Cable & Wireless

Comments on the 21 April submissions and 2 June interrogatory responses in the ICTA's public consultation on the FLLRIC Manual

(Ref: CD 2005-1)

7 July 2006

Introduction

1. Cable and Wireless (Cayman Islands) Limited ("C&W") is pleased to have the opportunity to comment on other interested parties' submissions and responses to interrogatories made over the last two and a half months in respect of the FLLRIC model. The only submissions made to date have been by Digicel, one on its behalf by its consultants, Ovum, the other–the responses to our interrogatories–by Digicel itself. We organise these comments along the main lines of assertions Digicel/Ovum have made in their submissions, namely whether

- the FLLRIC model uses least-cost technology and efficient network design for the fixed network,
- it is fair to model the networks as self-standing,
- the approach to asset lives and depreciation is appropriate,
- expense factors used in the model are consistent with benchmarks,
- WACCs for the mobile and fixed models are appropriate,
- the approach to cell-site location is in accordance with the scorched node principle, and
- various demand and technical assumptions are representative.

Least cost technology and efficient fixed network design

2. Digicel/Ovum asserts at page 5 of its 20 April submission, that IP technology is not the least cost technology currently available and operational in the market place. Digicel/Ovum states:

"…the use of IP technology exaggerates fixed network costs, probably because of higher asset costs…and definitely on the basis that C&W claims short depreciation periods for these assets."

3. C&W rejects this assertion. The IP-based network is lower cost in comparison with traditional PSTN equipment even in consideration of the shorter asset lives. The table below demonstrates this by comparing the annualized capital costs and depreciation of traditional PSTN assets (data from 2005 using C&W asset register and the same analytical approach to network opex as used for the expense factors in the LRIC study) and NGN network elements as produced by the LRIC model.

Table 1. Comparison of PSTN and NGN Network Assets Costs (all values in CI$)

	PSTN Network Assets			LRIC NGN Assets			Difference in Total Cost
	Annualised Capital Cost	Network Opex	Total	Annualised Capital Cost	Network Opex	Total	
International Transmission	##	##	##	##	##	##	-62.84%
Switching (PSTN: Host-RSU) vs. (NGN: MG, Softswitch-MSE)	##	##	##	##	##	##	-10.04%
Domestic Transmission	##	##	##	##	##	##	-0.49%
Access (Local Loop)	##	##	##	##	##	##	6.75%
Interconnect (billing platform and interconnect specific)	##	##	##	##	##	##	-67.55%

4. We note that the NGN equipment pricing that we used in the model was at the time of contract signing for these equipment in late 2003, early 2004. We are currently verifying new pricing with our vendor to capture the latest possible pricing. This no doubt will bring the fixed LRIC model costs down further.

5. Digicel/Ovum also expresses doubt as to whether C&W is actually implementing this technology in its network. The Authority will be aware of the progress we have been making on the implementation of our Next Generation Network. We include as part of our confidential submission a network diagram of a) the current network configuration highlighting the IP network elements already installed and b) the planned network which should be installed by ##. See Appendix A and B.

6. Digicel/Ovum asserts that "…by basing its fixed network model on IP technology, C&W has merely increased the costs associated with basic services..." This is simply not true. In addition to the observations we make above, the impact of the extent of the cost base reduction on individual services will depend on the volumes assumed. It is true that many fixed network service volumes have dropped since the previous (fully allocated) cost modelling undertaken by C&W thereby raising unit costs. This is due mainly to the massive fixed to mobile substitution caused in part by the pricing of mobile termination driven by Digicel and AT&T Wireless Ventures. However, rather than assume current volumes, we have assumed a certain amount of growth in fixed services. The Authority's focus in respect of this issue would be better spent on volumes rather than the overall IP costs. In our confidential Appendix C, we have included C&W's actual volumes alongside the volumes we submitted with the model. In those volumes it is clear that there is substitution between traditional and IP services and increased usage in those services using the IP network.

