

Narrowband Market Review

Ofcom consultation on possible approaches to cost modelling for the Network Charge Control for the period 2013-2016

Response by TalkTalk Group

9 November 2012

Introduction

TalkTalk welcomes the opportunity to comment on the possible approaches to cost modelling for the next BT network charge control.¹

TalkTalk continues to support strongly the use of NGN as MEA for the reasons outlined in our response to the previous call for inputs. However, we will focus our comments on the suggested NGN cost model in this response and reserve any further comments on policy etc for our response to Ofcom's consultation document.

TalkTalk has retained Analysys Mason to review the cost model and make any necessary comments on methodology and assumptions. Their report is enclosed and forms part of our response.

We respond in turn to Ofcom's specific questions below but in overview our key comments are as follows:

- (i) The cost model appears to us to be generally robust and built using reasonable assumptions around network structure and components. A modern NGN operator would use an MSAN-based approach and Ethernet/IP/MPLS/OTN core similar to that proposed by Ofcom. We also believe that using 20 PoI is a reasonable modelling assumption.
- (ii) We would question Ofcom's suggestion around assumed market share used in the cost model. It does not seem realistic to us to use a market share of only 25% given that BT currently, by our calculations, terminates over 60% of all fixed geographic traffic in the UK. Using a higher market share, closer to 40% to reflect BT retail market share, would be more appropriate and in line with a reasonable expectation around medium-term market development.

¹ For the fixed telecommunications world, it is a much welcome first to be able to verify in detail the underlying network costs and assumptions that make up the termination rate payable to BT and other operators (and reciprocally the one received by TalkTalk). Competitors who have to purchase BT's interconnection services have never before been able to ensure they understand precisely how network costs are derived and calculated.

- (iii) It is striking that the cost model proposed by Ofcom, even without any of TalkTalk's proposed changes outlined below, would result in a local termination rate of only 0.0082 pence per minute. This represents a 95% reduction compared to BT's current TDM-based local termination rate of 0.1873 pence per minute. Reducing the termination rate chargeable by all fixed operators to this level will have a significant but positive impact on the industry and ultimately consumers.²
- (iv) TalkTalk is keen that the fixed termination rate charged by BT and others move to NGN as per Ofcom's cost model as quickly as possible. The EC Recommendation states that fixed termination rates should (ideally) be based on pure LRIC and NGN by 31 December 2012. As the report prepared by Analysys for Ofcom makes clear, the UK is now a laggard compared to many other EU countries as concerns compliance with the recommendation.³ This unfortunate situation can only deteriorate between now and October 2013 when the new BT network charge controls are due to enter into force. TalkTalk believes that the "switch" to NGN-based termination rates therefore cannot be allowed to happen gradually over a three-year period but that Ofcom needs to impose a one-off reduction to NGN charges on 1 October 2013.
- (v) TalkTalk is concerned about the discussion in the consultation document about BT being given a "fair opportunity for cost recovery" because of the move from outdated TDM technology to modern NGN technology.⁴ We entirely accept that there should be no increase in costs compared to an anchor pricing approach (indeed the cost model proves that would not be the case anyway) and that there should be no retrospection. However, we cannot accept a principle that BT should continue to be rewarded for its failure to deploy NGN in a timely fashion by somehow being able to recover legacy TDM costs in its termination rate (or otherwise). The purpose of the model is to determine an efficient forward-looking LRIC over NGN which means it is inappropriate to include any legacy TDM costs.
- (vi) Although the average porting conveyance charge (APCC) does not form part of the network charge control work carried out by Ofcom, we need to emphasise (again) the vital importance of this charge particularly in light of the results of the cost model. Given that TalkTalk as a terminating operator has no way of avoiding the APCC, the charge reduces our termination revenue. Ofcom must therefore ensure that the APCC in the future NGN model will also be based on the pure LRIC cost of a single "hop" across one of the 20 nodes (effectively "single transit" in the model). Otherwise TalkTalk as a new entrant who has had to import numbers from the BT network (and thereby incurs the APCC) will be unfairly penalised. We would therefore urge Ofcom to make a policy statement to this effect as part of the NCC

² As a matter of fact, we would question whether it would make any economic sense for fixed operators to continue charging each other such small amounts or whether Ofcom's proposal heralds a move to a bill-and-keep arrangement in the UK.

