

OFCOM CONSULTATION: FAIR & REASONABLE CHARGES FOR GEOGRAPHIC CALL TERMINATION

NON-CONFIDENTIAL

25TH NOVEMBER 2010

Cable&Wireless
Worldwide

EXECUTIVE SUMMARY

We welcome this consultation and are pleased that Ofcom has invested time consulting on draft guidelines over the level of future geographic termination rates set by Communication Providers other than BT and Kcom. We see this as a sensible use of resources as it will doubtless save time and effort for both Ofcom and Communication Providers in future years, reducing the number of disputes that would likely arise in the absence of guidelines.

Many Communication Providers have historically taken a very partisan approach to this issue and have often only been focused on seeking to preserve or gain additional revenue at the expense of seeing the real practical and economic issues at stake. We believe the recently expired 'reciprocity' arrangement was significantly flawed and could only be considered reciprocal in the very loosest of terms. It has led to some very odd outcomes and has caused some Communication Providers to adopt some illogical routing choices in an effort to 'game' the regime to maximise their own economic benefit. Such behaviour is entirely rational when the financial rewards exist to justify such behaviour, but it is now clear that this arrangement can no longer continue and Communication Providers must adopt sensible routing choices and be free to route traffic to other providers (including transit providers) without fear of having to live with the consequence in the form of reduced termination rates (which should have no relationship to their call origination choices).

Much has been made about the existence of some Next Generation Networks using IP technology and how the cost of conversion between IP and TDM will be dealt with in the future, both when TDM remains predominant and in the transition years where there is a shift to IP. We view this debate as somewhat of a distraction, as the migration to IP will not be determined by the level of geographic termination rates. Instead Communication Providers will take rational decisions about how much can be saved through reduced technology costs. Likewise any new entrants will also have to consider these factors before entering the market.

The reality is that unless NGN IP technology can achieve a lower operational cost than TDM and as a result stand on its own two feet, then it can't be justified in any rational business model. While some Communication Providers have already made investments in this technology, either

incrementally or through a complete transition, the benefits of the migration will come from reduced operational expenditure, rather than through higher termination revenues. The introduction of higher termination cost for newer technology would be a perverse, retrograde step that could potentially result in consumer harm. There is no tangible benefit to the purchaser of call termination from IP, so how can a higher price be justified?

At this point in the technology evolution cycle no single NGN IP standard has emerged as dominant, and it is not inconceivable to imagine that several flavours will emerge before an industry standard finally becomes clear. So while today we may have disagreements between predominately TDM terminators and predominately IP terminators, in the future disagreements on conversion costs may emerge between Communication Providers using the different flavours of IP. All this leads us to soundly conclude that Ofcom is right not to set the termination rate guidelines with reference to the underlying technology, but instead base it on a technology neutral and economically justifiable approach.

Communication Providers should not be under any obligation to offer IP termination, as in the absence of an industry-wide technical standard; this can only be something they undertake voluntarily. The costs of meeting such requests on the terms of the requesting party could be considerable and it may result in costly stranded investment, as IP interconnection evolves and decisions on handovers might have to be taken without being part of a wider and more strategic investment programme. It is a Communication Providers decision to invest in an IP technology that subsequently turns out to be the Betamax of the NGN-world : they should not be able to unilaterally impose that decision on terminating Communication Providers.

A Communication Provider that complains that the LES rate is insufficient to meet their termination costs should not be looking for Ofcom to increase their termination rate to plug their inefficiency gap. Instead they must either trim their costs to an efficient level or face being overtaken in the market.

Setting the termination rate with reference to the BT's LES rate is a straightforward and understood concept. While we are mindful of BT's very large termination market share, leading to significant economies of scale and the wider footprint costs associated with non-BT termination, we must also consider the dispersed nature of much of the BT network, with large chunks of network serving

relatively few customers in many parts of the United Kingdom. On balance we think BT's LES rate does represent a fair competitive benchmark and we would urge Ofcom to stick with its conclusion from this consultation and introduce it as the assumed rate for geographic termination on other networks. The BT rate is subject to an RPI+X charge control and is supported by a well understood regulatory accounting framework, making it the only appropriate benchmark available.

