



The Bigger, Better Network.

Response of Digicel SVG Limited

to the invitation by

NTRC

to comment on

**C&W's 17 September submission regarding Access Deficit
Contributions in the ECTEL Member Countries**

November 10, 2008

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SUMMARY

An access deficit (AD) arises when the incumbent is required to price access (primarily the line rental charge) at less than cost. Access means the non-traffic sensitive aspect of the network. In a traditional network 'access' runs from the customer premises back to the line card. An AD does not include other local services or costs.

There should be no expanding of the AD concept to include "local services" in the Eastern Caribbean. This would amount to C&W's competitors being asked to indemnify C&W's local business profitability – something Digicel would fight vigorously. It would also represent a substantial back-peddling from earlier commitments to liberalise. Digicel urges ECTEL isolate itself from the "local service deficit" concept.

There is overwhelming evidence that AD caused network underdevelopment; i.e. ADs cause rather than cure universal service / access problems. In the ECTEL (and indeed in all middle and lower income) countries mobile networks are now the providers of universal access to the network, not the fixed network incumbent. Digicel believes that these 2 facts show the folly of an AD policy.

ADC schemes are abstract and very complicated to design and operate so as to reduce the distortion problems that will to a degree inevitably arise. Expert economists are needed to design such subsidy schemes. The main identifying feature of an interconnection based ADC scheme is that ADCs liabilities are estimated by examining the ADC cross-subsidies generated by the incumbent (C&W). These margins on retail prices are then added to the same services at the point of interconnection of ADC contributors. Not the present scheme or ECTEL's changes or C&W's proposed modifications, include this identifying feature, and as such they are not ADC schemes but are mandated distortionary transfers to C&W from its competitors. This is not surprising given C&W's words from its ADC claim,

"The previous ADCs were negotiated numbers which were not subject to much scrutiny. Some of the rates were negotiated with reference to those in other markets, rather than based on the actual cost in the local market".

Indeed, analysis suggests that where local fixed access is not ring-fenced (as they are in the USA), it is practically impossible to design an ADC scheme that would not distort competition and place "lead in the boots" of new entrants. This is one reason ADCs were never fully implemented in the country that first adopted them (the UK) and were abandoned relative soon after adoption. It is also why they are no longer permitted in the EU.

Moreover, access competition was not envisaged in the design of underlying ADC economic model, and it was certainly not foreseen that mobile networks would in fact become the universal access providers. Rather, an ADC scheme was intended to allow for the introduction

of carrier selection and carrier pre-selection competition without large scale inefficient entry and by-pass of the incumbent where it had an AD. Charging mobile networks ADC also conflicts with the fact the mobile networks are complimentary to fixed networks even though the margin on which they compete is become much broader.

C&W's ADC estimations have largely been redacted which of course prevents Digicel from critiquing the details. However, we show that there are glaring errors in fact and method, including the calculation of a local service deficit rather than an AD. There are also revenues that need to be added and costs removed; things that C&W has not done.

C&W has relied on the draft LRIC model currently under review for cost data and to make cost calculations. In its 11 August comments on the LRIC model Digicel set out in some detail very serious and far reaching flaws in the cost data used in the model and serious flaws in the cost model itself. One such flaw highly relevant to us here is that the main access network values in the LRIC model that C&W uses have not been estimated by the model but are simply values entered by C&W. These 'costs' can not be accepted at face value – indeed nor can any cost figure submitted by C&W to estimate its AD.

Digicel's criticisms of C&W's estimations are presented here notwithstanding the fact that the way the ADCs have been and are calculated lacks all semblance of economic sense demanded by such cross-subsidy schemes.

What is more, Digicel's calculations suggest that no AD exists in Dominica and it is probable that none exists in any Eastern Caribbean state. If an AD does not exist in any ECTEL country then ECTEL should require that all ADC revenues paid to date be returned to the contributors. These calculations are based on C&W traditional fixed access network. It seems certain to Digicel that a new entrant into a green field Eastern Caribbean countries would no longer invest in this technology but would use a broadband wireless technology (e.g. WiMAX) to provide business and residential access to voice and data services at a fixed location. In this case C&W has sort to cost the wrong technology.

If an AD does exist in any Eastern Caribbean country then an economically rational ADC scheme needs to be designed and ADCs estimated, including equivalent internal cross-subsides per service unit within C&W, which C&W does not appear to have paid to date. This will approximately equate with the explicit ADCs per service unit that ADC contributors should have paid. This can then be compared with what they did pay. Compensatory payments will almost certainly be required from C&W.

It should come as no surprise that Digicel considers that the continuation of existing schemes or similarly ill considered or designed ADC schemes in the Eastern Caribbean will, based on what Digicel has outlined above, be seen as an acceptance of a system that is highly discriminatory towards new entrants and contrary to the principle of a "level playing field" and to the detriment of the citizens of the Eastern Caribbean States.

1 INTRODUCTION

Digicel (SVG) Limited (Digicel) welcomes this opportunity to comment on the submission of Cable & Wireless concerning Access Deficit Contributions. Digicel views this as an extremely important proceeding and, accordingly, has devoted considerable resources to this submission. The result is a highly detailed and complex submission. Digicel would be honoured to answer any Interrogatories that the NTRC or ECTEL would consider appropriate concerning this submission.

In this document Digicel outlines definitional issues concerning the concepts of an access deficit and access deficit contributions (sections 2 and 3). We outline serious flaws in the rationale for access deficits (sections 4 and 6). Digicel then goes into a little detail about the underlying economic model upon which access deficit contributions (ADC) schemes are based, and discusses the spill-over costs and competition problems ADC schemes caused even those that are designed by experts (section 5). In this section we also discuss flaws in method and principle in the present ADC scheme and in the changes proposed by ECTEL in its August Consultation. We address certain aspects of C&W's claim in section 7, and in section 8 the need for revenues paid by ADC liable firms to be refunded by C&W.

2 DEFINING ACCESS DEFICIT?

Access deficit contribution (ADC) schemes are meant to impose ADCs on all firms that do not provide their own access and provide any of those services which the incumbent presently sells for high profit in order to generate the cross-subsidy revenues to fund access which is required by regulation to be priced at less than cost. By access we mean the access network; that aspect of a network's service that contains almost entirely non-traffic sensitive costs ... costs that exist whether or not subscribers make calls or use the internet.

An access deficit (AD) does not include local call revenues or costs. If incumbent operators also had to provide below cost local calls as occurs commonly in the USA, then we might expand the definition to, say, "local service". However, liberalisation and the market structure in the USA were born out of a regulatory decision to maintain local service monopolies. While this has been relaxed to as degree in the last 10 or so years, the structure of the industry in the USA still reflects this regulatory decision.