³ http://stakeholders.ofcom.org.uk/binaries/consultations/narrowband-market-review-call/annexes/analysys_mason.pdf

⁴ Ofcom consultation document, paragraph 4.17.

statement to avoid having to deal with disputes in the future once the new regime is in place.

Responses to Ofcom's questions

Question 1: Do you agree with our proposal that NGNs can be considered the MEA for the purposes of modelling call origination and call termination services? If not, please explain why.

TalkTalk agrees with Ofcom's proposals. NGNs are widely deployed in the UK and elsewhere and have been so for some time. Indeed, TalkTalk commenced the building of its NGN in 2005 and launched its LLU services based on it already in April 2006. NGN operators tend to deploy the same model and topology of their networks using similar network elements.

In addition, the individual costs of different NGN network elements are easily verifiable as they are produced by several competitive network suppliers. The modelling of call origination and call termination costs is therefore a relatively straightforward task.

Question 2: Do you agree with our proposal that our NGN model should include Pols based on IP interconnection? If not, please explain why.

We agree with Ofcom's proposal. The NGN model should be built on the basis that the network will interconnect at IP with other NGNs (effectively as if TDM technology no longer existed). In this vein, by way of illustration, the NGN cost model should not include any cost of media gateways for handling TDM-IP-TDM conversion and should assume that all traffic is simply handed over via session border controls. Otherwise, the NGN model will be polluted by irrelevant and inefficient network elements and will not represent a genuine MEA.

Question 3: Do you agree with our proposal on 20 Pols for our NGN model? If not, please explain why.

We agree that 20 Pols appear to be a reasonable number although in reality we believe fewer points may be sufficient. In TalkTalk's response to Ofcom's earlier call for inputs, we had even suggested a number of 10 Pols. This number was actually based on our understanding of the type of NGN that BT is currently rolling out.

Question 4: Do you consider that if the MEA is NGN, the costs of conversion from TDM to IP should be excluded from cost-based call origination and call termination rates? If not, please explain why.

We believe it is essential that any conversion costs are excluded from the cost stack underpinning NGN-based call origination and call termination rates. If Ofcom identifies NGN as the MEA for voice services, which TalkTalk strongly believes it should, it is absolutely imperative that the principle is followed through in a consistent manner and this clearly means that TDM operators should bear 100% of conversion costs. Up to now, NGN operators have been forced to bear conversion costs due to Ofcom's policy of using TDM

technology as the basis for the benchmark fixed termination rate. It should also be noted that Ofcom has explicitly rejected any option of sharing the conversion costs between TDM and NGN operators as previously suggested by TalkTalk.⁵ Consistency with Ofcom's previous policy therefore requires that TDM operators bear 100% of conversion costs and that BT (or other operators) should not be allowed to recover any such costs in their termination rate.

In this regard, we believe the cost model presented by Ofcom is not consistent with this principle. The model as published appears to provision 40% of the interconnection traffic as TDM and therefore includes the cost of media gateways in the cost stack. Media gateways are used to convert traffic from TDM to IP (and vice versa) and therefore constitute a conversion cost. They need to be stripped out of the cost model which should assume that all interconnection takes place using only session border controls. We estimate that this change would have a noticeable impact on the pure LRIC termination rate which at a 25% market share, would fall to 0.0026 pence per minute (compared to 0.0082ppm in the published cost model).