We would urge Ofcom to bring forward the enforcement of new guidelines to within six months of the statement. The current proposal leads to a significant regulatory vacuum and perpetuate the 'gaming' undertaken by some Communication Providers. An extended period is not required in this occasion and Ofcom should not perpetuate the practice of illogical routing any longer than necessary and should remove the economic incentives associated with this practice.

1. INTRODUCTION

Cable&Wireless Worldwide is one of the world's leading international communications companies. On the 26th of March 2010 C&W Worldwide demerged from C&W plc, beginning an exciting new chapter in the company's history.

C&W Worldwide provides enterprise and carrier solutions to the largest users of telecom services across the UK and the globe. With experience of delivering connectivity to 153 countries – and an intention to be the first customer-defined communications service business – the focus is on delivering customers a service experience that is second to none. More information on Cable&Wireless Worldwide can be found at: www.cw.com

Today Cable&Wireless Worldwide has the necessary scale to meet the needs of UK enterprise customers and we are a strategic provider of voice services to both the UK public and private sectors, offering a range of innovative and market leading voice & data products. Our customers include most of the UK's top companies and public sector organisations, each of whom has placed its trust in Cable&Wireless Worldwide to deliver an array of business critical services.

This consultation is of fundamental importance to our business and our customers. We are a key stakeholder, purchasing a very significant amount of geographic call termination from other Communication Providers in our role as a major originator and transit provider of traffic. We are keen to grow our transit business and we believe the recently expired reciprocity arrangements have worked against alternative transit providers, perpetuating BT's dominance in this market. We also terminate a material amount of geographic minutes on our own network, so we are keen for Ofcom to set out a sound basis for calculating termination rates through the publication of guidance on the issue.

OUTLINE OF THIS RESPONSE

We have structured our response around the specific questions raised in the consultation. Where relevant, we have also provided further insight into some of the specific concerns we have and any other factors which we believe are relevant for consideration.

2. Q&A

Question 1 *Do you agree that this section sets out the key issues? If not, please set out any additional issues which you think we should consider in providing guidance on fair and reasonable charging for termination of calls to fixed geographic number.*

Ofcom has set out a clear understanding of the issues at stake. The current linkage of Communication Provider termination rates to their outbound traffic to BT clearly distorts build/buy decisions and allows leverage between termination & transit markets. We believe Ofcom may have underestimated the amount of 'gaming' that takes place in the market, with several Communication Providers actively taking steps that they wouldn't otherwise take in a rational market, if there were no linkage between outbound traffic and geographic termination rates.

We would draw Ofcom's attention to the following outcomes which in our view are undesirable and not in the long term interest of the market or consumers:

- The ability of Communication Providers to game the situation by temporarily changing their outbound traffic profile while the termination rate is being assessed under the reciprocity arrangements.
- The ability of communication providers operating multiple networks to game the situation, for example in extreme by sending all their DLE outbound traffic by network 1 / tandem traffic by network 2, thus giving artificially high rate on network 2, and directing all their terminating traffic to that network.
- The disincentives that currently exist, with some Communication Providers reluctant to use an alternative transit provider for fear of the impact on their own termination rate.

- The adverse impact accepting transit traffic may have on a Communication Provider's own termination rate. As alternative transit providers route a mixture of traffic generated from their own business and their transit business, together, the existence of transit minutes may reduce their termination rate and discouraging them from taking such traffic.
- The call termination rates offered in the Transit market are set indirectly by the 'reciprocity' arrangement between the terminating CP and BT, and have no relationship to the interconnect arrangements that are place between the alternative transit provider and the terminating CP.

We note that Ofcom is keen to point out that those issues around number portability and the Average Porting Conveyance Charge (APCC) are out of scope. However we believe it is relevant to consider the fact that as a result of the difference between individual CP rates, the recently expired reciprocity regime frequently produces an outcome where a donor network can make a loss that cannot be recovered via APCCs, because the termination rate that they pay to a recipient CP can be higher than their own, or indeed make a windfall gain if it's lower. If the default situation was the BT LES rate, then this unsatisfactory situation would no longer arise, providing further justification for the move towards a default rate across the industry.