7. Digicel/Ovum states that moving to IP technology is not consistent with an assumption of GSM technology, and the "corresponding approach within mobile networks would be to build the model on the basis of 3G technology, which is also the 'latest available technology currently in use', capable of supporting new services, and operators in the Cayman Islands are 'currently moving towards' this technology." This position is also untenable. Replacement of GSM technology is not currently being considered by C&W, and no other operator we are aware of is implementing this[1]; whereas our IP upgrade is underway and we are aware of competitors[2] implementing similar IP technologies as well.

8. They also claim that the implementation of IP technology is inappropriate because the model doesn't incorporate new services that would make the technology economical. This is not accurate either. We have assumed that a number of services that are now provided on a traditional basis would be converted to IP, such as Frame Relay. More significant, however, is the central role of the ADSL service, which carries with it voice and multi-media traffic, and the fact that all voice services are provided over an IP core. Finally, this question comes back to volumes and, rather than assume current volumes of services are offered, we have assumed a certain amount of growth in fixed services—new and existing. Again, the Authority can consult Appendix C.

9. The final set of comments Digicel/Ovum make in this regards is that, if IP technology is to be employed, more network rationalisation must be built into the model. First, it is important to keep in mind that Digicel/Ovum's thesis underlying this suggestion is that C&W's modelling replaces "low-cost equipment with high-cost" - which we have already demonstrated is not true.

10. Second, by way of justification they utilise a misinterpretation of our statement in respect of fixed switching capacity on page 40 of our fixed network manual. Our statement is that the configuration has sufficient capacity to support all traffic volumes because--like most major pieces of core network equipment, whether IP or traditional PSTN--the minimum capacity available on the world market is enough to cover a market the size of Cayman.

11. Furthermore, the kind of rationalisation that Digicel/Ovum proposes is only possible for networks with a multi-level hierarchy. Digicel/Ovum themselves must sense in part the absurdity of their suggestion when they state "Granted in an island economy such as Cayman there is not the same scope for rationalisation as in the UK, but there is clearly scope for some reduction in C&W's network with the deployment of IP." If this is so "clear" to Digicel/Ovum, they may wish to be more specific, because in a two-switch network, we don't see it. In fact, the RSU locations modelled in the network actually understate the site requirements for the new network, as C&W will have to bring the IP platform closer to the home in order to provide effective broadband service to all residences.

12. Digicel/Ovum's statement that the fixed network currently modified is "grossly inefficient" is therefore untrue and unsubstantiated.

Self-standing Networks

13. The subject of whether the fixed and mobile networks should be self-standing spawns a number of false assertions—about economies of scale and scope and new entrant disadvantage--that the Authority must decisively reject. The Law and regulations of the Cayman Islands, as well as the policy of the Authority itself, have wisely kept to a well-grounded basis of costing: that it should reflect that of an

[1] It is not a surprise therefore that when we put it directly to Digicel to name any operator implementing 3G in Cayman, they were unable to do so. See Digicel's 2 June response to C&Ws Interrogatory 5.
[2] Westtel, Telecayman and CaymanOne.

efficient network operator. The particularities of Digicel's or C&W's business or investment plan is not relevant. It is a question of what an efficient competitor network would be installing today.

14. Furthermore, for every claim that Digicel comes up with where C&W has an unfair advantage in its cost-base, one can find another where Digicel has offsetting advantages. It may be that, C&W once—probably measurable in a matter of several months--had more economies of scale than Digicel. However, Digicel now has the biggest mobile network in the Caribbean, and this argument has no merit anymore. It may be that C&W can exploit some economies of scope between its fixed and mobile networks, but it is also saddled with legacy systems which raise its costs. Furthermore, Digicel and other new entrants have innovations that greatly reduce many of their costs relative to C&W. For example, Digicel's use of third party sales channels greatly reduces their costs of bringing a product to market. In fact, it is a significant economy of scope exploited through partnering through sales channels.

15. The fact is that the competitive market is indifferent to these particularities. Costs are driven down to the level of the most efficient operator. Companies can adapt, by changing their business model, or not and bear the negative financial consequences. The regulator should not be attempting to map every operator's cost differences, because in the long-run, they do not matter.

16. Reciprocity in costs is a recognition that costs are a product of competition, endogenous to the market, not a tool by which the regulator should adjust rates of return for individual operators. An approach of mapping company-specific and transitory costs runs counter to a policy of designing regulation to mimic competitive results.

