

**Ofcom consultation regarding fair and reasonable charges
for fixed geographic call termination**

Comments by TalkTalk Group

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1. Introduction

TalkTalk Group (“**TTG**”) welcomes the opportunity to respond to Ofcom’s consultation on the matter of fair and reasonable charges for fixed geographic call termination.

In essence, Ofcom is proposing that all fixed CPs would ordinarily receive, for the provision of the termination service on their networks, the same FTR as BT (currently the LES/DLE rate) irrespective of scale, network topology or technology, or ingress point. A CP would be able to impose a termination rate higher than DLE rate but only provided it would be able to meet the following tests:

- a) whether the CP is able to demonstrate that its actual costs of fixed geographic call termination would not be recovered by a symmetric FTR (i.e. BT’s LES rate); and
- b) that its actual costs are demonstrably efficiently incurred; and
- c) that a higher rate for termination on the CP’s network would deliver consumer benefits, such as lower end-to-end costs for call conveyance.

In respect of next generation networks (“**NGNs**”) this regime effectively means that all inter-working costs (i.e. transmission and conversion costs resulting from existence of TDM and NGN networks) will have to be paid by the NGN operator even though the migration to NGN reduces costs for legacy TDM operators and the regime will result in potentially substantial inefficiencies. The hurdles set by Ofcom that an NGN operator would need to pass in order to recover these costs are therefore arbitrary, illogical, unfair and insurmountably high.

TTG is very disappointed in Ofcom’s analysis and firmly disagrees with Ofcom’s proposed way forward for the following main reasons.

- **Ofcom fails to support and incentivise the roll-out of next generation networks**

Whilst TDM and NGN networks co-exist a number of unavoidable costs arise. We refer to these as inter-working costs. They do not arise at all in the case of an all-NGN or all-TDM world. The main inter-working costs are:

- (i) Cost of converting traffic from TDM to IP on ingress traffic as well as from IP to TDM on egress traffic;
- (ii) Cost of conveying NGN ingress traffic from a few points of interconnection with TDM networks. By way of illustration, BT is currently able to hand over traffic to TTG at 3 points of interconnection to achieve the lowest possible termination rate on our network. However, TTG has to build out its network to close to 700 points of interconnection in the BT network to achieve LES/DLE termination rate with BT; and
- (iii) Overall cost of maintaining a legacy TDM network in parallel with the NGN simply in order to be able to egress traffic to TDM operators. For instance, TTG is forced to maintain its legacy TDM network to interconnect at BT DLEs in order to achieve the lowest possible termination rate with BT.

Under the current regime these inter-working costs are paid for by NGN operators – the costs incurred by NGN operators are not recoverable in FTRs or other charges. Whilst NGN operators incur these additional costs, a legacy TDM operator gains financially from the investment made by the NGN operator because they can hand over their traffic to the NGN operator at a few points of interconnection and so do not need to maintain an expensive far-reaching network for egress traffic to the NGN operator. This saving for TDM operators is not reflected in FTRs or other charges.

Under Ofcom's proposed reciprocity regime this situation will remain unchanged – NGN operators will bear all the inter-working costs and TDM operators will experience cost savings. We have two concerns with this regime.

First, Ofcom's proposal does not provide incentives for efficient investment in NGNs and cost minimisation. Ofcom agrees that ultimately TDM operators will migrate to using NGN networks.

The efficient rate of migration from TDM to NGN will be determined by the differential in cost of the two technologies and the cost of migration – the bigger the differential the faster the efficient migration (and vice-versa). The presence of inter-working costs alter this picture – in the presence of inter-working cost the optimal rate of migration will reduce (since the longer the dual running period the higher the inter-working costs). Under Ofcom's proposed regime inter-working costs are borne by NGN operators and TDM operators enjoy reduced costs. This has the effect of reducing the cost differential between TDM and NGN so slows the migration rate beyond the efficient point. This results in higher costs through the continuation of higher-cost TDM networks for longer and a longer period of dual running and so higher inter-working costs.

The effect can be described in illustrative terms as below:

- Say, absent any inter-working costs the optimal / efficient migration period was 5 years
- The existence of inter-working costs will shorten the optimal / efficient migration period to (say) 4 years
- Ofcom's regime raises NGN costs whilst reducing TDM costs thereby reducing the incentive to migrate and increasing the migration period beyond the 5 years to (say) 6 years

The effect of Ofcom's proposed policy is to reduce the incentive to invest in NGNs and will therefore slow down the rate of migration to NGNs in comparison to the optimal rate of migration. Ideally, in order for the optimal efficient rate of migration to be incentivised (4 years) more of the inter-working cost should be borne by TDM operators to widen the cost differential. Instead of taking this optimal approach Ofcom is forcing the NGN operator to bear all the costs which narrows the cost differential and so slow migration (to an inefficient 6 years). A sensible pragmatic approach might be to split the costs 50:50 between TDM and NGN operators which would go some way to ensuring an efficient migration rate by leaving the leaving the cost differential unchanged (which would lead to a 5 year migration period).