Question 2 *Do you think we should consider other options for the general application of reciprocal charging? If so, please describe those options and your reasons as to why it is appropriate to consider them in the context of our proposed guidance.*

Insofar that the consultation is narrowly scoped to look only at rates for calls which are delivered to the correct node and handed over locally to that node, we believe Ofcom has considered all of the options.

Question 3 *Do you agree with our assessment of the options and provisional conclusion in favour of Option 3? If not, please explain which option you favour and why.*

We agree with Ofcom's analysis of the facts. In this specific instance, BT can be considered an efficient provider of call termination. While we are aware that they have the benefit of economies of

scale in volume terms and typically have a smaller termination footprint than most other Communication Providers, they also have to serve parts of the United Kingdom that have low population density and higher average footprint distances, which contributes adversely to their cost base. As BT's LES rate is subject to a RPI+X charge control and subject to ongoing regulatory cost accounting and reporting obligations it is the most appropriate and transparent benchmark to use.

While we remain in favour of option 3 and it is by far the most practical of the three options proposed, we don't believe the practical issues raised by Ofcom concerning Option 2 are material. Indeed as BT currently calculates the industry blend of traffic that is delivered at LES versus ST in order to determine their GNP APCC, there would be no additional overhead required to derive Option 2, although it would lack the economic rigour of Option 3.

Question 4 *Do you agree with our proposal to adopt a framework which we would normally apply to assess claims for higher FTRs? Do you consider that the proposed 3 stage test, including, where relevant, our proposed approach to demonstrate reduced end-to-end call costs, is an appropriate and practicable approach to considering such claims? If not, please set out what approach you consider to be appropriate and why.*

We do not believe that Ofcom's work in this area is particularly helpful. Far from clarifying the issue it may lead to speculative dispute referrals and greater uncertainty as some Communication Providers attempt to meet the criteria, as it is worded in such a way that lends itself to a particularly wide interpretation of what might be acceptable.

This ambiguity coupled with the proposed delayed introduction of the guidelines until autumn 2012 will create considerable uncertainty for the next few years, resulting in Ofcom not providing a stable regulatory regime for the setting of termination rates. We believe there is real scope that Ofcom will face a bow-wave of termination rate disputes on introduction of the guidelines, which could mean that there is not a stable regime until mid-2013, when autumn 2013 marks the end of the current Network Charge Control hence means the whole basis of charging will once again be opened up for debate.

The proposed consumer benefit test lacks the necessary clarity to make it understood and is potentially at odds with the Commission recommendations in this area. It is unclear what constitutes consumer benefit and also which consumer has to benefit (is it the originator of the call who is indirectly purchasing termination, or the recipient who is indirectly charging for termination or both)? As it the originator paying for termination, logic would suggest that at the very least the benefit should flow to the originator as they are being asked to pay more.

For example, it is plausible that a CP could try and make a case for allowing a higher termination rate to facilitate introduction of an IN dip, because this provides benefit to their customers of enhanced functionality (but by being incorporated into the termination rate would load the cost onto the originating CP/customer). As the terminating CP determines the technology for routing to meet the agreed standard, then there is arguably no real additional benefit from the dip to the originator of the call (as in the absence of the dip the terminating provider would not be meeting their obligation to terminate the call). However, if the presence of the IN dip allows the call to complete in for example a disaster recovery situation, the originator could be considered to be deriving some benefit, in much the same way that Mobile Termination Rates are allowed to be higher as they give the originator the ability to reach the call recipient when they're mobile. Clearly application of the guideline creates a grey area, which terminating Communications Providers would inevitably seek to exploit.

The test of a reduction in overall end-end call costs is also problematic. For example, a Communication Provider could argue that introducing a longer transmission path in their network would reduce network costs in the originating network by a higher amount than the increase in the termination rate, but this would mean that the terminating network would be receiving a higher proportion of the revenue. While arguably providing an overall consumer benefit, it is not for regulation framework to make this happen. In geographic call termination, where routing is conducted on the basis of Far end Handover, the issue of an originating network removing costs from its network by incurring additional costs in the terminating network would be a matter for commercial negotiation, and if the originating network does not act rationally on this aspect, their retail charges would inevitably rise and they'd lose customers in a competitive market. We believe there is further complexity in this example, because any regulatory analysis would use a common

basis for assessing costs. However, while the terminating Communication Provider would be seeking to increase their termination rate on a LRIC basis, the actual cost saving experienced by the originator would be on a marginal cost basis. Assessing both on a LRIC basis could result in a flawed outcome.