It really makes no sense in countries like the Eastern Caribbean states (and virtually any other country) that did not organise their liberalisation in this way, to expand the AD concept 5 years after liberalisation to one of a "local service deficit". This would imply a fundamental change in regulatory direction which effectively alters the investment environment retrospectively, i.e. firms have made irreversible investments based on a certain regulatory / liberal environment would

see it changed in a way that would fundamental effect the original decision to invest. There are various terms used to describe this type of policy turnaround including “asset stranding” and “regulatory opportunism”.

Digicel urges ECTEL to isolate itself from the “local service deficit” concept that we saw in the LRIC cost model and ECTEL’s August Consultation document. Expanding the AD definition to “local service deficit” is requiring C&W’s competitors to indemnify much of C&W’s business against losses. Digicel will aggressively fight such a policy.

3 MEASURING AN ACCESS DEFICIT

An AD may arise when the value of the operators access network plus incremental Opex and retailing costs, is above the present value of income the operator will get from selling access services over the life of optimised (forward-looking) access assets. We discuss separately the elements that represent access revenues and the elements that represent access costs.

3.1 Access revenues

Access revenues include for all of the following revenues for residential and business customers:

- Monthly line rental
- Installation fees
- Connection / reconnection fee
- Any separately charged for maintenance work

3.2 Access costs

The cost of access may be interpreted as either:

- A. The remaining value of the local (largely copper) access network up to and including line cards, plus incremental Opex and retailing costs. These values are far from straightforward to estimate. The value of the physical assets will have declined over time as its value has been written-down. This needs to be reflected in the access cost estimations since when competitors are being asked to help fund C&W network C&W should only be permitted to recover the value of that network once, or
- B. The cost of the access technology that a firm entering untapped ECTEL country markets for the first time would invest in today, and estimated incremental Opex and retailing costs relating to that technology, i.e. optimised current green field access technology.

Regulators usually follow B, but in Digicel's view 'A' may be appropriate in many regulatory environments until such time as it is no longer economically viable for C&W to continue with it, assuming regulated prices are based on this approach to valuation.

Digicel suspects, assuming no physical network already existed, that a new entrant investing today would use broadband wireless access technology such as WiMAX in urban and semi-urban areas, rather than copper-based technology. Such networks provide both voice and high speed internet access. For especially rural areas, lower frequency (higher range) wireless technologies would be needed – although we fully expect that C&W would today have relatively very few of these customers in its ECTEL member country areas.

C&W has approached the estimation of any AD by assuming the costs it would face today if it replicated its existing network. These are not the relevant forward-looking access costs. The costs of this technology are not optimised, and more fundamentally it is not the correct technology that is being costed.

4 UNIVERSAL ACCESS AND ACCESS DEFICIT POLICY

It is often claimed that pricing access at less than costs is a policy aimed at assisting universal service / access policy objectives. Indeed, in its 17 September submission C&W writes,

“... to regulate access prices so that they were below cost with the objective being to ensure universal access with all its associated benefits.”

This statement contradicts the facts. The situation is exactly the opposite; ADs prevent the development of fixed access infrastructure. As we wrote in our 18 April submission regarding ADCs in Dominica,

“[Such arguments have] been shown empirically to be false; in developing countries ADs cause network under-development, and tariff rebalancing has been shown to stimulate the growth in connections to the fixed network – the main problem with network under-developments is due to under-supply and not weak demand.¹”

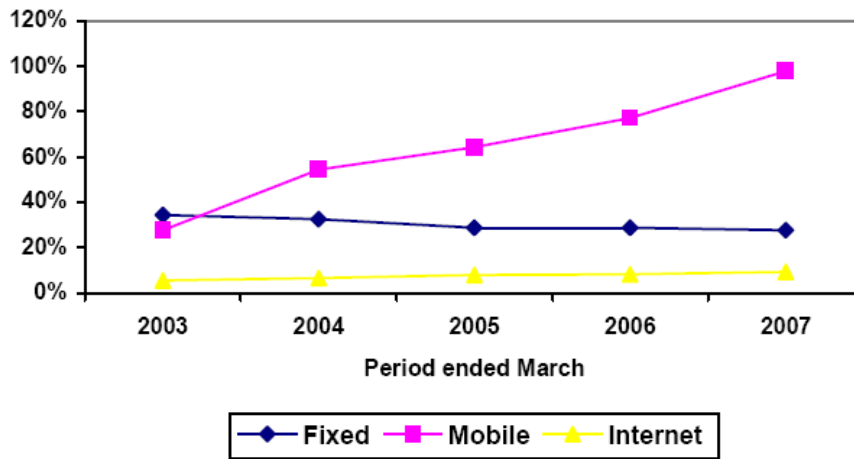
In their widely regarded report for the European Commission, Cullen International and WIK described ADs as “*untargeted residential access subsidies*”. Of these they said,

¹ See for example: Ros, R. (1999), "Does ownership or competition matter? The effects of telecommunications reform on network expansion and efficiency". *Journal of Regulatory Economics*, 15: 65-92. Ros, A., and A. Banerjee, (2000), "Telecommunications privatisation and tariff rebalancing: evidence from Latin America". *Telecommunications Policy*, 24, 233-252.

*“There are a number of drawbacks to employing untargeted access or line rental subsidies, not least of which is the lack of effectiveness of this policy for increasing network subscriptions. Evidence shows that consumers are extremely demand insensitive to the price of telephone access”;*² [and a little later] *“The evidence shows that higher residential subscription charges lead to higher mainlines per 100 inhabitants”.*

The Cullen/WIK report was written before it was fully appreciated the degree to which mobile networks would invest in middle and low income countries and replace the fixed line incumbent as the primary providers of access to the public telecommunications network. This has clearly occurred in the ECTEL region as is shown in the figure below.

Figure 1: Telecommunications service penetration in ECTEL



Source: ECTEL's Annual Telecommunication Sector Review (Period ended March 2007), November 2007

In summary, C&W has claimed in its submission that ‘black is white’ and the policy of subsidising fixed line access assists universal service / access. In fact even before mobile networks became the main providers of access in middle and lower income countries, i.e. when fixed network incumbents provided almost all existing access, both theory and empirical evidence shows C&W's claim to be incorrect.

² Cullen International SA and Wissenschaftliches Institut für Kommunikationsdienste GmbH (WIK) (2001), “Study on Universal Service in the Accession Countries”, p.28.

5 DESIGNING AN ADC SCHEME

5.1 Design principles and who contributes

5.1.1 Access competition

Where there is no legal or licensing separation between the provision of local access and traffic-based services, and long distance and international services (as in the USA), the form in which ADC liabilities would arise would need to be the same for all contributing firms, including the incumbent. Failure to provide for this would breach the first principle of regulation; that competitors must be provided with a “level playing field” on which to compete.