Finally in relation to conversion costs, we would emphasise the importance of considering the average porting conveyance charge (APCC). As mentioned above, TalkTalk believes that the APCC in an NGN pure LRIC environment needs to be based on the cost of "single transit" across an NGN node. This means that, if the traffic enters the BT network at one of the DLEs as TDM (i.e. originating on another network), we would not expect to pay for any TDM conveyance costs up to the relevant NGN node where the traffic is handed over to TalkTalk. Apart from being in breach of the cost-orientation requirement in GC18, we also believe that any such TDM costs would effectively amount to conversion costs and should not be recoverable from the NGN operator. It is important that Ofcom lays down these principles in detail now to avoid any future misunderstandings and indeed disputes between BT and NGN operators.

Question 5: Should we use a bottom-up modelling approach for calculating the efficient costs of call termination and call origination? If not, please explain why.

We agree with Ofcom's proposal to use a bottom-up modelling approach. It seems to us that this is really the only reasonable approach given that BT's network is still based on legacy TDM technology and Ofcom needs to model an NGN on a forward-looking efficient basis. It is difficult to see how Ofcom would reasonably be able to use a top-down approach in these circumstances or even use BT's existing network costs as any form of verification of the results from the bottom-up model. Finally, as Ofcom points out, using a bottom-up model does away with all forms of confidentiality issues and gives competitors/customers of BT the opportunity to verify completely the assumptions and methodologies used by Ofcom. In the world of fixed telecommunications, this is indeed a welcome change compared to

⁵ Fair and reasonable charges for fixed geographic call termination, Ofcom statement and final guidance, paragraph 4.62 <http://stakeholders.ofcom.org.uk/binaries/consultations/778516/statement/fair-reasonable-statement.pdf>.

previous NCCs since 1997(!). We would expect that the same principle would be followed in future network charge control reviews even if BT has rolled its own NGN.

Question 6: Do you agree that we should use a decremental approach when calculating the pure LRIC of call termination? If not, please explain why.

We agree with the use of a decremental approach. We believe this approach is fairly standard and we are not aware of any other reasonable alternatives in this context.

Question 7: Do you agree with our approach to network cost verification? If not, please explain why.

In relation to network cost verification, Ofcom's suggests that three conditions should be met:

- (i) No increase in costs compared to an anchor pricing approach based on a hypothetical ongoing TDM network;
- (ii) No retrospection; and
- (iii) Fair opportunity for cost recovery.

We agree with the first two conditions but strongly disagree with the third condition.

In relation to the first condition, it is entirely reasonable to expect that there should be not be any increase in costs as a result of NGN-based termination rates. TalkTalk has never been in any doubt that there would be any such risk and the cost model presented by Ofcom confirms this fact. Indeed, the cost model shows that the local termination rate would fall by 95% compared to the current BT local rate.

In relation to the second condition, we believe it is reasonable that there should not be any retrospection in the sense that BT should not be required to adjust its termination rates on an historical basis as a result of moving to more efficient technology assumptions. The move to NGN termination rates should be on a forward-looking basis.

In relation to the third condition, however, we believe it would be wrong in principle to allow BT (and other TDM operators) somehow to continue recovering TDM costs through its termination rate following the implementation of the NGN-based cost model:

- (i) The regulatory principle is that charges should be based on forward-looking LRIC costs (in this case pure LRIC). Allowing some kind of mark-up for TDM asset costs would mean that termination rates are not based on efficient NGN costs. I
- (ii) t would also mean that BT (and other TDM operators) would have a weaker incentive to migrate to NGN technology and that NGN operators would be put at an unfair competitive disadvantage.
- (iii) In addition, BT is already protected against the cost of technology obsolescence or stranded assets through a significant risk premium on debt included in the

calculation of the applicable WACC. Allowing any recovery of TDM costs would therefore amount to over-recovery on BT's part.

- (iv) Finally it is worth noting that BT (and its shareholders) cannot legitimately expect to be able to continue recovering TDM costs once the NGN-based network charge controls come into force on 1 October 2013. Published in May 2009, the EC recommendation⁶ is very clear that termination rates should be based on NGN costs as from 1 January 2013. It would have been very obvious to BT for a long time that a move to NGN-based termination rates (and pure LRIC) would take place around this time.