We are therefore not aware of any examples where this test should properly be met and as such we would ask Ofcom to think long and hard before committing itself to it. Any potential freedom that Ofcom infers is available to set rates in excess of LES will be exploited and disputes are likely to arise, thus undermining the value in publishing these guidelines. We would urge Ofcom to set out clearly that is not aware at this stage of any circumstances that would justify higher termination rates. At the very least in the period where the industry is adjusting to the guidelines any Communication Provider who feel they have a case to justify a higher termination rate should set out their case before the introduction of the new regime, thus reducing the period of uncertainty.

Question 5 *Do you agree with our assessment of financial impacts? If not, please explain why.*

We agree with Ofcom's assessment of the financial impacts. We would also highlight that those Communication Providers that stand to lose revenue because they've been predominately connected to tandems (hence currently have a high termination rate) would lose it because of their willingness to 'game' the current regime, by inefficiently routing egress geographic traffic in order to boost their termination rates.

While recognising small Communication Providers with only tandem conveyance would lose out, this is merely correcting an anomaly that such Communication Providers receive termination revenues far in excess of those costs efficiently incurred. It cannot be right that large originating Communication Providers defacto subsidise small terminating Communication Providers solely because they are small.

Against this backdrop we query why a prolonged implementation period can be justified. Why should there be such a long transition period to allow those Communication Providers acting inefficiently to maintain their inappropriate reward for a longer period than is necessary?

Question 6 *Do you agree with our assessment of the consistency of our general proposals and our policy objectives for NGNs? If not, please explain why.*

We agree with Ofcom's reasoning in the main, but we point out that any Communication Provider who has deployed NGN technology either in full or in part will have done so in the full knowledge that the current norm for interconnection is TDM and they would have to gateway to this technology until such a time that the norm for interconnection became NGN. The business case for such investment would have to include the cost of gateways to TDM, with any savings from NGN having to be gained from on-net routing and lower operation expenditure over time. Such a business case would also have offer benefits from running their own network versus buying services on a wholesale basis from a third party.

Against this backdrop it makes no sense that originating Communication Providers utilising the prevalent technology should pay for gateway costs, for something they have no control of, in order to accommodate a minority of Communication Providers, who for their own reasons have adopted their own particular NGN investment plans. To do otherwise would create a perverse incentive on terminating Communication Providers to choose technologies which load costs onto competing originating Communication Providers.

Likewise, it seems likely that at some point in the future the current norm for interconnection will become something which is NGN-based. We believe it is far from clear what that long term technology will be : IP seems a given, but at a transport level whether this is MPLS or Ethernet SVLANs remains to be determined, and at a signalling level whether it is "pure" SIP, a standardised SIP that's enhanced to provide regulatory service support, or one of the increasing number of SIP-I derivatives remains unclear. We believe the market will make those choices when the time is right, but that Ofcom should prepare itself for disagreements where individual Communications Providers don't follow the pack. In the long term, it is logical that those Communication Providers at odds with

the prevailing norm bear any interworking costs. Practicably this would be TDM operators interworking to whatever flavour of SIP emerges as victor, but equally it could be interworking of e.g. BICC to SIP.

During the transition period, which is likely to last several years, Ofcom should make clear that only when a majority of Communication Provider relationships utilise IP interconnection for the majority of their traffic and a dominant standard has emerged, should the default handover technology change. In such circumstances it would be obvious to all that the NGN interconnection had become the “norm” and the tipping point would have been reached. In reality, the tipping point would not be such a momentous occasion as one might think, as we would envisage that by that time the vast majority of Communication Providers would have the capability to support both forms of interconnection, and regulatory intervention would only be required should Communication Providers not be able to broker a commercial settlement (e.g. to use IP interconnect where both origination and termination is IP, TDM where both are TDM, terminator meets cost where there’s a mismatch).

