
Cumulo rates

5 October 2011 • Updated report

1 Introduction

This report provides a critique of the treatment of ‘Cumulo rates’ within Ofcom’s charge control model, suggestions for alternative methods, and a list of questions to be used in discussions with BT and the Valuation Office Agency (“VOA”) on this issue.

‘Cumulo rates’ is the phrase used to describe a tax on commercial property. The “commercial property” taxed in this way is defined by the VOA as BT’s network (ducts, poles, parts of exchange buildings and other assets as described more fully below).

This report supersedes the report of the same title dated 17 August 2011. It has been re-issued to take into account new data supplied to us on 29 September 2011.¹ Prior to 29 September the documentation supplied during the consultation implied that the VOA assessed the whole of BT for Cumulo rates.² However, it now appears that the VOA has limited its assessment (in recent years) to “UK wholesale activities” (under three headings: access markets, other wholesale markets and wholesale residual).

The main findings of this report are:

- the VOA calculates the amount of tax by considering the profit potential of all the services offered by BT’s UK wholesale activities
- so, if any service is profitable, then a service provided outside Openreach “causes” part of the tax
- in view of this, a causal allocation basis for this tax would be profits, not “profit weighted NRC”, as in Ofcom’s model
- Ofcom has made insufficient data available to calculate the impact of our suggested new allocation basis. However, even using Ofcom’s existing allocation basis, it appears that the annual cost of Cumulo rates allocated to LLU and WLR may have been overestimated by approximately GBP0.50.

This document is structured under the following headings:

- assumptions regarding the cost of Cumulo rates for the totality of UK wholesale activities
- implications for the price control of the valuation approach used by VOA
- allocation of Cumulo rates to Openreach

¹ BT, “BT Cumulo Rates: Non-confidential summary of BT presentation to Ofcom Aug 2011”, 29 September 2011.

² BT seemed to us to share the view that the VOA conducted a “whole BT” valuation. See, for example, the first witness statement of Edward Dolling to the LLU Appeal, paragraph 78.

- allocation of Cumulo rates between MPF, WLR+SMPF and NGA,³ and
- questions for discussion.

2 Assumptions regarding the cost of Cumulo rates for the totality of wholesale activities

This section summarises assumptions in the charge control model regarding the total cost of Cumulo rates. The allocation of this cost between services is addressed in Section 5.

Figure 1 shows the annual cost of Cumulo rates to Openreach, together with the (smaller) portion of the same annual cost allocated to the rest of BT.

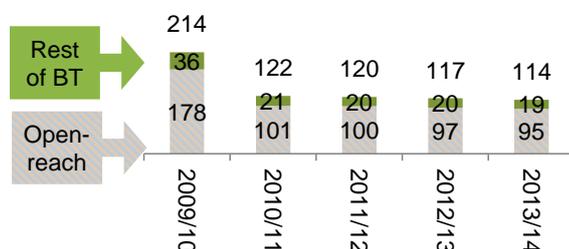


Figure 1: Cumulo rates annual cost, GBP million per year [Source: Ofcom’s Consultation Document (31 March 2011, Fig 8.3, p.53), after Ofcom adjustment. ‘Rest of BT’ derived by grossing up at 83% in all years, as per Fig 8.2, p.52, and A8.39, p.57]

The annual cost of Cumulo rates (or indeed of any business rates) is calculated by multiplying a Rateable Value (RV) by a Poundage Rate (or “rate multiplier”). An RV applies to an individual commercial property (a “hereditament”, in VOA jargon), while the poundage rate is the same for all hereditaments.⁴ The VOA revises each hereditament’s RV every five years, and publishes the poundage rate every year.

For the BT Cumulo assessment, the hereditament is the entire BT network. This includes, among other assets, BT’s duct, fibre, copper, exchange buildings, cabinets, manholes and poles.⁵ These are the “hereditament” assets. Other assets (including switches, power equipment, air conditioning, and numerous others) are known, again in VOA jargon, as “non-rateable assets”.