17. Ovum has over-zealously pursued its client's needs in this regard. This is patently clear in its statement that it "believes that ignoring site-sharing and infrastructure sharing is by definition in violation of ICTA Principle 1, which requires costs to be efficiently incurred and to provide the right incentives for efficient facilities-based investment, entry and exit."[3] And yet they try to deny any such economies may exist to a mobile operator in the effort to prop up Digicel's demands for high costs.

18. However, the fact is that the way the model works disproportionately minimizes any relative advantages C&W might enjoy. For example, Digicel/Ovum warn "the failure to account for [common] costs… excludes the substantial economies of scope enjoyed by C&W (and not other operators), so exaggerating C&W costs relative to other operators." The relevant components of this presumed cost "exaggeration" include: site-sharing, duct-sharing, equipment co-location, treatment of mobile transmission networks, WACC and use of equipment only for Cayman when there is excess capacity that could be used internationally. We look at each of these in turn.

- Site-sharing. For the mobile network the model uses average rentals for sites whether in actual practice the site is shared with the fixed network or not. Thus, for the mobile network, no economies of scale are exploited. The fixed network is allocated only those costs that it shares with the mobile network, therefore exploiting whatever benefit of the lower economies of scale.

- Duct-sharing. The fixed network is dimensioned to provide capacity for all the fixed services, including the wholesale service to the mobile network. Cell site links, however, are modelled on leased line market rates. Again, therefore, the fixed network cost-base is lowered through cost-based pricing, whereas the mobile network costing is imputed through tariffed services.[4]

[3] Section 2.2 of the Ovum submission

[4] It should be noted that such imputation does allow the mobile network to take advantage of the economies of scale, but they are economies that any network operator could take advantage of.

- Equipment co-location. Most all equipment co-location costs tie back to leasing costs for buildings. It is quite likely that on an expense factor basis these types of costs are not that different from those benchmarked against self-standing networks. In other words, in actual fact there aren't great economies of scale enjoyed by C&W in equipment co-location compared to other self-standing operators elsewhere in the world. Please see section on expense factors below.

- Treatment of mobile transmission networks. See our comments under "Duct sharing" above.

- WACC. We will be dealing with this as a separate issue in section on WACC.

- Use of equipment only for Cayman when there is capacity that could be used internationally. This is an obscure reference. We do not know of capacity in Cayman that could be used for "international" purposes. If the issue here is international capacity that C&W can exploit more efficiently by aggregating both its mobile and fixed traffic, we reject this as a relative advantage. There are competitive international facilities now on the market that exhibit unit costs that are very similar to what we experience. The international cable market has become highly competitive in the region serving new players that jointly, if not individually, generate more traffic than C&W.

19. Thus, despite our belief that asymmetric treatment should be rejected as a matter of principle, C&W has incorporated much of Ovum "requirements" that the mobile operator be treated as self standing, and the fixed network be treated as integrated.

Asset Lives and Depreciation

20. Apart from what we find to be an untenable position of rejecting the use of shorter asset lives for the IP network, Digicel/Ovum expresses dissatisfaction with the duration of 20 years for duct, pole and manholes. We acknowledge that 20 years represents a low end of the range normally used for such, but given the recent replacement requirement post-Ivan, it turns out to be quite reasonable. However, we will of course accede to the Authority's opinion on this matter.

21. Digicel/Ovum notes that in the manual there is some contradictory language used to describe the approach to depreciation. C&W regrets if there was confusion caused by the text, but in the model there is no inconsistency. We used a simple annuity approach consistently throughout the entire modelling.

22. Digicel/Ovum is also quite right to indicate that we supported a tilted annuity approach in our methodology documents. We never received any clear guidance on the issue from the Authority, and, as simple annuity does not require any price trend data, it was simpler to implement. However, we are in fact still prepared to implement a tilted annuity approach.

23. We note, however, that it is not true that tilted annuities always produce reduced capital charges, nor that telecommunications assets always decline in price over time. For example, duct and cable costs are likely to increase. Moreover, Digicel should be aware that, in asking for tilted annuity, it must accept that it will be applied to the mobile as well as the fixed network model.

