Part B – Revenue-sharing ranges

Contents

Section 7

Introduction to Part B and background to the ranges under consideration

Introduction

7.1 In this part of the document (Part B) we examine the consumer experience and market concerns related to the primary revenue sharing ranges (08, 09, 188) and the related issues linked to the current set of geographically linked ranges (0845, 0870, 03). We do not look at the Freephone ranges in this Part – these are addressed in Part C.

7.2 In this Section, we set out our overall approach and introduce the number ranges considered in this part of our consultation. We have grouped the ranges into three categories, which we cover in turn below:

- ranges linked to geographic rates (03, 0845 and 0870);
- revenue sharing ranges (0844/3, 0871/2/3 and 09); and
- Directory Enquiries range (118XXX).

7.3 The remaining sections of Part B (Sections 7 to 13) set out our analysis and proposals for the number ranges described below. These Sections are structured as follows:

- Section 8 considers the consumer harm caused by the market failures we have identified which is relevant to these number ranges (summarising our analysis in Annex 8 in particular);
- Section 9 considers the broad options for addressing that consumer harm, in particular assessing the maximum prices and unbundled tariff approach, and sets out our preferred option;
- Section 10 sets out specific proposals for the detailed design of the unbundled tariff, in particular relating to the Access Charge and Service Charge elements;
- Section 11 looks in more detail at the geographically rated ranges, in particular the regulation of the 03 number range, and assessing the specific options for the 0845 and 0870 number ranges.
- Section 12 considers the implementation and transition issues relevant to the unbundled tariff and sets out our proposals in this respect, including the appropriate implementation period;
- Section 13 sets out our impact assessment for the unbundled tariff and the application of the relevant legal tests, as well as how the legal instruments could potentially be modified to implement the proposed changes.

Consultation approach in Part B

7.4 In Section 9, we provisionally conclude that the unbundled tariff (which we consulted on in December 2010) is our preferred option for addressing the consumer harm we have identified. Our view on the unbundled tariff is, however, based on some new evidence (as well as evidence previously presented in the December 2010 Consultation) which stakeholders have not yet had an opportunity to comment on. Accordingly, in that Section we are specifically requesting stakeholders' views on that new evidence and how we have taken it into account in our assessment of the unbundled tariff.

7.5 In the other Sections of this Part of the document we are consulting on a range of options and how they could be implemented. In particular:

- the structure of the unbundled tariff (in Section 10);
- the inclusion of the 0845 and 0870 ranges within the unbundled tariff (Section 11); and
- the implementation of the unbundled tariff and potential exceptions that should apply (Section 12).

7.6 In the December 2010 Consultation we also provisionally concluded that the regulation of the 03 range should remain unchanged. Stakeholders largely agreed with that position and we have not seen any new evidence to suggest a change is needed. Accordingly, our view remains that we should not make any changes to the regulation of this range (Section 11).

7.7 We now set out a summary of each of the number ranges we are considering in this part of the document.

Geographically rated ranges (03, 0845, 0870)

7.8 Calls to these number ranges are linked to geographic call prices, and may be included within bundles. SPs typically receive little or no revenue share on calls to these numbers.[1]

The 03 range

7.9 The 03 range was opened for allocation in 2007[2], primarily to allow public sector and not-for-profit bodies to offer national access to their services at geographic call prices with callers also being able to use their in-bundle minutes to call these numbers. The 0300 range is specifically reserved for public sector bodies and not-for-profit organisations.[3]

7.10 In the Numbering Plan, 03 numbers are designated as 'UK-wide at a geographic rate'. This means that OCPs are required to charge these numbers at the same rate

[1] Revenue sharing on calls to 03 numbers is prohibited. CPs are required (under General Condition 17.5) to comply with the designation for 03 numbers in the Numbering Plan which states: (Section B3.6.1)"*Those who adopt or otherwise use 03 numbers shall not share with any End-User any revenue obtained from providing a service on those numbers."*

[2] http://media.ofcom.org.uk/2007/02/13/ofcom-introduces-uk-wide-03-numbers/ .

[3] We publish guidance on bodies that we consider eligible for this range: http://stakeholders.ofcom.org.uk/consultations/numberingreview/statement/0300guidance/

their customers would pay to call a normal geographic number (i.e. an 01 or 02 number) and treat it as part of any bundled package that normally includes geographic calls. Revenue-sharing is prohibited on this range.[4]

7.11 Usage levels for 03 numbers remain relatively low. The 2010 Flow of Funds study found there to be 223 million minutes on the 03 range in 2009 which accounts for less than 1% of total NGCs.[5] Furthermore, evidence from our 2009 Consumer survey found that very few consumers were aware of the price of 03 calls.[6] This lack of consumer awareness is also reinforced by views from respondents to the December 2010 Consultation (see Section 11 for more details).

The 0845 range

7.12 0845 has been around for a long time and has a complex history. It was established by Oftel in 1996 to facilitate revenue-sharing on calls costing less than premium rate prices. In 1998 it became the range of choice for dial-up internet services. These have now been largely overtaken by broadband internet services, though the 0845 range continues to be one of the most heavily used non-geographic number ranges after 080 (accounting for 29% of all NGC minutes).[7] Usage has largely been driven by major SPs, such as banks, Government services and utilities using these numbers as a point of contact for their consumers, though there are many smaller SPs that also use these numbers.

7.13 Historically call prices to 0845 numbers were pegged to BT's regulated 'local' call rate – initially this was around 5ppm, though as geographic call prices fell, so over time did call prices to 0845 numbers (although not always at the same rate). In February 2009, BT started to offer retail packages that included free inclusive calls to 0845 and 0870 numbers and subsequently a number of other fixed providers also started offering similar packages.[8]

7.14 Revenue sharing remains possible on the 0845 range albeit retail prices have been falling in recent years, and BT has increased the level of discounts applied to 0845 numbers (as highlighted above). This has led to reduced termination payments to TCPs and either reduced or no revenue being passed to SPs. Ofcom has been called to resolve a series of disputes about BT's wholesale termination payments for 0845.[9]

The 0870 range

7.15 0870 was introduced by Oftel in 1996 to consolidate a variety of number ranges used for 'national' rate NTS calls. It enabled revenue sharing from calls to numbers priced at the national geographic rate, at the time around 10ppm from BT.

7.16 Whilst over time, geographic call prices fell, prices to 0870 numbers remained relatively high, compared to geographic calls. Whilst consumers were aware that

[4] The charging requirements for the 03 range and prohibition of revenue sharing are set out in General Condition 17.5 and the Numbering Plan.
[5] 2010 Flow of Funds Study, p.29, Figure 5.5.
[6] 2009 Consumer survey. When asked the price of landline calls to 03 numbers, 72% of respondents said "don't know" and in the case of mobile calls to 03, 71% responded "don't know".
[7] 2010 Flow of Funds Study, Figure 5.9 on page 32.
[8] For example TalkTalk started including 0845/0870 numbers within some call bundles in June 2009.
[9] For example, the 0845/0870 Dispute Determination (http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_01042/)

0870 calls were more expensive, the lack of clarity about actual prices was compounded by advertisements for services claiming calls were charged at national rate when the prices charged were often far more than an equivalent national geographic call. As a result the 0870 range became increasingly unpopular with consumers, leading to the emergence of groups such as *"saynoto0870"* which identifies and publishes geographic alternative numbers for companies that use 0870.

7.17 These concerns led Ofcom to open a review of the regime underpinning NTS in 2004. A series of consultations followed, which culminated with the 2009 0870 Statement.[10] That statement set out our revised policy position that 0870 calls should be charged at geographic rates and included within bundles. Unlike 03, Ofcom did not make this a strict regulatory requirement but instead imposed conditions which enabled an OCP to charge higher prices for calls to 0870 numbers, as long as they made the prices clear in all their advertising and promotional materials.[11] In addition, regulatory support for revenue-sharing on the range was removed.[12] In line with the policy position set out in the 0870 Statement, Ofcom published the 0870 Dispute Determination in June 2009 which reduced termination rates for 0870 to a cost based level (as for termination of geographic calls).

7.18 These regulatory changes led to a large scale migration away from the 0870 range, with a 35% decline in volumes on the range between 2008 and 2009. Nevertheless, there were still around 2.5 billion minutes of calls to 0870 numbers in 2009.[13]

Revenue sharing ranges (0844/3, 0871/2/3, 09 and 118)

7.19 These ranges all involve revenue sharing, which means that the revenue from the termination of these calls (i.e. the termination rate paid by the OCP) is shared between the TCP and the SP. The level of revenue sharing varies significantly between the different ranges, for example on the 0844/3 ranges (where call charges are usually lower) there is only a small amount of revenue available to be shared, and therefore the SP may not receive a direct payment for calls, rather a reduction in the level of hosting costs it pays to the TCP.

The 0844/3 ranges

7.20 Numbers in the 0844 and 0843 range were opened for allocation in January 2000.[14] At the time, Oftel wanted to enable greater price differentiation between services, especially for internet services, from the 0845 and 0870 ranges already available. The intention was to foster competition through price differentiation, especially for internet services. These original policy objectives have been superseded by market developments, with growth of broadband relegating dial up internet access to a niche. Meanwhile, new services have come to this range and have contributed to its

[10] *Changes to 0870* ('the 0870 Statement') published in April 2009 (http://stakeholders.ofcom.org.uk/consultations/0870calls/statement/)
[11] These regulatory changes took effect from 1 August 2009. In addition, in June 2009 we published the 0870 Dispute Determination which reduced termination rates for 0870 to a cost based level (as for termination of geographic calls).
[12] This was achieved by removing 0870 calls from the NTS Call Origination Condition on BT. See the 0870 Statement, p.13.
[13] 2010 Flow of Funds Study, pp. 32-33 and Figure 5.10.
[14] http://www.ofcom.org.uk/static/archive/oftel/publications/1999/consumer/nts1299.htm

growth, including those that have migrated from the 0871/2/3 range following its inclusion within the scope of PhonepayPlus ('PPP') regulation in September 2009.[15]

7.21 Today this range appears particularly attractive to organisations that desire revenue share but who are also attracted by the low retail rates callers pay. The range is used to provide access to a variety of services such as pre and post sales enquiry lines, customer support lines, and information lines, provided by both the public and private sector. We are also note that 0844 numbers are often used by GPs or other primary care authorities.

7.22 According to the 2010 Flow of Funds study, consumers generated around 5.5 billion minutes of calls to these numbers in 2009 which accounted for around 18% of the total calls to non-geographic numbers.[16] In terms of revenues, this range is the second highest grossing range after 0845 (total revenue from these calls was £302 million which accounted for around 18% of the total spending for calls to non-geographic numbers).[17]

The 0871/2/3 ranges

7.23 Numbers in the 0871 range[18] are used to provide a variety of services and also to provide micro-payment mechanisms for some of those services. These numbers were intended to be charged at a higher rate than the other 08X revenue-sharing ranges and are used by a range of organisations including transport information or reservation offices; travel and entertainment booking lines and chatlines amongst others.

7.24 In 2009, because of concerns about pricing transparency for calls to these numbers, and to improve consumer protection from potential scams, we extended the Premium Rate Service regulations to include the 0871 number range.[19] This means that since August 2009, PPP has been responsible for the day-to-day regulation and enforcement of these numbers on Ofcom's behalf. PPP regulates 0871 services through a Code of Practice which sets out rules that all providers of services on these numbers must comply, which includes a requirement for publishing pricing information.[20]

7.25 Volumes on the 0871 range have been growing in the recent past, which may in part be due to migration from the 0870 range (as highlighted above). According to the 2010 Flow of Funds study[21], consumers generated around 1.6 billion minutes of calls to these numbers in 2009 which accounted for around 5.3% of the total calls to non-geographic numbers. In terms of revenues, a PPP Report shows that the revenues from 087 remained consistent in 2010.[22]

[15] http://stakeholders.ofcom.org.uk/binaries/consultations/087prs/statement/statement.pdf
[16] 2010 Flow of Funds study, p. 31.
[17] 2010 Flow of Funds study, p. 45 and Figure 5.24 on p. 46.
[18] We have used '0871' as shorthand to refer to the 0871, 0871, and 0873 number ranges.
[19] Ofcom, *Extending Premium Rate Service Regulation to 087 Numbers*, 5 February 2009, http://stakeholders.ofcom.org.uk/binaries/consultations/087prs/statement/statement.pdf
[20] These rules include provision of accurate price information, honest advertising and service content and appropriately targeted promotions. As of September 2011 PPP has a mandatory registration scheme for providers of PRS in place. The latest PPP Code of Practice is available at: http://www.code.phonepayplus.org.uk/pdf/PhonepayPlusCOP2011.pdf
[21] 2010 Flow of Funds Study, p.33-34, Figure 5.11
[22] PPP Report, p.109. (revenues generated through 087 were £97m in 2010) http://www.phonepayplus.org.uk/For-

The 09 range

7.26 The 09 range is designed for the provision of Premium Rate Services ('PRS') and is used to provide a variety of services such as entertainment, chat and adult services. It can also provide a micro-payment mechanism for some of those services. The 09 range is also subject to regulation by PPP. The prices at which services are provided can be significantly higher than other ranges, and therefore the revenue shared with TCPs, SPs and content providers is also higher.

7.27 The 09 PRS market has declined significantly in the recent past. One reason for this decline is the dramatic growth of mobile phone ownership in this period, which, when coupled with the emergence of premium content tailored for mobile handsets has provided competitive challenges to traditional 09 operators. However, more recent publications from PPP demonstrate that revenues are starting to increase again, with an increase from £171m in 2009 to £195m in 2010.[23]

7.28 The Numbering Plan specifies a price cap of £1.53 for calls from BT lines, but many mobile OCPs charge above this. In terms of usage, in 2009, consumers generated around 340 million minutes of calls to these 09 numbers, which only accounts for around 1% of the total calls to non-geographic numbers.[24] However, because of the higher retail prices for these calls, it accounts for around 15% of the total revenues of NGCs.[25]

The 118 (Directory enquiries) range

7.29 Directory enquiry ('DQ') services are provided on the 118 number range. This range was introduced to allow for greater competition in the provision of DQ services in September 2001.

7.30 There is no regulation of the structure or level of retail prices for DQ services, though these ranges are covered by PPP's Code of Practice which means they are required to publish pricing information. There are more than 400 separate DQ services listed by BT (though from a lesser number of individual companies).[26] They offer a variety of new services for example follow-on calling, identification of local services, text deliver of numbers.

7.31 Market share appears to be largely driven by marketing and the memorability of the 118 number and appears to owe little to price competition. There is little variation in prices, though the range of services offered provides some level of differentiation. The two main players in the market are 118 118 (operated by The Number UK ('TNUK')) and 118 500 (the successor to BT's incumbent 192 service). Together these services command more than 80% of the market by revenue.[27]

7.32 Over time the market has declined since the introduction of the 118 number range. In 2001, there was an estimated 700 million minutes for national DQ services. In 2009, 377 million minutes were carried to 118 numbers, equating to £301 million in retail

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Business/~/media/Files/PhonepayPlus/Research/2011_CurrentandemergingtrendsintheUKPRSmarket2010AnalysysMasonreport.pdf

[23] 2010 PPP Report, p.112.

[24] 2010 Flow of Funds study, p.34.

[25] 2010 Flow of Funds study, p.49.

[26] List of active DQ numbers and their pricing codes http://www.bt.com/pricing/current/Call_Charges_boo/2-1634_d0e5.htm; explanation of pricing codes http://www.bt.com/pricing/current/Call_Charges_boo/2-1584_d0e5.htm

[27] 2010 PPP Report, p.44.

revenues. This makes 118 the third largest non-geographic number range by revenue, whereas it represents just over 1% of the total NGC volumes.[28]

[28] 2010 Flow of Funds Study, pp.50-51, Figure 5.29.

Section 8

Summary of consumer concerns on the 03 and revenue-sharing number ranges

Introduction

8.1 In Section 4 and Annex 8 of Part A, we set out our concerns about the retail market and the consumer detriment that is flowing from the three market failures.

8.2 In this Section, we set out the particular consumer issues for the 03 number range and separately, for the other geographically-rated ranges (0845 and 0870) and the revenue-sharing ranges on 08X, 09 and 118). This includes:

- a summary of what we said in the December 2010 Consultation (originally set out in Annex 7 of that consultation);
- stakeholders' comments in response to the consultation; and
- our updated position on consumer detriment on these number ranges, based on further analysis (where necessary).

8.3 All the issues highlighted here are covered in more detail in Part A, Annex 8. That Annex also sets out in more detail the evidence on which we have relied.

Summary of consumer detriment on 03

Our analysis of the issues in the December 2010 Consultation

8.4 In Annex 7 of the December 2010 Consultation, we set out our concerns for the 03 range. They were as follows:

- poor consumer price awareness: despite the fact that the price of 03 calls was linked to geographic call prices, we considered that consumers' awareness of the price of calls to these numbers was poor. We considered this was due to the fact that consumers had little experience of 03 numbers, the range having only been opened for number allocation in 2007, and accounting for a tiny fraction of NGCs.
- service availability and innovation: we concluded that poor recognition of 03 numbers by consumers provided little incentive for development or innovation through new, cheap to call, services.

Stakeholder comments on consumer harm assessment in December 2010

8.5 Very few stakeholders commented on our assessment of consumer detriment on the 03 range. Stakeholders generally accepted that consumers' knowledge of this number range was poor.

8.6 Whilst not a specific point raised about 03, several stakeholders commented on Ofcom's general conclusion that the current regime is hampering service availability and innovation on non-geographic numbers. We set out our response to this challenge in detail in Annex 8.

Updated analysis of consumer harm and response to stakeholder comments

8.7 In the absence of any challenges to our original conclusions on the 03 range, we have not sought to undertake any further analysis of the consumer harm stemming from 03. We remain concerned about consumers' poor awareness of the price of calls to 03 numbers and the impact this could be having on service availability and innovation on that number range. This is supported by the comments we have received from various resellers which indicate one of the key reasons SPs do not choose of offer services on the 03 range is because of the poor consumer awareness of the range (see Table 11.3 in Section 11).

Summary of consumer detriment on the 08X, 09 and 118 ranges

Our analysis of the issues in the December 2010 Consultation

8.8 In Annex 7 of the December 2010 Consultation, we set out specific concerns about calling 08X, 09 and 118 numbers. Overall, we set out five forms of consumer detriment which applied to these number ranges, in varying degrees.

- poor consumer price awareness: we said that consumers were not confident that they knew the price of calls to 08X, 09 and 118 numbers. We argued that this was for a variety of reasons. Price transparency was generally poor which meant consumers found it difficult to successfully determine the price of calls. We noted that SPs generally advertised the BT prices for their services, but with a caveat that calls from other networks may vary and calls from mobiles may cost considerably more. In cases where numbers were only distinguishable by the fourth digit such as 0844/5 and 0870/1, consumers were confused about the difference between the price of calls. For example, some consumers expected calls to 0844 to be treated the same as geographically rated calls such as calls to 0845. In other cases, poor price awareness was due to the wide range of tariffs and tariff structures, such as for 118 numbers. We also concluded that poor consumer price awareness often led to consumers over-estimating prices. However, exceptions to this included 09 numbers where consumers were generally aware that the price of these calls was relatively high.

- the level of prices: we said that the prices of calls to 08X, 09 and 118 numbers tended to be high, relative to other telephony services. We argued that this was because poor price awareness weakened competitive constraints on the price of calls to these numbers. This exacerbated both the vertical and horizontal externalities[29] and consequently distorted the level of prices so that the prices of calls to these numbers were generally higher than for geographic calls. We noted that higher margins earned on these numbers were likely to be used to support lower prices for other telephony services, such as geographic calls, via the tariff package effect.

- service availability and innovation: we considered that the uncertainty created by the lack of consumer price awareness combined with high retail prices was likely to reduce demand for calls to 0845 and 0870 numbers, which in turn was likely to reduce SPs' incentives to invest in service availability and innovation. We considered that the same applied to calls to 118 numbers, but we highlighted the vertical externality was particularly responsible for DQ providers' weakened incentives to invest within this number range. We were also concerned that SPs

[29] See paragraph 8.14 below for a definition of these externalities.

using 0844 and 0871 were similarly affected, although to a lesser extent because revenue share on these ranges had, up to that point, been relatively certain (unlike on 0845 for example).

- access to socially important services: we were concerned that in relation to certain number ranges, vulnerable consumers may have to pay high prices to access socially important services. In particular, we identified that this was an issue on the 0845 range which is used by a number of socially valuable services, including bodies such as NHS Direct, the Child Support Agency, HM Revenue and Customs, some local councils and some doctors' surgeries.

- fraud/scams: we considered that consumers calling certain number ranges were vulnerable to fraud and scams. Our concerns were mainly focussed on 09 numbers where we considered the potential for raising high revenues provided an attractive target for scammers, although we also noted that PPP had had considerable success in reducing problems associated with this range.

Stakeholder comments

8.9 The mobile OCPs and Virgin Media were critical of our conclusions on the market failures and their outcomes. Broadly, their view was that we had provided insufficient evidence in the December 2010 Consultation to support our analysis and that we had overestimated the scale of consumer harm.

8.10 Fixed OCPs and TCPs were generally more supportive of our analysis although they did suggest that there were a number of specific weaknesses to our approach. In spite of this, there was consensus among them that the retail market was not functioning as effectively as it could be for these number ranges.

8.11 SPs generally agreed that consumers lacked price awareness and several agreed that this was leading to suppressed consumer demand and stifling innovation. Some SPs also raised concerns about mobile retail pricing.

8.12 Finally, consumer groups were supportive of our analysis and the CAB provided additional evidence of consumer harm, particularly to vulnerable groups.

8.13 There were a large number of specific challenges to our analysis. These challenges, and Ofcom's response to them, are set out in detail in Annex 8.

Updated analysis of consumer harm and response to stakeholder comments

8.14 We have structured this section by summarising the evidence on each of the market failures we have identified in Annex 8 that are specific to the geographically rated ranges (excluding 03) and the revenue sharing ranges. The three market failures are:

- **lack of consumer price awareness**;

- **the vertical externality:** by this we mean that OCPs are not sufficiently motive by the preferences of SPs on non-geographic numbers and therefore do not take into account the impact of their call pricing decisions on these SPs when setting their retail prices; and

- **the horizontal externality:** by this we mean that individual OCPs and SPs do not have an incentive to take into account the impact of their NGC pricing on the reputation/brand of the number range, or on non-geographic numbers as a whole**.**

8.15 We have then summarised the evidence relating to the five outcomes of these market failures which have a harmful impact on consumers. The five harmful impacts are:

- a reduction in demand for calls;
- the price of calls does not reflect consumers' preferences;
- SPs' lack of incentives to invest in service availability and innovation;
- loss of access to socially important services, particularly for vulnerable consumers; and
- higher consumer vulnerability to fraud.

8.16 We have therefore summarised our position on each of the above market failures and the outcomes of those market failures, with specific reference to 08X, 09 and 118 number ranges. We have set out our full analysis, including a detailed response to stakeholder comments in Annex 8.

Three market failures on the 08X, 09 and 119 ranges

<u>Low consumer price awareness</u>

8.17 As set out in Section 4 and Annex 8, price transparency in the NGCS market is generally poor and, consequently, few consumers are aware of the correct price of NGCs. This poor awareness leads many consumers to overestimate the price of making NGCs.

8.18 Evidence from the 2011 Consumer survey shows that this is particularly true of 0845 and 0870 number ranges. On 0845, only 14% of fixed callers and 10% of mobile callers stated that they knew how much it costs to make a call, whilst 39% of fixed callers and 51% of mobile callers did not know how much it costs but thought it was expensive. Similarly on 0870, only 7% of both fixed and mobile callers stated that they knew how much it costs to make a call, whilst 37% of fixed and 46% of mobile callers did not know how much it cost but thought it was expensive.[30]

8.19 Further evidence of consumer price over-estimation can be drawn from consumers' average expectations of the price of calls to these numbers. For example, as set out in Table A8.10 in Annex 8, the median expected price of landline calls to 0845 and 0870 numbers by respondents to the 2009 Consumer survey was 18ppm and 38ppm respectively.[31] This is in contrast to the estimated average actual prices of 5ppm and

[30] 2011 Consumer survey. QGL01X/Y: "Which of the following statements best describes what you know about the cost of calling a number starting with 0845/0870 from your landline/mobile?" Base: all adults aged 16+ who use a landline/mobile phone for personal use to make calls.

[31] We consider that responses to the 2011 Consumer survey, which also asked about consumers' expectations about the price of calls to 0845 and 0870 numbers, are likely to under-state the scale of consumer price over-estimation compared to the 2009 Consumer survey. This is because questions in the 2011 survey were set out in a different way. The base of respondents who stated their expectations about the price of calls to 0845 and 0870 numbers in the 2011 survey was drawn from those that had already responded to a previous questions indicating that they thought they knew the price of these calls. Therefore, those that went on to state their price expectations were likely to be

8ppm respectively. In addition, respondents' median expected price of mobile calls to 0845 and 0870 number was 38ppm for both numbers. This is substantially above the level of average actual prices, which we estimate to be 22ppm and 21ppm respectively.[32]

8.20 Callers also have poor awareness of the price of calls to 0844 and 0871 numbers (as set out in paragraph A7.305 of the December 2010 Consultation), and as such are likely to over-estimate prices. The 2009 Consumer survey found that the proportion of respondents that did not know the price of a call to a 0871 number from a landline was 63% and from a mobile, 60%. Given this low price awareness, the pattern of over-estimation exhibited by callers of 0845 and 0870 numbers and the likelihood that callers' expectations of the price of calls to one number range are influenced by their expectations of the price of calls to other non-geographic number ranges[33], it seems likely that consumers also over-estimate the price of calls to 0844 and 0871 numbers.[34]

8.21 We also consider consumers' awareness of the price of calls to 118 numbers to be poor due to the wide range of tariffs and tariff structures for different services (see Table A7.5 of the December 2010 Consultation). However, it is less clear that callers over-estimate the price of 118 numbers as consumers tend to be aware that calls to these numbers are relatively expensive.

8.22 Our 2009 Consumer survey evidence suggests that awareness of the price of calls to 09 numbers is low: 72% of respondents did not know how much calls from a landline to a 09 number cost, and 71% did not know the price of mobile calls to this number range.[35] However, unlike the other number ranges considered in this Section, the Consumer 2009 Survey showed that consumers tend to under-estimate the price of calls to 09 numbers.

The vertical externality

8.23 We set out our full analysis of the vertical externality in Annex 8. In summary, we are concerned that a significant proportion of SPs do not have sufficient control of retail prices. This allows OCPs to set retail prices to reflect their own incentives without fully taking into account the preferences of SPs. This often results in higher retail prices than SPs would like. The problem is exacerbated by a lack of price awareness because there is less competitive pressure on OCPs to keep retail prices low. The lack of price awareness also creates an incentive for OCPs to increase prices on calls to these number ranges to support lower prices on the more visible aspects of their retail offerings where competition is currently stronger. This makes a misalignment of OCP and SP incentives more likely.

8.24 Evidence from the 2011 SPs survey shows that some SPs using 0845 numbers would prefer alternative pricing arrangements to the ones they currently have and

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disproportionately price aware. Consequently, we consider that the 2009 Consumer survey provides a more reliable indication of consumers' price expectations.

[32] See Table A8.10 in Annex 8.

[33] i.e. the horizontal externality – see Annex 8 for a more detailed analysis of this effect.

[34] 0844 and 0871 numbers were not included in the 2011 Consumer survey so we cannot use the results of this survey to assess the likelihood that callers over-estimate the price of calls to these numbers. However, the results of the 2009 Consumer survey (question 43) show that the mean and median expected prices of 0871 calls from mobiles are 51ppm and 38ppm respectively. This is in contrast to an average actual price of 35ppm, suggesting that consumers do over-estimate the price of 0871 calls.

[35] 2009 Consumer survey, Q43 and Q44.

would be willing to pay higher hosting fees in order to secure a particular retail price for calls to their number. When asked what one aspect of 0845 numbers they would like to change, 65% of 0845 SPs responded "callers are charged the same amount as calls to a normal landline" compared to 14% that responded "the cost to your organisation of operating this number".[36] Of the two options for intervention that we asked about, 52% of 0845 SPs preferred all callers paying the same as for calls to a "normal landline" even though this option also involve a 1.5ppm increase in the cost of operating the number for the SP.[37]

8.25 One solution to this problem might be for SPs to contract with OCPs to set their desired retail price. However, negotiating bilateral deals with OCPs can be difficult for SPs who consequently struggle to control the retail price of their services. The payments to OCPs and the transaction costs for SPs attempting to negotiate have often been high, as set out in Annex 20. While the attempted deals discussed in this Annex relate to SPs trying to 'zero-rate' calls to their services (mainly on 080 numbers) rather than trying to negotiate lower retail prices, these examples illustrate the difficulties SPs in other number ranges would face in trying to influence the retail price of their services. Indeed we are not aware of any such deals on the number ranges considered in this Section.

8.26 The current proportion of retail revenue retained by OCPs in each of the number ranges considered here are shown in the table below and support the existence of the vertical externality in these ranges. We noted in the December 2010 Consultation that although the proportion of revenue retained by OCPs reduces for the more expensive number ranges (i.e. 09 and 118), the absolute prices for these calls are higher and so retained revenue is not necessarily small. Overall we consider this evidence shows that OCPs are retaining a significant proportion of NGC revenue, even where the number range supports revenue share with the TCP/SP. This suggests OCPs are able to price at a level high enough to cover not only the transit and termination costs (which include the revenue share element), but also to retain a significant level of revenue for themselves. These relatively high OCP retention rates, combined with relative lack of consumer price awareness in these number ranges, suggest OCPs are generally acting on their incentives to set high retail prices for calls to these numbers.

[36] 2011 SPs Survey. Q30: *"If you could change only one of the following aspects of 0845 numbers, which one would it be?"* [Base: all SPs with an 0845 number]

[37] 2011 SPs survey, Q31 "*So would you prefer the first option or the second option? Option 1..that the cost to you of operating an 0845 number will increase by 1.5 pence-per-minute, and the cost to callers (from fixed or mobile lines) of calling your 0845 number(s) will be the same as calls to a normal landline number. Option 2..that neither the cost to your organisation of operating your 0845 number nor the price paid by callers will change, but when you show your number, for example in advertising, it will state that the call charge is split, with 2 pence-per-minute going to you and the rest going to the phone company*" [Base: All 0845]

Table 8.1: Revenue retained by OCPs by number range

Number Range	Average retail revenue	Average proportion retained by OCPs	Absolute average amount retained by OCPs
0843/4	6.0ppm	47%	2.8ppm
0845	5.2ppm	68%	3.5ppm
0870	7.3ppm	57%	4.2ppm
0871/2/3	12.7ppm	22%	2.8ppm
09	79.2ppm	27%	21.4ppm
118	79.8ppm	20%	16.0ppm

Source: The 2010 Flow of Funds study

The horizontal externality

8.27 It is likely that customers' experiences in one NGC number range influence their perceptions of others, and their experiences of calls from mobiles to NGCs influence their perceptions of calls to these numbers from landlines (and vice versa). As a result, we consider adjacent number ranges and the NGC system as a whole to be collective brands created by all in the supply chain. The horizontal externality arises because OCPs and SPs acting on a particular number range do not have the incentive to consider the impact of their behaviour on the reputation of other number ranges or on the non-geographic numbering system as a whole. As a result, some OCPs and SPs have an incentive to free-ride on the NGC brand. This occurs for several reasons. First, callers are often unlikely to distinguish between number ranges and this means individual OCPs and SPs do not have the incentive to maintain the reputation of an individual range. Secondly, mobile OCPs are unlikely to take into account the impact their behaviour has on fixed callers (and vice versa). And thirdly, most SPs only operate on one or a few number ranges and thus they are not incentivised to consider the impact of their behaviour on the reputation of different number ranges.

8.28 Callers are unlikely to distinguish between the different numbers within the 08 range for a number of reasons. First, we know from the consumer survey evidence (as set out above) that consumers are poorly informed about call prices in these number ranges. Where callers do not know the prices of calling particular numbers, it seems plausible that they will make inferences from the prices of numbers with a similar prefix. Second, several stakeholders (including O2 and EE) alluded to the fact that callers mistake 070 and 076 numbers for mobile numbers. This is an example of the horizontal externality because callers are making an assumption about price based on the first two digits of the number, drawing on their experience of the price of calling mobiles. In addition, Vodafone said in its response to the 2010 Call for Inputs that "...consumers' practical ability to distinguish subtle differences between NTS numbers at a 3 or 4 digit level (e.g. between 0845 and 0844/3/2 etc.) may be limited".[38]

[38] Vodafone 2010 Call for Inputs response, page 3, paragraph 14.

8.29 While we consider it likely that callers may struggle to distinguish between numbers at the third digit level (i.e. between 084 numbers and 087 numbers), we consider it less likely that there is confusion between numbers at the two digit level (i.e. between 08, 09 and 11(8) numbers). This is because there is a clearer distinction between these numbers and because they have quite distinct identities.

8.30 In all of the number ranges considered here, we think it likely that consumer perceptions of the price of fixed line calls are influenced by their perceptions of the price of mobile calls to the same number range (and vice versa). Although we do not have direct evidence of this externality in these number ranges, our 2011 Consumer survey does suggest that consumers with higher expectations of the price of mobile calls to 080 numbers tend to have higher expectations of the price of fixed line calls to these numbers. We think it likely that that the consumers' perceptions of the price of calls to the other 08X, 09 and 118 number ranges from fixed lines will also be linked to their perceptions of the price of mobile calls to the same numbers. This may give rise to the horizontal externality between mobile and fixed OCPs (and vice versa) in these number ranges.

Five harmful consequences of the market failures on the 08X, 09 and 118 ranges

<u>A reduction in demand for calls</u>

8.31 As a result of consumers' general tendency to over-estimate prices, as well as their general suspicion of non-geographic numbers, they are likely to make fewer calls to 08X numbers than they otherwise would in a market with greater price transparency and greater consumer price awareness. In addition, we note that the lack of price awareness combined with the vertical and horizontal externalities means that prices in all number ranges considered here are likely to be higher than they would be in a more effective market (see below for more detail on this mechanism). This is likely to suppress demand in all of these number ranges. We have set out the evidence illustrating that consumers generally over-estimate the price of calls to these numbers above and in further detail in Annex 8.

8.32 We have set out the evidence for suppressed demand in greater detail in Annex 8. There, we note that greater price transparency and consumer price awareness would result in a reduction in consumers' perceptions of the price of calls to all number ranges where consumers currently over-estimate prices. As set out above, this includes 08X, numbers. We also note in the Annex that greater price awareness would increase competition between OCPs and between SPs, and reduce the vertical and horizontal externalities, which would in turn be likely to lead to lower prices for calls to all number ranges considered in this Section. The available evidence suggests that an effective reduction in price on all of these number ranges would lead to an increase in demand.

8.33 We acknowledge that the demand for calls (in terms of volumes) to 0844, 0845 and 0870 numbers is likely to be relatively insensitive to price because of the nature of services typically provided over these number ranges.[39] 0844 and 0845 numbers are used to access a wide range of low cost services that require a revenue share, including public sector services, transaction services and information services. 0870 numbers are used to provide access to voice and data services that are no longer

[39] However, the demand for calls in terms of call duration is likely to be more sensitive to price. This is discussed in further detail in Annex 8.

dependent on revenue share.[40] In many cases, customers calling these numbers will have no choice of SP and in some cases may have no choice over whether to make the call. Nonetheless we do not consider that demand for calls to these number ranges will be so unresponsive to price that the lack of transparency has no effect on the volume of calls demanded. In particular, we note the potential for consumers to alter the frequency and duration of calls (e.g. by hanging up if placed in a queue and calling back later). Our 2011 Consumer survey results show that a significant proportion of consumers say they try to keep calls to certain NGCs to a minimum, suggesting they feel they have a degree of control over duration.[41]

8.34 There is also some evidence from surveys and natural experiments that suggests at least a degree of price sensitivity in these ranges. In particular, the CAB survey found that a high proportion (over 60%) of respondents had been deterred from calling a government helpline or other helpline due to the high costs of mobile calls (see Annex 8, paragraph A8.262). In addition, call volumes to the Samaritans 116 free to caller helpline grew by 45% in the six month period following its introduction (the Samaritans also operate the same service on an 0845 number). We recognise there are limitations to this evidence (see A8.264) but still consider that taken together they are supportive of some price sensitivity in the 0844/5 and 0870 ranges.

8.35 Furthermore, given the scale of price over-estimation and resulting lack of consumer confidence in the 0844/0845/0870 number ranges, we consider that consumers would only need to be marginally sensitive to price for there to be a significant suppression of demand even in these number ranges. The evidence we have seen supports this degree of price sensitivity, although we recognise the degree to which demand will be suppressed in these number ranges will be less than in those where call volumes (as distinct from call durations) are more sensitive to price.

8.36 We consider that price sensitivity is likely to be greater for 0871 and 09 services because of the nature of services that generally use this range. 0871 is typically used for pre and post-sales enquiry lines and international telephony services provided by resellers. 09 is used for TV voting lines, scratch cards, adult entertainment and chat lines. As set out in Annex 8, these services are more likely to be discretionary and have alternatives that consumers could switch to and from in response to a change in relative prices.

8.37 The evidence we have seen supports significant price sensitivity in these ranges. A survey for PPP in 2010 found that around 28% of non-users cited cost as a reason for not using premium rate services. In addition, the same survey found that accurate pricing information was the single most important factor that would help improve trust in premium rate services (given by 74% of phone-paid service users).[42] This significant price sensitivity, combined with current uncertainty around the price of calls and likely over-estimation, means demand for 0871 services is likely to be suppressed. With 09 calls, the evidence set out above suggests consumers do not over-estimate the cost of calls to these numbers as call costs are typically high in this number range. This suggests that an increase in price awareness will not lead to a direct effect on demand. Nonetheless, we consider that prices of 09 calls are high in part because of the market failures identified in this review (see below for more detail

[40] Revenue share was effectively removed from these ranges following the decision to remove the range from BT's Call Origination Condition. See Section 7 for further details.
[41] 2011 Consumer survey, QGL08. 33% of respondents who had made a call to a 08 number they did not know the price of said that they tried to keep the call short.
[42] 2010 PPP Report, p.139, available at: http://www.phonepayplus.org.uk/For-Business/~/media/Files/PhonepayPlus/Research/2011_CurrentandemergingtrendsintheUKPRSmarket2010AnalysysMasonreport.pdf

on this mechanism). An increase in price awareness in this number range is likely to increase competition between OCPs and between SPs, as well as reduce the vertical and horizontal externalities, which is likely in turn to put downward pressure on prices. This in turn would be likely to lead to an increase in demand for calls, given the evidence on price sensitivity outlined above.

8.38 The impact of consumers' poor price awareness on their demand for calls to 118 numbers is less clear. Our consumer surveys have not asked specific questions about these number ranges and so we do not have any evidence on the price sensitivity of demand for calls to these numbers. However, we consider it reasonable to assume that demand for these calls shows some sensitivity to price. We also have evidence to suggest the existence of poor price awareness and the vertical externality in this number range, implying that prices for 118 calls may be higher than they would be in a more effective market. As a result, we consider that is it possible that demand for these numbers could also be suppressed.

The relative price of calls does not reflect consumers' preferences

8.39 We do not consider that a situation where the prices for 08X, 09 and 118 calls are higher than the price of other calls is necessarily an inefficient outcome. However, the fact that consumers' awareness of the price of these calls is so poor, coupled with the vertical and horizontal externalities, means that we do not believe that current price levels truly reflect consumers' preferences.

8.40 The evidence we have seen suggests there are currently weaker competitive constraints on calls to these numbers than on other elements of OCPs' retail offerings, in particular because of the lower price awareness for these numbers. The evidence of poor price awareness in these number ranges is presented in paragraph 8.17 to 8.21 above. The resulting disparity in competitive conditions means that OCPs do not have incentives to set an efficient structure of prices reflecting consumer preferences. Instead they have incentives to set the price of calls to these numbers too high and to set the price of the more visible elements of their retail offering too low. As a result, although there could be legitimate reasons for the price of calls to these number ranges to be relatively higher, we consider it is more likely that relative price levels do not reflect an efficient outcome.

SPs' lack of incentives to invest in service availability and innovation

8.41 Our concern is that revenue sharing non-geographic number ranges (0844, 0871, 09 and 118) suffer from reduced service availability and innovation because of the combination of the interrelated market failures discussed above (see also Figure A8.1 in Annex 8).

8.42 Of particular direct impact is the vertical externality. SPs have limited control over the retail price and so are restricted in the extent to which they can compete by offering different combinations of price and quality to callers. This is particularly true of number ranges where some OCPs charge the same price to all numbers within the range, e.g. 118. Such pricing by OCPs undermines any attempt by SPs in the affected ranges to differentiate their offering in terms of headline price or by providing a higher quality service. It also prevents SPs from offering certain features such as low cost follow-on calls or advertiser-funded services. Annex 11 notes this has particularly impacted DQ services, where it is not possible for SPs in the UK to offer a number of recent innovations observed in other countries. These innovations include free real-time connections to tradesmen who bid to offer the service to callers and other sponsored enquiry services.

8.43 Suppressed demand for calls to these number ranges is also likely to be weakening SPs' incentives to invest and innovate. As stated above, we consider it likely that demand in all the number ranges considered here (with the possible exception of 118, for which we do not have evidence) is currently suppressed. Annex 11 presents examples of where suppressed demand has affected investment in these number ranges as a result, including evidence from a PPP survey that a lack of consumer confidence has dampened demand for the use of PRS as billing systems.[43]

Loss of access to socially important services, particularly for vulnerable consumers

8.44 As set out above, our concern about access to socially important services centres on the 0845 number range. We have attempted to gauge the extent to which 0845 numbers are used by socially important SPs in two ways.

8.45 Table 8.2 firstly uses data gathered formally from TCPs on the twenty most popular 0845 SPs that they host. We have applied our definition of socially important services set out in Part A, Section 5 (see paragraph 5.103) to data provided by TCPs to estimate the percentage of those SPs which are or may be providing socially important services.[44] Secondly, the Table also uses data gathered from OCPs on the forty most popular 0845 numbers dialled by their customers. We have simply counted how many of those numbers relate to socially important services.

Table 8.2: Data from TCPs on largest SPs on the 0845 range and from OCPs on the most popular 0845 numbers

	0845 SPS	Count of 0845 numbers
Socially important	10%	28%
May be socially important[45]	1%	8%
Not socially important	89%	63%
Unclear[46]	n/a	1%

Source: 11 TCP responses to a s.135 request issued October 2011 asking for the 20 largest SPs on the 080 and 0845 number ranges by volume of call minutes. 13 OCP responses to the same information request asking for the 40 most popular 080 and 0845 numbers (by volume of call minutes).
Note: This data was based on differing time periods

8.46 Although we accept that there are several limitations to this data[47], it does give a crude indication of the approximate proportion of socially important services provided

[43] 2010 PPP Report, chapter 7.
[44] The TCPs that provided the data in this Table varied in size. The largest SPs hosted by small TCP X may be actually only be moderately sized from the perspective of the SP population as a whole. The data omits SPs hosted by the very smallest TCPs.
[45] SPs which provide a number of services, not all of which fall within our definition of socially important services, have been categorised as "may be socially important".
[46] We were not able to identify every service provided on the 0845 numbers listed and these are therefore marked as 'unclear'
[47] The limitations of this data are outlined in more detail in Part A Section 5 (paragraphs 5.108 to 5.111). In particular, the figures in the second column of Table 8.2 should not be treated as accurate estimates of the proportion of call minutes to socially important numbers. We have only collected

via 0845 numbers. It indicates that there are a significant number of socially important services on the 0845 range (potentially up to 28%). Therefore, we have also examined whether vulnerable citizens call this range more frequently than other consumers. The 2010 Consumer survey provides some information on the frequency that respondents make calls to 0845/0870 numbers.[48] However, the number of responses by all individuals and those belonging to either D or E social groups or/and with incomes below £10k is too small to draw any statistically significant conclusions.

8.47 Nevertheless, we are concerned some consumers, some of which are vulnerable[49] could be deterred from accessing socially important services that use 0845 numbers, due to consumers' tendency to over-estimate the price of these calls. We are also concerned that the same applies to 0844 numbers where a proportion of these calls connect people to their GPs or other primary care authorities. We note that the number of such calls need not be very large for the social costs to be high given the nature of services provided.

Higher consumer vulnerability to fraud

8.48 We consider that number ranges with an opportunity for high revenue share, such as 09 and 118, have the potential to attract fraudulent behaviour. Consumers' lack of price awareness on all number ranges considered in this section also has the potential to be conducive to fraud. However, in practice, fraud has been more common on the 070/076 ranges that are easily confused with mobile numbers, rather than the 08X, 09 and 118 ranges. We therefore consider that the market failures we have identified are unlikely to lead to higher vulnerability to fraud on 09 or 118 numbers, or indeed on 08X numbers.

8.49 We note that we intend to consult separately on the 070 and 076 number ranges later this year (see Section 6 in Part A).

Overall summary of consumer concerns on the 08X, 09 and 118 ranges

8.50 We are concerned that there is a wide-spread lack of consumer price awareness, leading to over-estimation of the price of calls to certain number ranges (in particular the 08X ranges). We are also concerned that SPs in these number ranges do not have sufficient control of the prices paid by callers, leading to retail prices that do not necessarily reflect the preferences of SPs (the vertical externality). Finally we consider that OCPs and SPs in the 08X number ranges do not take into account the effect their behaviour has on consumer perceptions of calls to adjacent number ranges, giving rise to the horizontal externality between these number ranges. We also consider that consumer perceptions of the price of calling any non-geographic number from a fixed line will be affected by perceptions of the price of calling the same number range from a mobile (and vice versa). This gives rise to the horizontal

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data on the largest SPs and we have not weighted the data to take account of the ranking of the SP in the data we were provided. Similarly we have not weighted the data to reflect the relevant importance of the OCP/TCP that provided the data (e.g. more weight on BT's data since it is a large OCP and TCP).

[48] 2010 Consumer survey, Q21 and Q25. 25% of respondents said they 'rarely' (i.e. less than once a month) called these numbers from a mobile, 39% from a landline, 4% said they sometimes called them (i.e. once a month) from a mobile, 22% from a landline and 69% said they never called them from a mobile and 33% from a landline.

[49] See Section 5 for the definition of vulnerable consumers we have used in our assessment

externality between fixed and mobile OCPs for all number ranges considered in this Section.

8.51 These three market failures are leading to the following adverse effects on consumers:

- demand for 0844, 0845, 0870, 0871, 09 and, potentially, 118 calls is suppressed;
- the relative prices of 0844, 0845, 0870, 0871, 09 and 118 calls do not reflect consumer preferences;
- SPs on 0844, 0871, 09 and 118 number ranges lack incentives to invest in service availability and innovation; and
- a loss of access to socially important services on 0845 numbers, particularly for vulnerable consumers.

8.52 We therefore remain of the view that there is significant evidence of consumer detriment in relation to the 08X, 09 and 118 number ranges which warrants our intervention. Accordingly, we need to consider our regulatory approach in protecting consumers from the market failures and adverse effects we have identified. We consider the high level options for achieving this in the next Section.

Section 9

Remedies to address the market failures

Introduction

9.1 In the previous section (and in Part A), having taken account of stakeholders' responses, we reach the view that market failures lead to consumer harm in how NGC services are currently provided to consumers. We consider that, in the absence of regulatory change to the current regime, the problems identified will continue to exist: consumers' price awareness will continue to be poor, adversely affecting the reputation of non-geographic numbers and further limiting the potential for competition and service innovation.

9.2 This Section considers the remedies put forward in the December 2010 Consultation for the main revenue sharing ranges (we address Freephone in Part C), in particular whether they address the consumer harm identified, before identifying our preferred option. The specific options we consider in detail in this Section are:

- price information/awareness measures;
- maximum prices; and
- the unbundled tariff.

9.3 We also summarise our position on wholesale only remedies, which we cover in more detail in Annex 17.

9.4 We provisionally conclude that, from the available options, the unbundled tariff has the greatest potential to deliver benefits to consumers through protecting them from the market failures and harm identified in the preceding Sections. We note, nonetheless, that the potential for the unbundled tariff to deliver these benefits is dependent on how it is designed and implemented, which we go on to discuss in the following Sections.

Overview of the options to address market failure

Potential retail remedies

9.5 In the December 2010 Consultation we identified four retail-level policy options to deal with the identified market failures. These were:

- **Deregulation:** the removal of ex ante regulation on the supply and pricing of NGCs allowing the market the potential to achieve a natural equilibrium. As explained in Part A (in Section 5 and in more detail in Annex 8), the market failures that we have identified are unlikely to be mitigated by deregulation. Indeed it is possible the situation could worsen for consumers. We have therefore not discussed this option further in this Section.
- **Price information/awareness measures alone**: the provision of more effective price information at the point of subscription and/or at the point of call. Examples could include pre-call announcements, so consumers have pricing information

available whenever calls are made. This option would build on the current information requirements.

- **Maximum prices**: setting maximum limits to the retail prices that can be charged for calls within each number range, with different maximum limits for different number ranges.

- **Unbundled tariffs:** this option would change the structure of pricing for NGCs. An unbundled structure would reflect the two services provided through non-geographic numbers. The primary service provided by the SP, and the 'access' service provided by the OCP. An unbundled tariff separates the retail price of a NGC into these two elements.

9.6 While the consumer harm identified is, to a greater or lesser extent, common across all non-geographic numbers in this review, we recognise that there are also specific issues relevant to certain number ranges, which we have highlighted in our assessment below where relevant.

9.7 The number ranges that have links to geographic prices (i.e. the 03, 0845 and 0870 ranges), have particular features that have to be separately considered. Once we have set out our preferred option for remedying the market failures in this Section (and the detailed design of that option in the next Section), we go on to consider these specific number ranges in more detail (including alternative remedy options which are specific to these number ranges) in Section 11.

Potential wholesale remedies

9.8 In the December 2010 Consultation we also discussed two wholesale level approaches which had been advocated by some stakeholders[50], specifically:

- variable termination rates; and

- regulating termination.

9.9 In response to the December 2010 Consultation some stakeholders indicated support for the second of these options in particular, arguing that it would reduce or remove the need for further intervention at the retail level. We provide a summary of our response to these comments below, and set out our view in more detail in Annex 17.

Information remedies

Position in the December 2010 Consultation

9.10 Given that our main concern was the lack of price transparency and poor consumer awareness of prices, we said in the December 2010 Consultation that it was natural to consider whether providing more information could alleviate our concerns.

9.11 We highlighted that a number of requirements for the provision of price information were already in place. Specifically:

[50] See Annex 4 of the December 2010 Consultation, pp. 261-271.

- General Condition 10 sets out information that must be published by CPs in the interests of transparency, including tariff information relating to all types of usage charges;

- General Condition 14.2 (Annex 2) requires that:

  - the published usage charges for calls to most 08 numbers are given the same prominence in terms of location and prominence given to geographic calls, calls to mobiles and call packages; and

  - any usage charges that apply for calls to Freephone numbers should be given prominence in published price lists and websites.[51]

9.12 We set out in Section 4 and Annex 2 of the December 2010 Consultation the evidence that demonstrated that, notwithstanding these existing publication requirements, consumer price awareness was poor. We therefore considered whether information provided to consumers in relation to NGCs could be improved at either the point of subscription and/or at the point of call.

9.13 Information at the point of subscription, we considered was unlikely to be effective given the current range and spread of charges for NGCs. We noted that the full price lists of OCPs typically ran to many pages and, in the absence of substantial simplification, we considered that consumers were unlikely to be able to compare effectively competing offers.

9.14 With respect to improved information at the point of call, we considered three alternative ways in which this might be delivered:

- Pre-Call Announcements ('PCAs'): a non-chargeable price information message displayed to the caller at the beginning of a call;

- Tariff Display Message: price information could be potentially conveyed via a splash box that appeared on the caller's screen when dialling a number; and

- Price Information line: OCPs could be required to implement a price information line that provided that information on request.

9.15 We considered that PCAs were likely to be the most effective of these three options.[52] However, we also considered that PCAs had material limitations. We noted that a PCA was unlikely to improve price awareness at the point of subscription and would not address concerns associated with the failure of OCPs to take account of the impact of their pricing decisions on SPs (the vertical externality) and, in relation to both OCPs and SPs, the impact of their pricing decisions on the reputation of particular number ranges and the provision of NGCS more widely (the horizontal externality). We noted the scale and complexity of delivering PCAs were greater for an OCP than a TCP due to the larger volumes of calls and greater number of price points handled by an OCP relative to a TCP.

9.16 However, the TCP was unlikely to be aware of the retail price of a call and therefore might be unable to play an announcement that provided the total price of the call. We also noted the significant costs that implementation of PCAs across all call types was likely to entail. In the 2010 Implementation Study, TCP estimates of these costs,

[51] http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/general-conditions/
[52] See paragraphs A4.42 to A4.45 of the December 2010 Consultation.

which were significantly lower than those suggested by OCPs, ranged from £300K to more than £1m with implementation time scales of up to two years.

9.17 In the light of these considerations, we said that we did not consider that wider implementation of PCAs would provide an effective stand-alone remedy to the concerns we had identified, but that it might nevertheless provide a complementary measure to a remedy that targeted the fundamental problems of the current regime more effectively.

Stakeholder responses

9.18 The majority of stakeholder responses considered that the current information requirements in relation to NGCs were not working effectively. C&W and TalkTalk, for example, acknowledged that the pricing of NGCs could be unclear and confusing for consumers, who were not able to make effective and informed purchasing decisions as a result.[53] C&W noted that, despite the tightening of the General Condition ('GC14') regulations at the time of the 0870 changes, there was little evidence that those requirements had been truly effective or beneficial.[54] BT agreed that the existing price advertising rules had failed to secure price transparency for consumers.[55] ITSPA considered that the requirements in GC14 were simply not being adhered to.[56]

9.19 EE said that the failure of information remedies to date stemmed from the lack of cost certainty for networks and Ofcom's theoretical approach to information provisions.[57] It advocated the re-assessment of existing information remedies, in particular what it considered to be the overly prescriptive Code of Practice approach in GC14. Virgin Media also considered that GC14 had ostensibly been proven to be ineffective, given that Ofcom considered that the lack of transparency it had been designed to address still existed.[58]

9.20 The majority of stakeholder responses also supported Ofcom's view that improved price awareness measures were unlikely to provide a comprehensive or stand-alone solution to the problems associated with the provision of NGCS. BT[59] accepted that improved price awareness measures would not be a sufficient solution in isolation and a number of CPs (including Vodafone, ITSPA, Magrathea[60]) agreed that simplification of existing NGC charges was needed first in order to enhance the effectiveness of information remedies. UKCTA and Verizon noted that whereas further price transparency might benefit consumers, it would not address the problems at the wholesale level and therefore it was not a desirable option.[61]

9.21 EE and Vodafone agreed that an information remedy at the point of subscription would be of limited value because of the evidence that NGCs rarely formed part of

[53] C&W, December 2010 Consultation response, pp. 3-5. TalkTalk, December 2010 Consultation response, pp. 1-2.
[54] C&W, December 2010 Consultation response, p. 12.
[55] BT, December 2010 Consultation response, p.8.
[56] ITSPA, December 2010 Consultation response, p.2.
[57] EE, December 2010 Consultation response, pp. 47-50. Sky, December 2010 Consultation response, p.1. UKCTA, December 2010 Consultation response, p. 4.
[58] Virgin Media, December 2010 Consultation response, p.19 .
[59] BT, December 2010 Consultation response, p.8.
[60] Vodafone, December 2010 Consultation, p. 60-61. ITSPA, December 2010 Consultation response, p. 3. Magrathea, December 2010 Consultation response, p. 5-6.
[61] UCKTA, December 2010 Consultation response, p.4. Verizon, December 2010 Consultation response, Q6.3.

purchasing or switching decisions, and that most consumers were not interested in receiving information on NGC charges. On the other hand, ITSPA and Magrathea considered that, in order to be effective and to enhance competition, information remedies must improve price awareness at the point of subscription, albeit they acknowledged that since callers do not make their subscription decisions on the basis of these calls, such remedies would be of little value.[62] Three, however, considered that some informational remedies could improve transparency, but believed that these would not have as strong a pro-competitive effect as the unbundled tariff, because that would actually improve consumer understanding of the different elements of NGC charges, and put pressure on OCPs and SPs to compete on those charges.[63]

9.22 EE argued however, that, coupled with wholesale regulation to address the underlying market failures, information remedies would help tackle Ofcom's remaining consumer concerns. It said it was imperative that Ofcom considered this option before seeking to impose more drastic and intrusive retail regulation. It considered that Ofcom had been too quick to dismiss the benefits of improved price information remedies, and argued that whilst previously Ofcom had focussed on providing information at the point of sale/subscription (which had proven to be ineffective), more could be done to allow consumers to 'pull' pricing information on demand and that such initiatives should be industry driven. For example it noted that Orange had created a tool for callers to look up 09 call prices.[64]

9.23 EE suggested that Ofcom should explore a number of different options for improved price information measures, including an SMS price query service to complement the provision of information via customer services, apps that would similarly provide call cost information or the ability to look up call costs without having to visit a website, enhanced numbering look-up tools, direct links to pricing information and user-friendly booklets containing call cost information (to replace the unwieldy codes of practice required by GC14.2). It believed that a cost benefit analysis for these options were more likely to show a consumer surplus when compared to the other retail structural changes Ofcom was contemplating, although only if the wholesale market issues were fully addressed.[65]

9.24 Virgin Media also argued that, combined with intervention at the wholesale level, the instigation of a comprehensive consumer education campaign which schooled consumers in the structure, purpose and use of NGCs would achieve substantial improvements at the retail level.[66]

9.25 In relation to specific price awareness measures, the vast majority of CPs and SPs considered PCAs to be an expensive and intrusive form of regulatory intervention, which would not necessarily achieve improved price awareness (C&W, UKCTA, Verizon, Vodafone, EE, FCS, Flextel).[67] FCS described them as prohibitive in terms of cost and feasibility of implementation and having, over time, a deterrent effect on

[62] ITSPA, December 2010 Consultation response, page 3. Magrathea, December 2010 Consultation response, pp. 5-6.
[63] Three, December 2010 Consultation response, p.19.
[64] EE, December 2010 Consultation response, pp. 47-50.
[65] EE, December 2010 Consultation response, p.51, paragraphs 17 and 18.
[66] Virgin Media, December 2010 Consultation response, p.19
[67] C&W, December 2010 Consultation response, p. 12. UKCTA, December 2010 Consultation response, p. 4. Verizon, December 2010 Consultation response, p.1. Vodafone, December 2010 Consultation, pp. 60-62. EE's response to the December 2010 Consultation, page 49. FCS, December 2010 Consultation response, page 13. Flextel, December 2010 Consultation response, page 6.

consumers. Sky noted that Ofcom's consumer research evidence did not support any requirement for PCAs.[68] ITSPA noted that PCAs might increase price awareness at the point of call, but it did not benefit the consumer in any other way.[69]

9.26 Even those CPs which were more positive about the potential transparency benefits of PCAs recognised that there were likely to be substantial implementation issues to be overcome (for example [✂]).[70] Nevertheless, some consumers advocated the presence of PCAs to allow the caller to abandon the call if they wanted to. Others, however, questioned their effectiveness if the call was one that had to be made (e.g. to a government helpline).

9.27 Flextel and the FCS were concerned that Ofcom had given very little consideration to Call Price Labelling ('CPL'). They argued that this was a solution that allowed consumers to make a purchase decision at the point of sale and it was far less intrusive than a PCA requirement, in particular because it did not inconvenience the caller.[71] They noted that a similar approach had been deployed since January 2011 in France, where consumers can dial the number 3008 to find out details of call prices.[72] ITPSA, however, disagreed that CPL would be an effective solution; it argued it would be onerous and time consuming for the caller and required investment by its members that would not lead to consumer benefit.[73]

Ofcom's response to stakeholder comments and conclusion on information remedies

9.28 The vast majority of stakeholder responses confirm the view we set out in the December 2010 Consultation, which is that existing information obligations have not been effective and that additional measures would not, as a stand alone option, address the consumer harm we have identified.

9.29 In terms of improving price information at the point of subscription, as highlighted in the stakeholder comments, the evidence from our 2010 Consumer survey shows that NGCs are not a primary consideration in consumer's subscription decisions. For example, when asked what elements would be important when choosing a new fixed operator, only 11% spontaneously mentioned the cost of calls to 08/09 numbers and 30% mentioned this factor when prompted. The corresponding figures when selecting a new mobile operator were 9% and 20%.[74] Nevertheless, this apparent lack of interest may be a reflection of the current complexity in NGC pricing within and across OCPs. Even if consumers' did want to find out more information about these call prices, the current range and spread of charges (which we provide evidence of in Annex 8) makes it very difficult to present information in a form which enables consumers to make effective comparisons between different tariff packages offered by OCPs.[75] Therefore we consider that increased obligations to disclose this

[68] Sky, December 2010 Consultation response, p.5.
[69] ITSPA, December 2010 Consultation response, p.3.
[70] [✂]
[71] FCS, December 2010 Consultation response, p.13. Flextel, December 2010 Consultation response, pp. 6 and 9.
[72] We note that a pre-call announcement is also available for each call in France.
[73] ITSPA, December 2010 Consultation response, p.3.
[74] 2010 Consumer survey, questions 5, 6, 7 and 9.
[75] This view is confirmed by our more recent 2011 Consumer survey where 24% of consumers who had looked up the price of a call said they always found the information they were looking for and 61% said they sometimes did so (2011 Consumer survey, question GL10), of those same consumers, 24% said it was difficult to find that information, 32% said it was neither easy nor difficult and 44%

information at the point of subscription under the current pricing structure would not be effective.

9.30 We also remain of the view, which is largely confirmed by stakeholder responses, that information remedies to improve price information at the point of call would not, on their own, address the consumer concerns. Whilst some stakeholders recognised the potential transparency benefits of PCAs, it is not clear that they would satisfactorily address the other market failures we have identified, such as the incentives on SPs and OCPs that lead to the vertical and horizontal externalities. Furthermore, there are clear implementation issues connected with PCAs, potentially leading to high costs. We think it is unlikely that these costs would be outweighed by the transparency benefits of PCAs.

9.31 Given the potential benefits of improved price information at point of call, we nevertheless remain of the view that PCAs might be an effective complementary measure to the other retail remedies we are considering. In particular, we intend to consider whether PCAs may be necessary for 09 numbers with a higher rate tariff for the purposes of consumer protection. As highlighted in Section 6 we intend to consider this issue as part of a separate consultation. In considering PCAs as a complementary measure, we recognise that we will need to consider how the implementation issues highlighted above can be resolved, in particular to ensure that if TCPs are responsible for PCAs[76], callers can choose not to connect the call without having been charged (but the costs involved for OCPs in handling those calls are still covered).

9.32 Flextel and FCS make a case for CPL (similar to the price information line option highlighted above) as an alternative remedy for providing information at the point of call. The evidence from our 2009 Consumer survey showed that the majority of consumers did not look up call information (82% said they had not looked up call costs) and this was primarily because they were not concerned about call costs, as opposed to the effort involved in looking them up.[77] It is therefore questionable whether consumers would actually dial a separate number to find out a call price. Moreover, as with PCAs, this remedy would not address the other areas of consumer harm we have identified (the vertical and horizontal externalities). Furthermore, it would not simplify price structures and therefore would not improve price information at the point of subscription. For these reasons, we do not consider that this remedy would be sufficient to protect consumers from the harms we have identified.[78]

9.33 Some respondents advocated improved price information in conjunction with wholesale regulation. Annex 17 sets out our reasons for rejecting wholesale intervention. Whilst we recognise that many of the approaches to price information suggested by EE could be beneficial to consumers, we disagree that these would be

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said it was easy (2011 Consumer survey, question GL13). This and the previous response relate to consumers' experience looking up the price of any call type, not just NGCs.

[76] In paragraph A4.48 of the December 2010 Consultation we concluded that the trade off between the contact of the PCA and the scale and complexity of implementation suggested that TCPs were best placed to implement PCAs. This view was largely confirmed by the consultation responses and in discussions at the Technical Working group.

[77] This is consistent with the evidence from our latest 2011 Consumer survey, which found that 77% of respondents who had considered making a call to a number in the last three months of which they were unsure of the cost stated that they had never looked up price information to find out the cost of a call, while 18% said they had occasionally done so (2011 Consumer survey, question GL09B).

[78] We also note that France are continuing to explore potential remedies for the consumer issues identified in this review, having issued a consultation in 2011 with another expected shortly, which suggests that CPL has not proved sufficient.

effective given the current complex pricing structures. As for CPL, the various proposals made by EE would not address the other market failures we have identified. Even with wholesale regulation in place, OCPs would continue to be able to set retail prices as they saw fit. As explained in Section 8 and Annex 8, this gives rise to the horizontal and vertical externalities which results in harmful effects for consumers.

9.34 In summary, while we continue to believe that there is an important role for requirements on OCPs and others to provide sufficient information in a clear and transparent way to consumers, we consider that, on their own, such requirements will not remove the concerns we have identified. Similar approaches in the past have not been wholly successful, and we see no evidence that, on their own, they would be in the future.

9.35 We therefore conclude that, consistent with our views as expressed in the December 2010 Consultation, more fundamental change to the structure of charges for NGC services is required to protect consumers from the harm we have identified.

Wholesale remedies

9.36 We do not believe that changes at the wholesale level would adequately address the concerns we have identified. Our reasons for this are summarised below and are set out in more detail in Annex 17.

Linking termination rates to retail prices

9.37 Tiered termination rates are termination rates which depend on the level of the retail price charged by the OCP. In 2010, BT introduced schedules of tiered termination rates for 080, 0845 and 0870 calls and since then has introduced them for other number ranges as well. A number of other TCPs have also now introduced these tiered termination rate schedules. We have considered whether tiered termination rates would address the market failures we have identified in relation to the current provision of NGCS.

9.38 In summary, our updated assessment in Annex 17 continues to support the analysis of tiered termination rates in the December 2010 Consultation. We remain of the view that there is a great deal of uncertainty around the impact of tiered termination rates and the incentives they create. Therefore there are likely to be significantly more effective ways to address the market failures and concerns in relation to NGCs and to promote improved outcomes for consumers.

Regulating termination rates

9.39 A number of stakeholders advocated regulation of the level of termination rates but little or no further intervention at the retail level. For example, EE favoured a market review of the wholesale level which it believed would conclude that competition was not effective, thereby paving the way for regulation at that level.[79]

9.40 We assess this option in detail in Annex 17. In summary, our view remains the same as in the December 2010 Consultation, namely our concerns stem from the consumer experience of the activities and responses of companies at the retail level which are unlikely to be addressed through wholesale intervention.

[79] EE, December 2010 Consultation response, Q6.2, paragraphs 17. Also Q2.3, paragraph 4.

Comparison of the maximum prices and the unbundled tariff options

9.41 Having concluded above that improved price information and wholesale only remedies would not be sufficient to address the consumer harm we have identified, we are left with two remaining options: maximum prices and the unbundled tariff. These were the two options we put forward in the December 2010 Consultation, although we indicated a preference for the unbundled tariff.

9.42 We have assessed each of these options in turn in detail below, using our assessment criteria and taking into account stakeholder responses to the December 2010 Consultation, as well as additional evidence-gathering we have carried out over the last year.

9.43 One of the key pieces of research relevant to our assessment below is the 2011 Experimental Research. Before we move on to the detailed assessment where we refer to this research, we set out further details of that experiment, as well as the caveats surrounding it and our response to some stakeholder concerns about how it can be interpreted.