Second, we note Ofcom's comments that it "*considers it desirable for a CP to levy a FTR determined independently of the technology it uses to terminate its calls. Under the principle an operator moving, for example, from a TDM infrastructure to NGN would see its termination revenues unaffected.*"¹ In addition Ofcom refers to the Competition Commission's determination of January 2009 regarding mobile termination rates in which it was held that the costs of the old technology (in that case 2G) in principle set an upper bound on what it was appropriate to recover through mobile termination charges for calls terminating on the new technology (in that case 3G).²

TTG has never argued that its termination rate for the same termination route should be higher than TDM because it has moved to new NGN technology. What we are saying is that an NGN operator is placed at an unfair competitive disadvantage because of the fact that it needs to continue interconnecting with BT's relatively inefficient legacy TDM network. TTG is not seeking to increase its termination revenues but needs to be able to recover the additional costs it incurs in the transitional period as a consequence of other operators, notably BT, clearly being slow in deploying their own NGNs. TTG has never argued that its termination rate should be permanently higher because of its NGN rather than it should be able to pass on the cost caused by BT's sluggishness and/or any FTR should reflect the cost saving that TDM operators enjoy as a result of NGN networks reducing their egress backhaul cost.

¹ Paragraph 5.70 of Ofcom's consultation document.

² Paragraph 5.15 of Ofcom's consultation document.

We are also very concerned that Ofcom's preferred approach will mean one thing for CPs and something completely different for BT when BT, eventually, migrates to NGN. Ofcom suggests that the termination rate for everyone in the industry should be BT's LES/DLE rate for termination handover at the deepest and most efficient point in the operator's network. We assume this means that the termination rate is the LES/DLE rate at its current level based on BT's current TDM infrastructure.³ We would be grateful if Ofcom could confirm this is the case. Our concern is that when BT eventually migrates to NGN, it will argue that its "DLE rate" needs to be much higher than its current level precisely because it accepts ingress traffic at fewer points of interconnection and so incurs additional backhaul cost (for instance the 27+2 points of handover as was envisaged under BT's previous 21CN plans). We would be grateful if Ofcom could confirm that this will not be allowed (just as Ofcom in the consultation document concludes that current NGN operators should not be allowed to increase their termination rate for the same reasons).

Lastly it is worth addressing why Ofcom has taken the path it has. We think it is because Ofcom insists on maintaining the illusion of adhering to the principle of technology neutrality or MEA when the starting point of its analysis continues to be TDM networks since BT happens to be using it. It places NGN operators like TTG in an impossible position from a policy point of view because it forces us to try and compare our state-of-the-art IP network with that of BT's legacy TDM network. This is not comparing apples with apples and we continue to be concerned that Ofcom's policy framework amounts to an unfair and discriminatory treatment of NGNs.

- **Ofcom provides no incentive on BT to offer IP interconnection**

Ofcom has suggested that one solution to the dilemma that NGN operators face is for BT to offer IP interconnection so NGN operators can egress traffic directly onto an IP network. The solution is correct. However, Ofcom has done little to incentivise BT to offer IP interconnection. This is very disappointing. While Ofcom "encourages" communications providers to negotiate IP interconnection with BT, it has nothing to say about whether BT should in fact be required (or at the very least seriously consider) to offer interconnection using state-of-the-art technology. Ofcom must surely be aware that BT will simply "delay, deny and degrade" any efforts to negotiate IP interconnection and reasonable terms (i.e. maximum DLE rate) because it knows that this path ultimately only leads to much lower revenues based on efficiently-incurred NGN termination costs. We believe Ofcom needs to require BT to offer IP interconnection within a reasonable timeframe and at a rate that is equivalent to that which NGN operators charge (i.e. DLE or similar). In the meantime, BT should "emulate" IP handover and offer 27 points of TDM interconnection on its network at which NGN operators could hand over all traffic terminating on the BT network at DLE rate.

³ With any increases allowed under network charge controls imposed by Ofcom.

- **Ofcom's position does in any event contradict 13 years of industry commercial consensus**

Since 1997, operators and BT have been in agreement over the “reciprocity formula” set out in the Reciprocity Agreement that expired on 30 September 2009. As such, the formula which resulted in a CP termination between BT DLE and Single Tandem, was agreed between the parties to result in a fair and reasonable termination rates which both BT and operators were prepared to pay. The fact that Ofcom is now effectively saying that this formula does not in fact result in a fair and reasonable termination rate is sharply at odds with the previous industry arrangement.⁴ It is difficult to understand why Ofcom now feels it is appropriate from a policy perspective to go against industry consensus without there actually being a formal dispute to resolve.