24. Based on our experience, we believe the asset categories and associated price trends appropriate for the implementation of the tilted annuity approach are the following.

Table 2. Suggested Price Trends for Tilted Annuity

Asset Category	Annual real price trend
GSM technology	-8.5%
Land and buildings	1.0%
Access network	1.0%
NGN MGs, MSEs and SoftSwitches	-8.5%
Transmission (backhaul and electronics)	-7.5%
Submarine Cable IRUs	-7.5%
IT equipment	-8%

Expense Factors

25. Digicel/Ovum have asked C&W to present its expense factors in such a way as to compare them with benchmarks on the public record.[5] We note that, in response to our question as to what Digicel/Ovum meant by "capital cost" in its response, Digicel was not very helpful.[6]. They suggest that these are based on annualized GRC, but this is not, in our experience, how expense factors are typically reported. More typical is annual opex as a percentage of investment or gross replacement cost of the asset. We ask Digicel to clarify once more what it intends by capital costs. Moreover, it was not clear from its submission whether Digicel was referring to these benchmarks applying to the fixed or mobile network or both. In the table below we present our results under both definitions of "capital costs" for both networks.

[5] Section 2.5 of the Ovum submission.

[6] Digicel responded that capital costs were "annualized costs of assets and associated capitalized items". Thus, it is not clear on what basis the investment costs were annualized or whether depreciation was included. Further Digicel states that "operational expenditure comprises annual non-recurring cost items". Needless to say, we are still in the dark about what is being proposed.

Table 3. Expense Factor Comparisons

			C&W Fixed Network Model		C&W Mobile Network Model	
Category	Benchmark %	Ovum benchmark	C&W results with definition of "capital cost" as GRC	C&W results expense factor with a definition of "capital cost" as annualized costs (depreciation + return on capital)	C&W results with definition of "capital cost" as GRC	C&W results expense factor with a definition of "capital cost" as annualized costs (depreciation + return on capital)
Indirect network "capital costs"	% of direct network "capital costs"	10-15%	##%	##%	##%	##%
Direct network opex	% of direct network "capital costs"	10-15%	##%	##%	##%	##%
Indirect network opex	% of direct network opex	20-30%	##%	##%	##%	##%
Common costs	% of direct network "capital costs"	5-10%	##%	##%	##%	##%

26. The divergences between the Ovum benchmarks and C&W results may also have as much to do with the definitions applied for "indirect opex", "direct opex" and "common costs" as the definition of "capital costs". Unfortunately, Digicel/Ovum was not helpful in defining what is a direct vs. indirect cost either. We have therefore included here a list of the cost categories underlying our expense factor analysis for the fixed and mobile networks. Again, we hope that Digicel/Ovum can shed light on what exactly the benchmarks it provided are meant to mean in their Reply Comments.

Table 4. Fixed Network Expense Factor Composite Costs

Indirect Capital Cost
Freehold Technical Infrastructure - Fixed Network
Furniture and Fittings - Fixed Network
Computers - Fixed Network
Building Infrastructure - Fixed Network
Vehicles - Fixed Network

Direct Network Opex
Maintain & Repair Distribution Network
Provide Underground Distribution Network Cabling
Provide Aerial Distribution Network Cabling
Provide Basic Business Telephony Services
Provide Basic Residential Telephony Services
Maintain National Transmission Technologies
Maintain National Transmission Infrastructure
Provide National Transmission
Provide National Switching Equipment
Maintain National Switching
Maintain Internet Services Equipment
Provide & Maintain Other Service Platforms
Provide & Maintain Payphone Services
Provide & Maintain VAS
Provide & Maintain Voicemail
Provide & Maintain ADSL Services
Provide Dial Up Internet Services
Provide Direct Connect Internet Services
Provide Domestic Frame Relay
Provide Domestic Leased Lines
Provide Fixed Network Prepaid Calling Card Services
Provide Internet Services
Provide Operator Assistance
Provide Wholesale ISP Services
Maintain International Transmission
Provide International Frame Relay
Provide International Leased Lines
Maintain Interconnection Services
Provide Interconnection Services
Satellite charges- earthstation
Network Management Charges
Call centres
Underground Line Plant
Submarine Cable
Cable Circuit/Pole Rentals
Consultancy Fees
Engineering Support
Intelsat Space Segment Rentals
Exchange Equipment
Overhead Line Plant