2011 Experimental Research

9.44 Ofcom has separately published a full, detailed report of the 2011 Experimental Research and in October 2011 hosted a presentation of these results to stakeholders.[80]

9.45 In summary, in that experiment subjects decided whether or not to make phone calls. They based their call decision on the payoff they would derive from the call (which they are told prior to having to make the decision) and the available information on the price of the call. Different groups of subjects were presented with call price information in different ways (called “treatments”), in order to explore the effects of interventions such as the unbundled tariff. In some treatments, subjects could choose to incur monetary search costs in order to obtain call charge information. Participants also selected which tariff package to subscribe to. Each tariff featured a different monthly subscription charge and a different mark-up (access charge) on call prices. Subjects were told the monthly subscription charge and, in the treatments reflecting the unbundled approach, were also told the access charge. Subjects in the experiment were paid depending on how well they performed. The experiment was computerised and carried out in a computer lab.

9.46 The key inferences that we draw from the 2011 Experimental research relate to:

- whether specifying maximum prices improves call decisions, compared to the unbundled tariff and the status quo;
- the value of providing accurate information at the point of call; and
- whether it provides a warning that even subjects such as university students are likely to fail to grasp how the unbundled tariff operates.

[80] London Economics, *Experimental Work in relation to NGCs*, 6 September 2011, http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/interventions-non-geographic/ (‘the 2011 Experimental Research’)

9.47 [✂] submitted a number of criticisms of the 2011 Experimental Research.[81] In particular it noted that:

- the participants in this experiment were university students. It argued that these subjects are neither representative of society as a whole nor of vulnerable consumers.

- the tariff choice modelled in the experiment did not reflect pre-pay mobile tariff structures, where there is no monthly subscription fee. While [✂] recognised that the monthly subscription charge could be treated as a proxy for the average monthly amount that a pre-pay mobile subscriber tops-up their phone by, it asserted that the "dynamics" of the two tariff models are too different to allow the same conclusions to be applied. Also in the experiment, the mark-up on calls was inversely proportional to the monthly subscription charge. It stated that this did not necessarily reflect reality.

- In the experiment the cost for subjects of searching was a fixed amount. [✂] stated that in reality search costs vary between OCPs and between consumers. It claimed that this may have resulted in a more favourable result for the scenarios modelling the unbundled tariff relative to those modelling maximum prices.

- In the experiment, subjects chose whether or not to make calls. [✂] did not consider that this adequately addressed the "discretionary components" involved in choosing whether to make a call, such as need and the availability of avoidance strategies.

- the outcome of the experiment might be influenced by subjects' aversion to losses.

9.48 Before addressing these criticisms it is important to highlight that economic experiments are simplified environments. As explained in the 2011 Experimental Research, experiments do not, and should not, try to capture all features from the 'real world'. This simplification is a strength of experiments of this nature because it allows the identification of the important features of alternative interventions. It is then possible to control for these features in the experiment environment. This allows those conducting the experiment to isolate the relative drivers of behaviour.[82] While [✂] has highlighted 'real world' complexities that were not reproduced in the experiment, the key question is to consider whether those simplifications affect the overall conclusions, in particular the ranking of the different treatments.

9.49 In terms of the specific criticisms:

- The 2011 Experimental Research explicitly recognised that university students are unlikely to be representative of the population as a whole. This means that there is some asymmetry to the implications that can be drawn from this experiment.[83] Where these subjects performed well we accept that some

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[81] Letter from [✂] dated 16 September 2011. The 2011 Experimental Research also stated that "there is a direct effect of full information (subjects save the search costs) and an indirect effect of full information (the problem becomes easier)" (page 3). [✂] stated that the "weighting of direct and indirect effects has recently been very contentious …" We understand this to be a reference to the issues considered in the 08x CAT Judgment. Note, however, that the terms "direct effect" and "indirect effect" had a different meaning in the context of that judgment (see in particular the definitions at paragraph 164).
[82] 2011 Experimental Research, page 4.
[83] 2011 Experimental Research, page 4.

uncertainties remain about how consumers as a whole would perform. In contrast, where these subjects struggled to make correct decisions (e.g. tariff choice) then it suggests that consumers as a whole, in a more complex 'real world' environment, would have even more difficulties. We have taken this into account when interpreting these results.

- In terms of the criticisms of whether the tariffs presented to subjects in the experiment reflect the choice facing pre-pay mobile subscribers, as mentioned above experiments are simplifications of the real world. In the 2011 Experimental Research, subjects faced a trade off between prices for NGCs and all the other aspects of their tariff package, which were all encapsulated through the subscription cost. We thus consider that the experiment did capture the essential features i.e. whether consumers are able to weigh up the price of NGCs against the other features of their tariff (subscription fees, geographic call prices, the price of calls to mobiles etc). Similarly, the tariff packages in the experiment had differing effects on subjects' payoffs, with some packages being fairly similar whereas some were materially worse than others.[84] Again, this captures the essential nature of the tariff choice facing consumers. In any event, as explained below, we have placed little weight on the differences between the performance of the different options in the 2011 Experimental Research in terms of tariff selection.[85]

- In terms of search costs, the parameters used in the 2011 Experimental Research were chosen so that the tasks faced by subjects encompassed all the possible combinations of search/don't search and call/don't call decisions.[86] While the absolute level of search costs did not change, what matters is the level of different parameters relative to each other. The experiment included cases where search costs were high relative to the benefits of learning about the price of the call and cases where they were low. Accordingly, we also do not agree with the claim that the 2011 Experimental Research may be biased against the "maximum prices" treatment because inherent in this treatment is a reduced benefit from search.

- We do not agree that the 2011 Experimental Research failed to adequately address the "discretionary components" involved in a call such as the availability of alternatives and call importance. In that experiment, the payoff from making calls varied between tasks. In some cases, the payoff was low relative to the call price, which could be thought of as a NGC service where either the service is of limited value or where alternatives to making a call are readily available. In other cases, the payoff was relatively high which reflects circumstances where consumers regard it as essential to make the call.

- We understand [✂] reference to loss aversion to mean the possibility that individuals are relatively more sensitive to making losses than they are to making equivalent gains.[87] The selection of the parameters used in the 2011 Experimental Research did not incorporate any assumptions that subjects are

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[84] 2011 Experimental Research, Table 7 on page 11.
[85] Note that in the treatments reflecting the unbundled approach, a package which featured both a high monthly subscription charge and a high AC might have been easier to detect. It is thus possible that the unbundled approach may have performed slightly better in terms of tariff selection if such tariffs had featured in the experiment.
[86] 2011 Experimental Research, page 11 and Table 6 on page 10.
[87] [✂].

particularly averse to making losses.[88] However subjects could react to the experiment as they thought best, so any psychological biases that they have will be reflected in the results. Moreover it is not obvious that loss aversion is relevant, given the design of the experiment. Subjects simply decided whether or not to make a call. This contrasts, for example, with experiments that have been carried out in other contexts. In particular, the reference point against which losses are assessed is important. In certain circumstances, it may be possible to alter or manipulate that reference point. An example of this would be where subjects see one element of the price, update their reference point in the light of that price element and then place limited weight on other elements of the price that are subsequently revealed.[89]

Maximum retail prices

9.50 In this sub-section we assess maximum prices as an option for addressing the consumer detriment identified in Part A.

9.51 We noted in the December 2010 Consultation that maximum prices could be an attractive option as it would allow SPs to give a much clearer statement of the cost of a NGC and consumers would also be directly protected from high prices. However, we recognised that it would be a highly interventionist approach which could potentially have a negative impact on competition, harming consumers' interests in the long term.

9.52 A number of stakeholders indicated support for the maximum prices option in response to the December 2010 Consultation. We present below our updated assessment of this option, taking into account stakeholder comments and the additional evidence-gathering and analysis undertaken since the last consultation.

9.53 We have structured this sub-section by first detailing the design of the maximum prices option (taking into account stakeholder comments on that design). We then present our updated assessment of the maximum prices option using our assessment criteria set out in Part A, whilst also responding to detailed stakeholder comments on this option.

Design of the maximum retail prices option

9.54 Before we can assess whether the maximum prices option would be effective in protecting consumers and addressing the areas of consumer detriment we have identified, we first need to set out what this option might look like in practice.

[88] Annex 3 of the 2011 Experimental Research explains how these parameters were derived.
[89] For example, in another experiment "… the data suggest[s] that consumers who see a low base price and do not yet know that the effective price will go up through 'shipping and handling' charges experience an increase in their willingness to pay for the good which is in line with loss aversion and the so-called endowment effect. Consumers who decide to buy the product at the low price experience a shift in their reference point as they already imagine departing with the good. Changing the initial decision, that is, giving up the good that is already in the virtual basket would be perceived as a loss. This loss can be avoided by purchasing the product despite an increased price." *The Impact of price frames on consumer decision making*, Office of Fair Trading, May 2010, paragraph 5.61 (see also paragraph 3.9). Available at: http://www.oft.gov.uk/shared_oft/economic_research/OFT1226.pdf

9.55 In the December 2010 Consultation we discussed various features of maximum prices.[90] In particular, we noted that the key issues relevant to the design of maximum prices were:

- the amount of 'headroom' between the maximum retail price and the termination rate (i.e. the size of the gap between the two);
- potential approaches to setting maximum prices (including whether to set different fixed and mobile price maxima);
- the level of termination rates; and
- granularity.

9.56 In relation to each of these design aspects, we summarise, our view from the December 2010 Consultation, and set out stakeholder comments, our responses to them and our updated position in the following paragraphs.

9.57 In response to the December 2010 Consultation, some stakeholders raised questions around Ofcom's legal powers to impose maximum retail prices. We address these points in Part A, Section 5 above (see paragraphs 5.40 to 5.61) and therefore do not deal with them as part of the assessment below.

Headroom between maximum retail prices and termination rates

<u>Position in the December 2010 Consultation</u>

9.58 As explained in the December 2010 Consultation[91], the effects of specifying maximum retail prices depends on the amount of 'headroom' between the maximum retail price for a particular call and the termination rate payable on that call. To illustrate:

- if the amount of headroom is large then OCPs have considerable freedom to set retail prices, subject to whatever competitive pressures they face. However the maximum retail price may be a poor guide to the actual price that a caller pays.
- OCPs may refuse to originate NGCs if the amount of headroom is insufficient to cover their incremental costs of originating these calls; and
- if the amount of headroom is smaller than an OCPs current retention then the introduction of the retail price maximum may reduce OCPs profits from NGCs. This is likely to increase the prices of other services supplied by the OCP (the tariff package effect or 'TPE').

9.59 We noted in the December 2010 Consultation that there would clearly be no benefit to consumers in setting maximum prices at levels that would allow the current highest charges available in the market to remain possible, while leaving termination rates essentially unchanged. The current diversity of prices structures would remain and the market failures would not be addressed. We also highlighted that the risk that existing prices in the fixed line market (where prices tended to be lower) would increase, given that the proposal would entail the removal of the current constraints on BT.

[90] See paragraphs A6.15-A6.51 of the December 2010 Consultation.
[91] Paragraphs A6.15-A6.20 and A6.53-A6.54 of the December 2010 Consultation.

9.60 We expected the majority of retail prices would cluster around the price maxima that we set, for example because the majority of callers were unlikely to be aware if their OCP chose to set a retail price that was below the price maximum.

9.61 We therefore considered that the maximum prices option would operate most effectively if OCPs did not enjoy a large amount of headroom (i.e. the gap between the retail price maximum and the termination rate was not large). However, we noted that a drawback of not having much headroom was that OCPs would be less likely to introduce packages that included low NGC prices for the (minority) of callers that had a strong preference for such low prices.

Stakeholder comments

9.62 Several respondents agreed with Ofcom's concerns about how to set the level of headroom. Three noted there was a risk that maximum prices would be set either too high or too low; if they were set too high consumers would not benefit; if they were set too low, OCPs were likely to be squeezed and might refuse to originate NGCs.[92] EE echoed that point, noting that setting prices too low would undermine the incentive to provide access to NGC services. It suggested that SPs might find they had insufficient revenues to cover their costs and might choose to exit the number range of the NGC market altogether.[93]

9.63 ITSPA, however, did not believe that it was necessary, or even desirable, from a consumer protection point of view to allow much headroom. This was because it believed that competition between OCPs in relation to NGCs was not strong enough to avoid consumer harm.[94] Lexgreen Services agreed, and noted that if the headroom was large then it usually led to consumers paying more than they should, but low headroom would be beneficial to both consumers and TCPs/SPs.[95]

9.64 The CAB said it would expect Ofcom to undertake analysis of the costs associated with call origination and to be able to determine a fair cost-reflective price, including sufficient margin for those involved.[96]

9.65 Lexgreen Services also considered that tariff rebalancing would not happen to any great extent because OCPs compete for customers on charges for the calls that consumers perceive they make most. It noted that the advantage of allowing little headroom was that callers would know what they would be paying. It suggested that the risk that OCPs might refuse to originate NGCs could be resolved by compelling them to originate all calls in the UK numbering plan, whilst at the same time ensuring there was sufficient revenue available to all OCPs to cover their reasonable costs.[97]

9.66 O2, however, questioned Ofcom suggestion that there could only be two options, a maximum tariff with large headroom or one with low headroom. In its view it was well within Ofcom's ability to determine a range of maximum tariffs with the appropriate amount of headroom relative to the market (fixed or mobile) and to allow the best overall outcome for consumers. It therefore considered that the risks identified with the maximum prices option could be easily mitigated if Ofcom were to consider that headroom must neither be too large nor too small, but at a satisfactory level at which

[92] Three, December 2010 Consultation response, p.25.
[93] EE, December 2010 Consultation response, p.57, paragraph 5.
[94] ITSPA, December 2010 Consultation response, p.8.
[95] Lexgreen Services, December 2010 Consultation response, Q6.5 response.
[96] CAB, December 2010 Consultation response, p.11.
[97] Lexgreen Services, December 2010 Consultation response, Q6.5 response.

OCPs could minimise the need for tariff rebalancing, could recover marginal, fixed and common costs and could maximise opportunities for OCPs to offer alternative packages for those who have a strong interest in NGCs. It suggested that even if there was a relatively large amount of headroom between the termination rate and the retail price, a maximum price tariff did give callers a far better 'ball park' figure from which to make a decision about whether or not to call, more so if different maxima for fixed and mobile calls was applied.[98]

9.67 O2 considered that the negative impacts from setting a maximum retail price too close to the termination rate could be managed and mitigated by working in close consultation with the industry, differentiating between mobile and fixed customers where it was appropriate to do so, remaining vigilant to adverse consequences, setting more robust price transparency measures on service providers.[99]

Ofcom response and updated position on headroom

9.68 The responses from stakeholders largely confirm our concerns about the difficulties in setting a maximum price which sufficiently takes account of all the relevant factors and potential impacts. We agree with O2 that the choice is not binary, between 'high' or 'low' headroom. However, in order for maximum prices to provide a reliable guide to the amount that callers should expect to pay, most actual prices should be at or close to that maximum. The lower the amount of headroom that is allowed to OCPs, the more likely that this is to occur.[100] Moreover, as explained in Annex 8, we consider that the current pattern of retail prices is likely to be inefficient, with OCPs generally earning too high a margin on NGCs due to the market failures that we identify. This suggests that the amount of headroom allowed to OCPs under a maximum retail prices regime should generally be lower than at present.[101] We thus consider that for this option to be most effective, and to sufficiently tackle the consumer detriment we have identified, the headroom between the maximum prices and the termination rate would need to be lower than at present.

9.69 We have considered O2's arguments that a maximum price, even with a large amount of headroom, would still give consumers an indication of the likely price. However, evidence from the 2011 Experimental Research, shows that a maximum prices option where the price can vary considerably below that maximum performed less well, in terms of consumers making accurate call choices, than a model where they are told the exact price (although it did perform better than the 'status quo' scenario).[102] Thus, while we agree with O2 that consumers might benefit from the provision of maximum price information even if there was a large amount of headroom, we consider that setting a lower level of headroom would be more effective in addressing our concerns about consumer price awareness. This is also

[98] O2, December 2010 Consultation response, pp.40-41

[99] O2, December 2010 Consultation response, p.38.

[100] As recognised in the December 2010 Consultation, if the maximum price were higher than an OCP's current prices then it may well have an incentive to raise prices towards that maximum (see paragraph A6.53). This suggests that even if some OCPs were allowed more headroom than they currently earn, prices may still cluster at whatever maximum retail price was set. However this is likely to worsen our concern that generally OCPs are currently earning too large a margin on NGCs.

[101] One exception is that BT's retail retention may not change significantly if we were to introduce maximum prices. Currently the amount of headroom that it receives on calls to many non-geographic numbers is constrained as a result of the NTS Call Origination Condition.

[102] 2011 Experimental research, pp. vii-viii, and 13. Specifically, the percentage of correct calls was better in treatment 3 (where subjects were told the maximum call price but where the actual call price varied below that maximum) than in treatment 1 (the 'status quo' scenario). However it was worse than in treatment 2 (where subjects were told the exact price of the call).

supported by previous experimental research in 2010, which also found that consumers preferred actual price information to maximum price information.[103]

9.70 O2 stated that the risks "could easily be mitigated" if Ofcom were to set the amount of headroom at a level that were neither too large nor too small.[104] We do not consider that it would be straightforward for Ofcom to determine a 'satisfactory' level of headroom. How O2 considers such a level can be determined is unclear. It notes that such a maximum price would need to take account of tariff rebalancing, fixed and mobile costs, and the overall impacts on consumers. Assessing all those different aspects would be a lengthy and complicated task, and any decisions would be likely to be controversial and disputed by the industry. Whilst such an assessment might be possible the amount of work involved should not be underestimated, particularly given that such an assessment would need to be completed for each different number range. Moreover, there is also a significant risk of regulatory failure i.e. allowing too much or too little headroom.

9.71 Finally, Lexgreen Services argued that there would not be a significant tariff package effect because of competitive pressures on the price of services that are prominent to consumers. We disagree. Indeed the tariff package effect is stronger if the competitive pressures at the retail level are strong. We discuss the strength of the tariff package effect in Annex 8.

9.72 In summary, we have not completed a detailed assessment of precisely what level of headroom is most appropriate. Such an assessment would be complicated. However, for the purposes of considering the effects of specifying maximum retail prices, our assumption is that the level of headroom would generally be lower than the retail margin that most OCPs' enjoy at present. This means that we have assumed for the purposes of our assessment that the level of maximum retail prices is likely to be a good guide for consumers as to the price that they would actually pay.

Potential approaches to setting maximum retail prices

Position in the December 2010 Consultation

9.73 In the December 2010 Consultation, we noted we would need to specify maxima for both the pence per minute and pence per call elements of the price. We considered two different approaches to setting these prices:

- **Using current retail prices:** we considered, however, that current retail prices were unlikely to provide a clear guide to setting maximum prices, given the variance in OCPs' pricing.[105] We therefore rejected this approach; and

- **Using the current limits in the Numbering Plan:** we noted that these might best reflect SPs' preferences about the price of calling their service.[106] We considered that setting price maxima that corresponded to SPs' preferences minimised disruption for SPs and reduced the likelihood of SPs migrating to other

[103] 2010 Experimental research, p.10.
[104] O2, December 2010 Consultation response, paragraph 161.
[105] See the December 2010 Consultation, paragraphs A6.27-A6.28 for evidence of retail price variation.
[106] SPs have some choice over the price point they select for calls retailed by BT. However even for these calls SPs generally do not control BT's call set up fees (the per call charge) or the level of retail discounts.

number ranges. However, we noted that no price limits were specified in the Numbering Plan for some number ranges, such as 070 or 118. We noted that fixed and (in particular) mobile OCPs frequently set higher prices than those specified in the Numbering Plan.[107] We therefore observed that setting price maxima based on the Numbering Plan would tend to reduce OCPs' average retention, unless termination rates fell by a corresponding amount.

9.74 An additional issue in considering the different approaches to maximum prices was whether different maxima for fixed and mobile calls should be set, bearing in mind that currently NGCs are generally more expensive from mobiles and that we generally recognise that fixed and mobile networks have different costs.

9.75 Our view in the December 2010 Consultation was that setting a higher price maxima for mobile calls was likely to be comprehensible for callers[108] and that the underlying differences between fixed and mobile OCPs' costs of originating and retailing NGCs were potentially a legitimate reasons for setting different retail price maxima. Moreover, we noted that this would send price signals to consumers by encouraging them to take those cost differences into account when choosing how to originate a call.

9.76 We also noted, however, that if the magnitude of any cost differences were small then the benefits of setting different retail price maxima were likely to be limited (for example the price signal being sent to consumers by allowing a price differential would be weak). In those circumstances, we recognised that setting a single price maximum might be a simpler message for consumers.

9.77 We highlighted that setting the same price maxima for fixed and mobile calls could result in significant falls in mobile call prices. Table A6.6 in the December 2010 Consultation, illustrated that setting a maximum that reflected fixed call prices would significantly reduce mobile OCPs profits from NGCs (we estimated the impact could be over £350m p.a., depending on the extent of volume changes).[109]

9.78 We concluded that setting the same price maximum for fixed and mobile OCPs either involved setting a maximum considerably above current fixed NGC prices or would involve considerable falls in mobile NGC prices (or somewhere between these two extremes). We noted that:

- the former option would mean that fixed OCPs (which accounted for the 89% of NGCs in 2009) have a large amount of headroom.[110] That would diminish the extent to which transparency would be improved;

- the latter option would result in lower NGC prices for callers, which in turn resulted in either higher prices for other telephony services (the tariff package effect) or lower income for SPs (as a result of lower termination rates). We considered it was questionable whether callers would wish to rebalance retail prices, while lower income for SPs might harm service quality and variety;[111] and

[107] See December 2010 Consultation, paragraph A6.24 for examples.
[108] Survey evidence presented paragraph A6.34 of the December 2010 Consultation suggested that the majority of callers had learned that calling a non-geographic number from a mobile was more expensive than from a landline.
[109] Paragraph A6.35 in the December 2010 Consultation explained how these figures were calculated.
[110] 2010 Flow of Funds study, page 5.
[111] See footnote 598 to paragraph A6.40 of the December 2010 Consultation.

- whether setting the same price for fixed and mobile calls would facilitate access to socially important services depended on what happened to termination rates. If they did not change then callers could access these services more cheaply; if termination rates fell then there was likely to be a negative impact on service availability.

9.79 We invited stakeholders' views on whether the price maxima should vary between fixed and mobile OCPs.

Stakeholder comments on approaches to setting maximum prices

9.80 A number of stakeholders agreed that maximum prices should be set following the current designations in the Numbering Plan. ITSPA, Magrathea and Lexgreen Services also particularly agreed that there was no merit in setting maximum prices based on current retail prices, since some OCPs were charging much more than the levels in the Numbering Plan. They disagreed that it was difficult for Ofcom to know the 'correct' retail price, noting that the correct retail price was the price selected by the SP for that particular number range, otherwise there was no point in the Numbering Plan.[112]

9.81 In terms of whether different price maxima should be set for fixed and mobile calls, FCS noted that for this solution to work, a cost of origination, which included margin, would need to be derived to form the OCP retention across all types of calling platform. ITSPA also argued that the price maxima should not vary between fixed and mobile providers as this would erode the reference value of the Numbering Plan and, it noted the 2011 MCT Statement implied that, assuming the cost of termination was a proxy for the cost of origination, there was minimal difference between the costs of mobile and fixed OCPs. It considered that there was little evidence to support the TPE, and did not believe that mobile OCPs would necessarily raise the price of other services in response to setting maximum prices.[113]

9.82 Lexgreen Services and Magrathea also considered that there should not be any different maximum prices for calls originated from mobiles compared with fixed. They conceded that mobile OCPs should be able to levy a slightly higher origination charge, which it recommended should be linked to the mobile termination rate (and which should fall along the glidepath determined by Ofcom in its 2011 MCT Statement).[114]

9.83 O2, however, noted that if Ofcom were to set a single price point for mobile and fixed OCPs there would be a risk that fixed OCPs would increase their retail margin.[115] It noted that without careful consideration Ofcom could risk adopting a policy which favoured larger headroom for fixed OCPs and a lower headroom for mobile OCPs. It did not consider that this would achieve the aim that Ofcom desired and might unduly indicate an inappropriate preference for one form of technology over another, in breach of Ofcom's statutory duties. It considered that it might be more appropriate to distinguish between mobile and fixed calls, and the level of headroom that should be applied should take into account the potential consumer impact in each market.[116]

[112] ITSPA, December 2010 Consultation response, pp.9-10. Magrathea, December 2010 response, p.11.
[113] ITSPA, December 2010 Consultation response, p.10.
[114] Lexgreen Services, December 2010 Consultation response, Q6.5 response.
[115] O2, December 2010 Consultation response, p.39, paragraph 155.
[116] O2, December 2010 Consultation response, pp. 39-40, paragraph 156.

9.84 The Number UK ('TNUK') agreed with Ofcom's concerns about the difficulties of setting a maximum price for the 118 ranges in particular, given that there is currently no maximum in the Numbering Plan. It noted that pricing flexibility was particularly important for DQ providers as it was highly likely that they would want to offer future services that required different (and currently unforeseen) pricing mechanisms.[117]

Ofcom response and updated position on approach to maximum prices

9.85 In terms of using current retail prices, we remain of the view that these would be an inappropriate basis for setting maximum prices given the current variations in OCP pricing. We recognise that using the Numbering Plan designated prices is a potential solution but it is not without difficulty.

9.86 For example, it does not provide a guide price for all the non-geographic ranges, notably in the context of this consultation, the 118 range. Stakeholders who supported using the Numbering Plan to set maximum prices did not address the question of how we set prices for this range. We agree that pricing flexibility is particularly important in the 118 range, and it is currently unclear how a maximum price could be set for this range which still allowed for some pricing flexibility.

9.87 There are additional questions raised by the use of the Numbering Plan, for example, currently a number of fixed OCPs levy a 'call set-up charge' on top of the limits in the Numbering Plan and we would therefore need to consider how, or if, such charges should be incorporated into the maximum prices which were ultimately specified (in the same way we have done for the setting service charge price caps, see Section 10).

9.88 In addition, these 'call set-up charges' have fed through into higher termination rates for NGCs (via the NTS Call Origination Condition). Indeed for some calls the termination rate may be higher than the headline price in the Numbering Plan. To illustrate, C&W stated that for some 0844 calls the average retail charge (expressed as a pence per minute amount but reflecting call set up charges) was 8ppm and the termination rate was 5.2623ppm.[118] However the Numbering Plan designates 0844 calls as costing up to 4.26ppm (excluding VAT) for BT customers. Clearly this means that we could not simply set maximum retail prices equal to the headline figures given in the Numbering Plan without reducing termination rates (which, in turn, is likely to be disruptive for SPs e.g. prompting them to migrate to another number range).

9.89 As discussed below, our assumption is that average termination rates would be largely unchanged under a system of maximum prices. This implies that maximum retail prices are likely to be higher than the 'headline' rates specified in the Numbering Plan.

9.90 We note that a number of stakeholders have questioned the existence of the TPE and argued that it should not be a relevant factor in our analysis. As explained above (in the headroom section), we disagree. We set out our position on this in more detail in Annex 8.

9.91 In terms of whether we should set different maximum prices for fixed and mobile calls, there are arguments for both approaches which stakeholders have set out. In consumer transparency terms, having a single price is clearly simpler, a point which

[117] TNUK, December 2010 Consultation response, pp.27-28.
[118] Figures refer to chargeband g6. C&W December Consultation response, page 29.

O2 highlights earlier in its consultation response, where it notes that "If there is a consistent message that all numbers with the same prefix are priced the same then that price consistency is more likely to be retained by consumers".[119] As with the assessment of the appropriate amount of headroom for maximum prices, we consider that in order to take a final position on whether different maxima should apply a much more detailed analysis of the potential impacts of different approaches would be required and we have not undertaken that analysis as part of this consultation.

The level of termination rates

Position in the December 2010 Consultation

9.92 We highlighted that specifying a maximum retail price raised the question of how the retail revenue would be divided between the OCP and the TCP/SP i.e. what would the termination rate be.

9.93 Annex 3 of the December 2010 Consultation stated that we were not confident that the termination rates that would arise commercially absent ex ante regulation were likely to lead to desirable outcomes for consumers. We noted that these concerns also created uncertainty about the effectiveness of maximum retail prices. For example, some OCPs might push down the termination rate resulting in a large amount of headroom which might reduce the extent to which maximum prices improved consumer price awareness. We therefore stated that, if concerns about termination rates did subsequently materialise, then it might be necessary at that point to consider what (if any) further regulatory intervention was appropriate. We recognised that this created a degree of uncertainty about how retail price maxima would operate in practice.[120]

Stakeholder comments on termination rates

9.94 Some respondents suggested that regulation of termination rates would be necessary under this option. ITSPA, for example, noted that termination rates would have to be regulated in order for maximum pricing to work. It considered that the vast majority of TCPs had weak negotiating power against the large OCPs. Accordingly, Ofcom should not wait to see if undesirable outcomes materialise but it should assume from the start that they would do so and set appropriate termination rates, which would remove any uncertainty from the beginning.[121]

9.95 TNUK similarly argued that fixing a retail cap with no enforceable regulatory guidance over how retail revenues should be divided between access and service would lead to significant difficulties. It noted that, even if the revenue share was determined, it had significant concerns about other ways in which OCPs may try to generate additional revenue in return for agreeing to originate calls. For example, it stated that two OCPs have suggested to it that if retail prices were to be frozen they might require additional lump sum payments, in addition to per minute/call margins or they would seek to restrict or close access to its services. It noted that such factors were likely to lead to a raft of disputes which Ofcom will have in some way to resolve.

[119] O2, December 2010 Consultation response, paragraph 149.
[120] Section 6 of the December 2010 Consultation, pages 78-79.
[121] ITSPA, December 2010 Consultation response, p.10.

Such resolution might require the conduct of a complex market review of both the access and DQ markets with the attendant risks of considerable litigation.[122]

9.96 [✂] also suggested that maximum termination rates should be set by Ofcom, by number range, and there should be an obligation on OCPs to send traffic to a given number range to the relevant TCP and an obligation on TCPs to terminate calls. It believed that the concept of separate markets for origination and termination could be replicated within the maximum price structure by wholesale intervention.

9.97 Three considered that in the absence of wholesale regulation, OCPs were likely to be squeezed by larger TCPs such as BT.[123] C&W highlighted that the 0870 disputes showed that commercial agreement across the industry is extremely unlikely without numerous dispute referrals to Ofcom, potentially for each individual number range.

9.98 FCS considered that any form of maximum retail prices would need cumbersome regulatory intervention. This is because it is unlikely that commercial negotiation alone between OCPs and TCPs will reach an agreed outcome and, even if commercial agreement were achieved, there would still be revenue uncertainty for both the TCP and the SP due to the likelihood of OCP retention changing on a frequent basis.

<u>Ofcom response and updated position on termination rates</u>

9.99 Changes to termination rates are likely to be disruptive for SPs. In particular, lower termination rates are likely to result in lower revenues for SPs and/or higher charges to SPs for hosting. This, in turn, may result in some SPs incurring the costs associated with migrating to another number range. Thus, in general, under a system of maximum prices there are attractions if the average termination rates do not change significantly.[124]

9.100 For the purposes of our assessment of the maximum price option, our assumption is that termination rates are largely unchanged.

9.101 We recognise that there is a strong view from stakeholders that maximum prices would also require regulation at the wholesale level. This view was emphasised in the industry working group discussions, where a broad agreement was reached that the model of maximum prices we had proposed in the December 2010 Consultation was unworkable without some form of wholesale regulation.[125]

9.102 As set out in Section 4 we remain of the view that, absent regulatory intervention, we are not confident that the termination rates that would arise commercially are likely to lead to desirable outcomes for consumers. As explained in Annex 10, the balance of wholesale negotiating power depends on the firms involved. In this case, we consider

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[122] TNUK, December 2010 Consultation response, p.28.
[123] Three, December 2010 Consultation response, p.25, paragraph 79.
[124] As noted in paragraph A6.56 of the December 2010 Consultation there may be some exceptions to this. We gave as a potential example the 070 number range where consumer confusion (particularly due to the similarity with mobile numbers) means there may be benefits from aligning retail prices more closely for those with calls to mobiles and from reducing the amount of revenue that the TCP receives by reducing termination rates. As discussed in Part A, the 070 is outside of the scope of this consultation document.
[125] See Annex 14 for a summary of the Commercial Working Group discussions of the maximum prices option. This was discussed at the meeting on the 28 July 2011, the notes of which are available here: http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-28072011

that there is a wide variation in the market power of sellers and countervailing buyer power which would make any formal analysis under market review procedures inherently complex. As one stakeholder highlighted during the working group discussions, establishing the price control under the NTS Call Origination Condition on BT has been a very difficult and lengthy process, and extending that kind of regulation to all the players in the market (which would effectively be the type of regulation required under some of the proposals put forward by stakeholders) is unlikely to be practical or proportionate.

9.103 We have therefore assessed the maximum prices option below on the assumption, as put forward in the December 2010 Consultation, that termination rates would not be regulated, albeit we recognise that means that there is a significant level of uncertainty about how such a model would work in practice.

9.104 We recognise we have proposed regulatory ex-ante intervention in relation to the wholesale origination charge for setting a maximum price of zero for the 080 and 116 ranges (specifically we are proposing the implementation of an Access Condition, see Part C, in particular Section 17). However, this is limited to two number ranges, and therefore it is of a substantially reduced scale, and in any case such an approach does not lead to the setting of an explicit level of termination rates in the same way as suggested in many of the stakeholder comments.

Granularity

Approach in the December 2010 Consultation

9.105 Granularity refers to the number of retail price maxima within a number range. For example, should there be a single retail price maximum applying to a number range (of 5ppm, say) or a ladder of maxima within that number range (at 1ppm, 2ppm and so forth).

9.106 Greater granularity allows for competition between SPs, for example by allowing them to select a price point that undercuts their competitors. The magnitude of this benefit depends on the importance of competition between SPs. The scope for competition depends on the nature of the service that the SP is offering.[126] But greater granularity also means that retail prices are more likely to reflect SPs' preferences, which mitigates the vertical externality effect discussed in Annex 8 and Section 4.

9.107 While greater granularity means increased complexity for consumers we considered this drawback to be relatively small. We said that consumers were unlikely to remember the price of calls to a particular non-geographic number, even if the structure of retail prices were to be relatively simple. Granular retail price maxima within each number range might also increase pricing and billing complexity for OCPs, particularly for those OCPs who currently have simple NGC pricing structures.

9.108 Therefore, we consulted on the view that a considerable amount of granularity would be appropriate on number ranges such as 09 and 118, where competition between SPs was particularly important and where different SPs were likely to want to set very different prices. We also considered that on number ranges such as 08, a degree of granularity was likely to be appropriate, because it would facilitate competition between some SPs and help alleviate the vertical externality.

[126] See paragraph A6.47 of the December 2010 Consultation for further discussion of this point.

Stakeholder comments on granularity

9.109 ITSPA argued that it was important to retain as large a level of granularity as possible so that SPs could continue to select an appropriate price level for their service. Lexgreen Services noted that if there was sufficient granularity in the charges then there should not be a concern about the price not being informative enough. It acknowledged that additional granularity would result in more complexity for consumers but it considered that would be mitigated if all the maximum prices and bands were brought into the Numbering Plan to be used as a reference point for consumers.

9.110 C&W, however, noted that the breadth of the 09 range, particularly if the current cap of approximately £1.50 (that applies to calls from BT) was increased, was too wide to justify the use of a single maximum tariff on consumer protection grounds. It therefore considered that unless specific caps were set at a granular number block level then the overall 09 price maximum would not be a good enough guide to actual prices to resolve our concerns about price awareness.

9.111 O2 agreed that where a particular number range offered more opportunity for price competition to develop (e.g. 09 numbers) a limited ladder of retail prices within that range might be appropriate. However, it did not consider that this was necessarily true on ranges for which there was little or no opportunity for price competition (e.g. 084 numbers in O2's view) either because the services are capable of locking customers in or because there are no or limited obligations to advertise the price in promotional material. It also argued that the level of granularity required to realise the benefits of effective SP competition would impose significant implementation costs.[127]

Ofcom response and position on granularity

9.112 As set out in the December 2010 Consultation, and as reflected in stakeholders' responses, the degree of granularity involves a trade off between:

- retail prices that better reflect SPs' preferences and greater scope for competition between SPs; against
- greater costs and complexity for OCPs and greater complexity for callers (the latter effect may not be large).

9.113 In particular, mobile OCPs typically only set a limited number of price points for NGCs. For example, there are around 80 different wholesale price points for 09 calls, but Vodafone sets just eight retail price points for 09 calls.[128]

9.114 Some OCPs might face technical constraints in supporting a large number of retail price points because of limited capacity in their network switches. Most fixed OCPs are unlikely to face any constraints, but some mobile OCPs with legacy network switches and billing systems would face a capacity constraint if they have to support a large number of retail price points. These constraints are similar to the constraints on number granularity discussed in the context of implementing unbundled tariff structure (see Section 10).

[127] O2, December 2010 Consultation response, p.38
[128] Vodafone December 2010 Consultation response, paragraph 169.

9.115 The question of granularity is also linked to the level of headroom. If we allow only limited headroom between the price and the termination rate, then each wholesale price point is likely to translate into a corresponding retail price point. This means that a greater degree of granularity would be required in order to allow SPs at least some flexibility in their pricing.

9.116 We agree that a greater degree of granularity is likely to be appropriate for the 09 range in particular. Given the breadth of prices in that range, a ladder of price points, broken down by number block, is likely to be appropriate. The same also applies to the 118 ranges, although again it is less clear on what basis those laddered prices would be set (as we discuss in Section 10 below, the same issue applies with the unbundled approach and selecting relevant SC price points).

9.117 We agree that for number ranges such as 0843/4, less granularity (fewer retail price points) than 09 is likely to be appropriate. In June 2011, BT had over 40 retail price points for 0843/4 calls and our assumption is that we would specify fewer price points (less granularity) than this. However this does not mean that we would only set a single price point. Whilst O2 suggested there was little or no scope for competition between SPs on ranges such as 0843/4, it did not present any evidence in support of its position. Moreover, competition between SPs would not be the only determinant of the number of price points. Offering SPs a degree of choice is also relevant. We thus remain of the view that a certain level of granularity would be appropriate on number ranges such as 0843/4, in order to mitigate the vertical externality by reflecting SPs' preferences.

Overall view on the design of the maximum prices option

9.118 Therefore, for the purposes of our assessment below, we have adopted the following outline as to what the maximum prices option would look like:

a) lower headroom between the maximum prices and termination rates than the retail margin that OCPs typically earn at present;

b) as a result, actual retail prices for calls to a particular number would generally be close to the maximum price for that number;

c) termination rates would generally be close to current levels;

d) maximum prices are likely to be higher than the 'headline' limits specified in the Numbering Plan;

e) we do not need to make an assumption about whether we would set different maxima for fixed and mobile calls;

f) no direct regulation of termination rates; and

g) a considerable degree of granularity on the 09 and 118 ranges, and some limited granularity (a reduced amount compared to 09 and 118) on the other 08 ranges.

9.119 A further factor which is relevant to the assessment below, and to the unbundled tariff assessment, is the extent of change in demand for calls to these number ranges. As discussed in detail in Annex 8 we consider that the current market failures are suppressing demand for NGCs. As explained below, maximum prices are likely to improve consumer price awareness and may also mitigate the vertical and horizontal externalities. It is reasonable to assume that addressing the market failures we have identified will lead to an increase in demand. Therefore, for the purposes of the assessment below, we have assumed that there will be a positive effect on demand. However we consider that the available evidence does not allow us to reach a view on whether the increase in demand with the maximum prices option is likely to be higher or lower compared to the unbundled tariff.

Assessment of the maximum prices option

Assessment in the December 2010 Consultation

9.120 In the December 2010 Consultation we assessed the maximum prices option against our assessment criteria, relative to deregulation. That discussion assumed that OCPs had a limited amount of headroom and that the level of termination rates did not create problems. We noted that, were those assumptions incorrect, setting maximum prices would be a less attractive option than our assessment presented.[129] We have provided a summary of that assessment below.

9.121 We considered that consumer price awareness would, to some extent, be improved. SPs would be able to provide an accurate indication of the maximum price that callers would be charged and, assuming the amount of headroom was relatively low, retail prices were likely to be close to that maximum. We noted that this would tackle consumers' tendency to overestimate the retail price of NGCs and would provide more certainty for consumers, thereby potentially increasing call volumes. We noted there was some indication of support for a maximum prices approach in our consumer survey, and from SPs (although primarily those on the 09 and 118 ranges).[130]

9.122 We identified a number of effects relating to efficient prices:

- the retail price would effectively be determined by the regulator (since most OCPs were likely to price close to the maximum). While we noted this would help to avoid inappropriately high prices and promote price transparency, negative consequences might be less flexibility or responsiveness. In particular, we noted it might be difficult for OCPs to offer packages featuring particularly low NGC prices tailored to the minority of callers that had a strong interest in these calls; and

- since OCPs' retention was likely to fall, we noted this would be likely to lead OCPs to rebalance their retail prices to some extent. We highlighted that the TPE was likely to be particularly significant for mobile OCPs. We noted that since the regulator would essentially be determining the balance of retail prices between NGCs and other services, there was a significant risk of regulatory failure i.e. a balance of prices that did not reflect the preferences of some or all consumers.

9.123 We considered that the impact on service quality, variety and innovation was likely to be positive. SPs were likely to benefit from any increase in demand, for example due to greater caller confidence. Moreover, a relatively granular series of retail prices

[129] See paragraphs A6.59-A6.67 of the December 2010 Consultation

[130] In the 2010 Consumer survey, 35% of consumers said they would feel more comfortable with a maximum price approach (although 39% also said it would make no difference). In the 2010 SPs survey, SPs were asked how desirable it would be to inform callers of the maximum price they could be charge, on a scale of 1 (not important) and 5 (important). The average response was just under 3, however, on the 09 and 118 number ranges the rating was much higher (4.5).Figure 36, page 21.

would be likely to give SPs the freedom to select price points that enabled them to compete on price. There appeared, therefore, to be some scope for competition between SPs. However, we noted the available price points would ultimately be selected by the regulator and for some number ranges (e.g. 118) having a limited set of price points might undermine competition and the presentation of new offerings.

9.124 In principle, we noted that maximum prices might result in lower retail prices for access to socially important services. We highlighted that there was scope to set lower maximum prices for number ranges with a high proportion of these services.

9.125 We considered that from a technical perspective, there were likely to be few systems costs to implementing maximum prices. However, we considered that it would involve considerable regulatory burden (adherence to a multitude of regulated price limits) and would require industry to engage in a substantial review of wholesale relationships (plus potentially, substantial regulatory intervention if conflicts arose at the wholesale level and were not resolved commercially). We noted that the outcome at the wholesale level was a particularly significant source of uncertainty about the performance of the maximum prices option. For example, one potential unintended consequence of this remedy was that OCPs might refuse to originate some NGCs. We noted this might happen if the level of headroom was lower than an OCPs incremental cost of originating NGCs.

9.126 Overall the view on which we consulted in the December 2010 Consultation was that setting maximum prices was an attractive option, although it did have both advantages and disadvantages. We noted it would be a highly interventionist approach, and there was a very real likelihood that the maximum prices would become the focal points for actual prices to be set (which would mean that actual prices were set by the regulator rather than by competition). We were also concerned that there would be limited potential for phone companies to compete on prices for these services. Furthermore, we recognised that just setting maximum retail prices was unlikely to address our wholesale level concerns.

9.127 We considered that the balance between the benefits and the costs of maximum retail prices was different for different number ranges. For most of the number ranges we were inclined to think that an alternative approach might be preferable. But we considered that maximum retail prices might have a valuable role to play for a limited set of numbers, for which the horizontal and vertical externalities represented especially serious concerns.

9.128 We asked the following question about our approach:

Q6.5: Do you agree with our assessment of maximum price as a potential remedy for the market failures identified? Do you agree with our assessment of the pros and cons of this approach? What do you consider would be the impact of the introduction of maximum prices in this market? How should such a scheme be structured? Ideally include in your response reference to the analysis set out in Annex 6.

Updated assessment of the maximum prices option

9.129 Note that, unlike the assessment in the December 2010 Consultation, our assessment of maximum retail prices in this consultation uses the assessment criteria against the base case of the status quo, rather than a deregulated scenario. As we set out in Part A, we consider that using the deregulated scenario as the base case adds to the difficulty of the analysis.

9.130 Below we assess the maximum retail prices option (using the design and assumptions described above) against each of our assessment criteria. We first outline stakeholder comments made in response to the December 2010 Consultation which are relevant to each criterion before setting out our updated assessment.

Consumer price awareness

Stakeholder comments

9.131 The Consumer Forum for Communications ('CFC'), the CAB, a number of SPs and individual respondents supported maximum prices over the unbundled tariff on the basis that it would be less confusing to consumers. The CAB noted that this option would enable SPs to provide an accurate indication of the price and that clarity would be much greater than with the unbundled tariff.[131] 24 Seven Communications noted that historically (when the sector was much simpler), pricing gave a clearer structure to the consumer and regulation could enforce that simpler structure again through setting maximum prices.

9.132 In addition, some fixed CPs and ITSPA also supported this option, arguing that it would offer far greater benefits in terms of consumer clarity than the unbundled tariff option. Colt noted that a maximum retail price was the only way to give certainty to customers about the cost of calling a particular number, because it did not require the consumer to do research about other call charge elements, e.g. access charges.[132] The FCS also agreed that strict adherence to the designations in the Numbering Plan would provide clear benefits for both the consumer and CP through absolute price transparency.

9.133 O2 also considered that, on the face of it, the maximum prices option offered far greater benefits in terms of consumer clarity than the unbundled option. It submitted its own research ('the O2 Survey') which indicated that a single price point was considered to be preferable to the unbundled tariff option by 65% of its research participants.[133] O2 also considered that maximum prices would ensure that the issue of bill shock would be almost entirely negated.[134]

9.134 However, BT noted that under this option consumers would still not have certainty of what they would pay and would not know the exact price of their call until they saw their bills. BT also noted that other areas of consumer harm would not be addressed through maximum prices. It noted that it would not address the issue of consumers perceiving these calls as being more expensive than they were. It noted that consumers would always see the highest price, although their provider might actually charge a much lower price and that this would continue to undermine consumer confidence in these services and deflate demand.[135] EE highlighted that, in the 2010 Consumer survey, only 35% of respondents felt that maximum prices would make them feel more comfortable. EE considered that loose maximum prices would therefore provide no greater consumer price clarity than currently.[136]

[131] CAB, December 2010 Consultation response, p.11.
[132] Colt, December 2010 Consultation response, pp. 4-5.
[133] O2's consultation response, p.37, paragraph 140.
[134] O2, December 2010 Consultation response, pp. 38-39, paragraph 151.
[135] BT, December 2010 Consultation response, pp. 9 & 29.
[136] EE, December 2010 Consultation response, p.57.

Ofcom response and updated assessment

9.135 We discuss the O2 Survey results below, as part of our assessment of the unbundled remedy (see paragraphs 9.234 to 9.235). For the reasons we give there, we have treated the responses given to the questions asked in that survey with caution. In particular, we consider that the fact that the maximum prices option is likely to be easier for consumers to understand is likely to have contributed to the preference of O2's research participants for this approach. In terms of BT's and EE's comments about a maximum price not reflecting the actual price consumers would pay, our assumption is that headroom would be set at a level that results in most retail prices being set at (or close to) the maximum.[137]

9.136 In the case where the actual price is very close to the maximum price, then we agree with stakeholders' comments that this approach would offer considerable benefits to consumers in terms of price transparency. In particular, SPs would be able to advertise an (almost) exact price for calling their service. Where consumers are provided with a statement of the price in advance of making a call, consumer price awareness is therefore unlikely to be a concern. In addition, it would address the problem of consumers overestimating the price of calls and provide more certainty to consumers, thereby encouraging demand. In support of this, the 2011 Experimental Research found that subjects were most likely to make accurate call choices when told the exact price at the point of call.[138]

9.137 Where callers do not have the exact price in front of them (for example, because they are calling a number from memory or because the SP does not quote the maximum price when it advertises the number) then they will be dependent on inferring the likely price from the prefix of the number they are dialling:

- Clearly, in these circumstances, consumers' price awareness may be limited.
- However, relative to the status quo, we would still expect price awareness to improve since the environment for NGCs will be more conducive to learning prices than at present (e.g. greater standardisation of prices across OCPs, a greater tendency for maximum call prices to be quoted alongside non-geographic numbers).
- The degree of granularity in pricing could potentially hamper this learning process. If there were a range of price points within a number range, the likelihood of consumers remembering exactly which of those different price points applies to the particular call they are making is limited.[139]

Efficient prices

Stakeholder comments

9.138 ITSPA considered that retail price regulation would not be overly intrusive in the case of NGCs, because competition amongst OCPs in relation to these calls was not

[137] Indeed, as explained above, the purpose of setting a limited amount of headroom is to avoid the significant gap between actual prices and maximum prices that EE and BT expressed concerns about.

[138] 2011 Experimental Research. See in particular the performance of Treatment 2 in Table 9 on page 13.

[139] This is in contrast to our proposals for Freephone where there would be a single pricing message for one number range, which would make it easier for consumers to remember.

strong enough currently to avoid consumer harm. It therefore did not believe that retail price competition should be the primary goal. It considered that certainty, not price competition, was important, and therefore the possibility that OCPs would tend to price towards the maximum was not necessarily a bad thing.[140]

9.139 The CAB noted that it would fully expect providers to compete vigorously and to drive down costs under a maximum prices model. It considered that the current regime did not reflect consumers' price preferences, particularly those on low incomes, and that Ofcom should not therefore be concerned that it would be determining the prices, rather than the market.[141]

9.140 A number of respondents indicated that setting maximum prices would immediately remove what they believed to be the biggest cause of consumer harm, the cost of NGCs from mobiles.[142] Colt considered that a maximum price model could be adopted which still allowed some limited flexibility in the way retail pricing was set, for example discounts in certain pricing plans, calls being in or out of bundle etc. Colt, along with ITSPA and Lexgreen Services, also argued that maximum prices could in fact improve competition amongst TCPs and SPs, because they would know their customers would pay less if they operated services on lower priced numbers, which was not the case currently.

9.141 BT, however, noted that the main impact of this model would be to do no more than level the playing field (as BT is already subject to maximum prices in the Numbering Plan), which might curb "excessive" pricing and reduce revenues for some originators, but would not restore consumer confidence.[143]

9.142 A significant number of respondents raised concerns about the effect of a maximum prices model on retail pricing competition. UCKTA, FCS, Vodafone and EE considered that price caps in reality would act as a focal point around which originating operators would be likely to cluster, potentially raising prices compared with the current competition. EE noted that price caps removed any incentive for operators to compete below the cap.[144] EE and Vodafone highlighted that the European Commission's regulation of roaming rates had led to this effect of prices clustering at the price cap level.[145]

9.143 EE noted that the maximum prices option was a highly interventionist approach which would involve prices being set by the regulator rather than competition. It considered that the ability for OCPs, TCPs and SPs to compete on the price of NGCs would be hindered and distorted by this approach, for example OCPs would be constrained in the types of trade-offs between NGC prices and the prices of other services and it would hinder SPs' ability to set prices according to consumer

[140] ITSPA, December 2010 Consultation response, p.9.
[141] CAB, December 2010 Consultation response, p. 11.
[142] For example, Colt, December 2010 Consultation response, p.5.
[143] BT, December 2010 Consultation response, p.29.
[144] EE, December 2010 Consultation response, pp.57-58.
[145] Vodafone highlighted the following information: when the European Commission proposed the extension of the regulation governing international roaming charges, its first draft of the second roaming regulation noted: *"…data indicates that retail and wholesale prices are clustering at or close to the limits set by Regulation (EC) No 717/2007, with only limited competition below those limits.*" See Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community and Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, Recital 5. See also the BEREC report: http://erg.eu.int/doc/berec/bor_10_58.pdf, p.21.

preferences.[146] Vodafone similarly claimed that maximum prices would distort pricing decisions previously freely made in a "competitive market" and inhibit competition and was thus not consistent with Ofcom's statutory duties.[147] EE noted that once a regulated rate had been introduced, there was little incentive for operators to compete against that rate – it made price differentiation more difficult because consumers' perception is that prices were the same on all networks because of the regulation.

9.144 Furthermore, Virgin noted that the constraining effect on OCPs' retail pricing would hinder the provision of diverse product and package offerings and other such innovations. For example OCPs would have less flexibility to offer their customers bundled packages in particular and there would therefore be wider reaching impacts on products and services on other markets such as broadband, TV and handsets. It therefore considered that the net effect of such a remedy would actually be a significantly poorer experience for consumers.[148] TalkTalk also noted that setting maximum prices would not be appropriate in a market that was generally characterised by competition across call bundles.[149]

9.145 EE and Vodafone also indicated concerns that any mandated readjustment of current NGC prices would result in tariff package effects on other call prices and/or handset subsidies and would create a risk that the balance of retail prices does not reflect the preference of some or all consumers.[150] O2 noted that given the evidence that consumers did not want cheaper NGC prices at the expense of higher prices for other mobile services, it was appropriate for the maximum prices option to include sufficiently large headroom to ensure that there was no need to rebalance retail prices.[151] It also argued that we had underestimated the extent of the rebalancing that would be required.[152]

9.146 Conversely, ITSPA believed that too much weight was given to the tariff package effect. It believed there was no evidence that mobile OCPs would raise the prices of other services unless their profits from NGCs were currently subsidising other services or unless the maximum price would leave them making a loss on NGCs, and it believed there was no evidence that either of these were the case.[153]

Ofcom response and updated assessment

9.147 In principle, where consumers are aware of prices and absent externalities, competition is likely to result in an efficient pattern of prices.[154] In contrast, under the system of maximum prices that we are considering, the actual pattern of retail prices is largely determined by the regulator. Whilst in principle regulation could also lead to an efficient pattern of prices, in practice there is a significant risk of regulatory failure. For the reasons set out in more detail in paragraphs 9.176 to 9.181 below, there is a

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[146] EE, December 2010 Consultation response, p.57.
[147] Vodafone, December 2010 Consultation response, Annex 4, p 49.
[148] Virgin Media, December 2010 Consultation response, p.22.
[149] TalkTalk, December 2010 Consultation response, p.2.
[150] EE, December 2010 Consultation response, p. 57, Vodafone, December 2010 Consultation response, p.49.
[151] O2, December 2010 Consultation response, p.38.
[152] O2, December 2010 Consultation response, p.5.
[153] ITSPA, December 2010 Consultation response, p.9.
[154] As explained in Annex 8, we do not consider that these conditions hold in the case of NGCs. This Annex addresses Vodafone's criticisms of our analysis of the retail level (Vodafone December 2010 Consultation response, Annex 1).

risk that regulated prices are not set at the correct level and regulation may also be less agile in responding to changing circumstances.

9.148 When considering the points raised by stakeholders, it is useful to distinguish between the effect on OCPs and SPs.

9.149 In terms of OCPs, we agree with stakeholders that it is difficult to see how there would still be substantial scope for competition between OCPs over call pricing for these number ranges, given our assumption that the amount of headroom between the maximum price and the termination rate would be low. Indeed the reason for specifying a system of maximum prices in this way is to lead to a clustering of prices close to the maximum (in order to promote consumer price awareness).

9.150 As highlighted in the stakeholder comments, OCPs would be restricted in their ability to tailor different packages to meet differing consumer preferences, since the headroom between the termination rate and the maximum price would be low. However, it is not clear how detrimental this loss of flexibility is. For example, only a small number of mobile OCPs offer bolt-ons that allow subscribers to make cheaper NGCs and take-up has been limited.[155] We note that some stakeholders have suggested that certainty is more important in this market than competition. However, Ofcom's principal duty in carrying out its functions includes the promotion of competition, where appropriate,[156] and therefore we need to give very careful consideration to any option that could negatively impact competition. We remain of the view that there is a material risk that in setting maximum retail prices for these number ranges we will choose prices that will not benefit consumers in the long term, so as to compensate for the reduced scope for competition.

9.151 Setting maximum prices would not just affect the prices charged by OCPs for NGCs. It would also affect the price of other telecoms services, via the tariff package effect. This raises the question of consumer preferences about the balance of prices more generally. We note some stakeholders have questioned the existence of the TPE. However, as set out above in Annex 8 we have concluded that the TPE does exist and a significant proportion of every £1 reduction in OCPs' profits on NGCs is likely to be recouped through higher prices for other services. Therefore, it is a factor we need to consider in our analysis.

9.152 Depending on the exact amount of headroom that we allow OCPs, there could be a significant TPE. Given mobile OCPs' current retention on NGCs, the effect could be significant in the case of mobile OCPs. In the December 2010 Consultation we suggested it could be hundreds of millions of pounds.[157] We have not updated these figures (particularly as we do not know what level of headroom we would set). However the broad observation that there could be a significant TPE for mobile OCPs remains relevant.

9.153 Some stakeholders referred indirectly to our 2010 Consumer survey as evidence that consumers do not support a rebalancing of prices. The relevant responses were to a series of three questions (questions 39, 40 and 42) about consumers' preferences for

[155] See Annex 8 for further details. EE withdrew the NGCs bolt-on that it previously offered and O2 has never offered one. In November 2011 approximately [✂] of Vodafone's post-pay subscriber base purchased a bolt-on offering cheaper 080, 0845 and 0870 call prices. Vodafone response dated 11 November 2011 to information request dated 21 October 2011, question 9(iii).
[156] Section 3 (1) of the Act states that Ofcom's principal duty, in carrying out its functions should be "to further the interests of consumers in relevant markets, where appropriate by promoting competition".
[157] In particular see Figure A6.6 on page 331 of the December 2010 Consultation.

changes to the balance of retail prices.[158] We discuss in detail in Part C (Section 16, see paragraphs 16.125 to 16.131) flaws in the structure of question 39 relating to 080 prices and how respondents may have reacted to it.[159] In summary, because of these failings, we do not consider that responses to this 080 question provide a reliable guide to consumers' preferences about the structure of retail prices. We consider that questions 40 and 42 have similar shortcomings and therefore consider that there is a high risk that the responses to them are, likewise, not reliable.[160]

9.154 The existence of a TPE is not necessarily undesirable. Indeed since the current pattern of prices is likely to be inefficient (as explained in Part A, Annex 8), at least some rebalancing of prices is likely to be beneficial. However, it remains the case that we do not know what consumers' preferences for the balance of prices are. There is thus a significant risk of regulatory failure i.e. forcing the rebalancing of prices in a way that would not reflect consumer preferences.

9.155 Turning now to the effect on SPs, the scope for competition between SPs may be increased under a system of maximum prices (particularly given the level of granularity that we assume).[161] This is for a number of reasons. First, greater price awareness will help SPs compare the prices charged by different SPs. Second, SPs will be able to select a maximum retail price that suits their needs. This effectively allows the SP to select the retail price that it wishes (since most OCPs are likely to price at or close to the maximum), which will help address the vertical externality. Thus, the efficiency of the price points selected by SPs may increase under a system of maximum prices.

9.156 The caveat in relation to the effect on SPs relates to the range of price points that are available. As explained above, our assumption is that there would be a considerable amount of granularity on number ranges such as 09 and 118 and some granularity on number ranges such as 08. However SPs would still be dependent on the range of (maximum) price points selected by the regulator. Insofar as an SP wanted the retail price to be at a point that was not reflected in those maxima, it would be unlikely to achieve this.

9.157 Our overall position in relation to this criterion is as follows. In principle, regulation could also lead to an efficient pattern of prices that reflects consumers' preferences as to the balance of retail prices and takes into account the vertical and horizontal externalities. However, in practice, there is a significant risk that this is not achieved due to regulatory failure, for the reasons set out in more detail at paragraphs 9.176 to 9.181 below. Thus, the overall impact of the maximum prices option on efficient prices is uncertain.

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[158] Specifically, question 39 (focusing on 080 prices), question 40 (focusing on 0845/0870 prices) and question 42 (focusing on 08/09 prices).

[159] This was Q39 of the 2010 Consumer survey.

[160] Question 40 (on 0845/0870) was framed in the same way as question 39. Question 42 (about 08 and 09 calls) was worded slightly differently, asking respondents if they would prefer "to keep the costs for … 08 and 09 calls the same as they are now, or reduce the costs of these calls and increase the costs of national and local calls". We think, however, that respondents are likely to have approached it in a similar fashion to questions 39 and 40. First, it came immediately after those two questions. Second, like those questions it required respondents to keep several ideas in their heads at once in order to express a preference, and gave no guide as to the magnitude of the price reductions and increases for which a preference was sought.

[161] As set out above, Colt, ITSPA and Lexgreen Services all made observations to this effect in their responses to the December 2010 Consultation.

Service quality, variability and innovation

Stakeholder comments

9.158 TNUK considered that it would be practically impossible to implement maximum prices in a manner that did not have significant effects on the incentives for innovation and competition. It considered that maximum prices would in particular stifle innovation in the DQ market since DQ providers may find it difficult to price in a novel way. It argued that Ofcom should recognise the risk that a price cap would mean that future innovation would not happen and that current services could actually deteriorate. It considered that it would be impossible for Ofcom to set a maximum retail cap which took account of all future potential possibilities.[162]

9.159 BT agreed that SPs would not have incentives to innovate under a maximum prices model.[163] It noted that originators would continue to want to reduce their termination rates and if they were successful this could have an impact on revenue sharing arrangements with SPs, or even remove revenue sharing opportunities completely.

9.160 EE also noted that the risks of setting the retail price caps at the wrong level were even greater in relation to innovative services which may use NGN numbers that were at an early and constant stage of evolution. It noted it was imperative for these services that they were allowed to continue to develop and flourish free from the distorting forces of retail price regulation.[164]

9.161 [✂], however, noted that whilst it was likely that SPs and OCPs would seek to maximise their pricing by charging at the maximum band for each threshold, this in turn actually gave SPs a degree of certainty around their product offering and position in the market.

Ofcom response and updated position

9.162 We consider that by providing a greater degree of certainty to SPs over retail prices, and allowing them to advertise that to their customers, (which will in turn contribute to greater consumer awareness and thereby increase demand), the overall impact of the maximum prices option on service availability and innovation is likely to be positive. That consideration is based on the assumption that there would be a sufficient level of granularity within the regulated prices which would still enable a certain amount of competition between SPs on prices (in particular on the 09 and 118 ranges).

9.163 Nevertheless, we recognise the concerns raised by stakeholders that there is a risk that future innovation and new services would be negatively impacted, because of the limits on pricing. As discussed above in relation to the efficient prices criterion, the maximum price points that are available would be determined through regulation and may therefore not reflect the preferences of some SPs. We consider that this is particularly the case with the 118 range, where there is a risk that limits on the retail price points that are available may restrict any future innovative pricing techniques.

9.164 Finally, although the assumption that we are making for the purposes of our assessment is that termination rates would generally be close to current levels, we agree with BT that OCPs have an incentive to seek lower termination rates (just as

[162] TNUK, December 2010 Consultation response, p.28.
[163] BT, December 2010 Consultation response, p.29.
[164] EE, December 2010 Consultation response, p.57.

TCPs within a maximum prices system are generally likely to have an incentive to raise them). Provided competition at the hosting level is effective, changes in termination rates are likely to feed through to SPs, and thus affect service availability. We discuss the uncertainties created by the operation of the wholesale level under the regulatory burden criterion below.

Access to socially important services

Stakeholder comments

9.165 BT noted that the issues for low income households might not be addressed; if a higher set of mobile price maxima were introduced (relative to fixed prices) it would not accommodate low income consumers who relied solely on a mobile.

9.166 The CAB noted that the absence of regulation in this area was leading to the market not enabling access to socially important services, and the maximum price model would address this.[165]

Ofcom response and updated assessment

9.167 It is important to highlight that, as we discuss in more detail in relation to the unbundled tariff below, this criterion is only relevant for the 084 ranges (and primarily the 0845 range). We are unaware of any socially important services being provided on the other number ranges being considered in this section.

9.168 We note BT's comment about different price maxima for fixed and mobile calls. As explained above, we have not reached a view on whether we would set different price maxima for fixed and mobile calls. In any event, we consider that access to socially important services would be improved for two reasons.

9.169 First, in terms of our concern that the current system leads to consumers overestimating prices and being deterred from calling socially important services on non-geographic numbers, the maximum prices model we are considering would, in principle, address this concern. By addressing the issue of consumer awareness (through providing a clear pricing message for these calls), consumers would be less likely to overestimate the price and are thus less likely to be deterred from accessing these services on the 084 range.

9.170 Second, consumers may also be deterred from accessing socially important services by the actual level of call prices. As explained above, our assumption is that the headroom between the maximum prices and termination rates would generally be lower than the retail margin that OCPs enjoy at present. Lower actual call prices may also support access to socially important services. Indeed, given that these services are primarily present on the 0845 range (and to some extent the 0844/3 ranges), there would also be an option to set a lower maximum price for this range in order to further address this concern.

9.171 In terms of this assessment criterion, we consider the difference between the maximum prices and the unbundled tariff option is not material – both would address the concerns we have identified and provide benefits. However, given that, within this Section, this criterion is only relevant for the 084 ranges, we have placed less weight on this compared to other criteria.

[165] CAB, December 2010 Consultation response.

Regulatory burden

Stakeholder comments

9.172 EE considered that the maximum prices option carried risks of regulatory failure that were so high that such an approach was more likely to result in consumer and industry harm rather than benefit.[166] EE, Vodafone and Three all considered that it would be a highly interventionist approach that would put considerable regulatory burden on Ofcom and the industry.[167]

9.173 C&W also noted that this option would require Ofcom to not only determine the initial price points but also to constantly review their appropriateness in light of inflation and consumer complaints. It considered that such an approach would be labour intensive and highly intrusive form of intervention in the market.

9.174 A significant number of respondents raised concerns that the maximum prices option would not address the problems at the wholesale level and could potentially make them worse, thereby creating significant regulatory burden, costs and uncertainty for industry. BT, C&W and EE considered that the inevitable consequence of maximum prices was a series of disputes across the number ranges between both originating and terminating operators. UKCTA also agreed that this option would require ongoing regulatory intervention to resolve future disputes around the division of revenue.

Updated assessment and response

9.175 Three issues are relevant to the regulatory burden associated with introducing a system of maximum retail prices:

- first, the risk of regulatory failure;
- second, uncertainty about the operation of the wholesale level; and
- third, the costs for some OCPs of introducing a more granular set of retail prices for NGCs.

9.176 In terms of the first issue, we agree with stakeholders that the maximum prices option would create a significant risk of regulatory failure. The design of the option, as outlined at paragraph 9.118 would require Ofcom to:

- assess the appropriate amount of headroom between the termination rate and the maximum retail price;
- assess whether there should be different price maxima for fixed and mobile operators;
- determine the extent of granularity required and the basis on which a ladder of price points should be set.

9.177 Ofcom would have to consider these issues in relation to each number range and across a diversity of OCPs, TCPs and SPs, taking into account tariff rebalancing,

[166] EE, December 2010 Consultation response, p.56, paragraph 1.
[167] EE, as above. Three, December 2010 Consultation response, p.25, paragraph 78. Vodafone, December 2010 Consultation response, p. 49.

fixed and mobile costs, the multiplicity of services offered on the ranges, as well as the impacts on consumers. In addition to the regulatory burden of obtaining and analysing the data required to carry out these assessments, determinations of this nature and scope are likely to entail a considerable exercise of judgment, some of which will, inevitably, be finely balanced. This is a sizeable task that, by its nature, carries a significant risk that errors in assessment and/or judgment will be made. This, in turn, could lead to some maximum prices being set at the wrong level, resulting in adverse outcomes, such as inefficient prices and restrictions in innovation and service availability.

9.178 Furthermore, as highlighted by C&W, as well as setting the initial retail price points, Ofcom would need to regularly review them to ensure they remained appropriate. This increases the regulatory burden of the option and compounds the scope for error.