Question 8: Do you agree with our proposed approach to traffic forecasting and the modelled market share? If not, please explain.

We disagree with Ofcom's proposal to base the cost model on a market share of only 25%. Ofcom should be using a share closer to BT's current retail market share of around 36%. It is unrealistic (and therefore incorrect) to assume that the fixed line market in the UK would develop into one where there are four large operators of roughly the same size (BT, Virgin, Sky and TalkTalk) over the medium-term. By using BT's current retail market share rather than the proposed 25%, we note that the termination rate in the cost model would reduce quite significantly to 0.0035ppm (compared to 0.0082ppm in the published cost model).

It is also noting in this context that BT retains a commanding share of the market for wholesale exchange lines (total BT retail lines (residential and business) plus all "external" WLR lines). Needless to say, BT will originate and terminate traffic to all WLR line (i.e. using CPS for external lines) and that no WLR provider actually originates or terminates calls (which are still on the BT network). By our calculations, this would give BT a current share of terminated fixed minutes of as much as 65%.⁷ This is a useful indicator of BT's economic scale and associated cost advantages.

We believe using as a basis in the cost model BT's actual market share and its projected development during the network charge control period would be fully in line with the 2009 EC recommendation.⁸ We believe using BT's actual market share would promote efficient

⁶ European Commission Recommendation on the regulatory treatment of fixed and mobile termination rates in the EU, May 2009.

⁷ According to BT's annual report for 2012, as of 31 March 2012 it provided 15.5m WLR lines to other BT lines of business and 6.3m to other CPs.
http://www.btplc.com/Sharesandperformance/Annualreportandreview/pdf/BTAnnualReport2012_smart.pdf
According to Ofcom's market data, there were 33.3 exchange lines in the UK at the same point in time.
http://stakeholders.ofcom.org.uk/binaries/research/cmr/telecoms/Q2_2012_telecoms_data_tables.pdf. This gives a market share of 65%.

⁸ We find Ofcom's consideration of the relevance of the EC recommendation to be rather contradictory and self-serving. In paragraph 5.14, Ofcom admits that the recommendation "is not specific in the approach to apply determining the market share for FTR cost modelling." In paragraph 5.16, Ofcom then goes on to say that using a 50% market share would "most closely follow the spirit of the 2009 EC Recommendation". Yet in paragraph 5.21, Ofcom has a remarkable change of heart when it suddenly claims that using a 25% market share would be the "most consistent with the 2009 EC Recommendation". In actual fact, it seems to us that the recommendation does not actually provide much guidance either way in this regard and it is wrong and inappropriate to claim otherwise.

entry and would also be consistent with the finding that BT has SMP in the markets for call termination (and origination).

Finally, we would note that BT has argued that using a 25% market share would be “more consistent with the 2011 MCT cost modelling” (paragraph 5.18). We do not believe Ofcom’s conclusions in relation to the mobile market to be relevant at all in determining what market share to use in relation to the BT network charge controls. Unlike the fixed line market where BT retains a dominant position by way of historic gift and legacy, the origins of the mobile market are very different in terms of competitive structures. The mobile market has never been dominated by an incumbent operator and already has 4/5 operators of roughly equal size. The approach taken by Ofcom in relation to MTR modelling therefore has a solid evidential base but the same reasoning cannot simply be transposed without considering the very different nature and structure of the fixed-line market.

Question 9: Do you agree with our approach to non-network costs and passive network elements? If not, please explain.

We agree with Ofcom’s approach. We appreciate Ofcom is exploring this issue but would find hard to believe that the cost of “passive” network elements would vary with voice traffic volumes and would result in incremental costs that should be included in the pure LRIC call termination cost stack.

In relation to non-network costs, we agree with Ofcom’s proposal not to include administration costs (product management, policy and planning (PPP)) within the pure LRIC call termination cost stack. There is no clear link between traffic volumes and the cost of administration services.

Question 10: Do you agree with our proposed approach to cost recovery? If not, please explain why.

We agree with Ofcom’s proposed economic depreciation approach to cost recovery.