³ MPF, WLR+SMPF and NGA are wholesale services offered by Openreach to Communications Providers (CPs) (including to BT Retail). MPF means Metallic Path Facility, a fully unbundled local loop allowing a CP to offer voice and data using its own switch co-located in BT’s exchange. WLR+SMPF means Wholesale Line Rental plus Shared MPF, in effect a shared unbundled local loop allowing the CP to offer data via its own switch, plus voice via BT’s switch. NGA means Next-Generation Access, an arrangement whereby BT’s traditional all-copper local loop is replaced by a local loop, making use of fibre-optic technology.

⁴ The poundage rate is not uniform throughout the UK. For example, there are regional variations. However, the simplified summary here is sufficient for the purposes of the current document.

⁵ Second witness statement of Edward Dolling to the LLU Appeal, page 4. The hereditament “includes, amongst other assets, all the duct, fibre, copper and cabinets within BT’s network plus all of its exchange buildings. It, however, excludes BT’s office estate”. Ofcom’s Statement of 22 May 2009 (at A6.126) mentions duct, exchange buildings, cabinets and poles. The 31 March 2011 Consultation Document (at Fig 8.2, p.55) mentions, in addition, fibre, copper, payphones and manholes.

Ofcom’s Consultation Document does not present the RV or the poundage rate used to derive the annual cost of Cumulo rates. However, we can “reverse engineer” them by reference to VOA publications. Figure 2 shows the poundage rate that we think Ofcom has used in its model.

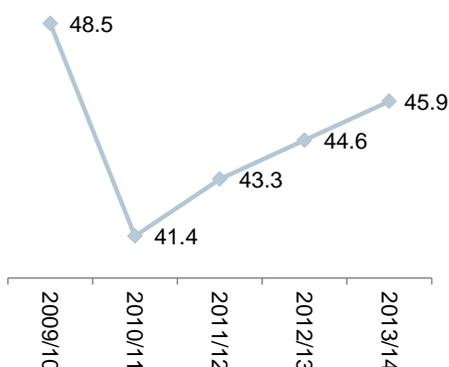


Figure 2: Poundage rate (or “rate multiplier”), per GBP [Source: Actuals from the VOA (2009/10 and 2010/11), increasing in line with Ofcom’s RPI forecast thereafter]

Combining Figure 1 and Figure 2, we can derive the RV that Ofcom will have assumed for the whole of BT. This is shown in Figure 3.

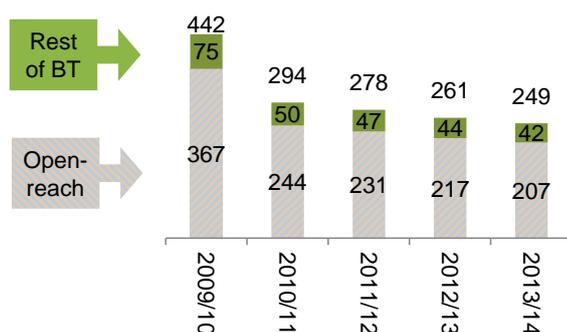


Figure 3: Rateable value (RV), GBP million [Source: inferred from the annual cost and the poundage rate]

BT’s RV has fallen significantly in recent years. It was at least GBP533 million in 2005/6.⁶ As can be seen in Figure 3, Ofcom forecasts further reductions in RV over the period covered by the charge control. The VOA does not aim to revise RVs annually, but only every five years. The current five-year valuation cycle for BT’s Cumulo was supposed to have begun in April 2010.⁷ Over the previous five-year cycle there were “mid-cycle” adjustments to the RV in response to what VOA calls “material changes in circumstance” (“MCCs”). Ofcom has not forecast expected future MCCs individually,⁸ preferring instead to model a progressive expected future downward adjustment to BT’s RV, based on an average annual rate of reduction of 5.4%.⁹

⁶ Witness Statement of Euan Smith to the LLU Appeal, page 6: “the Central Rating List for England was [...] updated in January 2009 to reduce the rateable value of BT’s infrastructure assets *in England* from £533,500,000 to £386,000,000” (our emphasis; the value including Scotland will have been higher).

⁷ Although we understand that the corresponding valuation is still a confidential draft.