9.179 In terms of the second issue, there is also a significant concern about the failure of the maximum price model to address the issues we have identified at the wholesale level (see Annex 10). Our assessment of this option rests upon particular assumptions about the level of headroom between the maximum retail price and termination rate. However, in practice some OCPs might be able to secure significantly lower termination rates which could be disruptive for SPs and may affect service availability. Similarly, some TCPs may be able to secure higher termination rates which would reduce OCPs' headroom and would be likely to lead to rebalancing of retail prices (the tariff package effect). There is thus uncertainty about how this option would operate in practice.

9.180 The regulatory uncertainty created by this option would be considerable. Industry would need to engage in a substantial review of wholesale relationships, and as highlighted in the stakeholder comments, it is likely that substantial regulatory intervention would be needed if disputes arise at the wholesale level and are not resolved commercially. Indeed, in the industry working group discussions it was clear that the majority of the group felt that without some form of wholesale regulation the maximum prices option would be unworkable.[168]

9.181 We recognise that we have stated a preference for a 'maximum price' on the 080 and 116 ranges in Section 16 and that this will potentially carry many of the same risks. However, for those ranges we have set out an Impact Assessment Range for the origination charge reflecting the particular circumstances of our proposal for those ranges (following detailed analysis of the costs and SPs' preferences) and in addition, we have proposed ex ante intervention to address identified concerns. However, given that it is limited to a single maximum price (of zero) on two number ranges, such regulatory intervention is on a substantially reduced scale compared to applying a similar approach across the 0843, 0844, 0845, 0870, 0871, 0872, 0873, 09 and 118 number ranges.

9.182 Finally, in terms of the third issue of granularity, some OCPs currently only set a limited number of retail price points for NGCs (see above). They may thus need to support a larger number of retail price points if we were to adopt the maximum price proposal. Some OCPs would incur costs to update their network switches and/or billing systems to support a larger number of retail price points. Similar costs arise in

[168] See Annex 14 for a summary of the Commercial Working Group discussions of the maximum prices option. This was discussed at the meeting on the 28 July 2011, the notes of which are available here: http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-28072011

the case of the unbundled tariff. In the case of a system of maximum prices, these costs would be lower than the costs of supporting unbundled tariff structures, since the latter requires a strict 'pass-through' relationship between wholesale charges (i.e. service charges) and retail prices.

Conclusions on the maximum prices option

9.183 Overall, we consider that this option would offer an improvement on the status quo and has the potential to protect consumers from the harm we have identified, particularly in terms of price awareness, improving access to socially important services and, potentially, service availability, innovation and quality. We agree with many of the stakeholder comments (which are supported by evidence from the 2011 Experimental Research) that maximum prices, where the retail price is very close to the maximum price, would offer the greatest benefits to consumers in terms of price transparency. We consider that it would also offer the possibility of some increased competition between SPs because they would be free to select a number that corresponds to their preferred price point (assuming that there was a sufficient amount of granularity in the maximum prices that are available).

9.184 However, imposing maximum prices on these number ranges also comes with a number of significant drawbacks. It is a highly interventionist approach and (given our assumption that the headroom between the maximum price and the termination rate would be limited) the maximum prices set by the regulator could effectively become the actual prices offered by almost all OCPs. This creates a real and significant danger of regulatory failure. For example, the prices that we set may not reflect the preferences of consumers in the long term and may lack flexibility.

9.185 We also consider that the regulatory burden created by this option would be substantial, particularly because it would not address the issues at the wholesale level, and is likely to result in ongoing disputes and significant costs and uncertainty for stakeholders.

The unbundled tariff

9.186 We now move on to our assessment of the unbundled tariff as an option for protecting consumers against the harm we identified in Part A.

9.187 At a high level, what we call the 'unbundled tariff' involves restructuring charges to recognise explicitly that there are separate payments to be made to the OCP and the SP. The charges for the calls would therefore comprise two components:

- **the Access Charge ('AC')**: which would be charged to cover the cost and profit of the OCP; and

- **the Service Charge ('SC')**: which would be paid to TCPs and SPs to cover or contribute towards their costs.

9.188 In the December 2010 Consultation, the unbundled tariff was our preferred option. We considered it would increase consumer price awareness by ensuring consumers know how much they were paying, and to whom, it would reduce the scope for disputes between OCPs and SPs as to how to share retail charges, and it would potentially provide a framework within which competition could take place to the benefit of consumers.

9.189 A majority of stakeholders indicated supported for the unbundled tariff option over maximum prices in response to the December 2010 Consultation, although a number of concerns and objections were also raised. We present below our updated assessment of this option, taking into account stakeholder comments and the additional evidence gathering and analysis undertaken since the last consultation.

9.190 We have structured this sub-section by first setting out the assumptions we have used to assess this option at high level, before summarising our overall approach in the December 2010 Consultation. Finally, we present our updated assessment of the unbundled tariff option using our assessment criteria set out in Part A, whilst also responding to detailed stakeholder comments on this option.

Approach for the high level assessment of the unbundled tariff

9.191 For the purposes of the assessment below, we have adopted a simplified outline of the unbundled tariff option (i.e. the basic principle of splitting the charges as set out in paragraph 9.187 above). In Section 10 we consider in detail the possible design features of an unbundled tariff.

9.192 It is, however, necessary to make a number of assumptions about the design in order to present an appropriate assessment. The assumptions we have made are:

- that the AC will be a simple, single charge for a consumer's given telephone package but it will not be capped (below the level of current prices at least);
- that SCs will not vary by OCP and will have a set of maxima in order to differentiate between the number ranges. There will also be a limited number of price points from which SPs will choose an SC for their service;
- that the AC will be made transparent to the consumer by the OCP and that the SC will be published by the SP.

9.193 In addition, as set out in relation to maximum prices (see paragraph 9.119 above) we have assumed that the unbundled tariff will also have a positive impact on demand, since it tackles the underlying market failures that we have defined. However, the available evidence does not allow us to reach a view on whether the increase in demand with the maximum prices option is likely to be higher or lower compared to the unbundled tariff.[169]

Assessment in the December 2010 Consultation

9.194 In the December 2010 Consultation we evaluated the unbundled tariff against our assessment criteria and relative to the deregulated scenario. We have set out a summary of that assessment below.[170]

9.195 In terms of consumer price awareness we stated that the unbundled tariff would have a number of advantages over the deregulated scenario. The complexity of prices was likely to be significantly reduced. It would be easier for consumers to compare prices (the AC) between different OCPs. It would be easier for SPs to communicate the cost

[169] For the purposes of evaluating whether the costs of the unbundled approach are outweighed by the benefits, Annex 16 analyses the extent to which demand will need to increase in order to outweigh the costs. We refer to this analysis in our more detailed assessment of the costs and benefits of introducing the unbundled tariff in Section 13 below.
[170] See paragraphs A5.215 to A5.223, pages 318 to 321 of the December 2010 Consultation.

of calling their services (the SC). As a result of being better informed consumers were more likely to make decisions that were in their interests. However we did highlight uncertainty as to how consumers would react to a change of this type. We noted that we intended to carry out further research to test how consumers might respond to an unbundled price structure and how it would affect their behaviour.

9.196 In terms of the efficient prices, we considered that this would depend on the strength of competition between SPs and between OCPs under the unbundled remedy:

- in terms of the AC, the unbundled remedy would be likely to increase competitive pressures both at the point of subscription and at the point of call. Greater price transparency would also mean that the structure of OCPs' prices (i.e. the balance between NGC prices and the price of other services) is likely to move closer to consumers' underlying preferences. However we were cautious about the strength of the competitive pressures at the point of subscription for example because most callers believe that they do not make many NGCs;

- in terms of the SC, we noted that the extent of competition would depend on the nature of the service in question. Where multiple SPs supply comparable services then there may be some additional competitive pressure. However, we recognised that there was likely to be a significant share of NGCs for which callers had no effective choice and for such calls there was likely to be limited increases in competition; and

- we considered the unbundled tariff might alleviate the vertical externality since it provides the SP with more control over the retail call price. We noted maximum SCs would directly address the horizontal externality to some extent by helping protect the perception of different number ranges. Greater price transparency (as a result of the unbundled tariff) should also help mitigate this externality.

9.197 As explained above, we considered that the unbundled remedy would increase price awareness. This is likely to stimulate demand for NGCs, for example because consumers would be more confident and less likely to markedly overestimate prices. Overall we considered that this was therefore likely to promote service quality, variety and innovation. We considered that SPs would face stronger incentives to differentiate their services as they can set and communicate to consumers the prices of services of different quality, and OCPs would be free to set different ACs for different tariff packages. The unbundled tariff would allow OCPs to offer a variety of packages to cater for the variety in consumer preference.

9.198 We considered competitive pressures on the level of the AC might result in some reduction in retail prices, which would help address our concerns about access to socially important services. Moreover, we considered the unbundled tariff would make it clear to what extent the SP was responsible for the retail price, by making the SC element explicit. SPs providing socially important services might therefore be particularly sensitive to claims that they were profiting unduly from NGCs. We noted that the threat of adverse publicity might thus exert a further constraint on the level of SCs. However, ultimately whether socially important services would become more accessible to vulnerable citizens and consumers would be largely dependent on the decision of the SP as to the number range it used to provide its services.

9.199 Lastly we considered the regulatory burden. We considered that the key advantage of the unbundled option was that it would still allow SPs and OCPs considerable flexibility to select the level of AC and SC, taking into account the extent of competition and consumers' preferences. There are likely to be some implementation costs e.g. changes to billing systems. We recognised that the implementation costs estimates from the 2010 Implementation Costs study appear relatively high. However we considered that these are likely to be an overestimate. The extent of implementation costs could be minimised by limiting the requirements to present disaggregated information to consumers in their bills.

9.200 Overall the view on which we consulted was that the unbundled tariff seemed very likely to perform substantially better than both the deregulated scenario and the status quo. We noted that it was particularly attractive for the revenue sharing ranges, because it made it clear to the caller whom they were paying for what. In addition, we noted that it was sufficiently flexible to still allow for competition between OCPs and between SPs. We concluded that the magnitude of the benefits from this option would depend on the improvement in consumer price awareness and the resulting increase in the extent of competition. We considered that there would be scope to mitigate the costs of implementing the option.

9.201 We asked the following question:

Q6.4: Do you agree with our assessment of unbundled tariffs as a potential remedy for the market failures identified? Do you agree with our assessment of the pros and cons of this approach? What do you consider would be the impact of the introduction of unbundled tariffs in this market? Ideally include in your response reference to the analysis set out in Annex 5.

Updated analysis of the unbundled tariff option

9.202 Below we have evaluated the unbundled tariff option against our assessment criteria. First we set out stakeholder comments relevant to each of those criteria before setting out our response and updated analysis.

9.203 Note that, as above, and unlike the assessment in the December 2010 Consultation, our assessment of the unbundled tariff option in this consultation applies the assessment criteria against the status quo, rather than a deregulated scenario.

Consumer price awareness

Stakeholder comments

9.204 A number of stakeholders agreed that the unbundled tariff would increase consumer price awareness. For example, BT agreed that the unbundled tariff option would greatly increase consumer price transparency and was the most attractive option.[171] It noted that consumers would be able to make a more informed decision about the cost of a call, it would provide pricing consistency and would enable SPs to market their services more accurately. FCS agreed that the unbundled tariff could provide a long term solution to the market failures identified.[172] Vodafone noted that, to the extent there was a transparency problem to be tackled, the unbundled tariff directly addressed it.[173] It acknowledged that, conceptually, de-coupling access and service charges had the potential to enable transparency obligations to be exercised by

[171] BT, December 2010 Consultation response, pp. 3 and 8.
[172] FCS, December 2010 Consultation response, p.16.
[173] Vodafone, December 2010 Consultation response, pp.2 & 22.

those best placed to do so, i.e. the SP for the SC and the OCP for the AC.[174] In addition, TalkTalk noted that one advantage that it saw with the unbundled tariff structure was the possibility to simplify the advertising of the service charge on retail provider's websites and price lists.[175]

9.205 Other stakeholders also agreed, although they highlighted that the level of price transparency would depend on the implementation. C&W noted it was broadly supportive of the unbundled tariff proposals (predicated on certain design features, which are discussed in more detail in the next Section). It stated that the unbundled tariff represented a potentially effective consumer model which would resolve many of the market failings to a greater extent than maximum prices.[176] Three noted that, properly implemented, the unbundled tariff could have the potential to increase price transparency.[177] 4D Interactive supported the unbundled tariff approach but noted that its success would depend on the AC being transparent, it noted that if it was as opaque as mobile OCPs current NGC prices then the overall effectiveness of the proposal would be severely compromised. Antelope Consulting also noted that the distinction between ACs and SCs would not come easily to many people but it agreed that the approach would benefit consumers, although implementation would have to be handled carefully. PhonepayPlus ('PPP') agreed that unbundled tariffs would improve the current level of pricing transparency to consumers, although it noted that ACs would need to be consistent and OCP billing systems would need to have granularity to separate out ACs and SCs.

9.206 TNUK considered that unbundled charges would allow DQ providers to better advertise their prices as they will be able to advertise a single market-wide price. It noted that the approach would also make it clear to consumers which of the two parties (the DQ provider or the OCP) were responsible for high prices.[178]

9.207 However, a number of stakeholders raised significant concerns about whether the unbundled tariff would address the consumer price awareness problem.

9.208 Firstly, some stakeholders considered that it would not offer an improvement on the status quo. EE queried how the presentation of pricing information would be materially different from today, because the difference would only be in the presentation point, which would move from BT's retail charge to the SC.[179] ITSPA and Magrathea also considered that the pricing message for the unbundled tariff would be no more useful than today's. They noted that currently consumers at least knew what the price from a BT landline would be, which served as a useful benchmark. It noted that consumers already did not know what their provider's charged for NGCs so they would be unlikely to know what their AC was unless pricing for ACs was much simpler than current NGC pricing.[180] O2 considered that the amount of research a consumer would be required to do under an unbundled tariff would not be significantly reduced compared to currently.[181]

9.209 Secondly, a number of respondents suggested that it would increase complexity of prices, because there would be two elements of the call and rather than being told

[174] Vodafone, December 2010 Consultation response, pp.6 & 22.
[175] TalkTalk, December 2010 Consultation response, p.2 and 5.
[176] C&W, December 2010 Consultation response, p.15.
[177] Three, December 2010 Consultation response, p.21.
[178] TNUK, December 2010 Consultation response, p.18.
[179] EE, December 2010 Consultation response, p.51.
[180] ITSPA, December 2010 Consultation response, p.4. Magrathea, December 2010 Consultation response, p.6.
[181] O2, December 2010 Consultation response, p.31 paragraph 121.

the total price, consumers would have to remember their AC. A number of individual respondents, for example, were concerned that this model would actually increase confusion. The FSB, THA and ITV were concerned that the unbundled tariff would still give an impression of a lack of transparency and consumer confidence might not be increased.

9.210 [✂] and ITSPA noted that consumers would have to memorise a fixed and a mobile AC, which could lead to consumer confusion.[182] ITSPA argued that the unbundled tariff would double the work the consumer had to do to understand the price of an NGC: first they had to compare ACs then they had to understand the SCs. It considered it was unnecessarily complex.[183] O2 and Virgin Media similarly argued that there was a multiple-step research cost to the consumer under the unbundled approach, which would be complicated by the fact that the consumer would have multiple ACs and that these would vary by packages.[184] O2 argued that Ofcom had been too quick to assume the success of the shortcode pricing model could be replicated in the NGCs market without any attempt to understand the differences between the two (e.g. the greater number of ranges, price points and diverse service types). It considered that what might be transparent in one market should not be assumed to deliver pricing transparency in others. Virgin Media considered that the unbundled tariff would not only require consumers to think differently about the way in which charging for NGCs functioned but actually establishing the price of an NGC would be more complex and onerous than the equivalent activities that a subscriber would need to undertake under the current arrangements.[185] TalkTalk noted that consumers would face a steep learning curve to reach a position where they would understand and be comfortable with the new unbundled charging methodology. [186]

9.211 [✂] considered that the unbundled tariff would result in even more information being presented to consumers and that any changes should result in a simplification, not an increase, in the amount of information to be processed by users before they made an NGC.

9.212 The CMA considered that the unbundled tariff would be of little benefit in an environment where telephony was generally not sold and billed by the minute but as a package, often including elements that are not even phone related such as TV and broadband. It therefore suspected that the proposals would have little long-term impact on the consumer perspective and it might even add further confusion.[187] The CMA also noted that it was far from clear that callers would become aware of the actual level of their AC without action by Ofcom.

9.213 Lexgreen Services considered that the unbundled tariff would cause confusion in the same way as some of the ‘hidden’ charges levied by budget airlines (e.g. payment card charges). It considered that consumers would just want to know the price of the call, without having to look up the AC, in particular because they would probably need to make the call regardless of the price.[188]

9.214 O2 also questioned whether this solution would incentivise SPs to improve their role in delivering pricing information to consumers. It highlighted current examples where

[182] [✂], ITSPA, December 2010 Consultation response, p.6.
[183] ITSPA, December 2010 Consultation response, p.8.
[184] O2, December 2010 Consultation response, p.31 paragraph 121.
[185] Virgin Media, December 2010 Consultation response, p.20.
[186] TalkTalk , December 2010 Consultation response, p.2 and 5.
[187] The CMA, December 2010 Consultation response, p.4.
[188] Lexgreen Services, December 2010 Consultation response, Q6.4

SPs offered no pricing information at all.[189] ITSPA argued that it would not allow SPs to more easily communicate the cost of calling their services because they could only communicate the SC, not the entire cost. Furthermore, O2 questioned whether consumers would in fact always be informed about the SC, given that Ofcom had not proposed regulation of the 0845 number range, and that regulation of the 0844/3 range as proposed would likely result in migration to the 0845 range.[190]

9.215 Thirdly, respondents questioned whether it was necessary, or desirable for consumers to be made aware of the different elements of a NGC. Colt considered it was unreasonable to expect consumers to grasp the intricacies of the different players involved in the value chain and that it was likely to cause confusion and uncertainty as consumers could be put off by the 'access charge' message. [191]

9.216 [✂] and ITSPA considered that consumers did not care about the different between OCPs and TCPs / SPs etc, they just wanted to make a phone call and know how much it would cost them.[192] They questioned whether the unbundled tariff would be widely understood by consumers and were concerned that the consumer confusion it could cause would further compound the harm caused to the NGCS industry as a whole. They argued that consumers just wanted to 'make a phone call' and would not want the complexity of having to add their AC (which they would probably have to look up) to their SC before making a decision about whether to call.[193] Lexgreen Services agreed that educating consumers about the chain of costs was neither necessary nor desirable – the customer did not care, they were only concerned with what they would pay and wanted to know the price simply and quickly.[194] THA was also concerned that the unbundled tariff call costs into two charges oversimplified the number of parties involved in connecting a call, all of whom must receive some revenue from the call. If a helpline had to advertise a phone number as costing '4p/minute plus your operator's Access Charge', callers might think that the helpline was receiving all of that 4p, when in fact some of it would be going to other parties.[195]

9.217 Fourthly, some stakeholders challenged whether consumers would actually remember or learn their AC, given that Ofcom's evidence showed that NGCs were not as important to consumers compared to calls they made more frequently. O2 noted that there was no evidence that customers would respond to or even care about the costs of NGCs at the point of subscription – rather Ofcom's own research suggested the contrary.[196] Sky also noted that Ofcom's research highlighted that consumers paid little attention to the price of NGCs when considering which provider to sign up with, what calls to make or what services to access. [197] Virgin Media questioned how many subscribers would actually undertake action to look up call costs, in particular their AC, given the general lack of interest in individual call costs and the relative infrequency with which consumers actually seek to investigate individual call charges. Indeed, it suggested that the unbundled tariff would actually lead to an even lower propensity for callers to seek to confirm individual call prices.[198]

[189] O2, December 2010 Consultation response, p.17, paragraph 63.
[190] O2, December 2010 Consultation response, p.31.
[191] Colt, December 2010 Consultation response, p.4.
[192] [✂], ITSPA, December 2010 Consultation response, p.6.
[193] [✂]
[194] Lexgreen Services, December 2010 Consultation response, Q6.4.
[195] THA, December 2010 Consultation response, Q6.8.
[196] O2, December 2010 Consultation response, p.30 paragraph 118.
[197] Sky, December 2010 Consultation response, p.7.
[198] Virgin Media, December 2010 Consultation response, p.20.

9.218 Fifthly, a number of stakeholders questioned whether there was sufficient evidence that the unbundled tariff would be understood by consumers. EE considered that the unbundled approach had the highest prospect of delivering some benefits, however, it considered there was a lack of evidence that it would deliver material benefits to consumers as it had not yet been established that the separation of the AC and the SC was something that consumers wanted or needed and whether it would improve consumer price awareness. UKCTA also noted there was an apparent lack of evidence that the unbundled approach would provide a material benefit to consumers. Given the lack of evidence that consumers would react positively to the idea of an access charge and service charge when dialling a non-geographic number (and indeed the evidence from the 2009 Consumer survey some 82% of respondents have never looked up pricing information to determine the cost of any call), it considered it was not clear that the separation of charges was something consumers wanted, needed or indeed particularly care about.[199]

9.219 Verizon noted with concern that Ofcom had not yet tested its provisional thinking on consumers, in particular the idea of separating out the AC and SC. It considered it imperative that an assessment of consumer reactions was carried out.[200] The CFC was similarly not convinced there was sufficient evidence that consumers would find an unbundled structure simpler, more transparent or easier to understand. It supported the need for further research.

9.220 O2 provided its own survey research which it considered demonstrated that consumers would not understand the unbundled tariff. Only 14% of respondents to its survey said they would prefer the unbundled approach. O2's view was that this approach was too complex as it depended on the customer's ability to remember the AC for different platforms, which in its view, replicated Ofcom's concern about price transparency and the difficulty customers have when trying to recall and compare charges from each of their providers.[201]

9.221 Finally, O2 and EE questioned whether the unbundled tariff would address the risk of bill shock. EE in particular questioned whether the unbundled tariff would address the area of consumer harm around the onward call connect element of DQ charges (which it noted had the highest level of complaints).[202] O2 was unconvinced that the unbundled tariff would help customers manage bill shock in circumstances where there was no indication about how long or short a call might be. It believed that extended holding times were a significant ground of complaint for 08 numbers and it was therefore surprised that Ofcom had not considered the impact of the unbundled tariff on this source of bill shock.[203]

Response and updated assessment

9.222 For the purpose of assessing the unbundled tariff proposal under the consumer price awareness criterion and responding to stakeholders' comments, we have grouped our analysis under the following headings:

- Unbundled tariffs are more complex than the status quo;

[199] UKCTA, December 2010 Consultation response, p.5.
[200] Verizon, December 2010 Consultation response, paragraphs 24-25.
[201] O2, December 2010 Consultation response, p.14, paragraph 53.
[202] EE, December 2010 Consultation response, p.73.
[203] Ibid, paragraph 115.

- Consumers will not understand the structure (for example, because they will be unable to remember ACs) and there is no evidence of the benefits to consumers; and

- it will not improve awareness because consumers are not interested in NGCs.

Unbundled tariffs are more complex than the status quo

9.223 We reject the argument that the unbundled tariff offers no improvement on the status quo, or will offer the same pricing message with the point of reference just moving from BT to the SC. These arguments misrepresent how the unbundled tariff will operate in practice. Currently, the SP's pricing message only specifies the price for calls from a BT landline and offers no or limited information as to the extent to which the price from other providers may vary.[204] Even the BT price that is quoted may omit the call set up charge and therefore may not provide full price transparency for BT customers.[205] Hence, the SP's current pricing message provides only limited information to most consumers.[206] Under the unbundled tariff approach, SPs will tell callers the amount of the SC (including whether is a per minute or per call charge, or any other variations in charging structures), and this will apply regardless of the OCP originating the call. Therefore the SC will be relevant information for <u>all</u> callers, not just BT customers.

9.224 Currently, in the absence of a relevant SP pricing message, a caller who wants to find out the price of a call has to look up the price, either on their OCPs website or by calling their OCP. As set out in Annex 8, although some CPs have made efforts to try and simplify the pricing information they provide consumers, OCP price lists can be very long and complicated. For example, they may require the caller to find a code then look up that code in an alternative document, and prices can vary down to even the fifth or sixth digit of the number being called. The unbundled tariff would mean the OCP would advertise the AC associated with each of its call packages and that AC would be one single number rather than hundreds of different prices (as it is currently in many cases).[207] Moreover, as well as being simpler for the OCP to communicate to its consumers, if the AC is a single number applying to all NGCs then it should be easier for consumers to remember.

9.225 In terms of the SP, the SC will be charged to all their customers, regardless of which OCP they are calling from. SPs would be able to state their SC in their advertising and publications with certainty, rather than stating a BT price that would not apply to the majority of their customers. As explained below, we are not suggesting that consumers would routinely make a special effort to seek out the SC associated with the number they are calling. Rather, the unbundled remedy allows that SC to be provided by the SP alongside their non-geographic number. The 2011 Consumer survey found that 65% of callers obtained the telephone number for the last company or public organisation they called from at least one of the following sources: the

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[204] The message may indicate that the price charged by other CPs will be different and the price if calling from a mobile may be considerably higher.

[205] Moreover, insofar as an SP simply quotes the price of calls for BT customers from the Numbering Plan, this price may not include the call set-up charge. As of February 2012, this charge was 13.1ppc (incl VAT) for most BT residential consumers.
http://www.productsandservices.bt.com/consumer/assets/downloads/BT_PhoneTariff_SpecialNos.pdf

[206] In 2010, BT accounted for 36.5% of overall fixed call volumes. Communications Market Report 2011, Figure 5.1 on page 245.

[207] For example, Virgin's price list for NGCs is a 59 page document with several hundred different price points for NGCs:
http://shop.virginmedia.com/content/dam/allyours/pdf/010911_Non%20geo_V1.pdf

internet; a letter, bill or leaflet from the company being called; a written advert; or an advert on the TV or radio.[208] Each of these sources is likely to allow the SP to indicate alongside its number what the SC is for that number.

Consumer understanding of the structure

9.226 The unbundled tariff is a new approach, and, relative to maximum prices, is a more complicated pricing message. We therefore understand the concerns about whether consumers will be able to understand this pricing model. As highlighted earlier in this Section, last year we carried out behavioural economic experiments ('the 2011 Experimental Research') in order to understand what the relative merits of the unbundled approach might be compared to the status quo and the maximum prices model. That research found that providing accurate information at the point of call significantly improved decision making,[209] and, crucially, that price information does not need to be complete (i.e. the total charge) in order for it to be useful.

9.227 In terms of the unbundled model, the research did find that it made call decisions a little more complex.[210] This is to be expected given that it involves two call prices rather than one and so requires the caller to add two price elements. However, in terms of call decisions, where subjects were provided with the SC at the point of call the unbundled model performed better than the status quo.[211] Where subjects were not provided with the SC at the point of call, the unbundled model performed the same as the status quo.[212]

9.228 As outlined above, one of the key advantages of the unbundled tariff is that it enables SPs to clearly communicate their element of the price (i.e. the SC). Since most consumers are likely to obtain non-geographic numbers from sources that allow the SC to be presented alongside the number being dialled, we expect most consumers to be aware of the SC at the point of call. [213] Thus, we believe that the unbundled tariff proposal will materially improve price awareness and (as supported by the 2011 Experimental Research) allow consumers to make better NGC decisions.

9.229 We note that O2 has questioned whether SPs will in fact be incentivised to advertise their SCs given that in the December 2010 Consultation we did not suggest that any pricing obligations would apply across all number ranges for which we had proposed an unbundled tariff. As set out in more detail in Section 12, we are proposing to require SPs on all unbundled number ranges to state the SC for their non-geographic number in their advertising and promotional material.

9.230 In terms of consumers' ability to memorise the AC, the 2011 Experimental Research found that there was no statistically significant difference between the scenarios where participants were provided with the AC before every call and where they were

[208] 2011 Consumer survey, question GL14: "Thinking about the last time you made a call to a company, shop or public organisation which of the following did you use to get the telephone number?"
[209] 2011 Experimental Research, page vii, point 1.
[210] 2011 Experimental Research, page vii, point 3.
[211] 2011 Experimental Research, page vii, point 1 and Table 2. In particular subjects made significantly better call decisions under treatments 4 and 5 (the unbundled tariff with the SC provided at the point of call) than under treatment 1 (the status quo).
[212] 2011 Experimental Research, page vii, point 1 and Table 2. In particular subjects performed similarly in terms of call decisions under treatment 6 (the unbundled tariff with the SC not provided at the point of call) than under treatment 1 (the status quo).
[213] The 2011 Consumer survey indicates that 65% of consumers are likely to have the number in front of them when they make the call.

just told it at the point of subscription. This suggested that they were able to memorise the AC in the experiment.[214] But this particular feature of the experiment may have limited read across to the real world.[215]

9.231 Consumers' actual ability to memorise the AC will depend very much on how clearly it is communicated and the simplicity of that message, particularly when it is combined with the other information they are provided with at the point of signing up to a new telecoms package. We propose to make the AC as simple as possible in order to make it easier for consumers to absorb, and compare this information, as we set out in more detail in the next Section. As noted in the December 2010 Consultation, even at present, most callers seem to be able to form a view about the relative price of fixed and mobile calls (although this does not mean that they can accurately recall charges).[216]

9.232 That said, we recognise that consumers call non-geographic numbers fairly infrequently. For example, in 2009 calls to the 084, 087, 09 and 118 number ranges accounted for around 12% of voice call minutes and around 2% of mobile voice call minutes.[217] Similarly Table 9.1 below shows most consumers believe they call these numbers infrequently.

Table 9.1: How often respondents estimate they call particular number ranges from their landline and mobile phone

	Regularly (every week)		Sometimes (every month)		Rarely (less than once a month)		Never	
	Fixed	Mobile	Fixed	Mobile	Fixed	Mobile	Fixed	Mobile
0844/0871	3%	1%	14%	4%	38%	12%	45%	83%
0845/0870	6%	2%	22%	6%	39%	14%	33%	78%
09	n/a	n/a	4%	1%	16%	6%	80%	92%

Source: 2010 Consumer survey, questions 21 and 25

9.233 We thus accept that consumers may not always be able to exactly recall their AC. However, we think it is plausible that many consumers will recall its broad magnitude. Moreover, as explained above, it will be easier for OCPs to communicate the AC to their customers than the current plethora of retail price points. We thus consider that the unbundled remedy will improve price awareness relative to the status quo.

9.234 We turn now to O2's survey evidence.

[214] 2011 Experimental Research, page vii, point 3.
[215] In particular, in the experiment different tariff packages had only two features: the monthly cost and the AC (to illustrate, see page 42 of the 2011 Experimental Research). Moreover immediately after selecting a tariff package, subjects then made a series of call decisions which relied on them remembering the AC.
[216] December 2010 Consultation, paragraphs A5.41-A5.42. In particular, 78% of respondents to the 2010 Consumer research thought that mobile 080 calls were more expensive than fixed 080 calls. For other 08 calls, the figure was 77%. 2010 Consumer research, question 33 and 34.
[217] There was 16,444m minutes of fixed calls to these number ranges and 2,676m minutes of mobile calls to these number ranges. In 2009, total fixed voice minutes was approximately 133bn and mobile voice minutes was 118bn. NGC volumes taken from 2010 Flow of Funds study and total voice minutes taken from the 2010 Ofcom Communications Market Report.

- The O2 Survey described two options. First, "a price cap that applies to all mobile providers for each number type … (i.e. all calls to 0871 numbers cost 25p per minute – regardless of your mobile network)". Second, "the cost of the call split out to show the network access charge (how much your network provider is charging you) and the call cost (what the call recipient is charging you) … (i.e. calls to 090 numbers cost £1.50 per minute plus an access charge made by your network provider)."

- O2 asked "which of these options is your preference?" There was a clear preference for a "Price cap to numbers which stays the same across networks" with 65% of respondents favouring this option. As highlighted by O2, only 14% of respondents preferred "Splitting out network charge and recipient charge for calls".[218] Note that this statistic relates to a comparison between the unbundled tariff and the maximum prices option.

- When asked "how does this new suggested [unbundled] approach compare to the current situation?", 47% considered that it was better than the status quo.[219] Most of the other respondents considered that there would be no improvement – see Table 9.2 below.

Table 9.2: Comparison between the unbundled tariff and status quo (O2 survey)

Response	
Much better than at the moment	16%
A bit better than at the moment	31%
No better than at the moment	41%
A bit worse than at the moment	6%
Much worse than at the moment	6%

9.235 We have treated the responses to these questions in the O2 Survey with caution. The different advantages and disadvantages of the unbundled tariff and maximum prices were not unpacked for respondents. As a result, respondents are unlikely to have made an informed judgement about the implications of the different options. Indeed since the maximum prices option is likely to be easier for consumers to understand, this is likely to have contributed to consumers' preference for this approach. This is not to say that respondents did not understand the unbundled option – O2 asked whether the unbundled option was clear from the description and 72% of respondents said either "very clear" or "quite clear". However, respondents found the description of the maximum prices option clearer.[220] As discussed above in relation to the maximum prices approach, we recognise that maximum prices do offer

[218] 17% of respondents stated "Don't care what happens" and 5% opted for "Staying as it is". O2 survey, question 17.
[219] O2 Survey, Question 18.
[220] 93% of respondents said the description of the maximum prices option was either "very clear" or "quite clear". The proportion of "very clear" responses was also higher than for the unbundled option. O2 survey, question 17.

a simpler pricing message than the unbundled tariff and therefore it is understandable that consumers would tend to say that they prefer this option, particularly when maximum prices reflect the actual prices that are being charged. However, our preference for the unbundled option is based on its superior performance on the other relevant criteria, as discussed further below.

9.236 Some stakeholders also questioned whether it was necessary or desirable to educate consumers about the different parties involved in a NGC. This is not the primary aim of the unbundled tariff and we would agree that, given the complexity of the non-geographic value chain, consumers may have limited interest in this. The key advantage in splitting out the call charges is, the benefits of allowing each side of the chain to compete on the element of charges which they are responsible for and allowing prices to be communicated in a clearer fashion than at present. We recognise that the unbundled tariff is a more complex price structure than prices for other call types (e.g. calls to geographic and mobile numbers). However, that complexity reflects how these calls operate. Furthermore, we consider there are benefits in making clear to consumers who is responsible for the different elements of the call. We discuss in Annex 8 that there is evidence of confusion currently about who is responsible for call charges, which can mean that the SP receives complaints about call costs that the OCP is in fact responsible for, and vice versa. The unbundled tariff would reduce that potential for confusion.

9.237 Not all of the SC will go directly to the SP in the form of revenue. Rather some of it is likely to be retained by the TCP to reflect the costs of termination and some may be retained by the TCP to cover the costs of hosting the SP's service. For example, for a 084 call, if the SC was 1ppm, that revenue is likely to be retained by the TCP rather than paid directly to the SP. Nonetheless, in that scenario, the SC selected by the SP is likely to reflect the fact that its costs of providing the 084 service will be offset by the 1ppm SC retained by the TCP for each call.

9.238 We accept that there may be some asymmetry with the treatment of other calls since callers are typically unaware of termination rates. For example, where calls to a non-geographic number range are required to be priced identically to a geographic call (as is currently the case for 03), callers are not given an indication that a small amount is being passed to the TCP to reflect the costs of termination. However the amounts in question are likely to be small. For example, 03 termination rates (which are cost based) are less than 1ppm.[221] Therefore we disagree that the SC presents a materially misleading message about the contribution being made to the SP's overall costs of operating a non-geographic number.

9.239 EE and O2 questioned whether the unbundled tariff would in fact address bill shock, citing onward call connect charges for DQ services and extended holding times as examples where this occurs. While bill shock does occur, as explained in Section 4 (and in more detail in Annex 8), the emphasis of our concerns is that consumers tend to overestimate NGC prices (rather than underestimating them). In Annex 8 we accept that call duration (e.g. call waiting times) may contribute to bill shock.

[221] For example, the termination rate BT charges for 03 calls varies by time of day and depends on the point at which the OCP hands the call over to BT (the TCP). For single tandem calls the termination rate is 0.56ppm (day), 0.28ppm (evening) and 0.2ppm (weekend) - see 03 Dispute Determination, Annex 2.

However more and clearer information about the price of a call may reduce the likelihood that consumers suffer from bill shock.[222]

9.240 In particular, we consider that by presenting the SC element directly to the consumer, and providing a more memorable AC, consumers will be more informed about how much a call is likely to cost them before they make that call. The consumer will then be in a better position to decide whether to stay on a call if it is taking a long time.

9.241 As regards bill shock for the onward call connect charges for DQ services, there is a specific regulatory measure in place already to address this – these charges are subject to their own pricing requirements under the PPP Code of Practice, in particular providers are required to advise the caller of the costs before they onward connect the call.[223]

Consumers not interested in NGCs

9.242 We disagree that current evidence of lack of consumer interest in NGC pricing is a valid reason why the unbundled tariff will not improve price awareness, and in particular, that consumers will not pay attention to the AC element of their call package. As explained above, we accept that consumers may not always be able to exactly recall their AC. However, we think it is plausible that many consumers will recall its broad magnitude. As we discuss in more detail in the following section, the AC will be a single price point per customer's package and therefore is much more likely to be remembered than the multitude of price points for NGCs that consumers are currently faced with.

9.243 We accept that evidence from our 2009 Consumer survey shows that consumers do not look up price information from NGCs.[224] Table 9.3 below shows the top five reasons for never looking up call costs, taken from the 2009 Consumer survey.[225] Note that these survey questions asked about all call types, not just NGCs.

[222] We recognised the importance of clear and transparency information on tariffs as part of our recent review of unexpectedly high bills (http://stakeholders.ofcom.org.uk/consultations/unexpectedly-high-bills/statement/). In this review we found that unexpectedly high bills were most commonly caused by downloading data whilst roaming but there was also some evidence of harm as a result of using voice services in the UK as a result of calling numbers outside of their calling allowance. We intend to push for more opt-in measures such as tariffs that enable consumers to set their own financial caps/and or receive alerts in order to address some of the concerns about unexpectedly high bills.
[223] The PPP Directory enquiry service provider guidance note states at paragraph 2.3 that "prior to further connection being made by the provider, the consumer should be clearly informed of the cost, and have the opportunity to opt out of the connection".
[224] 82% of respondents to the 2009 Consumer survey stated that they had never looked up pricing information to determine the cost of a call. 2009 Consumer survey, question 33.
[225] 2009 Consumer survey, question 37.

Table 9.3: Top five reasons for never looking up call costs

Reason	
"I feel well enough informed about call costs"	23%
"I don't make very many calls"	21%
"I generally make calls within my package …"	15%
"The effort to find the information is just not worth it"	15%
"I do not know where to find the information"	14%

Base: All respondents that have never looked up pricing information to determine the cost of a call

9.244 While there are a number of reasons why consumers do not look up call costs, a contributing factor does seem to be the currently complexity in prices. Currently the information can be so difficult to find, it is not worth the time expended trying to find it, particularly given the low value of some transactions (e.g. 08 calls in particular). If that information were simplified to a single price, it would be much easier for consumers to obtain it and compare between different OCPs. This is also consistent with the evidence from the 2011 Consumer survey of the mixed success of those consumers that did look up price information.[226] In addition, there is some evidence that at least some consumers would value this information if it were available. Evidence from the 2010 Consumer survey suggests around a quarter of respondents (26% for fixed callers, 24% for mobile) who have switched or considered switching in the past 12 months would have liked to have received information about 08/09 calls but did not.[227]

9.245 Furthermore, the AC (as discussed in the following section) will apply across all the NGC ranges considered in this Section. The unbundled tariff would therefore apply to 63% of NGC minutes.[228] This equates to approximately 13% of fixed voice call minutes and 2% of mobile voice call minutes.[229] The consistency of the pricing message across the different call types would reinforce consumer understanding of the structure.

[226] Of those consumers that had looked up pricing information, 24% said they always found the price information they were looking for and 61% said they sometimes did so. Of those consumers that had looked up price information, 44% said it was easy to find what they were looking for, 32% said it was neither easy nor difficult and 24% said it was difficult. 2011 Consumer survey, questions GL10 and GL13

[227] 2010 Consumer survey Q14/19: *"Would you have liked to have received information about 08/09 calls?"* [Base: all respondents who use a landline/mobile and have switched or considered switching in the past 12 months and didn't receive information about 08xx/09xx numbers].

[228] Calculation assumes that 0845 and 0870 calls will be subject to the unbundled remedy. Using data from the 2010 Flow of Funds study, in 2009 there were 30,791m minutes of NGCs. 19,320m of these minutes were to 084, 087, 09 and 118 numbers.

[229] Calculation assumes that 0845 and 0870 calls will be subject to the unbundled remedy. Using data from the 2010 Flow of Funds study, in 2009 there were 16,644m minutes of fixed calls to 084, 087, 09 and 118 numbers and 2,676m minutes of mobile calls. Overall according to the 2010 Ofcom Communications Market Report, there was 133bn minutes of fixed voice calls and 118bn minutes of mobile voice calls in 2009..

Conclusions on consumer price awareness

9.246 We recognise that the unbundled tariff is inherently more complex than the maximum prices model in terms of the message it conveys to consumers. In addition, because this is not a pricing structure which has been widely used before, there is an element of uncertainty about how consumers will react, although the 2011 Experimental Research does give some positive indications.

9.247 The key benefits of the approach relative to the status quo are that it enables SPs to present a clear message about their SC for the call and by having a single, simple AC for all NGCs (being considered in this section) consumers will more easily be able to learn this cost and compare it across OCPs.

9.248 We discuss options for making the AC more transparent in the following section, including more interventionist options such as linking it to the price of geographic calls. Publicising the unbundled tariff and trying to develop consumer understanding will also form part of our communications campaign (discussed in Section 13) and we would expect that campaign to help reinforce consumers' understanding.

9.249 Therefore, we consider that the unbundled tariff will offer significant benefits in terms of consumer price awareness. Whilst we acknowledge that these benefits may not be as great as under the maximum prices option, we consider that the other benefits provided by the unbundled tariff (discussed in the next sub-section) are greater than those for maximum prices.

Efficient prices

9.250 Stakeholder comments under this criterion can be grouped into concerns about the two elements of the call price, in particular:

- competition on the AC (and the impact on the overall level of prices); and
- competition on the SC.

Stakeholder comments

Competition on the AC

9.251 Some stakeholders agreed that the unbundled tariff could encourage competition between OCPs. For example Three considered that the unbundled tariff could put pressure on OCPs to compete more aggressively.[230] TNUK –considered that because the access charge would be non-discriminatory, it would prevent mobile OCPs and other networks from imposing the highest access prices on services where the demand was particularly inelastic.[231] However, there was also concern about whether competition would actually materialise.

9.252 Lexgreen Services considered that competition amongst OCPs on NGCs was non-existent and therefore there was no reason to suspect that this would change and competition would suddenly materialise. It considered it was plainly obvious that unregulated tariffs in an uncompetitive market had no value whatsoever and would make matters worse than today. [232] FCS was similarly concerned that a competitive

[230] Three, December 2010 Consultation response, p.21.
[231] TNUK, December 2010 Consultation response, p.18.
[232] Lexgreen Services, December 2010 Consultation response, Q6.4.

environment would not exist between OCPs when setting ACs and there was a risk that this would derail the entire approach. It considered that mobile OCPs would set high ACs at the outset to maintain their revenues and margins.

9.253 Several stakeholders echoed this concern that the prices of NGCs would not actually fall under the unbundled approach, particularly if the AC was not capped and just left to competition (247 Communications, ITSPA, TalkTalk, O2, the CAB, and Virgin Media). Stakeholders pointed to the evidence that consumers did not consider the cost of NGCs at the point of subscription nor when choosing a provider, so questioned whether competitive pressure on the AC would actually exist. ITSPA considered that Ofcom had no conclusive evidence that competition would constrain the AC between OCPs. It therefore did not consider that overall prices would fall under the unbundled tariff model because there was insufficient competition between OCPs and SPs and for the same reason it considered that demand for services would not be stimulated.[233] TalkTalk suggested that if call prices remained the same or increased as a result of the new regime, it would be deemed a regulatory failure by Ofcom and industry. Its main concern was around the likely behaviour of mobile operators and whether they would feel the need to keep their access charge at a reasonable level compared to fixed operators.[234]

9.254 C&W noted that there was a fundamental assumption with the unbundled approach that consumers would take notice of the level of the AC and thereby stimulate competition. It noted there was a risk that if competition failed to control the level of the AC, the result would be a situation where the AC would become as ephemeral as today's 'network extras' message. It noted this would particularly be the case where a caller makes a low volume of NGCs, hence the level of the AC would not be a key factor when choosing their retail package.[235]

9.255 [✂] noted that increasing flexibility to encourage competition (e.g. through allowing ACs to be included in bundles) proportionally increased the risk of consumer confusion and harm. It also noted that without any caps on the AC there would be a situation where the current (arguably) excessive charges were maintained. It considered that separate markets for origination and termination would invariably lead to the margins for both being squeezed, which in turn was likely to lead to price inflation. It considered that the introduction of 'standard operator charges' would replicate the issues around the higher charges levied by mobile operators for NGCs, which it considered to be the most significant contributor to the consumer harm Ofcom had identified.[236]

9.256 The CAB noted that consumers already had to take multiple pieces of often complex information into account when selecting their OCP, and many other factors would be more important to them (e.g. overall cost, network availability, bundled minutes etc). It was therefore concerned that information about ACs would be ignored by consumers or relegated to the small print of any information provided by OCPs.[237]

9.257 The CAB noted that consumers were unlikely to be able to predict their need to make calls to these numbers (which were usually contingent on some other event, e.g. if a bank failed to make an expected payment) and therefore they could not be expected to make decisions based on their perceived likelihood of having to call them. It noted

[233] ITSPA, December 2010 Consultation response, p.8.
[234] TalkTalk, December 2010 Consultation response, p.6.
[235] C&W, December 2010 Consultation response, p.17.
[236] [✂]
[237] CAB, December 2010 Consultation response, p.10.

that an analogy could be drawn to consumers' perceptions about their likelihood of entering into an unarranged overdraft.[238]

9.258 THA believed that opening up the number ranges to more competition would add to consumers' confusion. It also considered that relying on competition and market forces to ensure low prices assumed that consumers were all price-conscious, committed and able to shop around for the best deals. It highlighted that many people, for various reasons, for example language barriers, learning difficulties or because they are in rented accommodation, might have difficulty in shopping around for a different provider.[239] THA considered that by unbundling the 084, 087 and 09 ranges without imposing caps on the total cost of calls, the distinction between the ranges could be lost altogether, leaving consumers even more confused about call costs.[240]

9.259 Virgin Media was concerned that, in the form proposed, the unbundled remedy imposed too many restrictions on OCPs in particular and would stifle innovation, and ultimately competition, at the retail level. For example, it considered that the limitation on being able only to apply a pence per minute Access Charge to NGCs as opposed to/in addition to a pence per call or call set up fee would significantly constrain OCPs' flexibility. Moreover, it argued that the imposition of a common AC for NGCS that prevented differentiation at least by number range type, would be equally constraining. It said this would very likely lead to a dilution of package offerings in the market and could exacerbate any tariff package effect.[241]

9.260 Lexgreen Services considered that the argument that the unbundled tariff would send efficient price signals to callers about the underlying cost of providing a call was plainly nonsense, because the charges that OCPs made today had no relation whatsoever to the underlying cost. It also considered that because there was no evidence that the overall price of non-geographic numbers would fall with unbundled tariffs, they would also do little or nothing to stimulate demand for NGCS.

9.261 [✂] and the FCS indicated concern that if the NTS Call Origination Condition was removed from BT, price inflation was likely, and BT's "dominance" in the market was likely to increase.[242] The FCS also noted that if regulations on BT were removed, it would erode the known benchmark for these calls and open the door for other providers to raise their ACs to the maximum they could get away with.[243]

9.262 O2 also argued that at the point of call, the AC would always put mobile CPs at a competitive disadvantage to fixed platforms, in terms of price, given that the costs of originating and retailing calls on a mobile network are higher than those from a fixed phone. It considered that this challenged Ofcom's assumptions about how this solution (and greater pricing clarity) could increase competition and demand for services, or even the extent of fixed to mobile substitution.

[238] It highlighted research by the OFT which found that 34% of respondents had incurred an insufficient funds charge but did not consider charges to be important when opening their current account, said that the reason was because they had not expected to use an unarranged overdraft. CAB, December 2010 Consultation response, p.10.
[239] THA, December 2010 Consultation response, Q6.8.
[240] THA, December 2010 Consultation response, Q6.8.
[241] Virgin Media, December 2010 Consultation response, p.20.
[242] [✂].
[243] Lexgreen Services, December 2010 Consultation response, Q6.4.

Competition between SPs

9.263 UKCTA noted that SPs would have greater control over the prices its customers were charged for calling their numbers, as well benefiting from more clear and stable termination charges tied to specific number ranges.[244]

9.264 FCS agreed that a benefit of the unbundled structure was that competition would evolve between SPs to the benefit of the consumer because of the removal of the incentive for SPs to select price points at the highest level (e.g. 5p in the 0844 range). It noted that under the unbundled tariff, SCs would not be grouped at the maximum level and would instead be variable which would create an environment where SPs could compete.[245]

9.265 TNUK noted that in contrast to other NGCs, when a consumer called a DQ service, the call itself was the means of accessing the service, rather than simply a way in which to contact a service provider, providing a separate service beyond the call. Therefore the SC would become not just the cost of contacting the service provider. Rather, it would be the cost of the service itself. Consequently, it considered that if the SC (i.e. cost of the product) became fully transparent, it would be entirely subject to competitive forces and there would be every economic incentive on DQ service providers to reduce the cost, exactly as Ofcom intended.[246]

9.266 ITSPA, however, argued that the facilitation of competition between SPs was only relevant where the customer had an effective choice of services. It noted that it might work for certain chatlines, but would not apply when calling a TV talent show, nor when the call related to an existing service (e.g. utility provider). It considered that SPs rarely competed on price and there was no incentive for them to do so.[247] Therefore, it considered that absent competition at the SP level, the unbundled tariff had no value. It noted for that reason that unbundled tariffs would not be as detrimental on the 09 range, but it did not believe they would offer any improvement on the status quo.[248] EE did not consider that there was a strong argument that the unbundled tariff would lead to increased competition on the 09 range, because it queried whether consumers would just use the service that appealed to them rather than shopping around for the cheapest service.[249] EE also argued that increasing transparency of the high charges for 118 services would not address what it considered to be the underlying structural demand issues, where DQ providers were looking to recoup falling revenues caused by competition from an increasing range of readily accessible free of charge competing services (e.g. internet search engines).[250]

9.267 The CAB was unsure how much importance consumers might attach to the level of the SC at the point when decisions about which bank to use, for example. As such it was uncertain that competition between SPs in many sectors was likely to be apparent or to drive down prices for consumers. In particular, for government services such as tax and benefits, there was clearly no scope for competition between SPs. It was also unsure how consumers would be expected to be able to make a comparison without having to undertake a significant amount of research.

[244] UKCTA, December 2010 Consultation response, p.6.
[245] FCS, December 2010 Consultation response, p.16.
[246] TNUK, December 2010 Consultation response, p.17.
[247] ITSPA, December 2010 Consultation response, p.4.
[248] ITSPA, December 2010 Consultation response, p.7.
[249] EE, December 2010 Consultation response, pp. 72-73.
[250] EE, December 2010 Consultation response, p.73.

PPP also highlighted that SPs did not currently compete significantly and consistently around service price.

Ofcom response and updated position

9.268 Competition between suppliers to deliver services to price aware consumers and where externalities are taken into account (internalised) will often deliver an efficient pattern of prices. We have already discussed the impact of the unbundled tariff on price awareness under the first criterion above. In our updated assessment below we first discuss the impact of the unbundled tariff on competition, as well as addressing the stakeholder comments highlighted above. We then discuss the extent to which the unbundled tariff addresses the vertical and horizontal externalities.

Competition on the AC and overall level of prices

9.269 We note that a number of stakeholders have raised concerns that competition would not actually materialise between OCPs on NGCs, because they do not currently compete, and because consumers do not view these calls as important when making subscription decisions. There are two factors we need to consider here, competition at the point of subscription and competition at the point of call.

9.270 Competition at the point of subscription means that consumers would take the AC into account when selecting their telecoms provider. There is evidence of some competition between OCPs in relation to NGCs, for example the way in which other fixed OCPs' also decided to include 0845 and 0870 calls within calling plans once BT announced that it would do so.[251] However, we accept that there is evidence that NGCs are currently not a key element of consumers' subscription decisions. Our consumer survey evidence indicates that the majority of callers currently do not consider that the cost of 08 or 09 calls is important when selecting their OCP.[252]

9.271 However, a key benefit of the unbundled tariff is that it would potentially enable an environment in which competition could develop. We agree that competition is currently weak, but that is to a large extent a reflection of the existing market failures which we discuss in detail in Annex 8. Currently consumers' poor awareness of NGC prices makes them artificially insensitive. They do not care about the prices because they are unaware of them and because it is difficult for OCPs to communicate prices to consumers at the point of subscription. Accordingly, rather than considering the current level of competition, we have considered whether competitive pressures on NGC prices at the point of subscription are likely to increase as a result of the unbundled tariff.

9.272 The top reason cited by consumers for not considering the price of 08/09 calls when selecting a fixed or mobile provider is that consumers claim not to call these numbers regularly and therefore, as highlighted in the CAB comments, they may not take them into account.[253] This is consistent with the figures given in Table 9.1 above, which

[251] See paragraph A5.33 of the December 2010 Consultation for further details.
[252] For example, when asked what elements would be important when choosing a new fixed operator, 11% spontaneously mentioned the cost of calls to 08/09 numbers and 30% mentioned this factor when prompted. The corresponding figures when selecting a new mobile operator were 9% and 20%. 2010 Consumer survey, questions 5, 6, 7 and 9.
[253] The top two reasons for not considering the price of 08/09 calls when selecting a fixed provider were "Rarely use these numbers" (29%) and "Don't use these numbers" (28%). The top three reasons for not considering the price of 08/09 calls when selecting a mobile provider were "Don't use these numbers" (30%), "Don't use a mobile for these numbers" (23%) and "Rarely use these numbers" (16%). 2010 Consumer survey, questions 8 and 10.

show for example, that only 6% of consumers claim to call 0845 and 0870 numbers regularly from a fixed line. This drops to only 2% from a mobile. Given the nature of services provided on these numbers this is perhaps not surprising. But only 22% of consumers claim to even call them sometimes from a fixed line, and only 7% from a mobile. We therefore recognise that the competitive constraints on the AC may not be strong.[254]

9.273 In the 2011 Experimental Research, London Economics concluded that the experiment indicated there were some indications that unbundling call charge information helped participants to make better tariff choices. For example, there was some evidence that participants were less likely to choose the worst tariff. The report suggested that this might have been because the AC was more transparent and therefore it was easier to decide whether to trade off lower fixed fees in return for higher ACs. However, the report also noted that it was clear that participants found selection of the optimal tariff difficult, and that whether differences between the various options were statistically significant depended on the specification of the statistical tests.[255] Moreover, in that experiment tariff packages simply consisted of a fixed fee (reflecting the monthly subscription charge) and the AC, whereas in practice consumers deciding what OCP to subscribe to are likely to be faced with many more elements that they need to weigh up. In addition, given that the university students used as subjects in the 2011 Experimental Research clearly found tariff selection difficult, we would expect the consumers as a whole to experience greater difficulties. Accordingly, we have placed little weight on the differences between the performance of the different options in the 2011 Experimental Research in terms of tariff selection. In a real world situation, consumers are faced with significantly more information than they are able to take in when signing up to a new provider and therefore we recognise the concern that the AC may not feature highly in that decision making process.

9.274 A key part of ensuring that competition can develop is the simplicity of the structure of the AC, i.e. it needs to be as simple as possible to ensure that consumers are able to retain it and compare with the AC for other packages or offered by competitors. We also recognise the CAB's concerns that if consumers are not informed of the AC then they are unlikely to take it into account. We are therefore proposing that OCPs will be required to communicate the AC to consumers at the point of subscription. The design of the AC and the OCP's obligations in relation to it are discussed in Section 10 and Section 12. We consider that our proposals in relation to the AC structure and publication will contribute to enhancing competition between OCPs at the point on subscription.

9.275 In response to Virgin Media's comment that the restrictions on the structure of the AC would restrict OCPs' competitive freedom, we consider, on the contrary, that for the reasons outlined in the preceding paragraph, restrictions which secure a simplified AC will contribute to competition between OCPs. The maximum prices model would be a much more restrictive option in this regard. Furthermore, our proposed requirements in relation to the structure of the AC (see Section 10) will not prevent OCPs varying their ACs between different tariff packages to meet consumer preferences (for example including them within bundled packages), and setting the AC at a level to compete with the AC offered by other OCPs.

[254] This is the same position that we adopted in the December 2010 Consultation – see paragraph A5.37 of that document.
[255] 2011 Experimental Research, page viii.

9.276 A number of stakeholders expressed concerns that the level of ACs would be unduly high under the unbundled tariff. We discuss in detail in Section 10 the arguments for and against having a maximum cap on the AC.

9.277 In summary, as stated in the December 2010 Consultation, we recognise that there is a risk of relying on competitive constraints on the AC at the point of subscription. Many consumers may have limited regard to this element of their tariff package, particularly given the infrequency with which NGCs are made. However, we do consider that the AC is much simpler to communicate and understand than the current multitude of NGC prices. In particular, we are proposing requirements that will secure a simple structure for the AC (see Section 10) and this should increase consumer awareness and capacity to make choices about the prices they will face for NGCs at the point of subscription relative to the status quo.

9.278 In terms of competition at the point of call, i.e. when consumers select which device to use when making a call, the majority of consumers have both a landline and a mobile and thus the ability to substitute between them.[256] Moreover the relatively low proportion of NGCs made from mobiles suggests that substitution has already occurred in practice.[257]

9.279 As noted in the December 2010 Consultation, the key issue is consumers' ability to recall relative fixed and mobile prices at the point of call. Moreover, for competition to be effective, such substitution is not just a matter of identifying the cheapest means of making a call. Understanding the magnitude of any price difference is important, so that price can be weighed up against other factors. For example, a caller might decide "I know the AC is only a couple of pence higher on my mobile than on my landline, so I'll use my mobile since it is more convenient".[258]

9.280 As explained above (under the price awareness criterion), we accept that consumers may not always be able to exactly recall their AC. However, we think it is plausible that many consumers will recall its broad magnitude. Indeed even at present, where there is poor consumer price awareness, callers seem to be able to form a view on the relative price of fixed and mobile calls. They are largely aware that mobile calls are more expensive (for example, 77% are aware that 08 and 09 numbers are more expensive on a mobile).[259] We thus consider that the unbundled tariff is likely to increase competition at the point of call, relative to the status quo.

9.281 Compared to a maximum prices model where the price maxima are the same for fixed and mobile calls, an advantage of the unbundled tariff is that the different ACs will send a price signal to callers that reflects the additional resource costs associated with mobile calls (i.e. for most callers, the mobile AC is likely to be higher, reflecting the higher origination costs). These price signals were highlighted in the recent BEREC Special Rate Services Report, as a potential drawback of a more

[256] In 2011, 79% of households had access to both a landline and a mobile. The Consumer Experience 2011, Figure 28 on page 25.
[257] For 08 and 09 calls, less than 25% of call minutes are originated from mobiles (and considerably less in most cases). 2010 Flow of Funds study, Figure 1.5 on page 6. In contrast, mobiles account for 49% of all voice call minutes. The Communications Market Report 2011, Figure 5.1 on page 245.
[258] December 2010 Consultation, paragraph A5.39.
[259] This survey question excluded 0800 numbers, which were asked about separately. 2010 Consumer survey, Q34.

restrictive version of the unbundled tariff model, where there is a set price for the AC element of the call.[260]

9.282 O2 argued that mobile OCPs would always be at a disadvantage at the point of call compared to fixed OCPs, given their higher costs of originating and retailing calls. We are not convinced that this is necessarily the case, particularly given the convenience of using a mobile phone.[261] In any event, insofar as well-informed consumers respond to price signals and choose to use a lower cost means of originating calls, this is not problematic. It is simply competition in action.

9.283 We discuss the NTS Call Origination Condition in further detail in Section 12. Under the unbundled tariff, the level of BT's AC is likely to be determined by competitive pressures, rather than regulation. Changes in BT's prices may also prompt other OCPs to change their retail prices, given BT's position in the market. While [✂] and the FCS expressed concerns, it is not obvious that this will lead to a less efficient pattern of retail prices (provided that competition is increased). They also argued that this would remove the "benchmark" provided by BT's call prices. However, in terms of the price advertised to consumers, under the unbundled tariff the price point that we anticipate SPs advertising would be the SC. As explained above, in relation to the price awareness criterion, we consider that this is likely to be more effective than the current practice of advertising the price specified for BT calls in the Numbering Plan. We highlight in Section 12 that we will be separately considering the question of BT's SMP position, and the appropriate remedies, if any, as part of our next review of call origination, which is expected to begin later this year.

Competition on the SC

9.284 We accept that, as highlighted in stakeholder comments, the extent for competition between SPs may be limited, and will vary significantly for different number ranges. Our 2010 Consumer survey demonstrated that overwhelmingly consumers do not shop around when deciding which 08 or 09 service to call.[262] For the 08 ranges in particular, a high proportion of calls are likely to be to public services, banks and customer support lines.[263] For all of these types of services, consumers are unlikely to be able to call a different SP and therefore the scope for competition on the price of that call is likely to be limited. This is not to suggest that callers have absolutely no alternatives, since even when calling these types of SP they may be able to vary the duration of the call or choose an alternative means of contacting the SP (e.g. the internet).

9.285 Nevertheless, for 09 and the 118 ranges in particular, there is likely to be scope for competition. Where SPs compete against each other, the unbundled tariff is likely to increase competition relative to the status quo, particularly given that it enables the SP to advertise the SC for the call, and consumers can compare that SC directly with other SPs offering the same service. For example a consumer wanting to call a particular chatline service will be able to compare two different advertisements with pricing information. Indeed consumers may be fairly price sensitive given the duration

[260] Draft BEREC Report on Special Rate Services, p.18.http://erg.eu.int/doc/berec/bor/bor11_68_srsreport.pdf
[261] Indeed the cost disadvantages cited by O2 would appear to apply to all mobile calls. However overall mobile call volumes have been growing and account for almost half of all voice calls. The Communications Market Report 2011, Figure 5.1 on page 245.
[262] 62% of consumers said they never shopped around, 15% said they didn't know the prices. 2010 Consumer survey, Q38.
[263] 2010 Consumer research, Q22 and Q26.

of such calls.[264] The same would apply for DQ providers, where, as highlighted below, the price of the call is the same as the price of the service itself, thereby encouraging direct competition on the SC element of the call.

9.286 Furthermore, as we discuss in further detail relevant to the access to socially important services criterion, the fact that the SC element of the call will be required to be published with the number could lead to negative publicity where the SP selects an unusually high SC and this may act as an additional constraint on SPs' behaviour.

9.287 Therefore, the extent of competitive constraints on the SC is likely to vary substantially depending on the service in question. We accept that for a significant proportion of calls the direct competitive constraints on the SC may be weak. For these services, the unbundled tariff may have little effect on competition between SPs relative to the status quo. However even for these SPs, the unbundled remedy may increase competitive pressures, since the SC will be visible and SPs may be constrained from selecting a high SC by the threat of adverse publicity. We also consider that there are a significant proportion of calls where competition could develop, in particular on the 09 and 118 ranges. For these services, competition is likely to increase relative to the status quo.

Addressing the horizontal and vertical externalities

9.288 We discuss these externalities, and how they affect the number ranges within the scope of this Section, in Annex 8. These externalities are one reason why prices are likely to currently be inefficient.

9.289 In terms of the vertical externality, whereby OCPs set retail prices without sufficient regard to the preferences of SPs, the unbundled tariff will mitigate this by enabling SPs to choose a price point for their SC (from a limited range – see Section 10 below), which they will then be able to advertise clearly to their customers. This would therefore improve the efficiency of prices by providing SPs with the ability to obtain a number range with a price point that they consider will meet customer demand.

9.290 That said, we accept that the unbundled tariff will not completely address the vertical externality. The overall retail price paid by a caller will also depend on the AC which will be set by the OCP (subject to the competitive constraints discussed above) rather than the SP. Thus, while the unbundled tariff is likely to mitigate the vertical externality relative to the status quo, it may not be as effective at addressing this externality as specifying maximum prices. As explained in paragraphs 9.155 to 9.156 above, the maximum prices option has the potential to give SPs greater control over the retail price paid by callers, provided there is a sufficient granularity of price points. However, the chances of that potential being achieved may be limited, given the significant risk of regulatory failure that this option carries (see paragraphs 9.175 to 9.182).

9.291 The unbundled tariff will also address the horizontal externality, whereby OCPs and SPs do not have the incentive to consider the impact of their behaviour on the reputation of other non-geographic number ranges, or on the non-geographic numbering system as a whole. In Annex 8 we identify several potential types of the horizontal externality:

[264] One TCP told us that callers' that used dating and chat services did so for an average of almost 3 hours per month. It also stated that there were examples of services that had been profitable at a 9ppm charge (from a BT landline) but not at a 10ppm charge. [✂].

i) between mobile-originated and fixed-originated calls to the same number range: the unbundled tariff will help address this concern because the SC for a particular number will not vary by OCP, in particular whether the call is from a fixed line or a mobile. This will remove the potential for consumer's understanding of the SC element of the call to be influenced by whether they are calling from a fixed line or a mobile. Furthermore, because the AC will be a single charge customers will be more aware of their AC and be able to compare ACs between fixed and mobile calls.

ii) between one number range and another number range: under the unbundled tariff the AC will be the same across number ranges and the maximum price caps on SCs for different number ranges (set out in Section 10) will help protect the perception of those number ranges. Therefore the potential for confusion between the number ranges, and the ability of SPs to free ride on the reputation of a particular number range will be removed; and

iii) the collective brand of NGCs as a whole: as above, having a single AC across the number ranges and maximum SC caps by number range will remove the potential for both OCPs and SPs to free ride on the reputation of a number range in order to set prices higher than the industry mean without the awareness of consumers. This, combined with the rationalisation of the number ranges (see the proposed Numbering Guide set out in Section 6), will ensure the horizontal externality effect is removed.

Conclusions on efficient prices

9.292 We therefore consider that the unbundled tariff will lead to more efficient prices than the status quo, because it is likely to increase competitive pressure on the AC at both the point of subscription and the point of call, as well as some additional competitive pressure on some number ranges for the SC. It will also mitigate the horizontal and vertical externalities. As a result, prices are more likely to reflect callers' and SPs' preferences.

9.293 In comparison with the maximum prices option discussed above, the unbundled tariff has the advantage of potentially allowing competition to shape prices, rather than regulation. However the comparative advantages of the two options in terms of securing efficient prices depend, in the case of the unbundled tariff, on the strength of competition between OCPs and SPs and, in the case of maximum prices, the size of the risk of regulatory failure. Overall our view is that the unbundled tariff is more likely to result in efficient prices compared to the maximum prices model, where there is a greater risk that prices will be set that do not reflect callers' preferences.