Moreover, Ofcom's proposed termination rate of BT LES/DLE is not actually “reciprocal” despite the fact that Ofcom concludes that the reciprocity principles identified by Oftel in 1997 remain valid. A “reciprocal termination rate” should mean that a CP should receive the same rate as it pays to BT. Ofcom's proposal does not result in such a reciprocal charge since no CP achieves DLE rate on all calls that it sends to BT for termination on the BT network.

Finally, Ofcom has consistently held in the few disputes over the Reciprocity Agreement that it has resolved over the years that the Agreement's reciprocity formula remains valid. Most notably, in the Opal termination rate dispute, Ofcom explicitly stated that DLE rate is not a fair and reasonable termination rate.⁵ What Ofcom is now proposing therefore clearly contradicts its earlier dispute determinations.

⁴ BT may have argued more recently that DLE rate is the most appropriate but this position is new and does in any event contradict past commercial consensus over the past 13 years. Indeed BT has never deemed it necessary or appropriate to bring a dispute to Ofcom on the basis that the CP termination rate should be DLE rate.

⁵ Ofcom Determination to resolve Dispute between Opal Telecom and BT about Opal's Fixed Geographic Termination Rates (26 October 2009).

2. Responses to Ofcom's questions

In this section we respond in turn to each of the specific questions set out in Ofcom's consultation document.

Section 4

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 numbers.

We agree this section sets out the key issues.

Section 5

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.

We believe Ofcom has identified the relevant options for the general application of reciprocal charging with the exception of Option 3 which we believe does not in fact result in a reciprocal termination rate for CPs for the reasons outlined above.

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 fundamentally disagree with Option 3 for the following reasons:

- (i) it unfairly and unreasonably ignores the additional costs that an NGN operator incurs during the transitional period before BT has converted its network to IP;
- (ii) as a consequence it incentivises an inefficiently slow rate of migration to NGNs and so results in inefficient costs being incurred;
- (iii) it does not in fact result in reciprocal charging for CPs in conflict with Ofcom's analysis that the principle of reciprocity remains valid; and
- (iv) it contradicts Ofcom's position set out in its determination of the dispute between Opal and BT over Opal's fixed termination rate (which explicitly concluded that DLE rate is not a fair and reasonable termination rate).

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 believe that the proposed 3 stage test means that it is in reality impossible for a CP to demonstrate that it should be allowed to charge a termination rate higher than BT LES/DLE. In particular, we fail to understand how Ofcom expects a CP to meet the third stage of the test (that a higher FTR would be offset by demonstrable consumer benefit). For an NGN operator who is forced to incur additional conveyance and conversion costs that a TDM operator does not face, it seems to us that the only way to remedy this is to allow the NGN operator to charge an uplift over and above BT LES/DLE rate. We would suggest that Ofcom knows that it would be extremely difficult for an NGN operator to be able to demonstrate any specific consumer benefits in those circumstances. Ofcom's test is therefore unfair and unreasonable.

We consider that the proposed 3 stage test is also flawed in another respect in that it would prevent NGNs recovering efficiently incurred inter-working costs and would result in the benefits that TDM networks enjoy due to the presence of NGN networks not being shared. The effect of this would be a significant inefficiency. It is for Ofcom to set clear policy and specific regulation that would incentivise efficiency. It cannot be right that efficiency can only be achieved by operators having to take the initiative and pass an arbitrary test. Efficiency should be designed *ex ante* into the regime not be something left to operator negotiation and disputes.

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

No we do not agree with Ofcom's assessment of financial impacts. Ofcom is reducing termination revenue available whilst at the same time effectively signalling that CPs who migrate to NGN infrastructure will have to continue to bear all transitional interworking costs (cost of IP/TDM conversion, longer backhaul distances, parallel TDM networks) during the transitional phase (before BT has migrated). The financial impact on NGN operators is therefore far greater than what Ofcom's quite simplistic analysis (lost termination revenue versus lower termination costs on other networks) would suggest. What Ofcom is proposing will worsen the competitive disadvantage for NGN operators and delay migration beyond the optimal rate. The cost of these dynamic inefficiencies needs to be identified and taken into account by Ofcom before finalising its conclusions.

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.

No Ofcom's proposals will unequivocally reduce the incentives on operators to migrate to NGN infrastructure for the reasons set out above.

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.

We disagree with a number of aspects of Ofcom's analysis and conclusion.

First we note that the analysis was only done on conversion costs not on all inter-working costs. The analysis should be performed on all inter-working costs.