⁸ Consultation Document Annexes, Paragraph A8.37.

⁹ Strictly speaking, Ofcom is forecasting an annual average decline of 5.4% in *Openreach’s share* of BT’s Cumulo RV. Ofcom does not purport to forecast the annual cost or RV for BT as a whole. However, we can infer that Ofcom’s approach requires the whole of BT’s Cumulo RV to decline by the same average rate of 5.4% p.a.. This is

According to the VOA, “the rateable value broadly represents the annual rent the property could have been let for on the open market on a particular date”.¹⁰ The VOA employs various valuation methods, one of which is called “expenses and receipts” (E&R, or “profits basis”). The E&R method is the one used to calculate BT’s Cumulo RV.¹¹ The steps in the E&R method are set out in the VOA’s Rating Manual (RM):¹²

“Firstly the gross profit derived from occupation of the hereditament is calculated by deducting the cost of purchases made [by the hypothetical tenant] from [the hypothetical tenant’s] gross receipts.

The working expenses, including an allowance for renewal of the tenant’s assets, are then deducted from the gross profit to give the divisible balance.

The divisible balance represents the amount to be shared between the tenant (tenant’s share) and the landlord (rent, or rateable value).”

The VOA explains the above steps in detail by means of a 16-page chapter in the RM. It also provides a worked example whose key steps can be summarised as follows:¹³

- “Adopted Net Profit” (ANP) is calculated, excluding depreciation, loan interest and exceptional items
 - In the example, this is done by taking some 20 revenue and cost “line items” for the preceding three years and then combining the three years’ values to arrive at a single “adopted” value for each line item
 - These line items appear to be based on the last three years’ accounts of the business being assessed for rates (we refer to this as “the Taxpaying Business”, to distinguish it from the so-called “hypothetical tenant” whose business is similar, but not the same, as that of the Taxpaying Business). The worked example lists revenues from four of the Taxpaying Business’s products, along with its costs such as “wages and salaries”
 - It is reasonable to assume that the VOA makes significant use of the last three years’ accounts of the Taxpaying Business in this sort of exercise; the RM says “It is customary for at least the three years accounts leading up to the [valuation date] to be examined in order to establish trends and levels”.¹⁴

because Ofcom’s model keeps the proportion of BT’s Cumulo RV that is attributable to Openreach constant at 83% between 2009/10 and 2013/14.

¹⁰ VOA, “Business Rates: an introduction” (<http://www.voa.gov.uk/corporate/publications/businessRatesAnIntro.html>)

¹¹ VOA, “Rating Manual – Volume 5 – Section 873: Next Generation Access Telecommunications Network (NGA): Practice Note 2010” (http://test.voa.gov.uk/instructions/chapters/rating_manual/vol5/sect873/frame.htm)

¹² VOA, “Rating Manual – Volume 4 – Section 6: the Receipts and Expenditures Method” (<http://www.voa.gov.uk/corporate/Publications/Manuals/RatingManual/RatingManualVolume4/sect6/b-rat-man-vol4-s6.html>)

¹³ VOA, “Rating Manual – Volume 4 – Section 6; Appendix 2” (<http://www.voa.gov.uk/corporate/Publications/Manuals/RatingManual/RatingManualVolume4/sect6/d-rat-man-vol4-s6-app2.html>)

¹⁴ Rating Manual – Volume 4 – Section 6 – Section 2.1.

- The worked example then subtracts from the ANP an amount called “Renewal Fund for the replacement of Non-Rateable assets” (RF). These are the assets that the company requires to produce its products (excluding the assets comprising the hereditament). In the example, the RF is arrived at by comparing, contrasting and then combining three related quantities:
 - a single representative depreciation figure, based on an inspection of the depreciation in the last three years’ accounts
 - an estimate of the replacement costs of the non-rateable assets, annualised using a sinking fund formula
 - the same estimate of the replacement costs of the non-rateable assets, this time annualised using a straight-line depreciation formula.
- The result of the previous step (ANP minus RF) is called the “Divisible Balance”. The worked example allocates this to the tenant in two tranches:
 - “Interest on Capital”: 6% of the replacement costs of the “Non-rateable assets”
 - “Profit and risk”: 45% of the Divisible Balance, after deduction of the Interest on Capital. It is not clear how the 45% is derived. The RM provides some hints:

“16.7 Percentage of the divisible balance

*The percentage to adopt will depend on the negotiating strengths of the parties and the risk to, and quantum of, the tenant’s capital. Where this method is adopted it is unlikely that **50% of the divisible balance** will be correct, although **by default such a split has been commonplace in the past**. [our emphasis]*

A variation on this division of the divisible balance is to estimate the tenant’s share in two parts. Firstly, an allowance is made for “interest on capital”, at 6% for the 1995 Lists as described at 16.2 above. This is then deducted from the divisible balance and a proportion of the “remaining balance” attributed to the tenant as an allowance for “profit and risk”.

The proportion of the “remaining balance” adopted will again vary with the facts of the case but will be a lower percentage than if an allowance for interest on capital had not already been made [...].

The allowances for “interest on capital” and “profit and risk” should be summed to arrive at the total tenant’s share.”

3 Implications for the price control of the valuation approach used by the VOA

The worked example in the VOA’s RM (summarised above) is clearly not the method used to work out BT’s RV, because the example business is smaller and simpler than BT’s. However, it raises some intriguing questions and possibilities about the valuation of BT’s “wholesale activities”:

- It seems that a key input for the VOA's valuation of the RV of BT's "wholesale activities" will have been the revenue and cost items in BT's Regulatory Financial Statements (RFS) for the previous three years
- It is likely that the VOA will have forecast those revenue and cost items using a relatively small number of broad headings of revenue and cost. For example, we think it is likely that, if it could obtain a forecast of Openreach's financial results, the VOA would use that to inform its forecast for wholesale "access markets". If this is so, the VOA will probably have made use of the published forecasts of industry analysts such as brokers and specialised market forecasting firms, who regularly forecast BT's expected revenues and costs, based on analyses of performance over rather similar time periods to the past three years' accounts considered by the VOA. These firms forecast the impact of changes in the market (such as fixed–mobile substitution, and the growth of local loop unbundling). Many of their published forecasts present BT's future revenues under a small number of broad headings, one of which is "Openreach".

BT's RV has declined sharply in recent years, from GBP533 million in 2005/6 to an estimated GBP294 million in 2010/11. BT's explanation suggests that most of this reduction was due to the introduction of local loop unbundling (LLU).¹⁵ Another way of saying the same thing would be to infer that, at some point in the period 2005/6 to 2010/11, the VOA switched from valuing the whole of BT to valuing only the "wholesale activities". Knowing when this transition took place would increase confidence in the explanations currently being offered by BT for the Cumulo valuation.

4 Allocation of Cumulo rates to Openreach

Ofcom assumes that 83% of the RV of BT's wholesale activities, and of its annual Cumulo cost, is caused by Openreach. The same percentage figure is used in each year of the charge control model. The 83% figure is based, in 2009/10, on the RFS, whose methodology on this point was explained by BT in the appeal. The key points of BT's explanation were:¹⁶

- BT's assumption is that the majority of the Cumulo charge charges should fall on Openreach, because Openreach owns most of BT's rateable assets, notably "Access" assets like duct, copper, telegraph poles, cabinets, manholes, etc.

¹⁵ Second witness statement of Edward Dolling to the LLU Appeal, paragraph 21: "The rebate reflected a reduction in BT's rateable value as a result of local loop unbundling. [...] The effect of local loop unbundling is that Openreach continues to use the same copper lines to provide the [Core Rental Services, "CRS"] and to derive revenues from them; that is so **irrespective of whether CPs take MPF, SMPF or WLR Rental**; however, other downstream parts of BT no longer derive revenue from the use of those lines by CPs who have unbundled local loops to supply voice and broadband services to customers further downstream (end-users). Local loop unbundling therefore results in a reduction in the overall net earning potential of the [BT hereditament]." (our emphasis)

¹⁶ First witness statement of Edward Dolling to the LLU Appeal, paragraph 78: "Firstly, under rating law and precedent, BT's rateable assets are assessed together. The allocation of BT's rateable value and/or its Cumulo bill to various divisions is not a matter for rating law so an allocation basis has to be derived. For both the management and regulatory accounts, the key allocation basis is the net replacement value of BT's rateable network assets: this has been the subject of external audit and regulatory scrutiny for several years. Regardless of whatever value metric is used to apportion BT's Cumulo Rates bill the majority of the charges would fall on Openreach as Openreach owns most of BT's rateable assets, notably "Access" assets like duct, copper, telegraph poles, cabinets, manholes etc.".

