



Vodafone input to Narrowband Markets Review: BT changes to deregulated services



1 Introduction

In Vodafone's submission to the Fixed Call Origination & Termination Call For Inputs, we stated that we thought it unwise of Ofcom to focus narrowly on origination and termination, and instead there was a need to take a more holistic view of the operation of the market. In particular, we expressed surprise that Ofcom had not seen fit to examine the operation of markets that it had deregulated in previous market reviews, in order to determine whether the outcome had been what Ofcom had expected, and whether the deregulation was causing unforeseen harm.

In this submission we describe BT's forthcoming changes to deregulated services, and set out possible damage to competitive retail markets.

2 November 2015 price changes

BT has set out changes to its charges, as set out in this section.

2.1 Geographic Termination Rates

BT has removed time-of-day splits for all non-regulated components of call termination, and introduced a pence-per-call charge in addition to pence-per-minute. The rate, which applies 24hrs/day, is set at 10% less than the previous daytime rate, meaning that the ppm rate is now 96% higher than before in the evening and 149% higher at weekends. Given that BT's current day/evening/weekend rate prevails for the regulated termination rate for DLE delivery (which effectively forms part of the pricing), defacto BT's rate for conveying calls between tandem and DLE nodes is now higher at evening/weekend than it is in the daytime.

It is notable that BT has not updated the regulated termination rates. Usual practice is for these to be updated on the 1st October to take account of the charge control. As BT has not done this, it will be necessary for it to introduce a larger reduction later in the year in order to comply with the 15/16 charge control. However, this means that it is possible that the "exit" rate from the current charge control at September 2016 will be set at below the average level of rates Oct 15-Sept 16, thus complicating the calculation of rates for the new charge control (if there is one).



The rates are set out as below:

Delivery at	Applies	Pence Per Min			+ Pence Per Call		
		Daytime	Evening	Weekend	Daytime	Evening	Weekend
DLE (regulated)	Unchanged	0.0449	0.0206	0.0162	0	0	0
Single Tandem	Previous	0.1767	0.0809	0.0637	0	0	0
	New	0.1588	0.1588	0.1588	0.0704	0.0704	0.0704
Double Tandem (Short)	Previous	0.4268	0.1954	0.1539	0	0	0
	New	0.4169	0.4169	0.4169	0.0704	0.0704	0.0704
Double Tandem (Med)	Previous	0.6004	0.2749	0.2164	0	0	0
	New	0.5832	0.5832	0.5832	0.0704	0.0704	0.0704
Double Tandem (Long)	Previous	0.8401	0.3846	0.3029	0	0	0
	New	0.8073	0.8073	0.8073	0.0704	0.0704	0.0704

Services other than DLE delivery were deregulated in the last-but-one market review, on the basis of local-tandem-conveyance being a contestable service. On the whole Vodafone would not disagree with this supposition, but there are certain locations on BT network that are unavailable for direct connection (e.g. ASU nodes), and others where it is uneconomic (⌘). As such, in some cases the charges are unavoidable.



2.2 Carrier Preselection (call origination)

As with call termination, BT has removed time-of-day splits for all non-regulated components of CPS origination, and introduced a pence-per-call charge in addition to pence-per-minute. The rate, which applies 24hrs/day, is set at 54% more than the previous daytime rate, meaning that the ppm rate is now 236% higher than before in the evening and 327% higher at weekends. The rates are set out as below:

Delivery at	Applies	Pence Per Min			+ Pence Per Call		
		Daytime	Evening	Weekend	Daytime	Evening	Weekend
DLE (regulated)	Previous	0.5654	0.2588	0.2038	0	0	0
	New	0.5318	0.2435	0.1917	0	0	0
Single Tandem	Previous	0.6636	0.3088	0.2392	0	0	0
	New	1.0217	1.0217	1.0217	0.1493	0.1493	0.1493
Double Tandem (Short)	Previous	0.9136	0.4183	0.3294	0	0	0
	New	1.493	1.493	1.493	0.1493	0.1493	0.1493
Double Tandem (Med)	Previous	1.0872	0.4978	0.392	0	0	0
	New	1.7813	1.7813	1.7813	0.1493	0.1493	0.1493
Double Tandem (Long)	Previous	1.327	0.6075	0.4784	0	0	0
	New	2.2388	2.2388	2.2388	0.1493	0.1493	0.1493