Question 7 *Do you agree with our preliminary conclusion on the apportionment of conversion costs? If not, please set out your reasons for reaching a different view.*

Yes, we agree with Ofcom’s preliminary conclusion over the apportionment of conversion costs. There are a couple of areas where additional feedback was sought:



In Paragraph 5.127 Ofcom asked for consideration of the benefits derived from the migration by all Communication Providers to NGNs - such as lower costs, the avoidance of interworking costs and other wider public benefits. We do not believe that these benefits are material. Firstly, as Ofcom’s analysis points out, the interworking costs are not that significant so avoidance of them would not present an over-riding public benefit. Left to their own devices Communication Providers will migrate to NGNs at a rate that primarily suits their own business, but which would inevitably take account of the actions of other Communication Providers, because of the requirement to

interconnect and the fact that Communication Providers would not wish to be perceived to be left behind from a functionality standpoint and, eventually when the norm becomes IP handover, those Communication Provider left on TDM would know that they would have to meet these interworking costs downstream.



As such, it would be perverse to change the regulatory framework to address an issue which has not manifested itself.

Question 8 *Do you agree with our preliminary conclusion in relation to fair and reasonable FTRs in the context of TDM-NGN interconnection? If not please set out your views.*

We strongly disagree, for the case of BT and especially for the case of other terminating TDM networks.

C&W Worldwide does not agree with Ofcom's assertion that IP interconnect for calls destined to TDM lines constitutes part of the call termination market. A characteristic of the call termination market is that the terminating CP has SMP. Clearly, for the interworking function the terminating CP has no such SMP because the originating CP has the option to purchase the interworking from the terminating CP (if it offers it), purchase it from a 3rd party transit operator, or to self-provide – in this context Ofcom's assertion at 5.147.1 that the terminating CP offering IP interconnect has SMP represents a flawed analysis.

As the originating NGN CP has options of how to convert from IP to TDM, it is incorrect to mandate the terminating CP to provide the interworking function: the terminating CP did not make the decision that the originating CP should utilise NGN, so it cannot be their problem to deal with the fallout of that decision. This is particularly the case in the scenario where the terminating CP solely uses TDM technology: the consequence of Ofcom's proposals would be to mandate that CP to

introduce a new technology, which cannot be consistent with the remit of regulation to be technology neutral.

It may be reasonable to mandate that once a given terminating CP is providing interconnect services on an IP basis, they be mandated to provide these on fair and reasonable terms to any other CP that requests them. For example, we believe that this would apply to BT as they're already doing this via IPExchange capability.

That then raises the question of what would represent "fair & reasonable" charges. Ofcom take the view that the conversion forms part of call termination, hence would be subject to the tests outlined in this consultation, so in essence anything above LES rate would need to be cost justified. However, as that conversion is analogous to a tandem facility, being another network element in the call path (especially as it involves conveyance to remote termination points from the point of handover), and one that can be avoided by the originating CP either interworking then connecting to the terminating node, or purchasing that facility from a third party. In line with tandem switching, the prices levied for the conversion and additional conveyance should be free from regulation and a commercial matter. As such, far from being cost oriented, "fair & reasonable" should be whatever the market will bear.

We must further highlight that as well as foreclosing the competitive market for IP-TDM conversion, the approach put forward in the consultation would also have ramifications for the highly competitive TDM transit market. If a CP could interconnect to a minimal number of locations in BT's network and receive cost-oriented conveyance charges, this would distort the transit market, which provides similar conveyance services on a competitive basis.

Finally, we should highlight that the proposals regarding technical standards in clause 5.147.1 neglects the standards war that will probably occur around IP interconnection. NICC has standardised IP interconnection using SIP-I signalling and BICC: the latter was intended for specialist usage between MNOs, but nothing in the standard restricts it to such usage. Work has commenced within NICC on standardising a "basic" SIP protocol, with extensions to support regulatory requirements such as 999 and number portability. Internationally, various derivatives of

SIP signalling exist, including a version of SIP-I which is optimised around the needs of mobile networks. The outcome of which IP signalling standard dominates will be market driven, reflecting which of the standards is most efficient and supported by most equipment vendors when IP interconnects are deployed in earnest. By taking the position that the terminating network be compelled to support IP interconnect using the preferred protocol of the originator, this means that a terminating fixed TDM network would be compelled to deploy an IP network that supports all of the potential protocols which have gained NICC approval, and including those which were not aimed at usage in fixed networks. This cannot be considered rational.