Service quality, variety and innovation

<u>Stakeholder comments</u>

9.294 BT noted that improved pricing transparency should restore consumer confidence in these services, potentially increasing demand and incentivising SP investment and innovation.[265]

9.295 EE considered that, in relation to the 09 range specifically, the suggestion that tariff unbundling may "turn the tide" of declining 09 volumes ignored the market evolution factors that had caused the reduction in usage in the 09 range, and that there were

[265] BT, December 2010 Consultation response, p.9.

many reasons which had nothing to do with price awareness for the fall in demand in NGCs. It also noted evidence that trust in the 09 range was already improving.[266] EE also argued that increasing transparency of the high charges for 118 services would not address what it considered to be the underlying structural demand issues, where DQ providers were looking to recoup falling revenues caused by competition from an increasing range of readily accessible free of charge competing services (e.g. internet search engines).[267]

9.296 O2 questioned the extent to which the unbundled tariff would be able to offer the level of pricing flexibility for SPs that Ofcom assumed it would. It noted that unless there were restrictions on the number of price points for SCs, there would be significant, insurmountable, implementation costs. It noted, however, that a limited range of price points might substantially affect the extent to which increased price competition could be achieved.[268] O2 also stated that Ofcom had failed demonstrate that increased revenue from higher call volumes was likely to be passed through to SPs or that it would be fully invested by SPs in a way that benefited consumers. [269]

Response and updated assessment

9.297 As set out above, we consider that the unbundled tariff is likely to increase consumer price awareness. Since consumers are likely to be more confident of NGC prices and less likely to overestimate call prices, this is likely to stimulate demand for services. The benefits of addressing the horizontal and vertical externalities will also stimulate demand. Therefore we consider the overall effect of the unbundled tariff is that it will promote service availability and innovation.

9.298 In terms of innovation, as set out in Annex 11, there is some evidence of increased diversity of services in other countries, particularly in relation to DQ services, that may not be emerging here due to the impact of the current regime on innovation. We also have evidence from some SPs that the current regime is affecting the attractiveness of operating a non-geographic number and therefore we consider the unbundled tariff will help to encourage the right incentives for SPs to offer innovative services.

9.299 Stakeholders have raised several specific challenges to this, however:

- the unbundled tariff may not “turn the tide” of declining 09 volumes and trust in 09 calls is already improving;
- 118 services are affected by wider structural changes in demand;
- the level of pricing flexibility for SPs will be limited (because of technical issues with OCPs’ billing) and therefore scope for innovation will be limited; and
- higher call volumes may not prompt investment by SPs that benefits consumers.

9.300 We respond to these points below.

9.301 We agree with EE that there are wider factors affecting the volume of 09 calls. EE also pointed to evidence that complaints to PPP are declining and that most

[266] EE, December 2010 Consultation response, pp. 72-73.
[267] EE, December 2010 Consultation response, p.73.
[268] O2, December 2010 Consultation response, p.34, paragraph 131.
[269] O2, December 2010 Consultation response, p.5. and p.34, paragraph 132.

complaints are about the operation of the services. However, the question at hand is whether the unbundled tariff is likely to improve service availability relative to the situation where we do not intervene (rather than, for example, whether it is likely to return to call volumes to the levels seen in the past). Research for PPP found that 74% of consumers that use PRS services cited “accurate prices” as a factor that would help improve trust (by far the most commonly cited factor).[270] We thus do consider that by improving price transparency, the unbundled remedy is likely to have a positive effect on 09 call volumes which, in turn, is likely to have a positive effect on service availability.

9.302 Further we have not identified significant evidence of an improvement in ‘trust’ for 09 numbers now as proposed.

9.303 A similar argument applies to DQ services (users of which were encompassed within the PPP survey discussed above). The issue is whether the unbundled tariff improves matters, relative to the base case where it is not introduced. In Annex 8, we discuss the negative impacts of current arrangements on DQ providers. These include poor consumer price awareness and obstacles to differentiating themselves on price. For example, mobile OCPs may charge the same retail price for calls to a DQ provider that wished to offer a ‘no frills’ service as for calls to other DQ services.[271]

9.304 Under the unbundled remedy, these concerns will be mitigated by giving SPs more control over retail prices than under the status quo, by enabling them to select an SC. We acknowledge that this level of control will be affected by the limits on the number of price points we are proposing in the following section, as highlighted by O2. Nevertheless, we consider that the range of price points that could be available under an unbundled tariff, and in particular the ability of the SP to be able to advertise that price point will provide a significantly greater level of control than is currently provided.

9.305 We accept that for some number ranges, the need for pricing flexibility is greater than others, in particular on the 09 and 118 ranges, where active competition between SPs is more likely. We recognise that restricting the number of price points will have some effect on the ability of these SPs to innovate. Nevertheless, we consider that compared to the status quo the level of flexibility will be sufficient to enable some competition. Consumers will be able to directly compare the SC for two different services, and therefore SPs will be able to compete on that price. As highlighted in TNUK’s earlier comment above (see paragraph 9.265), this is particularly relevant for DQ services, where being able to compete on the price for that service will be a key benefit of the unbundled tariff.

9.306 Under the unbundled remedy we are proposing to limit the total number of SC price points (see Section 10) but it will be an industry process which determines precisely which SC price points are available. This contrasts with the maximum prices option discussed above, where we would have to set in regulation both the total number of SC price points and what those price points are (e.g. 5ppm, 10ppm etc). Accordingly there may also be fewer restrictions on SPs’ pricing under the unbundled model

[270] *Current and emerging trends in the UK premium rate services market 2010, Analysys Mason for PhonePayPlus,* pages 7-8. Page 1 of this report explains that it uses the term “phone paid services” to mean PRS services. Available at: http://www.phonepayplus.org.uk/For-business/~/media/Files/PhonepayPlus/Research/2011_CurrentandemergingtrendsintheUKPRSmarket2010AnalysysMasonreport.pdf

[271] Evidence relating to these concerns was set out in the December 2010 Consultation, paragraphs 5.31-5.33 and Figure 5.3.

compared to maximum prices. In particular, reviewing what maximum price points are available would always require (a most probably lengthy) regulatory intervention process, whereas the unbundled tariff would offer greater flexibility to change SC prices (within a set of industry controls and within the maximum caps by number range).

9.307 O2 suggested that, even if call volumes increased, TCPs may not pass the resulting termination revenue on to SPs. However, as set out in Annex 9, the available evidence suggests that the hosting market is broadly working well for SPs. This suggests that a significant proportion of changes in termination revenue are likely to be passed on to SPs. O2 also suggested that SPs may not "re-invest the full amount" of this revenue in ways that benefit consumers. We agree that where SPs earn higher revenue then they may use this in a number of ways, including retaining some of it as profit. But it is also likely that some SPs will be stimulated to innovate or otherwise improve the quality or availability of NGC services.

Access to socially important services

<u>Stakeholder comments</u>

9.308 O2 noted that Ofcom had stated it was aware that this concern rested largely on the decision of the SP as to which number range they operated on. Consequently, O2 considered that it was of limited value to assess the unbundled tariff as one which had any positive impact on vulnerable consumers. O2 noted that the threat to SPs operating a socially important service of being exposed to adverse publicity on prices would only work if there was a requirement to publish that price. Given Ofcom did not appear to be proposing publication on the 0845 and 0870 number ranges, it considered that SPs would have an easy means of opting out of that publicity.[272]

9.309 O2 noted that it was not convinced that this assessment criterion was relevant for the higher rate revenue-share numbers. It considered that all the number ranges which Ofcom was proposing the unbundled tariff for carried few socially important services, if any. Nevertheless, it noted that if a socially important service was provided on these ranges, it was almost inevitable that the customer would be locked in to making the call and free from any competitive constraints, and therefore it was unclear how the unbundled tariff option offered any assurance for low-income customers that they would be able to access the said service at a reasonable cost they could afford.[273]

9.310 The BMA was concerned that the December 2010 Consultation neglected to mention the impact of the unbundled tariff proposals on primary care, which was a noteworthy omission given the widespread use of 0845 and 0844 numbers by NHS GP practices and many other parts of the NHS. It noted disappointment that the December 2010 Consultation did not reference the Department of Health's ('DH') 2009 consultation on the use of 084 numbers in the NHS[274], which led to the DH issuing Directions to NHS bodies to the effect that 084 numbers could be used, provide that the cost to call did not exceed that of a local call.

9.311 The BMA strongly believed that practices should be able to continue to use 084 numbers where they met the DH Directions and was concerned that Ofcom had not referred to this existing legal framework. It noted that many GP practices had

[272] O2, December 2010 Consultation response, p.35, paragraphs 134-136.
[273] O2, December 2010 Consultation response, p.35, paragraphs 134-136.
[274] http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Consultations/Liveconsultations/DH_091879

entered into long term contracts which would be difficult to terminate without major financial implications. It also highlighted that many patients benefitted from the increased functionality of 084 numbers and evidence suggested that they had helped to significantly improve telephone access for patients and the responsiveness of practices. It urged Ofcom to take account of the impact of its tariff restructuring proposals on GP practices that used 084 numbers.

9.312 NEG considered that the inaccurate perceptions of the cost of calling 084 numbers created by Ofcom's proposals could cause unwarranted public pressure for GP and Primary Care Organisations to abandon 084 numbers entirely. It did not believe that a significant proportion would use 03 numbers as an alternative, therefore the benefits of enhanced telephony would be lost to significant parts of the NHS. NEG highlighted that for many vulnerable citizens access to Primary Care by telephone was particularly important. It provided evidence to demonstrate that the outcome of GP surgeries not using enhanced telephony was that millions of patients would encounter the engaged tone, thereby negatively impacting the ease of patient access to their local GP and in the quality of service provided.[275] NEG therefore considered that Ofcom's proposals (in particular our proposed communications code and suggestion that 084 numbers be described as 'business rate') could increase patient confusion over the cost of contacting NHS primary care and discourage access to socially important services.

Response and updated assessment

9.313 We accept O2's comment that this assessment criterion is only relevant for certain number ranges being considered in this Section. In particular, we consider that it is relevant for the 0845 range, but also to some extent the 0844 range (where, as highlighted in NEG's comments, some GP surgeries use these numbers). We set out information on the number of these services provided on the 0845 range in Section 8 above) That information indicates that up to 30% of services on this range could fall within our definition of 'socially important'. This includes services such as NHS Direct and NHS 24, the HM Revenue and Customs Tax Credit and Child benefit helplines, the DWP's Job Centre Plus helpline, a number of electricity, gas and telephone suppliers and the Samaritans, among others.

9.314 In terms of the 084 range, we consider that the unbundled tariff would offer benefits to consumers over the status quo in terms of vulnerable consumers' access to socially important services in two ways:

- First vulnerable consumers would have greater awareness of the prices of calls to socially important services provided on the 084 number ranges, as SPs would now be able to advertise a single price for these calls. This would reduce the price overestimation that deters these callers currently. Our evidence on price overestimation from the 2009 Consumer survey shows that consumers estimated price for 0845 calls (30ppm for fixed calls and 46ppm for mobile calls) is significantly greater than the actual price (5ppm for fixed calls and 22ppm for mobile calls).[276] Removing that price overestimation would help avoid consumers being deterred from accessing socially important services on the 084 range.

- Second, the unbundled tariff would make it clear how much of the call price the OCP is responsible for and how much the SP is responsible for. SPs operating

[275] NEG, December 2010 Consultation response, p.3.
[276] These figures are presented in Table A8.10 in Annex 8. We have applied an uplift to obtain actual prices as described in Annex 16.

socially important services may not wish to be perceived as earning revenue from calls. SPs providing socially important services might be particularly sensitive to claims that they are profiting unduly from NGCs. As a result, concerns about adverse publicity may prompt some SPs to select either a different number range (such as 03) or a low SC.

9.315 We recognise that part of this issue comes down to the SPs' choice of number range (as highlighted in O2's comment). We have previously stated that we did not consider it justifiable or appropriate for Ofcom to prevent public bodies using revenue sharing non-geographic numbers, particularly as an approach that singled out public sector services would be potentially discriminatory.[277] We remain of the view that the choice of number range is a matter for the organisation concerned. We are not banning socially important services such as doctors surgeries from using 084 numbers, as the BMA and NEG appear to suggest.

9.316 One of the benefits of the unbundled approach is that it will make prices more transparent, and in particular (unlike the maximum price option) makes it clearer what part of the overall call price the SP is responsible for. As explained above, this could provide pressure (e.g. in the form of adverse publicity) that would deter the SP from using a number range if it feels that it is unable to justify to callers an SC applicable to that range . We recognise that many SPs operating on the 0845 number range in particular do not receive any direct profit from the revenue sharing element of the call. Instead the costs of their operation of the number are reduced from what they would be compared to, for example, a 03 number, where revenue sharing is not permitted. Nevertheless, the SC will have a strong influence on the level of hosting costs the SP is paying, for example, for a 084 call, if the SC was 1ppm, the SP's costs of providing the 084 service should be reduced by 1ppm, which will be retained by the TCP for each call.

9.317 As discussed above, we accept that there may be some asymmetry with the treatment of other calls since callers are typically unaware of termination rates. However we do not accept that the SC presents a materially misleading message about the contribution being made to the SP's overall costs of operating a non-geographic number.

9.318 In response to NEG's concerns, we note that the same enhanced telephony services are available on the 03 range and, for many of the services, ordinary geographic numbers (01 and 02) as well (these numbers may not offer the same advanced routing functions, but features such as call management or call queuing would be available). Therefore the main concern about GP and NHS services appears to be that there would be increased costs involved for them if they chose to migrate to these ranges (and away from the 084 ranges) as NEG suggest.

9.319 We spoke to the BMA about its concerns and once it was clear that we were not forcing existing services to migrate to different number ranges, and that a significant period of implementation would be provided following any final decision to pursue the unbundled tariff, it was satisfied that this would allow GP surgeries to take their own decision about whether to stay on the existing number ranges or migrate.

9.320 We consider that the 03 range offers a viable alternative for many socially important services. Indeed, it is recommended in the Cabinet Office's *Better practice guidance*

[277] Ofcom, NTS: A Way Forward Consultation, 28 September 2005, http://stakeholders.ofcom.org.uk/binaries/consultations/nts_forward/summary/nts_way_forward.pdf

for government contact centres.[278] Where SPs choose to change their number then we accept that this will involve migration cost (we have taken these costs into account in our detailed modelling of the unbundled tariff in Section 13). We have also taken this into account when considering implementation timescales (in Section 12) to allow SPs sufficient time to migrate their existing numbers should they choose to.

9.321 In terms of O2's comment that we did not consult on price transparency obligations for SPs on the 0845 and 0870 numbers ranges, we recognise that this was not part of our December 2010 Consultation. This was in part due to the fact that a number of different options were being considered for these ranges (as discussed in the Section 11), including closure and geographic rating. However, as set out in more detail in Section 12 we consider that there should be obligations on the SP to advertise SCs for non-geographic number ranges which we propose to make subject to the unbundled tariff proposal. The extent of those obligations may vary, in particular for the 0845 number range, given the lower price points involved. Nonetheless, these obligations will provide increased transparency of the prices of these calls and potentially increased pressure on SPs to choose numbers that are cheaper to call.

9.322 Overall, therefore, we consider that the unbundled tariff will improve access to socially important services by increasing price awareness and ensuring that vulnerable consumers are not deterred from accessing these services. In addition, a particular advantage of the unbundled tariff is that it makes it clear what element of the price the SP is responsible for (or what level of costs it is paying) and publicity about this may help ensure that socially important SPs choose number ranges which are more appropriate to the services they are providing. Nevertheless, as also highlighted in our assessment of the maximum prices option, given that this criterion is primarily relevant for the 084 range, we have given it less weight than the other criteria in our analysis.

Regulatory burden

Stakeholder comments

9.323 A significant number of stakeholders highlighted the potentially significant costs of implementing the unbundled tariff. C&W, for example, noted that it would be a significant project, consuming resource from a broad range of functions and requiring investment in an upgrade to its billing systems and potentially also its voice network.[279] [✂] argued that it would involve considerable cost, effort and time particularly in terms of billing systems (because a doubling of effort required to keep systems up to date with multiple charges). Virgin Media considered that the substantial implementation costs associated with the unbundled tariff would disproportionately affect OCPs. It noted these costs would include not only billing system and process changes, and changes to the format of customer bills, but also the less physical aspects of implementation including communication to customers and dealing with the inevitable increase in calls to contact centres that would arise from customer confusion/enquiries about the revised arrangements.[280]

[278] http://www.coi.gov.uk/documents/gcc-third-edition.pdf
[279] C&W, December 2010 Consultation response, p.43.
[280] Virgin Media, December 2010 Consultation response, p.21.

9.324 EE, O2 and Virgin Media were concerned that Ofcom had underestimated the likely implementation costs.[281] EE noted that the unbundled tariff would not only be complex to implement from a systems perspective but also from a customer service and communication point of view. EE was concerned that Ofcom had dismissed the comments received as part of the 2010 Implementation Costs study which noted that implementation could take several years and millions of pounds, it disagreed that these estimates were an over-exaggeration.[282] Virgin Media estimated that implementation costs would be, even in the least complex case, in the £millions.

9.325 ITSPA considered that the implementation of the unbundled tariff option would take too long and it was important to apply an effective remedy as soon as possible.[283]

9.326 Some stakeholders were concerned that these implementation costs would not be outweighed by the benefits, or that they needed further research before Ofcom could conclude in favour of the unbundled tariff. Vodafone noted that the potentially substantial implementation challenges needed to be investigated in detail prior to any regulatory mandate in order to ensure proportionality.[284] TalkTalk also considered that Ofcom's final proposals for the unbundled regime had to be proportionate to the implementation cost for industry and must be capable of identifying a clear enhancement to consumer welfare before they could become law.[285]

9.327 Similarly, EE was concerned that the implementation costs to the industry appeared to be so significant as to outweigh the "very marginal benefits case" of the unbundled tariff.[286] EE considered that further consumer testing needed to be done in order to establish whether there was a positive cost benefit analysis so as to justify the proposal.[287] Verizon also considered it questionable whether Ofcom had yet made a compelling case for preferring the unbundled approach, particular in terms of weighing up the costs to industry of such a wholesale change and the benefits that consumers could expect to see.[288]

9.328 There were some specific features of the unbundled tariff which raised particular concerns in terms of costs. Three considered that some of the elements of the unbundled approach were potentially too costly or too complex to implement, for example PCAs by SPs to advertise their SC, the number of price points for the SC, and itemised billing.[289] UKCTA also noted that two particular areas of concern were the implications of PCAs and more granular billing. UKCTA considered that the success of the unbundled approach would be determined at least in part by Ofcom's willingness to fully address and resolve the detailed implementation issues, and to mitigate the cost and resource burdens on industry where possible.[290] Virgin Media noted that the nature of any obligation to communicate changes to customers/any obligation to provide additional pricing information and the required level of granularity to be included on customer bills, all had the potential to require appreciable levels of investment.[291]

[281] O2, December 2010 Consultation response, p.35-36, paragraph 138.
[282] EE, December 2010 Consultation response, p. 77.
[283] ITSPA, December 2010 Consultation response, p.5.
[284] Vodafone, December 2010 Consultation response, p.2
[285] TalkTalk, December 2010 Consultation response, p.7.
[286] EE, December 2010 Consultation response, p. 78.
[287] EE, December 2010 Consultation response, p.51.
[288] Verizon, December 2010 Consultation response, paragraph 22.
[289] Three, December 2010 Consultation response, p.21.
[290] UKCTA, December 2010 Consultation response, p.7.
[291] Virgin Media, December 2010 Consultation response, p.21.

9.329 O2 noted that the most significant costs were likely to be imposed by the level of pricing granularity required. O2 considered that the proposals in the December 2010 Consultation implied that OCPs billing systems would need to be able to offer SPs an unlimited number of price point variations or at least the same level of variability as currently offered by BT. It considered that this was a significant barrier to implementation. [✂].[292]

9.330 In terms of reducing regulatory burden, BT noted that the unbundled tariff option would reduce the likelihood of disputes similar to those that had arisen in NGCs over the last few years.[293] Sky considered that the main benefit of the unbundled approach was that it removed the need for OCPs and TCPs to negotiate and agree the division of retail revenues and payment of origination and termination costs.[294] UKCTA noted that, depending on how Ofcom ultimately intended to regulate the level of service charges for NGCs, the unbundled tariff might introduce greater certainty for the industry as well as consumers. OCPs, TCPs and service providers would potentially benefit from transparency of setting access and service charges.

9.331 EE questioned, however, whether the unbundled remedy would address the tensions between OCPs and TCPs. EE stated that in the past "gentlemen's agreements" in relation to termination rates for NGCs had broken down and gave 03 termination rates and 080 origination charges as examples.[295]

Response and updated assessment

9.332 In our assessment of the regulatory burden associated with the unbundled tariff below, we first discuss the impact on wholesale disputes before discussing the systems and transition costs of introducing this option. We then summarise our high level views on this point.

Impact on wholesale disputes

9.333 We agree with BT's comments that one of the key advantages of the unbundled tariff option, particularly when compared to the maximum prices option, is that it would be likely to reduce the level of disputes between OCPs and TCPs over termination payments. We accept that this will depend on the definitions of the AC and SC elements of the call, and the demarcation between them. We discuss this in further detail in relation to the assumed point of handover at paragraphs 10.393 to 10.398 in Section 10. This assessment is also reflected in our outline of the General Conditions likely to be required to implement the unbundled tariff at paragraphs 13.374 to 13.377 in Section 13. Nevertheless, on the assumption that these charging elements are clearly defined then it offers much greater certainty to all players in the value chain about their revenues.

9.334 In response to EE's comment that what it characterised as "gentlemen's agreements" in relation to non-geographic termination rates previously in place having broken down, we accept that disputes may still arise under the unbundled tariff. However, clear definitions of the AC and SC will mean that the demarcation lines are much clearer than at present. We do not accept that EE's comparison with 03 termination rates and 080 origination payments is particularly illuminating. The recent 080 dispute arose in the context of the current, largely deregulated approach. In the case

292 O2, December 2010 Consultation response, pp.35-36, paragraph 138.
293 BT, December 2010 response, p.9.
294 Sky, December 2010 Consultation response, p.8.
295 EE, December 2010 Consultation response, Q6.2, paragraph 13.

of 03 calls, OCPs are required to price these in an identical manner to calls to geographic numbers. The situation in relation to 03 is thus somewhat different to that which will prevail under the unbundled tariff.

Systems and transition costs of introducing the unbundled tariff

9.335 In recognition of the significant concerns about the implementation costs associated with the unbundled tariff we have undertaken a more detailed examination of these costs, and engaged closely with the industry (through the working groups[296] and bilateral meetings) to understand the drivers of these costs and what steps could be taken to mitigate them.

9.336 We are not proposing a cap on the AC (see Section 10, paragraphs 10.146 to 10.193) as part of the unbundled tariff proposal. We are aware, however, that other elements of the proposal are likely to create more significant costs than others, as highlighted in the stakeholder comments. In particular two areas around which particular concerns have been raised are:

- the number of price points for the SC; and
- the extent of tariff information presented on consumers' bills.

9.337 We have therefore revisited our approach to these two elements and we discuss this in further detail (as well as the other more detailed design elements of the unbundled tariff) in the following Section. Annex 19 also sets out further detail on the evidence of these costs and how we consider they can be mitigated. In summary, we consider that the unbundled tariff can be designed in a way which still allows the benefits to consumers in terms of transparency, and some flexibility to SPs in choosing an SC for their service, whilst reducing the impact of the costs on OCPs in amending their billing systems. A further key element in reducing these costs is the timing of implementation, and this is something which we discuss in Section 12, where we take account of stakeholder comments on the need for a longer implementation period to make all the necessary changes. Three's understanding of the unbundled tariff was that SPs may be required to include a PCA stating what their SC is.[297] Three said that the effects of such a requirement had not been tested.[298] However Three appears to have misunderstood the proposals in the December 2010 Consultation. We did not, and are not, proposing that there should be a PCA applying to all unbundled numbers.[299]

Impact on business callers

9.338 As discussed in Annex 8, we have not looked at the retail circumstances facing business callers in the same detail that we have looked at the experience of residential callers. However, we understand that business callers may sometimes be charged for NGCs in a different way, at a different rate, to residential consumers.[300] Given that we have less information in relation to business callers, as explained in

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[296] See Annex 14 for a summary of the outputs of the working groups and what was discussed.
[297] Three response to December 2010 Consultation, paragraph 69.
[298] Three response to December 2010 Consultation, paragraph 72.
[299] The exception was if the current cap on the price of 09 calls (from BT) were lifted from the current level of approximately £1.50. We considered there was a strong case to be made for requiring PCAs to be introduced for higher-rated 09 calls. December 2010 Consultation, paragraph A7.401.
[300] For example, in the course of the appeals against the 080 Dispute Determination a mobile OCP stated that the price paid for 080 calls is different for residential callers, SME callers and large corporate callers. [✂].

Section 12 we are inviting comments from stakeholders as to whether the unbundled approach would lead to particular regulatory burdens for business consumers.[301] In the light of the responses we receive to this consultation we will decide whether or not the unbundled tariff should apply in a different fashion in the case of some business callers.

9.339 The scope for flexibility towards business callers (in the event that the unbundled tariff causes them particular difficulties) means that this intervention is unlikely to impose a large regulatory burden on them.

Summary of the regulatory burden associated with the unbundled tariff

9.340 There are a number of regulatory costs associated with the unbundled tariff. First, there are a number of technical costs associated with making changes to billing systems to reflect the new price structure. These are influenced by issues such as the number of price points (i.e. how many SC points are there) and the extent to which information needs to be communicated to customers on their bills. Second, there are also likely to be a number of transition costs. Both callers and SPs would need to be informed about the new regime and hence OCPs and TCPs are likely to face increased enquiries from their customers.

9.341 The unbundled tariff may also reduce the regulatory costs for both Ofcom and stakeholders by reducing the number of disputes that we receive about termination rates for NGCs.

9.342 In addition to this high level discussion of the costs of the unbundled tariff, we have also undertaken a more detailed impact assessment of this option, including a quantitative analysis of the costs and benefits (Section 13). This helps inform our assessment of the proportionality of our proposals.

Summary of assessment of the maximum price and unbundled tariff options against criteria

9.343 The Table below summarises our assessment of the maximum prices and unbundled tariff options against the criteria.

[301] For example, there may be cases where business callers are currently not charged for calls to certain non-geographic numbers that are used for communication between employees of that business. Specifying a single AC might prevent such arrangements.

Table 9.4 Comparison of options against the assessment criteria

Criteria	Maximum Prices	Unbundled tariff
Consumer price awareness	• Simplest pricing message, greatest improvement in transparency • SPs can state exact price	• Improved price transparency compared to status quo • SPs can communicate their SC • More complex message than maximum prices
Efficient prices	• In principle maximum prices could be set at the efficient level that reflects consumers' preferences and addresses the horizontal and vertical externalities • In practice, significant risk of regulatory failure e.g. prices that do not reflect consumers' preferences	• Maximum SCs on number ranges and single AC across NGCs will mitigate the horizontal externality • Partially addresses vertical externality by allowing SP to select SC • Increased competition on the AC can lead to prices that better reflect consumer preferences • Constraints on the SC due to greater clarity of division of revenues and (for some services) competition between SPs. • It is dependent on the extent and effectiveness of increased competition.
Service quality, variety and innovation	• Lower mobile call prices and greater price awareness likely to have a positive effect on service quality and variety. • SP has control and can choose appropriate price point (within a limited range). • Restrictive maximum prices may prevent future pricing innovation by SPs.	• Increased price awareness likely to have positive effect on service quality, variety and innovation • SP can choose and control the SC (within limited range of price points) but not overall price of call.
Access to socially important services	• Increased price awareness (and potentially reduced prices) likely to improve mobile-only consumer's access to these services on the 084 range.	• Reduced prices and better price awareness likely to improve for mobile-only consumers' access to these services on 084 range
Regulatory burden	• Considerable regulatory burden, highly interventionist approach. Significant risk of regulatory failure. Maximum prices likely to need frequent regulatory review. • Some implementation costs for some OCPs from introducing a more granular set of retail prices. • Significant risk of numerous wholesale commercial disputes, causing uncertainty for industry.	• Reduces potential for wholesale disputes • Retains some pricing flexibility and less interventionist • Potential for significant implementation costs (but can be mitigated to some extent by design of the unbundled tariff)

Summary of impacts on different stakeholder groups

9.344 As part of the assessment above we have discussed the impact of the two options on different stakeholder groups. However we have summarised the key points relating to each group below for the maximum prices and unbundled tariff options.

Maximum prices

9.345 We consider that the impact of the maximum prices option on the various parties is as follows:

- Consumers/callers: will be presented with a clear pricing message for individual NGCs and are likely to benefit from lower NGC prices, but they will not be able to exercise much choice over the relative level of those prices. The pattern of retail prices, including the balance between NGC prices and the price of other telecoms services, may not therefore reflect their preferences. In particular, packages tailored to the requirements of specific groups of consumers may be harder to introduce. Consumers may be impacted by rises in the price of other calls as a result of the TPE. Callers will be presented with a clear and unambiguous pricing message by SPs, which will increase confidence in the cost of the call and reduce the risk that consumers overestimate prices. There may be improvements in availability but consumers may not benefit from future innovation by SPs on their pricing.

- SPs: will be able to advertise a single, unambiguous pricing message and may benefit from increased demand for services as a result. However, benefits from that control may be affected by revenue uncertainty as a result of commercial disputes between TCPs and OCPs on termination rates. In addition, innovation on pricing may be restricted by the maximum prices.

- OCPs (fixed and mobile): may share in some of the benefits of increased demand for NGCs as a result of consumers' greater price awareness and confidence. There will be limited ability to compete on NGC prices, because there would be limited headroom between the maximum price and the termination rate. Depending on the level at which maximum prices are set, there may be a significant tariff package effect, particularly for mobile OCPs. They are also likely to suffer from uncertainty and costs as a result of wholesale disputes.

- TCPs: may share in some of the benefits of increased demand for NGCs as a result of consumers' greater price awareness and confidence. Some revenue uncertainty is likely as a result of commercial disputes.

Unbundled tariff

9.346 We consider that the impact of the unbundled tariff on the various parties is as follows:

- Consumers/callers: will be presented with, and be able to choose, an AC which reflects their preferences as part of their overall phone package. They will also be presented with a clear message about the SC element of an NGC when receiving communications from SPs and reminding them that the total cost will also include their AC. We acknowledge that there will be a learning curve for consumers to understand this new pricing model, but we consider that that can be addressed through a communications campaign involving Ofcom, consumer groups and the communications providers.

- SPs: will be able to choose an SC (from a range of price points) and will have certainty that that SC will always be charged at the same rate to customers, regardless of their OCP. They will be able to advertise that SC clearly to their customers and thereby compete with other SPs on price. They will have an increased incentive to innovate and offer more services because of that revenue certainty and control, as well as the increased demand for services as a result of improved consumer price awareness. Increased competitive pressures and transparency may lead to some SPs to migrate their existing non-geographic number.

- OCPs (both fixed and mobile): will be able to communicate a much simpler pricing message for NGCs, i.e. the AC for a given package, without the need for long pricing lists of the different number ranges. The need for lengthy negotiations over termination rates will be removed because they will recover their costs from their customers, which will improve revenue certainty. In addition, OCPs will retain the flexibility to tailor the AC to meet different consumer preferences by offering different packages and levels. The increased consumer price awareness will also lead to an increase in demand for the services which will benefit OCPs. However there will be implementation costs e.g. changes to billing systems, and costs of explaining the unbundled regime to consumers.

- TCPs: may share in some of the benefits of increased demand for NGCs as a result of consumers' greater price awareness and confidence. Removing the need to negotiate their rates with OCPs will ensure revenue stability and investments in services for SPs. There will be implementation costs, e.g. costs of explaining the unbundled regime to their SP customers.

Conclusion on preferred approach

9.347 We consider that both maximum prices and the unbundled tariff are likely to represent an improvement over the status quo.

9.348 The unbundled tariff has the advantage of allowing competition to shape prices, rather than regulation. While we recognise that the maximum prices option may be perceived as simpler by consumers and in some cases may offer a clearer pricing message, we consider that the unbundled tariff will also offer improved pricing awareness compared to the status quo.

9.349 We consider that the unbundled tariff is more likely to result in efficient prices, and improvements in service quality, variety and innovation, compared to the maximum prices model, where there is a greater risk that prices will be set that do not reflect callers' and SP preferences.

9.350 In addition, the unbundled tariff offers a clear benefit in addressing the wholesale concerns, in particular by removing the need for negotiations over termination rates and the potential for disputes, which the maximum prices option fails to do. We have discussed the potential implementation costs of the unbundled approach but we consider that these can be mitigated through an appropriate design of this tariff and that the benefits will outweigh those costs. In other respects the regulatory burden and risk of regulatory failure is much lower for the unbundled tariff than for the maximum price option.

9.351 For the reasons set out in detail above, we consider that the unbundled tariff should be applied to the 08X (excluding 080), 09 and 118 number ranges.

9.352 Accordingly, our provisional conclusion is that the unbundled tariff is the best option available for addressing the consumer harms we have identified. The next Section goes on to consider how best to structure the unbundled tariff and sets out our proposals in this regard.

Q9.1: Do you have any comments on our provisional conclusion that the unbundled tariff should be applied to the revenue-sharing non-geographic number ranges, and in particular on the additional evidence (gathered since the December 2010 Consultation) which we have used to support our assessment?

Section 10

Design of the unbundled tariff

Introduction

10.1 The previous Section concluded that an unbundled tariff had advantages over setting maximum prices in tackling the concerns we have identified. In particular it has the advantage of allowing scope for competition and innovation in how NGCS services are provided to consumers.

10.2 This Section considers the characteristics and features of an unbundled tariff and how these might need to be regulated. It considers potential options first for the AC and second, for the SC. Finally it sets out proposals for the assumed handover point (‘AHP’) for NGCs under the unbundled tariff; this will determine how wholesale charges (notably transit payments) for these calls are established.

10.3 In determining what regulation may need to be applied with respect to the characteristics and features of the charges, we have considered options against the assessment criteria established in Section 5. In this Section, we only make specific references to those criteria where our assessment in relation to the option under consideration is materially positive or negative.

The Access Charge

10.4 In this sub-section we consider what measures related to the structure of the AC may be required for the purpose of protecting consumers in relation to the provision of NGCS. In particular, we address the following questions:

a) Should an OCP be able to offer multiple ACs within its portfolio of tariff packages?

b) Should an OPC be able to vary the AC within a tariff package for different number ranges?

c) Should the pricing structure of the AC be subject to tariff principles, namely:

- Should it be limited to a price per minute (‘ppm’) charge or could it include a price per call (‘ppc’) element (such as call set up charges)?

- Can there be a minimum charge per call?

- Should it be allowed to vary by the time of the day?

d) Should OCPs be allowed to include the AC in bundles? If so, are there conditions that should apply?

e) Should there be a cap on the AC that OCPs may set?

Varying AC between tariff packages

December 2010 Consultation

10.5 We observed that retail prices for NGCs often vary between packages offered by the same OCP.[302] On that basis, we argued that OCPs were likely to set different ACs for different packages in the absence of regulation.

10.6 We considered two options: allowing OCPs to vary the AC according to the tariff package purchased or prohibiting this variation.

10.7 We said that the advantage of prohibiting OCPs from setting different ACs for different tariff packages was greater simplicity and hence improved consumer price information. However, we proposed that this benefit was likely to be small.

10.8 We also said vulnerable consumers might benefit from a single AC per OCP regime, since it was likely to result in a lower AC for pre-pay customers. However, we considered that such a remedy would be highly intrusive and an indirect way of addressing a concern about access, which related to a minority of mobile subscribers in relation to a minority of calls to non-geographic numbers.

10.9 In contrast, we considered that there were a number of advantages in allowing OCPs to have different ACs for different tariff packages. It allowed OCPs to tailor their offers to different caller preference sets, and gave consumers a choice of package which suits their individual preferences for the balance of prices across the different services provided. We considered this should mean the OCP's pricing was more efficient than it would be if such variation were prohibited.

10.10 Overall we considered that the benefits of prohibiting variations of the AC across tariff packages would be small in comparison to the advantages of allowing them to do so and we therefore proposed that OCPs should be allowed the vary the AC across tariff packages.

Stakeholders' responses

10.11 Very few stakeholders explicitly responded on this point. BT agreed with Ofcom's proposal.[303] Vodafone saw no good reason to prevent OCPs from offering differentiated standard AC on different tariffs to reflect varying customer needs and preferences.[304] EE also expressed similar views.[305]

10.12 TNUK was concerned with the option that would allow the AC to vary between tariff packages, because it considered this would undermine consumers' ability to estimate the cost of calls as it would not be possible for any promotion of services to offer a definitive price for a given provider.[306]

Our considerations

10.13 Having considered these responses, we remain of the view that the AC should be allowed to vary across tariff packages for the reasons outlined in the December 2010

[302] See December 2010 Consultation, paragraphs A5.27-A5.30 for further details.
[303] BT, December 2010 Consultation response, p.15.
[304] Vodafone, December 2010 Consultation response, paragraph 88.
[305] EE, December 2010 Consultation response, Q6.4, paragraph 8.
[306] TNUK, December 2010 Consultation response, p19.

Consultation. We consider that four of our assessment criteria are particularly relevant to this issue, namely consumer price awareness, efficient prices, access to socially important services and the regulatory burden.

Consumer price awareness

10.14 While a single AC across all tariff packages has the advantage of greater simplicity, we consider that consumers are familiar with charges varying by tariff package, since this is how telephone services are typically marketed to them. Furthermore, provided there is a single AC per tariff package (see next sub-section paragraphs 10.43 to 10.85), it will be easy for OCPs to communicate that and for consumers to make a comparison between packages and between OCPs.

10.15 We understand TNUK's concern about consumer confusion and limits on the ability to advertise a definitive price, but we do not consider that a restriction requiring a single AC per OCP would provide the clarity that TNUK suggests. Unless we were to specify a single AC for all OCPs (or one for fixed and one for mobile OCPs) then there would still be, across all OCPs, a large number of different ACs. As a result, it would, in all likelihood, be difficult for SPs to present the full range of ACs present in the market in their advertising.

10.16 We consider consumers are most likely to remember the AC on a per call basis through repetition in the presentation of the AC on their bills and other contract material. Clarity at the point of sale of the AC should be provided through its clear presentation as part of the tariff package components on offer (see Section 12 for further discussion of the publication obligations that are likely to apply to the AC).

10.17 We therefore consider that there is unlikely to be a material advantage in terms of enhancing consumer price awareness in imposing a tariff principle that each OCP may only set one AC across all its tariff packages.

Efficient prices

10.18 Consumers clearly have different concerns and preferences with respect to call charges. This can be inferred from the range of tariff packages on offer.[307] Allowing OCPs the freedom to vary the AC between tariff packages will enable them to offer consumers the opportunity to trade off the AC charge with the charges for other services and choose a package that is best suited to their individual preferences for the services provided. This should result in prices that are more efficient than those that might result if such variation were prohibited

10.19 In contrast, the imposition of a single AC for a given company will limit the scope of the OCP to design tariff packages that can cater for consumer preferences and therefore is more likely to result in less efficient prices. Therefore, in relation to this criterion, we consider that continuing to allow OCPs to vary the AC by tariff package will achieve the better outcome for consumers.

[307] For example, Vodafone currently offers a 'bolt on' that allows subscribers to include 080, 0845 and 0870 within their bundle of inclusive minutes in return for a higher monthly fee. Under the unbundled tariff system, a comparable offering would be a low AC in return for a higher monthly fee. Similarly, as explained below it is possible that the AC for pre-pay mobile subscribers may be different to that for post-pay subscribers.

Access to socially important services

10.20 In 2010, some (but not all) mobile OCPs charged pre-pay subscribers higher prices for calls to non-geographic numbers than post-pay subscribers.[308] Moreover, mobile OCPs earn an additional revenue source from post-pay subscribers, namely the monthly subscription charge. This suggests that the AC for pre-pay mobile subscribers may be higher than for post-pay subscribers. If we were to require mobile OCPs to set a single AC for all consumers, this might lead to a slightly lower AC for pre-pay subscribers and a slightly higher AC for post pay subscribers.

10.21 Vulnerable consumers are more likely to be in mobile only households.[309] There is also evidence that they are more likely to use pre-pay rather than post-pay contracts.[310] Preventing OCPs from varying the AC between tariff packages might thus assist vulnerable consumers in obtaining access to socially important services, by reducing the AC for pre-pay mobile subscribers. However vulnerable consumers on post-pay contracts would face higher prices.

10.22 However, we consider that the magnitude of this benefit is likely to be small (given post-pay prices might rise and since not all mobile OCPs set different pre-pay and post-pay prices).

10.23 Equally, it is likely that while mobile companies may seek to ensure that the total revenue collected through the AC is similar to that collected now, this does not necessarily mean that the distribution between pre and post pay customers would be the same, as mobile companies will need to consider the sensitivity of the different customers groups to this more explicit charge.

Regulatory burden

10.24 In the December 2010 Consultation, we said that preventing OCPs being able to price discriminate in relation to the AC could increase the regulatory burden on OCPs. It is certainly a more interventionist approach for which we consider there is limited consumer benefit, as set out above.

Conclusion on varying the AC between tariff packages

10.25 In our view, the application of the assessment criteria to these alternative options favours allowing OCPs to vary the AC by tariff package. While a single AC per OCP may secure some benefits in terms of consumer price awareness and access to socially important services, these are, at best, not materially greater than those that

[308] For example, on Orange's most popular tariffs the difference was 10ppm for an 080 number (15ppm compared to 25ppm), 20ppm for an 0870 number (20ppm compared to 40ppm) and 5ppm for an 0871 number (35ppm compared to 40ppm). On O2's most popular tariffs the difference was typically smaller: 5ppm for an 080 number (15ppm compared to 20ppm) and a 0870 number (20ppm compared to 25ppm) and there was no difference for an 0871 number (both are 35ppm). On T-Mobile, headline prices were the same on its most popular pre-pay and post-pay tariffs for 080, 0870 and 0871 numbers (40ppm in each case). Responses by Orange (30 June 2010), O2 (20 July 2010) and T-Mobile (20 June 2010) to information request dated 25 May 2010, section A, question 6.
[309] Our definition of vulnerable consumers includes those in households that are involuntarily mobile-only and those on low incomes. Low income households are more likely to be mobile only – see *The Consumer Experience Report 2011*, Figure 27 on page 25.
[310] For households in socio-economic group DE with a mobile phone, 67% were pre-pay and 33% were post-pay (compared to 48% and 52% across the population as a whole). *The Consumer Experience Report 2011*, Figures 23 and 24 on page 23. In addition, in the 2010 CAB survey, 59% of mobile-only respondents were on pre-pay contracts.

would result from allowing OCPs to have different ACs for different packages. Furthermore, such a restriction carries a significant risk of material disadvantage as regards efficient prices and regulatory burden, which outweigh the limited consumer benefits. We therefore consider that it is appropriate to allow OCPs to vary the AC by tariff package.

Varying the AC within a tariff package

Position in the December 2010 Consultation

10.26 The December 2010 Consultation considered the following two broad options:

- Not specifying any tariff principles governing the way in which the AC can be structured within a tariff package; and
- Specifying tariff principles that prevent the AC from varying in certain ways.

10.27 Within the second option, we considered two variants: (i) specifying a principle that the OCP should not set different ACs for calls to different non-geographic number ranges; and (ii) specifying a principle that the AC should be charged on a uniform ppm basis at all times of the day. In the discussion below, we consider only the first of these. Our assessment of the latter is set out at paragraphs 10.86 to 10.136.

10.28 We said that the key trade-off between the broad options of whether or not to specify principles that would restrict the structure of the AC was that, in principle, allowing ACs to vary across each number range may send more efficient price signals to callers (for example about the underlying costs of providing a particular call). We said, however, that such efficiencies were only realised if callers were aware of these differences in prices and were able to take them into account. We noted that as the complexity of tariffs increases, callers would find it more difficult to respond in this way. Increasing complexity could lead to detrimental effects, such as poor price awareness and higher NGC prices (which, in turn, suppress demand).

10.29 In terms of allowing OCPs to have different ACs for different non-geographic number ranges, we acknowledged that the cost of retailing calls to different numbers could vary and that there would be a benefit in allowing the OCP to take account of this by setting different ACs. We said that the greatest difference in cost appeared to derive from bad debt costs and that these were, in particular, associated with calls to the 09 range.

10.30 Nonetheless, we considered that the benefits of requiring the AC to be the same across all number ranges outweighed the benefits of not doing so. We said that consumers would find it difficult to remember different ACs for different ranges given that their ability to distinguish between number ranges is limited and they make relatively few calls to each range. We noted that the proportion of calls to the 09 range is particularly low.

10.31 We accepted that setting the same AC for calls that attract a higher bad debt risk (such as 09 calls) as for other calls where this risk was smaller (such as 08 calls) was likely to decrease the OCPs' margin on the former call type but increase the OCPs' margin on the latter call type. However, our analysis suggested that the magnitude of this effect was slight and did not outweigh the disadvantages of allowing the AC to vary by number range.

Stakeholders' responses

10.32 Most OCPs argued for allowing the AC to vary depending on the number range, and specifically that there should be two ACs, one for the 08 range and one for the 09/118 ranges. They used different arguments for supporting their preference. Most argued that bad debt was the main factor in favour of a higher AC for some number ranges, but others also referred to differences in consumer preferences and in administrative and network costs. Some also argued that prescribing a single AC across number ranges would stifle innovation.

10.33 BT agreed the AC should be as simple as possible.[311] A single AC would allow this, but it argued that rules needed to be flexible to allow for future development.

10.34 C&W put forward some overarching principles related to the AC.[312] It argued that the AC needed to be transparent – i.e. clearly referenced by OCPs and SPs – simple and easy to understand and relevant to consumers making the call. This notwithstanding, C&W favoured two ACs – one for number ranges for which the risk of bad debt was higher and another to allow OCPs to include lower risk number ranges in bundles of minutes. C&W argued that the AC should include origination, transit (if required) and the costs of bad debt. All OCPs should be able to reflect the cost of recovering bad debt in the AC because it is the OCP who had the greatest influence over the levels of bad debt that would be experienced. Hence, it considered it was best if the OCPs took the lead on this. C&W argued that today's arrangements did not incentivise the efficient recovery of bad debt as the costs were ultimately borne by SPs.[313]

10.35 Vodafone questioned whether Ofcom needed to go as far as to specify a single AC per tariff for all NGCs subject to the unbundled tariff.[314] Vodafone noted that Ofcom had recognised in the past that PRS calls (primarily on the 09 range) had a different risk profile and suggested that it would not be appropriate to recover the bad debt costs largely driven by PRS from all NGCs. Vodafone considered that if Ofcom decided to impose a single AC per tariff restriction it should not impose any other restrictions on the structure of the AC.[315] [✂].[316]

10.36 O2 argued that a single AC for all NGCs did not reflect consumers' preferences.[317] In O2's experience calls to the 0845 and 0870 number ranges were more popular than other ranges, therefore, O2 argued, on efficiency grounds, against a pricing structure that caused the services that were consumed more to increase in price whilst the price of those services that were consumed less (and carried higher risks of bad debt) would decrease.

10.37 Three similarly noted that the level of bad debt was significantly higher on 09 calls than on 08 calls.[318] It said that setting a single AC meant that the majority of consumers making calls to 08 numbers would "effectively subsidise" the minority that made 09 calls. Therefore, Three considered that separate ACs across different non-geographic numbers were more appropriate.

[311] BT, December 2010 Consultation response, p.15.
[312] C&W, December 2010 Consultation response, pp.15-23 and 25-26.
[313] C&W, December 2010 Consultation response, p. 21-22.
[314] Vodafone, December 2010 Consultation response, para 87.
[315] Vodafone, December 2010 Consultation response, paras 87-88.
[316] [✂].
[317] O2, December 2010 Consultation response, paragraph 123.v.
[318] Three, December 2010 Consultation, paragraph 72.

10.38 Similarly, UKCTA argued that two different AC rates should be allowed, one for 'business rate' and one for 'premium rate'. UKCTA identified higher network and administration costs as a justification for permitting a higher AC for 09 and 118 calls. In particular, UKCTA referred to the requirement to have pre-call announcements on some calls, permitting the caller to end the call without charge.[319] It said it accepted the concept that a single price was easier to remember but it dismissed the value of that benefit due to consumers' own admission that they paid little or no attention to the price of these calls.[320] TalkTalk and Sky also supported this view.[321]

10.39 EE considered that there should be at least two ACs for each OCP tariff package, one for 08 and 07 non-geographic ranges and one for 09 and 118.[322] EE agreed with the view put forward by UKCTA that this would allow the AC to be set to reflect more accurately the different underlying costs (i.e. bad debt, administrative and network costs etc.).[323] EE did not consider that this would make the AC structure significantly more complex or less likely to be recalled by consumers and stated that consumers were already aware that 09 charges were higher than 08.

10.40 Magrathea held strongly to the position that more than one AC per tariff package would be problematic for consumers.[324] It considered that only the simplest form of AC within tariff packages and between OCPs would be acceptable and support competition. It considered that more than one AC within a tariff package would be too complex for consumers to recall or utilise in their decision making. TNUK [325] was also concerned about the options that would allow the AC to vary between ranges, because it considered this would increase the difficulty for consumers when recalling the AC.

10.41 In addition, outside of the responses to the December 2010 Consultation, during the discussions at the industry Commercial Working Group ('CWG'), it was noted that the majority of group members supported having two ACs.[326]

Our considerations

10.42 Having considered the responses of stakeholders, we remain of the view that there is a need for a limit on the number of ACs within a given tariff package for the purpose of consumer protection. In particular, we consider that there will be material benefits in terms of enhancing consumer price awareness and these outweigh the potential for limited disadvantages in terms of efficient prices.

10.43 Further, we believe that these arguments favour a single AC across all number ranges. The evidence set out in Annex 8 confirms the extent of poor consumer price awareness for calls to non-geographic number ranges.[327] In view of our assessment of the consumer harm that this results in, we believe that for the purpose of

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[319] UKCTA December 2010 Consultation response, page 8
[320] UCKTA, December 2010 Consultation response, p.7.
[321] TalkTalk, December 2010 Consultation response, p.3. Sky, December 2010 Consultation response, p.8-9.
[322] EE, December 2010 Consultation response, paragraph 8.b. and answer to Q6.4, para 8-12.
[323] UKCTA, December 2010 Consultation response, p.7.
[324] Magrathea, December 2010 Consultation response, at pp. 7-8.
[325] TNUK, December 2010 Consultation response, pp. 19-20.
[326] See Annex 14 for a summary of the CWG discussions.
[327] In particular, as discussed in Section 11, the 2011 Consumer survey indicates that many consumers struggle to distinguish between numbers based on the fourth dialled digit such as 0843/4 and 0845 and 0870 and 0871/2/3.

protecting consumers, there is a strong need for simplifying the pricing structures for calls to non-geographic numbers.

10.44 While there was little disagreement about the need for simplicity, the submissions of the majority of respondents supported an approach which would allow at least two ACs to reflect the difference in demand and/or the differences in costs (due to higher bad debt risk) between 084 and 087 calls compared to 09 and 118 calls.

10.45 We consider there are two key factors that need to be taken into account when considering, the case for permitting different ACs:

- bad debt and other differential costs; and
- consumers' preferences

10.46 We discuss each in turn with reference to our assessment criteria.

Bad debt

10.47 A number of stakeholders have identified differences in underlying costs between 08 and 09 as being a justification for separate distinct ACs between these ranges.

10.48 We first set out background information in relation to this issue, particularly the question of bad debt. We then discuss the two assessment criterion that are particularly relevant, namely consumer price awareness and efficient prices.

Background

10.49 The payment nature of the NGCs market is such that even where OCPs are able to link a given call to a consumer's failure to pay a, they are unable to withhold payment for that call from the TCP/SP. This is because OCPs' payments for calls to TCPs/SPs are independent of their billing of their customers – termination payments are frequently made in advance of the collection of charges from customers.

10.50 This does not mean that there is no allowance for the costs of managing any customer bad debt in the termination rates the OCP pays to the TCP. As we explain below, BT is allowed to retain a higher level of revenue for 09 numbers as a consequence of the costs of bad debt management and this retention, in turn, influences the termination rates paid for these numbers by other CPs.

10.51 In the NTS Retail Uplift Statement (published in July 2011), we said that BT experienced a higher level of bad debt in relation to PRS calls (broadly, calls to 09 numbers) and we identified a number of factors which might contribute to the higher incidence of bad debt:[328]

- the average pence per minute charge for PRS calls is much higher than for other call services;
- calls may be more likely to have been made without the bill payer's consent; and
- the service is more likely to be subject to undetected fraud.

[328] NTS Retail Uplift Statement, paragraph 5.56.

10.52 We, therefore, decided that BT should be allowed to retain 5.2%[329] of retail revenues from PRS calls to reflect the costs of managing bad debt on these calls (this is referred to as the "PRS Bad Debt Surcharge").[330]

10.53 It is worth noting that in our NTS Retail Uplift Statement we did not recognise any other material difference in the cost of administering 08 and 09 calls other than the bad debt (i.e. we have not found that the other administrative costs, identified by UKCTA and EE amongst others, to be material). Equally, BT has never sought special allowance for origination costs arising out of PCAs.

10.54 Given the findings set out in our statement on the NTS Retail Uplift, we have considered, in applying our assessment criteria, whether bad debt linked to 09 and 118 numbers is materially higher than for other calls, and therefore whether it is justified to allow OCPs to set a different, higher AC to reflect bad debt.

Consumer price awareness

10.55 In order to understand whether consumer price awareness would be adversely affected if the OCP were permitted to set a second higher AC on 09/118 numbers it is useful to consider the following factors:

- whether consumers would be able to distinguish the 09 and 118 ranges from other non-geographic number ranges; and
- whether consumers would understand that they would face a different AC for calls to that range and remember what that AC is.

10.56 In terms of the first issue, consumers do seem to distinguish between 09 calls and 08 calls. For example, the mean expected price given by respondents to the 2009 Consumer survey was higher for 09 calls than for 08.[331] This is perhaps unsurprising, since these numbers differ at the level of the second digit. We thus agree with EE that consumers are likely to recognise that 09 calls are more expensive than 08 calls. Although we do not have evidence on this point, it also seems plausible that consumers are also capable of distinguishing 118 calls from 08 calls.

10.57 However while consumers might recognise that the overall price of 09 and 118 calls is higher than 08 calls, they might assume that this is simply due to the higher SC for 09 calls (given the nature of the services offered via 09/118 numbers). In other words, they might not recognise that the AC component was higher. Moreover, even if they were aware that the 09/118 AC was higher, it may be difficult for them to recall how much higher it is.

10.58 In the 2010 Consumer survey we asked consumers how often they made calls to 09 numbers from their landline and their mobile phones. The results are set out in Table 10.1 and they demonstrate that few consumers call 09 numbers. This is consistent

[329] The PRS Bad Debt Surcharge reflects the increased costs of bad debt associated with PRS calls over and above that of other NTS calls.
[330] NTS Retail Uplift Statement, paragraph 1.6. This is in addition to the NTS Retail Uplift where we imposed a price cap of RPI+1.25%.
[331] The mean expected price for 09 calls from a landline was 70ppm compared to 41ppm for 0871 calls, 39ppm for 0870 calls and 30ppm for 0845 calls. The mean expected price for 09 calls from a mobile was 70ppm compared to 52ppm for 0871 calls, 51ppm for 0870 calls and 46ppm for 0845 calls. 2011 Consumer survey, questions 43 and 44.

with the results of the 2010 Flow of Funds study, which found that 09 and 118 call volumes were relatively low.[332]

Table 10.1: Frequency of making 09 calls

	Landline calls	Mobile calls
Regularly (every week)	0%	0%
Sometimes (every month)	4%	1%
Rarely (less than once a month)	16%	6%
Never	80%	92%

Source: 2010 Consumer survey, Q21 and Q25.

10.59 Given the infrequency with which consumers call 09 and 118 numbers, if a different AC is applied to these calls then we consider that most consumers are unlikely to remember its level. Indeed they may not even remember that the AC is different compared to 08 calls. Moreover the difficulties that consumers currently experience in relation to NGCs (see Section 8 and Annex 8) caution us against introducing too much complexity for consumers into any intervention. We thus consider that allowing the AC to vary between 09/118 and other numbers to reflect the higher bad debt risk or other costs would be less effective in terms of price awareness than if OCPs set a single AC for all number ranges.

Efficient pricing

10.60 As noted above, in the NTS retail uplift only bad debt was identified as a cost which was materially different between 08 and 09. We, therefore, focus on this cost in this consideration.

10.61 In principle, reflecting any higher costs associated with certain call types may send more efficient price signals to consumers. To help us gauge the importance of this factor, we now consider the potential price differential between the AC charges that bad debt would imply. Evidence from BT indicated that in the financial year 2009/10, its bad debt associated with calls to PRS numbers was 5.2% of retail revenue.[333] We consider that this can be assumed to be near or at the upper bound for the industry, given that it relates to fixed line services (which do not have the credit control advantages of pay as you go mobile services for poorer credit risk customers). In addition, BT is also subject to the Universal Service Obligation ('USO', meaning it is required to offer services to all customers on request), which may constrain its ability to control credit risks.[334]

[332] In 2009, there were 16,109m minutes of fixed calls to 084 and 087 numbers. This compares to just 267m minutes of fixed 09 calls and 268m minutes of fixed 118 calls. In 2009 there were also 2,492m minutes of mobile calls to 084 and 087 numbers. This compares to just 75m minutes of mobile 09 calls and 109m minutes of mobile 118 calls.
[333] NTS Retail Uplift Statement, paragraph 1.14. This evidence was audited by the accounting agency BDO.
[334] http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/universal-service-obligation/

10.62 Our estimates of a single AC and different ACs, based on current revenue retention levels are set out in Table 10.2 below.[335] This Table was calculated using data from the 2010 Flow of Funds study as follows:

- Under the unbundled tariff, OCPs' retention will equal the AC. We have used data from the 2010 Flow of Funds study to calculate OCPs' retention in 2009. We have then calculated what AC would generate the same level of retention for OCPs. To illustrate, suppose OCPs' average retention (in 2009) on one number range was X pence per minute and on another number range was Y pence per minute. This is equivalent to ACs of X and Y (if ACs vary between number ranges) or the weighted average of X and Y (if OCPs set a single AC).

- This implicitly assumes that OCPs' average retention does not change as a result of the unbundled tariff.[336] This assumption is made for modelling simplicity.

- The Table shows two cases. First, a different AC for 09 and 118 calls compared to 084 and 087 calls. Second, the same AC for all these calls.[337]

- We have added VAT at 20% in order to give an indication of the AC that consumers would pay (the figures in the 2010 Flow of Funds study all exclude VAT).

Table 10.2: Estimate of impact of specifying separate AC for 09 and 118 calls

	Estimated fixed AC	Estimated mobile AC
Single AC for 084, 087, 09 and 118 numbers	2.9ppm	16.1ppm
Different ACs for 084 and 087 compared to 09 and 118	2.4ppm for 084/087 calls 18.3ppm for 09/118 calls	14.8ppm for 084/087 calls 34.1ppm for 09/118 calls

10.63 This Table shows that there could be a material difference between an AC for the 08X ranges and a separate AC for 09/118 ranges, specifically the difference could be approximately:

- 15.9ppm for fixed OCPs; and

- 19.3ppm for mobile OCPs.

10.64 Based on the 2010 Flow of Funds study, the average price of fixed 09/118 calls was 89.8ppm and the average price of mobile 09/118 calls was 112.4ppm.[338] If we

[335] We set out similar figures at Table A5.5 of the December 2010 Consultation. Those figures excluded VAT and the 0870 number range and only considered a separate AC for 09 calls.
[336] This implies that the ratio of calls between different number ranges does not change. For example, if call volumes were to increase by X%, this increase is assumed to apply uniformly across all number ranges.
[337] As explained in Section 11, we are proposing applying the unbundled remedy to 0845 and 0870 as well.
[338] This includes both the OCPs' retention and the amount paid to the TCP/SP. Figures have been uplifted by 20% to reflect current VAT rates, so that they are comparable with the figures in Table 10.2.

assume that bad debt on these calls accounts for 5.2% of the retail price then this implies that average bad debt costs could be:

- 4.7ppm on a fixed 09/118 call; and
- 5.8ppm on a mobile 09/118 call.[339]

10.65 It is therefore clear that bad debt represents a material cost to OCPs. However, it is also clear that the difference in the estimated ACs for 09/118 and 084/087 calls is not solely due to bad debt. Indeed, bad debt might only account for around 30% of the difference in ACs in Table 10.2.[340]

10.66 There are a number of reasons why enabling OCPs to accommodate this difference by setting a different AC for 09/118 calls may not result in more efficient pricing than a prohibition on such differentiation.

10.67 First, we are concerned that competitive pressures on a separate AC for 09/118 calls might not be strong. As explained above, consumers make few calls to these numbers. As a result, consumers' awareness of this AC is likely to be low. This is likely to allow OCPs to exploit consumer confusion by setting the AC at an inefficient level, above that required to recover bad debt.

10.68 Moreover, in a fully competitive retail environment, while some provision on bad debt may be included in the costs against which a price is set, competition would ensure that there are incentives on retailers to minimise these costs in order to offer the lowest charges. However, since consumer awareness of the level of a separate AC for the 09/118 ranges is likely to be low, this may result in a lower level of competitive pressure on the charge, thereby reducing the incentive for effective credit management.

10.69 Second, since we propose that there may be different ACs for different tariff packages, it is open to the OCP to adjust its tariff package offerings to consumers to reflect their individual credit risk. If that is right, it is not clear that there is a need to adjust the AC to reflect credit risk by number range.

10.70 We recognise, however, that the approach we took in relation to BT's bad debt risk for PRS calls in the NTS Retail Uplift Statement might appear to be at odds with this analysis. In reality, we do not think that is the case. Key considerations on which our decision in the NTS Retail Uplift Statement was based do not apply to OCPs other than BT, and their retailing of calls to non-geographic numbers. Those elements were the regulatory constraints to which BT is subject, notably:

- its Universal Service obligations to provide access to its services[341];
- its adherence to the pricing limits in the Numbering Plan; and
- the restriction on the returns it can recover from the NTS/PRS calls under the NTS Call Origination Condition.

[339] This would almost certainly be an overestimate in the case of the mobile OCPs, given the lower credit risk of mobile callers, given the use of pay as you go and more extensive credit checking for new accounts and the absence of USO obligations.
[340] Namely, on fixed 4.7ppm (bad debt) divided by 15.9ppm (difference in ACs). On mobile the corresponding figures are 5.8ppm and 34.1ppm.
[341] USO 1.1, see http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/uso0703.pdf

10.71 Thus the approach in the NTS Retail Uplift Statement recognised that BT had constraints on its credit management and its ability to adjust prices and revenues to recover bad debt or invest in techniques to manage it. These circumstances will not be true for other CPs nor, if the NTS Call Origination Condition were to be lifted once the unbundled tariff is implemented, for BT either.

10.72 Our proposed unbundled tariff gives OCPs the freedom to set the level of the AC (see discussion below about the level of the AC - paragraphs 10.146 to 10.197). In doing so, they can make such adjustments as they consider appropriate to take account of the level of bad debt associated with 09 calls which they may face. Accordingly, we do not consider that our findings in the NTS Retail Uplift Statement are applicable here.[342] We remain of the view that allowing OCPs to set a different AC for 09/118 calls is not clearly beneficial in terms of more efficient prices for the reasons given.

10.73 Finally, we consider that actual price differentiation based on credit risk and cost differential is likely to be very small – far smaller in fact that the current differentiation in current average OCP retention between these ranges and at a level likely to further confuse consumers (as the two ACs would be almost identical).

Differences in consumers' preferences

10.74 O2 has submitted that OCPs should be able to set a different, lower AC to reflect a consumer preference for cheaper 084/7 calls. We consider that consumer price awareness and efficient prices criteria are particularly relevant to this.

Consumer price awareness

10.75 For the reasons given above, we consider that more than one AC in a given tariff package risks consumer confusion as to which numbers a given AC would apply, with the risk that they will only recall the more commonly used AC or that the additional complexity would undermine their capacity to recall any AC clearly.

Efficient pricing

10.76 In principle, it is likely to be more efficient for firms to recover a greater proportion of their fixed and common costs from relatively price inelastic services (so-called Ramsey pricing). We have considered whether differences in the elasticity of demand for 084/087 calls compared to 09/118 calls mean that allowing OCPs to charge different ACs for these calls would improve the efficiency of pricing.

10.77 As a preliminary point, O2 stated that the "0845 and 0870 ranges are more popular than 0871, 09 and 118 ranges. A price structure which causes those services that are consumed more to increase in price, whilst those services that are consumed less … to decrease in price appears to be inefficient."[343]

10.78 As discussed in Annex 8, given the different types of service available on some number ranges (particularly 09/118), we accept that there may be differences in consumers' elasticities across non-geographic number ranges. Indeed data from the 2010 Flow of Funds study suggests that OCPs' average retention varies across

[342] We discuss the on-going application of the NTS Call Origination Condition on BT in Section 12.
[343] O2 December 2010 Consultation response, paragraph 123(v).

number ranges for both fixed and mobiles. In 2009, the highest ppm levels of OCP retention came from 09 and 118 calls.[344]

10.79 The efficiency arguments assume that consumers have good price information that allows them to make informed decisions on whether or not making different NGCs or to subscribe to a particular OCP or package because the AC for a particular number range is low. However, the current situation provides ample evidence that when tariffs become complex consumers struggle to make informed subscription and/or calling decisions. In other words, for the efficiency arguments to be valid, consumers must be price aware and take price differences into account in making their calling and subscription decisions. We have doubts that this would be the case if OCPs were allowed to set different ACs for different number ranges.

10.80 If we allowed OCP to set different ACs for 084/087 calls compared to 09/118 calls, any difference may not be set on the basis of efficiency. Instead, our concern is that any differences in the AC are likely to reflect the fact that consumers may recall the AC for the number ranges they often call, but they may not be able to do so for those who they only rarely call. For example, given that consumers currently call 09 numbers much less frequently than 08 numbers, the OCPs may have an incentive to set a higher AC for those number ranges that consumers call less often and exploit their lack of price awareness.

10.81 In addition, there is no clear direction in the possible changes. The incentives on OCP may be to increase the price for 08 numbers which they consider to be less elastic in demand. This could be considered to be efficient, if not socially desirable.

Conclusions

10.82 We recognise that there are valid efficiency and cost reasons for allowing OCPs to vary the AC across number ranges.

10.83 However, these arguments only apply if consumers are aware of price differences and can act accordingly. We consider that there is significant risk that if OCPs were allowed to set different ACs for different number ranges, consumers will not be able to recall them at the point of calling or compare them across OCPs at the point of choosing an OCP. We doubt that consumers will be able to be aware and recall even two ACs (one for 09/118 and one for 084/087), given that the relatively low proportion of calls that consumers make to 09/118 numbers. As a result, consumer price awareness is likely to be higher if a single AC applies to all NGCs, rather than the AC varying across number ranges. Improved price awareness is an important reason why the unbundled tariff is likely to offer significant improvements on the status quo in addressing the consumer harm we have identified.

10.84 We also have doubts that, notwithstanding the different bad debt cost profiles and consumer preferences in relation to different number ranges, different ACs for different ranges to reflect that would result in more efficient prices than a single AC across the non-geographic number ranges. In particular, the risk is that rather than being set on the basis of differences in costs and consumers' preferences, the AC will be set on the basis of differences in consumers' price awareness across number ranges. This would tend to lower the efficiency of prices, rather than strengthen it.

[344] For fixed OCPs on average the retention on 09 and 118 calls was about 18pmm and 13ppm (36ppm and 23ppm for mobiles), respectively. This compares with fixed OCPs' average retention rates ranging between about 1ppm and 3ppm for the 08 (but 080) number ranges. The equivalent figures for mobile OCPs ranged between 11ppm and 13ppm. Figures exclude VAT.

10.85 Accordingly, we propose to implement a tariff principle that OCPs should have a single AC for calls to non-geographic number ranges for the purpose of protecting consumers. This is on the basis that allowing multiple ACs is likely to lead to a greater level of consumer detriment through the introduction of increased consumer confusion and may not deliver efficient prices.