Indirect Network Opex
Plan Distribution Network
Monitor Distribution Network
Plan Core Network
Monitor Core Network
Billing: Manage Interconnect Billing
Manage Fixed Interconnect Specific Requirements
Plan & Monitor Interconnection Services
Respond to Other Local Operators (OLOs)
Support Regulatory Costing
Prepare Quotations for Fixed Interconnect Services
Carrier Sales & Operations
Carrier Service Billing
Management Support
Support Fixed Network

Common Cost
Billing: Collect Call Data
Billing: Systems support
Manage Disaster Recovery Process
Provide Operational Support Systems
Maintain Generators
Maintain Network Buildings
Manage Disaster Recovery
Manage Insurance Premium & Claims
Janitorial Services
Building Repairs
Electricity - General
Electricity - Trinity Square
Finance, accounting and budgeting - Networks
Human Resources - Networks
Provide Business Support Systems - Networks
Provide Legal Services - Networks
Manage Corporate Affairs - Networks
Provide Strategy & Policy - Networks
Provide Public Relations - Networks
Administer Government & International Relations - Networks
Manage Security - Networks
Operate Fleet - Networks
Procurement & Stores - Networks
Manage Admin Buildings - Networks
Manage Switchboard - Networks
Property Rentals - Networks
Fleet Expenses - Networks
Security Expenses - Networks
Management Office
Billing licences
Business support
Management Support
Billing Support
Audit Fees
Bank Charges
Computer Bureau, Licence Fees & Central Systems
Licence Royalty
Management Fee
Sundry Financial Charges
Regulatory Authority Fees

Table 4. Mobile Network Expense Factor Composite Costs

Indirect Capital Cost	Common Cost
Freehold Technical Infrastructure - Mobile Network	Billing: Collect Call Data
Furniture and Fittings - Mobile Network	Billing: Systems support
Computers - Mobile Network	Manage Disaster Recovery Process
Building Infrastructure - Mobile Network	Provide Operational Support Systems
Vehicles - Mobile Network	Maintain Generators
Direct Network Opex	Maintain Network Buildings
Maintain Cellsites	Manage Disaster Recovery
Maintain Mobile Network	Manage Insurance Premium & Claims
Maintain Mobile Switch	Janitorial Services
Provide Mobile Cellsites	Building Repairs
Provide Mobile Switching Equipment	Electricity - General
Provide Mobile Network Services	Electricity - Trinity Square
Non Broadband Radio Vendor Support	Finance, accounting and budgeting - Networks
Licence Fees - Spectrum	Human Resources - Networks
Courier & Telephone - GSM links	Provide Business Support Systems - Networks
Electricity - Cell Sites	Provide Legal Services - Networks
Non Broadband Radio - E-mail	Manage Corporate Affairs - Networks
Telecoms Equipment - Vendor Support	Provide Strategy & Policy - Networks
Indirect Network Opex	Provide Public Relations - Networks
Plan Mobile Network	Administer Government & International Relations - Netwo
Monitor Mobile Network	Manage Security - Networks
Prepare Quotations for Mobile Services	Operate Fleet - Networks
Manage Mobile Interconnect Specific Requirements	Procurement & Stores - Networks
Support Mobile Network	Manage Admin Buildings - Networks
	Manage Switchboard - Networks
	Property Rentals - Networks
	Fleet Expenses - Networks
	Security Expenses - Networks
	Management Office
	Billing licences
	Business support
	Management Support
	Billing Support
	Audit Fees
	Bank Charges
	Computer Bureau, Licence Fees & Central Systems
	Licence Royalty
	Management Fee
	Sundry Financial Charges
	Regulatory Authority Fees

27. We produce a full set of costs in the confidential appendix D for the Authority to make further inquiries as to the categorization of these costs. However, until these clarifications are made, C&W will not have an opinion as to whether the benchmarks proposed by Digicel/Ovum are acceptable.