- The VOA applied its Receipts and Expenditure (R&E) method to BT as a whole, not to Openreach as such (although information provided on 29 September indicated that it was in fact only applied to BT’s “wholesale activities”). The allocation within BT of the cost of Cumulo was a matter for BT, and made by BT
- BT relied primarily on its own data to make this allocation – specifically the RFS database, which allowed BT to derive an allocation key called “profit weighted NRC [Net Replacement Cost]” for each of its assets.

BT’s method, outlined in the points above, appears flawed. On the first point above, the fact that “Openreach owns” certain assets is not relevant. The VOA methodology we summarised in Section 3 above suggests that RV (and hence Cumulo cost) is a function of profit potential, not ownership. Openreach’s profits are strongly influenced by regulation, and the profits of the Core Rental Services (CRS)¹⁷ are more strongly influenced by regulation than many of Openreach’s other products. The current price control consultation intends to set a price control that allows BT to earn a regulated rate of return on certain Openreach products.¹⁸ It is therefore natural for BT to seek higher profits from the unregulated (or less regulated) products and businesses that make use of the hereditament. If profits cause Cumulo via the RV (as seems to be the case) then a causal allocation key would be profits, not “profit weighted NRC”.

5 Allocation of Cumulo rates between MPF, WLR, WLR+SMPF and NGA

The current allocation method will tend to allocate a similar amount of Cumulo (expressed in GBP per line) to each of MPF and WLR+SMPF. If implemented correctly it would also allocate a similar amount to NGA. As we explain later in this section, we do not believe that Ofcom’s model currently allocates any Cumulo cost to NGA.

It is impossible to estimate what results a more causal method of allocation based on profits would produce. The VOA seems to share the view that NGA lines are more profitable than those based on copper access lines. The VOA probably knows that BT estimated a Cumulo cost per line in 2009/10 of approximately GBP5.50 for services based on copper access lines,¹⁹ and it proposes to assess NGA operators (other than BT) for Cumulo using an RV of GBP20 per home connected,²⁰ equivalent to an annual charge of GBP9.70 (after multiplying by the rates multiplier of 48.5p in 2009/10).²¹ This implies that the profit potential of a non-BT NGA line is higher than that of a BT copper-based line, by a factor of 1.76 (GBP9.70 divided by GBP5.50). This greater value could be accounted for by a number of factors, including:

¹⁷ CRS means WLR rental, MPF rental, SMPF rentals only, i.e. excluding new provides, migrates and other related services.

¹⁸ Plus or minus an amount depending on whether it comes in above or below the efficiency benchmarks employed by Ofcom in its forecasting.

¹⁹ Consultation Document, Annex Fig 8.10, p.62. WLR: GBP5.35. MPF: GBP5.45. SMPF: GBP0.07.

²⁰ “Rating Manual – Volume 5 – Section 873: Next Generation Access Telecommunications Network (NGA): Practice Note 2010” (http://test.voa.gov.uk/instructions/chapters/rating_manual/vol5/sect873/frame.htm)

²¹ See Figure 2.

- NGA lines enjoying a higher average wholesale revenue per user than copper-based lines, and
- non-BT operators having a greater opportunity than BT to focus their network build on areas of high density and low unit cost.

On the first point, about revenue per user, it is unlikely that an NGA line would earn more than 10% to 20% more than a copper-based line for the same customer. On the second point, about low unit costs, this effect will be less pronounced during the years covered by the charge control than it will be in the long term, because BT itself can be expected to find its initial NGA customers in the same low-cost areas. In summary, based on the limited experience of NGA to date, it is impossible to estimate the relative profit potential of BT's NGA lines and its copper-based lines for the purposes of allocating Cumulo.