Restrictions on the pricing structure of the AC

10.86 In this section we consider whether, and if so in what ways, it would be appropriate to impose tariff principles for the protection of consumers in relation to how the AC should be charged. Specifically:

- Should it be limited to a price per minute ('ppm') charge or could it include a price per call ('ppc') element (such as set up charges)?
- Can there be a minimum charge per call?
- Should it be allowed to vary by the time of the day?

10.87 Our consideration of whether there should be restrictions on the pricing structure of the AC is structured as follows:

- We set out our position in the December 2010 Consultation;
- We summarise stakeholders' responses to the December 2010 Consultation;
- We provide an overview of current price structures;
- We then consider whether it would be appropriate to allow different charging structures for the AC (for example on a ppc basis and call set up charges, as well as ppm).
- Last, we consider whether the OCP should be able to vary the AC according to the time of day.

December 2010 Consultation

10.88 In the December 2010 Consultation we considered two options:[345]

- providing OCPs with the freedom to structure the AC charges within each tariff package. This would allow OCPs to retain all the current retail price structures; or
- preventing the AC from including pricing elements other than a ppm charge.

10.89 We identified the key trade-off between the two options as follows. In principle, we noted that including a fixed component in the AC could reflect cost elements that did not depend on the length of a call, and thus could send price signals to callers that better reflected underlying costs. However, in practice, we concluded that these benefits were small. Callers believe that they make relatively few NGCs and were therefore unlikely to devote much effort to recalling the fine details of the AC. In other words, the majority of consumers were unlikely to be aware of (or respond to) price signals being sent to them. We considered that these limited benefits needed to

[345] See paragraphs A5.51 to A5.69 of the December 2010 Consultation.

be weighed up against its disadvantages relative to the second option, namely the likely increase in caller confusion from setting more complex AC structures.

10.90 For these reasons we concluded that it would be more appropriate to specify a tariff principle that the AC should solely consist of a ppm charge.

Stakeholders' responses

10.91 Stakeholders' responses covered three main issues: whether the AC should be restricted to a ppm structure; how to set the AC when the SC is levied on a ppc basis; and whether OCPs could apply set-up charges to NGCs.

10.92 First, most stakeholders argued in favour of allowing flexibility on the AC, although most agreed that some rationalisation would be appropriate. BT argued that the AC should be primarily set on a ppm basis. [346] However, it also argued that given that there would be ppc SCs (or ppm and ppc combinations) it would be appropriate for the AC to have the same format. Vodafone agreed that some standardisation might be needed, but queried how Ofcom's vision of a pure ppm AC sat with our view that SPs should have a wide discretion to determine their own charging structure.[347]

10.93 Three noted that currently retail prices were structured in four different ways: (i) ppm; (ii) ppc; (iii) ppc plus ppm; (iv) ppc with the first minute free then followed by a ppm charge for subsequent minutes.[348] It argued that these reflected the structure of wholesale charges and that all price structures should be allowed in the AC. It gave two reasons for this: because the unbundled tariff presented a significant risk for the OCPs' profitability; and also to provide some protection from fraudulent activity. On the other hand, C&W[349] believed that the AC should be made as simple as possible and should not be split into different types of charges (ppc and ppm) and should not be varied by call types. It expressed a preference for the AC to be specified on a ppm basis only.

10.94 Second, C&W also raised a specific issue in terms of the structure of the AC and the SC in some cases. It argued that Ofcom's preferred choice would give rise to "problems" as many non-geographic services were charged as ppc – e.g. voting services – whose duration could be very short but the charge might still be high. C&W argued that in this case the level of the AC was likely to be very small in relation to the SC and, hence, a simple competitively priced ppm AC would not recover the costs of origination. C&W argued that a more complex solution could be confined to "premium" services (for which it argued that a different and higher AC was warranted). For these calls C&W argued that the AC should have a minimum call charge of up to one minute. It considered that this would solve the concern identified. FCS similarly noted that with short duration calls a per minute AC might not collect the costs for the OCP and a simple solution would be to have an AC that was applied on a per call or per minute basis depending on the structure of the SC.[350]

10.95 Third, some fixed OCPs also argued for and against maintaining the common structure they have for non-geographic (and sometimes geographic) calls where they

[346] BT, December 2010 Consultation response, p.15.
[347] Vodafone, December 2010 Consultation response, para 89.
[348] Three, December 2010 Consultation response, paragraph 72.
[349] C&W, December 2010 Consultation, response, p. 22.
[350] FCS, December 2010 Consultation response, p.15.

also had a call set-up charge in addition to the ppm charge. BT[351] argued that such structures were simple to communicate and were already applied by BT to all chargeable geographic and NGCs. BT claimed that without a set up charge the AC would be higher; it noted that [✂] of its chargeable NGCs were not included in packages. BT estimated that if both the ppm AC and the set up fee were included in bundles the proportion of calls outside the package would fall to only [✂]. C&W[352] instead argued against explicit set-up call charges in the AC but, as set out above, proposed a minimum call charge to cater for the higher proportion of short duration calls on the 09 range. EE[353] put forward a similar proposal and agreed with the UKCTA proposal that where an OCP charged a set up charge for all calls in a specific call plan they should be allowed to continue to include a connection charge in their AC.[354]

10.96 Outside of the responses to the December 2010 Consultation, [✂] suggested that it would be preferable to remove all restrictions on the AC as it considered these were unnecessary restrictions on OCP pricing freedom. It considered that competitively determined retail prices were likely to best reflect consumer preferences and enable efficient cost recovery.[355]

Current price structures

10.97 In this sub-section we first examine the price structures that currently exist for NGCs and try to understand the underlying reason for their presence. Then we assess the charging options against our assessment criteria and respond to the main arguments put forward by stakeholders.

10.98 Currently retail call charges for NGCs are expressed in many different ways. Although the ppm structure is substantially more common than ppc, there are additional variations including, for example, a set-up (or a ppc) fee followed by a ppm charge and a minimum of one minute charge.[356] Some of these retail charges reflect the wholesale termination rates structure chosen by SPs. Other pricing structures, such as call set-up charges, may have no wholesale equivalent.

10.99 For example, BT retail charges for geographic and NGCs include, in the majority of cases, call set up fees.[357] Call connection charges also exists for NGCs in TalkTalk and Virgin Media call plans.[358] Mobile operators[359] on the other hand do not make

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[351] BT, December 2010 Consultation response, p.15.
[352] C&W, December 2010 Consultation response, p. 23.
[353] C&W, December 2010 Consultation response, Q6.4, paragraph 19.
[354] UKCTA, December 2010 Consultation response, p.8.
[355] [✂].
[356] We have not undertaken a thorough review of all retail call charge structures currently existing, but just identified the most common types of charge structures.
[357] See for example http://www.productsandservices.bt.com/consumer/assets/downloads/BT_PhoneTariff_Residential.pdf.
[358] See TalkTalk Essentials (https://sales.talktalk.co.uk/pricing/package/essentials); TalkTalk Plus (https://sales.talktalk.co.uk/pricing/package/plus); Talk UK Evening & Weekend (https://sales.talktalk.co.uk/pricing/package/eveweekend); and Talk UK Anytime (https://sales.talktalk.co.uk/pricing/package/anytime). Virgin Media's NGC Call prices are listed here: http://shop.virginmedia.com/phone/calling-costs.html
[359] See for example Vodafone (http://www.vodafone.co.uk/personal/price-plans/pay-monthly/call-charges/index.htm?ssSourceSiteId and http://www.vodafone.co.uk/personal/price-plans/pay-as-you-go/call-charges/index.htm) and O2 for 09 charges (http://www.o2.co.uk/assets2/PRODImages/PDF/PremiumRateNumberCharges.pdf).

use of call set up charges, but often apply a one minute minimum call charges for NGCs.

10.100 At the wholesale level there are substantial differences in the termination price structures depending on the number range:

a) there is only one termination rate price band in the 0845 range and it is expressed in ppm;[360]

b) for 0843/4 and 0871/2/3 97% of call minutes were based only on ppm tariffs; [361]

c) for 09, the top 20 wholesale charge bands ranked by call minutes account for 94.4% of 09 traffic. Of these three-quarters are charged on a ppm basis;

d) for 118 the wholesale charges for most traffic includes a set-up charge of some kind.[362]

Should OCPs be able to adopt different charging structures for the AC?

Consumer price awareness

10.101 We have explained already that the design of the AC should be simple if it is to enhance consumer price awareness. It is important that consumers are able to easily recall the AC, have an understanding as to how it will apply in the charge for a specific call, and be able to compare ACs between OCPs. Given that, in 2009, calls to non-geographic numbers only accounted for 20% of fixed call minutes and under 3% of mobile call minutes, it seems plausible that the AC will not be at the forefront of most consumers' minds.[363] This emphasises the importance of simplicity.

10.102 Allowing the AC to vary in structure between OCPs, even if only to reflect existing patterns of pricing behaviour risks undermining this aim. Different charging structures may make it harder for consumers to understand how calls to non-geographic numbers will be charged. They will also make it harder for consumers to recall and compare ACs in different packages and of different OCPs at the point of subscription and at the point of calling.

10.103 We do not accept Vodafone's argument that this position is at odds with the stance we have taken in relation to the SC. As we argued above in Section 9, there is scope for consumers to learn the AC but this relies on the structure of the AC being consistent. Equally, we noted there is less scope for consumers to learn the SC but in this case price transparency is secured through the price publication obligations we are proposing to impose on SPs in relation to the advertising of the exact SC (see Section 12, paragraphs 12.149 to 12.178). Advertising of the exact AC by SPs in

[360] See the BT carrier price list, Section B1.06. This does not take into account the variations caused by BT's tiered termination rates (which are explained in Section 3), https://www.btwholesale.com/pages/static/Library/Pricing_and_Contractual_Information/carrier_price_list/cpl_sectionb1telephony.htm

[361] The information provided here and in c) below, is based on volume data for the month of August 2011 provided to us by BT, C&W, Sky, O2, Everything Everywhere, Three, 4D Interactive, IV Response, Gamma and Zimo. The information can therefore only be thought as indicative. It was provided as a follow up to discussions at the Commercial Working group on 14 July 2011 (http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-14072011).

[362] BT Carrier Price List, Section B3.46.

[363] 2010 Flow of Funds study, pages 2 and 4.

relation to a particular non-geographic number will not, in contrast, be possible because it will vary between packages and between OCPs. Accordingly, it is more important to ensure a pricing structure that is more readily understood and recalled by the consumer so that s/he is able to make a reasonable estimate of costs at the point of calling.

10.104 Furthermore, it is not the case the SPs will have complete freedom in relation to the setting of the SC - we are proposing to restrict the number of SC price points as explained at paragraphs 10.346 to 10.367.

Efficient prices

10.105 In principle, allowing OCPs to include a ppc component in the AC might lead to more efficient pattern of prices for a number of reasons:

i) First, there may be benefits from having the AC and SC for a particular call structured in the same way; and

ii) Second, it might better reflect the underlying costs of the call.

10.106 We address these arguments in turn below.

10.107 In terms of the first issue, BT considered that it would be appropriate for the AC price structure to mirror that of the SC – i.e. where the SC is a ppc charge then so should the AC. We do not consider that generally there is an efficiency rationale for the AC and SC price structure to match. Indeed, the current price structure of BT's retail and wholesale charges shows that often their structure differs – i.e. the retail call set up charges are not present at the wholesale level.

10.108 Under the current framework the wholesale charge bands are an input into the OCPs' retail prices, in that the retail price includes the costs of origination, the termination rate and the SC. As a result, the OCP is more likely to follow the ppc or ppm structure of the wholesale termination charges in setting its retail price. This will not be the case under the unbundled tariff. The AC and the SC will be set separately and will be presented to the consumer as two distinct prices. It therefore seems less likely that the OCP will wish to use the SC charging structure as a template when setting its AC.

10.109 Moreover even if there were benefits from structuring the AC and the SC for a particular call in the same way, reflecting variability in the SC between different numbers would require variability in the AC between different numbers.[364] For example, if the SC for one number is a ppc and a ppm amount whereas the SC for another number is a ppm amount then a uniform AC cannot mimic the structure of prices to both numbers. Rather, the AC for calls to the first number would need to be a ppm and ppc amount whereas the AC for calls to the second number would a ppm amount. This would clearly be more complex for consumers and therefore diminish the benefits of improved price awareness associated with the unbundled tariff.

10.110 We understand Three's concerns that there is a risk that the unbundled tariff poses a threat to the OCPs' profitability and flexible pricing structures provide protection against fraudulent activities. However, under the unbundled tariff we do not propose

[364] To put the same point in another way, the suggestion that the AC should always include a ppc and ppm element would mean that, where the SC is simply structured as a ppm charge, the structure of the AC and the SC differs.

to regulate the level of the AC set by the OCP (see below paragraphs 10.146 to 10.193) therefore, there will not be any regulatory constraint on the OCPs' profitability.

10.111 In terms of the second issue, there may be a small ppc element to the costs of a call. Call setup requires exchange of signalling information (e.g. called party number) between OCP and TCP. This exchange of information uses network resources (e.g. transmission resources). Although, this resource usage is likely to form a small proportion for most calls, it might be a significant proportion of short-duration calls, such as calls to voting lines, which can last just a few seconds

10.112 We thus accept the argument C&W, FCS and Three put forward that where the call is short, a ppm charge may not cover the costs of origination. There is also the risk that a near zero origination charge could allow the type of short call fraud identified by Three. C&W suggests that for these calls, OCPs should be allowed to set a minimum call charge of one minute, which would address both these concerns.

Conclusion

10.113 We consider that, subject to a minimum call charge, the efficiency argument for variable charging structures does not outweigh the consumer price transparency benefits of a single charging structure for the AC. For the purpose of protecting consumers, we are therefore proposing to implement a tariff principle that the AC should be structured on a uniform basis by OCPs. However we consider that there is merit in allowing OCPs to specify a minimum call charge option that is linked to the ppm charge. On the basis of stakeholder comments, we propose that a minimum call charge equivalent to the price of a one minute call is appropriate.

<u>Time of day ('ToD') variation</u>

10.114 The discussion of whether it is appropriate to allow ToD variations in the AC raises similar issues to those we have addressed in above in relation to variable pricing structures for the AC.

December 2010 Consultation

10.115 In the December 2010 Consultation we considered two options: either allowing ToD (price structure) variations of the AC or not allowing such variations.

10.116 We stated that allowing OCPs to vary the AC by time of day potentially sent a price signal to encourage callers to use networks when they were less busy. However, in practice, we considered that those benefits were small compared to the added complexity and the greater scope for consumer confusion that would result from having different charges for different times of day. In summary, we considered that preventing OCPs from setting ToD variations in the AC would be more appropriate.

Stakeholders' responses

10.117 Not many stakeholders covered this issue in their response.

10.118 BT argued that while it might not make sense to have a time of day variation today, such variation might be needed in the future – i.e. it wanted to build flexibility in to the structure of the AC.[365]

10.119 EE agreed with Ofcom that the benefits of allowing time of day variations were likely to be outweighed by the level of complexity that it would add to the AC.[366]

10.120 C&W also argued that time of day variations were not required. [367] It argued that this type of variation might be sensible in some cases, but the arguments in favour were not compelling when considered against the advantages of ensuring that prices were clear and easily understood. It referred to the 2011 MCT Statement where mobile termination rates were constrained to a single maximum charge applicable to all times of the day. To the extent that the AC could be included in bundles and these bundles were ToD specific (i.e. free calls at certain times of the day), C&W argued that this would allow ToD differences to be reflected to a certain extent.

10.121 Virgin Media[368] instead was of the view that the unbundled tariff imposed too many restrictions on OCPs, including the time of the day restrictions on the AC. It further noted that this restriction did not apply to the SC and that that inconsistency not only implied that OCPs were unable to "track" the underlying wholesale input costs of their retail services, but also created opportunities for arbitrage.

Our considerations

10.122 Below we discuss the two assessment criteria that are particularly relevant to ToD variation in the AC, namely consumer price awareness and efficient prices.

Consumer price awareness

10.123 ToD variations have the potential to confuse consumers, particularly as OCPs and SPs do not operate consistent definitions of peak and off-peak periods. Such variations can triple the number of prices that consumers will need to remember (namely the day, evening and weekend AC). Accordingly, they are not desirable against this criterion. Moreover, as explained above, calls to non-geographic numbers account for a relatively small proportion of call minutes (especially for mobile OCPs), so it seems plausible that the AC will not be at the forefront of most consumers' minds. This emphasises the importance of simplicity.

Efficient pricing

10.124 ToD variations may serve two purposes. First, they are used to manage peak traffic and avoid inefficient investment in capacity. Second, they allow OCPs to price discriminate between consumers. Both potentially have an efficiency rationale. However, as NGCs are only a small proportion of all calls it is unlikely that these have a major role in peak traffic management.[369] This limited role is reinforced by consumers' likely limited awareness of ToD variations in prices (since most consumers would not respond to price signals encouraging them to originate calls at times when network congestion is likely to be high).

[365] BT, December 2010 Consultation response, p.15.
[366] EE, December 2010 Consultation response, Q6.4, paragraph 20.
[367] C&W, December 2010 Consultation response, pp. 23-24.
[368] Virgin Media, December 2010 Consultation response, p. 20.
[369] In 2009, calls to non-geographic numbers only accounted for 20% of fixed call minutes and under 3% of mobile call minutes. 2010 Flow of Funds study, pages 2 and 4.

10.125 In relation to price discrimination, it is important to distinguish between cases where consumers' underlying elasticity of demand varies by time of day (e.g. if consumers were more price sensitive when making calls at the evening compared to calls during the day) and cases where consumers are less aware of prices at certain times of the day. It is not clear to us that any time of day variations in elasticity are significant. Indeed even those stakeholders that favoured ToD variation on the AC did not argue that this was the case.[370]

10.126 Turning now to the issue of whether the AC should be permitted to vary by ToD in response to ToD variations in the SC, as set out later in this Section (paragraphs 10.222 to 10.247 we are not intending to prohibit ToD variation in the SC. However, we also note there are likely to be significant technical challenges for industry in establishing SCs that vary by ToD (since such ToD variation effectively involves using three price points and would require standardising the definition of day, evening and weekend between TCPs/SPs and OCPs – see the summary of the Technical Group discussion (Annex 14)). We thus consider ToD variation in the SC may be unlikely because of these technical constraints.

10.127 In any event, we do not accept Virgin Media's claim that our differing treatment of the AC and SC introduces "inconsistency". As we explained above in paragraph 10.103, different considerations apply to these two components of the price (e.g. SPs will be able to advertise the SC at the point of call whereas callers must remember the AC). We have already addressed the arguments that the AC should have the same structure as the SC in paragraph 10.107 above. In particular, we do not accept Virgin Media's –claim that allowing ToD variation in the SC creates scope for "arbitrage". Whatever the SC is, the OCP can still levy its AC on top.

10.128 Accordingly, there would appear no significant efficiency arguments which favour ToD variations for the AC.

Conclusion

10.129 We therefore consider that there is no material efficiency argument for ToD variations that outweighs the consumer price transparency benefits of a single AC for all times of the day. For the purpose of protecting consumers, we are therefore proposing a tariff principle that the AC should be charged on a uniform basis at all times of the day.

Inclusion of the AC in call bundles

December 2010 Consultation

10.130 At paragraphs A5.61 to A5.62 of the December 2010 Consultation, we recognised that a mobile OCP might wish to count NGCs towards the allowance of inclusive minutes under the unbundled tariff. We noted this would translate as an AC of zero, provided the caller still had inclusive minutes remaining and a positive ppm AC once the allowance of inclusive minutes was exhausted; the caller would still be charged the SC on top of this.

10.131 We considered that while this pricing structure differed from the rule of 'one AC per tariff package', consumer familiarity with call bundles and their expectations of reduced call costs within a bundle was likely to make this exception less problematic.

[370] Rather its arguments rested on an "inconsistency" with the treatment of the SC. Virgin Media December 2010 Consultation response, page 20.

We concluded that it would not be appropriate to preclude OCPs from including the AC in their bundles of inclusive minutes, provided that the structure applied to all the non-geographic number ranges covered by the unbundled tariff.

Stakeholders' responses

10.132 Only few respondents covered this point. Both C&W[371] and EE[372] favoured the inclusion of the AC in bundles. EE believed that there was no justification for not allowing OCPs to include NGCs in bundles. EE anticipated that, in most cases, both the AC and the SC would be included in bundles and Ofcom's proposals would need to accommodate this.

Our considerations

10.133 In 2009, OCPs rarely included NGCs in bundles according to data from the 2010 Flow of Funds study. The exceptions are 03 on mobiles and 03, 0845 and 0870 on fixed.[373]

Table 10.3: Percentage of call minutes that are within bundles for each non geographic number range

FIXED	03	080	0843/4	0845	0870	0871/2/3	09	118
Call volume (million minutes)	110	10,659	4,907	7,792	2,090	1,321	267	268
% of calls 'within bundles'	13%	0%	1%	20%	20%	1%	0%	0%
MOBILE								
Call volume (million minutes)	113	529	599	1,218	387	288	75	109
% of calls 'within bundles'	92%	3%	3%	3%	1%	0%	0%	0%

Source: 2010 Flow of Funds.

10.134 Below we jointly consider two issues.

- Should OCPs be permitted to allow NGCs to count towards bundles of inclusive minutes (and charge for those calls once the allowance of inclusive minutes is exhausted)? Since it is mobile OCPs that tend to offer inclusive minutes, we refer to such calls as being "within mobile bundles".

- Should OCPs be permitted to set a zero AC at certain times of the day? We refer to such calls as being "within fixed bundles" since it is fixed OCPs that tend to offer some calls for free at some times of the day.

10.135 In terms of assessing the options for and against the AC being included within fixed and mobile bundles, the key questions are:

[371] C&W, December 2010 Consultation response, pp. 22-23.
[372] EE, December 2010 Consultation response, Q6.4, paragraphs 17-18.
[373] As set out in Table 3.9 in Section 3 the proportion of mobile within bundle calls might be slightly higher in 2011.

- whether allowing the AC to be included within fixed and mobile bundles would undermine consumer understanding of the charges they face for calling non-geographic numbers; and

- whether the OCPs should be allowed to include calls to some non-geographic number ranges within fixed/mobile bundles but not others (e.g. include calls to 084/7 numbers but not calls to the more expensive 09/118).

10.136 We address each question below against the relevant assessment criteria. .

Consumer Price Awareness

10.137 In our discussion above on the option of multiple ACs within a given tariff package, we considered that this could unduly compromise consumer understanding of the AC and thereby undermine the effectiveness of the remedy in addressing the consumer harm we have identified. For that reason we retained a preference for a single AC.

10.138 We consider that the inclusion of the AC in a call bundle does not cause similar concerns about pricing complexity. Consumers have experience of the inclusion of calls to other number types within fixed and mobile bundles and the evidence from consumer consumption is that call bundles are increasingly used by consumers – probably due to the budget confidence that they provide. In particular:

- the proportion of mobile post-pay contracts has been rising over time. In 2010, 49% of mobile contracts were post-pay.[374] A key feature of post-pay contracts is a bundle of inclusive minutes; and

- most standard fixed telephony line rental tariffs now include some element of bundled calls to UK geographic numbers, and over recent years the availability of tariffs which include bundled calls to these numbers at all times has increased.[375]

10.139 Consumers are, therefore, familiar with services within the bundle having a separate ppm charge outside the bundle, when the number of inclusive minutes is exhausted or at a time when the period of zero-rating does not apply. Moreover, we consider that calls within fixed bundles can be distinguished from time of day variation in call prices more generally. Free (i.e. a within fixed bundle call) is likely to be a very simple price point for consumers to remember.

10.140 There may, however, be an issue of consumer price awareness should the inclusion of the AC in the bundle be confined to calls to specific number ranges. In this case the consumer would need to have a greater depth of understanding of the rule of inclusion, adding significant complexity to the AC pricing structure. This type of AC differentiation would appear very similar to the option of separate AC charges for different number ranges, which, for the reasons set out in paragraphs 10.43 to 10.85 above, we do not consider would be effective in enhancing consumer price awareness for these calls.

10.141 Therefore, while we accept that there is a slight increase in complexity caused by allowing the AC to be included in bundles, we think the nature of the inclusion (effective zero AC charge within the bundle), the consumers' familiarity with bundles and their active promotion by OCPs would significantly mitigate the impact of this additional complexity. There is a clear difference between this option and the option

[374] Ofcom, CMR 2011, Figure 5.16 on p. 260.
[375] Ofcom, CMR 2011, p.283.

of allowing two separate non-zero AC charges as in that case there are no clear mitigating circumstances to offset additional complexity.

10.142 Therefore, we consider that consumer price awareness should not be materially harmed by inclusion of the AC in the bundle provided that there was no differentiation by number range.

Efficient prices

10.143 Allowing OCPs to include NGCs within fixed and mobile bundles gives them increased flexibility to respond to consumer preferences. The fact that fixed OCPs have chosen to include geographic calls within fixed bundles is evidence of consumers' appetite for this price structure. Similarly for post-pay mobile subscribers, calls to mobile and geographic numbers count towards bundles of inclusive minutes. We thus consider that bundling of call charges may be welcomed by consumers as evidenced by their proliferation in mobile and fixed contracts. In other words, permitting inclusion of NGCs within fixed and mobile bundles may materially increase the efficiency of retail prices (by better reflecting consumers' preferences).

Conclusion on the inclusion of AC in call bundles

10.144 We consider that inclusion of the AC in call bundles would be welcomed by consumers (given their apparent preference for call bundle purchases of calls) and is unlikely to undermine the presentation and consumer understanding of the AC, provided inclusion does not differentiate by number range.

10.145 Accordingly, we are proposing a tariff principle that the OCP may include the AC in its bundles, subject to the restrictions discussed.

Cap on the AC

December 2010 Consultation

10.146 In the December 2010 Consultation we considered that an unbundled tariff that provided for a simple AC would be likely to increase competitive pressures both at the point of subscription and the point of sale so that the structure of OCPs' prices should move closer to consumers' underlying preferences.

10.147 Our argument was that the unbundled approach would facilitate competition between OCPs, since in order to determine the cheapest means of originating a particular NGC, consumers would just need to look at the AC. We said that provided the AC was structured in a simple way, it potentially provided a single simple figure that consumers could readily take into account when selecting which OCP to subscribe to and which device to use to originate a call. We highlighted the contrast with the multitude of NGC prices that consumers were currently faced with.

10.148 Nonetheless, we noted that there was some evidence to suggest that, notwithstanding such a remedy, competitive constraints on the AC might not be strong and therefore we acknowledged that there was a degree of risk that the AC would exceed an appropriate measure of the OCP's costs. We therefore considered whether it would be appropriate to set a maximum price for the AC to prevent this and invited respondents' views on this issue.

10.149 Also we raised the question as to whether, in the event that we did not specify a cost-based maximum price, it might be appropriate to set a looser AC maximum as a safeguard.

Stakeholders' responses

10.150 A number of stakeholders expressed concern about Ofcom's proposal not to impose a cap on the AC. C&W was concerned about absence of constraints on the AC, noting that SPs were concerned about high retail prices.[376] It considered that the "business rate" AC (i.e. the AC that C&W thought should apply to 08 calls) should be no greater than for a geographic call and given the risk that competition might not drive the "business rate" AC down to the geographic level, a cap may be appropriate (as an interim measure). Similarly it considered that the "premium rate" AC (i.e. the AC that C&W thought should apply to 09/118 calls) should also be capped.[377] The FCS was also concerned about the lack of a cap on the AC, as it had severe reservations that competition on the AC would actually materialise.[378]

10.151 Magrathea considered that setting the level of the AC was no less intrusive than setting a maximum retail price, yet without it, overall charges would remain at the same level and consumer harm would be perpetuated. It advocated that the AC should be no more than the OCPs' standard geographic rate for that tariff package and that the AC part of the call would have to count towards any inclusive geographic minutes.[379] Antelope Consulting also favoured requiring the AC to be no greater than the charge for a call to a geographic or mobile number to assist consumer understanding.[380]

10.152 TalkTalk also considered that there should be some safeguard cap (perhaps with a glide path) on the AC, because it doubted mobile OCPs would feel competitively compelled to lower their ACs to a level similar to that levied by fixed OCPs (taking into account the difference in origination cost). It felt that the guiding principle should be that the AC should reflect origination and retail costs.[381]

10.153 TNUK strongly favoured imposing a safeguard maximum limit on the AC from the outset, because, it argued that without such a limit the mobile OCPs would continue to drive up ACs to the continuing detriment of consumers who would not be making purchasing decisions on the basis of them. It noted that a safeguard limit would deliver an immediate a noticeable benefit to consumers in reduced cost of calls which could not be delivered by other means. It suggested that the European Mobile Roaming Regulations and their implementation gave guidance as to how a safeguard cap could be established (using that guidance, it suggested that a cap of [✂] was appropriate).[382]

10.154 The CAB suggested that an overall maximum limit for calls could be set in addition to the unbundled tariff so that consumers were presented with a pricing message of "this call costs Xp per minute, plus your phone company's access charge. The total

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[376] C&W, December 2010 Consultation response, paragraph 17.
[377] C&W, December 2010 Consultation response, paragraphs 25-26.
[378] FCS, December 2010 Consultation response, p.14.
[379] Magrathea, December 2010 Consultation response, p.8.
[380] Antelope Consulting, December 2010 response, p.1 and p.3.
[381] TalkTalk, December 2010 Consultation response p. 3.
[382] TNUK, December 2010 Consultation response pp.22-23.

cost will be no more than Xp per minute". It considered that this would provide greater clarity to consumers.[383]

10.155 BT suggested that if after the launch of the unbundled tariff, Ofcom had concerns about competition being insufficient to curb excessive prices, a cap could be imposed on the AC. It said that any cap should apply to both fixed and mobile OCPs and be automatically adjusted for inflation and VAT changes.[384]

10.156 The majority of OCPs were, however, opposed to any cap on the AC. EE[385], O2[386], Sky[387] and Vodafone[388] considered that there was no rationale for setting a cap on the AC since it would be constrained by competition. UKCTA also supported this view.[389] In addition, the PRA were concerned that a maximum price on access charges would lead to complex negotiations between OCPs and TCPs/SPs over outpayments.[390]

Considerations

10.157 Stakeholder views on a cap for the AC can be summarised into three groups:

- competition will constrain the AC to an efficient level;
- competition may constrain the AC to an efficient level but if it does not, Ofcom should be prepared to set a cap; and
- competition will not sufficiently constrain the AC and, therefore, the charge should be capped immediately to avoid consumer detriment. This, then, leads to three main types of recommendation:
  - o the cap should be set based on some measure of OCPs' costs (i.e. call origination), potentially varying by fixed or mobile origination;
  - o the cap should be linked to existing charges – principally the price of calling a geographic number which is currently subject to greater competitive pressures and would encourage inclusion of the AC in call bundles; and
  - o a safeguard cap i.e. a loose cap that would prevent ACs from rising (potentially different for fixed and mobile OCPs), which was either purely protective against overcharging or which sought to lower charges now.

10.158 We will consider the options against the criteria of consumer price awareness, efficient prices, access to socially important services and regulatory burden.

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383 CAB, December 2010 Consultation response, p.7.
384 BT, December 2010 Consultation response, p.9.
385 EE, December 2010 Consultation response, paragraphs 5-7.
386 O2, December 2010 Consultation response, paragraph 128.
387 Sky, December 2010 Consultation response, section 4.5.
388 Vodafone, December 2010 Consultation response, paragraphs 86-89.
389 UKCTA, December 2010 Consultation response, p.9.
390 PRA, December 2010 Consultation response p.2.

10.159 Note that linking the AC cap to geographic call charges has been advocated in other countries, with France, the Netherlands and other states considering an unbundled tariff structure with the AC aligned in this way.[391]

Consumer Price Awareness

10.160 As we have discussed in the proceeding sub-sections, we consider that the AC should be simple in form and presentation so that there are no barriers to it being readily understood and utilised by consumers.

10.161 We discussed the impact of the unbundled tariff on price awareness in Section 9. We discussed in that Section the likely strength of competitive constraints on the AC and the extent to which consumers are likely to recall the level of the AC. In summary, we recognise that the unbundled tariff is inherently more complex than the maximum prices model in terms of the message it conveys to consumers. We also accept that consumers may not always be able to exactly recall their AC. However, we think it is plausible that many consumers will recall its broad magnitude.

10.162 Capping the AC may improve consumer price awareness. The impact depends on the particular form of the AC cap:

- In the case of an AC cap based on some measure of OCPs' costs, SPs would be able to advertise that "calls cost X pence per minute plus your phone company's standard access charge (this will be no more than Y pence per minute for fixed calls and Z pence per minute for mobile calls)".[392] How useful this extra information would be to consumers depends on whether or not the cap bites i.e. whether or not the majority of OCPs price at or only just below the cap.

- As some stakeholders suggest, capping the AC on the basis of the geographic rate charged by the OCP in a given tariff package could reduce the scope for confusion. In particular, SPs would be able to advertise that "calls cost X pence per minute plus the price of a normal phone call". It is not clear whether the geographic call price is simpler for consumers to remember than a single ppm figure. On the one hand, consumers may be more familiar with the geographic call price since it tends to be relatively prominent in OCPs' advertising and since consumers make geographic calls more often.[393] On the other hand, particularly in the case of geographic calls from landlines, the price structure can be somewhat complex (since they may vary by time of day and may include a call set up fee) compared to a simple ppm AC.

- The case for a safeguard cap on the AC is similar to the case for an AC cap based on some measure of OCPs' costs (i.e. the first bullet point above), in that SPs could advertise that "calls cost X pence per minute plus your phone company's standard access charge (this will be no more than Y pence per minute for fixed calls and Z pence per minute for mobile calls)". However, as explained above, how useful this extra information would be to consumers depends on whether or not the cap actually reflected the price that OCPs charged. Under this

[391] See the BEREC report on Special Rate Services http://erg.eu.int/doc/berec/bor/bor11_68_srsreport.pdf
[392] This is similar to the model proposed by the CAB above.
[393] We know from our consumer research that the median consumer estimates of geographic call charges are reasonably accurate, see http://stakeholders.ofcom.org.uk/binaries/consultations/numberingreview/annexes/marketresearch.pdf

option the cap is likely to be less reflective of the actual price because it would be a looser cap.

Efficient prices

10.163 Retail prices are more likely to be efficient if competitive constraints on the AC are strong. We discussed the strength of constraints on the AC in Section 9. In summary:

- We recognise that competitive constraints on the AC at the point of subscription may not be strong (although the AC is much simpler to communicate and understand than the current multitude of NGC prices, so we consider that competition at the point of subscription will increase relative to the status quo). Many consumers may have limited regard to this element of their tariff package, particularly given the infrequency with which NGCs are made.

- In terms of competition at the point of call, i.e. when consumers select which device to use when making a call, the majority of consumers have both a landline and a mobile and thus the ability to substitute between them. The key issue is consumers' ability to recall relative fixed and mobile prices at the point of call. We accept that consumers may not always be able to exactly recall their AC. However, we think it is plausible that many consumers will recall its broad magnitude. We thus consider that the unbundled tariff is likely to increase competition at the point of call, relative to the status quo.

10.164 If there are sufficient competitive pressures on the AC then this should encourage the presentation of a range of ACs in different tariff packages designed to meet individual preferences in the composition of charges. Such a competitively derived range should ensure price efficiency for the benefit of consumers. In such a case the presence of an AC cap may either have no effect (as the cap will be above the competitive charges) or may distort the retail prices inefficiently. In particular, due to the tariff package effect, if the AC cap is set too low then it is likely to result in both an inefficiently low price for NGCs and inefficiently high prices for other telecoms services.

10.165 However, if the AC is not subject to effective competition because an insufficient proportion of consumers understand and react to the charges, then the charge may not be set at an efficient level. In this case there is an argument for capping the charge to protect consumers from over-charging. In line with stakeholder comments, and as highlighted in paragraph 10.157 above, there are three potential options for capping the charge in these circumstances and we discuss each in turn below.

A cap based on the cost of call origination

10.166 Clearly, there is some attraction in an AC cap based on the cost of call origination. In principle, we might be confident that on an individual call basis consumers are paying the minimum reasonable charge, while ensuring that the OCP is not out of pocket.

10.167 However, the approach raises a number of questions:

- do we set the cap separately for individual OCPs or use an average cost estimate?

- if we use an average estimate do we set separate caps for fixed and mobile origination?

- which costs should be included?
- how frequently should the cap be updated?; and
- what is the impact on other retail prices (i.e. the tariff package effect)?

10.168 As we can see, there is a substantial degree of complexity in setting a cost based charge. Such a cap is likely to be more complex than our current approach to setting the NTS Retail Uplift and the PRS Bad Debt Surcharge on BT since it would apply to all fixed OCPs and mobile OCPs.

10.169 In particular, while cost based charges may be appropriate as a remedy in a situation where significant market power has been found, it is far from clear that such an approach is appropriate when pricing one of a set of services in a tariff bundle bought by a consumer (which draws on a set of common costs).

10.170 Setting a cost based cap is likely to raise similar issues to those we considered under the maximum prices approach in Section 9. In particular, there is a risk of regulatory failure. In other words, the AC cap might be set at too low a level and thus might not reflect most consumers' preferences in the way that a competitive price would, i.e. they may prefer lower geographic rated call charges or greater data allowances rather than a lower AC.

10.171 If the cap did not bite, there is a risk that it would act as a "focal point". In other words, by specifying a maximum permissible AC then it risks OCPs' all choosing to price at or close to that level.

10.172 The legal basis for setting a maximum AC in this manner would require clarity about the purpose of the cap. Ex-ante cost based retail charge controls are available to the regulator, as a last resort, as a means of addressing the exercise of market power. However, in this case, a cap on the AC would be for the purpose of addressing consumer harm. It is not clear on the information currently available that the concerns about the AC would justify the cap being set as a cost-based charge control.

A cap based on the geographic rate

10.173 Unlike an AC cap based on to the cost of call origination, a cap based on the geographic rate has the advantage that the charge is likely to be subject to greater competitive pressures.

10.174 It also naturally ensures that there is a reasonable reflection of the differences in costs between OCPs and moves in line with changes in these costs.

10.175 The downside is that, compared with separate competitive setting of the AC, consumer preferences in price differentials between NGCs and geographic calls would not be represented.[394]

10.176 In particular, there is a risk of a substantial tariff package effect, particularly for mobile OCPs. In 2009, mobile OCPs' retained £360m from calls to 084, 087, 09 and 118 numbers.[395] If we were to cap the AC at price of geographic calls then, for post-

[394] Moreover there may be some cost differences with geographic calls, in particular due to the higher levels of bad debt associated with some NGCs.
[395] Data underlying 2010 Flow of Funds study.

pay mobile subscribers, these calls would count towards subscribers' allowance of inclusive ('free') minutes. As a result, there is likely to be a substantial fall in mobile OCPs' margins on these calls. It is plausible that this could be of the order of £100m or £200m.[396] This is likely to result a corresponding rise in the price of other telecoms services (the tariff package effect).

10.177 It also seems plausible that there would be a tariff package effect for fixed OCPs in a similar way.

10.178 The existence of a tariff package effect is not necessarily undesirable. Indeed since the current pattern of prices is likely to be inefficient (as explained in Annex 8), at least some rebalancing of prices is likely to be beneficial. However, it remains the case that we do not know what consumers' preferences are for the balance of prices. There is thus a significant risk of regulatory failure i.e. forcing the rebalancing of prices in a way that would not reflect consumer preferences.

10.179 Also, there is a risk that alignment with the geographic rate will lead in some instances to higher ACs than separate establishment of the charges. For example:

- for geographic minute charges on fixed lines can be up to 8ppm + call set-up charges; and
- our estimate of an average fixed AC (assuming existing levels of return on NGCs) is only 3ppm.[397]

10.180 Further, we would only be able to set a cap based on geographic rates if there was evidence that the introduction of a separate AC would not be sufficient to provide an adequate level of consumer protection. This is because imposing a cap is subject to the evidentiary requirements mentioned in the previous subsection (see paragraph 10.172). At present consider that there is evidence that consumers will be able to understand and utilise the AC in a way that should allow competition to constrain charges. If this proves not to be the case, it may become appropriate to return to a consideration of a cap on the AC aligned with the geographic rate.

Safeguard cap

10.181 The third option of a protective cap would be appropriate if we considered that there is a risk that OCPs might use the introduction of the AC to set an initial AC that is unduly high.

10.182 The introduction of new charging structures can give rise to consumer confusion that companies can exploit. However, setting a charge cap in the short term to address this may itself encourage inefficient price setting by signalling a price level that is 'acceptable'. As highlighted in the December 2010 Consultation, the risk is that such a maximum operates as a "focal point". By specifying a maximum permissible AC, there could be a risk that OCPs all choose to price at or close to that maximum. As a result, this option may actually increase the level of the AC. The magnitude of this risk depends on the strength of competition between OCPs when supplying NGCs which (as explained above) may not be strong.

[396] This is simply a crude, order of magnitude figure, in the light of mobile OCPs' overall retention of £360m. In particular, retention on these calls from post-pay subscribers is likely to fall very sharply (since most will be within mobile bundles). There may also be a fall in margins on these calls for pre-pay subscribers.
[397] See Table 10.2.

10.183 As we discuss in Part A (Section 6), the new unbundled tariff will be accompanied by a significant programme of consumer awareness activity and OCPs will have an incentive to position themselves competitively in the new regime. Further, given the highly competitive nature of the retail market at any given time, OCPs will need to be present in an attractive tariff package to consumers comparing offerings. We anticipate that this should temper the behaviour of market participants.

10.184 We accept the risk that without such a cap, OCPs may exploit a period of uncertainty to introduce high ACs. However, as noted, equally there are risks that such a cap will provide a focal point for OCPs and lead to higher prices overall than today. Our preference would be not to set a cap but to monitor the AC levels and the returns they generate for the OCPs to consider whether further intervention, if any, may be required.

Access to socially important services

10.185 We would not wish the introduction of the AC to lead to prices that exclude consumers from access to socially important services. However, our assessment is that the incentives on OCPs will be to set ACs which are not exclusionary. Nonetheless, we are aware of the risk and would be open to intervention if there was evidence of ongoing consumer harm, as discussed above.

Regulatory burden

10.186 It is clear that the imposition of a cap on the AC carries with it significant costs to Ofcom and the OCPs and, more importantly, substantial risk of regulatory failure.

10.187 Except in the case of the alignment with the geographic rate, AC caps will require Ofcom to reach a determination of minimum necessary cost recovery for OCPs. This quantum is clearly likely to vary between fixed and mobile and potentially significantly between companies. It is also likely to be difficult to estimate the exact cost that should be attributed specifically to NGCs.

10.188 The calculation would involve substantial consultation with all OCPs and may need to be reviewed regularly.

10.189 Regulatory failure could come from:

- too low caps (leading to OCPs losses or more likely substantial and inappropriate tariff rebalancing);
- too high caps (offering no benefit to consumers and potentially tempting higher than appropriate AC charges); and
- misalignment of charges with consumer preferences as the AC is distorted by the caps.

10.190 While some of the risks of calculation would be removed by alignment to geographic rates, we still risk regulatory failure in terms of charge alignment with consumer preferences and setting caps too high.

Conclusion

10.191 In our December 2010 Consultation we said that setting a cap on the level of the AC was a finely balanced decision. It is clear from stakeholder comments and the above discussion that this remains the case.

10.192 However, given the regulatory costs and risk, we are reluctant to set a cap on the AC in the absence of clear evidence of a need to do so. We are therefore proposing that the AC should not be capped in the first instance.

10.193 Successful competition around the AC will ensure the most efficient price setting for consumers. Early intervention in setting caps risks distorting price signals and encouraging prices at the cap even where this is not efficient.

However, we would remain open to revisiting the need for a cap if evidence of consumer confusion in relation to the AC was to emerge.

Summary of proposed approach to the AC

10.194 In summary, we are proposing the following in relation to the AC:

- that OCPs will be able to offer ACs that vary by tariff package;
- that we should impose a tariff principle that the same AC applies to all calls within the 08X, 09 and 118 number ranges unless the call is within the caller's inclusive minutes in a fixed or mobile bundle;
- that the AC should also be subject to the following additional tariff principles:
    - be charged at a ppm rate only but OCPs will be permitted to impose a minimum call charge of up to one minute;
    - will not be permitted to vary by time of day; and
- that we are not proposing to implement a maximum price cap on the AC at the current time but will keep the level of AC prices under review following implementation of the unbundled tariff.

Questions on the AC

Q10.1: Do you agree with our proposal that the AC should be allowed to vary between tariff packages but that OCPs should be subject to a tariff principle permitting only one AC for NGCs? If not please explain why.

Q.10.2: Do you agree with our proposed structure for the AC, in particular that:
(i) that the AC should be a pence per minute charge only, but can be subject to a minimum one minute call charge;
(ii) that the AC should not vary by time of day; and
(iii) that the AC can be included as part of call bundles provided that inclusion does not differentiate by number range?
If not please explain why.

Q10.3: Do you agree with our proposal not to impose a cap on the AC in the first instance? If not please explain why.

The Service Charge

10.195 We now turn to the design of the Service Charge ('SC'). As with the Access Charge there are a number of different possible ways of structuring the SC including whether to set maximum price levels. The design of that structure will affect how the unbundled tariff is implemented, as well as how effective it will be in protecting consumers from the harm we have identified.

10.196 The design elements we consider in this sub-section are:

- In relation to the structure of the SC:
  - bespoke SCs (i.e. SCs that vary depending on the OCP that the consumer is calling from);
  - variation by time of day ('ToD');
  - unitisation (i.e. whether the call can be pence per minute or pence per call, or a combination of both);
- in relation to the level of the SC;
  - whether SC price maxima are needed;
  - whether the any SC caps should be set as inclusive or exclusive of VAT in the Numbering Plan;
  - proposed caps for the 08, 09 and 118 ranges; and
  - restrictions on the number of SC price points.

Structure of the SC

Bespoke SCs

Position in December 2010 Consultation

10.197 In our December 2010 Consultation we recognised that there might be legitimate reasons why a SP might wish to set a different SC for some OCPs. In particular, SPs might negotiate with OCPs in order to become the favoured supplier of a particular service on that network. This might involve offering a lower (bespoke) SC on that network, in return for greater marketing.

10.198 However we noted that few of those arrangements actually existed at that time and therefore the benefit of allowing such arrangements might be limited. In particular, we noted that:

- such arrangements appeared to be only in place for DQ services, which we noted was not surprising given that most callers did not regard NGCs as important when deciding which OCP to subscribe to. We therefore considered it was questionable whether OCPs saw such 'favoured supplier' agreements as a significant source of competitive advantage, particularly as there was a transaction cost to negotiating them; and

- in addition, we noted that with an unbundled tariff OCPs would be unable to offer to lower their AC (see discussion on the AC above) for calls to a particular SP in return for a bespoke SC from that SP.

10.199 We noted these limited benefits had to be weighed against the drawbacks of allowing bespoke SCs:

- firstly, we noted it would reduce how informative the AC was in relation to a given call. In the case where bespoke SCs were not permissible, the OCP with the lowest AC would always be the cheapest way to make a given call to a particular SP on a non-geographic number. However, were bespoke SCs to be offered, it might be that the total cost of a particular call was cheaper from an OCP with a higher AC (because the discount offered under the bespoke SC could be greater than the difference between OCP ACs).

- secondly, bespoke SCs would add complexity to the pricing messages delivered to consumers. For example, it might be more difficult for consumers to calculate the total cost of the call if an SP was able to vary its stated SC between different OCPs by offering bespoke SCs.

10.200 We also considered the effect of bespoke SCs on the wholesale level. We noted they could provide a means by which OCPs could exercise their buyer power when dealing with TCPs/SPs or vice versa and that such imbalances in wholesale negotiation power might have negative consequences for consumers and SPs. In particular we highlighted that BT was likely to be in a strong position when originating calls and that we had previously placed an SMP condition on BT to address this concern.[398] We noted that under the unbundled tariff, BT could engage in equivalent behaviour by exerting downward pressure on the SC that it paid. This suggested that there was a strong case for not allowing BT to agree a BT-specific SC.

10.201 However, we considered that it was likely to be more appropriate to implement any restriction that just applied to BT through SMP conditions. We recognised that, if the unbundled remedy were introduced, changes to the current formulation of the NTS Call Origination Condition might be required. However our analysis in Annex 3 of the December 2010 Consultation suggested that BT was not the only OCP that might sometimes be in a strong position at the wholesale level. We thus considered that a prohibition on bespoke SCs might help the wholesale level operate more smoothly, for example by lessening the commercial advantage that an OCP would gain from using its wholesale market power to drive down the SC.

10.202 We therefore had a preference in the December 2010 Consultation for an option which prevented bespoke SCs. We recognised that in practice bespoke SCs might not be common (even if no general tariff principle were in place), provided a revised SMP condition addressing BT's position was in place.

Stakeholder responses

10.203 The majority of respondents that commented on this point agreed that restrictions on bespoke tariffs were necessary. OCPs in particular, thought SPs should not be free to vary SCs based on the originating OCP, arguing that the downsides in terms of reduced transparency of prices and potential distortions because of market power outweighed any potential benefits in competition between SPs.

[398] The NTS Call Origination Condition. See the Wholesale Narrowband Statement, Section 15 in particular paragraphs 15.32-15.34.

10.204 BT argued that any restriction on agreeing bespoke SCs should be applied to all CPs, and not only BT (as a TCP), as to do so would be disproportionate. C&W stated that restrictions on bespoke tariffs were a prerequisite for the unbundled tariff to work effectively, the clarity of SP advertising to consumers being a cornerstone of the unbundled tariff. C&W was also concerned that without any restrictions BT would be incentivised to exercise its market power in wholesale call origination to provide its own termination business or its SP customer base with preferential and potentially discriminatory rates. C&W suggested replacing BT's current SMP condition with an alternative wholesale safeguard in order to protect the termination market from any potential abuse. It said that this safeguard should take the form of an SMP obligation upon BT rather than a general constraint on the SC at an industry-wide tariff level.[399]

10.205 EE noted strong opposition to allowing bespoke SC and said Ofcom should state a clear preference against any bespoke SCs and expressly exclude SCs that varied dependent upon the level of the AC. It considered so-called 'ladder' charging was discriminatory as it set different charges to different providers for the same service. It highlighted that a number of disputes had been raised with Ofcom because of that ladder charging.[400]

10.206 Both Sky and UKCTA fully supported the restrictions to prevent bespoke SCs being offered solely on the OCPs identity. UKCTA argued that retail price competition would only occur on the AC and SC if the SC was stated with accuracy in the SPs advertising materials.

10.207 TNUK agreed that there were potentially some disadvantages to bespoke SCs, but considered that a requirement to set a standard AC would largely eliminate any concerns. Nevertheless, it agreed with Ofcom's reasoning that bespoke SCs would overall reduce consumer transparency and that there might be a concern about how OCPs exercise their market power.[401]

Ofcom response and updated position

10.208 A decision on whether to allow SPs to negotiate bespoke tariffs or not comes down to a trade-off between allowing SPs flexibility and ensuring consumer transparency. The relative assessment criteria are therefore consumer price awareness and efficient prices and we have considered each in turn below.

Consumer price awareness

10.209 Bespoke SCs make the unbundled tariff system more complex, including for consumers. As outlined elsewhere in this consultation we believe that improving consumer price awareness is a key requirement if we are to address the concerns that we have identified.

10.210 In order for consumers to make more informed decisions about whether or not to make a call, they need to be able to calculate the price of that call as accurately as possible. To do this they need to add together the AC and the SC. In many cases our expectation is that the SC will be provided alongside the advertising of the SP number. Evidence from the 2011 Experimental research found that where participants were provided with the SC at the point of call, the unbundled model

[399] C&W, December 2010 Consultation response, pp.28-29.
[400] EE, December 2010 Consultation response, p. 55.
[401] TNUK, December 2010 Consultation response, p.24 .

performed better than the status quo; however, where they were not provided with the SC, the unbundled model performed the same as the status quo.[402]

10.211 It is unlikely that it would be practical for SPs to publish (alongside their number), a range of SCs dependent on which OCP a particular customer was calling from.[403] Even if this were possible, it would add complexity and likely consumer confusion and therefore still dilute consumer price awareness. Therefore, by allowing bespoke SCs, a customer may find it harder to confidently calculate the cost of a call. We think that this is a significant concern.

10.212 This view is clearly supported by the majority of stakeholders who agreed with our position in the December 2010 Consultation. Stakeholders raised similar concerns about the reduction in consumer transparency that would occur were SPs allowed to set bespoke SCs. We do not agree with TNUK's point that requiring a standard AC would address our transparency concerns if bespoke SCs were allowed. Primarily consumers would still be unable to accurately calculate the total cost of the call, if the published SC did not apply to at least some consumers.

10.213 In addition, bespoke SCs would reduce how informative the AC would be. Where bespoke SCs are not permissible, the OCP with the lowest AC will always be the cheapest way to make a call. However, where bespoke SCs can be offered, it may be that the total cost of a particular call is cheaper from an OCP with a higher AC (because of the discount offered under the bespoke SC). By making the AC a less reliable guide, bespoke SCs risk consumer confusion.

Efficient prices

10.214 As described above the benefits of allowing SPs to set bespoke tariffs is that it allows SPs to offer lower SCs to OCPs that offer something in return, greater marketing of the SPs service for example. In turn consumers of the OCP with which the SP has negotiated a bespoke tariff would pay a lower retail price to access the services of the SP. Allowing bespoke SCs might provide scope for SPs to set more efficient prices.

10.215 However, as noted in the December 2010 Consultation, it could also allow TCPs to exploit relative power imbalances in commercial negotiations which would not necessarily lead to efficient prices for consumers. We also note EE's comments in relation to 'ladder' pricing or tiered termination rates, and the number of disputes that have been raised.[404]

10.216 We note stakeholders' concerns about the potential for BT to exercise its market power. As previously noted we consider that there is a risk of relative market power considerations influencing negotiations between a number of the industry players and

[402] 2011 Experimental Research, page vii, point 1 and Table 2. In particular subjects made significantly better call decisions under treatments 4 and 5 (the unbundled tariff with the SC provided at the point of call) than under treatment 1 (the status quo). And subjects performed similarly under treatment 6 (the unbundled tariff with the SC not provided at the point of call) and treatment 1 (the status quo).

[403] A particular issue would be where the wholesale network that originates the call is not the same as retail OCP that the consumer subscribes to. To illustrate, a bespoke SC that applied to calls originated on EE's network may also apply to MVNOs using that network, such as Virgin Mobile. As a result, in order to inform consumers when that bespoke SC applied, the SP would need to list all the brands that consumers associate with calls originated on EE's network i.e. Orange, T-Mobile, Virgin Mobile and so forth.

[404] See Annex 17 for our view on tiered termination rates.

we consider that as far as possible we should structure regulations to ensure that consumers are not adversely impacted by these.

10.217 With respect to BT's specific position, we consider that this is best dealt with in the next wholesale narrowband call market reviews which will have the opportunity to consider, firstly whether BT continues to hold SMP and secondly if it does what remedies would be appropriate in the context of our proposed revised regulatory structure for NGCs.

10.218 We consider that this current consultation is not the appropriate forum to take any further the question of the existence, or otherwise, of significant market power, as well as any consideration of the appropriate remedies should SMP exist. As indicated in the previous paragraph, this question will be the subject of the next wholesale narrowband call market review.

Conclusion on bespoke SCs

10.219 The balance of the argument above suggests that it would not be appropriate to allow bespoke pricing for SCs.

10.220 The existence of such arrangements at present is still limited. We have no new evidence that there is significant demand for such arrangements among SPs. Therefore the impact of not allowing bespoke SCs is likely to be limited.

10.221 On the basis of the above we consider that, consistent with our position in the December 2010 Consultation, SPs should not be free to set bespoke SCs for different OCPs.

Time of day ('ToD') variation in the SC

10.222 Absent intervention we would expect some SPs to select SCs that varied by time of day. We therefore need to consider whether to allow such variation under the unbundled tariff. Assessment of this issue involves a trade off between the potential for greater efficiency (such as sending more efficient price signals) against the consumer detriment that flows from greater complexity.

Position in December 2010 Consultation

10.223 In the December 2010 Consultation, we noted that the advantage of allowing time of day variation in the SC was that it would allow SPs to send price signals to callers, to encourage them to call at particular times of the day. We noted this might allow the SP to use its capacity more efficiently, which was also likely to benefit callers (e.g. if calls were spread more evenly through the day, it might reduce caller waiting times).

10.224 The issue we highlighted with time of day variation was that it potentially would make the SC less transparent for callers. In particular, it would make it harder for callers to remember the SC, which was necessary for calculating the total cost of the call.

10.225 However, we did not regard this as a major concern. We noted that:

- Many callers would obtain the non-geographic number they wanted to call from written material (e.g. advertisements, bank statements, utility bills, and the internet). Provided that that material also set out the SC, including any time-of-day variations, we considered that callers would be unlikely to be confused about this aspect of the tariff.

- We recognised that sometimes consumers might call non-geographic numbers without having a written statement of the SC in front of them and would therefore be dependent upon remembering the price. We considered that in those circumstances, only a minority of consumers would remember the SC, even if it was very simple and therefore the transparency benefits of preventing ToD variation would be limited.

- Furthermore, we noted that since a particular SC only related to a small subset of the NGCs that a consumer would make, callers would be far less likely to recall a particular SC for a specific non-geographic number. As shown in the 2010 Consumer survey even where a particular number was called regularly, consumers were not significantly more confident about the price of a call to that number.[405]

10.226 On this basis, our provisional conclusion was that the potential efficiency benefits of allowing ToD variations were likely to outweigh the simplification resulting from preventing ToD variations to the SC.

Stakeholder responses

10.227 The majority of respondents that commented agreed with our proposal that restrictions on ToD variations to the SC were not necessary. C&W said that it welcomed the flexibility of allowing SPs to vary the SC by ToD. The flexibility for time of day gradient was beneficial for those SPs trying to drive volumes in a specific time of day band or to manage capacity in peak times. It also believed that flexibility was required to allow SPs to differentiate their offerings in what it said was a fiercely competitive market.[406] UKCTA[407] and TalkTalk[408] made similar comments around the need for flexibility given the competitiveness of the market.

10.228 Both C&W and UKCTA noted the need for caution in relation to the level of pricing publication that was required in order to prevent consumer confusion. They considered that an overly prescriptive reporting requirement could lead to complex message with multiple prices dependent on the ToD that a call was made. They were concerned that this would fail to achieve the simplification objective. C&W noted however, that at the time, of the 45 ppm price points in the 09 number range, 36 were flat-rate with no ToD variation, so the scope for potentially confusing consumer messages (given ToD variation tariffs) was limited.

10.229 TNUK considered that any attempt to prohibit charging according to time of day would immediately reduce consumer choice and future innovation, with no associated benefits.[409]

10.230 EE did not object in principle to allowing ToD variation, but was concerned that the ability for such variations did not lead to onerous and costly obligations on OCPs to pass charges through to retail consumers.[410]

[405] 2010 Consumer survey, Q37. Only 9% of respondents said they felt more confident about the prices of 08/09 calls they made regularly, 30% said it made no difference and 50% said they did not call 08/09 numbers regularly.
[406] C&W, December 2010 Consultation response, p.27
[407] UKCTA, December 2010 Consultation response, p.10.
[408] TalkTalk, December 2010 Consultation response, pp.4-5.
[409] TNUK, December 2010 Consultation response, p.24.
[410] EE, December 2010 Consultation response, p.52.

10.231 However, BT argued that it would be easier for consumers to remember the SC accurately if there was no ToD variation allowed. Were such variations required in future, BT considered that industry would need to adopt standard peak and off-peak rules.[411]

10.232 Virgin Media argued that allowing SPs to vary the SC by ToD but not affording the same flexibility to OCPs to vary the AC introduced inconsistency in the system, and prevented OCPs from 'tracking' the underlying wholesale input costs of their retail services. It also argued that it would create the possibility for arbitrage. It argued that ToD variations should not be prohibited on the AC.[412]

Ofcom response and updated position

10.233 The key criteria to be considered when assessing this option are consumer awareness, efficient pricing, service innovation and the regulatory burden.

Consumer price awareness

10.234 In the December 2010 Consultation we considered that any reduction in transparency was likely to be limited if ToD variations to the SC were allowed. The 2011 Consumer survey found that 65% of callers obtained the telephone number for the last company or public organisation they called from at least one of the following sources: the internet; a letter, bill or leaflet from the company being called; a written advert; or an advert on the TV or radio.[413] Each of these sources is likely to allow the SP to indicate alongside its number the SC for that number and any time of day variations.

10.235 Where consumers are not told the SC at the point of call then, as set out in the December 2010 Consultation, they are likely to experience difficulties in recalling its level.[414] Thus, regardless whether the SC varies by ToD, consumer price awareness is likely to be limited.

10.236 We remain of the view that the impact of ToD variation on consumer price awareness is likely to be low. We agree with stakeholders that care needs to be taken to ensure the message to consumers is not overly complex. However we believe that including an additional ToD variation to the message setting out the SC is unlikely to confuse consumers as the price of the SC.

Efficient prices

10.237 Allowing TCPs/SPs to vary the SC by ToD provides flexibility and price signals to be sent to consumers which may provide for more efficient use of the TCPs/SPs network/services. During discussions at the Commercial Working Group ('CWG'),

[411] BT, December 2010 Consultation response, p.16.
[412] Virgin Media, December 2010 consultation response, p.20.
[413] 2011 Consumer survey, question GL14: "Thinking about the last time you made a call to a company, shop or public organisation which of the following did you use to get the telephone number?"
[414] Only 9% of respondents to the 2010 Consumer survey stated that they feel more confident of the price of 08/09 numbers that they call regularly (2010 Consumer survey, Q37). We accept that this may be higher in an unbundled environment (e.g. because it is easier to present the SC and consumers may recall its broad magnitude on subsequent occasions). However, given with the infrequency with which most consumers call non-geographic numbers, consumers are still likely to experience difficulties in learning SCs.

Magrathea strongly supported allowing ToD variation on the SC, indicating that SPs' costs could vary according to the time of day.[415]

10.238 However, during those CWG, there was also a majority view that ToD variation might not be necessary (with the possible exception of DQ services).[416] The particular concern was that it would risk increasing complexity (which we address under the consumer awareness criterion below), but it was also suggested that any benefits of allowing such variation were likely to be limited.

10.239 In summary, stakeholders' views on the benefits in terms of efficient prices from ToD variation were mixed. The CWG did not identify evidence that would allow us to gauge the scale of this benefit. Accordingly the extent to which ToD variation would improve the efficiency of prices is uncertain.

Service quality, variability and innovation

10.240 The majority of stakeholders in their responses agreed with the need for ToD variations allowing SPs to not only manage calling patterns to their services but also to allow them to differentiate and compete in how they offer services to consumers. TNUK went further and suggested that any restriction on ToD variations in the SC would limit consumer choice and future innovation. However, as highlighted above, discussions at the CWG indicated that the benefits of ToD variation might be limited. Moreover, of the 130 DQ retail price points offered by BT in March 2012, none of them have charges that vary by time of day.[417] This suggests that the impact on DQ providers if they are unable to vary charges by time of day is unlikely to be material.

10.241 In other markets, there is some evidence that consumer might expect different prices for services 'out of hours', many goods and services have this feature. Accordingly, we accept that this characteristic might potentially be important in developing new services. There is thus uncertainty about whether ToD variation might be important for some future business model, which does not currently exist in the marketplace. We would welcome further stakeholder evidence on this point, and in particular whether this potential for innovation is limited to certain number ranges.

Regulatory burden

10.242 There are two significant implementation issues that need to be considered in allowing ToD variations to the SC. At discussions of the Technical Working Group ('TWG')[418] it was noted that ToD variations would need to be consistent across industry as certain billing systems were unable to handle complex ToD variations. For example, if one OCP defines "evening" calls (to any number) as being between 7pm and 7am on a weekday then a SP that wanted ToD variation in its SC would have to adopt the same definition of an "evening" call. The TWG recommended that ToD variations were not allowed to avoid these billing system problems. We recognise these concerns, and those raised by EE, and agree that use of ToD

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[415] http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-290911

[416] See Annex 14 for a summary of the output of the CWG. ToD variation on the SC was specifically discussed at the meeting on 30 June 2011; http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-30602011

[417] *Prices for calls to Specialised Numbers from BT Residential Fixed Lines*, 1 March 2012,

[418] See Annex 14 for a summary of the output of the TWG. See the meeting notes here: http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-080911 and here http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-110811

variations by TCPs/SPs should be avoided if it would lead to costly or onerous obligations on OCPs.

10.243 Therefore, while efficiency in the TCP/SP end of the value chain might be enhanced there is a risk that this could be offset by costs elsewhere. We need to be sure that the commercial drivers of ToD variation, and the efficiency savings are sufficient to outweigh the additional costs of changes to billing systems in order to accommodate it.

10.244 Furthermore, allowing ToD variations would also impact on the number of SC price points required. At paragraphs 10.346 to 10.367 below we consider the need to have a fixed number of SC price points. Having ToD variations will increase the number of SC price points required within a given number range. A SC that varies by ToD effectively uses up three scarce price points (i.e. day, evening and weekend). ToD variations will have to compete with other tariffs within this finite set and be justified in terms of consumer and SP demand.

Conclusion

10.245 We think the potential benefits of ToD variation, in terms of flexibility for TCPs/SPs and the potential for future competition and innovation, outweigh our concerns in relation to consumer price awareness. Accordingly, we do not consider it is appropriate to impose a regulatory rule prohibiting such a feature on that basis.

10.246 However, we note that ToD variations will need to compete with other tariffs within the likely finite number of SC price points (see discussion below). Standardisation of terms such as “evening” across the industry would also be needed. Therefore, these will need to gain a degree of industry support. In this context we would expect a proponent of a ToD tariff to define it within any technical constraints identified in the industry, such that the tariff would be available from all CPs. We look to industry to agree any ToD variations and implement them in a way that avoids unnecessary costs. In other words, whether or not ToD variation emerges is a matter for industry – we are not intending to prohibit ToD variation nor mandate that it must be present.

10.247 We note the comment made by Virgin Media in relation to varying the AC by ToD. We discuss this, and the reasons why we think such variations should be prohibited, at paragraphs 10.122 to 10.129 above.

Unitisation (ppm/ppc)

10.248 Some SPs, particularly those on the 09 and 118 number ranges are likely to want set a SC that includes either a pence per call (‘ppc’) charge as well as / or instead of a pence per minute (‘ppm’) charge. For example, many voting lines currently on the 09 range have a ppc charge (and the caller needs only stay on the line a few seconds in order to register the vote). In deciding whether to allow different types of unitisation, the assessment involves a trade-off between the potential for more efficient price signals versus greater complexity in tariff structures.

Position in December 2010 Consultation

10.249 We set out the advantages of allowing a per call element in the December 2010 Consultation.[419] In summary, we noted it allowed for different SP business models. For example, allowing NGCs to be used for a small transaction, to better reflect the

[419] See in particular paragraph A5.143 of the December 2010 Consultation.

costs to the SP of providing the service or to provider callers with more certainty about the overall costs of an (uncertain duration) call.

10.250 We noted that the drawbacks of allowing different types of unitisation were the same as the question of time of day variation, namely the potential for reduced transparency for callers. As explained above in relation to ToD variation, we considered that those transparency benefits were likely to be small. Those callers that obtained the non-geographic number they wanted to call from written material were unlikely to be confused about this aspect of the tariff, provided that the SC, including any tariff variations, were set out in that material. We considered that only callers to a number without access to tariff information were likely to be affected, and as stated above, we considered it unlikely that consumers would remember the SC for a particular non-geographic number, even if the SC was simple.

10.251 Therefore, our preference in the December 2010 Consultation was for allowing ppm and ppc variations in the SC, on the basis that the potential efficiency benefit of doing so would be likely to outweigh the simplification of preventing such variations.