Abiding by the principle that competitive dis-advantage should not be a design feature of an ADC scheme will mean that the scheme will be abstract to explain and complex to design, implement and operate. Indeed, as we argue below, where fixed local service is not competitively isolated from other networks and services (i.e. the case in almost the entire World), an economically rational ADC system becomes practically impossible to design.

While ECTEL has specified that mobile networks should pay ADCs when terminating calls on C&W's fixed network, this is in defiance of an implicit assumption of the ADC model. Indeed, it was assumed when the ADC model for liberalised markets was being devised, that there would be no access competition. In the UK where an ADC scheme was first designed and implemented for a liberalised market it was envisaged that mobile networks would not pay ADCs and nor would triple-play cable TV companies which by this mid 1990s past approximately 25% of UK homes.³ Those that would pay would be the cream-skimmers such as carrier select (CS) and pre-select (CPS) providers. An ADC scheme was intended to allow for the introduction of CS and CPS competition without large scale inefficient entry and by-pass.

What is more, mobile networks are compliments to fixed networks even though the margin on which they compete is increasingly large, especially in middle and lower income countries. What we mean by this is that fixed networks benefit from the presence of mobile networks although we acknowledge that in some countries we may now be getting close to the point where this is no longer true. Since ADCs are supposed to prevent creaming skimming by firms that are substituting for C&W services, it is not legitimate to apply the concept to mobile networks which are complimentary and moreover supply their own access. Some calls will clearly be made on mobile networks that would have been made on C&W's fixed network if the mobile option did not exist, however, many more calls pay retail or interconnection revenues to C&W fixed that would not have occurred at all if mobile networks did not exist. Thus, where an AD exists and rebalancing has yet to be completed, any ADC scheme that might be adopted should only charge ADCs to firms that do not supply their own access.

³ The scheme was introduced in the early 1990s but was largely unimplemented (most new entrants received ADC waivers) and abandoned as unworkable in 1996.

The unjust and highly discriminatory nature of requiring access providers to pay ADCs can be seen in the following two points:

- (i) Competitive access providers have invested in their own access even though C&W's access service is priced below cost. There is thus no cream skimming possibility as new entrants will only make a profit if they are more efficient than C&W, and
- (ii) Competitive access providers are nevertheless being required to pay C&W ADCs for interconnected calls.⁴

It is a perversely asymmetric situation where access competitors pay part of C&W's access costs and C&W does not pay part of the access costs of other access providers.

5.1.2 The ADC model is static

The underlying model from which arguments about ADCs derive is static such that adjustments must be made although we believe there is agreement among regulatory economists that these can ultimately provide no more than crude patches to 'repair' the irreparable.⁵ This is true whether ADCs are paid by marking up interconnection prices (the present ECTEL system) or are paid on end-user services (the less flawed method by which ADC liabilities are incurred).

5.2 Adding ADC payments to interconnection

When ADCs are added to interconnection prices they become a cost component for all firms that pay them. As such ADC payers must charge higher retail prices in order to recover these costs, which are then paid to C&W.

If services provided via competitor networks are perfect substitutes for services provided via C&W's (the incumbent's) network (an assumption of the ADC economic model), ADCs will represent the margin per call that the incumbent would have received to cross-subsidise its AD had it provided the service(s) in lieu of the interconnecting new entrant. (In order not to overly complicate our discussion we will assume that services are traditional phone calls). In order to do this the designer of an ADC scheme needs to find out C&W's existing subsidy provided per service to fund the AD, and estimate an adjustment to reflect any inefficiency. This in effect

⁴ With all that Digicel has written so far above, we believe the following statement from the August Consultation to be false; that it is discriminatory and places Digicel and other access providers at a competitive disadvantage: *"The deficit charge on mobile-to-C&W fixed contributes to competitive parity by requiring mobile operators to fund part of the local services deficit"*.

⁵ The logic comes from the "Efficient Component Pricing Rule" of Baumol – Willig after the academic economists who designed it. Several of the problems were debated in the economic journals in the early to mid 1990s – see especially the *Yale Journal of Regulation* over this period.

requires that the efficient LRIC costs of every C&W service, including opex and retailing costs, must be estimated, along with the AD.

C&W's retail revenues by service that are in excess of these costs (which will include a fair return on capital) can be considered as either:

- (i) AD cross subsidies, or
- (ii) Excess profits.

If after making the cost estimations and assigning revenues sufficient to cover costs (including a return on capital employed), the C&W annualised revenues available per service to fund the AD are greater than the annual cost of the AD (i.e. C&W is making super profits overall net of its AD), then a policy decision will be needed by the regulator to determine what the per unit access cross-subsidy will be per service. Interconnection prices would be set to the LRIC cost of interconnection per service plus a subsidy per end-user service unit (e.g. per minute) currently paid by an efficient C&W to fund its own AD.

One serious weakness with this approach, however, is that calls provided by new entrants are not simply perfect substitutes for calls provided by C&W – i.e. a call provided by a non access providing competitor is not simply a replacement for a call that would have otherwise been provided by C&W. Total traffic grows with liberalisation and new entry.⁶ The assumption that all call minutes provided by such new entrants simply substitute for call minutes that would have been carried by C&W is untrue and implies an incumbent oriented view of the sector and competition that develops in it. Moreover, if the ADC mark-up is set for interconnection minutes according to the present mark-up that C&W applies net of any adjustment for inefficiency and super-profits, ADC contributions would end up substantial over-compensating C&W.

A conundrum arises for a regulator, however, in deciding how to correct for this unacceptable error. It may choose to adjust the cross-subsidy per consumed unit by service so as to reflect the regulator's forecast of the incumbent's fixed on-net and interconnected service traffic (in ECTEL countries the latter would include traffic units between C&W fixed and mobile networks) as the expected expansion of traffic volumes would result in the cost recovering cross-subsidy per call unit being lower than what the incumbent currently needs and prices for. The problem here is that it creates a price signalling problem similar to, although albeit lesser than, the cream-skimming problem that would exist if the incumbent had a sizable AD and there were no contributions from other non access providing competitors; that is the subsidies per service unit at future traffic levels are lower than what C&W would pay toward funding its AD.

⁶ This will be especially so if we expanded our ADC contributor base to include licensees that provide their own access network. Indeed, the evidence shows that fixed network minutes increase substantially with the entry of competitive mobile operators.

The apparent 'fix' does not look appetising either; the unit subsidy per service would need to be dynamic, reflecting the growth in interconnection traffic volumes. Such estimations will be subject to significant error and so adjusting payments would be required once actual traffic data became known.⁷ This would have the effect that interconnection payments would be declining from one day to another with retail prices potentially doing likewise, creating a billing nightmare.