Second we disagree with Ofcom's assessment of the six principles. In particular does not take into account of (or has ignored) the impact of its proposal in reducing the incentive on CPs to migrate at an efficient rate to NGN. We believe Ofcom has a duty to promote efficient investment in networks by virtue of its general duty under Section 3 of the Communications Act 2003 to "*further the interests of consumers ... where appropriate by promoting competition.*" By disallowing NGN operators the ability to recover inter-working costs, Ofcom is acting in conflict with this duty.

We believe an accurate assessment of Ofcom's six principles of pricing and cost recovery applied to "interworking costs" would be as follows.

- **Cost causation:** we agree with Ofcom that this principle does not point to a particular method of recovery of interworking costs – it is equally arguable that the costs are caused by TDM operators being slow to move as it is to argue that the costs are caused by NGN operators moving early. That said, there is an argument that over time it makes less and less commercial sense for any operator to stay on TDM and therefore they are effectively causing inter-working costs to be incurred and should be responsible in full for meeting those costs.
- **Cost minimisation:** Ofcom suggests an NGN operator should not be allowed to recover inter-working costs in a higher FTR because the operator would then have a reduced incentive to minimise the cost. We believe this analysis is very partial and ignores a far bigger cost minimisation opportunity. By not allowing additional cost recovery in this way, Ofcom reduces the incentive for efficient migration to NGNs and as a consequence costs will be higher. Therefore, cost minimisation will be best achieved by allowing the inter-working costs to be recovered from TDM operators (and/or the benefits that the TDM operators enjoy to be shared with NGN operators).

- **Effective competition:** Ofcom's analysis of this principle is misconceived because it is premised on the assumptions that an NGN operator provides the same termination service as a legacy TDM operator. That is not the case. It is inherent in NGNs that there are fewer points of interconnection and that a call is conveyed over a longer distance before terminating compared to a TDM network. Termination on an NGN is more akin to single tandem termination on the BT TDM network and not the same as DLE termination on the BT network. Therefore, effective competition would be most effective by allowing an NGN operators to charge a single tandem rate since this would represent the same price for the same service – charging a single tandem rate would effectively be similar to allowing an NGN operator recover inter-working costs. The underlying problem is again here that Ofcom is approaching the analysis from a TDM network architecture perspective and not, as required, a truly technology-neutral perspective. Ofcom compounds its error by including only conversion costs in its materiality assessment and fails to consider all inter-working costs as explained above.
- **Distribution of benefits:** We believe Ofcom is approaching this principle from too narrow a perspective and should, as it suggests itself, adopt the broader view of the distribution of benefits to all customers. Firstly it is important to recognise that TDM operators (and their customers) benefit from NGN networks since it reduces their costs. Secondly and more importantly, all operators and all customers will benefit from TDM operators bearing some inter-working costs since the migration to NGNs will then be at a more efficient rate and all customers will benefit from lower costs. Therefore, from the perspective of distribution of benefits it is clear that all customers would benefit from a sharing of inter-working costs (since it incentivises efficient migration) and therefore it is appropriate for TDM operators to bear some of the inter-working costs.
- **Practicality:** we agree with Ofcom that it is slightly more difficult to create a regime whereby TDM operators bear some inter-working costs. However, this is a relatively minor concern.
- **Reciprocity:** we have argued above that the termination service offered by an NGN operator is not the same as that available from the TDM operator. It is cheaper for a TDM operator to interconnect into an NGN operator's network than the other way around. The principle of reciprocity therefore means that an NGN operator should be able to recover inter-working costs in an increased FTR to make sure that the balance of termination costs and payments is actually reciprocal.

In summary every principle supports the case for TDM operators to bear some inter-working cost except practicality (which is of relatively minor weight). Thus we fundamentally disagree with the conclusion Ofcom reached.

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.

No we do not agree with Ofcom's preliminary conclusion for the reasons set out above in our response to Question 7.

Section 6

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

No we believe Ofcom has identified all reasonable options on timing.

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

No we believe Option 2 on timing is the most appropriate for the following reasons:

- (i) It is logical to make any change to coincide with the entry into force of the next set of network charge controls imposed on BT.
- (ii) Option 2 would allow future commercial negotiations over a BT IP termination rate to conclude and become embedded in a commercial agreement (with a likely dispute having to be resolved by Ofcom).
- (iii) The argument that Option 2 would unreasonably delay the realisation of consumer benefits is weak at best. Fixed operators have charged a reciprocal rate under the previous Reciprocity Agreement for over 10 years now which means another year is hardly going to make any difference.

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.

TTG does not have any routing constraints in its state-of-the-art next generation network. We do not believe it is fair and reasonable for less advanced network to charge any surcharge for what is effectively inefficient routing due to constraints imposed by outdated technology.