Stakeholder comments

10.252 The majority of respondents on this point supported our view. C&W[420], TalkTalk[421] and UCKTA all supported allowing such variations to give SPs sufficient flexibility to differentiate and compete in the provision of their various services to consumers. Both C&W and UKCTA reiterated the need for caution when considering the publication requirements placed on SPs, particularly if variations in ppm and ppc charging were allowed. UKCTA commented that any requirements to publish onerous price permutations would negate all the benefits Ofcom sought to preserve.[422]

10.253 Vodafone noted that allowing ppm and ppc, as well as other ‘call features’ such as onward calling (for DQ) services, would increase the complexity of the system because of the need for SC pass-through. It considered that allowing significant scope for SPs to set and vary the SC unfettered, posed a real risk of inaccurate retail billing and potentially significant billing implementation issues.[423]

10.254 BT[424] argued that where a SC was set on a ppc basis it was up to the TCP to ensure that the call was terminated within 60 seconds. It said that should a call exceed that time, the OCP must be able to charge the TCP on a pence per minute basis in order to recover its costs.[425]

10.255 TNUK argued that any attempt to prescribe charging according to ppc/ppm would immediately reduce consumer choice and future innovation, with no associated benefits. It noted that future services might well require innovative charging models

[420] C&W, December 2010 Consultation response, p.27
[421] TalkTalk, December 2010 Consultation response, pp. 4-5.
[422] UKCTA, December 2010 Consultation response, p.10.
[423] Vodafone, December 2010 Consultation response, p.39
[424] BT, December 2010 Consultation response, p.17
[425] BT note (at footnote 12 of its response to the December 2010 Consultation), that “*some services charge on a pence per call basis. The originator retains an amount to cover its costs which is based on the call lasting no longer than 60 seconds. However, some services are designed in a way which can lead to longer call durations. As the originator cannot charge the caller any more money, they recover their additional costs from the terminator using “clawback”*”.

beyond a simple pence per minute element, and if those charging models were not available, those services could not be developed.[426]

Ofcom response and updated position

10.256 The relevant assessment criteria are efficient prices, service quality, variability and innovation and consumer price awareness.

Consumer price awareness

10.257 As for ToD variations, ppm and ppc may impact on the level of consumer awareness of prices. However, as with ToD variation, given that the majority of consumers should have a statement of the SC in front of them when they make a NGC, the SP will be able to make clear in its advertising whether that SC is a ppm or a ppc rate. Therefore we consider that the impact on price awareness of allowing these different structures is likely to be limited.

Efficient prices

10.258 Given the variety in SPs' business models, there is clear demand for calls with a ppm element, a ppc element and both a ppm and a ppc element. During the CWG it was noted that having ppm and ppc charging was important, particularly for the 09 range.

10.259 If we were to prohibit ppc charges, for example, SPs' behaviour is likely to change. For example, if a voting service was unable to charge on a ppc basis then it is likely to react by extending the length of a call – clearly to the detriment of network efficiency, SP call handling systems and consumers' use of their time. We thus consider that allowing a variety of price structures is likely to improve the efficiency of SPs' pricing.

10.260 BT stated that if ppc charges were allowed then the TCP must be responsible for ensuring the call duration did not exceed 60 seconds. Where a call did exceed this duration a ppm rate should be applied. We do not consider that this should be a concern to OCPs as the AC is set independently of the SC structure and allows the OCPs to recover the cost of the connection time.

Service quality, variability and innovation

10.261 Allowing ppm and ppc SCs allows SPs' flexibility and supports different SP business models. It also provides alternative ways for consumers to pay for services, and therefore allowing both charging mechanisms may benefit consumers through increased choice.

Conclusion

10.262 We recognise that there may be system issues, particularly for billing systems, that need to be resolved if ppm and ppc SC are allowed. We would look to industry to identify and seek to resolve these issues, in the same way as for ToD variations discussed above.

10.263 Nevertheless, subject to industry resolving any particular issues in relation to billing systems and available SC price points (discussed at paragraphs 10.346 to 10.367 below), we remain of the view that both ppm and ppc SC should be allowed. We

[426] TNUK, December 2010 Consultation response, p.24.

think that the benefits of allowing ppm and ppc in terms of flexibility to SPs and choice to consumers are likely to outweigh any potential increase in tariff complexity and associated impact on consumer transparency and awareness.

Level of the SC

Requirement for SC maximum prices

10.264 We now turn to the question of whether we should impose regulations on the level of the SC. In this sub-section we are specifically considering whether we should impose caps for the purposes of addressing weak competition between SPs, or for protecting the identity of the different number ranges.

Position in December 2010 Consultation

10.265 We distinguished between two possible concerns in relation to the level of the SC.

i) the risk that competition between (some) SPs was weak, and therefore, in the absence of any constraint on the SC, charges for at least some services would be high. We noted it could be argued that maximum prices should be set for the SC with the intention of forcing down the SC of those services where competition was weak; and

ii) the risk that consumers' perception of number ranges was undermined. We were concerned that unrestricted freedom in setting the SC would mean that the first few dialled digits no longer provide a guide to the price of calls, might prove more confusing to consumers than some level of control.

10.266 We considered that setting maximum SCs to address the first concern had some major drawbacks:

- firstly, we considered it was unlikely to be effective, because SPs that faced limited competitive constraints could simply select a number in a different number range that permitted a higher maximum SC;

- secondly, we noted that the relevant revisions to EU Framework Directives were explicit that the maximum prices can be specified for the purposes of consumer protection. We considered it was therefore arguable whether those powers could be used to address concerns about retail competition (i.e. the competitive constraints on some SPs); and

- thirdly, we noted that setting the level of any maxima was likely to be exceptionally challenging, in particular because SPs' services are very varied and non-geographic numbers facing effective competitive constraints are likely to be intermingled with numbers facing weak competitive constraints.

10.267 As such we consulted on the view that setting maximum prices aimed at addressing weak competition would not be appropriate.

10.268 In terms of setting maximum SCs to address the second concern (ii), we noted that there was evidence from our 2009 Consumer survey of a degree of broad consumer recognition of the number ranges, at least based on the first two digits (despite the existing price complexity and identified obstacles to price transparency).[427] We therefore considered that it would be beneficial to consumers for number ranges to provide a broad indication of the price of a call.

10.269 We also expressed a concern that if we did not specify maximum SCs, there would be a risk that number ranges would not provide a reliable guide to the price of calls. For example, an SP might choose to set a £1/minute SC for a 0844 number, which could expose consumers to considerable risk of bill shock as well as creating opportunities for scams (fraud).

10.270 In summary, we consulted on the view that it was appropriate to specify maximum prices for the SC because it would help different number ranges to convey information about the approximate cost of a call and would also help to protect consumers.

Stakeholder comments

10.271 The significant majority of stakeholders that responded on this point agreed that it should be set with reference to the number range over which the service is offered. BT, for example, considered that if improved consumer clarity was to be achieved, there should be a maximum SC for each number range (with the exception of 118 services, where it accepted that SPs needed to be free to differentiate and price accordingly). BT also said a single (maximum) SC at or below the overall maximum limit within each number block should be applied. It noted these maxima would need to be regularly reviewed by Ofcom to enable the effects of inflation and/or changing market conditions to be taken into account.[428]

10.272 EE also noted the benefits of greater certainty for industry and consumers in terms of introducing clearer and more stable termination charges associated with specific non-geographic number ranges. It recognised the value in maintaining tariff bands on number ranges to assist consumers is identifying likely costs of calls.[429]

10.273 While UKCTA[430] believed that the hosting market was sufficiently competitive to remove the need for tariff ceilings on the SC for the purposes of consumer protection, it recognised the value of maintaining tariff bands for SCs based on number range to assist consumers in identifying the likely costs of making a call. It considered that such call price banding, enforced through the Numbering Plan would help avoid the sort of consumer confusion experience on the 070 range.

10.274 TNUK argued in its response that DQ services were materially different to the other NGC ranges Ofcom was considering, because they had a ‘service-specific’ number range and were potentially subject to competition.[431] It asked for clarification regarding the approach for setting DQ SCs, because it considered Ofcom’s position was not set out clearly in the December 2010 Consultation. It supported an option where there was no maximum cap on the SC for DQ ranges. It considered that setting a maximum SC would be a highly intrusive and unwarranted intervention that

[427] For example we noted that callers recognised that calling an 09 number tens to be more expensive than calling an 08 number, even if they did not have an accurate understanding of precisely what the prices are. 2009 Consumer research Q43 and Q44.

[428] BT, December 2010 Consultation response, p.15.

[429] EE, December 2010 Consultation response, p.56.

[430] UKCTA, December 2010 Consultation response, p.10.

[431] TNUK, December 2010 Consultation response, pp.25-26.

would distort the market, reduce consumer choice and severely limit service innovation.

Ofcom response and updated position on maximum SC caps

10.275 The key assessment criteria in considering whether we should set a cap on the SC are consumer price awareness, efficient prices and service quality, variability and innovation.

Consumer price awareness

10.276 As discussed in the December 2010 Consultation and agreed by stakeholder comments, there is a clear value to consumers in having SCs for a particular non-geographic number range being set within a cap applicable to that range so that consumers are able to make a reasonable estimate of the likely price of calling an SP on that number range (for example in the absence of specific price information from the SP).

10.277 The caps will ensure that consumers will receive consistent pricing messages for given ranges (because all SCs advertised for a given range will be at or below the cap) and will allow Ofcom and other bodies to provide pricing guides. This is particularly important in the 08/09 ranges where there is a diversity of services which, in the absence of constraints, are likely to be charged at a wide range of prices.

10.278 In particular, there are likely to be benefits in setting caps that are consistent with consumer expectations. We set out earlier the evidence of consumers' expectations of the prices of different number ranges; generally consumers are aware that 09 numbers tend to cost more than 08 numbers and this suggests that they are able to make abroad inference of the magnitude of the price of calls based on the first few digits of the number they are calling. We therefore consider that imposing caps on the SCs to reinforce consumer expectations is likely to be beneficial to consumer understanding of prices and give them greater confidence in those prices.

Efficient prices

10.279 Price caps can secure more efficient pricing by addressing the effects of weak competition. However, we do not consider that it would be practical or desirable for price caps in this case to do so (that is below an overall limit – see discussion on higher rate PRS call limits below). As highlighted in the December 2010 Consultation, even with a maximum SC cap, SPs that faced limited competition would be able to migrate to a different number range which had a higher SC, thereby undermining the purpose of any cap. In addition, setting a cap for this purpose is likely to be very challenging, because of the range of different services offered on non-geographic numbers, some of which are likely to face competitive constraints and some which are not.

10.280 We highlighted in Section 9, that where there was scope for competition between SPs on prices, the requirement for SPs to publish their SCs is likely to increase competitive pressures. We therefore do not consider that price caps on the level of the SC would secure efficient prices by addressing weak competition.

Service quality, variability and innovation

10.281 The existence of caps would also clearly add a benefit to the SP. As noted in Annex 8, a key concern for SPs is the lack of consumer price confidence. SPs would welcome a structure that addressed this concern and encouraged demand for their services.

10.282 In addition, as evidenced by the responses to the PPP Call of Inputs with respect to 084 numbers (see Section 12, paragraph 12.164) SPs are very concerned about the reputation of the number range they use and would not wish for this to be unduly diluted by a structure where the ranges had no effective meaning in terms of the price that consumers will be charged for calling a number on a given range. It is clear that SPs see a value in being able to operate on a 084 range which is distinct from a 09 range, for example.

Conclusion

10.283 We consider there is a value in setting a maximum SC charge, not with the intention of restricting revenue and addressing weak competition, but instead to enable consumers (and SPs) to gain an intuition as to the price of calling services on a given non-geographic number range. We do not expect consumers to directly reference the actual SC caps we set in the Numbering Plan (which will in any event be set in ex-VAT terms - see the next sub section discussion), but they will receive the information through advertised pricing and pricing guides (for example the proposed Numbering Guide in Section 6).

Proposed level of SC maxima

10.284 Having proposed the imposition of SC maxima for some non-geographic ranges, we now need to consider what those maxima should be.

10.285 We will focus in this section on the 08 range, though some of the principles apply to 09. However, there are some separate considerations that need to be taken into account in considering the appropriate cap on the SC for the 09 range. The current pricing designations for 09 in the Numbering Plan specifies charges of up to £1.53 (including VAT at 20%)) for calls by BT subscribers. These caps also tend to reflect termination rates for these calls. We consider that there is a case for continuing with these caps on consumer protection grounds but not necessarily at the current levels.

10.286 We highlight in Section 6 that there is substantial industry interest in higher revenue options for 09 calls (i.e. a cap significantly above the current £1.53 pm limit in the Numbering Plan). The current limit has been decreasing in real terms for a decade, with consequential impacts on existing service revenues and encouragement of new service provision.

10.287 The impact of the £1.53 limit has been to encourage alternative revenue raising channel development (see Annex 11 on Innovation) and practices to get around the limit (for example encouraging multiple calls for a single service, or unnecessarily long messages).

10.288 In assessing what is an appropriate SC cap for the 09 range we need to ensure that we understand in more detail the potential benefits and risks of changing the current pricing limit and make sure, to the extent practicable, that the appropriate parties are able to participate in any consultation. In particular a higher cap may increase the incentives for fraud or scams on this range and are likely to also require additional consumer protection measures (for example PCAs) to help consumer’s control their expenditure.

10.289 We have not been able to devote sufficient resources to this specific issue thus far. We are also concerned that its inclusion in a consultation of the complexity and scope of this document may not allow this issue sufficient prominence; we consider it is appropriate to consult on this point separately (as set out in Section 6). This will allow us to devote more time to the specific issues and ensure that the issue has sufficient prominence for interested stakeholders. Nevertheless, as highlighted in Section 6, we do not intend this to lead to a different implementation timeframe to that of the unbundled tariff as a whole. Accordingly we propose to consult as soon as possible so as to ensure that we can include stakeholder views on this matter in our review of our final position on the unbundled tariff.

10.290 TNUK asked for clarification on how the SC would be set for DQ services. It argued that the services on 118 ranges were materially different from other services provided on non-geographic numbers. We do not think that the differences between 118 and other call types (particularly 09) are as stark as suggested. In particular, some 09 services are also potentially subject to competition. Similarly it is not obvious whether having 118 as a 'service specific' number range removes the potential benefits in terms of consumer price awareness of a maximum SC.[432] These are issues that we consider require further consideration.

10.291 We are not proposing to set a maximum SC for the 118 range for the purposes of protecting the identity of the number range. However, there may be separate arguments for imposing a cap on the basis of consumer protection, which is linked to some of the issues highlighted above which need to be considered for the cap on the 09 ranges (for example the risk of scams and ensuring that appropriate protections are in place to enable consumers to control their expenditure). We therefore intend to further consider whether a cap on the SC for the 118 range may be appropriate as part of the separate consultation on higher rate PRS (see Section 6 for further details).

Position in the December 2010 Consultation

10.292 In Annex 5 of the December 2010 Consultation, we set out our initial thoughts on how to set the SC maxima, although we did not propose what the actual levels might be.[433] We noted the following:

- we considered that setting a maximum SC that was lower than the current termination payments that TCPs (and ultimately SPs) received was likely to prompt SPs to migrate elsewhere. In order to mitigate those migration costs, we said the natural starting point for the maximum SC of a particular number range would be current termination rates, in particular the current POLOs[434] specified by BT;

- we questioned whether it was necessary to set different maximums for the 0844/3, 0845 and 0871/2/3 ranges or whether a single maximum for all 08 calls could be set; and

[432] Similarly the 098 number range is designated in the Numbering Plan as being for specific services, namely sexual entertainment services.
[433] See paragraphs A5.168 to A5.175.
[434] Payment to Other Licensed Operator – this is a BT specific term which effectively refers to the termination rate that BT pays for calls originating on its network.

- for 09 calls, provided callers were more aware of the likely charge, we noted it might be appropriate to set a SC maximum that was higher than current termination rates.

10.293 We also considered the question of how we would assess compliance with a maximum SC if the ppm component were to vary by time of day. In particular, we considered whether the maximum would apply to the average (blended) time of day price, or to each component of the price (e.g. if the maximum SC was 5ppm, could an SP charge a daytime SC of 8ppm combined with a low evening SC provided the average charge was below 5ppm?). We considered it would not be appropriate to use some form of blended average but instead impose a requirement that the SP be require to comply with the maximum at all times, and that it would apply to both a ppm and a ppc charge.

Stakeholder responses

10.294 Several respondents, including BT[435], UKCTA, FCS, Vodafone[436] and C&W, agreed that setting a maximum SC for each number range (with exception of the 118 range, on which a maximum is not currently applied), based on the current termination rate received (or POLO) was the right starting point. Some respondents, including C&W[437] and Vodafone, suggested that there should be separate SC maxima for business rate and premium rate services. Vodafone also suggested the possibility of two business rate SC bands, one for 084 and another for 087.[438]

10.295 Several respondents, including C&W[439], UKCTA[440], FCS[441] and Sky[442] noted the need to ensure that additional charges, such as call set-up charges and minimum call payments were taken into account when setting the new SC for particular number ranges, to prevent negative impacts on SPs and potentially significant levels of SP migration.

10.296 C&W noted that it supported the unbundled tariff on the basis that it would be revenue neutral for TCPs, which meant that recent pricing changes had to be taken into account when setting SC maxima. It highlighted that the pricing levels in the Numbering Plan were set over a decade ago, and charging of call set up fees, or minimum call charges, was now common. For example, it noted that the Numbering Plan for 0844 numbers stated a maximum retail price of 5p, but when the minimum call fee was included, the total retail price to the consumer rose to around 8p. C&W said that these call set up fees flowed through to termination payments, meaning that they were higher than the nominal retail charge in the Numbering Plan. It said that in order to ensure that the implementation of the unbundled tariff was revenue neutral on TCPs, the effects of call set up fees needed to be taken into account.

10.297 C&W was concerned that if the call set up fee was not taken into account in the SC maxima, it would lead to a significant loss of revenue for TCPs, impacting the ability to provide services. C&W provided estimates of these revenue impacts in its response. It noted that for 0844 calls a SC cap of 6.5ppm might be appropriate

[435] BT, December 2010 Consultation response, p.15.
[436] Vodafone, December 2010 Consultation, p.7.
[437] C&W, December 2010 Consultation response, p.27.
[438] Vodafone, December 2010 Consultation, p.7.
[439] C&W, December 2010 Consultation response, pp. 27-28.
[440] UKCTA, December 2010 Consultation response, p.10.
[441] FCS, December 2010 Consultation response, p.21.
[442] Sky, December 2010 Consultation response, p.10.

(rather than the 5p figure cited in the Numbering Plan). For 0871, it calculated the SC would need to be around 12.5p and for 0845 around 2p.[443]

10.298 Given the desire for clear consumer messages, C&W considered that whole numbers for retail prices would be necessary, and therefore suggest that the maximum cap for the 08 range as a whole should be 13ppm. C&W also noted, similarly to BT, that there needed to be a formula that allowed maximum SCs to be changed from time-to-time, allowing Ofcom to review SC suitability in face of inflation and to do so in a controlled way.

10.299 FCS made similar points in its response, highlighting that the Numbering Plan would need to be amended so that the maximum caps reflected the set up fees which currently applied. It also suggested a SC cap of 7ppm for 0844 numbers. It said that as a result of this, consideration would also need to be given to amending the PRS Condition so that calls under7ppm were excluded.[444] FCS considered that SCs should be structured in half-penny increments for calls up to 13ppm (which it considered should be the maximum for calls to 087 numbers).

10.300 UKCTA also noted the original price points in the Numbering Plan were set over a decade ago, and the inflationary pressures that had occurred since then. It said that the tension between that inflationary pressure and the restrictions placed on BT had been circumvented through BT's introduction of call set up fees, which had themselves been subject to several increases since their inception. It said that support for the unbundled tariff from its members was dependent upon the SC being set at an appropriate level.[445] In particular, with regard to the 0845 range, UKCTA noted that it remained an important and largely well received service. Therefore it considered that it was important for Ofcom to preserve the termination revenue from 0845 numbers, which was greatly influenced by call set up fees. It noted that failure to do so would result in a significant loss of revenue for terminating operators.

Ofcom response and proposed approach

10.301 The assessment criteria relevant to determining our approach to setting the caps are consumer price awareness and regulatory burden.

Consumer price awareness

10.302 While the evidence from our consumer surveys highlights the low level of consumer understanding of the different prices for 08 and 09 numbers, there clearly remains a residual understanding that 08 numbers are, by and large, less costly than 09. Consumers' ability to distinguish beyond the first two or three digits of a number range may, however, be limited. The evidence from our 2011 Consumer survey is that consumers have trouble distinguishing numbers based on the fourth dialled digit. 19% of consumers responded "don't know" when asked whether there were cost differences between 0844 and 0845 calls. A further 41% had not heard of the 0844 range.[446] Results were similar for 087 numbers (between 0870 and 0871).[447]

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[443] C&W, December 2010 Consultation response, pp.31-32.
[444] FCS, December 2010 Consultation response, p.21.
[445] UKCTA, December 2010 Consultation response, p.11.
[446] 2011 Consumer survey, question GL04A.
[447] 2011 Consumer survey, question GL03A. Similarly, in the 2009 Consumer survey, the mean expected price of fixed 0870 calls was 39ppm which was almost the same as for fixed 0871 calls, namely 41ppm. For mobile 0870 and 0871 calls the corresponding figures were 51ppm and 52ppm. 2010 Consumer survey, questions 43 and 44.

10.303 There is some evidence, however, that at least some consumers differentiate between 084 and 087 numbers. For example, in the 2009 Consumer survey, the mean estimate of the cost of calling 0870 numbers from a landline was 39ppm compared to 30ppm for 0845 calls. The corresponding figures for mobile 0870 and 0845 calls were 51ppm and 46ppm.[448] Accordingly, in setting any restrictions on the SC we should seek to build on this residual understanding rather than undermine it.

10.304 We think that it is worth preserving the current structure of maxima split between 084, 087 and 09 numbers, which we consider aligns well with the consumer capacity to remember these distinctions.

Regulatory burden

10.305 The December 2010 Consultation suggested setting the level of the SC in relation to the current POLO specified by BT for each number range. By setting the SC above the current POLO we would be seeking to limit migration between number ranges.

10.306 The majority of stakeholders agreed that taking the current POLO as the starting point for setting the level of the SC was appropriate. Maintaining integrity of the current tariff bands – with 08x being a lower rate and 09 being a higher rate – was also generally supported.

10.307 Several stakeholders made a strong case for the SC to be uplifted from the limits specified in the Numbering Plan to include the additional payments, primarily the call set-up charge, that TCPs/SPs currently receive. Currently these additional payments mean that the payment to the TCP/SP for a call to a non-geographic number is higher than the nominal retail charge for the call as set out in the current Numbering Plan caps which BT adhere to.

10.308 Accounting for this difference in setting the SC would ensure that a move from the current system to the unbundled tariff would be close to revenue neutral for TCPs/SPs. This would minimise disruption and potential SP migration between number ranges.

10.309 We recognise the concern expressed by stakeholders that simply matching the SC to the current Numbering Plan level risks understating the SC and therefore having a negative impact on TCP/SP revenue, which in turn could lead to significant disruption and migration with associated additional costs.

Conclusion

10.310 We propose to set the level of maximum SC per number range using the current POLOs paid by BT for calls originating on its network as the starting point. This would allow an appropriate up-lift to include any relevant additional charges, for example the call set-up charge, so as to limit negative impacts on TCP/SP revenue and thereby limit potential disruption and migration.

10.311 We agree that it is not necessary to provide too many distinct price caps. However, providing some flexibility and differentiation for SPs is useful. As noted above, there is evidence to suggest that at least some consumers are aware of the differences

[448] 2009 Consumer survey, questions 43 and 44. The responses to question GL01 of the 2011 Consumer survey were less clear about whether consumers expect a price difference between 0845 and 0870 calls, although respondents were slightly more likely to say that they had never heard of 0870 numbers.

between the costs for 084, 087 and 09 calls. We think that preserving this structure is useful, and aligns well with the consumer capacity to remember these distinctions. We therefore propose to set SC maxima for these number ranges. As highlighted earlier, there are some specific issues which we need to consider separately in relation to the cap for the 09 range.

10.312 Furthermore, as set out above, we intend to consider in the same consultation document whether such a cap is required on the 118 range for the purposes of consumer protection.

10.313 We did not receive any substantive comments in relation to how compliance with the maximum SC would be assessed. We propose therefore that the position set out in the December 2010 Consultation remains how we would assess compliance with the SC maxima.

VAT and round numbers for SCs

10.314 Before we set out our proposed SC caps for the 084 and 087 ranges, we need to first consider whether the caps we set in the Numbering Plan are exclusive or inclusive of VAT.

10.315 Connected to this issue is the question of whether SC prices are presented as round numbers, either in the Numbering Plan caps or in advertising by SPs. We did not discuss these issues directly as part of the December 2010 Consultation.

Stakeholder responses

10.316 A number of respondents raised the question of how prices should be rounded in response to the December 2010 Consultation. As mentioned above both C&W and FCS noted the need to have suitably clear SCs (rounded to the full or half penny) to ensure consumers understood the charge.

10.317 BT noted that currently POLOs were calculated to four decimal places and highlighted that an SC with four decimal places would not be suitable for advertising and promotion. It said that some rounding of the SC would therefore be necessary.[449] It commented that TCPs/SPs would need to agree reasonable principles to enable settlement, and not be able to request that SCs are unreasonably rounded up, to the nearest £1 or minute for example.

10.318 An individual respondent, David Hickson, noted that the SC must be stated as a precise number of pence, either per minute or per call, and VAT inclusive. He noted that as a result the SP would have to consider the possibility of future of inflation and any VAT changes when choosing its SC, which would then remain fixed.

10.319 Three and BT also raised the question of how best to deal with VAT.[450] BT considered that that SCs must be shown to customers as inclusive of VAT in advertisements. In addition, where the rate of VAT changed, it considered that OCPs should be able to adjust SCs accordingly.

10.320 The FCS said that the sake of price clarity to the consumer it appeared best that the SC price points were inclusive of VAT, whilst it recognised that this could cause

[449] BT, December 2010 Consultation response, p.16-17.
[450] Three, December 2010 Consultation response, p.22.

revenue uncertainty for SPs when there was a VAT change, the benefit was that prices remained transparent for consumers.[451]

10.321 In terms of how the SC caps were set in the Numbering Plan, Vodafone noted that Ofcom had changed the previous designations in the Numbering Plan so that they were VAT exclusive equivalents (in response to the recent increase in VAT to 20 per cent), which avoided a VAT induced price squeeze on SPs at the expense of non-round VAT inclusive numbers. It noted that it was an issue that Ofcom needed to consider and said there were arguments both ways.[452]

Ofcom response and updated position

10.322 The key criterion for this issue is the impact on consumer price awareness. We also consider efficient prices and regulatory burden. There are essentially two options which we need to consider; either we set the SC caps in the Numbering Plan inclusive or exclusive of VAT. We consider each below.

Consumer price awareness

10.323 In relation to VAT, the SC price presented to the consumer is required to be inclusive of VAT in the vast majority of instances.[453]

10.324 There is, however, a separate question of whether the SC maxima should be set inclusive or exclusive of VAT. This issue was discussed as part of the industry CWG, where arguments were put forward for both sides. It was noted that if prices were set inclusive of VAT, Ofcom would need to set out a clear mechanism for reviewing the caps in cases where the VAT rate changed.

10.325 The benefit in setting SC maxima inclusive of VAT in the Numbering Plan would be if round number limits were to offer a substantial improvement in consumer price awareness. This is because Ofcom, in setting the SC maxima, would select a round number, which would be reflected in the SC prices set at the cap. However, if the maxima are set exclusive of VAT, whilst initially we can set a price that would reflect a round number level in the first instance, if the VAT rate was to change, SPs may choose to reflect that change in their SC prices, which would not necessarily be a round number.

10.326 We would clearly prefer that pricing information is presented to consumers as clearly as possible but we note that currently pricing practices vary between firms in terms of whether round numbers are used. For example:

- BT specifies retail geographic call prices to two decimal places;[454] whereas

[451] FCS, December 2010 Consultation response, p.21.
[452] Vodafone, December 2010 Consultation response, p.
[453] For example, as part of the Advertising Code administered by the ASA, there is a requirement for all prices presented to consumers in advertising to be inclusive of VAT. See clause 3.18 (http://www.cap.org.uk/The-Codes/CAP-Code/~/media/Files/CAP/Codes%20CAP%20pdf/CAP%20Section%203.ashx). In addition, see the Department for Business, Innovation and Skills, *Guidance for traders on good practice in giving information about prices,* paragraph 2.3.1, http://www.berr.gov.uk/files/file46254.pdf.
[454] For example, 7.95ppm for daytime calls plus a call set up fee of 13.1ppm. Tariff Guide for Residential Consumers, 9 March 2012, page 4. Available at: http://www.productsandservices.bt.com/consumer/assets/downloads/BT_PhoneTariff_Residential.pdf

- in contrast, Vodafone specifies most prices for its post-pay subscribers as whole ppm figures.[455]

10.327 Accordingly, it is not clear that round numbers are essential for clarity of price information to consumers. There is no evidence that consumer estimates of costs are likely to be substantially enhanced by round number presentation, given the need to estimate both time and charges. Estimates will be based on rough calculations which can be attempted with or without round numbers, and in general the message from the SC maxima will be one of relative scale of charges (i.e. high/low).

Efficient pricing

10.328 If the SC maximum limits were to be set inclusive of VAT, unless we were to adjust the limits whenever VAT was changed, it would lead to arbitrary changes in revenue to SPs unrelated to the intentions of the Government in varying consumption taxation. This would not be consistent with efficient prices.

10.329 On the other hand, if the limits are set exclusive of VAT, TCPs/SPs have flexibility to decide how to implement a change in the VAT rate to their SC prices, i.e. they would have the opportunity to assess whether the change in VAT could be absorbed in existing prices, or whether changes were required. We consider that providing that flexibility to TCPs/SPs, who are in a better position to decide the best approach for meeting their own, and their customers', needs is more consistent with a principle of efficient prices.

Regulatory Burden

10.330 As highlighted above, if SC maxima are set inclusive of VAT there is likely to be a need for Ofcom to review the maxima in the event of a change in the rate of VAT. The time taken to complete that review and update the maxima could cause revenue uncertainty to TCPs/SPs in the meantime. In contrast, as highlighted above, setting maxima exclusive of VAT allows TCPs/SPs to make their own decision as to how to reflect any changes in the prices they charge to consumers. We therefore consider that setting prices exclusive of VAT would have a lower regulatory burden compared to setting them inclusive of VAT. It is also consistent with the current approach.

Conclusion

10.331 In view of the complexity of instituting changes and the lack of clearly identified benefits, we consider that SC maxima should be set exclusive of VAT.[456] This removes the impacts of VAT fluctuations on the levels of the SC and provides certainty to industry as to the maximum SC for a given number range.

10.332 For the purposes of this initial change in the system we will seek to set the ex-VAT prices so that the VAT inclusive charge is easily expressed (i.e. it will be a round number once VAT of 20% is added). However, we noted that regardless of how the limits are set today, given that VAT can vary, there is no guarantee that the limits in this case would be able always to be expressed in round number when VAT is included.

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[455] Vodafone prices viewed 1 December 2011. http://www.vodafone.co.uk/personal/price-plans/pay-monthly/call-charges/index.htm

[456] Ofcom, *Telephone Numbering*, 20 December 2010, http://stakeholders.ofcom.org.uk/binaries/consultations/telephone-numbering/statement/numbering-statement.pdf

10.333 We note that therefore, it is likely that SC will have the potential to be set in terms that cannot be expressed in round numbers. This might be modified by industry selecting only round numbers as its set of price points for the SC regardless of the exact limit of the Numbering Plan (which we discuss further below).

Proposed SC maxima

10.334 We now need to consider what the SC price maxima should actually be, taking account of our proposed approach set out above, specifically that SC maximum prices should be set:

- for the 084 and 087 ranges (the 09 and 118 ranges will be considered separately);
- based on current termination rates to avoid significant SP migration; and
- should be stated exclusive of VAT.

10.335 C&W and FCS both suggested in their responses that an appropriate cap for the 084 range was likely to be 7 pence (derived from the amount set out in the Numbering Plan plus an amount to reflect call set up fees). They also both indicated that a cap of 13 pence should apply to the 087 range, calculated on a similar basis.[457]

10.336 BT's retention on many NGCs that it originates is regulated under the NTS Call Origination Condition. BT publishes the "NTS calculator", which is a tool that shows TCPs what termination rate they will be paid for calls originating on BT's network.[458] It takes into account BT's (regulated) retail margin and the amount BT charges for conveying the call.

10.337 Those termination rates vary by time of day and the call handover point (for example whether the call is handed over at the local exchange, or whether single transit or double tandem transit is used).

10.338 Table 10.4 shows the termination rate for calls originating on BT's network from 1 April 2012 assuming handover at the local exchange.[459]

[457] C&W, December 2010 Consultation response, pp.31-32. FCS, December 2010 Consultation response, p.21. This was based on the G6 (for 084) and G7 (for 087) chargebands in BT's Carrier Price List.
[458] Available from BT's website: https://www.btwholesale.com/pages/static/Number_Translation_Services/index.htm
[459] Calculated using April 2012 (v25) version of BT's NTS calculator. Figures show the (negative) POLO that BT pays to the third party TCP. We selected the local exchange since as explained in Annex 18 and in paragraphs 10.393 to 10.398 below, this is our assumed point of handover.

Table 10.4: Current termination rates for calls originated by BT (exclusive of VAT)

	Day	Evening	Weekend
5ppm operator 0844 NTS call (g6)	5.2230ppm	5.8822ppm	6.0842ppm
10ppm operator 0871 NTS call (g7)	10.0714ppm	11.2705ppm	11.0172ppm
5ppc operator 0844 NTS call (ff29)	3.5242ppc	3.8906ppc	3.9564ppc
10ppc operator 0871 NTS call (ff28)	7.8242ppc	8.1906ppc	8.2564ppc

10.339 Taking the ppm rates from this Table (the first two rows), the C&W and FCS estimates of a maximum SC of 5.833ppm (which is 7p including VAT) for 084 calls and a maximum SC of 10.833ppm (which is 13p including VAT) for 087 calls appear appropriate.

10.340 The Table shows, however, that there is a difference between the ppm and ppc termination rates currently. This is because a 0844 call with a retail price of 5ppm also attracts a call set up fee. Therefore the effective price of a call is actually higher than 5ppm and therefore the termination rate is higher. In the case of a 5p fixed fee call, however, there is no additional call set up fee, which results in a lower effective call price and thus a lower termination rate.

10.341 Given the difference between the ppc and ppm termination rates, we could consider setting different caps for the different charging structures (i.e. a different ppc cap and ppm cap). However, we consider it would be simpler to have a single standard maximum rate which applies for both ppm and ppc.

10.342 In addition, as stated above, we want to avoid large scale migration to other number ranges by SPs and therefore want to ensure, as far as possible, a revenue neutral approach. This leads to a rounding up of the figure (i.e. to the 5.833p rate for 084) rather than rounding down (to reflect the ppc rate).

10.343 There is a risk that this could lead to price inflation, in particular SPs selecting a higher price point on either the 087 or 084 number ranges than they might otherwise have done because the limit is higher. However, unlike under the current system, the SPs' SC will be charged to all its customers (not just BT customers) and the SP will have to advertise that rate. We consider that this requirement to advertise the exact rate will help encourage consumer awareness of SC prices, and therefore the incentives for the SP to select the highest price point will be reduced (a point made by some stakeholders, e.g. FCS).

10.344 Our proposed caps for the 084 and 087 ranges are therefore set out in the Table below exclusive of VAT. We propose to implement a requirement on number range holders[460] / TCPs to ensure the SC that they set is within the VAT exclusive maximum.

[460] This means the CP which is allocated a particular number block by Ofcom.

Table 10.5: Proposed Numbering Plan SC caps for 084 and 087

	084	087
SC maximum cap in the Numbering Plan (exc VAT) in pence per minute or per call	5.833p (7p at 20% VAT)	10.83 (13p at 20% VAT)

10.345 Currently, as highlighted in some stakeholder comments, the PRS Condition defines any service which charges more than 5ppm (including VAT) from a BT line as premium rate and this will therefore conflict with a SC cap of 5.833p excluding VAT. Consequently, we will be giving consideration to how to amend the PRS Condition appropriately. We are likely to amend the PRS Condition to reflect a cap on the SC of 5.833ppm excluding VAT.

Limits on SP price points

10.346 From the responses received and discussions with industry it is clear that a significant driver of implementation costs will be the costs of upgrading billing systems to allow OCPs to pass-through the SC. A significant factor affecting the level of these costs will be the number of SC price points, the greater the number of price points, the more sophisticated (and costly) the billing systems need to be to ensure accurate pass-through.[461] At present there are more than 300 price points (including some 125 for DQ services).

Approach in the December 2010 Consultation

10.347 We considered this issue in the December 2010 Consultation in the context of maximum prices. We considered the advantage of greater granularity of price points was to allow SPs greater scope to compete with each other in offering services to consumers. We noted that a potential drawback, however, was increased complexity in retail prices, and the additional costs of OCPs managing an increased number of SC price points.

10.348 In our December 2010 Consultation we were of the view that:

- a considerable amount of granularity would be appropriate on number ranges such as 09 and 118, where competition between SPs is particularly important and where different SPs are likely to want to set very different prices; and
- on number ranges such as 08, a degree of granularity is also likely to be appropriate because it would facilitate competition between some SPs and would be more likely to provide a price that would meet SP demand, thereby alleviating the vertical externality.

Stakeholder responses

10.349 EE said it mapped the large number of current wholesale price points to a smaller number of retail price points because the work required to establish and maintain a larger table of price points was completely at odds with the benefit. It indicated that

[461] We consider in Annex 19 the costs associated with different billing system requirements.

very low volumes were associated with some price points and therefore it was efficient to use fewer retail price points.[462]

10.350 In O2's view significant implementation costs would be incurred as a consequence of the level of pricing granularity. It said initial assessment of costs suggested that any level of granularity beyond that offered for mobile premium shortcodes would be insurmountable [✂].[463] Three was of the view that we should mandate a maximum number of SC price points and recommended a figure of 60. It considered that consumers were likely to be confused with more SC price points and noted it could present serious logistical issues for OCPs. [464]

10.351 Vodafone noted that it mapped a large number of wholesale price points to a smaller number of retail price points partly in order to be able to present a simple and easily comprehensible structure of prices to customers. It said it also faced a technical constraint on the number of different retail price points that could be supported for NGCS numbers. [✂].

10.352 C&W said it would be necessary for industry to agree SC price points rounded to the nearest penny, which Ofcom should 'rubber stamp' before they took effect. It noted that TCPs/SPs would be able to move number ranges if they were unhappy with the revised designation.

10.353 TalkTalk said that it was incorrect and an exaggeration to say that the SP would be able to choose the SC for its numbers. It noted the SP would not have any more freedom to choose the level of its SC than under the current regime. Instead what the unbundled tariff meant was that the SP would be able to pick a number from the TCP's number ranges, which just as now, would have price points based on number blocks (normally 10k or 100k blocks).[465]

Ofcom response and updated position

10.354 The relevant criteria in assessing the appropriate number of SC price points is consumer price awareness, efficient prices, service quality, variety and innovation and regulatory burden.

10.355 Allowing an unfettered number of SC price points adds increased complexity to systems as well as increased set-up costs (which may be very high in for some providers) and ongoing maintenance costs. Setting an overly prescriptive and limited number of SC price points risks hampering competition (between SPs) and future innovation.

10.356 While the price points relate to the SC and therefore will be determined by TCPs and other number range holders, any cap on the number to be available will only be effective if OCPs are willing to accept them. We therefore consider that the most appropriate mechanism for constraining the number of price points would be through our regulation on OCPs. If our proposed limit on the number price points is agreed by the industry, then we would impose the limit through an obligation on OCPs to

[462] EE, December 2010 Consultation response, pp. 78-79. In particular it noted the example of the 118 range, where it noted that if it was to re-price the range into bands based on wholesale price they would need around [✂] price points, whereas it noted that the bulk of the traffic and revenue was generated from just [✂] numbers.
[463] O2, December 2010 Consultation response, p.34
[464] Three, December 2010 Consultation response, pp.22-23.
[465] TalkTalk, December 2010 Consultation response, pp.4-5.

accept an equivalent number of price points on their billing systems (see Section 13, paragraph 13.76).

Consumer price awareness

10.357 Consumers benefit from choice but only up to a point if this leads to excessive complexity in that choice. However, for the SC, provided the tariff information is clearly presented with the telephone number (as we propose in Section 12) we expect consumers to be able to manage a relatively high number of price points within a recognisable system (i.e. variations on a small number of themes – ppc, ppm, set up charges, follow-on charges).

10.358 Therefore, we do not consider that consumer price awareness is a limiting factor in this consideration of the number of tariff points.

Efficient pricing and service quality, availability and innovation

10.359 Clearly it is desirable to allow SPs to structure charges to best reflect the service provided and provide a funding structure for new services. However, it is questionable whether very minor differentials in charging structure offer substantial benefits as evidenced by the small proportion of the existing price points that are actively used.

10.360 Following discussions at the CWG, we performed a preliminary analysis of call volumes on different existing price bands based on data provided by a number of OCPs and TCPs.[466] The indicative results of that work showed that call volumes were concentrated on a small number of price points. Over 95% of call minutes were in the top ten charge bands for the 08 ranges, with the most common being the Numbering Plan maxima of 5p for 0844/3 calls, and 10p for 0871/2/3 calls. For the 09 ranges over 90% of call minutes were in the top twenty charge bands, again with the most common charge band being the maximum limit of £1.53 (either charged at a ppm or ppc rate). This suggests that a significant number of the large range of existing price points are currently barely used.[467]

10.361 We consider this suggests that while efficient pricing and a structure which supports a variety of services requires a reasonable choice of price points, this can be constrained without major impact on SPs.

Regulatory burden

10.362 We have discussed with industry the appropriateness of simplifying the existing large array of price points in the current system.[468] There was general consensus that some simplification was appropriate.

10.363 As can be seen from the responses from stakeholders outlined above, mobile OCPs in particular could face significant costs in amending and upgrading their billing systems in order to cope with a wide range of SC price points.

[466] Data provided to Ofcom following a request in July 2011 (see the notes of the CWG meeting on 14 July 2011, http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-14072011). This data only included a selection of OCPs and TCPs and not all were able to provide data for all the number ranges, therefore it can only be treated as indicative.
[467] We were not provided with sufficient data on the 118 ranges to develop a similar analysis.
[468] Discussed at the Commercial Working groups on 30 June 2011, 14 July 2011, 11 August 2011 and 29 September. See the Summary of the outputs in Annex 14.

10.364 We have engaged with stakeholders to understand the extent of these limitations and the costs involved if a wide range of SC price points was permitted. Annex 19 discusses these issues in more detail. In summary, based on these discussions with industry, we note that a larger number of SC price points could be supported in most modern billing systems. However, this might not be true for all OCPs (those with legacy or older billing systems and potentially for smaller OCPs) and for those OCPs a significant number of price points (particularly if there are more than 100 price points) would create significant costs. In addition, all OCPs would face annual administrative (and maintenance) costs in managing retail price points and these costs are likely to be higher with a larger number of retail price points. These costs therefore need to be balanced against the benefits of larger number of price points to improve competition among SPs and support innovative new services as discussed above.

10.365 In arriving at a set number of SC price points we need to act proportionately. That is to set a number of price points the costs for which the costs are reasonable in light of the benefits they would provide in terms of competition and innovation.

Conclusion

10.366 Given the potential costs associated with having an unlimited number of price points, we consider that it is appropriate to curtail the number of price points we would oblige OCPs to accept. This would effectively cap the total available SC price points available as SPs would not be able to offer a range if it is not being built on OCP networks.

10.367 We set out below our current thinking on both the total number of price points and what those price points might be (which also takes into account the technical and cost constraints set out in Annex 19). However, we recognise that stakeholders are likely to be better placed to identify the price points for which there is substantial demand from SPs. The intention of the discussion below is to stimulate and focus responses to this consultation. However we consider that the process for agreeing those price points should be led by industry, albeit with Ofcom involvement.

Potential SC price points for each range

10.368 In considering the appropriate number of price points, we need to consider the particular set of requirements for each of the number ranges under consideration, 08, 09 and 118.

10.369 Below we present a summary of the evidence we have on the number of price points necessary for each range. We do not consider this is definitive and propose that this should be used only to as an initial guide to a reasonable maximum number as a starting point for industry discussions to determine the allocation of tariff price points to that fixed maximum when it is finalised.

Potential SC price points for the 08X ranges

10.370 From our own analysis we know that the vast majority (over 95%) of traffic to 08 numbers is within the top 10 price bands.[469] This suggests that a minimum of 10 SC price points would be appropriate for the 08 number range.

10.371 Clearly additional SC price points for 08 may be useful, for example it may be beneficial to have a '0'ppm price point to allow SPs of 08 numbers not to charge an SC to their customers (for example if they do not want revenue share from calls but still want to retain their 08 number). Additional price points may also be reserved to allow for future competition and innovation.

10.372 During discussions at the CWG, some stakeholders indicated that services could compete on differences of 1p increments.[470] There was therefore some support for allowing price points which increased in increments of 1p. Given our proposed cap equates to 7p (inclusive of VAT) for the 084X range, this means there would be a minimum of eight price points for the 084X range, as set out below.

Table 10.6: Potential price points up to the 7p 084X SC cap

	1	2	3	4	5	6	7	8
084X	0ppm	1ppm	2ppm	3ppm	4ppm	5ppm	6ppm	7ppm

10.373 There is also a question of whether ppc price points are required for the 084 ranges. Our analysis of the traffic data for the different price points indicates that the existing ppc 5p price point is not one of the most commonly used. We have therefore not included this as one of the potential options in the Table above. However, as we set out below, it will be for industry to ultimately decide on the range of price points and therefore if there is evidence of a need for, for example, a 5ppc price point, this could be included.

10.374 In terms of the remaining price points for the 087X ranges, for which we propose a higher cap, there may be less need for increasing 1p increments after 10p. However, there may be more need for ppc price points, e.g. 10p per call. We have therefore included these in the potential range of price points below.

Table 10.7: Potential price points above the 7p SC cap

	1	2	3	4
087X	8ppm	10ppm	10ppc	13ppm

10.375 This leads to a total of potentially 12 price points for the 08X ranges, but there may be scope for reducing this if there is evidence that not all of these are required.

[469] Data provided to Ofcom following a request in July 2011 (see the notes of the CWG meeting on 14 July 2011, http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-14072011).
[470] See the discussion of Ofcom's proposal for the number of SC price points at the CWG meeting on 29 September 2011, http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-290911

There are a wide variety of services on 084 and 087 numbers, some of which may be readily substitutable (e.g. different chatlines) and others for which there may be few alternatives (e.g. a contact line for a bank's existing customers). That said, it seems plausible that the scope for competition between SPs on the 08X ranges may be more limited than on the 09 and 118 ranges.

Potential SC price points for the 09 ranges

10.376 For 09 numbers, our analysis also shows that over 90% of traffic to 09 numbers is within the top 20 price bands. Again this suggests that a minimum of 20 SC price points would be appropriate for the 09 number range. However the range of prices that may be accommodated in the 09 range is significantly greater than in the 08 range (up to £1.53ppm or ppc currently, and potentially higher in future). To allow scope for competition and future innovation in provision of services using 09 numbers, a greater number of price points may be appropriate.

10.377 Given the wider range of potential prices, price points can increase in increments greater than 1p. Furthermore, there is more likely to be demand for ppc charging as well as other charging models such as ppc plus ppm, or even time of day variations (as highlighted earlier). Vodafone highlighted in its response that of the eight wholesale price points for 09 numbers, 42 were ppm, 22 were ppc and 17 were a combination of the two.[471]

10.378 During the CWG working group we made a proposal for a potential range of price points for the 09 range, which we have presented below (up to the current maximum of £1.50). This proposal took into account the traffic data previously gathered (as highlighted above).

Table 10.8: Potential price points for 09

	1	2	3	4	5	6	7	8	9	10	11	12
09 (ppm)	20	25	30	35	45	50	60	75	100	125	135	150

	13	14	15	16	17	18	19	20
09 (ppc)	25	35	50	75	100	125	135	150

Potential SC price points for the 118 ranges

10.379 Currently there are no limitations on the retail price for 118 calls. We are not proposing to implement a cap on the SC for these calls as part of this consultation, but will be revisiting this issue as part of a separate consultation on higher rate PRS (see paragraphs 12.286 to 12.289 above and Section 6). Potentially, however, if we do not impose a cap, it could mean that the possible number of price points could, in principle, be almost limitless.

[471] Vodafone, December 2010 Consultation response, p.39, footnote 74.

10.380 Whilst there are numerous DQ providers (and over 125 price points for these services at the moment), currently only two providers account for more than 80% of the market by revenue (the Number UK on 118118 and 118 500, BT's DQ service).[472] In addition, Vodafone highlighted in its response to the December 2010 Consultation that the top four 118 numbers accounted for roughly 90% of all call volumes.[473]

10.381 Given the need to limit the total number of SC price points it may be necessary for some DQ providers to move from their current retail price. We would clearly need to consider with the industry how this could be managed with the minimum level of disruption.

10.382 It is worth noting, however, that the range of available SC price points would not necessarily restricted by number range. Therefore DQ providers would be able to choose one of the price points set out in the Tables above for the 08 and 09 ranges.

10.383 It is more difficult to determine a reasonable number of price points for this range – for the moment we suggest for planning purposes that 15 additional price points for DQ services may be appropriate, which will allow for DQ specific features (for example low cost follow-on calling).

Provisional conclusion on the number of SC price points

10.384 On the available evidence, we suggest a minimum of around 50 price points (excluding higher PRS charge points) is required across the 08X, 09 and 118 ranges. If the cap on PRS calls is increased, a minimum of 60 price points may be appropriate. This is consistent with the analysis of OCP costs which suggest the restriction should be in the range 60-100 (see Annex 19).

10.385 We believe that a restriction in the number of SC price points within the range 60-100 balances the desire for future growth, competition and innovation in delivery of these various services and limits the potential for additional costs on OCPs, particularly those in relation to set-up and maintenance of billing systems.

10.386 As set out in Section 13, for the purposes of our impact assessment we have assumed a maximum of 60 price points.

10.387 We would welcome working with industry to refine the size and division of SC price points, as well as (as set out in Section 12) the process for determining the initial allocation of SC price points, based on the principles outlined above, i.e. minimising industry disruption, preserving service flexibility while allowing scope for innovation.

Inclusion of SC in an OCPs bundle

10.388 We have not previously sought stakeholder views on this point. However, we do not, at this time, consider we need to intervene in this area. Should an OCP wish to absorb some or all SCs within a bundle we do not consider that this has a bearing on the design of the SC itself. This would be a separate discount offered by an OCP to a customer.

[472] 2010 PhonepayPlus PRS Report, http://www.phonepayplus.org.uk/For-Business/~/media/Files/PhonepayPlus/Research/2011_CurrentandemergingtrendsintheUKPRSmarket2010AnalysysMasonreport.pdf, p.44.

[473] Vodafone, December 2010 Consultation response, p.41 footnote 77. EE similarly noted that the bulk of traffic and revenue on the 118 range was generated by just [✂] numbers, EE, December 2010 Consultation response, p.80.

10.389 However, we would welcome stakeholder views on this point.

Summary of proposed approach to the design of the SC

10.390 In summary we are proposing the following in relation to the SC:

- Bespoke SCs will be prohibited;
- No other tariff principles in relation to the setting of the SC will be imposed on CPs(for example no restrictions on ppm, ppc or ToD charging);
- SC maximum of 5.833 pence for the 084 range and 10.83 pence for the 087 range. These maximums are exclusive of VAT. We will consider the appropriate maximum for the 09 range, and whether an equivalent maximum is required for the 118 range, as part of a separate consultation;
- We will cap the obligation on OCPs with respect to the number of price points they will need to build into their systems. This will be in the range of 60-100. The process for agreeing the specific price points within that overall restriction will be led by industry but with Ofcom involvement.

10.391 We welcome stakeholder comments on all elements of these proposals.

Questions on the Service Charge

Q10.4: Do you agree with our proposed approach for the structure of the SC? In particular that:
(i) bespoke SCs should be prohibited;
(ii) that no further restrictions on the SC structure should be required (e.g. allowing ppm and ppc SCs, no restriction of ToD charging subject to ability of billing systems to pass through the charges)
If not, please explain why and provide evidence if possible.

Q10.5: Do you agree with our proposals to impose maximum SC caps for the purposes of protecting the identity of the number ranges? Do you agree that the caps should apply to the 084, 087 and 09 ranges and that they should be set exclusive of VAT in the Numbering Plan? If not please explain why and provide evidence to support your position if possible.

Q10.6: Do you agree with our proposed SC cap of 5.833p for the 084 range and 10.83p for the 087 range? If not please explain why.

Q10.7: Do you agree that the number of SC price points should be restricted? Do you agree that that restriction should be somewhere between 60 and 100, and where within that range do you consider would be optimal? Do you have any comments in relation to how Ofcom should decide where in that 60 to 100 range the maximum number of SC price points available should be set?

Q10.8: Do you agree with Ofcom's proposed approach to agree the relevant SC price points with industry rather than specifying them as part of the Numbering Plan? Do you have a particular preference for which SC price points are necessary within the different number ranges? What criteria would you propose for the selection of price points?

Assumed Point of Handover

10.392 In considering the design of the unbundled tariff, a further important question is where NGCs are handed over between the OCP and the TCP. We have set out earlier that the AC element of the call relates to the retailing of the call, and the costs for the OCP in carrying the call. However, the OCP will only carry the call up to a certain point, after which it will 'hand over' the call to the TCP. Similarly, the termination rate for these calls (i.e. the payment the OCP makes to the TCP) will be determined by the point at which the call is handed over.

10.393 We therefore need to define a point where we assume calls are handed over (the assumed handover point, or 'AHP'). The AC element of the call will then relate to the conveyance of the call up to that AHP, and the SC relates to the conveyance of the call after that point. Specifically, the SC will be the payment received by the TCP for calls handed over at the AHP. Calls can be handed over at other points and where this is the case, other charges could be relevant.

10.394 We consider how to define the AHP and stakeholder comments regarding the AHP in Annex 18.

10.395 In summary, we propose that the AHP should be set based on a Near End Handover ('NEHO') regime. In the case of the BT network, this would be the Digital Local Exchange ('DLE'). In relation to transit services, we propose that for the unbundled tariff number ranges, the TCP should pay the transit provider for transit services but that the OCP should bear the costs of its interconnection circuits to the transit provider.

10.396 Where two CPs other than BT interconnect directly, we propose that there is scope for commercial discussion on how the cost savings realised by not using a transit provider should be shared to the benefit of the two interconnected CPs.

10.397 We would welcome views from interested parties on our proposals for defining the AHP and in relation to transit services.

Questions on Assumed Handover Point

*Q10.9**:** Do you agree with our assessment on the location of the AHP on BT's and other CPs' networks set out in Annex 18? If not, please explain why you disagree.*

*Q10.10**:** Do you agree that for calls that route via a transit network, the TCP should pay for transit? If not, please explain why you disagree. In particular please explain your views on how incentives can be included within an "OCP pays" approach to ensure the TCP seeks to interconnect directly (where this is efficient) and not to reduce its points of interconnection at the expense of the OCP and efficient end to end call routing.*

Q10.11: Do you agree with our proposed approach for calls between two non-BT CPs, both for the case when a transit network is used and for when direct interconnection is implemented? If not, please explain why you disagree.

Section 11

Number ranges linked to geographic rates (03, 0845 and 0870)

Introduction

11.1 We now consider the group of non-geographic number ranges that are associated with geographic call pricing, either as a result of regulation or practice, which includes the 03, 0845 and 0870 number ranges.

11.2 Currently, the extent to which the price of calls to these numbers mirrors the price of calls to geographic numbers varies:

- all OCPs are required to price 03 calls at or below the price for geographic calls.[474] Some consumers purchase fixed packages that allow unlimited geographic calls at certain times and some consumers purchase mobile packages that include bundles of inclusive minutes. Where such arrangements apply to geographic calls, OCPs are required to ensure that they also apply to 03 calls;

- there is no equivalent requirement on OCPs to price 0845 and 0870 calls at geographic rates. However, in the case of 0870, OCPs are required to price such calls at or below the price for geographic calls unless their charges have been published with the same prominence as their charges for geographic and mobile calls;[475]

- mobile OCPs generally set higher prices for 0845 and 0870 calls than for calls to geographic numbers. Generally 0845 and 0870 calls are not included within bundles of inclusive minutes, even if geographic calls are;[476]and

- some fixed OCPs (e.g. BT) price 0870 and/or 0845 calls identically to calls to geographic numbers. Other fixed OCPs (e.g. Virgin Media) set higher prices for these calls.

11.3 The discussion of these number ranges is structured as follows in this Section:

- we explain why we consider it is appropriate to have at least one universally available non-geographic range for which calls are charged at or below geographic prices. We consider that as a result of the market failures that we identify in Annex 2, this outcome is unlikely to occur without regulatory intervention; and

- we then discuss the 03, the 0845 and the 0870 number ranges in turn.

11.4 For the reasons explained below, our view is that the current set of number ranges linked to geographic calling rates should be rationalised. We have decided to maintain the current regulation of 03 calls, with OCPs required to price such calls at

[474] See GC 17.15 and the Numbering Plan designation for 03 numbers
[475] See GC 17.15, GC14.2, Annex 2 to GC 14 and the Numbering Plan designation for 0870 numbers.
[476] There are some exceptions, such as the Vodafone bolt-on.

or below the price for geographic calls. Our preference is to have the 03 range as the only geographically rated non-geographic number range. While current use of 03 is low, we consider that greater promotion of the range (through the various communications activities we intend to undertake more broadly as a result of the proposals in this document) will help encourage greater usage and awareness. Furthermore, 03 is next in the number series for the geographic ranges- 01 and 02 - and therefore there is a natural logic in requiring 03 prices to be aligned with the prices for calls to those ranges.

11.5 The same does not apply to 0845 and 0870. In addition, those ranges are numerically similar to the 0844 and 0871 ranges, which are not generally priced at geographic call prices. Therefore, we consider the scope for consumer confusion, and the consumer harm that results from that, is much greater if we were to require prices for 0845 and 0870 calls to be aligned with prices for geographic calls.

11.6 We consider that our proposals would, therefore, be building upon existing consumer knowledge and understanding of the 01/02 ranges and minimising the scope for consumer confusion in the 08 ranges. This would be consistent with our wider vision for rationalisation set out in Section 6.

11.7 If we de-link 0845/0870 from the price of geographic calls, we consider it is appropriate to integrate them into the structure for other 084/087 numbers. We consider the only other realistic alternative is to close one or both of the ranges but do not consider the cost of doing so is proportionate.

Requirement for a non-geographic number range linked to geographic call prices

Proposal in the December 2010 Consultation

11.8 In the December 2010 Consultation we considered that it would be appropriate to have at least one universally available non-geographic range for which calls were charged at or below geographic prices for the following reasons:

- such a number range would meet the demand of those organisations which wanted a non-geographic number because they required a national presence, rather than because they wished to generate revenue from incoming calls.[477] The 2010 SP Survey found that the reasons for selecting a specific number range focused mainly on the perception that was created. This was in terms of the perceived size and location of the SP (e.g. one SP selected a number that gave the impression of being a larger company that was based in London).[478]

- there was demand for the existence of such a range from SPs. The termination rates for 0870 calls are cost based (as for geographic calls, taking into account differences such as the point at which calls are handed over).[479] This suggests

[477] A point that we made in the statement establishing the 03 number range. *Telephone Numbering: safeguarding the future of numbering*, Ofcom, 27 July 2006, paragraphs 5.41-5.44. Available at: http://stakeholders.ofcom.org.uk/binaries/consultations/numberingreview/statement/statement.pdf
[478] 2010 SPs Survey, page 16.
[479] Specifically in the 0870 Dispute Determination Ofcom set rates on the basis of the cost of termination of 0870 calls, i.e. geographic call termination charges plus relevant additional costs of termination for 0870 calls on a fully allocated cost basis. These additional costs reflected the different way in which geographic and NGCs are routed and consisted in additional conveyance and switch

that those SPs currently operating on the 0870 range would also like calls to be available at geographic rates (even if that preference was not reflected by all OCPs in the price of calls). We noted this was because 0870 SPs had chosen not to locate on other number ranges associated with higher termination rates;[480] and

- similar reasoning applied in the case of SPs operating on the 03 range.

11.9 However, we said that a non-geographic number range for which all OCPs charged calls at or below geographic prices would be unlikely to arise absent regulatory intervention. We said that this was a consequence of the (inter-related) market failures that we identified, namely:

- OCPs' incentive to set higher retail prices without due regard to the SP preference for geographic call prices (the vertical externality); and

- the incentives of OCPs and SPs to free-ride on the consumer reputation of a number range for being priced in line with geographic call prices and, in the case of OCPs, set prices above that level, and in the case of SPs, by selecting higher termination rates which put upward pressure on retail prices (the horizontal externality).

11.10 We identified the differing outcomes on the 03 and 0870 number ranges as providing support for our view, in that retail prices for 03 calls were aligned with geographic call prices because of the regulatory requirement whereas mobile OCPs and a number of fixed OCPs had chosen to set higher prices for 0870 calls than for geographic calls.

Stakeholder responses

11.11 Several stakeholders, including BT, C&W, TalkTalk, UKCTA, the CAB, the Consumer Forum for Communications ('CFC') and Virgin Media noted the value of having a geographically rated non-geographic number (they also supported the use of 03 alone as this range – to be discussed later in this section).[481]

11.12 Only Antelope Consulting questioned the appropriateness of maintaining a non-geographic number range priced in line with geographic call prices. It noted that '[u]sing geographic rates as the only benchmark is backward-looking. Calls to geographic numbers form a decreasing proportion of the whole and now barely exceed calls to mobile numbers. Calls to mobile numbers can in some circumstances be cheaper than calls to geographic numbers. Ultimately, low-income mobile-only

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costs which are incurred by the TCP in the case of 0870 calls and saved by the OCP (whereas the reverse holds true for a geographic call).

[480] Note that since the December 2010 consultation, BT has successfully appealed Ofcom's 0845/0870 Dispute Determination which found that BT's ladder of termination rates for 0870 calls originated by other CPs, which it introduced in 2009, were not fair and reasonable(http://stakeholders.ofcom.org.uk/binaries/consultations/resolve0870calls/statement/determination.pdf) . Following the 08X CAT Judgment (http://www.catribunal.org.uk/238-7221/Judgment.html), BT reinstated those termination rates, which increase according to the retail price charged by the OCP. Other than the lowest charging band, the termination rates are not purely cost-based. The CAT's judgment is being appealed to the Court of Appeal.

[481] BT, December 2010 Consultation response, p.12, C&W, December 2010 Consultation response, p. 47. TalkTalk, December 2010 Consultation response, p.1. UKCTA, December 2010 Consultation response, p.11. CAB, December 2010 Consultation response, p.13. CFC, December 2010 Consultation response, p.3. Virgin Media, December 2010 response, p.25**.**

households could be disadvantaged by needing to call non-geographic numbers with geographic rates. Overall the confidence caused by knowing only that calls have geographic rates is likely to be rather low, except for landline users with “any time” packages”.[482]

Ofcom response to stakeholder comments and conclusion

11.13 We consider that there continues to be a demand for low cost non-geographic ranges which are aligned with the geographic rate. This is evidenced by the value placed by SPs on the alignment of 0845 numbers with a geographic rate, even though this is not currently consistently applied across OCPs.[483] We accept that the brand value of alignment for 0845 and 0870 has diminished over time as consumer confidence in the ranges has diminished and the introduction of 03 has not been successful, thus far, in addressing this decline. This decline in consumer confidence is part of the motivation for this review.

11.14 We accept Antelope Consulting’s point that consumers do not have a good understanding of the geographic rate in isolation and that a ‘local call rate’ is no longer a benchmark of the lowest call rate.

11.15 However, what is clear is that consumers are comfortable budgeting for calls which are linked to geographic rates, particularly where these calls are included in bundles. NGCs are perceived as high cost[484] and there is an increased trend towards contracts with bundles in the fixed[485] and mobile sectors.[486]

11.16 Also, as evidenced by the Department of Health’s regulation for phone numbers used for the NHS (including GP surgery contact numbers) which recommends that the cost of calls should be no more than the equivalent geographic rate, alignment with the geographic calls is still perceived as giving consumers’ comfort that the cost of a call will not be expensive.[487]

11.17 Accordingly, we consider that the maintenance of a non-geographic number range which is charged in line with geographic call prices is consistent with our criteria by contributing to:

- consumer price awareness, given existing consumer understanding of geographic call prices and bundles),

[482] Antelope Consulting, December 2010 Consultation response, p. 5.
[483] SP Survey December 2011, Q28. SPs said that the most important feature of the 0845 range was that ‘callers are charged the same amount as for a call to a normal landline’ (86% of SPs said it was important or very important). http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/Non-geographic-numbers.pdf
[484] The 2011 Consumer survey found that the “commonly held view amongst those that didn’t know the precise cost per minute of calls to different number ranges was the belief that they were expensive. ... The exception was 01/02 calls, where a greater proportion of respondents that said they didn’t know the price, but did not think it was expensive (23%) than thought it was expensive (17%), http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/omnibus-survey.pdf
[485] 2011 Communications Market Report, see pp.270-272, 309
[486] 2011, Communications Market Report, see pp.316-318.
[487] In December 2009, the Department of Health (‘DH’) issued Directions to NHS bodies prohibiting the use of telephone numbers that charged callers more than the equivalent call to a geographic number. The DH issues further guidance on this policy in February 2012 here: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132809

- efficient prices, given the competition between OCPs around geographic rates; and

- access to socially important services, because many socially important services seek to link the cost of their calls to the geographic rate.

11.18 In the following paragraphs, we consider which of the three non-geographic number ranges currently associated with geographic call prices should be regulated on this basis.

The 03 number range

11.19 As highlighted in Section 7, the 03 range was introduced relatively recently, having been opened for allocations in 2007. Its allocation was intended primarily to allow public sector and not-for-profit bodies to be able to offer national access to their services at geographic call prices with callers also being able to use their in-bundle minutes when calling these numbers.[488]

11.20 The range is not, however, widely used currently (it accounts for less than 1% of the total NGCs) and as a result awareness levels of the range are also low.[489]

December 2010 Consultation proposals

11.21 In the December 2010 Consultation we identified the following concerns for the 03 range:

- poor consumer price awareness in relation to 03 calls (notwithstanding the current link to geographic call prices).[490] We said that relatively recent introduction of the range and the low volume of calls to 03 might explain this; and

- poor consumer recognition of the number range, which provided little incentive for development or innovation through new, cheap to call, services.

11.22 Based on the above concerns, we identified that our key policy objectives for the 03 range were to promote consumer awareness and confidence in the range, to ensure consumer protection from the level of charges and to promote service availability.

11.23 Given these objectives, and the desirability of having a non-geographic number that was geographically rated, we proposed that the most appropriate approach for 03 was maintaining the *status quo*. While we accepted that use and recognition of 03 was low, we noted that it aligned well with the geographic ranges, 01/02. Furthermore, we said that provided these calls continued to be priced at geographic rates, over time we would expect price awareness to improve.

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488 http://media.ofcom.org.uk/2007/02/13/ofcom-introduces-uk-wide-03-numbers/ .
489 2010 Flow of Funds study, page 29 and Figure 5.5.
490 For example, when asked the price of landline calls to 03 numbers, 72% of respondents to the 2009 Consumer research responded “don’t know”. In the case of mobile calls to 03 numbers, 71% responded “don’t know”. The mean expected price amongst those that did provide a price estimate was 11ppm for fixed calls and 23ppm for mobile calls. 2009 Consumer research, questions 43 and 44.