2.3 Transit (also known as TWIX)

For TWIX, BT has removed time-of-day splits for all non-regulated components, and introduced a pence-per-call charge, with pence-per-minute charging now applying after the first minute. The ppm rate, which applies 24hrs/day, is set at 58% more than the previous daytime rate, meaning that the ppm rate is now 246% higher than before in the evening and 340% higher at weekends. The rates are set out as below:

Delivery at	Applies	Pence Per Min			+ Pence Per Call		
		Daytime	Evening	Weekend	Daytime	Evening	Weekend
Single Tandem	Previous	0.04	0.0183	0.0144	0	0	0
	New	0.0634*	0.0634*	0.0634*	0.0634	0.0634	0.0634
Double Tandem (Short)	Previous	0.3328	0.1523	0.1199	0	0	0
	New	0.5323*	0.5323*	0.5323*	0.5323	0.5323	0.5323
Double Tandem (Med)	Previous	0.4478	0.2050	0.1814	0	0	0
	New	0.7034*	0.7034*	0.7034*	0.7034	0.7034	0.7034
Double Tandem (Long)	Previous	0.7175	0.3285	0.2856	0	0	0
	New	1.1263*	1.1263*	1.1263*	1.1263	1.1263	1.1263

*applies after first minute (i.e. effect is defacto to introduce a minimum one minute call duration)



2.4 NGCS call origination other than from DLE (also known as AERO)

NB [X] this [X] is a supplement to the NGCS Access Charge where calls are not collected from the originating DLE. For AERO, BT has removed time-of-day splits for all non-regulated components, and introduced a pence-per-call charge with pence-per-minute applying thereafter. The ppm rate, which applies 24hrs/day, is set at 84% more than the previous daytime rate, meaning that the ppm rate is now 300% higher than before in the evening and 410% higher at weekends. The rates are set out as below:

Delivery at	Applies	Pence Per Min			+ Pence Per Call		
		Daytime	Evening	Weekend	Daytime	Evening	Weekend
Single Tandem	Previous	0.1156	0.0529	0.0417	0	0	0
	New	0.215*	0.215*	0.215*	0.215	0.215	0.215
Double Tandem (Short)	Previous	0.3656	0.1674	0.1318	0	0	0
	New	0.6731*	0.6731*	0.6731*	0.6731	0.6731	0.6731
Double Tandem (Med)	Previous	0.5392	0.2469	0.1944	0	0	0
	New	1.0149*	1.0149*	1.0149*	1.0149	1.0149	0.10149
Double Tandem (Long)	Previous	0.779	0.3566	0.2808	0	0	0
	New	1.4342*	1.4342*	1.4342*	1.4342	1.4342	1.4342

*applies after first minute (i.e. effect is defacto to introduce a minimum one minute call duration)



3 Impact on competition

3.1 NGCS

BT's price changes will have a profound effect upon retail NGCS competition.

Non-BT origination

At the time of the introduction of the two-part NGCS charging regime, Ofcom concluded that the terminating operator should pay transit charges. The logic of this was that terminating operators had the ability to interconnect to originating operators to get the calls routed directly.

However, the bulk of transit to Vodafone's NGCS services – at least [redacted] – in fact comes from originating operators to whom Vodafone directly connects. These originating operators have little incentive to go to the trouble of breaking out the thousands of decodes required to route 08/09 correctly to the terminating network, since the terminating operator (i.e. Vodafone) is compelled to pay for any transit routing: it is far easier to simply default route 08/09 to BT. The issue is a structural one, caused by the complexity of the 08/09 numbering plan – whereas Vodafone receives minimal transit traffic to 101 and 111, transit traffic from the same originators to our 0800 ranges is of the order of [redacted] of the total. [redacted]

Ofcom's logic was that terminating operators could incentivise originating operators to route directly by passing on some of the transit charge in the guise of a lower termination rate (or *defacto* lower service charge). However,

- a) given the amount of work involved in breaking out the 08/09 ranges it is unlikely that any reduction will be of sufficient incentive and
- b) providing such a discount means the terminating operator receives lower revenue than BT (as the only operator not facing these transit charges) for a given price-point, meaning that it will suffer a competitive disadvantage.

