the same as in Call Type a)

viii. Fixed termination. Not applicable as interconnect is used to gain access to national transit, not domestic termination.

ix. Fixed National Transit. C&W imputed the Fixed international transit fee from the fixed FAC model. This includes the per minute conveyance cost (###) as well as the minutized call set-up/signaling cost ###. We note that we have "minutized" the call-driven signaling/set-up portion, by dividing by the average duration of calls found in the mobile FAC ###.

x. Fixed International Transit. C&W mobile doesn't incur any additional cost for the routing once past the fixed national transit and crossing into 3rd party mobile network.

xi. International Outpayment. C&W mobile doesn't incur any additional cost for the routing once past the fixed national transit and crossing into 3rd party mobile network.

xii. Roaming Partner Network. C&W mobile doesn't incur any additional cost for the routing once past the fixed national transit and crossing into 3rd party mobile network.

xiii. 3rd party mobile termination. This termination rate is paid by C&W mobile irrespective of where the 3rd party customer is located. We have assumed the highest interim termination rate paid to 3rd party mobile networks

xiv. Voicemail platform. Not applicable in this case.

xv. Mobile Switch Processing-Termination. Not applicable in this case.

xvi. Tower to Mobile Switch-Termination. Not applicable in this case.

xvii. Radio Tower to Mobile Switch-Termination. Not applicable in this case.

xviii. Same as in Call Type a)

xix. Same as in Call Type a)

xx. Same as in Call Type a)

xxi. Same as in Call Type a)

Call Type f) Originating C&W mobile terminating on voicemail

i.-vii. are the same as in Call Type a)

viii. Fixed termination. Not applicable as interconnect is used to gain access to the voicemail platform, not a PSTN subscriber.

ix. Fixed National Transit. C&W imputed the Fixed international transit fee from the fixed FAC model. This includes the per minute conveyance cost (###) as well as the minutized call set-up/signaling cost ###. We note that we have "minutized" the call-driven signaling/set-up portion, by dividing by the average duration of calls found in the mobile FAC ###.

x. Fixed International Transit. Not applicable as interconnect is used to gain access to the voicemail platform, not international transit.

xi. International Outpayment. Not applicable in this case.

xii. Roaming Partner Network. Not applicable in this case.

xiii. 3rd party mobile termination. We have assumed the highest interim termination rate paid to 3rd party mobile networks

xiv. Voicemail platform. Platform usage cost source from fixed FAC model ### for per minute conveyance costs and ### for per call set-up/signaling costs. These latter were minutized by dividing by the average duration of voicemail calls found in the fixed FAC ###.

xv. Mobile Switch Processing-Termination. Not applicable in this case.

xvi. Tower to Mobile Switch-Termination. Not applicable in this case.

xvii. Radio Tower to Mobile Switch-Termination. Not applicable in this case.

xviii. Same as in Call Type a)

xix. Same as in Call Type a)

xx. Same as in Call Type a)

xxi. Same as in Call Type a)

Prepaid Hiptop Imputation Test

In paragraph 109, the Authority asks for an imputation test for C&W hiptop Prepaid product. It has requested this imputation test in light of its initial findings on bFree Anytime set out in Decision 2004-1, in which it portrays a failed imputation test.

As we noted in our original imputation test, we believe that the voice costs associated with the hiptop can be examined on the same basis as the bFreeAnytime plan, i.e., on the basis of the FAC costs as they are representative of a digital mobile network. It is the GPRS platform and associated connectivity costs that lie beyond the scope of the FAC mobile model and must be added. On the revenue side, a charge of $1.32 per day is charged to active hiptop prepaid users to cover the GPRS costs.

We note that, since the issuance of Decision 2004-1, C&W has applied to the Authority for a reversal of those findings as the Authority appears to have omitted revenue. In particular, we believe that when account is taken of the 25 cents daily charge, even the Authority's version of the imputation test turns positive. Therefore, in our examination of the imputation test for hiptop prepaid, rather than recreate the analysis of bFreeAnytime for the voice costs, we demonstrate that the $1.32 per day is adequate to cover the GPRS costs plus make an additional contribution of more than 25 cents per day per customer for voice costs.

With respect to costs, we must examine the three types a) costs associated with the Jamaica-based GPRS platform, b) connectivity to the platform via CFJS and c) costs associated with the special server, rendering and caching supplied by our vendor.

The cost sharing for the Jamaica-based GPRS platform has not been formalized among the business units. However, C&W Cayman believes it has identified the relevant costs for the platform and have an understanding of how the costs of related joint projects have been shared in the past, so a representative costing can be carried out.

In particular, given the investment costs of the project, the C&W regional business units negotiate ###. We note that since the ### are the subject of negotiation, they may or may not be consistent with, respectively, ###. In the cases of cost sharing of the GSM switch and the GSM ### prepaid platform, ###. These are assumption used in our analysis for the GPRS costs.

The actual equipment that constitutes the GPRS platform is given in the Appendix D in sheet "GPRS&Customers". We note that the ### components are located within six of the participating business units territory. Cayman has one solely for its own use. We have therefore attributed 1/6 of the entire ### cost to Cayman. The other components of the platform--###--are shared on the basis of the relative number of GSM subscribers in each participating Cayman's share is determined on the basis of an estimated relative number of GSM subscribers.

The capital costs used are the vendor prices (see sheet "gross vendor platform prices"). These are adjusted by an overall discount and CIP (shipping). The adjusted vendor price is then uplifted by duties, local delivery and installation. The assumptions on those uplifts are given the spreadsheet and again are consistent with assumptions used in related projects. See sheet "Cost Calculation". For opex we have used an estimated staff cost that is equivalent to that provided in the cost sharing arrangement for the ### prepaid platform. We note that there is no incremental maintenance costs as these are covered under a general agreement with the vendor for GSM equipment.

With respect to connectivity to the platform, we have used the kbps estimates for the CJFS cable that are consistent with the filing we made for our ADSL costings to the Authority (on date 12 March 2004). These estimates are found in the "Bandwidth to Jamaica" sheet. We note that the theoretical top download speed of the hiptop is 64kbps. This is the figure we use in our estimates. Connectivity between the GPRS platform and the Internet is not established through dedicated facilities. Moreover, the incremental costs are negligible ###.

Finally, our vendor for webserver, rendering, compression and caching associated with the Hiptop product charges us a flat $US### per customer. Assuming an average customer life of ### months as we have elsewhere enables us to unitize this cost to a per day basis.

As the Cost Calculation spreadsheet demonstrates the monthly cost associated with providing GPRS to the Cayman subscriber is around ### per month or ### cents per day. The daily charge of CI$1.32 per day offsets this cost by CI$###cents. CI$### cents exceeds the 25 cents discussed above. We therefore deem prepaid hiptop to have passed the Authority's imputation test."

Yours sincerely
Cable & Wireless (Cayman Islands) Limited

["Signed"]_____
Rudy B. Ebanks
Vice President, Regulatory and Carrier Relations

Cc: Mr. Timothy Adam, C.E. Cable & Wireless (CI) Ltd.
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