Stakeholder responses

11.24 The majority of stakeholders', including CPs, SPs and consumer groups, supported the proposals for retaining the current regulations in relation to the 03 range by keeping the link with geographic rates and requiring them to be included in call bundles. As noted above several stakeholders, including BT, C&W, TalkTalk, UKCTA, CAB, the Consumer Forum and Virgin Media - noted the value of having a geographically rated non-geographic number, and the advantage of locating it near the 01/02 ranges.

11.25 A number of respondents, including C&W, UKCTA, EE, and the Premium Rate Association ('PRA') did however note that consumer awareness of 03 numbers was currently low and advocated steps to improve consumer awareness and use. The CMA also noted that consumers had no idea what the 03 range represented and there was therefore no reason why any business would want to use a range that the public did not understand, particularly given that it was more costly to use.[491]

11.26 Whilst EE was in favour of the proposal to leave 03 as the only geographically rated non-geographic number it argued that the requirement for 03 calls to count towards inclusive call minutes if the customer had remaining inclusive minutes to UK geographic numbers should be removed. EE considered that this requirement limited OCPs' "retail pricing flexibility" and had failed to encourage take-up of the range by SPs or improve consumer price awareness.[492] EE also believed that such a requirement was legally unfounded retail intervention and that it had a discriminatory impact on OCPs, given that termination rates for calls to 03 numbers were not aligned with geographic termination rates.[493]

11.27 [✂] argued that the revenue share restriction on 03 numbers should be lifted. It argued that some CPs had made substantial investments in next generation networks and the restriction on revenue sharing prohibited CPs from competing for SPs' business on the basis of network efficiency for terminating calls on these ranges. It considered that that removal of the restriction would enhance competition, drive uptake of 03 and promote consumer understanding. Similarly NEG argued that revenue-share should be permitted on 03, noting that the take-up of 03 by doctors surgeries had been limited to date because of the absence of that revenue-sharing and in particular because of the contribution of that revenue towards infrastructure costs (i.e. enabling surgeries to provide enhanced telephony solutions such as call waiting).[494]

11.28 Antelope Consulting suggested that if 03 were to be kept then it should be subject to the unbundled tariff that had been proposed for the other non-geographic number ranges. It suggested that the AC could be set on the basis of either a geographic or mobile rate, and the SC set at zero.

Ofcom response to stakeholder comments

11.29 In the light of stakeholders' comments, we have considered whether the proposal set out in the December 2010 Consultation (namely that the current regulatory requirement to price 03 calls at or below the price for calls to geographic numbers) remains appropriate by reference to our assessment criteria.

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[491] CMA, December 2010 Consultation response, p.6.
[492] EE, December 2010 Consultation response, Q6.7, paragraph 4.
[493] EE response to December 2010 Consultation, Q6.7, paragraph 2.
[494] NEG, December 2010 Consultation response, pp. 4, 15, 66.

Consumer price awareness

11.30 The 03 range was established to provide a distinctive and recognisable non-geographic number range with a set of characteristics which were closely matched to the geographic number ranges 01 and 02 in order to give consumers a clear understanding of the price they pay for calls to the range and thereby contribute to consumer trust and confidence in the range. As we have already noted, however, this policy objective has yet to be achieved, with consumer survey evidence and stakeholder responses clearly indicating that there is poor consumer recognition of the range and of the retail price for calls to 03 numbers.

11.31 We have therefore considered the following issues:

i) whether adopting a different regulatory regime for 03 calls would improve price awareness;

ii) whether consumers' price awareness could be improved for 03 calls, whilst maintaining the linkage with geographic call prices; and

iii) SP demand for retaining 03 as non-geographic number range for which charges are aligned with geographic prices.

11.32 In terms of the first issue, requiring 03 calls to be priced the same as geographic (01/02) calls is a very simple price structure. Accordingly, it is not obvious that either the unbundled tariff or setting a maximum price at a particular pence per minute level would achieve greater price transparency for consumers.[495] Moreover, given the proximity of 03 numbers to the 01 and 02 number ranges, adopting the same pricing approach for calls to all these numbers is likely to have an intuitive appeal to consumers.

11.33 This coincides with the view of the majority of respondents to our December 2010 consultation, who agreed with our proposals for 03 numbers. In particular we note comments from a confidential respondent Virgin Media that "*given its [03] relative immaturity, and thus relative absence of legacy problems associated with it, together with intuitive association with the adjacent 01 and 02 ranges, we consider it to be a suitable candidate for a geographically priced range*".[496] Both the CAB and the CFC also agreed on the use of 03 as a geographically rated non-geographic number range.

11.34 In terms of the second issue, we consider that the package of proposals we make in this consultation document in relation to non-geographic numbers should significantly improve consumer understanding of the price differences between the ranges. Unlike today, there will be clear separation between: ranges charged at or below the geographic rate (01/02/03); Freephone ranges (080 and, in some form, 0500); and the other non-geographic ranges which will be charged at the OCP's AC rate plus the relevant SC. We anticipate that these clear distinctions should help to improve consumer recognition of the 03 range and how it is charged (see the proposed Numbering Guide in Section 6).

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[495] Moreover, as discussed above, there is demand from SPs for a geographically rated retail price point. Providing a retail price point that reflects SPs' preferences helps address the vertical externality.

[496] Virgin Media, December 2010 Consultation response, p.25.

11.35 As we discuss in Section 6, we are proposing a communications campaign involving Ofcom, communications providers and consumer groups to introduce consumers to the new structure.

11.36 Only one respondent, Antelope Consulting, suggested an alternative approach, namely to unbundle the price for 03 calls and impose a cap for the AC based on geographic or mobile rate, and a cap on the SC of zero. In our view, by combining the unbundled tariff with geographic call charging, such an approach would blur the regulatory and price distinction we are seeking to draw between on the one hand, 03 and the numerically similar geographic number ranges and, on the other hand, the other non-geographic number ranges. As a result, we consider it could cause consumer confusion, rather than enhancing consumer price awareness.

11.37 Finally, consumer awareness of the 03 range and prices should increase in line with increasing use of the number range by SPs. We have therefore considered the extent to which there is demand from SPs for 03 as the non-geographic number for which callers are charged the same as calling a geographic number.

11.38 There is clearly some demand for such a number given that SPs currently operate 03 numbers. However to date, uptake of 03 numbers has been limited. In 2009, calls to numbers in the 03 range accounted for less than 1% of total non-geographic traffic (we do not know how call minutes have changed since 2009).[497] 03 number block allocations (either new allocations or transfers of existing allocations between TCPs) have remained low but relatively stable over the last three years. Allocations for 03 numbers remain below those for 08 and significantly below those for 09 number ranges.

11.39 In October 2010 we contacted a number of resellers asking why SPs chose to operate 084 or 0870 numbers rather than 03 numbers. In summary, the key reasons where:

- lack of consumer knowledge of 03;
- cost versus benefit ("if an SP is going to pay, they would rather pay for Freephone");
- lack of revenue share; and
- migration costs (for existing users of other non-geographic number ranges).

11.40 As explained in the preceding paragraphs, we expect that this package of proposals to enhance consumer knowledge and understanding of the 03 range. The SP responses suggest that this, in turn, may contribute to greater SP demand for 03 numbers.

11.41 In addition, demand from SPs for 03 numbers may increase as a result of the other changes that we are proposing. In particular, for the reasons discussed below, we are intending to introduce the unbundled remedy for the 0845 number range. A large proportion of 0845 SPs have indicated a preference for a number that is priced the same as a call to a geographic number and have indicated that they might migrate elsewhere in response to 0845 being unbundled. Maintaining a geographic link for 03 call prices means that the 03 range provides an alternative for these SPs.

[497] 223m minutes out of a total of just under 30.8bn minutes. 2010 Flow of Funds study, pages 26 and 29.

Efficient prices

11.42 The issues raised by stakeholders which are relevant to this assessment under this criterion can be divided into three areas:

i) a concern that there is an insufficient justification for the requirement to include 03 calls in bundles of inclusive minutes for geographic calls, because it inhibits OCPs' pricing flexibility;

ii) that the requirements on 03 discriminate unduly against OCPs, because termination rates for 03 calls are higher than for geographic calls; and

iii) that the prohibition on revenue-sharing on the 03 range should be lifted.

11.43 We deal with each of these in turn.

Inclusion of 03 calls in bundles

11.44 In Ofcom's original proposals for introducing the 03 number range we identified as a primary benefit the certainty that customers would have about, and confidence in, the price that they would pay to make a call. Many respondents to the consultation at the time voiced supported for this, provided 03 prices were included in any bundle of minutes for geographic calls.[498]

11.45 EE has argued that, given consumers limited price awareness and SP take-up in relation to 03 calls, there is not a strong case for limiting OCPs' flexibility to set retail prices by requiring OCPs to count 03 calls towards inclusive call minutes in a bundle of minutes to geographic numbers. We disagree. Removing the requirement for inclusion of these calls in call bundles would lessen the certainty that consumers had about calling these numbers, as different OCPs could treat them in different ways. This would limit consumer confidence in the 03 number range, and thereby reduce SPs' incentives to move to 03 even if they wanted to.

Impact of 03 termination rates on OCPs

11.46 EE also contended that the regulation of 03 discriminated against OCPs since the termination rate for calls to 03 numbers, as determined by Ofcom in January 2011 in relation to a dispute between EE and BT (the "03 Dispute Determination"),[499] is higher than for terminating calls to geographic numbers. EE raised the same complaint in that dispute and we rejected it for the following reasons:

- during that dispute EE neither suggested nor provided evidence that it was failing to recover its efficiently incurred costs on calls to 03 numbers (paragraph 1.5.4);

- we were not provided with any evidence to demonstrate that there was a realistic prospect of retail prices for calls to 03 numbers or to geographic numbers increasing as a result of BT's 03 termination rates (paragraph 1.5.6); and

[498] 2007 03 Statement, http://stakeholders.ofcom.org.uk/binaries/consultations/numbering03/statement/gc17statement.pdf, pp. 12-14.

[499] *Determination to resolve a Dispute between Everything Everywhere and BT about BT's termination charges for 03 calls*, Ofcom, 27 January 2011. Available at: http://stakeholders.ofcom.org.uk/binaries/consultations/draft-everything-bt-termination/statement/determination.pdf

- further, if termination rates for calls to 03 numbers were aligned with geographic termination rates, TCPs would not recover their costs of terminating 03 calls from the termination charge. This is because geographic termination rates reflect the costs of terminating geographic calls and the costs of terminating 03 calls are higher than the costs of terminating geographic calls (paragraph 1.5.7).

11.47 EE did not challenge Ofcom's determination in relation to the termination rate for 03 calls nor has it provided any evidence in its consultation response to support its contention that the rates are unduly discriminatory. We therefore consider there are no grounds for revisiting our assessment of the 03 termination rates and their impact on OCPs.

11.48 Finally, EE also referred in its response to its wider objections to the way in which 03 range is currently regulated, arguing that regulation is "*unprecedented and legally unfounded*". The legal basis for the modifications to GC17 and the Numbering Plan that underpin the 03 range was set out in Ofcom's 2007 03 Statement which included our assessment of why the measures were objectively justifiable, non-discriminatory and proportionate. EE did not seek to challenge that analysis at the time the relevant decisions were taken and, for the reasons given in the preceding paragraph, we are not persuaded by the specific objections to the regulation of 03 that it has raised in its response to the December 2010 Consultation.

Revenue sharing between TCPs and SPs on 03 numbers

11.49 As noted above, some stakeholders have argued that the revenue share restriction on 03 numbers should be lifted because this restriction prohibits CPs from competing for SPs' business on the basis of network efficiency for terminating calls on these ranges. One stakeholder argued that removal of the restriction would enhance competition, drive uptake of 03 and promote consumer understanding.

11.50 Ofcom's policy position with respect to revenue sharing on the 03 range was originally set out in the 2007 03 Statement.[500] In this statement we clearly stated the policy objective for 03 numbers:

> "We therefore are creating a new type of number – starting with 03 – for those organisations who require a national presence, but who do not wish to make an additional charge to consumers for contacting them. We expect the new range to become trusted by consumers as covering clearly-understood services and price ranges. The new range will meet the need for consumer certainty and confidence in making calls, mainly due to the charging features of 03 numbers:
>
> - consumers will have a clear understanding of the price that they are paying for a call, mainly as call tariffs and call discounts will be required to be the same as if the consumer was calling a geographic (01 or 02) number. This will apply to all call minutes, including ones that are part of the customer's inclusive minutes; and
>
> - the use of revenue-sharing will be forbidden on this new range. Consumers calling these numbers should be confident that they will be paying only for the call, and not for any

[500] http://stakeholders.ofcom.org.uk/binaries/consultations/numbering03/summary/03.pdf

> additional services provided by the organisation being called."[501]

11.51 We went on to give the reasons why this new range was required to meet certain needs, and stated clearly the need for a non-geographic number range that was different from the (then) existing ranges, and in particular from 08:

> "The July document aimed to simplify the Plan by providing more memorable, general messages through a Plan that can be sustainable in the longer term. It proposed that clear, distinct number ranges be delivered by creating a new 03 number range, with some quite different features to current 08 numbers. Consumers would then face just two very broad number types, for calls from any line:
>
> - 03 numbers priced at geographic rates (and without revenue-sharing); and
>
> - 08 numbers in a simpler long-term structure (including revenue-sharing)…
>
> …The second benefit flows from the first, in that certainty and clear consumer confidence in the price paid to call 03 numbers would preserve the incentive for SPs to move to 03 numbers, thereby delivering benefits to consumers through a successful 03 number range that is clearly distinct from 08 numbers. The 03 range will not allow SPs to gain revenue share, so the incentive to move to 03 would instead be more effective delivery of their services. Ofcom's discussions with representatives of both public and voluntary sector SPs emphasise that, to a very significant degree, SPs would not see a value in migrating to 03 if the distinction with 08 pricing were diluted by allowing for 03 pre-call announcements and price variations that removed certainty and led to price complexity and confusion."[502]

11.52 We consider that our reasons for prohibiting revenue sharing on the 03 range remain valid. TCPs still have the opportunity to compete on the total cost of service delivery to customers without revenue sharing, while avoiding revenue share ensures that there is clarity in the message to consumers.

11.53 Further, allowing for revenue sharing would be likely to result in a reassessment by TCPs of their termination rates for 03 calls, which in turn might result in further disputes on the issue. Accounting for revenue-sharing would add substantial additional complexity to any determination of the appropriate termination rate and the balance to be struck with the broader policy goal of encouraging low termination costs to facilitate the OCP's ability to meet the regulatory requirement of including 03 calls in call bundles.

Conclusion on efficient prices

11.54 The current regulation of 03 calls constrains the pricing flexibility of OCPs by requiring them to charge such calls at or below the geographic call price and to include them in bundles of inclusive minutes for geographic calls. Although the

[501] Paragraph 1.13 of the 2007 03 Statement

[502] Paragraph 3.1 and 3.26 the 2007 03 Statement

termination rate for 03 calls is higher than it is for geographic calls, it is based on the costs of TCPs and we have not been provided with any evidence to demonstrate that this price constraint discriminates unduly against OCPs or that it leads to higher retail prices for geographic calls. Furthermore, we consider the prohibition on revenue-sharing contributes to the OCP's ability to meet the regulatory requirements, as well as enhancing consumer trust and confidence in the range. Accordingly, there is no evidence before us that the retail price constraint on OCPs in respect of 03 calls results in inefficient pricing to a material degree.

Service quality variety and innovation

11.55 The provision of a geographically rated, non-geographic range ensures that there remains an option available to SPs to deliver services at the same cost to the consumer as a geographic call but with the call handling benefits of a non-geographic number.

11.56 As discussed in the earlier section on the need for a non-geographic range with a geographic rate, there is SP demand for a geographically rated non-geographic number. It provides a number range for organisations that require a national presence with the additional functionality provided by a non-geographic number, but that do not wish to make an additional charge to their customers for contacting them. 03 is the only range which currently offers this functionality with the certainty of geographic call pricing.

11.57 03 currently provides SPs with an alternative to not only the higher retail priced services available on other non-geographic numbers but also to Freephone services using 080. While these latter services are 'free' to many consumers making a call, they place a higher cost on the SP. We consider that demand for non-geographic number range linked to geographic calls may well increase as a result of our proposals to make 080 free to caller and unbundling the other non-geographic number ranges. Offering a variety of retail price points provides choice for SPs and reduces the ability of OCPs to set their retail price without due regard to the wishes of SPs (the vertical externality).

Access to socially important service

11.58 The 03 range was specifically designed to allow socially important services access to a number range which offered the same cost base as geographic numbers but with non-geographic characteristics and with retail pricing certainty that other ranges, notably 0845 and 0870 lacked. In particular the 030 range is specifically reserved for use by public sector and not-for-profit bodies such as registered charities.[503]

11.59 Maintaining the 03 range in its present form preserves this benefit. We also expect that with the other proposed changes to NGCs (see in particular the proposed Numbering guide in Section 6) the role of 03 as a range for socially important services may be enhanced (see the discussion on 0845/0870 below).

[503] Ofcom publishes guidance on the types of services that are eligible to use the 030 number range: http://stakeholders.ofcom.org.uk/telecoms/numbering/guidance-tele-no/030-guidance/030-current-guidance/

Regulatory burden

11.60 We do not consider that maintaining the 03 range is its present form has any additional impact on the regulatory burden, whereas its modification would clearly add costs to OCPs, TCPs and SPs in implementing any changes.

Conclusion on the 03 range

11.61 In summary, the existing regulation of 03 was intended to contribute to price awareness and we consider that this should be enhanced as a result of our proposals and the increased take-up by SPs which may follow. We do not believe that an alternative regulatory approach for 03 would achieve a better outcome in terms of consumers' understanding of the range and the prices they will be charged. We believe that maintenance of the existing regulation, as part of our package of proposals, could make a positive contribution to service quality and innovation and access to socially important services. Since there will be no change to regulation, there will be no additional regulatory burden. In the light of this assessment, we are therefore satisfied that, for the protection of consumers, we should:

- retain the current regulatory structure for 03 numbers; and
- include the 03 number range in any future consumer awareness and information campaign.

The 0845 and 0870 number ranges

11.62 Continuing with 03 as a geographically rated non-geographic number leaves the question of what, if anything, to do with the 0845 and 0870 number ranges. As set out in Section 7, these ranges had some historical link with geographic call prices.

11.63 The structure of the remainder of this section is as follows:

- our policy preference for the retail price of 0845 and 0870 calls to date;
- an overview of our position in the December 2010 Consultation;
- responses to the December 2010 Consultation;
- options for 0845 and 0870 being considered in this consultation;
- assessment of those options against our assessment criteria; and
- our preferred options in relation to 0845 and 0870.

Our policy preference in relation to the retail price of 0845 and 0870 calls

11.64 We set out the history and usage of each of the 0845 and 0870 number ranges in Section 7. As noted there, these number ranges have been around a long time and have a complex history which has shaped how industry and consumers view the numbers. 0845 remains one of the most frequently used non-geographic number ranges, whereas 0870 has seen a significant decline in usage. The prices charged to consumers for calls to these numbers vary widely and they are rarely included in bundles (although more recently BT and some fixed providers have started to include them in some call packages). These ranges were initially intended to be linked to 'local' and 'national' call rates for geographic calls and that has always been Ofcom's stated policy preference for these ranges.

11.65 Most recently, in the 0845/0870 Dispute Determination we reiterated that our policy preference for calls to 0845 and 0870 numbers was that they should be treated in the same way as calls to geographic numbers. We noted that this meant that where an OCP included geographic calls in bundles, 0845 and 0870 calls should also be included, and where geographic calls were not included in bundles, that 0845 and 0870 calls were priced in the same way as calls to geographic numbers.[504]

11.66 Furthermore, as highlighted in Section 7 and above, in April 2009 Ofcom published a statement which restored the link between 0870 and geographically price calls by changing the designation of 0870 in the Numbering Plan to reflect our policy preference. This means that OCPs are required to treat calls to 0870 in the same way as calls to geographic numbers unless the call prices are prominently displayed.[505] In addition, revenue sharing on this range was effectively ceased following the accompanying changes in termination rates for the 0870 range and removal of 0870 from the NTS Call Origination Condition on BT.[506]

11.67 As explained in the December 2010 Consultation, in this current review we are therefore considering whether our policy preference in relation to 0845 and 0870 calls should change.[507]

Proposals in the December 2010 Consultation

11.68 Because of the history behind these numbers, and their current position in the Numbering Plan, in the December 2010 Consultation we identified some specific options for dealing with our concerns.

11.69 For 0845 we considered the following range of options:

- the status-quo;
- the unbundled tariff; and
- requiring calls to be priced at geographic rates (and where geographic calls formed part of a bundle of inclusive minutes, 0845 calls should be treated likewise).

11.70 We evaluated these options using our assessment criteria. We noted that the existing problems were unlikely to be resolved under the status quo, which left us with either an unbundled tariff or linking prices to geographic rates. We considered that there were some positive features to linking call prices to geographic rates, particularly in terms of consumer price awareness, however, we also noted it was likely to lead to a rebalancing of retail prices and there was uncertainty about the impact on termination rates, which created the potential for costly mass migration by SPs to other ranges. We saw significant advantages in having only one geographically rated range (03) and aligning 0845 with the other 084 ranges through

[504] 0845/0870 Dispute Determination, paragraph 2.2. See also paragraphs 2.39-2.50.
[505] 0870 Statement, http://stakeholders.ofcom.org.uk/binaries/consultations/0870calls/statement/0870statement.pdf
[506] See the 0870 Dispute Determination and the 0870 Statement.
[507] December 2010 Consultation, paragraphs A7.272 and A7.277.

the unbundled tariff. We therefore concluded that the unbundled tariff was capable to delivering more long term benefits than restoring the geographic call price link.

11.71 For 0870 we considered the following options:

- the status-quo;
- the unbundled tariff;
- requiring calls to be priced at geographic rates (and where geographic calls formed part of a bundle of inclusive minutes, 0870 calls should be treated likewise); and
- closure of the 0870 range.

11.72 After reviewing each of these options we concluded that some form of intervention was necessary and therefore maintaining the status quo was not an option. We considered that the other options all held attractions. We said the unbundled tariff and alignment with the 0871 range was likely to improve price transparency and increase competitive constraints on calls to 0870 numbers, however, we also noted that linking prices to geographic rates was also likely to provide more certainty over prices and boost consumer confidence in the range, albeit that the potential for confusion with the 0871 range would remain. Finally we noted that closing the range would help simplify the numbering system, but highlighted that it would potentially result in significant migration costs. We asked for stakeholders' views on which of the unbundled tariff, geographic rating or closing the 0870 range was the most attractive.

Stakeholder responses

11.73 There were a range of views made by respondents in relation to our proposals for 0845 and 0870. Below, we have considered responses on both 0845 and 0870 against each of the main options set out above, in particular:

- Number range closure;
- Linking prices to geographic rates; and
- Alignment with other non-geographic ranges (i.e. 0843/4 and 0871/2/3).

Number range closure

11.74 There was little support from stakeholders for the closure of the 0870 range.

11.75 BT reflected the majority view noting that:

> "It is important to keep the range open as, whilst some SPs migrated away from 0870 following the changes implemented in August 2009, many SPs have kept services on 0870 despite the loss of revenue share. This implies that the number(s) is more significant than the revenue share; had they wanted to change tariff or migrate to a parallel 03 number, they would have done so by now."[508]

[508] BT, December 2010 Consultation response, p.13,

11.76 This view was supported by a significant number of other stakeholders who were against the closure of the 0870 range, including Verizon, Vodafone, EE, C&W, 24 Seven Communications and Flextel.[509]

11.77 Verizon was concerned that the cost to industry, and users of 0870 numbers, of closure may have been significantly underestimated.[510] Other respondents made similar comments. Flextel in particular noted that the option to close the 0870 range given the problems appeared "unjust" given the "ineffectiveness" of Ofcom's previously stated policy for 0870.[511] Magrathea noted that closure of the range would cause considerable and unnecessary cost and disruption to businesses.[512]

11.78 Vodafone queried Ofcom's proposed forced eviction of 0870 SPs.[513] It argued that differences between 0845 and 0870 were insufficient to justify a different approach towards these two number ranges. EE argued that Ofcom's consumer research showed that awareness of the 0870 number range was higher than the 0871 and 09 ranges, which Ofcom was not proposing to close; it also noted that the range was not unique in terms of service availability and innovation and there were fewer distributional concerns.[514]

11.79 C&W believed that closure of 0870 would be disproportionate, and argued against the unbundled tariff and geographically linking because of the costs and upheaval of the changes imposed on SPs as a result of Ofcom's previous decision. C&W questioned the need to force migration from 0870 other than to maintain a clean structure for the unbundled tariff.[515] Instead it argued that the range should be closed to new allocations; it noted that the mass migration of SPs from the 0870 range had been completed in terms of volume, but the range continued to haemorrhage users and it foresaw that continuing, it therefore considered it should left to 'wither on the vine'. It considered that for the majority of customers that would signal that long-term the range had become untenable.[516] Magrathea also suggested that 0870 should be closed to new allocations and supply to encourage customers and SPs to move to the 03 range.[517]

11.80 On the other hand Virgin Media considered that closure of 0870 was the most logical option as it would address the inconsistent pricing of calls to 0870 and 0871.[518] It noted that if Ofcom proceeded in this direction it should allow sufficient time for SPs to make alternative arrangements. BT also made a similar comment about timing (although it was opposed to the forced closure of number ranges).[519]

11.81 [✂] had concerns about applying the unbundled tariff to 0845 and instead argued that migration to the reserved 0345 and 0370 ranges was a far more effective remedy. It considered this would avoid the potential for price inflation on the 0845

509 Verizon, December 2010 Consultation response, paragraph 39, C&W, December 2010 Consultation response, pp 57-58.Vodafone, December 2010 Consultation response, paragraph 26. EE, December 2010 Consultation response, paragraph 8d.
510 Verizon, December 2010 Consultation response paragraph 39-47.
511 Flextel, December 2010 Consultation response, p. 5. Also, 24 Seven Communications, December 2010 Consultation response, p. 5.
512 Magrathea, December 2010 Consultation response, p.13.
513 Vodafone, December 2010 Consultation response, paragraph 26.
514 EE, December 2010 Consultation response, p. 70.
515 C&W, December 2010 Consultation response, pp. 57-58.
516 C&W, December 2010 Consultation response, pp.57-58.
517 Magrathea, December 2010 Consultation response, p.13.
518 Virgin Media, December 2010 Consultation response, p. 26 .
519 BT, December 2010 Consultation response, p. 32.

range in particular, although it noted there would also be some implementation issues to be considered in terms of that migration procedure.[520]

Linking prices to geographic rates

11.82 The majority of respondents disagreed with the option of geographically rating 0845 numbers and the removal of revenue sharing. Colt argued that to do so would disrupt the existing and long standing commercial arrangements relied upon by companies who use 0845 numbers.[521] FCS noted that over 50% of its members had agreed that the geographic link for 0845 should be removed, and 0845 aligned with prices for 0844 numbers.[522]

11.83 The DWP raised concerns about having 03 as the only geographically rated range and noted that its preference was for calls to 0845 numbers to be charged at geographic rates. It noted that it used 0845 numbers to provide access to a wide range of services and it was concerned that it might be required to migrate all those services to the 03 range if the structure of prices for 0845 numbers was to change. It said that migration process could lead to significant costs.[523] NEG also noted the high usage of 084 numbers in NHS primary care trusts and the potential impact of any changes on these users.[524]

11.84 NEG considered that Ofcom's proposals could actually reduce consumer confidence in the 084 range and increase confusion because it would not enable Primary Care Organisations using 084 numbers for which a patient paid no more than an equivalent geographic rate to be distinguished from any other 084 numbers where the cost to call was significantly more.[525] It believed this would lead to all 084 numbers in the NHS being unfairly and inaccurately perceived as being far more costly for patients to call than 01, 02 or 03 numbers, even when in some cases the opposite was true.

11.85 Lexgreen Services and Magrathea argued that 0870 should be geographically rated and treated the in the same way as 03. Lexgreen noted that this had been successful in providing clarity of call costs for 03 numbers and it would do the same for 0870 numbers, it saw no reason why that change could not be implemented very quickly and it considered it would prevent excessive charging by OCPs.[526]

11.86 There were no stakeholders who proposed retaining 0870 in its current form in the event of major reformation of the regime.

0845/0870 alignment with other 084/087 number ranges

11.87 The majority of responses agreed that the number ranges should be aligned so that a consistent approach was applied (including Antelope Consulting, BT, TalkTalk, Three, EE, UCKTA, Verizon and Vodafone), and these respondents supported the unbundled tariff as the preferable option.[527] TalkTalk and Antelope Consulting both

[520] [✂]
[521] Colt, December 2010 Consultation response, p.8
[522] FCS, December 2010 Consultation response, p.5
[523] DWP, December 2010 Consultation response, p.5
[524] NEG, December 2010 Consultation response, p.2.
[525] NEG, December 2010 Consultation response, p.2.
[526] Lexgreen Services, December 2010 Consultation response, Q6.7.
[527] Antelope Consulting, December 2010 Consultation response, p. 6, BT, December 2010 Consultation response, pp.13, 16, and 32. TalkTalk, December 2010 Consultation response, p. 6, Three, December 2010 Consultation response, paragraph 88. EE, December 2010 Consultation

noted that the link to national and local rates was confusing to consumers and, in any case, most consumers were largely unaware of it. The CAB also noted it had no objection to 0845 being treated in the same way as 0843/4.[528]

11.88 A number of other respondents, including Colt, Magrathea and Lexgreen Service, also supported the alignment of the 0845 range at least, but considered that a maximum price for calls would be preferable.[529]

11.89 UKCTA noted the significant importance of the 0845 range and the revenues that are generated through use of 0845, to a wide range of UK business. It recommended that all 0845 ranges were migrated to the same SC price point to ensure a consistent approach and to ensure recipient networks with ported in 0845 numbers had certainty on the approach.[530]

11.90 Virgin Media recognised that there may be some logic in aligning 0844 and 0845 but considered that Ofcom had not undertaken a sufficient assessment of the impacts of doing so.[531] It expected that SPs migrating out of 0845 to a pure revenue sharing regime would result in a material increase in termination charges (i.e. SCs), which would lead to a significant transfer of funds from the originating end of the value chain to the terminating end. It argued that TCPs/SPs would benefit from this windfall at the expense of the OCPs and that redistribution would trigger a tariff package effect at the retail level.

11.91 [✂] noted similar concerns. It argued that alignment of 0844/3 and 0845 was likely to lead to an increase in retail charges, as SPs would move towards the top end of the charging band for 0845, likely removing the inclusion of 0845 numbers in bundles (where they existed to some extent today). It also noted that implementation could be difficult given the heterogeneity of organisations using the number ranges and the difficulties that could arise in routing calls to different organisations in the same number block that would want different charges. Whilst it noted that there might be issues with consumer awareness, it believed there was a level of expectation that these calls were analogous to geographic calls, particularly given that some OCPs included them within bundles.[532]

11.92 C&W said that whilst the unbundled tariff, and reversal of the 0870 regulation had appeal, it considered that the impact upon those customers that choose to migrate away from 0870 and the potential claims for compensation from Ofcom were likely to be severe.[533]

Other issues

11.93 Several respondents, including Colt, UKCTA and Verizon also raised concerns that the current regime for 0845 numbers, where the wholesale payment between networks is governed by the SMP condition on BT, allowed BT to control the payments to TCPs through changes to its retail prices. Verizon argued that this had a

response, paragraph 8.b. and answer to Q6.7 at paragraphs 5-11. UCKTA, December 2010 Consultation response, p.12. Verizon, December 2010 Consultation response, p. 4, Vodafone, December 2010 Consultation response, paragraph 26-27 and response to Q6.7.

528 CAB, December 2010 Consultation response, p.13.

529 Colt, December 2010 Consultation response, pp.8-9, Magrathea, December 2010 Consultation response, p.13, Lexgreen Services, December 2010 Consultation response, Q6.7.

530 UKCTA, December 2010 Consultation response, pp.11-12.

531 Virgin Media, December 2010 Consultation response, p. 25.

532 [✂]

533 C&W, December 2010 Consultation response, p.57.

significant adverse effect on efficiency and competition.[534] Colt argued that it created uncertainty for TCPs and for SPs that relied on outpayments for their business models to work.

11.94 Colt argued that Ofcom should set an industry-wide TCP payment from the OCP, alongside retail charge caps on all OCPs to prevent excessive charges.[535] UKCTA saw this review as an opportunity to correct historical anomalies associated with the end-to-end flow of payments in relation to 0845 and make a positive difference to the wholesale regime which would ultimately benefit consumers.[536]

Updated options for the 0845/0870 ranges

11.95 In light of the stakeholder responses and after further review of the costs of number range closure we do not propose to continue with consideration of closure for 0870.

11.96 We accept the views of stakeholders that complete closure of this range would lead to either significant SP migration and associated costs for migration or potentially the loss of services currently provided and that the evidence of substantial improvement in consumer outcomes compared with other options is weak.

11.97 We note C&W's and Magrathea's suggestion that the range could be closed to new applicants, with a managed process of decline over time, but we are not convinced this offers any particular benefits to consumers. We consider that 0870 is likely to persist indefinitely under this approach (as evidenced by the continued persistence of 0500, despite that range being closed to new allocations for over a decade). Thus we would need to determine how 0870 should be regulated in any event (otherwise the current concerns in relation to this range, such as consumer confusion, would remain).

11.98 We have therefore focused our analysis on whether the remaining options for the 0845 and 0870 number ranges perform better than the status-quo. Those options are:

- **Option 1**: re-affirming the link to geographic calls for calls to these numbers. Specifically, all OCPs would be required to price 0845 and 0870 calls at or below the price they charge for a call to a UK geographic number i.e. the same requirement that currently applies to the retail pricing of 03 calls; and

- **Option 2**: applying the unbundled tariff to 0845 and 0870 numbers and thereby aligning them with the other 084 and 087 ranges.

11.99 We have evaluated each option below using our assessment criteria. In undertaking this assessment we have drawn on the additional evidence collected through the 2011 Consumer survey and the 2011 SPs survey. First, however, in order to complete that assessment we have made some assumptions about the termination rates for the 0845 and 0870 number ranges, which we explain below.

Assumptions about termination rates

11.100 An important issue under Option 1 is what termination rate OCPs would pay in relation to 0845 and 0870 calls. For the purposes of our impact assessment, we have

[534] Verizon, December 2010 Consultation response, p.3.
[535] Colt, December 2010 Consultation response, p.9.
[536] UKCTA, December 2010 Consultation response, p.6.

derived what we consider to be a reasonable assumption about the level of termination rates under Option 1.[537]

11.101 Currently retail prices for 03 calls are the same as for geographic calls. In the 03 Dispute Determination we considered the termination rates charged by BT to EE for 03 calls. We concluded that it was fair and reasonable for BT to align its termination rates for calls to 03 numbers with those for calls to 0870 numbers to reflect the cost of termination, as calculated in the 0870 Dispute Determination.[538] In the 0870 Dispute Determination we set cost based termination rates for 0870 calls originated by BT with a zero allowance for revenue share with the SP. We explicitly stated that outpayments to SPs should not be recovered through termination charges. This was on the basis that enabling the TCP to recover outpayments to SPs through the termination charge would undermine the policy objective of aligning such charges with geographic calls.[539]

11.102 In the light of our analysis in these past disputes, our assumption is that under Option 1 the termination rates for all 0845 and 0870 calls would be the same as for 03 calls or for 0870 calls originated by BT. Such termination rates would be cost based and would not include any allowance for revenue sharing with the SP. This is likely to be particularly significant in the case of 0845 calls which, as explained above, currently incorporate a small revenue share with SPs. As a result, under Option 1 the costs to SPs of operating a 0845 number are assumed to increase.

11.103 Our assumption about termination rates allows us to assess the impact of Option 1. As explained in Part C, in relation to the origination payment for 080 calls, we consider that ex-ante intervention is required (in the form of access obligation on TCPs to set origination payments that are fair and reasonable). We have set out our assessment of the possible basis for this in Annex 23, which draws on the cost of the provision as part of the this assessment.

Updated assessment of Options 1 and 2

11.104 Below we assess Options 1 and 2. Given similarities in the analysis, we look at both 0845 and 0870 together (although we do identify any differences between these ranges). We have based our assessment of these options against maintaining the status-quo. However, we also highlight which of the options performs better against our assessment criteria.

Consumer price awareness

11.105 As we explain in Section 8, consistent with other non-geographic numbers, consumer awareness of retail prices for 0845 and 0870 calls is poor. Our assessment of the impact of Options 1 and 2 on consumer price awareness is set out below:

- we explain how the two Options may improve consumer price awareness;
- we explain the risk of confusion between different 084 and 087 number ranges under Option 1;

[537] This is the a similar approach to that adopted in Part C in relation to origination payments for 080 and 0500 calls.
[538] 03 Dispute Determination, paragraph 1.8. Available at: http://stakeholders.ofcom.org.uk/binaries/consultations/draft-everything-bt-termination/statement/determination.pdf
[539] 0870 Dispute Determination, paragraph 6.59.

- we discuss the impact of Option 2 on the effectiveness of the unbundled remedy for other number ranges; and

- then we set out our conclusion (on which we are consulting) in relation to this assessment criterion.

How might the two options improve consumer price awareness?

11.106 The primary conclusion of the 2011 Experimental Research[540] was that subjects made better call choice decisions when price information was provided at the time they decided whether or not to make a call.

11.107 We have already discussed the impact of the unbundled tariff on price awareness in Section 9. In summary, we consider that the unbundled tariff (Option 2) will improve price awareness relative to the status quo:

- In particular, the unbundled tariff allows SPs to communicate their SC to callers. The 2011 Consumer survey found that 65% of callers obtained the telephone number for the last company or public organisation they called from at least one of the following sources: the internet; a letter, bill or leaflet from the company being called; a written advert; or an advert on the TV or radio.[541] Each of these sources is likely to allow the SP to indicate what the SC is alongside its number. In other words, for around two-thirds of calls the consumer may have the SC in front of them at the point of call. Price awareness for these consumers is likely to be substantially improved.

- We discuss the impact of the unbundled tariff on price awareness for consumers that do not have the SC in front of them below, under the heading “Confusion with 0843/4 and 0871/2/3 calls”.

- While consumers may not always be able to exactly recall their AC, we think it is plausible that many consumers will recall its broad magnitude. Moreover, it will be easier for OCPs to communicate the AC to their customers than the current plethora of retail price points.

11.108 We also consider that geographic rating (Option 1) would improve price awareness relative to the status quo:

- Consumers would be presented with consistent retail treatment of these numbers (unlike the present). As a result, SPs could accompany the presentation of the numbers with a message to the effect that “calls to these numbers will be charged at or below the price for a local or national call”. This message could potentially be provided for around two thirds of calls to non-geographic numbers (see the 2011 Consumer survey results above).

- Where consumers are told that 0845 and 0870 calls cost the same as or less than calls to a geographic number, this is likely to improve their understanding of the price they will be charged. In particular, as discussed in Annex 8, consumers are more aware of the price of geographic calls than of NGCs and therefore a price at or below that threshold should have greater resonance for them.

[540] 2011 Experimental Research, point 1 on page vii.
[541] 2011 Consumer survey, question GL14: “Thinking about the last time you made a call to a company, shop or public organisation which of the following did you use to get the telephone number?”

- The effectiveness of this intervention would depend on whether SPs were required to inform consumers (e.g. in any advertising) that 0845/0870 calls were priced at or below the price for geographic calls. This is something that we would need to consider (and is not something we consider necessary for 03). Absent a regulatory requirement, it is possible that some SPs would choose not to provide such a message, which may lessen the extent to which Option 1 improves price awareness.

- Where consumers are not told that 0845/0870 calls are priced in the same manner as geographic calls, then they will need to infer this from the number range or remember it from the last time that they called. We discuss the impact on price awareness in these circumstances below.

Confusion with 0843/4 and 0871/2/3 calls

11.109 Under Option 1, the price of calls to 0845 and 0870 will be set on a very different basis to calls to 0843/4 and 0871/2/3. The former would be priced the same as calls to geographic numbers whereas the latter would be subject to the unbundled remedy. Thus, under Option 1, consumer confusion between these ranges may lead to incorrect inferences about call prices.

11.110 Evidence from the 2011 Consumer survey shows that consumers currently struggle to distinguish between closely aligned prefixes – i.e. between 0845 and 0844/3 and between 0870 and 0871/2/3. In other words, consumers are likely to make mistakes whose consequences are likely to be substantial if charges differ substantially across similar number ranges.

11.111 In the 2011 Consumer survey we asked respondents about the relative prices of 0844/0845 calls and 0870/0871 calls. We report the results in Table 11.1. The majority (60% or over) of consumers responded that they either did not know the relative price or were unaware of the existence of these number ranges. We cannot be sure whether those respondents that did express a view on the relative price of calling these number ranges were correct (since prices depend on which package a consumer subscribes to). That said, it seems likely the price of 0871 calls is generally higher than the price of 0870 calls (since the latter does not include a revenue share with the SP). However only 11% of respondents selected this option.

11.112 Furthermore, a significant proportion of respondents were not particularly confident about their answer. Table 11.2 shows the responses to a follow up question asking respondents how certain they were about their answer. Among those who were aware of 0871/0844 numbers, just under half claimed they were “fairly uncertain” or “very uncertain” of their answer.

Table 11.1: GL03A/GL04A – "I am going to ask you about the cost of making calls to 0870 [0845] numbers compared to 0871 [0844] in general. Thinking about the cost of making calls to the two numbers do you think…?"

	0870 & 0871	0844 & 0845
Calls to 0870 (0844) and 0871 (0845) numbers cost the same per minute	18%	19%
Calls to 0870 (0844) numbers cost more per minute than calls to 0871 (0845)	9%	12%
Calls to 0871 (0845) numbers cost more per minute than calls to 0870 (0844)	11%	9%
Never heard of 0871 (0844) numbers	44%	41%
Don't know	18%	19%

Base: Adults 16+ that are aware of 0870 (0845) numbers. 2011 Consumer Survey 2011.

Table 11.2: GL03B/GL04B – "How certain are you?

	0870 and 0871	0844 and 0845
Very certain	9%	9%
Fairly certain	41%	44%
Fairly uncertain	35%	35%
Very uncertain	14%	11%

Base: Adults 16+ that are aware of 0870 and 0871 (0845 and 0844) numbers. 2011 Consumer Survey.

11.113 This finding that today most consumers find it difficult to distinguish between number ranges based on the fourth dialled digit is not particularly surprising given consumers' general lack of price awareness in relation to non-geographic numbers. It also tallies with a comment made by Vodafone in response to the Call for Inputs, that "consumers' practical ability to distinguish subtle differences between NTS numbers at a 3 or 4 digit level (e.g. between 0845 and 0844/3/2 …) may be limited".[542]

11.114 Under Option 1, geographically rating calls to 0845 and 0870, introduces a different pricing regime for two number ranges that to most consumers would look very much like the unbundled 0844/3 and 0871/2/3 number ranges. This creates a risk of confusion for callers to 0843/4 and 0871/2/3 numbers (who may incorrectly think these calls are geographically rated) and callers to 0845 and 0870 numbers (who may incorrectly think that these calls are subject to the unbundled tariff).

11.115 Obviously for those calls where the consumer is told the price at the point of call (e.g. in the advertisement containing the non-geographic number) the risk of confusion is lower. As explained in paragraph 11.107 above, the 2011 Consumer survey suggests that up to two thirds of calls may fall into this category (because consumers obtain the number from a sources that is likely to allow the SP to indicate the price of calls).

11.116 This concern thus centres on the second situation where the caller has to remember or infer the price from the number range they are dialling. In these circumstances, we consider that Option 1 risks leading to a significant number of consumers being confused about the price of calls to 084 and 087 numbers. This problem may be exacerbated by the difference in call prices between geographically rated 0845 and 0870 calls and unbundled 084 and 087 calls. In particular, post-pay mobile subscribers and subscribers to some fixed packages currently do not pay for

[542] Vodafone response to Call for Inputs, May 2010, paragraph 14.

geographic calls and thus would presumably not pay for 0845/0870 calls under Option 1. In contrast, these subscribers would pay both an AC and a SC for 0844/0871 calls.

11.117 Further, the initial information campaign for 0845/0870 as geographic numbers is subject to significant risk, as noted above. We would need to present consumers with a message that three number ranges (03, 0845 and 0870), which are quite distinct in form are subject to the same pricing requirement, based on the prices for yet another set of numbers (01 and 02), while ranges which are similar to two of these (0844 and 0871) are subject to different tariffs. It is self-evident that communicating such a complex message will be difficult to achieve effectively.

11.118 In contrast, Option 2, the unbundled tariff, will mean that calls to 0845 and 0870 are treated in the same way as calls to 0844 and 0871. While the SC will obviously depend on the particular number that is being dialled, callers will face a consistent pricing structure.[543] Thus, where the caller has to remember or infer the price from the number range they are dialling, the magnitude of any mistakes is likely to be smaller under Option 2.

Impact on the effectiveness of the unbundled remedy

11.119 Including 0845 calls within the unbundled tariff is likely to improve the operation of that remedy. 0845 is the second largest number range (by volume of calls). By including this number range, it means that the unbundled tariff thus applies to a significantly greater number of calls. To illustrate, under Option 1, the number ranges that we are proposing to unbundle accounted for 7,833m minutes of calls in 2009.[544] Under Option 2, this rises to 19,320m minutes (mainly due to the inclusion of 0845).[545]

11.120 Since the AC applies to more calls under Option 2, this means that consumers are more likely to pay attention to this element of the price and are more likely to take it into account when selecting which OCP to subscribe to. In other words, because the AC applies to a greater number of calls, its importance to consumers is likely to be higher, meaning they are more likely to exert the effort required to recall it. Option 2 is thus likely to support the effectiveness of the unbundled remedy in raising price awareness on other number ranges.[546]

Conclusion on consumer price awareness

11.121 It is clear that both Options 1 and 2 are an improvement for consumers over the status quo.

11.122 Where call cost information is presented at the point of presentation of the number, both options are largely equal.

11.123 However, there is a significant differential when call information is not available and consumers have to rely on other information. The evidence of consumer confusion

[543] Moreover, as discussed in Section 10, we are proposing that for callers on any particular package the same AC would apply to calls to all unbundled numbers.
[544] Calculated by adding together 0843/4, 0871/2/3, 09 and 118 call volumes from the 2010 Flow of Funds study.
[545] Calculated by adding together 0843/4, 0845, 0870, 0871/2/3, 09 and 118 call volumes from the 2010 Flow of Funds study.
[546] Under Option 2, the greater importance of the AC means that competitive constraints on the AC are also likely to be stronger (consumer awareness is likely to be higher).

between other similar ranges not linked to geographic rates is high and is a significant part of the current consumer concerns about the non-geographic ranges.

11.124 In addition, Option 2 would significantly enhance the effectiveness of the unbundled tariff as a whole in terms of consumer price awareness given the substantial volume of 0845/0870 calls and the avoidance of two separate sets of rules for apparently similar number ranges.

11.125 We consider that on balance Option 2 is the preferred option against this criterion.

Efficient prices

11.126 For this assessment criterion, there are a number of factors that are relevant to our analysis. We have, therefore, structured the discussion below according to these different factors, which are:

- addressing the horizontal externality;
- addressing the vertical externality; and
- the tariff package effect ('TPE').

Impact on the horizontal externality

11.127 The horizontal externality refers to the potential negative impact of the consumer experience when calling some non-geographic numbers on consumers' behaviour when calling other non-geographic numbers. It is helpful to distinguish between: (i) the effect that pricing by one OCP can have on the perceptions of the prices set by other OCPs for the same number range; (ii) the effect that pricing on one number range may have on the perceptions of prices on other ranges; and (iii) the effect on the NGC system as a whole.

11.128 In terms of the first aspect of the horizontal externality, i.e. between the price of 0845 and 0870 calls from different OCPs, both Option 1 and Option 2 would mitigate this concern. This is because different OCPs would all price 0845 and 0870 calls in a broadly consistent manner:

- Under Option 1, all OCPs would price these calls at or below the price for geographic calls (although obviously that geographic call price would vary between OCPs).
- Under Option 2, all OCPs would unbundle these calls and the SC would be common across OCPs (although the level of the AC would vary between OCPs).

11.129 However, as explained above, Options 1 and 2 have different impacts on the second and third aspects of the horizontal externality, i.e. between different 084 and 087 number ranges and on the NGC system as a whole. Under option 2, the confusion that can occur because of the similarity of the digits of number ranges with widely different prices is alleviated. Thus, it is likely to better address this aspect of the horizontal externality and, in this regard, may contribute to a more efficient pattern of prices. Similarly it provides a clearer overall structure for non-geographic numbers (see the proposed Numbering guide in Section 6) as a whole.

11.130 As described above, under Option 1 the potential for consumer confusion, for example between 0844 and 0845, exists in terms of their ability to distinguish between the ranges and then recall the different price structures that would apply. We therefore consider that Option 1 is less likely to address the horizontal externality effectively.

Impact on the vertical externality

11.131 The vertical externality arises when the retail price chosen by OCPs does not reflect the preferences of SPs. Internalising this externality will tend to increase the efficiency of retail prices.

11.132 We discuss 0845 and 0870 SPs' preferences in relation to retail prices as part of our assessment of the service quality, variety and innovation criterion below. In summary, Option 1 is slightly preferred to Option 2, although different SPs have different views.

11.133 Under Option 1, the retail price will be no more than the price of calls to geographic numbers. For those 0845 and 0870 SPs that have a strong preference for this retail price point the vertical externality will be addressed, leading to a more efficient pattern of retail prices.

11.134 We have already discussed the effects of Option 2, the unbundled tariff, on the vertical externality in Section 9. In summary, SPs will be able to control the SC for calls to their number. This would improve the efficiency of prices by providing SPs with the ability to obtain a number range with a price point that they consider will meet the needs of their customers. However, the unbundled tariff will not completely address the vertical externality. The overall retail price paid by a caller will also depend on the AC which will be set by the OCP. Under Option 2, those SPs that would prefer calls to their 0845/0870 number to be priced the same as calls to geographic numbers will have to incur the costs associated with migrating to 03.

The tariff package effect

11.135 Under Option 1, mobile OCPs' would generally have to reduce call prices.

11.136 In the case of fixed OCPs the situation will vary. The Numbering Plan cap on BT charges for 0845 has led to that charge being substantially below the out of bundle geographic rate (BT charges no more than 2.042ppm for 0845 but up to 7.95ppm for a geographic call out of bundle). TalkTalk, however, treats 0845 calls in the same way as geographic calls (they are charged at 7.95ppm and often included with in bundled call packages) and similarly Virgin Media charges the same rate for 0845 calls as geographic calls, albeit that they are not included within bundles.

11.137 Lower OCP profits on 0845 and 0870 calls are likely to lead to increases in the price of other telecoms services (the tariff package effect or 'TPE'). Higher OCPs profits on 0845 calls would have the opposite effect. In our view, the existence of a TPE is not necessarily undesirable. Indeed since the current pattern of prices is likely to be inefficient (as explained in Part A), at least some rebalancing of prices is likely to be beneficial:

- In the 2010 Consumer survey we asked "If all calls to 0845 and 0870 numbers cost the same as a call to a standard geographic number, there would be a cost to the operator. If your total bill stayed the same, would you like 0845 and 0870 numbers to be priced in this way, even if other calls (or line rental) became more expensive?" 14% of respondents wanted 0845/0870 calls to be priced in this way, 14% replied "maybe" and 61% did not want this change.[547]

- However, we do not consider that responses to this question provide a reliable guide to consumers' preferences about the structure of retail prices. We set out our reasoning on this point in relation to an almost identical question about making 080 calls free in Part C of this consultation (see Section 16, paragraphs 16.125 to 16.131). In summary, the particular question is structured in a way that makes the results less reliable as many consumers read into this question the risk that there will not simply be a rebalancing but a net increase in their bills.

11.138 In our 2010 December Consultation we identified a potential TPE if calls to 0845 and 0870 were geographically rated. We estimated that geographically rating 0870 calls might lead to an overall reduction in mobile OCPs' profits on these calls in the region of £20m-£32m.[548] This gave an indication of the order of magnitude of the TPE for mobile OCPs in relation to geographic rating of 0870 calls. We did not attempt to quantify the TPE for geographic rating of 0845 calls in the December 2010 Consultation due to the uncertainty about termination rates and because the precise size of this effect was not crucial to our evaluation of the most appropriate remedy for 0845.[549]

11.139 For the purposes of the current consultation we have not attempted to quantify the scale of the TPE associated with Option 1. As in the December 2010 Consultation, the size of this effect is not crucial to our evaluation of this Option. That said, it seems plausible that Option 1 would result in a substantial reduction in mobile OCP's retention on 0845 and 0870 calls.[550] This, in turn, would lead to higher prices for other mobile telecoms services.

11.140 The impact on fixed OCPs will be more mixed (given that 0845 is frequently charged below geographic rate) though as 0845/0870 numbers are frequently included in bundles the impact is complicated (as when included in bundles these numbers are effectively charged at the same rate as geographic calls).

11.141 Under Option 2, the unbundled tariff, OCPs will be free to determine the level of the AC, subject to normal commercial pressures (see discussion on the structure of the AC in Section 10). As discussed in Section 9, provided consumers are aware of the level of the AC and that it is subject to competitive pressures, it is likely to reflect consumers' preferences. Accordingly, insofar as a TPE arises, it is likely to be a consequence of moving to a more efficient pattern of prices.

Conclusion on efficient prices

11.142 Again we consider that there is clear evidence that both Options are preferable to the status quo.

11.143 Option 2 by supporting a consistent approach to the presentation of pricing across 08 numbers is likely to more effectively address the horizontal externality whereby consumer confusion in some ranges impacts on the overall system and leads to poor

[547] 12% of respondents said "don't know". The total percentages do not sum to 100% due to rounding. 2010 Consumer survey, question 40.
[548] December 2010 Consultation, paragraphs A7.280-A7.281.
[549] December 2010 Consultation, paragraph A7.217 and footnote 700.
[550] In 2009, average mobile OCP retention on 0845 calls was 13.4ppm and on 0870 calls was 10.6ppm. Overall mobile OCPs retained £163m on 0845 calls and £41m on 0870 calls. Calculated using data underlying 2010 Flow of Funds study.

competitive pressure on prices as a whole, thus making them less likely to be efficiently aligned with consumer preference.

11.144 Option 1 which, compared to Option 2, ensures specific retail charges is marginally stronger in addressing the vertical externality, though we consider that the unbundled tariff offers a reasonable response to this concern.

11.145 Again on balance we consider that Option 2 is stronger overall and is likely to deliver better outcomes for consumers.

Service quality, variety and innovation

11.146 We now discuss the impact of Options 1 and 2 on service quality, variety and innovation.

11.147 Under Option 1, geographically rating, the various effects on service quality, variety and innovation are as follows:

- our assumption is that the 0845 termination rate will fall, since the current revenue sharing component will be removed. As a result, the cost to SPs of operating a 0845 number is likely to increase. Some 0845 SPs may be dissatisfied and this may lead to migration and/or service loss;

- in contrast, our assumption is that the 0870 termination rate will be largely unchanged. As a result, the cost to SPs of operating a 0870 number is likely to be unchanged; and

- on the other hand, increased consumer price awareness and the ability for SPs to guarantee that 0845 calls are charged the same as geographic calls may make 0845 and 0870 more attractive to SPs.

11.148 Under Option 2, the unbundled tariff, the various effects on service quality, variety and innovation are as follows:

- It will be more apparent to consumers that not all of the price of 0845 and 0870 calls is being retained by the OCP. Rather some revenue is received by the SP (or the TCP). As discussed in Section 9, some SPs may not wish to be perceived as ‘profiting’ from 0845 and 0870 calls. Accordingly these SPs may seek to migrate to another number range, for example 03.

- In addition, some OCPs, most notably BT, may set an AC that leads to an overall increase in the retail price that consumers currently pay for making calls to 0845 and 0870 numbers. This may reduce the volume of calls from BT and some SPs may lose out. As for Option 1, some unsatisfied SPs could either migrate or drop out.

- On the other hand, increased consumer price awareness, greater control of the retail price (via selection of the SC) and lower mark-ups by some OCPs may make 0845 and 0870 more attractive to SPs.

11.149 To help weigh up these factors, we will:

- consider the outcome of detailed discussions with selected resellers[551] on their preferences for either 0845 or 0870 over 03 in our qualitative survey;
- set out the results of the 2011 quantitative SPs survey, which sheds light on 0845 SPs' preferences;
- discuss what inferences can be drawn from that survey in relation to 0870 SPs' preferences; and
- finally, set out our conclusions in relation to this assessment criterion.

The qualitative resellers' survey

11.150 In order to gain a more in depth understanding of SPs' views and concerns with respect to the current regime and their response to possible changes, we interviewed a number of resellers with significant SP customer bases and in particular resellers recommended by the FCS as offering a representative sample of companies.

11.151 One of the questions we asked resellers who used 084 and 0870 numbers was, why or why not their SP customers choose to use 084/0870 rather than 03? The answers are presented in Table 11.3 below (the names of the resellers that provided responses are withheld).

[551] Resellers are companies that offer hosting services for non-geographic numbers to SPs – they are effectively an intermediary between the TCP and the end-user SP.

Table 11.3: Reasons for using/not using 084/0870 rather than 03

Respondent	Reasons for using/not using 084 rather than 03	Reasons for using/not using 0870 rather than 03
[✂]	Lack of consumer knowledge of 03. If an SP is going to pay, they would rather pay for it to be free to the consumer. Consumers are more aware of 084 numbers and SPs get fewer complaints about them, although all 084 numbers are seen as being charged at same price.	Benefits/incentives for using 03 don't outweigh migration costs.
[✂]	Knowledge of 03 is very poor, SPs reluctant to move to a range they are unsure about. Some customers value revenue share and have therefore switched to 084.	Poor knowledge of 03 combined with high migration costs in changing numbers.
[✂]	0844/3 offer revenue share. They do not offer 0845 but offer 03 instead, which are better.	Cost of change.
[✂]	Revenue share (to subsidise network based services).	All their SPs moved to other numbers because no advantage to 0870 and legacy bad press.
[✂]	0844/3 is free for the SP (revenue sharing). They do not offer 0845 anymore because of uncertainty over what Ofcom will do with them. 03 is not well known enough by consumers.	Do not issue 0870 anymore. SPs that do not want to pay use 0844/3.
[✂]	Cost	Overseas access. Not clear whether 03 can be dialled from abroad.

11.152 It is clear that a large part of the reluctance to move to 03 is the risk of poor consumer understanding of this range (and to a large extent SP understanding). The second important reason for those using 084 numbers is the lack of revenue share, which is preferable even if it means that the range is not aligned with geographic rates. The final reason is the cost of migration.

11.153 It is also clear that 0845 and 0870 are already considered sub-optimal by many SPs as they fail to offer a clear message to consumers and SPs are not confident in their regulatory future.

11.154 In this context Option 1 would not be valued by SPs seeking to maintain revenue share. Option 1 would provide a benefit for those concerned about consumer confidence but overall this could equally be addressed by a programme that led to more consumer confidence in 03.

11.155 Option 2 would potentially enhance the 03 brand by making this a more clearly defined range and thus of more benefit to SPs. It would also allow the 0845 and

0870 ranges to be used more extensively by those seeking some (even if a low level) of revenue sharing.

The 2011 SPs' survey - 0845

11.156 The 2011 SPs' Survey asked SPs that use[552] 0845 numbers about their preferences and about likely reaction to the two options considered.

11.157 As shown in Table 11.4 below, SPs considered that the most important[553] feature of 0845 numbers is that callers will be charged the same amount as for a call to a normal number. This was chosen by 86% of respondents.

Table 11.4: Q.28: "How important or not important it is to your organisation that 0845 numbers have the following features"

	Important	Unimportant	Don't know
Being able to advertise the exact cost of the call to customer	45%	54%	1%
That callers will be charged the same amount as for a call to a normal number	86%	13%	1%
The cost to you of operating the number	76%	24%	1%
The message or brand which is associates with having an 0845 number	68%	31%	1%
Being able to obtain a particularly memorable number	67%	31%	2%

11.158 SPs were also asked what aspect of 0845 they would change if they were able to do so (Q30). They were offered three options and 65% chose "that callers are charged the same amount as for a call to a normal landline".[554] These results suggest that the majority of 0845 SPs may find Option 1 attractive.

11.159 We also presented two options to 0845 SPs and asked which they preferred.[555] Specifically, the options were described as follows:

- "the cost to you of operating a 0845 number will increase by 1.5 pence-per-minute, and the cost to callers of calling your 0845 number(s) will be the same as calls to a normal landline number". This broadly corresponds to Option 1 above;[556] and

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[552] Respondents were only asked questions about a particular number range if it was of equal or more importance than other number ranges used by the business. 2011 SPs survey, page 1.
[553] Including answers rated "very important" and "fairly important".
[554] 16% of 0845 SPs chose "being able to advertise the exact cost of the call to consumers" and 14% chose "the cost to your organisation of operating this number". 5% responded "don't know". 2011 SPs survey, question 30.
[555] 2011 SPs survey, question 31.
[556] The 1.5ppm increase in SPs' costs was intended to reflect lower 0845 termination rates. BT confirmed that the difference between 0845 and 03 termination rates was approximately 1.5ppm (rounding to the nearest 0.5ppm). Email from BT dated 15 September 2011.

- "neither the cost to your organisation of operating your 0845 number nor the price paid by callers will change, but when your number is mentioned, for example in advertising, it will state that the call charge is split, with 2 pence-per-minute going to you and the rest going to the phone company". This broadly corresponds to Option 2 above.[557] [558]

11.160 The majority of SPs (52%) preferred the first of these options. 31% preferred the second option and 17% responded "don't' know". This suggests that the views of 0845 SPs between Options 1 and 2 are split, but that more are likely to prefer Option 1 (geographic rating) to Option 2 (the unbundled tariff).

11.161 We have considered what may have driven respondents to this question to prefer the first of the two options that was presented (i.e. geographic rating). We consider there may be two potential reasons:

- SPs may have a strong preference for calls being charged at geographic rates, and are willing to give up their current revenue share in order to secure this; and/or

- SPs may not want callers to think that the SP is earning revenue from the call.[559]

11.162 In the 2011 SPs' survey we also asked 0845 SPs that expressed a preference for one option what they would do if we were to adopt the other option.[560] The responses are outlined in Table 11.5 below, and we go on to consider the implications of this data for service availability. However, it is worth highlighting first that simply because an SP migrates away from 0845 (or 0870) does not mean that that service becomes unavailable for consumers merely that it may be offered on a different number range.

[557] The 2ppm figure was intended to reflect the SC. BT confirmed that average 0845 termination rates were approximately 2ppm (rounding to the nearest 0.5ppm). Email from BT dated 15 September 2011.
[558] In practice, under Option 2 (the unbundled tariff) the price of 0845 calls may change. On the one hand, greater competition and price awareness may place downward pressure on OCPs' margins. On the other hand, we are proposing that each tariff would feature a single AC that applies to all NGCs. This means that OCPs that currently set a relatively low margin on 0845 calls may increase that margin slightly (while also reducing their margin on calls to other unbundled numbers).
[559] We recognise that in practice most or all of the SC for 0845 calls may be used to cover the costs of termination and hosting i.e. the SP may not be earning a profit from the call price.
[560] 2011 SPs survey, questions 32 and 33.

Table 11.5 – Q32/Q33 – which of the following actions are you most likely to take were we to adopt Option 1, geographically rated, or Option 2, the unbundled tariff?[561]

	Reaction of those who preferred Option 1 if we adopted Option 2	Reaction of those who preferred Option 2 if we adopted Option 1
"Keep your 0845 number"	38%	39%
"Get a new number and use that instead"	21%	16%
"Get rid of that line completely"	18%	21%
"Switch that line and those calls to a different number that you have already"	16%	17%
"Don't know"	7%	7%

11.163 Regardless of which option we select, 0845 SPs that did not receive their favoured option appear to react similarly. Approximately 38-39% say they will keep their existing number. Approximately 33-37% say they will migrate the service previously provided through 0845 to another number and 18-21% appeared to suggest that they would cease providing the service via a non-geographic number.

11.164 There are reasons for suspecting that the claimed responses to take an action other than keeping the 0845 number which are set out in Table 11.5 are overstated. Respondents to the 2011 SPs survey were not told what was happening to number ranges other than 0845. For example, SPs that disliked the second (the unbundled tariff) option may have thought that they could migrate to 0843/4 numbers in order to avoid fundamental changes in how NGCs are presented to consumers.

11.165 More importantly, the results shown in Table 11.5 are stated preferences and therefore may overstate what an SP's actual reaction would be. In order to better assess this, we also asked respondents how likely they would be to act on the stated action.[562] The likelihood of following through depended on the claimed course of action. For those SPs that said they would either migrate services elsewhere or get rid of their 0845 number, 40-60% said they were "very likely" to follow through with their claimed course of action. The rest generally said that they were "fairly likely" to do so, although (for some actions) up to 18% of respondents said they were "not very likely" or "not at all likely" to do so. Note that, given the sample size, the apparent differences in responses between actions may not be particularly reliable.

11.166 Using this evidence from the 2011 SPs survey we set out two scenarios for how 0845 SPs may react if we introduce Option 1 or Option 2:

- Scenario 1 – all the SPs that answered that they are "very likely" or "fairly likely" to migrate or "get rid of" their 0845 service are assumed to do what they claimed. The remainder keep their 0845 number; and

[561] For brevity, the labels in this Table refer to Options 1 and 2, even though the options presented in the 2011 SPs survey were slightly different.
[562] 2011 SPs survey, question 34.

- Scenario 2 –only those SPs that stated that they are "very likely" to migrate or "get rid of" their 0845 service are assumed to do so. The remainder are assumed to keep their 0845 number.

11.167 The purpose of these scenarios is take into account the general tendency of survey respondents to overstate their propensity to respond to changes and to underestimate the extent of inertia.[563] Table 11.6 below shows the proportion of all 0845 SPs that would migrate or "get rid of" their 0845 services in response to the Options 1 and 2.

Table 11.6: Potential reaction of 0845 SPs to the unbundled tariff and geo-rating

	Adopt Option 1 (geographic)		Adopt Option 2 (the unbundled tariff)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Migrate service	10%	6%	20%	10%
Get rid of service	7%	3%	9%	5%

11.168 This Table was calculated using the responses to questions 31-34 from the 2011 SPs survey as follows:

- The 17% of 0845 SPs that responded "don't know" when asked about the two options are assumed not to have a strong preference and are thus assumed to retain their 0845 service regardless of which Option is selected.

- For the 0845 SPs that expressed a preference for one option, we used their stated reactions if the other option was introduced. The SPs that said "don't know" when asked how they would react were allocated across the other reactions on a pro rata basis. Those reactions were then weighted using the stated likelihood of following through, as described for Scenarios 1 and 2 above.

- We have aggregated the two variants of migration that we asked about (namely "Get a new number and use that instead" and "Switch that line and those calls to a different number you already have") and rounded figures in the Table to the nearest percentage point.

11.169 Table 11.6 shows that:

- Under Option 1, geographically rated, a total of between 6% and 10% of 0845 SPs may migrate plus between 3% and 7% may cease providing 0845 services altogether.

- Under Option 2, the unbundled tariff, a total of between 10% and 20% of SPs may migrate plus between 5% and 9% may cease providing 0845 services altogether.

[563] In both scenarios we have effectively assumed that those SPs that stated that were "not very likely" or "not at all likely" to migrate or drop their service in fact retain their 0845 number. This seems reasonable given the potential inertia and costs involved in changing number or dropping the service.