Question 9 *Do you think we should consider other options on timing? If so, what alternative option(s) would you propose and why?*

Yes. We do not believe the proposed delay in the introduction of the guidelines is appropriate or justified. As we have stated earlier in this response, the routing changes requires are fairly routine and could be enacted within a few months. A variation of Option 3 with a transition of six months following the publication of the guidance would be a more proportionate and realistic way forward. Further, Ofcom should have considered the options for treatment of Communication Providers that wish to price at a level which is not in-line with the guidance, i.e. those Communication Providers that wish to make a case for higher termination rates (in line with the test set out by Ofcom). The transition period should have allowed for Ofcom to consider the merits of their case(s) ahead of the guidance becoming effective, rather than leaving these to subsequent dispute and thus prolonging the period of uncertainty.

Question 10 *Do you agree with our preferred option (Option 3) on timing? If not, please set out which option you prefer and why.*

We disagree with Ofcom's proposals on the effective date for the guidelines to be enforced. While accepting that an immediate changeover would be unreasonable, October 2012 is unreasonably long. The default outcome is that Ofcom leaves the current reciprocity arrangement, which has unanimously been agreed as not fit for purpose and not fair nor reasonable in place for 3 years following its expiry in 2009. We should particularly highlight that the current reciprocity arrangement, against which Ofcom proposes to adjudicate any Disputes until 2012, is unacceptable because it

distorts a competitive market (transit) because of quasi-regulation of an SMP one (termination), and because it represents an uneven playing field in that BT are able to route as much as 10% of traffic to the wrong CP nodes and still receive SSO rates, while Communication Providers are penalised for each individual minute which is not routed to the correct terminating node in BT network.

Additionally, because Communication Providers will inevitably seek to set their rates at above LES and these will be subject to dispute, the likelihood is there will be no regulatory certainty until mid 2013, a point at which subsequent uncertainty will be introduced via the end of the NCC period and potential imposition of charging based upon pure incremental costs.

We should propose mandating of Communication Provider termination rates set at LES by October 2011. In the intervening period, if any Communication Provider wishes to put forward a case to justify higher rates, they should do that by an agreed date for Ofcom to assess and provide an adjudication of whether it passes their test (this would not preclude other Communication Providers subsequently utilising this same justification for their rates to be higher, if Ofcom accept the logic and the subsequent CP can demonstrate their circumstances are the same). Until that point, Communication Provider rates should remain “as is” other than with the NCC indexation.

Question 11 *Do you consider that guidance on how routing constraints should be treated in the context of fair and reasonable FTRs would be beneficial? If so, please set out your views on whether it would be fair and reasonable for additional conveyance charges to be levied on those networks which are technically unable to route traffic at a more granular level.*

We believe there should be an industry agreement, but this may not require regulatory intervention and could alternatively be resolved by industry discussion, potentially via NICC.

Although modern switching equipment (particularly some NGNs) are able to route on a more granular basis, this is dependent on the relevant information being loaded onto switches, call servers or separate databases (such as those based on ENUM technology). Unfortunately, with the demise of the Ofcom proposed Common Numbering Database, there is no easy way of disseminating such information on a multilateral basis, even if technically some network nodes are able to route based

upon it. Bilateral mechanisms are not realistic due to the number of Communication Providers in the UK market, nor is an approach where a terminating Communication Provider publishes the homing of individual numbers in a common format for originating Communication Providers to poll (because of the sheer volume of terminating Communication Providers that would need to be polled).

Therefore, our position is that subject to the outcome of the ongoing Ofcom study on conservation of geographic numbers, it is appropriate that the expected granularity of routing be at the 1k level. Where a terminating Communication Provider has numbers within a 1k range dispersed across multiple nodes, they should publish a notional home switch for the range, and the onus is on them to deliver the traffic to the actual terminating node at their own cost. That this does not preclude bilateral agreements between Communication Providers to optimally route individual numbers, or the formation of federations of Communication Providers to use a common database to exchange individual number terminating node information, it just means that there is no compulsion on originating networks to do this.

END