In the remainder of this section we present some thoughts on the impact on unit costs of allocating Cumulo cost to NGA, and assuming that (for the sake of argument) NGA lines are 10% more valuable than copper-based lines.

In Ofcom's model, between 41% and 45% of Openreach's Cumulo cost is attributable to services other than CRS. This can be worked out by applying the Cumulo allocation to CRS. As shown in Figure 4, the Cumulo cross-charge attributable to CRS services is modelled as GBP98 million in 2009/10, falling to GBP56 million in 2013/14.

<i>Concept</i>	<i>Source</i>		<i>WLR</i>	<i>MPF</i>	<i>SMPF</i>	<i>Total</i>
Cost per line per year, 2009/10, GBP	Annex Fig 8.10, p.62	[a]	5.35	5.45	0.07	
Lines, 2009/10, 000s	Annex Fig 6.1, p.43	[b]	15 851	2253	11 760	
Allocated cost, 2009/10, GBP m		[c] = [a]x[b]	85	12	1	98
Cost per line per year, 2013/14, GBP	Annex Fig 8.10, p.62	[d]	3.03	3.08	0.04	
Lines, 2013/14, 000s	Annex Fig 6.1, p.43	[e]	11 470	6 660	9 160	
Allocated cost, 2013/14, GBP m		[f] = [d]x[e]	35	21	0	56

Figure 4: Applying the Cumulo allocation to Core Rental Services (CRS) [Source: as indicated in second column]

The Consultation Document does not provide a breakdown of the remainder of Openreach's Cumulo cost, which will be accounted for by:

- LLU Ancillary Services ('LLU-AS')²² that form part of the Consultation, such as new provides, migrations, co-mingling, etc.

²² By "LLU-AS" (a new term introduced in this document, not an Ofcom acronym) we mean Ancillary Services (new provides, migrates and other related services); that is, everything whose prices are proposed to be regulated in the Consultation Document, except for the CRS.

- Other Openreach regulated services that do not form part of the Consultation Document, such as the so-called Alternative Interface Symmetric Broadband Origination (“AISBO”) services, including Wholesale Extension (“WES”), Backhaul Extension Services (“BES”), Ethernet Backhaul Direct (“EBD”) and Ethernet Access Direct (“EAD”), plus Openreach activities without regulatory reporting obligations.

This remainder of Openreach’s Cumulo cost is represented by the red area and question mark on Figure 5.

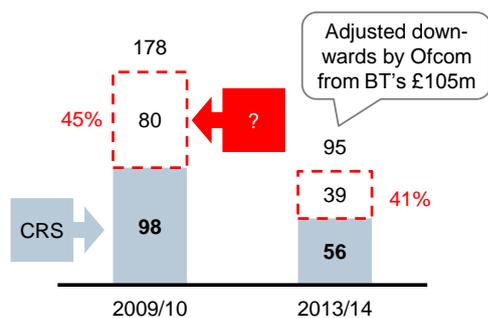


Figure 5: Openreach Cumulo transfer charge, GBP million [Source: inferred from the Consultation Document, as explained in the text]

In order to understand better what services are accounted for by the red shaded areas in Figure 5, we then “grossed up” the amount labelled “CRS” in an attempt to estimate the additional cost accounted for by Ancillary Services. That calculation is set out in Figure 6.

Item	Source		2009/10	2013/14
Revenues from LLU and WLR Rentals (CRS)	Annex 6.1, with	GBP m	2021	1849
Revenues from new provides and single migrations	Figures 7.14 and 7.15	GBP m	224	181
Revenues from services in Ofcom migration basket	Annex Figure 7.19	GBP m	144	119
Revenues from services in Ofcom comingling basket	Annex Figure 7.18	GBP m	80	95
Revenues from services in Ofcom SMPF basket	Annex Figure 7.17	GBP m	44	30
Revenues from services in Ofcom MPF basket	Annex Figure 7.16	GBP m	18	4
Sub-total: LLU-AS		GBP m	510	429
Total: CRS plus LLU-AS		GBP m	2531	2279
CRS as a proportion of the total			79.9%	81.2%
Hence, gross-up factor to derive total from CRS			1.25	1.23