As the Cullen \ WIK report notes, however, adding the ADC to interconnection breaches one of the fundamental tenants of taxation policy; and that is – do not tax inputs; tax outputs.⁸ The scheme outlined above taxes an input (interconnection) and provides financial rewards for those who can find a way around it. Most types of IP calls will accomplish this. An ADC scheme that taxes interconnection (i.e. marks up interconnection above cost) in such a way as to give C&W a fair chance of funding any AD without being “cream skimmed” or “cherry picked”, would need to be short lived due to inefficient entry and distorting by-pass activity it would give rise to.

Assuming there is an AD and the regulator is committed to having an ADC scheme, where should an ADC tax be placed?

5.3 Imposing ADCs on end-user prices

ADCs should be placed on end products. As the Cullen\WIK report notes, placing ADC mark-ups on end-user services would mean that *“local, long-distance, international and Internet calls would each pay contributions to subsidise residential access service, that approximate that which the incumbent would have provided itself (cross-subsidy) if it instead had provided the service”*.⁹

The liability to pay an ADC would arise not through the passage of interconnection but when liable services are purchased by end-users. In this way the ADC mark-ups will be different for different types of service and to prevent cream-skimming would apply to end-user services supplied by firms that did not supply their own access.^{10, 11}

⁷ There is some discussion of this in and around p.54 of the Report for the European Commission by Cullen International SA and Wissenschaftliches Institut für Kommunikationsdienste GmbH (WIK) (2001), “Study on Universal Service in the Accession Countries”.

⁸ Exceptions arise when the point of the tax is to ‘incentivise’ decision-makers to substitute away from the taxed item, as would occur with a pollution tax for example.

⁹ *Cit op* 7 p53.

¹⁰ Note that ADC subsidy payments made by an incumbent will be different for different services and that a scheme that then required competitors to pay at the passage of interconnection a share of the AD would also result in different per unit payments for different services.

¹¹ Note that whether they are incurred with the exchange of interconnected traffic or at the moment of retail purchase, ADC mark-ups will appear in retail prices.

There are important data and administrative implications of charging ADCs on end-user prices but we reserve a discussion of this for section 5.6.

5.4 The need to impute additional access revenues and remove some access costs

5.4.1 Impute revenues

If C&W prices access (mainly line rental) differently for different subscribers, the authorities must decide whether there are access revenues that ought to be imputed and added to C&W's actual access revenues. What must be estimated is the proportion of customers who take the discounted service who would be willing to pay the standard access price. For these customers it ought to be the revenues at the standard price that must be imputed. This is a real issue in the Eastern Caribbean where C&W offers large access discounts to businesses.¹² This has not been considered to date by C&W or by ECTEL.

5.4.2 Costs to remove

No firm makes profitable investments all of the time. On occasions C&W will have chosen to invest in installing an access line for a customer or group of customers who are subsequently proven to impose on C&W more costs than revenues. In some cases subscribers will have cancelled their subscription and moved to mobile access only. The fixed access costs that relate to such customers should not be counted in an assessment of any AD that C&W might have. It is not up to other companies, even those that do not provide their own access network, to compensate C&W for its business losses.

The way such adjustments are made in practice is to sample the operator's customer base using carefully selected criteria and through this to estimated costs that must be removed from any AD calculations. This unavoidably involves highly sophisticated modelling and statistical techniques.

As with the need to impute access revenues, this need to remove certain costs has not been considered to date by C&W or by ECTEL.

5.5 Existing ADC schemes and ECTEL's suggested changes

Digicel's intention here is not to provide a detailed analysis of the existing ADC scheme or the proposed revised scheme of ECTEL; this would require much more time and space. However, there are numerous fundamental design flaws, especially in regard to ECTEL's proposed changes, that Digicel wished to comment on.

¹² See for example, the first section of our comment on the ADC scheme in Dominica, dated April 18, 2008.

The majority of supposed ADC schemes that have or continue to exist appear to have occurred in C&W territories where in practice they have neglected to consider the economic imperatives we outline above, but have primarily required competitors to pay money to C&W based on C&W's own largely unsubstantiated cost estimations. This has also been the case in the ECTEL region where, to use C&W's own words,

"The previous ADCs were negotiated numbers which were not subject to much scrutiny. Some of the rates were negotiated with reference to those in other markets, rather than based on the actual cost in the local market".

This is a situation that should never have arisen, and indeed we believe should not be permitted to remain on the record books. At the time Digicel signed interconnection agreements with C&W we had little choice but to agree to C&W's demands as we were told, "No ADC payments equals no interconnection".

In its recent submissions concerning the ADC scheme in Dominica, Digicel outlined what we believe to be a compelling case to have the estimation of the claimed AD (which our numbers suggest does not exist in Dominica) re-evaluated. If no ADC is found Digicel would demand a return of the ADC payments made in Dominica under false pretences. The same would apply to the other ECTEL countries.

If an AD is found to exist, the ADC payments per interconnection service unit should be calculated using rigorously derived financial data and based on the proper economic principles which we outline above, rather than some agreement based on C&W's unsubstantiated numbers.

In its August 2008 Consultation ECTEL outlined an ADC scheme going forward that has several far-reaching changes to the present ADC scheme, including the following:

- An Access Deficit includes, "Cost of access lines and other regulated domestic service" [our emphasis].
- Explicitly targets ADCs to services rather than being restricted to by-pass providers.
- ECTEL seems to envisage that C&W fixed and mobile should also pay subsidies to fund the AD, which it appears they have not done to date.

The first bullet expands the concept of AD to include other services not just access. Indeed, this is even broader than the concept of a local service deficit. This and the following statement are confusing to Digicel since the accepted definition of an AD is that implies that only access is supplied at less than cost. If other regulated services are also regulated at less than cost then we are looking at a very substantially expanded concept which is not an access deficit but

something like a “*regulated services deficit*”. The point here would be that there would be numerous services price capped at less than cost.

This would be a very significant and grave regulatory development which would begin to turn liberalisation in the Eastern Caribbean into a sham and would see the sector suffer in the long-run due to substantially reduced level of investment and competition.¹³

Digicel very strong urges ECTEL to drop this expanded concept. Digicel will use all possible options open to it to contest such a change. We sincerely believe that for ECTEL to adopt such an expanded AD concept will also bring regulation in the Eastern Caribbean into disrepute.

The result of the second bulleted policy point above would be to penalise investment in networks that provided their own access. We have mentioned this already in section 5.1, but review the issue again here.

As a potential investor in wireless broadband access technologies (which would provide both voice and broadband data services), Digicel is interested in knowing the circumstances in which ECTEL envisages a situation in which access competitors would be excused from making ADC payments. Would MiWAX or triple-play CATV network providers be excused from paying ADCs, and indeed would they also qualify for ADCs?

The third bulleted policy point is of course correct, although this has not been the way the scheme has worked to date. C&W mobile has not paid ADCs which is highly discriminatory and in contradiction with fundamental legal and regulatory principles upon which liberalisation is built, and to our knowledge C&W fixed has not contributed either.