WACC

28. Digicel/Ovum asserts that their principal concern with the standard approach to quantifying WACC is that it is a "company specific measure", illustrating the risk-adjusted cost of investing in that business compared with the stock market as a whole."[7] We disagree. The approach that we employ utilizes average values from a range of representative fixed and mobile network operators and adjusts for relevant risk factors that are not company specific. It therefore generates, we believe, a good proxy for the cost of capital of investing in Cayman irrespective of the firm.

29. Furthermore, their proposal that there be a C&W-specific WACC and another WACC for others is fundamentally inconsistent with the basic approach to FLLRIC which seeks to model a single set of representative costs. Again, good policy suggests there is a single efficient opportunity cost for investment in this, as well as any other, market.

30. Digicel/Ovum then go on to make a case for fixed network WACCs being very different from mobile network WACCs. They deride C&W Cayman's evidence for fixed networks by claiming the sample as containing operations with at least 70% fixed revenue from the fixed network. However, the fact that 70% of revenue is from the fixed line does not necessarily mean 30% of revenue is from wireless, as indicated in the Appendices given in the manual. It may include other sources of revenue. More importantly, by adjusting the sample to meet a higher threshold of fixed revenue share, e.g., one with zero wireless revenue, does not change the results significantly.

31. Digicel/Ovum also introduces a selective list of WACCs for "fixed and mobile operators", apparently of incumbent fixed operators and major mobile operators. Digicel was not very helpful in its response to the C&W Interrogatory asking Digicel to identify the actual network operators whose WACCs were listed, the dates or vintages of the WACCs presented, and references to the proceeding or determinations in which these WACCs were considered.[8] C&W has researched some of the WACCs quoted by Digicel/Ovum. In many cases these are both inaccurate and misrepresentative. Specifically at this time we would comment:

32. C&W questions the WACC of 17% shown for French mobile operators given that the regulator, ART, used a WACC of 15% in December 2004, when it designated three mobile operators (Orange, SFR and Bouygues Telecom) as having significant market power (SMP) in mobile termination.[9]

33. The rates shown for Spain also seem outdated. In February 2006, the regulator, CMT, made a decision[10] on the rate of return for Telefonica's fixed network, setting it at (pre-tax nominal) 10% rather than the 12.3% shown by Digicel/Ovum. C&W also does not understand why Digicel/Ovum has reported the mobile network WACC as 18% when the CMT made a series of decisions[11] in the latter half of 2005 that determined the (pre-tax nominal) rate of return on capital for 2005 as 12.49% for Telefonica Moviles; 13.29% for Vodafone and 12.07% for Amena. Taking the average of these three rates would give a WACC of 12.6%.

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[7] Section 2.6 of the Ovum submission.

[8] See response to Interrogatory 9 in Digicel's June response.

[9] Decisions available at www.art-telecom.fr/textes/avis/04/04-937.pdf (Orange); www.art-telecom.fr/textes/avis/04/04-938 (SFR) and www.art-telecom.fr/textes/avis/04/04-939 (Bouygues)

[10] Decision AEM 2004/35. Comision Del Mercado de las Telecommunicaciones (CMT) Feb 23, 2006

[11] CMT Decisions AEM2005/217 (Telefonica), May 19 2005; AEM 2005/488 (Vodafone) June 23, 2005 and AEM2005/985 (Amena), October 20, 2005,

34. Finally, the WACC of 12% shown for mobile networks in the UK was the rate that Ofcom estimated in June 2004. Ofcom revisited this rate in June 2005 and has since estimated the (pre-tax real) cost of capital as in the range 9.1% to 12.9% with a mid-point of 11%.[12]

35. These differences suggest that Digicel/Ovum has been very selective in the rates quoted for the WACC's of different countries, in some cases ignoring the results of the most recent regulatory decisions. This has had the result of inflating the average fixed and mobile WACCs shown in the table on page 9 of Digicel's April 20 submission and exaggerating the difference between the two. In addition Digicel/Ovum had calculated their mobile 'average' incorrectly (17.7% vs. 15.9%) so to further increase the claimed disparity between their fixed and mobile figures. In any case, C&W would question whether such a calculation should bear any weight, however, not least because it is mixing nominal rates with real rates, but also because as has already been noted, these are based on selective rates.