Figure 6: Calculating a gross-up factor for Ancillary Services (LLU-AS), based on revenues [Source: as per second column]

The data in the table above is not presented in one single place in the Consultation Document – we synthesised it from various data items in the Consultation Document. The table represents our attempt to reproduce Ofcom’s “bottom-up” calculation of what Openreach’s forecast revenues would be if prices were set at costs for the LLU-AS services defined previously. We have grossed

up costs using factors derived from revenues. It is therefore an approximation, but one which is justified because the revenues should be derived (in effect) from cost-based prices. The result is depicted in Figure 7.

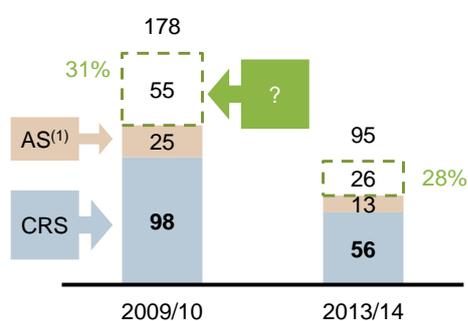


Figure 7: Openreach Cumulo transfer charge, GBP million [Source: inferred from the Consultation Document, as explained in the text]

The remainder of Openreach's Cumulo cost (GBP26 million in 2013/14, shown in green shading, and with a question mark, on Figure 7) must be attributed to other Openreach services such as AISBO which are not covered by the Consultation Document. So, Ofcom appears to assume that Openreach's Cumulo cost attributed to services is outside the scope of the Consultation Document (here referred to as "OSNCD" for short) will decline from GBP55 million in 2009/10 to GBP26 million in 2013/14, a reduction of 16.9% in CAGR terms. By way of comparison, Openreach's total cost of Cumulo only declines by 14.5% in CAGR terms over the same period.

It seems counter-intuitive that the value of OSNCD services would decline faster than the average. Some of the OSNCD services are not regulated, and the others (such as AISBO) are driven by the multi-line business market and so might be expected to hold their value better than the largely single-line products represented by CRS and their ancillary LLU-AS services. However, based on the data provided, it is impossible to propose an alternative to the above-mentioned 16.9% reduction. We can only note that this 16.9% reduction may represent a source of upward bias to the costs allocated to the CRS and their ancillary LLU-AS services. In any case, this aggressive rate of reduction militates against the idea that the OSNCD costs include all the costs of NGA – otherwise the rate of reduction would be less pronounced (or even reversed); indeed, it may be the case that the OSNCD costs do not contain any of the Cumulo costs that will be caused by the 3.7 million NGA lines forecast to be added by 2013/14.

Allocating Cumulo to NGA on a per-line basis should lead to reductions in CRS costs of the order of 17%. This is illustrated in the calculations set out in Figure 8.

<i>Item</i>	<i>Source</i>		<i>2009/10</i>	<i>2013/14</i>
Average number of “non-NGA lines”	Consultation Document Annex Fig. 6.1	Lines (000s)	18 104	18 130
WLR		Lines (000s)	15 851	11 470
MPF		Lines (000s)	2 253	6 660
Average number of “NGA” lines (total) ...	CF model, sheet 1.Vol row 343	Lines (000s)	0	3 716
... of which 90% ²³ pick up Cumulo from the same cost base as CRS+AS		Lines (000s)	0	3 344
NGA “Value uplift” (intended to simulate how much more valuable an NGA line might be than a traditional copper line, in the VOA’s opinion)			1.10	1.10
NGA equivalent cost driver after value uplift			0	3 679
Total cost driver (NGA equivalent + CRS lines)			18 104	21 809
% of Cumulo to be re-allocated to NGA			0%	17%

Figure 8: *Impact of NGA on Cumulo allocation to CRS [Source: as per second column]*

A 17% re-allocation of Cumulo from CRS to NGA results in a unit cost for MPF of the order of GBP0.52 (the reduction for WLR would be similar, of the order of GBP0.51). The basis for this calculation is set out in the accompanying spreadsheet model.