Let us assume *arguendo* that no one gets access to any customers except by C&W's fixed access network. When ADCs are added to interconnection prices they become a cost component for all firms that pay them and are therefore reflected in end-user prices. If C&W is excused from paying them then C&W does not have a cross-subsidy distortion, only a shortfall in access that is being met by its competitors that do have a cross-subsidy distortion. A similar argument applies when the ADC tax is added to end-users prices; all competitors including C&W should incur ADC liabilities on their sales. As such, ADCs, however the liability arises, must be imposed on all competitors equally. Neither C&W mobile nor C&W fixed ought to be excused from paying that tax, as has occurred to date.¹⁴

¹³ The following related statement in ECTEL's consultation similarly confused definitions.

“Where an access deficit exists, it means that unbalanced rates allow Cable & Wireless' fixed subscribers to purchase domestic regulated services at prices below cost”.

An AD relates to access only and thus it only allows customers to purchase “access” at less than cost.

¹⁴ We discuss compensation relating to this malpractice in section 8.

Other aspects of ECTEL's new services deficit scheme (for the sake of brevity we will continue referring to it as an ADC) are not correct in fact and are at odds with the economic imperatives of any such subsidy scheme. We now quote from ECTEL's August Consultation:

"In particular, it is recommended that deficit charges be assessed on the following services:

- *Call origination: C&W fixed-to-international;*
- *Call termination: International-to-C&W fixed; and*
- *Call termination: Mobile-to-C&W fixed."*

Digicel is more than a little troubled by this policy suggestion. If there was an AD prior to liberalisation then it would have been recovered at the time from retail services to the extent price caps allowed it. ECTEL would need to understand where these subsidy costs were recovered by C&W in order to know how much the services sold by cream-skimming competitors needed to be marked up in price, either through mark-ups to interconnection prices, or in the event that the ADC revenues are recovered directly (instead of indirectly) from end-users through marking up retail prices charged by ADC liable licensees. If an ADC scheme is imposed that provides for different mark-ups by service compared to what actually exists, retail prices will need to adjust to reflect the regulated change in ADC recovery. The financial modelling work used to determine these mark-up would need to be published in detail and comments requested from interested parties.

It is not clear to Digicel why ECTEL selected these 3 wholesale services when in practice, and assuming there is an AD with ADC liabilities imposed on interconnection, incumbents would recover the subsidies used to fund the AD from:

- (i) ADCs generated with the passage of ADC contributors' interconnection traffic over C&W's fixed network, and
- (ii) Through retail prices charged by C&W.

If ADCs are recovered through interconnection prices, retail prices are where C&W's fixed network contributes are charged while ADC contributors pay through matching mark-up on interconnection with C&W fixed. If ADCs are recovered directly from end users as mark-ups on retail prices, all contributors including C&W fixed collect their contributions in exactly the same way.

Referring to the first bullet (*Call origination: C&W fixed-to-international*), we are not aware of any licensee that currently buys origination on C&W's fixed network. If this is to apply to C&W then this proposal is in error. The way calls originated by an incumbent such as C&W provide revenue to fund the AD is through retail prices; only retail service sold by C&W and wholesale purchased by other firms, can be marked up to pay contributions to the AD. Other ADC payers that provide their own access do not have to originate such calls with C&W. They would incur

ADC liabilities only with the passage of interconnected traffic with C&W. International calls provided by these competitors (e.g. Digicel) would not be affected; a situation that would give rise to C&W being competitively disadvantaged if it was required to contribute toward the AD on this basis.

What is more, by requiring that ADCs are paid for "*call termination: International-to-C&W fixed*" (the second bulleted item above) and not for termination by any other licensee on its own network, ECTEL would be creating the same problem i.e. essentially the one ADC schemes are intended to rectify; that is, it would force C&W's costs up in providing international termination but not those of competitors. This is just what an AD requires of C&W when it faces competition from resellers such as carrier select and pre-select providers if they do not have to pay ADCs.

In summary, neither in the present scheme or in the amended scheme proposed by ECTEL can we find any indication that either scheme is other than arbitrary. There is no appreciation, for example, of the need for the designer of the scheme to set ADC levels for specific services so as to balance the contributions required by the contributors – which is the defining feature of an ADC scheme. Digicel considers the ADC proposal outlined in the August 2008 Consultation to be substantially flawed, highly discriminatory unacceptable.

5.6 ADC scheme administration and data requirements

At the time the ADC schemes were being set up in the Eastern Caribbean, the authorities should have determine which of C&W's services were priced above cost in order to fund its supposed AD. These services and their prices are what would have been subsidizing any AD at the time.

The data needed to set up and operate an ADC scheme is daunting. LRIC service costs can only be approximately estimated, although with the potential for large errors especially due to the premature and use of a new access technology in a LRIC model or the continued use of a now outdated access technology in a LRIC model. Where the ADC scheme recovers subsidy revenues through interconnection, the LRIC interconnection costs, with Ramsey-Botieux mark-ups for incremental costs that are common to the services that pay ADCs, need to be estimated for each service. The C&W \ ECTEL LRIC model that is under development is absolutely incapable in its current form of estimating such costs.

Where end-user services are charged ADCs the model must factor in incremental retailing costs for each service. Such costs are not practically measurable by a LRIC model. What is needed is a large body of data on retailing costs for many network operators and for statistical techniques to be applied which provide an approximate estimate of these costs by service. But to our knowledge the USA is the only country that supplies a suitable database of actual opex costs for fixed networks and it is not clear how to adjust for the considerably different wage and productivity conditions in the ECTEL countries compared with the USA.

There are clearly a moral hazard problem involved in self reporting data that gives rise to a tax (ADC) liabilities. Simply relying on auditor reports suffers from at least two drawbacks:

- Company auditors are often captured by big fee paying clients and can thus be less than thorough in their auditing, and
- The auditors would need to understand a great deal about the ADC scheme in order to report on whether it was being properly followed. This would require the audit team to be closely advised by a highly experienced telecommunications economist. Such skills sets would be tricky to assemble in countries that are considered leaders in telecoms regulation. In the Caribbean it would potentially be an insurmountable hurdle.

Then there is the issue of the regulators resources and capabilities. Without wishing to speculate as to numbers, Digicel feels there are only a small number of regulators around the World that would have the resources and expertise to be able to design, implement and administer an ADC scheme on its merits – minor as these are. ECTEL is a small authority that is most unlikely to have the resources necessary to be able to perform this along with its other regulatory tasks. Contracting the task out to consultants runs its own particular risks which can be acute at times especially when the buyer is less than well informed about the topic. These risks have been discussed in the literature,¹⁵ and of course would not avoid the costs of designing, implementing and operating the scheme.