36. A similar criticism can be made of Digicel/Ovum's position on the mobile beta. It presents two cases where the beta was significantly higher than that assumed in C&Ws WACC analysis. But our "estimate" of beta is based on a sample of 29 operators. While a few operators in the sample had betas as high as those referenced in Digicel/Ovum's response, the majority did not.

Cell Sites and the Scorched Node

37. C&W notes Digicel/Ovum's position that, rather than optimizing the number of cell sites as the current version of the FLLRIC model does, to be consistent with the scorched node principle, the model should use existing numbers and locations of cell sites. C&W would be agreeable to this so long as the number is not inflated. C&W notes that before Digicel's recent acquisition of AT&T Wireless in Cayman, Digicel had 36 cell sites. C&W has the same number for its GSM network as well.

Demand and Technical Assumptions

38. Digicel/Ovum cites differences between the treatment of fixed and mobile networks in certain demand and technical assumptions. In some of these cases cited, what may constitute a representative experience may vary somewhat from what C&W proposes. In those cases, we are agreeable to accommodate Digicel/Ovum proposals to modify. In others, Digicel/Ovum is proposing parameters that are designed to raise unduly the cost of the mobile network, and therefore their proposals should be rejected.

39. Digicel proposes, in the Section 3.2 of the Ovum submission, that the busy hour traffic in the two models be modified so that the assumptions in both are the same. While we have empirical evidence to suggest that busy hour traffic does differ between the two networks, we can agree to Digicel's simplifying proposal in this case. We suggest that we take the average of the two divergent sets of numbers and use busy days of 309 and 9% traffic in the busy hour.

40. With respect to unsuccessful calls, Digicel/Ovum say that the assumption of 24% is too low, and that 40% is more realistic.[13] We acknowledge that a rate of unsuccessful calls may actually vary within this range, so we propose a compromise at 32%.

[12] Detail available at http://www.ofcom.org.uk/consult/condocs/wholesale/wholesale.pdf
[13] Section 4.3 of the Ovum submission.

41. Digicel/Ovum's criticisms of the technical assumptions with respect to utilisation and load factors are, we believe, not justified. Firstly, Digicel/Ovum attempts to make an equivalence between the number of parameters made on capacity and the size of the difference between built and theoretically required capacity, i.e., that, simply because the fixed model has more utilisation factor inputs than the mobile model, unduly more excess capacity must be built into the fixed network. This is not true. It is natural that the fixed network has more inputs to describe excess capacity. Fixed networks are more modular in nature, and they require more factors to describe the different aspects of the network. The various capacity ratios in the fixed model are used for different purposes. For example, the 75% provisioning allowance for MGs is concerned with line card provision, and is not related to traffic.

42. Secondly, Digicel/Ovum cite a number of reasons why mobile capacity should be more overbuilt than fixed. These are not justified. For example, it is incorrect to assume that only mobile networks require greater capacity allowance for unexpected events as these can occur in fixed networks also.

43. Finally and most importantly, it is not true that the mobile network utilisation is governed only by one input in the model. An Erlang B calculation is used to dimension the cell site capacity, which is in addition to the 80% transmission utilisation. In fact, if one were to compare the actual Erlang capacity in the network to the actual utilisation, you would be closer to the 150-200% range that Digicel/Ovum is talking about in Section 4.3 of their June submission.

44. In summary, we do not believe any modification of the technical assumptions is warranted.

Conclusion

45. In summary, C&W submits that the methodological approach it has taken to the FLLRIC model is entirely consistent with internationally-accepted principles, and its inputs are fair and representative. Further, it reflects the reality of how the fixed and mobile networks are currently being implemented and deployed in the Cayman Islands. For Digicel to suggest that C&W has somehow contrived to model the results in a way that will be anti-competitive in intent or effect is not just untrue but entirely inappropriate. C&W believes that such accusations would never hold up under scrutiny and are clearly an attempt by Digicel to delay or prevent the introduction of appropriate FLLRIC-based interconnection rates to protect its own interests.