²³

We are assuming here that the remaining 10% of NGA lines are addressing a different customer base to that addressed using MPF and SMPF+WLR. The latter can be thought of as a “mass market” of consumer households, as well as small and home offices (SoHos). Our assumption here is that 90% of the NGA lines address consumers and SoHos, but that 10% address larger business sites that were never served by MPF and SMPF+WLR, but instead were traditionally served by leased lines, primary-rate ISDN or other such high-capacity accesses.

6 Conclusion and questions for discussion

In conclusion:

- There are grounds for questioning the 83% allocation of Cumulo to Openreach. Cumulo is “caused” by profits, not profit-weighted NRC
- The aggressive rate of reduction in the amount of Cumulo allocated to the Openreach services which are outside the scope of the Consultation (the “OSNCD” in our discussion above) indicates that it does not contain any of the Cumulo costs that will be caused by the 3.7 million NGA lines forecast to be added by 2013/14. In these circumstances, some of the Cumulo allocated to the CRS should be reallocated to NGA, and
- We have suggested such a reallocation, that would result in a reduction in the unit cost of MPF of the order of GBP0.52 (and a similar reduction for WLR, of the order of GBP0.51), in 2013/14.

In order to validate and, as necessary, modify these conclusions, it would be very interesting to discuss with the VOA and BT how BT’s RV is determined. Some issues which could help to guide such a discussion include:

- 1 **VOA’s perimeter of analysis.** As shown earlier in this document, in carrying out its usual “receipts and expenditures” (or “profits based”) analysis, the VOA has to forecast revenues and costs for a hypothetical tenant. Are we correct in inferring that the VOA’s hypothetical tenant was an entity called something like “BT’s wholesale activities”?
- 2 **Sources of forecast data for the hypothetical tenant.** As shown earlier in this document, the VOA usually forecasts receipts and expenditures for the hypothetical tenant with help from the past three years’ financial statements for the actual occupant (what we call the “Taxpaying Business”). The entity “BT’s wholesale activities” does not publish financial statements (unlike other more typical taxpaying businesses assessed by the VOA). To inform its forecasts of the revenues and costs of this entity, to what extent does the VOA rely on information supplied by:
 - BT
 - third-party forecasters and research firms?
- 3 **The VOA’s view on NGA.** In making its forecasts of the receipts and expenditures of the hypothetical tenant, did the VOA assume that this “wholesale activities” entity would deploy significant quantities of NGA during the forecast period? And if not, how did the VOA ensure that any forecasts on which it was relying (for example, forecasts of Openreach revenues from third-party research firms) excluded significant quantities of NGA?
- 4 **ANP and DB.** Did the VOA follow the process outlined in Section 2 of this report, working out the Adopted Net Profit (ANP) and the Divisible Balance (DB)? If so, does this not mean that the cost driver for this tax is *profits*, not Net Replacement Cost?

- 5 **The VOA’s knowledge and use of the concept of MPF.** The document supplied on 29 September notes that most Cumulo rebates have been the result of appeals associated with increasing MPF.²⁴ The VOA therefore knows that MPF is one of the business lines of the hypothetical entity “BT’s wholesale activities”. To what extent are the cost forecasts in the VOA’s model driven by forecasts of MPF volumes? Or would the VOA’s forecast of the entity’s costs be the same, independent of the relative volumes of MPF and WLR forecast to be sold by the entity?
- 6 **The allocation method tends to assign Cumulo to asset-intensive activities.** BT allocates Cumulo between products using “rateable COWs” (assets). Does this not tend to bias the allocation of the tax towards activities that make intensive use of assets (such as the CRS) and away from unregulated and less asset-intensive activities that are nonetheless drivers of the tax, via the VOA’s forecast of receipts and expenditures?
- 7 **Switch from “whole BT” to “wholesale activities”.** When did the VOA change from assessing BT’s Cumulo rates liability based on forecasts of receipts and expenditures for the whole of BT, to its current method of looking only at the “wholesale activities”?

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²⁴ At Slide 3.