In their report to the European Commission consultants Cullen International and WIK wrote,

*“In practice, therefore, ADC schemes are policies that can be developed on paper but come with an acute risk that they would not be operated as envisaged by theory, and would thus give rise to additional economic distortion”.*¹⁶

In countries the size of Dominica, Grenada, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, imposing an ADC scheme makes no economic sense – even if an AD was shown to exist. A ‘quick and dirty’ ADC scheme or one designed by C&W might be administratively manageable but would be discriminatory, anticompetitive, and intolerable. Moreover, even assuming that a proper ADC scheme can be designed for the Eastern Caribbean, it will come at

¹⁵ Perhaps the most important problems concern “adverse selection” and “asymmetric information”. These are highly complex topics discussed in an academic style in the seminal text by Laffont, J.J. and Tirole, J. (1993), *A Theory of Incentives in Procurement and Regulation*. MIT Press, Cambridge, Mass. More practical or readable publications include: Paul Klemperer, (2005), “Bidding Markets”, a report for the UK Competition Commission. Robin Mason (2005), “The Tender Process for a Public Service Publisher”, Mimeo, Department of Economics, University of Southampton and CEPR. The former focuses primarily on unexpected issues of market power; the latter on the policy approach needed for public sector tendering such as for advisory services.

¹⁶ Cullen \ WIK (2001), p.55: *Op. cit.* 2.

a substantial cost and would certainly not pass a public interest cost benefit test in any Eastern Caribbean Country.

6 TARIFF REBALANCING

In a liberalised environment ADCs are inevitably anticompetitive, inefficient and contrary to the public interest. It is not possible to design and operate a scheme which fully corrects for economic distortions caused by mandated cross-subsidies. If there is an AD a commitment to tariff rebalancing is a must.

Rebalancing is the strongly recommended policy of the World Bank and the ITU.

“Tariff rebalancing is a necessity for all governments and operators.”¹⁷ “Tariff rebalancing is a fundamental aspect of a competitive market”.¹⁸

“A critical step towards competition in international services is to rebalance the incumbent's retail tariffs so that they roughly reflect industry cost structures. This is necessary for reasons of economic efficiency as well as for the financial viability of incumbents and new entrants”.¹⁹

“Whatever the benefits from subsidizing access prices, economists agree that rebalancing tariffs can produce significant economic gains. Table 1 sets out estimates of economic gains from tariff rebalancing from four separate studies”.²⁰

Table 1: Estimates of Welfare Gains from Tariff Rebalancing²¹

Study	Country / Service Type / Year	Estimated Welfare Gains
Crandall and Waverman [2]	United States / All / 1994	\$6.42 Billion
Munoz [3]	Spain / Local & National / 1996	2621.84 Million 1993 Pesetas
Lewis Perl [4]	United States / All / 1988	\$4,278 Million (1984 Dollars)
Griffin and Mayor [5]	United States / Local / 1987	\$685- \$800 Million

¹⁷ ITU-D, Study Group 1, Second Study Period (1998-2002), Final Report, p.5: <http://www.itu.int/pub/D-STG-SG01.12-2002/en>

¹⁸ *Ibid*, p.27.

¹⁹ “Competition in International Voice Communications”, Policy Division Global ICT Department Global (a joint World Bank/IFC department), January 2004, Report No. 2 76 71, p.36

²⁰ “ICT Regulatory Toolkit”; an online document funded and supported by the World Bank and the ITU: Section 5.6 Tariff Rebalancing. <http://www.ictregulationtoolkit.org/en/Section.3041.html>

²¹ *Ibid*

Digicel does not believe that C&W has an AD in most and perhaps any Eastern Caribbean State. However, if an AD exists in an Eastern Caribbean country, rebalance is essential. The option of liberalisation and at the same time requiring C&W to price services at less than cost is not a sustainable; it is not an option a country should consider.

7 C&W ESTIMATIONS

7.1 The level of redaction in C&W's claim

Due to the level of redaction in C&W's submission, Digicel has largely been prevented from commenting on the detail of C&W's actual calculations. Redaction is of course a strategy issue especially for regulated incumbents. A great deal of redaction that actually occurs is unnecessary; it is done to exclude other interested parties from commenting and in so doing potentially assisting the regulator in assessing the numbers and methods used in making the estimations.

Regulators need to be able to deal with strategic reduction. Where there is doubt regulators need to put the onus on the incumbent to explain for each piece of redacted data or group of closely related data, why redaction is necessary. An explanation that says "because it is commercially sensitive" is nowhere near enough. What is needed is a full description of how it would be commercially damaging to the regulated operator. Checking the data that is publicly available in other jurisdictions is often useful in coming to a decision as to whether a specific case of redaction is warranted.²²

7.2 Errors in fact or method

The largest error in method and principle concerns the measurement of a local service deficit rather than an access deficit. Defining the deficit as a local service deficit is expecting C&W's competitors to indemnify C&W's local service business against losses. Digicel is adamant that it will not do this and we believe a sufficiently powerful legal challenge can be mounted against it. We have discussed the problem we have with a local service deficit contribution scheme above, especially in sections 2 and 5.1. Thus, Digicel rejects the calculation outlined in C&W's Annex A as incorrect, invalid and flawed in principle.

²² We have researched BT access and core network (Openreach) costing in the UK and discovered that relatively little is redacted in practice. See for example the following Ofcom documents: "Valuing copper access: A consultation on principles", 9 December 2004. "Valuing copper access", Part 2 – Proposals: 16 March 2005. "Valuing copper access": Final statement, 18 August 2005. "A New Pricing Framework for Openreach": Consultation, 30 May 2008.

Payphones, for example, are not included in an AD calculation, as C&W has done, since payphone call prices do not give rise to a first order cream-skimming problem. All payphone revenues are call revenues, although priced at a level that ought to cover on average payphone specific call and access costs. Payphone users do not explicitly pay access charges. Although it is possible that access prices for business and residential users in any jurisdiction are regulated below access costs, no such access charge applies to payphones. If payphone revenues do not cover payphone costs and the investment in the loss-making payphones was mandated by the authorities, the net costs are part of the cost of universal service – they are not part of any AD. If the investments were not mandated by the authorities then any loss is for C&W to alone. It should be noted that universal service cost are estimated using a far more expansive method (i.e. all customer services and costs are considered) than for estimating AD costs.

C&W has relied on the draft LRIC model currently under review for cost data and to make cost calculations. In its 11 August comments on the LRIC model Digicel set out in some detail very serious and far reaching flaws in the cost data used in the model and serious flaws in the cost model itself. One such flaw highly relevant to us here is that the main access network values in the LRIC model that C&W uses have not been estimated by the model (in this regard the model falls short of being a full bottom-up costing model) but are simply values entered by C&W.²³ These 'costs' can not be accepted at face value – indeed nor can any cost figure submitted by C&W to estimate its AD.