[redacted] The issue potentially goes further than transit traffic, however. The most common approach across industry where operators establish direct interconnects is that the benefit of avoiding BT transit is shared. Typically, a "split TWIX" arrangement is used, whereby for NGCS, the termination rate applied is the standard one, minus half the TWIX rates above. At a time when single tandem transit was regulated, many interconnect agreements actually directly referenced the section of the BT Carrier Price List (CPL) governing TWIX to make the rate determination a formulaic one. These agreements were not reviewed when single tandem transit was deregulated, and it is now unclear whether originating operators will seek to make



terminating operators dramatically reduce their NGCS termination rates to reflect BT's new extreme TWIX charges.

BT Origination

Layered on top of this we have the impact of AERO price changes on origination from BT. On the whole, terminating operators have the flexibility to interconnect deeply into BT network in order to avoid AERO charges. However, there remains a significant tail of BT nodes where interconnection is not possible, hence AERO charges are unavoidable [§].

Competitive effect

Therefore, taking into account all of the above, competing NGCS providers will receive a considerably lower termination rate than BT's equivalent services. [§] At the time of the last market review, Ofcom acknowledged that BT had market power in single tandem transit conveyance (at least to smaller operators), but concluded that *ex post* application of competition law would be sufficient to constrain abuse. Given the scale of the price changes being implemented by BT [§]

3.2 Geographic Call Termination

As described above, the prevalent pricing methodology on direct interconnections is "split TWIX". In the case of geographic call termination, this means the terminating operator applies the published rate that they charge BT, plus ½ TWIX – once again this is typically embedded in interconnect agreements, from a time when the rate was regulated.

It is now unclear whether terminating operators will ripple through the BT price changes, thus dramatically increasing their termination rates to operators other than BT – for example at weekend, an altnet would pay 0.0479ppm¹, versus 0.0162ppm charged to BT. Vodafone would prefer that these changes were not rippled through but [§]. Vodafone considers that part of the Narrowband Markets Review analysis should consider whether a near 300% differential in termination rates charged to BT versus other CPs can be considered Fair & Reasonable, and whether there is a need for Ofcom to be more prescriptive about other operators' fixed termination rate (as is the case for mobile termination rates).

If terminating operators do ripple through the BT price changes, then competition will be compromised both at a retail and wholesale basis. The impact upon retail markets is obvious; all operators other than BT will face a higher cost base and in a low margin market, that means higher retail prices. Less obvious is the

¹ Termination rate of 0.0162ppm charged to BT, plus ½ TWIX of 0.0634ppm



impact upon competitive wholesale transit markets – if transit operators other than BT face a higher cost base to terminating operators, then inevitably this will compromise competition. A market where Ofcom believed in 2013 that competition was robust enough to allow deregulation to occur will potentially implode.

3.3 Carrier PreSelection

Services other than DLE origination were deregulated in the last-but-one market review, on the basis of local-tandem-conveyance being a contestable service. As with call termination, on the whole Vodafone would not disagree with this supposition, but [redacted].

3.4 Portability Conveyance Charges

Vodafone is currently in dispute with BT about the level of Average Portability Conveyance Charges (APCCs) applied by BT where we import numbers from them. A key point of this Dispute has been whether, when calculating APCCs, BT can consider portability conveyance elements such as inter-tandem-conveyance to be unregulated. Ofcom's Provisional Conclusions are that they cannot, hence the guidance that charges be LRIC-based apply. However, in the event that these Provisional Conclusions are reversed in the final statement, the above price changes will undoubtedly trickle through to BT's APCC, thus dramatically increasing it. BT's modelling is somewhat opaque, but our estimate is that weekend APCC charges could be some 5-6x the termination rate received by operators that have imported numbers.

4. Conclusions

The initial scope of the market review was restricted to being focused narrowly upon call origination and termination. Vodafone has made the point that Ofcom should take a more holistic view, because certain deregulated markets are linchpins to the operation of retail markets. This submission has described how changes by BT to pricing in deregulated wholesale markets have the power to dramatically affect retail markets. We urge Ofcom to take an overview of the voice market, rather than leaping to examination of narrow wholesale service markets.