Section 6.3 of our 11 August submission dealt with fundamental failings of the part of the model that addressed the issue of a “local service deficit”. We repeat section 6.3 in the box below. However, the entire 11 August submission is relevant in explaining why C&W's ADC calculations are deeply flawed (as are ECTEL's recommended changes) and Digicel implores ECTEL to re-read that submission alone with this present submission.

“Local Service Deficit Calculation”

Section 6.3 of Digicel's August 11, 2008 submission on the July 2008 LRIC Models Consultation Document

Digicel believes that the methodology as well as the input values used to calculate “local service deficit” (LCD) is incorrect. The required approach needed to decide by model whether a LCD exists and if so its level is quite different from doing similar for a possible access deficit (AD). We now develop this further.

The LCD approach is similar to that used in the USA, where high cost local service providers obtain tariff averaging subsidies for access and local call services from low cost providers and from long distance

²³ In our August 11, 2008 submission to ECTEL in regard to the AD in Dominica, we wrote:

“The ‘Access Dimensions’ sheet involves numbers which have not been derived within the model; there appear to be no precedent linkages to other parts of the model. As the latest manual does not suggest that an independent investigation of these values was undertaken, we assume that these values are provided by C&W. These numbers therefore potentially hide a substantial element of C&W self-interest.”

See section 6.1.3 of this submission.

(inter state) service providers. The latter has to pay because the level of access and local service charges is on average regulated too low in the USA and thus subsidies from outside local service are required if low local service provider prices are to continue without the regulators being in breach of that part of the US constitution which prevents the State from opportunistically seizing investors' assets.

The AD schemes that have operated in some of the ECTEL countries, while seriously flawed in their design (for reasons including those outlined in our submissions on the AD scheme in Dominica), are addressing a significantly different situation than that existing in the USA. In the USA local and long distance operators in general do not compete, whereas in ECTEL (as well as the EU) there is no structural division between local and other services, with incumbents being an integrated local, long distance and international service providers. Moreover, in ECTEL (and the few EU countries that considered their incumbents had an AD), the incumbent formerly fully funded the deficit itself through internal cross-subsidies. But assuming an AD exists following liberalisation which allows the incumbent's customers to choose to use other service providers (e.g. through carrier selection), pressure is brought to bear on the incumbent's prices such that it is unlikely in future to be able to sustainably fully fund its the assumed AD.

The problems for incumbents that have an AD under these circumstances are primarily twofold:

- (i) there is a "price signalling" problem which distorts competition in favour of hit and run entry (e.g. through carrier selection), and
- (ii) the incumbent's access assets are gradually stranded by it not being permitted to charge a remunerative price.

The problem in (i) is not present in the USA, and in the USA (ii) applies to local services and not just to access. Digicel thus believes the existing model has made an error by modelling an LSD rather than an AD.

What the above discussion also suggests is that many more costs (and revenues) have been included in the model calculations than ought to have been included. Rather, in practice over 95% of AD costs are line sensitive costs. Figure 2 shows numbers from the sheet "fixed network costs" which is where the costs are drawn from by the "LSCD Gen Calc" sheet. The thing that stands out to us here is the ratio of operating to annualised capital costs. This is far greater than it should be but without an active model that includes cell formulas we are unable to locate the reasons why this has occurred. Secondly, we have noted above that local access capex is very much determined by the values that C&W has assumed, such as aggregated labour costs – recall here that the access network is not built using a true bottom-up methodology. We are pretty sure that the level of these costs is excessive.

Figure 2: Access network opex and annual capex from the ECTEL/C&W model

	Operating costs \$'000	Annualised Capital Cost \$'000	Total of operating and capital costs \$'000	RF Volume '000	Average cost per min/unit on a current cost basis \$
Line Sensitive					
400-RSU line sensitive	306	638	945	38	24.830
400-Access Local Loop	8,494	17,444	25,938	39	670.229
400-ADSL Equipment	1,074	2,239	3,313	11	301.203
400-Payphone Equipment	212	90	302	0	1512.178

7.3 Digicel's "adjusted benchmarking" estimations for Dominica

Digicel undertook a detailed "adjusted benchmarking" of access costs in Dominica using data about access Capex and Opex costs from leading jurisdiction abroad and including these in an adjusting model containing key cost variables. The estimations were reported in Digicel's 6 May submission to the NTRC of Dominica in some detail and in a way that provides a high degree of transparency and enables readers to see the reasonableness of Digicel's calculations. Those calculations suggest that there is no AD in Dominica. Readers will see that it is probable that a similar result would be obtained for C&W in other Eastern Caribbean countries.

7.4 The choice of access technology

In the last 18 months or so, cost effective reliable residential wireless broadband has become a reality. A network operating entering any Eastern Caribbean state at this time with a view to providing telecommunication services to residents and businesses at a fixed location, would no longer invest in a fixed access network but in a broadband wireless network such as WiMAX which is currently being rolled out in many jurisdictions around the World. A forward-looking approach to estimating C&W's access costs would need to be based on this new access technology. C&W's cost estimations have not done this but have simply inserted numbers it says represent the cost of its traditional access network.

8 EX POST FACTO CORRECTING PAYMENTS

8.1 Correcting payments if no access deficit exists

In its response to invitation to comment on the ADC scheme in Dominica, Digicel described in some detail the "adjusted benchmarking" approach it used to estimate the likely range of any

access deficit (AD) that C&W might have in Dominica.²⁴ In that paper Digicel provided sensitivity analysis that showed for reasonable ranges of variables used in the calculations, there was not AD in Dominica. It is also important to note that similar access technology as is used by C&W in Dominica was used as the cost basis and not current access technology.

As Digicel understands it, the situations in the other Eastern Caribbean countries are sufficiently similar to that in Dominica in terms of the access network costs and revenues, that Digicel fully expects there to be no access deficit in these countries either. Digicel believes that if ECTEL wishes to go ahead with an ADC scheme it should first be established by appropriate costing experts whether an AD does in fact exist in any of the Eastern Caribbean States. This is one of the weakest aspects of the cost model that ECTEL is developing, making it unhelpful for this task.

If Digicel is correct and there is no AD in one or more of the Eastern Caribbean countries then C&W's competitors have been required to pay for something that does not exist and we would ask the authorities to require C&W to refund all ADC payments made to date to the relevant contributors, including compounded interest at a rate which reflects the cost of debt to start-ups in the telecoms sectors of Eastern Caribbean countries.

8.2 Correcting payment if an access deficit does in fact exist

In this section Digicel largely repeats the relevant section from its 6 May submission regarding Dominica, titled "Discriminatory flaws in the ADC scheme", although with editorial changes so that it applies to Eastern Caribbean countries and not simply to Dominica.

As outlined above, in Digicel's view C&W does not have an AD in Dominica and perhaps in none of the ECTEL countries. However, what follows is based on the assumption that a modest AD does exist.²⁵ Notwithstanding Digicel's view that mobile operators should not pay any ADC to C&W even should an AD exist, Digicel believes that a majority of the ADC revenues it has paid to date in the Eastern Caribbean are illegitimate. This is because C&W's claimed AD has been paid only by 'other' market participants – not at all by C&W.²⁶ Digicel, for one, has raised

²⁴ Part II of the Response of Wireless Ventures (Dominica) Limited, trading as Digicel Dominica to the invitation by NTRC to comment on the Access Deficit Contribution Scheme in Dominica

²⁵ Access deficits are sometimes maintained by fixed line operators that are free to rebalance their tariffs. In the UK, for example, it is commonly considered that BT still has an AD and even though the UK ADC scheme was abandoned in 1996 and all restraints on rebalancing by BT were removed, BT has chosen not to rebalance its prices. The primary reason for this is thought to concern the access competition that BT faces from cable TV providers who are also providing telephony and internet services as well as from mobile network operators.

²⁶ Note that C&W fixed and mobile should pay ADCs, although in the case of C&W fixed these would be hidden in the retail prices it charges. However, the design of ADC scheme requires that these are known

the subsidy revenue through having certain interconnection prices marked up above those that C&W has to pay for virtually identical termination services. This simply shifts the AD subsidy burden from C&W to the ADC contributors. In other words, Digicel costs have been forced up by the ADC scheme in order to pay a subsidy to C&W while C&W is exempted from making any contributions. Among other things, it has resulted in a pricing distortion which favours C&W. Where there is liberalisation, if existing firms are to maintain a price at less than cost, they, along with new entrants, must contribute to the subsidy if the subsidy is not to breach basic non-discrimination \ competitive neutrality requirements. The ADC schemes in the Eastern Caribbean have failed to do this.²⁷

In general, the same analysis also applies to the recovery of net universal service (US) costs. In most countries that have a formal US funding scheme, the incumbent is responsible for meeting the obligations. In the EU, for example, where there are 4 of 27 member countries that maintain a formal US subsidy scheme, EU law requires that the measured net cost must be divided up among all market participants according to an estimate of each contributor's market presence.²⁸ A similar system also exists in Australia and New Zealand. Exempting the incumbent from making contributions is not permitted either under the liberalising regulatory framework or according to the requirements of competition law. In liberalised sectors, subsidy schemes need to distribute the subsidy liability across all market participants in a way that as far as is practical maintains competitive neutrality, i.e., the 'level playing field' principle. It is with this principle in mind that the UK ADC scheme was designed, although it was later understood to also have its flaws. ADC schemes have not been permitted in the EU since liberalisation occurred at the start of 1998, not least because they cannot be designed in a way that does not impose costly economic distortions.

Putting the issue of the existence of an AD or not, to one side, Digicel considers that the present ADC schemes contradict the principles that should flow from the mission of ECTEL, "to create fully liberalized telecommunications environment, by promoting competition amongst service providers for the delivery of efficient and affordable telecommunication services". Digicel also views the present ADC schemes are inconsistent with the terms of the preamble to the ECTEL

in order to work out the ADCs by service {and possibly also time of day} that must be paid by contributors (see sections 5.1 and 5.2 for further clarification)

²⁷ Even if C&W were to say that it contributes, as the ADC payments made by rivals do not cover its AD (a point we believe the evidence contradicts), the rules specify that for new entrants the ADC liability is incurred on interconnection and transit; should C&W need to generate any internal cross-subsidy it is free to do this in any way it pleases.

²⁸ There remain relatively high economic costs associated with this approach to cost recovery. Less costly for society is a scheme that pays the subsidy out of the state budget, or to include a US contribution as a line item on customers' bills where the amount would be determined, for example, to be a proportion of the bill net of the US component and net of wholesale payments between each contributor. See chapter 3 of WIK (1999), "Study on the re-examination of the scope of universal service in the telecommunications sector of the European Union, in the context of the 1999 Review". Study for the European Commission.

treaty, which specify that the contracting states are “determined to provide affordable, modern, efficient, competitive and universally available telecommunications services”.

An *ex post facto* correction of the ADC scheme that has operated to date is required in each of the Eastern Caribbean states that are shown to have a significant AD. The correction would need to impose retroactive ADC contributions on C&W's off-net calls including from C&W mobile to C&W fixed and for certain fixed on-net calls.²⁹ These would be charged at the same rates as would be charged to the new entrant ADC contributors.

The annual revenue in each ECTEL country needed to facilitate this correction represents the overpayment made by the new entrant contributors (e.g. Digicel) for each year the ADC scheme has operated. If estimated correctly C&W's retroactive payments of its share of the claimed AD will equal the overpayment by the other contributors. This amount should be refunded by C&W to the market participants according to the proportion of each licensee's contribution to the total annual subsidy payments that have gone to C&W. The amounts payable by C&W should of course be adjusted upward to reflect interest charges.

Such payments would mean that all firms will have contributed on an approximately equitable basis, although the pricing distortions that will have occurred over the period and which favoured C&W, will not be corrected by this return of the over-paid ADC subsidies.”

9 CONCLUSIONS

Digicel has put forward a very powerful case for ECTEL to require experts to work out the scale of any AD and to work out ADC refunds. If no AD exists these payments will be the total of what each contributor has paid. They will be partial in order to reflect the fact that C&W has not paid its share to date, if in any country an AD is shown to exist.

The existing ADC schemes and the changes ECTEL outlined in its August Consultation new scheme are an affront to liberalisation, to the economics of regulation and competition, and to the concept of a “level playing field”. An ADC was a concept invented almost 20 years ago to allow for gradual tariff rebalancing in an environment in which there was monopolisation of the provision of fixed line access. It was soon recognised as being seriously flawed and was very largely not put into practice in the UK or France (the 2 countries that for a brief period had an ADC scheme on its record books). ADC schemes are now the reserve of C&W territories.

ADC schemes are unavoidably distortionary and anticompetitive. They will not come close to passing a public interest cost-benefit analysis. Abandoning ADCs in the Eastern Caribbean is

²⁹ These calls must be included in order to approximately preserve a 'level playing field' among competitors.

thus a “*no brainer*” – there should be no attempt to continue with the present chronically flawed ADC scheme, or to implement the changes ECTEL has proposed in its August Consultation, or to attempt to design, implement and operator a reformed scheme of any kind in any of the ECTEL countries.

It should come as no surprise that Digicel considers that the continuation of existing schemes or similarly ill considered or designed ADC schemes in the Eastern Caribbean will, based on what Digicel has outlined above, be seen as an acceptance of a system that is highly discriminatory towards new entrants and contrary to the principle of a “level playing field” and to the detriment of the citizens of the Eastern Caribbean States.