11.170 These figures suggest that migration and service loss could be significant under either option, but more so under Option 2, the unbundled tariff. We are less concerned about migration under this criterion, because as highlighted above, the services will still be available on a different number range. We consider the costs of migration separately under the regulatory burden criteria.

SPs preferences on 0870

11.171 As highlighted above we have not collected the same information for 0870 as for 0845 numbers in the 2011 SPs Survey. However, we believe that we can draw inferences from the results for 0845 SPs about the preferences and behaviour of 0870 SPs.

11.172 It seems plausible that 0870 SPs have a stronger preference for the Option 1, geographically rating. As explained above, we have assumed that 0870 termination rates would be cost based under Option 1. Currently the 0870 termination rates charged for calls originated by BT do not include a revenue share. For other OCPs, termination rates may vary depending on the retail price charged by the OCP, but our understanding is that there little additional revenue sharing with 0870 SPs in practice. Thus, Option 1 is unlikely to lead to a significant increase in hosting costs for 0870 SPs. This contrasts with the position for 0845 SPs and suggests that a higher proportion of 0870 SPs are likely to prefer this option.

11.173 We have also considered the behaviour of 0870 SPs if we were to introduce the option that they did not favour. As explained above, approximately 33-37% of 0845 SPs said they would migrate and 18-21% of 0845 SPs appeared to suggest that they would cease providing the service via a non-geographic number. We suspect that both these reactions are less likely in the case of 0870 SPs. Previously the revenue sharing component in 0870 was removed in August 2009, which resulted in a significant increase in the cost for SPs of operating a 0870 number. This suggests that, for the SPs that remain on 0870, the costs of migrating elsewhere are likely to be high. Moreover, it may also suggest that they are reluctant to cease providing the service offered via the 0870 number (since if the SP did not regard it as important they might have ceased providing it following the changes in 2009).

Overall assessment of the impact on service quality, variety and innovation

11.174 In summary, both options are likely to lead to significant change in use of the 0845 and 0870 number ranges by SPs. Different SPs are likely to react in different ways.

11.175 The evidence suggests that migration away from 0845 will be larger for Option 2 than Option 1. Option 2 is thus likely to have a larger negative impact on the availability of services from 0845 numbers.

11.176 Migration does not necessarily lead to service loss, however. Under Option 1 (geographic rating), SPs would presumably migrate to another unbundled number range such as 0843/4. Similarly under Option 2 (the unbundled tariff), SPs would presumably migrate to 03 numbers (as explained above, we propose that 03 calls will continue to be priced at no more than a call to a geographic number). Total service loss is thus likely to be limited under both options.

11.177 The quantitative survey evidence highlights the existing level of dissatisfaction with 0845/0870 and consumer confusion with 03/0845/0870. In this context while both Options would assist in clarifying the regulatory and pricing position, Option 2 would appear to meet more of the need of SPs for a clear set of ranges for either geographic prices services or revenue sharing.

11.178 The 2011 SPs survey suggests that, under Option 1, 3% to 7% of 0845 SPs could get rid of their current 0845 service (rather than migrate elsewhere). Under Option 2, 5% to 9% of 0845 SPs may do so. Where SPs react in this way, overall service availability will fall.

11.179 However where an SP ceases to offer a service via a non-geographic number it ceases to receive the benefit of being called i.e. the benefits to the SP of whatever service it was offering are lost. Accordingly it seems plausible that the non-geographic services that are discontinued are likely to attract relatively low volumes of calls now or have an alternative (e.g. the internet) that is readily accessible for a large proportion of consumers. Accordingly, in considering the adverse impact on consumers, we have placed limited weight on the proportions of SPs claiming that they would discontinue services altogether.

11.180 It is important to recognise that Options 1 and 2 also have positive effects on service variety, availability and innovation. Both Options are likely to improve consumer price awareness relative to the status quo and mitigate the horizontal and vertical externalities (as described above). This in turn will tend to make it more attractive for SPs to offer services via non-geographic numbers.

11.181 Note that, as explained above, the impact on consumer price awareness is likely to be greater under Option 2 than under Option 1. Option 2 also is more effective at mitigating the horizontal externality between different 084 and 087 number ranges and may also improve the overall effectiveness of the unbundled remedy. As a result, Option 2 may have greater positive impact on service provision and innovation, taking into account both 0845/0870 and other number ranges.[564]

Access to socially important services

11.182 Some non-geographic numbers are used to deliver socially important services. As discussed in Part A (Section 5) access to these services is important for citizens. Therefore, we have an assessment criterion relating to the risk of vulnerable citizens being excluded from accessing these socially important services.

11.183 On the basis of evidence provided by OCPs, we understand that services that might be considered as socially important,[565] are primarily offered using either 080 (Freephone) or 084 numbers. The use of 0870 to offer such services does not appear to be significant. Accordingly we have not placed much weight on this factor in relation to 0870.

11.184 We also need to examine the impact of the two options considered for 0845 on the ability of vulnerable citizens to access socially important services. For this purpose we need to understand the relative impact of each option on:

- consumers' price awareness;

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[564] As discussed above, we recognise that Option 1 may mitigate the vertical externality more effectively than Option 2. However we consider that this is outweighed by the other positive aspects of Option 2 that we discuss, particularly as SPs that have a strong preference for calls being geographically rated can instead opt for a 03 number under Option 2.

[565] See Part A, Section 5 where we have set out this evidence and our definition of what constitutes a socially important service.

- the call charge that citizens are likely to face under Option 1, geographic rating, or Option 2, the unbundled tariff, relative to the status quo; and
- the proportion of socially important services that will remain in the range if either option is introduced.[566]

Consumer price awareness

11.185 One reason why consumers may be deterred from accessing socially important services via non-geographic numbers is that they overestimate the price of calls. As explained above, both Option 1 and Option 2 are likely to improve price awareness relative to the status quo but we consider that Option 2 is likely to improve consumer price awareness to a greater extent than Option 1.

Call charges

11.186 Under Option 1, geographic rating, calls to 0845 numbers are likely to be cheaper than under the status quo on mobiles, though the impact on potential fixed prices is less clear cut (see discussion above – paragraph 11.140).

11.187 Under Option 2, the unbundled tariff, the charge for calls to 0845, at least from some providers may increase, though from others, for example from mobile OCPs, charges may decrease from current levels. Dependent on exactly how the unbundled tariff is structured (see discussion in Section 10 above), calls to these numbers may also be included in consumers' call bundles. In particular:

- greater competition and price awareness should place downward pressure on OCPs' margins; and
- on the other hand, we are proposing that each tariff would feature a single AC that applies to all NGCs. This means that OCPs that currently set a relatively low margin on 0845 calls may increase that margin slightly, while also reducing their margin on calls to other unbundled numbers. While the scale of this effect may differ between OCPs, overall it may not be large.[567]

11.188 It is difficult to determine how prices would move on average though we would not expect the immediate impact to be significant.

Availability of socially important services on 0845

11.189 Some SPs may migrate away from 0845 as a result of the option that we choose. However, where an SP migrates away from 0845 its service will continue to be available, albeit via a different number. It is possible that some SPs may migrate

[566] The main potential concern here is that dissatisfied SPs that provide socially important services may migrate from 0845 to ranges that have higher charges which deter some citizens from making such calls. Some socially important SPs may migrate into the 0845/0870 range as a result of adoption of a particular option. However, this is more difficult to assess.

[567] In 2009, fixed OCPs' retention on 084, 087, 09 and 118 calls (together) averaged 2.4ppm (excluding VAT). Fixed OCPs' retention on 0845 calls was fractionally lower at 2.0ppm. This suggests that for fixed OCPs (as an overall group) any increase in 0845 call prices as a result of adopting a single AC will be very slight (and might be outweighed by factors such as increased competition). For mobile OCPs, in 2009 their retention on 084, 087, 09 and 118 calls (together) averaged 13.4ppm which was the same as their retention on 0845 calls. This suggests that for mobile OCPs (as an overall group), adopting a single AC is unlikely to materially increase 0845 call prices. Figures exclude VAT and were calculated using data from the 2010 Flow of Funds study.

number ranges that have a lower retail price for consumers, either 080 (Freephone) or 03 (geographically rated) number ranges. The existence of the 03 range as a geographically rated non-geographic number is particularly relevant to Option 2 as it provides an alternative for those 0845 SPs that would prefer call prices to be aligned with prices for geographic calls.

Our current view in relation to socially important services

11.190 We know that a significant proportion of socially important services use 0845 numbers.

11.191 We consider that both options are likely to improve access compared to the status quo, particularly since both options will reduce the extent to which consumers' overestimate prices. In considering the choice between Option 1 and Option 2, there are pros and cons on both sides.

11.192 Given the nature of the present market failures (i.e. linked to number transparency and consumer disengagement with the number ranges) we consider the key determinant is whether consumer confidence in the use of the numbers will be improved more by either option. On this basis we consider Option 2 is likely to perform better than Option 1, as it more fully addresses the horizontal externality and poor consumer price awareness which have a negative effect currently on vulnerable consumers' willingness to use these numbers to access socially important services.

11.193 In making this assessment we are conscious that Option 1 does have some advantages. Calls are likely to be cheaper under Option 1 than Option 2, though the difference may be relatively small. The proportion of existing SPs (including those that provide socially important services) that is likely to migrate/stop providing services is lower under Option 1 than Option 2. However, we consider the relative difference between these effects of the two options is likely to be small and our conclusion on the wider benefit of Option 2 more significant.

Regulatory burden

11.194 In terms of the regulatory burden, the main difference appears to be the cost of migration by SPs. Apart from migration costs, we do not believe that there is much difference between Options 1 and 2. In particular, if we opt for the unbundled tariff for 0843/4, 0871/2/3, 09 and 118 calls then the additional (incremental) systems costs of extending the unbundled tariff to 0845 and 0870 are unlikely to be material.

Estimates of migration costs for each option

11.195 The figures obtained from the 2011 SPs' Survey allow us to calculate an estimate of the one-off potential migration costs for 0845 and 0870 under either option. In order to carry out these calculations we made the following assumptions:

- Annex 12 sets out in full our estimates of migration costs per firm. We use a range of £1,000-£2,500 per firm.
- we have used an industry estimate that there are currently 13,000 SPs operating on 0845 and 9,000 SPs operating on 0870.[568]

[568] [✄]

- Under the criterion of service quality, variety and availability (above) we set out two scenarios for the proportion of SPs that would migrate their 0845 services under Option 1 and Option 2. See Table 11.7 above.

- We have assumed, for the purposes of our calculations, that 0870 SPs would react in the same way as 0845 SPs. In other words, we have used the reactions of 0845 SPs to estimate the proportion of 0870 SPs that would either migrate their 0870 number. As explained above, in practice 0870 SPs are probably more likely to favour Option 1 (geographic rating) and less likely to either migrate or get rid of their 0870 service. This implies that the costs of Option 1, and perhaps of Option 2, may be overestimated.

11.196 Table 11.7 below shows how the results vary depending on the assumptions on migration costs and the scenario (1 or 2 as discussed above). Total migration costs under Option 1, geographically rated, may be between £1.3m and £5.6m. If we instead adopted Option 2, the unbundled tariff, these costs may be between £2.2m and £10.9m.

Table 11.7: Migration and service loss overall cost estimates for 0845 and 0870

	Option 1 (geographic rating)		Option 2 (the unbundled tariff)	
	Migration costs: low	Migration costs: high	Migration costs: low	Migration costs: high
Scenario 1	£2.2m	£5.6m	£4.3m	£10.9m
Scenario 2	£1.3m	£3.3m	£2.2m	£5.5m

11.197 In addition to the costs incurred by SPs, consumers may also incur costs from misdialling calls.[569] As explained in Annex 12, we estimate that there were 2bn calls to 0845 in 2009 and 0.6bn calls to 0870. We also assume that, on average, 10% of calls in the first year to SPs that migrate are misdialled. The costs we have assumed per misdialled call are:[570]

- Under Option 1, a misdialled 0845 or 0870 call will cost the same as a call to a geographic number. We have assumed that this cost is 3.5p for fixed calls and 6.1p for mobile calls.[571]

[569] This is because callers may call the numbers of SPs that have migrated away from that range and by doing so will incur a connection cost to listen to, for example, a recorded message advising them that the number has changed.
[570] Our calculations reflect the cost of misdialling for all callers, both residential and business.
[571] We have assumed that the duration of a misdialled call is 1 minute. The 2010 Flow of Funds study indicates that the average retail price of a fixed (geographically rated) 03 calls was 3.5ppm in 2009 (including VAT at 20%). The average retail price of a mobile 03 call that was not part of a bundle of inclusive minutes was just under 12.3ppm (including VAT at 20%). In 2009, 92% of mobile 03 call minutes were part of bundles of inclusive minutes and, since no revenue was attached to such calls, the average retail price of mobile 03 calls in the 2010 Flow of Funds study was very low. We have instead assumed that 50% of misdialled mobile calls would be made outside of bundles, implying an average price of 6.1ppm. This 50% assumption is in line with the proportion of mobile connections that are pre-pay (see Communications Market Report 2011, page 259).

- Under Option 2, a misdialled 0845 or 0870 calls will incur an AC and a SC. We have assumed that this cost is 4.9p for fixed calls and 18.1p for mobile calls.[572]

11.198 Table 11.8 sets out our estimate of misdialling costs, given the assumptions about migration discussed above.

Table 11.8: Misdialling costs for 0845 and 0870

	Option 1 (geographic rating)	Option 2 (the unbundled tariff)
Scenario 1	£1.8m	£3.6m
Scenario 2	£1.1m	£1.8m

11.199 Adding the misdialling costs incurred by callers onto the migration costs incurred by SPs suggests a total cost of:

- £2.4m to £7.4m under Option 1 (geographic rating); and
- £4.0m to £14.4m under Option 2 (the unbundled tariff).

11.200 Note that the £m estimates set out above do not take into account those SPs that cease operating the service they currently provide via 0845/0870 numbers. However, as explained above, such services are likely to either only attract a small number of calls or are likely to be of limited value to callers and SPs. Accordingly we consider that the costs (loss of benefits) associated with the closure of these services are likely to be low.

Conclusions for 0845 and 0870 number ranges

11.201 On the basis of the assessment against each of the criteria set out above, overall we believe both Option 1, geographically rating, and Option 2, the unbundled tariff, are likely to improve on the status quo. The principal reason for this is that both options are likely to significantly improve consumers' price awareness.

11.202 The particular benefits of Option 1 are certainty of the charge for these number ranges through alignment with (or at least capping by) the geographic rate – both characteristics valued by SPs and consumers. Option 1 also appears to be marginally less disruptive to SPs and marginally more protective of the continuation of services.

11.203 However, our analysis would suggest that the consumer benefits of Option 1 would only be assured if we could be confident of or would insist on SP confirming the charge of the call whenever they present their 0845/0870 number. This is a higher

[572] We have assumed that the duration of a misdialled call is 1 minute (this is also consistent with our proposal that for unbundled calls with a duration of less than 1 minute, OCPs would be able to bill for a full minute. The 2010 Flow of Funds study indicates that average OCP retention on fixed 084, 087, 09 and 118 calls was 2.9ppm in 2009 (including VAT at 20%). For mobile calls it was 16.1ppm. We have used these figures as estimates for the average AC. The average outpayment from OCPs to TCPs on 0845 calls in 2009 was 2.0ppm (if VAT at 20% is added). We have used this as an estimate of the average SC for a 0845 call.

regulatory requirement than currently imposed on 03. In the absence of this publication the benefits of price transparency are significantly reduced.

11.204 Further, we consider that without regular price publication (and perhaps even with it), there is a significant risk of enduring consumer confusion between the price and treatment of 0845/0870 and the other 084 and 087 numbers. We know that consumers are poor at differentiating number to four digits and therefore the dichotomy between the treatment of these different number ranges in Option 1 risks undermining consumer understanding and confidence in both the 0845/0870 number ranges and the unbundled number ranges.

11.205 We consider this is a substantial risk, as this type of confusion is one of the main causes of the current malaise in the system.

11.206 Option 2 on the other hand clearly addresses this concern. 084/087 ranges are consistently treated no matter what the fourth digit. There is a clear distinction between non-geographic number ranges which offer alignment with geographic rates – 03 – and the 084/7 range.

11.207 The larger pool of unbundled numbers and their likely continued use by a large body of mainstream services/companies will increase exposure and confidence with the unbundled structure and is, as a consequence, likely to lead to more efficient price outcomes in the setting of the AC than Option 1 (and more generally than the status quo).

11.208 Clearly, Option 2 does come with marginally higher transition costs for the industry.

11.209 On the basis of feedback from the 2011 SPs survey, Option 2, may lead to a significant proportion of SPs migrating to a new number range.

11.210 Table 11.9 below show the range of differences in migration costs between Options 1 and 2 (including misdialling costs), as calculated above. The first column of figures uses the upper end of our range for migration costs per firm (£2,500) and the second column uses the lower end of our range (£1,000).

Table 11.9: Difference in migration costs between Options 1 and 2

	High migration costs	Low migration costs
Option 1	£7.1m	£3.9m
Option 2	£3.0m	£1.6m

11.211 The difference in migration costs between Options 1 and 2 may thus lie in the range £1.6m to £7.1m. These additional migration costs therefore need to be weighed against the risk of additional confusion for callers to 084 and 087 numbers under Option 1 as highlighted above.

11.212 Given the sheer size of the 084 and 087 number ranges[573], it seems likely that the ongoing benefits of reduced consumer confusion under Option 2 are likely to outweigh the additional migration costs of around £1.6m to £7.1m.

11.213 We consider that on balance, and especially when considering the longer term, the argument for Option 2 is stronger. It is likely to lead to a more intuitive Numbering Plan, clearly defining differences in number ranges and reinforcing the benefits of our main changes. It is therefore likely to be more effective in alleviating the market failures of low price awareness and the horizontal externality (and significantly alleviates the vertical externality compared to the status quo). We consider that the downside risks of Option 1 are larger despite some of its clear benefits.

11.214 Therefore, in the light of this, and the assessment under each of our assessment criteria set out above, we consider that Option 2, the unbundled tariff, should be applied to the 0845 and 0870 ranges.

Q11.1: Do you agree with Ofcom's assessment that the unbundled tariff should also apply to the 0845 and 0870 range? If not, please explain why.

[573] In 2009, these number ranges accounted for 18.6bn minutes of calls and £1.4bn of retail revenues. Figures taken from 2010 Flow of Funds study. Revenues include VAT at 20%.

Section 12

Implementation of the unbundled tariff

Introduction

12.1 This section sets out our detailed proposals for the implementation of the unbundled tariff for certain non-geographic number ranges, including the approach to price publication requirements for OCPs and SPs.

12.2 In our December 2010 Consultation, we made a number of preliminary points about implementation. In summary, we had more questions than answers, and it was difficult for both Ofcom and stakeholders to assess the likely implementation issues without a more detailed proposal for the design of the unbundled tariff remedy (a point made in a number of submissions).

12.3 We are now seeking views on specific implementation proposals.

12.4 In the remainder of this section we set out the steps OCPs (retail and wholesale), TCPs, and SPs would need to take to implement the new regime and other actions that might need to be undertaken to ensure the new framework is introduced successfully. In particular we consider the issues of system and billing changes; communication requirements; transitional arrangements; and price publication requirements.

12.5 The outcome of this analysis will lead to an assessment of the minimum implementation period and will feed into the impact assessment in the next section.

Our view in the December 2010 Consultation

12.6 Section 7 of the December 2010 Consultation set out our consideration of how implementation of two options (an unbundled tariff and maximum prices) might proceed.

12.7 In relation to changes to the tariff structure, we considered:

- systems costs;
- communications costs (of the new system to consumers); and
- implementation duration and intermediate phases.

12.8 Considering each of these concerns in turn in relation to an unbundled tariff, we made a number of points:

- In relation to systems costs, we were sceptical of the submission, made in response to our 2010 Implementation Study,[574] that implementation might take up to 24 months and cost in the range of £2m to £10m per firm to support both correct charging under an unbundled tariff and to present a bill with disaggregated call charges on a per call basis. Our preliminary view was that

[574] The 2010 report on the implementation costs of different tariffing and billing options by AnalysysMason, published at: http://stakeholders.ofcom.org.uk/binaries/consultations/simplifying-non-geo-numbers/annexes/tariff-billing.pdf

these claims potentially overestimated the complexity of an unbundled tariff structure and the details that we believed would have to be presented in a bill.[575]

- We considered that communications would be important, and therefore that costs of communications could be relevant, since the effectiveness of any new proposed structure would rely strongly on consumer understanding of how the tariff structure would operate, and the choices consumers would have.[576] Our preliminary view was that we would be likely to require CPs to provide information to their existing customers, as well as at the point of sale.[577] Beyond this, we identified areas for further consideration, such as: the need for centralised promotion of changes (including funding of any advertising campaign); how the promotion of unbundled tariff changes should be linked (if at all) to other individual number range changes; and how an information campaign should be developed to assist consumers. We set out some preliminary ideas of how to present the new numbering structure[578] and foresaw (but did not discuss further) the need to "engage with stakeholders" to develop a communications plan, as well as the description of what would be implemented.

- The implementation issues to be considered, included, in our view:

a) Impacts on consumers. Our starting point was that a longer implementation period would leave consumer harm arising from the problems we had identified to continue longer. We did not think it would be necessary for full implementation to be completed for the benefits of change to be felt. We observed that "[c]areful thought would need to be given to the ordering of the full implementation features to ensure an appropriate prioritisation of the implementation steps required".

b) The minimum implementation period (and costs). As noted above, the industry view was that 24 months might be appropriate; we set out our view that earlier action in relation to some level of transparency might be desirable. We suggested that an intermediate step might be to present the bill as aggregated access and service charges, something we observed might be possible within 12 months, with full roll-out of the unbundled tariff in 24 months. We saw an advantage of such an approach being that it might reduce the implementation costs imposed on OCPs, allowing them to roll-out full implementation as part of their billing system upgrades.

c) Transition from the existing regime. We believed that we should consider whether there were incentives on, and scope for, service providers and CPs to act in ways that harmed consumers' interests during implementation, and how the stages of implementation might be structured to minimise the risk of disputes. We discussed each briefly in turn.

12.9 Our preliminary view was that 18 months was likely to be an appropriate period to implement an unbundled tariff, with scope for charges to change more quickly than "full billing differentiation", provided consumers were kept informed.

12.10 We asked:

[575] December 2010 Consultation, §7.12.
[576] December 2010 Consultation, §7.13.
[577] December 2010 Consultation, §7.14.
[578] See Annex 9 of the December 2010 Consultation.

Q7.1 Do you consider 18 months would be a reasonable period for the implementation of an unbundled tariff structure? What are you views on staging for the potential implementation? In particular, would it be desirable to move more quickly to restructuring charging to reflect the new regime even if detailed billing would not be ready? What are your views of the technical cost of potentially introducing the new regime and how could implementation be staged to minimise these cost (see also Annex 7 for a discussion of costs)? What are your views on the communications' challenges for potentially introducing this new structure and how should they be addressed?

Updated approach to implementation

12.11 We received a number of stakeholder comments on our approach to implementation and as a result of those comments have undertaken a number of strands of work to consider the appropriate approach to implementation. We have divided the issues in to the following topics:

- system and billing changes;
- communication (including both communication to consumers and to SPs);
- transitional arrangements;
- approach to price publication obligations, both for OCPs (in relation to the AC) and for SPs (in relation to the SPs).
- other implementation issues raised by stakeholders; and
- timing.

System and billing changes

12.12 Stakeholders responses to the December 2010 Consultation raised a number of issues around the system changes, in particular to billing systems, created by the unbundled tariff.

12.13 There was a particular concern about the cost of these changes. A number of stakeholders challenged Ofcom's view of the costs. For example, EE disagreed with Ofcom's view that the estimates in the 2010 Implementation Study were an overestimate, particularly given that those estimates excluded the revenue impact and non-billing related implementation costs.[579] Verizon was concerned that Ofcom appeared to consider that the findings of the 2010 Implementation Costs Study were an overestimate; it considered that further input was needed from consumers and industry before thought could be given to implementation issues.[580]

12.14 The comments we received can be divided into the following two areas:

- disaggregation of ACs and SCs on customers bills;
- wholesale billing (in particular the pass through of the SC, taking into account the range and structure of SC price points);

[579] EE, December 2010 Consultation response, p.78, Q7.1 paragraph 2.
[580] Verizon, December 2010 Consultation response.

12.15 We will deal in this Section with our understanding of the implementation requirements and our proposals with respect to the details of implementation. We address more detailed questions on the cost of implementation options in Annex 19 and Section 13 where we set out our impact assessment of the unbundled tariff.

Disaggregation of ACs and SCs on retail bills

Stakeholder comments

12.16 A number of stakeholders indicated concern about the costs of presenting separate ACs and SCs on customers' bills and questioned whether it was proportionate given the limited evidence that it would be of benefit to consumers. C&W considered that separating out the aggregate AC would be a "major development" from a systems perspective, and it questioned how receptive customers would be to the approach. It considered that showing the combined AC and SC would be the simplest option to implement. It also noted that presenting an aggregated AC would still require major systems development and could not be regarded as a stop-gap compromise prior to presentation of fully disaggregated charges.[581]

12.17 FCS believed that it was important that the customer was able to reference the total cost of a call and they would be less concerned to see a breakdown of the individual elements of those costs. It considered that Ofcom's suggestion of aggregating ACs and SCs on a per number range basis was therefore reasonable.[582] Whilst it agreed in principle that full disaggregated billing solution was not required, it did consider that a specific policy of what ACs and SCs actually were was vital.[583]

12.18 EE also did not agree that disaggregated ACs and SCs should be a core requirement of the unbundled model.[584] It, along with Sky and UKCTA, noted that currently OCPs were not required to break out and separately list the elements of the price of a call and they were not aware of any material consumer concerns relating to bill presentation currently. EE therefore considered that the same level of flexibility should be extended to OCPs on how they presented charges. EE noted that many customers did not receive a paper bill and the benefits of disaggregating ACs and SCs for those customers was therefore questionable. Sky and UKCTA noted it would be very costly to have to disaggregate and present the AC and SC separately on a bill, on a call basis or as an aggregate of all calls to a particular number. Sky considered that such an approach would therefore be disproportionate.[585]

12.19 TalkTalk did not consider it would be feasible to require providers to split out the access and service charges on an itemised basis. It submitted that this requirement would require a disproportionate amount of system development and cost. It considered it would be sufficient to display the AC on each bill as a reminder to the customer whilst bills for individual calls to NGCs could display the total cost of the call.[586]

12.20 Three considered that the proposal to disaggregate ACs and SCs on customer bills was disproportionate and excessive because of the cost implications. Three

[581] C&W, December 2010 Consultation response, p. 45-46.
[582] FCS, December 2010 Consultation response, p.23.
[583] FCS, December 2010 Consultation response, pp.23-24.
[584] EE, December 2010 Consultation response, p.78.
[585] Sky, December 2010 Consultation response, pp. 9-10.UKCTA, December 2010 Consultation response, p.9.
[586] TalkTalk, December 2010 Consultation response, p.4.

considered that itemised billing replicated information provided to the consumer at the point of sale and the benefit of repeating that information in the bill was marginal and would not justify the significant cost of upgrading billing systems. It noted it currently provided a special number checker on its website and it would look to develop that to fully support the AC and SC charging elements as an alternative to fully itemised billing.[587]

12.21 Antelope Consulting similarly considered there was only a weak case for disaggregating the charges on bills, because customers did not seem to read bills in detail, or necessarily receive paper bills. It considered the case was weaker still if there was only one AC per package, because it could just be listed on the bill through a footnote. It, along with Lexgreen Services noted that only post-pay customers would benefit from information on bills.[588]

12.22 Magrathea, Lexgreen Services and ITSPA considered that splitting call charges on bills was not desirable because it would introduce unwanted complexity and would do nothing to prove the image of the number ranges.[589] Colt submitted that its customers (mainly businesses whose use of NGCs was relatively low compared to consumers) were likely to find disaggregated bills "irrelevant and irritating".[590]

12.23 BT felt that some of the benefits of unbundled tariffs could be achieved by SPs and OCPs' marketing messages without the need for expensive system changes. It gave as examples SP advertising of the SC, enhancements to OCPs' marketing to explain the AC and messages on customers' bills to explain how the call costs were broken out. It noted that these changes would need a much shorter implementation time than disaggregated billing.[591]

12.24 [✂], on the other hand, considered that it would be able to implement disaggregated billing in 3 to 6 months, incurring only the opportunity cost of the developers and testers involved in that work. It believed, however, that the rest of the supply chain would not have the same capability to perform that easily and might find the mandated changes cost-prohibitive.[592]

12.25 FCS indicated concern that little analysis had been conducted with smaller OCPs. It said that they would need to provide itemised billing and it was important to obtain a more detailed grasp of these costs, because they might well be passed on to customers in the form of higher ACs.[593] [✂] similarly considered that many 08 resellers would not have the necessary billing platforms and would be forced out of the market.[594]

Ofcom response and updated view on disaggregated bills

12.26 In the December 2010 Consultation our expectation of disaggregated charges in bills was driven by our desire to provide greater transparency of call charges.

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587 Three, December 2010 Consultation response, p.23.
588 Lexgreen Services, December 2010 Consultation response, Q7.1. EE, December 2010 Consultation response, p.78.
589 Magrathea, December 2010 Consultation response, Q7.1, p.18.
590 Colt, December 2010 Consultation response, p.6.
591 BT, December 2010 Consultation response, p.17.
592 [✂]
593 FCS, December 2010 Consultation response, p.23.
594 [✂]

12.27 Following the responses set out above, we undertook to gather further information from stakeholders on the likely costs of changes to customers' retail bills. The approach was discussed at a general level as part of the industry Technical Working Group (see Annex 14 for a summary of those discussions). We also held a number of bilateral meetings with stakeholders in order to ascertain the level of those costs.

12.28 We have outlined the results of that work in Annex 19. In summary it is clear that there are clear costs to disaggregation and that these costs are dependent first, on how existing billing systems are constructed and second, on the level of price detail required. Thus, in relation to the second point, disaggregation on a call by call would be the most costly, while setting out the AC alongside the presentation of total charges for NGCs is likely to be the cheapest.

12.29 In addition, as highlighted by the stakeholder comments above, there is a question of how useful this information is to consumers. In terms of mobile customers, pre-pay customers do not receive a bill. Currently, 48% of consumers are on pre-pay tariffs, and within the DE socio-economic group, this increases to 67%.[595] Therefore, any billing requirements would not be relevant to these customers. Furthermore, a larger proportion of pre-pay mobile customers qualify as vulnerable consumers than the equivalent proportion for consumers as a whole, and we have highlighted these vulnerable consumers as a group which would particularly benefit from improved transparency of call charges.

12.30 In terms of how important information on bills is to customers that do receive them, 69% of fixed line consumers receive a paper bill, and 21% receive an online bill (4% receive both). The equivalent proportions for mobile post-pay customers are: 35% paper; 51% online; and 6% both. 10% of mobile customers do not receive a bill.[596] Furthermore, amongst those who receive a bill, not all customers check that bill, although the great majority say they do, at least some of the time.[597] In addition, the qualitative research we conducted as part of the 2010 Consumer Survey reported that charging for paper billing meant that very few customers received an itemised breakdown of their calls and charges. The authors of the research report noted that "most consumers were…signed up to a bundle of services, and they would simply look at the monthly total without considering the individual elements of the bill. If this total was within the usual range (and generally it was), then that was enough detail for them".[598]

12.31 Therefore, not all consumers receive a bill and this is particularly the case for low-income mobile only households. Of those consumers that do receive a bill, not all check them. As a consequence, the transparency benefits of disaggregating ACs and SCs on bills are reduced.

[595] 2011 Consumer Experience Report, Figure 20, p.21.http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-11/research_report_of511a.pdf

[596] Ofcom, Ease of accessing bills research, March/June 2011 – Q6 (slide 5) http://stakeholders.ofcom.org.uk/binaries/consultations/switching-fixed-voice-broadband/annexes/billing_slidepack.pdf. Also in the 2009 Consumer research we asked "How often do you check your bills?" to respondents with a landline or contract mobile phone (Q13). 54% of respondents said always, 7% said about ¾ of the time, 7% said about ½ the time and 7% said about ¼ of the time and 19% said never (in addition 6% said "don't know").

[597] 71% of fixed line consumers say they always check their bill, compared to 59% for mobile. 9% of fixed line customers and 12% of mobile customers said they never check their bill.

[598] 2010 Consumer research report, page 4 (also page 6). Available at: http://stakeholders.ofcom.org.uk/binaries/consultations/simplifying-non-geo-numbers/annexes/nts.pdf

12.32 The reason for our original proposal to require the presentation of disaggregated ACs and SCs on bills was to reinforce consumer understanding of the unbundled tariff and ensure that there is clarity about what they have been charged for a particular NGC. However, consumer information about the unbundled tariff will be delivered through a number of other avenues, in particular:

- we propose that the OCP advertising and promotional material will present the AC for a particular phone package (see paragraphs 12.12.134 to 12.135 below);

- we propose that the SP will present the SC for a particular number, as well as stating than an AC will apply for each call, in its promotional material (see paragraphs 12.12.176 to 12.178);

- Ofcom's proposed communications campaign; and

- Any other communications activity by consumer groups, the OCPs, and other interested stakeholders.

12.33 We therefore consider that, given the arguments set out above, and in particular the significant implementation costs that such an approach are likely to create, a mandated detailed disaggregation on retail bills of ACs and SCs, on a call by call basis is not appropriate at the current time. We are therefore no longer proposing to impose a requirement to that effect.

12.34 Our primary requirement with relation to the presentation of the unbundled tariff on customers' bills is that customers should understand that the price for a NGC to the relevant number ranges is made up of two separate elements: the AC charged by the OCP and the SC set by the service provider and that consumers, if they wish, can disaggregate the payments they make to each party. Disaggregation of the AC and SC on a call-by-call basis on the bill is one way to achieve this. However, given the simplicity of the AC structure (ppm only except for a minimum initial charge) other options could achieve a similar result at a lower cost.

12.35 We note that GC12.1 currently requires the following:

> "The Communications Provider shall provide to each of its Subscribers, on request, and either at no extra charge or for a reasonable fee, a basic level of itemised billing. The Communications Provider shall ensure that each itemised bill shows a sufficient level of detail to allow the Subscriber to:
>
> (a) verify and control the charges incurred by the Subscriber in using a Public Communications Network and/or related Publicly Available Telephone Services; and
>
> (b) adequately monitor the Subscriber's usage and expenditure and thereby exercise a reasonable degree of control over their bills"

12.36 Given this, we consider that the most proportionate and justifiable approach is to give OCPs the flexibility to decide the best way to present these charges to their customers on bills, provided that they meet the requirements set out above. However, at a minimum we will require that the AC charged to the customer is set out on the bill. It will be open to OCPs to present a greater level of detail on customers' bills about how the prices to these non-geographic number ranges are calculated, if it wishes to do so.

Q12.1: Do you agree with our proposal not to mandate the presentation of disaggregated AC and SC charges on customers' bills? Do you agree with our view that it should be up to OCPs to decide the best way to present these charges to their customers on bills OCPs but that we require that at a minimum, the OCPs should include the customer's AC on the bill they receive?

Accurate establishment, recording and maintenance of SCs

Stakeholder comments

12.37 Some stakeholders, particularly mobile OCPs, were concerned about the complexity of introducing and managing a system which required OCPs to accurately maintain a billing structure where retail prices included a direct pass through of wholesale charges (i.e. the SCs). We set out a summary of their comments below. As a consequence of these comments we have undertaken a series of discussions at the industry level about the structure of such a system for it to be manageable. We incorporate these discussions in our revised recommendations set out in the next subsection.

12.38 EE said that at a minimum the 'banding' of SC charges into groups would make it easier for billing purposes. It noted that this would avoid the need to update billing systems for every fluctuation in the SC and/or agree industry processes to manage the SC change process.[599] It noted that if changes to SCs were not harmonised with its current systems in some way there were likely to be ongoing practical difficulties with implementation.[600]

12.39 Three also agreed that the implications of extending the number of price bands were considerable. It noted that significant effort would be required both in terms of man power and systems development in transferring across to the new approach, and that subsequently significant ongoing resource would be needed to support the structure. Three therefore proposed that Ofcom should mandate a number of maximum number of SP price points and that SPs should be required to give no less than one month's notice of any changes to their SCs.[601]

12.40 O2 similarly noted that if pricing granularity was required to be greater than what it currently offered, the costs of implementation would be significantly compounded.[602]

12.41 Vodafone considered that the central challenge was how to ensure and guarantee the correct retail and wholesale pass through of the SC to allow the OCP to bill correctly. It noted that this required co-ordination and possibly technical integration of distinct retail and interconnection billing systems which existing systems were not designed to handle. It concluded that the above issues could be simplified if Ofcom established a smaller number of stable price points and structures for use on particular number ranges.[603]

[599] EE, December 2010 Consultation response, p.79, Q7.1 paragraphs 8, 9.
[600] EE, December 2010 Consultation response, p.79-81, Q7.1 paragraphs 8-9.
[601] Three, December 2010 Consultation response, pp. 22-23.
[602] O2, December 2010 Consultation response, p.7, paragraph 23.
[603] Vodafone, December 2010 Consultation response, Annex 4, pp.38-41.

Ofcom response and updated view on accurate establishment, recording and maintenance of SCs

12.42 It is worth commencing this section with a summary of the current processes for establishing a new number range, selecting and updating a tariff point for that range and the promulgation of the tariff through the industry (we also provided a brief summary of this process in Section 3).

12.43 Ofcom issues non-geographic numbers in 10k number blocks on reasonable request from a Communications Provider ('CP'). As part of this request Ofcom seeks confirmation from the requester as to the BT tariff structure that will be used to charge for this range. If the requestor is seeking a new tariff structure, Ofcom requires that this is first negotiated with BT.

12.44 Once a CP has obtained a number it must then arrange for the number to be opened up on other OCPs networks. Considering that it is a pre-requisite for a new telephone number or number range being usable, the process for opening up new number ranges on OCPs' networks is strikingly *ad hoc*.

12.45 New number ranges and associated tariff information are distributed to OCPs via a Yahoo email group. Each OCP then acts to enable calls to those numbers from their network (to "build" the number range); the speed of building number ranges varies considerably by OCP. As a result, it may be difficult for a TCP to confirm to SPs when a number will be universally available (or even if it will be – see discussion on 'access to numbers', below).

12.46 There are no General Conditions which apply specifically to the building of number ranges. However, General Condition 20 requires all CPs to ensure, where technically and economically feasible, that end-users are able to access and use non-geographic numbers. Nonetheless, there are no specific procedures which must be followed for the building of new number ranges by OCPs (unlike in some European states, for example Germany).[604]

12.47 When number block holders seek to change the tariff to which their number block is assigned (the change has to apply to the whole block), then it negotiates this with BT, circulates the change using the Yahoo 'system' and notifies Ofcom. At times this can lead to significant delays in implementation of new tariffs by OCPs.

12.48 Under the unbundled structure the current system may pose some challenges. As OCPs would be required to set charges which link retail prices to SCs, they need to ensure that their billing platforms incorporate the SC accurately from the moment such prices are advertised. In such a system it would be desirable to have a more coordinated process for the establishment and processing of tariff variations for number ranges. We will discuss this below.

12.49 As we have discussed in Section 10, our preliminary view is that the technical feasibility and practicality demand that SPs choose a price for their services from a number of pre-established prices. To have no restrictions on SPs in choosing a price for their service would have a very large and potentially disruptive impact on the structure and maintenance of OCP billing systems.

12.50 Accordingly, we are consulting on setting a cap on the number of separate price points for the SC which OCPs must support on their billing platforms (see Section 10

[604] http://www.aknn.de/fileadmin/uploads/oeffentlich/10-12-14_ITEX_Spezifikation_PDA_15-0-0.pdf

– in particular the section on the SC). We expect these to be agreed and modified as appropriate by the industry (subject to adhering to the maximum SC charge for each high level range).

12.51 We think this restriction addresses a large part of the concerns expressed by OCPs with respect to the implementation of the unbundled structure. There will, nevertheless, still be some implementation costs as a result of the increase number of price points and requirement to pass through SCs. Our assessment of these costs is set out in Annex 19 and we have taken these into account in our impact assessment in Section 13.

12.52 Constraining the number of price points also ensures that that unbundled structure can be introduced by modern billing platforms available in the market. We understand from discussions with industry (as set out in Annex 19) that the unbundled structure can either be introduced within existing systems or by revised systems proposed for introduction within the next two years – this timeframe will be one factor to consider in any implementation timetable (discussed at the end of this Section).

12.53 There remain some other issues with respect to the management of pricing and billing systems, identified by stakeholders, which we will now consider below, specifically

- the process for TCPs to notify new number ranges or variation in the tariff level for the number range; and

- the desirability of a central SC database which links number ranges and tariffs.

12.54 A further issue which we consider is relevant, and which we discuss below in this context, is the question of access to non-geographic numbers.

Database of Service Charges

12.55 As set out in Annex 14, where we summarise the outcomes of the TWG and CWG, there is broad industry support for a single accessible database from which OCPs could confirm and update their billing information for SCs. This would be a single resource enabling OCPs to know the correct SC for any particular number.

12.56 Supporting a set number of tariffs reduces the complexity of the database, with variations occurring only where new number ranges were introduced or number range blocks shifted tariffs (which we anticipate will be a reasonably rare event).

12.57 We understand the advantages of a central database at a wholesale and retail level to be:

- TCPs would have a single point to inform OCPs of new number ranges (subject to a process for the establishment of the ranges we will discuss below);

- OCPs would have a single point to validate the Service Charges for NGCs and update the charges as appropriate;

- If a consumer interface was added, this could be used to provide an online reference point for the SC for any number – this could be used to supplement, or support, the existing online information systems/webpages provided by OCPs.

12.58 Ofcom has specific duties in relation to keeping records for numbers, and some of the information required exists in Ofcom's Numbering Plan registry.[605] We also currently publish the 'National Numbering Scheme' on our website, which sets out the allocations of each number range, including the BT tariff associated with each range. This database is updated weekly to reflect any changes.[606] Ofcom's existing systems would not, however, be a substitute for a central database of SC charges.

12.59 We consider that there are two approaches, which may be available:

- Public sector provision of the database: either directly by Ofcom or delegated by Ofcom to another party, possibly PayphonePlus.

- Private sector provision through the establishment of a database operating entity with commercial contracts with OCPs and TCPs for the recording and supply of the data.

12.60 Both options are likely to require some operating levy on the users of the database. The levy would be principally to cover operational costs. We estimate that the construction cost of the database should be relatively low as relatively simple data management functionality would be required, given the limited number of price points and the relative stability of the system proposed. Ofcom currently carries out functions bearing some similarities to this with three staff.

12.61 Although Ofcom has specific duties and functions in relation to numbering, at this stage we have not sought to verify whether Ofcom's powers extend to the provision of a database of this nature, nor whether it would be able to secure the necessary payments from industry to fund it. These are critical constraints on Ofcom's ability to act in this area.

12.62 Such limitations do not apply to commercial provision. We consider there are other reasons why this is likely to be the best option. The database is for the benefit of TCPs and OCPs and therefore they have a common commercial interest in securing its effective provision. Second, such provision may well be cheaper since there may more scope for costs to be offset by other commercial service provision using the database.

12.63 We anticipate having significant input on this issue from the industry working groups. We would also welcome stakeholder views on how a central database might be established and operated.

Q12.2: Do you agree with the requirement for a central SC database. If so what would be your preferred approach – public sector or private sector provision? If you do not agree with the need for the database what approach for the dissemination and verification of SC would you prefer and why. Are there any other issues with respect to the database you would wish to raise?

[605] Ofcom's duties to keep records in relation to numbers are: i) to publish the Numbering Plan which sets out the numbers available for allocation and restrictions, tariff principles etc that apply to the use of allocated numbers; and ii) keep day to day records of numbers which we allocate as we consider appropriate. Sections 56(1) and 56(3) of the Act.

[606] http://www.ofcom.org.uk/static/numbering/index.htm#prem

Process of establishment of number ranges and variation in tariffs

12.64 As noted above considering that it is a pre-requisite for a new telephone number or number range being usable, the process for building of new number ranges on OCP networks is strikingly *ad hoc*. As a result, it may be difficult for a TCP to confirm to SPs when a number will be universally available.

12.65 Ofcom does not regulate this process directly, beyond the requirements of General Condition 20 referred to above.

12.66 Similarly, the process for notifying changes to termination rates on existing ranges is not smooth. We understand that, frequently, OCPs are only retrospectively aware of changes to termination rates, leaving them potentially liable for higher than budgeted costs.

12.67 Based on our discussions with network operators and service providers, it is clear that there is industry support for a reform of these systems, particularly in the context of the overall reform of the regime.

12.68 We are aware of an industry initiative for a voluntary code of conduct with respect to the times and processes for building number ranges. This would include agreement on times, points of contact, and escalation procedures.[607]

12.69 In addition, as set out in Annex 14, there is broad industry consensus as to the need for a more regulated process in notification of tariff changes – say with changes notified subject to specific implementation notice and coming into force on specific dates (i.e. monthly or quarterly).

12.70 We think any such reforms would be easier and more cost-effective if undertaken in the context of the new regime and with the availability of the new SC database.

12.71 We would prefer to see industry sort these issues out for themselves and this seems plausible (as evidenced by the code of conduct discussion). Ofcom remains willing to participate in facilitating discussions and assist communications say by providing central records of any industry agreed processes and agreements.

Q12.3: Do you agree with the need for reformation of the existing processes for number range building and tariff change notification? If so, what do you consider to be the key characteristic of a revised set of processes? Do you consider that there is a need for regulatory intervention in their establishment, if so why and on what basis should Ofcom intervene.

Access to numbers

12.72 Customers expect to be able to call every other retail customer irrespective of the network to which the called party is connected. This is important for both competition generally and end-users individually. Under Article 28 of the Universal Services Directive, Member States are required to ensure that the national regulatory authority takes all necessary steps to ensure that, where technically and economically feasible, end users are able to access and use services using non-geographic numbers. Ofcom has implemented this requirement through General Condition 20, which requires CP to "ensure where technically and economically feasible, that End-

[607] This code is currently being considered under the auspices of the NGCS Focus Group.

Users in any part of the European Community are able to access and use those Non-Geographic Numbers which the Communication Provider adopts...”

12.73 It is well-documented that some CPs have experienced problems with other CPs refusing to open number ranges on their networks. In some cases, restricting access to number ranges appears to have been used as a negotiating tactic in the context of agreeing termination rates for traffic flows between networks. In other instances, access seems to have been temporarily denied because the CP concerned has not devoted the resources required to build the number ranges on its network.

12.74 To date, informal action by Ofcom has resolved complaints of this nature. However, in the context of this review, we are clearly concerned about the impact which instances of this sort can have on consumers’ ability to access non-geographic numbers. In the absence of a justification on technical or economic feasibility grounds, CPs are required under GC20 to ensure end-users are able to access non-geographic numbers. In our view, this means that where a CP is informed that a new non-geographic number is to be opened by a SP, it should take the steps necessary to enable its customers to call that number with reasonable promptness. Likewise, a CP should not use the withdrawal of such connectivity as a negotiating tactic in the context of discussions over termination rates.

12.75 We are aware that in other Member States there are more prescriptive regulations to ensure that end-users are able to call non-geographic numbers, for example, regulations which specify the time period for building new number ranges on networks. Our preliminary view is that similar regulation in the UK is not required at this point, since the commercial incentive of CPs to provide end-to-end connectivity to its customers, combined with GC20, should secure end-users ability to access non-geographic numbers. We will monitor how well market developments match this hypothesis. Should more evidence emerge that CPs are hindering consumers’ access to non-geographic numbers, further intervention might become necessary.

Q12.4: Do you consider that there is a need for additional regulatory intervention in the area of end-users’ access to non-geographic numbers, in addition to GC20? If so why and what form should such an obligation take?

Summary of position on system and billing changes

12.76 We are no longer proposing to mandate a specific requirement on OCPs to present disaggregated ACs and SCs in their retail bills.

12.77 Consumers bills should, nonetheless, make clear that an AC applies for NGCs they have made and thereby enable consumers to be able to establish what they have paid as a SC. OCPs will have flexibility to determine the most appropriate way to achieve that for their customers.

12.78 We consider that the restriction on the number of tariff points for SC addresses most OCP concerns on the cost and complexity of the new unbundled structure.

12.79 We would welcome stakeholders views on the additional system and billing issues set out above with respect to:

i) SC database and its management;

ii) Number range building and tariff changes; and

iii) Access to numbers.

Communication activities

12.80 A new regime for non-geographic numbers will only benefit consumers if they find it easier and simpler than the current, confusing, arrangements. Therefore, communicating the changes to customers (including residential consumers and SPs) will be one of the largest challenges of implementing the unbundled tariff.

12.81 In the December 2010 Consultation we noted that the effectiveness of any new proposed structure relied strongly on consumer understanding of how the tariff structure would operate and the choices that they would have.

12.82 We suggested that there might be a need for a centralised promotion of the changes (alongside individual CPs promotion of the changes), for example through advertising and through media consumer programmes. We noted that other factors, such as funding of any advertising campaign that might be required, would also need to be considered.

12.83 Finally, we noted that there was the consideration of how promotion of the unbundled tariff changes should be linked to the other individual number range changes. We noted that we would need to consider how an information campaign should be developed to assist consumers in understanding what the changes would be and when they would come into effect.

12.84 CPs are relatively well-placed to understand the changes drawing on the usual regulatory process (Ofcom's consultations and industry working groups). Therefore, the critical concerns are with two groups: residential consumers, and enterprises using non-geographic numbers (SPs). Therefore, the communications issues can be divided into the following areas:

- communicating with consumers – specifically, whether there should be a general communications campaign to inform consumers;
- actions by OCPs to inform their customers and the costs involved; and
- actions by TCPs to inform their customers (i.e. SPs) and the costs involved.

12.85 We have addressed each in turn below.

Communications campaign

Stakeholder comments in response to the December 2010 Consultation

12.86 All stakeholders that commented agreed that there was a need for a national advertising and communications campaign. BT, for example, agreed and said it would work with Ofcom and the industry on how best to achieve that. Sky considered that it would be an effective way of raising awareness of the proposed changes, in particular as a means of giving consumers an overview of all the ranges and the pricing characteristics of each range.[608] TalkTalk said that a relatively high profile campaign by Ofcom was needed, in particular to explain the reasons for change.

[608] Sky, December 2010 Consultation response, p. 11.

12.87 Antelope Consulting considered that the industry would not have great interest in communicating the changes to consumers, at least until bills displayed all the information and call centres started to receive bill queries. It said that Ofcom would therefore have to be responsible for the communications programme.[609]

12.88 The CAB also said it expected Ofcom to undertake a comprehensive national communications strategy to inform consumers about any new charging structure.[610]

Ofcom updated position

12.89 As set out in Annex 14, we have begun discussing with industry on the measures for ensuring the effective communications of the changes to the industry and importantly consumers. We have refined our proposed Numbering Guide (set out in Section 6), which will be an important feature of any communications activity.

12.90 We see benefit to consumers in a co-ordinated communications strategy by CPs, the media and Ofcom, with the timing and content reflecting the timing of implementation.

12.91 Ofcom's direct communication to consumers is likely to include:

- Press releases – targeting national, regional and trade press;
- Media interviews/appearances for key broadcasting outlets;
- Information on Ofcom and PhonepayPlus websites – home page feature, consumer guide, consumer information;
- Information to Ofcom's call centre about the changes;
- Approach consumer websites to include information;
- Social media engagement and other online information distribution channels; and
- Seed selected blogs, forums, etc.

12.92 We are also considering more specific advertising campaigns and targeted messages to ensure consumers are made aware of the changes (in the context of Ofcom's overall available budget for such initiatives). We intend to develop more specific proposals prior to our final statement and in discussion with stakeholders, including the Communications Working Group.

Q12.5: What steps / actions do you consider need to be undertaken to ensure changes to the structure and operations of non-geographic numbers are successfully communicated to consumers?

OCP communication to customers

Stakeholder comments in response to the December 2010 Consultation

12.93 Virgin Media noted that in relation to the customer experience, a sufficient period would be needed to inform consumers of the revised approach. In this respect it considered it would be highly undesirable to move more quickly to restructure

[609] Antelope Consulting, December 2010 Consultation response, Q7.1, p.7
[610] CAB, December 2010 Consultation response, Q7.1, p.14.

charging even if detailed billing changes were not ready. It considered that such an approach would only serve to complicate the implementation as, for example, in the very likely event that consumers raised queries about the new charging structure or questioned their bills, the full complement of supporting information would not be available to deal with those queries.[611]

12.94 TalkTalk believed that a significant level of effort would be needed to ensure a sufficient level of understanding among consumers around how NGC pricing would work.

12.95 EE said the costs involved in explaining tariff unbundling to customers should also not be underestimated. It questioned how it would benefit directly from the proposed changes and therefore said it would object to having to directly fund any communications campaign to explain the changes. It also noted that its customer service experts had major concerns that, without consumer awareness of the unbundled tariff, it would drive significant additional volumes into its call centres, which would be costly to handle.[612]

12.96 EE also noted that the unbundled tariff would place an increased strain on OCPs customer service functions. In particular a detailed staff training programme would need to be carried out, which it considered would involve significant costs and time to complete prior to the new tariffs being launched.[613] It said that, in terms of timing, it would need fairly long lead times to communicate changes to contract terms to its customers and all the relevant collateral. It estimated it would require at least [✂] to communicate the changes to its entire customer base.[614]

Ofcom view

12.97 This issue was discussed as part of the Communications Working Group. The view of that Group was that at least three to six months' lead time would be required for communicating the message to consumers, taking into account the need for internal communications (e.g. messages to staff etc), printing materials and literature.[615]

12.98 We consider that OCP activities could include the following:

- Inserts/ leaflets included in paper bills – all customers from start date for a certain time period (e.g. six months);
- Additional information included in online billing;
- Text messages to customers – to all customers from start of new charging system.
- Information at point of sale – written, verbal information from sales teams, including access charge in tariff package information (see the discussion of obligations on pricing information below);

[611] Virgin Media, December 2010 Consultation response, p.28
[612] EE, December 2010 Consultation response, p.81,Q7.1 paragraph 16 and 24.
[613] EE, December 2010 Consultation response, p.82,Q7.1 paragraph 23.
[614] EE, December 2010 Consultation response, p.81,Q7.1 paragraph 19.
[615] Communications Working Group meeting 7 October 2011, http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-070911

- Information on OCP websites – from start of new system onwards including promotion of the new price website (for example via a specially designed graphic 'button', common to all CPs, that links to the site);

- Newsletters and information to staff; and

- Other online information channels.

12.99 We have included estimates of the cost of these OCP communication activities as part of our impact assessment in the following Section. This takes into account the additional materials OCPs are likely to need to produce as well as staff training and additional calls into call centres.

TCP communication with their SP customers

Stakeholder comments

12.100 C&W noted its experience with the changes to 0870 was that it involved several rounds of communication, with each round generating multiple queries. It said to support this exercise it would need to ensure account teams were fully aware of the changes and could manage discussions with customers (which was likely to involve training etc). Following a generic awareness campaign, communications would need to shift to customer specific analysis, in particular preparing for customers challenging the new rates or wanting to migrate. It also noted that moving ranges within PhonepayPlus's remit would create additional contract changes and need for due diligence by TCPs.[616]

12.101 BT noted that, in relation to establishing the SC price points, there would be impacts on the contractual arrangements for interconnection, and that a move to the unbundled tariff meant that termination rates would change. It said it was not yet clear whether it would be appropriate for BT to issue Operator Charge Change Notices ('OCCNs') as it did currently (a process which it noted has led to many disputes), or for other CPs to do so. BT did not see this as a barrier to migration but noted that small CPs often failed to acknowledge and return OCCNs and hence it was imperative that all players were signed up.[617]

12.102 Virgin Media also noted that TCPs and SPs would face a number of practical and strategic challenges, billing systems and processes would need to be adapted, new price publication requirements implemented etc. It also noted that tariffs would need to be rebalanced, price positioning re-evaluated and it would be necessary to renegotiate a significant number of inter-provider agreements.[618]

Ofcom view

12.103 In the impact assessment in the next Section we discuss a range of estimates of the cost of this necessary communication activity between TCPs and SPs, which takes into account the various activities highlighted in the stakeholder comments above.

12.104 To minimise the risk of disruption to consumers, we agree it is desirable to map new SC tariffs to existing termination rates as closely as possible. We set out our view in paragraph 12.114 below that this process should be led by industry but with Ofcom

[616] C&W, December 2010 Consultation response, pp. 43-44.
[617] BT, December 2010 Consultation response, p.18, section 5.4.
[618] Virgin Media, December 2010 Consultation response, p.27.

involvement – there will be a clear overlap with the process of establishing the initial price points as we discuss in Section 10 (paragraphs 10.384 to 10.387).

12.105 We note BT's concerns about contractual arrangements. We consider that this would be addressed to a large extent by the proposed changes to the billing and notification systems discussed in earlier in the section (paragraphs 12.55 to 12.63) if a central database for SCs is established.

Transitional arrangements

Stakeholder comments in response to the December 2010 Consultation

12.106 In terms of detailed points about the transition to the unbundled approach, C&W[619] noted that all number ranges had to be associated with a defined SC. It considered it was vital that the SC for each legacy charge band should be determined in advance and universally applied to all services (regardless of which network it was hosted on) in order to ensure a smooth transition to the new regime.

12.107 C&W noted that for its originating customers, implementing the unbundled tariff would be a complex process, and would need significant analysis to determine the AC rates for each tariff to achieve a margin neutral position (against today's tariffs). For its terminating customers, it noted the work would potentially be less onerous (provided that Ofcom was involved in setting the starting SC for each chargeband) but customer pricing would need to be reviewed and notified. It said that the magnitude of this re-pricing work should not be underestimated as it anticipated it would need to employ additional resource and that it estimated it would take 6-9 months to complete.[620]

12.108 EE said Ofcom need to clarify how the unbundled tariff would be applied to customers on legacy tariffs (i.e. those that were still in contract when the changes came into effect), as price changes for existing customers could create a risk of churn.[621]

12.109 Virgin Media noted that OCPs would not only need to address the substantial practical implications of the change but would also need to make more strategic changes, which would likely include changes to the relative weighting of charges for different services, reconfiguration of product bundles etc. It also considered the proposals were likely to result in material financial downsides for OCPs and they should be given appropriate time to prepare for those effects.[622]

12.110 SSE believed there was a significant need for effective co-ordination across the industry, including retail-only OCPs to manage the project of implementation successfully. It noted Ofcom was well placed to lead this process. It suggested a forum should be established to provide ongoing supervision of numbering developments.

Ofcom view on transitional arrangements

12.111 We agree with views expressed by several stakeholders that Ofcom would need to be directly involved in managing the transition to a new regime. Once this

[619] C&W, December 2010 Consultation response, pp.33-34.
[620] C&W, December 2010 Consultation response, pp.44-45.
[621] EE, December 2010 Consultation response, p.81, Q7.1 paragraphs 17-18.
[622] Virgin Media, December 2010 Consultation response, p.27.

consultation is published we propose to re-establish the working groups with industry to consider the detailed implementation steps required and jointly develop plans for those changes which are the responsibility of industry.

12.112 In considering the timing for implementation (discussed below) we have taken account of the work involved for OCPs in recalculating their prices.

12.113 As highlighted below, we are consulting on an implementation period of 18 months, which should enable OCPs to notify the majority of customers of the potential changes prior to the end of their contracts. Where customers are on existing tariffs, General Condition 9.6 would be relevant if the changes to their package "is likely to be of material detriment to the Subscriber" (as the term is defined for that General Condition).[623] This requires OCPs to give notice of no less than one month of any such modification, as well as informing and allowing the Subscriber to withdraw from the contract without penalty when they receive that notice.[624]

12.114 We have addressed elsewhere the need to improve the way changes to tariffs are notified to CPs (paragraphs 12.64 to 12.71 above). The other issue raised by C&W is the need for the initial establishment of SCs that map well onto existing termination rates. We have already noted our preliminary view that there should be an established set of SC prices prior to implementation. As we set out in the Section 10, we are proposing to limit the number of SC price points because of limitations in OCP billing systems. However, whilst the maximum caps by number range for SCs will be part of the Numbering Plan, the individual SC price points will not. We consider that the most appropriate approach for achieving the mapping process is for Ofcom to work with industry to develop an agreed approach ahead of implementation, and for that approach to be implemented across industry.

Approach to price disclosure obligations

Proposals in the December 2010 Consultation

12.115 We noted that the effectiveness of the unbundled tariff structure would rely on consumer understanding of how the tariff structure would operate and the consumptions choices that they would have. We therefore considered options for price obligations on OCPs and SPs, which we outline in turn below.

12.116 We said we would have to consider price disclosure obligations on OCPs to ensure that ACs would be easily understood and to promote competition between OCPs on the AC. We noted there were already a number of transparency requirements on OCPs, in particular through General Condition 14, 23 and 24, under which they were obliged to make a range of pricing and other information available in advertising and at the point of sale.[625]

12.117 Our view was that it would be necessary to impose obligations on OCPs to make information clearly available consumers about the relevant AC for each tariff package, in both advertising and at the point of sale. Our provisional position was

[623] Definition of material detriment in the GCs: "Material detriment" is where the consumer's overall charges would increase by more than RPI (10%)
[624] General Condition 9.6: http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/general-conditions.pdf
[625] See paragraph 7.63 of the December 2010 Consultation. These obligations are in particular GC14.2(b), GC23.5, 23.6 and 23.10.

that as well as amending existing General Conditions to reflect these changes to NGCS, a new General Condition would also be required, which would specify:

12.117.1 That, at the point of sale (before entering into or amending a contract) an OCP had to disclose to a customer in a clear and accurate manner the relevant AC; and

12.117.2 Advertising or promotional material for a specific package that referred to call pricing would also need to include the relevant AC for that package.

12.118 In terms of price disclosure obligations on SPs, we noted it would be important that they had responsibility for communicating their SCs to customers. We highlighted that 0871, 09 and 118 numbers were all regulated by PhonepayPlus ('PPP') as premium rate services, which carried a number of responsibilities, but also included an obligation to ensure that consumers were fully informed of the cost of the call prior to incurring any charge. We therefore noted that in a future unbundled tariff environment the PPP Code would therefore require that SPs on these number ranges inform customers of the relevant SC, as well as that an AC would be incurred.

12.119 We noted that the only revenue sharing range that was not currently subject to similar price disclosure requirements under the PPP code was 0843/4. We said that our ability to regulate the advertising activities of SPs was limited, and we considered that, a case could be made for amending the PRS Condition to make 0843/4 service subject to regulation by PPP. We noted that we would expect any subsequent regulation to be applied by PPP to be 'light-touch', but to include an obligation on providers to state the SC in all advertising.

12.120 We asked the following question:

Q7.5. Do you consider that the potential approach to the price publication obligations would be likely to be effective?

Price publication obligations on OCPs

<u>Stakeholder comments</u>

12.121 Several respondents supported price publication by OCPs with regards to their ACs, with some highlighting that success of the unbundled tariff would depend on consumer awareness of their AC and that it was important that that information was not lost with all the other information OCPs presented to customers.[626] For example the CAB noted it must not be allowed for such material to be hidden away in the small print.[627]Other respondents noted previous pricing publication requirements had not been successful (as discussed in Section 10 above in relation to potential information remedies) and therefore it was important that an effective approach was developed.

12.122 SSE accepted that it would be important for retail OCPs to make retail charges clear to customers, however, it urged Ofcom to step back from the over-prescriptive "code of practice" approach that currently governed retail information provision under General Condition 14. It suggested that it might be appropriate to bring together in one GC all the retail and wholesale obligations relating to NGCs. It noted that in the sales and marketing of fixed and mobile telephony Ofcom had removed the previous

[626] For example C&W, December 2010 Consultation response, p.19.
[627] CAB, December 2010 Consultation response, Q7.5, p.14.

detailed mandatory code of practice requirement and had instead implemented new GCs with associated non-mandatory guidance. It suggested that Ofcom should use a similar approach for NGCs.

12.123 A number of other OCPs questioned whether additional requirements were necessary, given the extent of price publication requirements that already existed. EE considered that there were no benefits to consumers in imposing an additional obligation (on top of existing price publication obligations) on OCPs to provide AC information. In fact it considered that the existing pricing publication obligations should be rolled back (as covered in its response on information remedies) as it considered it was clear that despite the transparency obligations in GC14.2 had not achieved Ofcom's desired consumer awareness results. It therefore doubted that amending the regulations to change the requirement to publish maximum prices for NGCs to an AC would change consumer attitudes to NGCs.[628]

12.124 EE considered that a better approach would be to specify at a high level the outcomes that Ofcom would like to achieve, rather than the detailed means by which they should be achieved. It considered that this could be done by requiring OCPs to publish their AC in an appropriately prominent manner, along with the maximum SC price caps of each number range, UKCTA also supported this approach.[629] Vodafone considered that the AC should just be subject to the same transparency obligations as everything else in GC10.[630]

12.125 EE considered that OCPs should no longer have to maintain and provide complete price lists for NGCs. OCPs role should instead be limited to promoting the AC, over which it would have control. SPs should take responsibility for promoting their SCs, if not, it would be an onerous and costly process for OCPs to maintain their price lists with that third party information.[631]

12.126 Sky disagreed that a new General Condition on presenting pricing information for NGCs was required. It believed that the AC would be no different from any other tariff which informed a consumers' purchase decision and therefore it was disproportionate if this charge was required to be included in customer contracts, even though other prices were not currently included.[632]

12.127 TalkTalk also said it had misgivings about the proposal that the AC would need to be advertised in a prominent fashion. It was concerned that there were already a number of regulatory requirements which required providers to display a host of information in consumer marketing and welcome material. It considered that Ofcom needed to give specific guidance on the perceived relative importance of this information by taking a holistic view of requirements and issue guidance on what information customers should be provided with at the point of sale, and what could be displayed on websites/welcome literature. It noted that what tended to happen currently was that providers simply added statements to increasingly lengthy footnotes in their advertising and website information and it did not think that consumers actually read any of that information (never mind making purchasing decisions based on it).[633]

[628] EE, December 2010 Consultation response, pp.83-84,Q7.5 paragraphs 3-8.
[629] EE, December 2010 Consultation response, pp.83-84,Q7.5 paragraphs 3-8. UKCTA, December 2010 Consultation response, p.8.
[630] Vodafone, December 2010 Consultation response, Q7.1, p.64.
[631] EE, December 2010 Consultation response, p.81,Q7.1 paragraph 20.
[632] Sky, December 2010 Consultation response, p.12.
[633] TalkTalk, December 2010 Consultation response, pp.3-4.

12.128 [✂] did not support price publication requirements with relation to the business sector that it supplied. It proposed that Ofcom should consider a size-related break point for business consumers where price publication was not required.[634]

Ofcom's response and updated view on price publication requirements on OCPs

12.129 We accept stakeholder's comments that there are a number of existing publication requirements relating to price already in place, which are present in several different General Conditions, in particular:

- **General Condition 10**: This requires communications providers to publish clear and up to date information on their applicable prices and tariffs, including details of their standard tariffs with regard to all types of usage charges;[635]

- **General Condition 12:** CPs are required to provide subscribers on request a basic level of itemised billing which allows the subscriber to verify and control the charges incurred and adequately monitor usage and expenditure.

- **General Condition 14**: OCPs are required to establish a Code of Practice for the publication of prices of calls to NGCs[636], which conforms to specific guidelines in Annex 1 (for premium rate) and 2 (for other NGCs) to that Condition. In particular, OCPs are required to:

  - for premium rate services, publish the usage charges required to be published under GC10.2(d)(ii) and information about the tariffs that apply on their network for calls to any PRS number range[637];

  - publish NTS and 0870 charges and give them equal prominence in terms of location and format given to charges for geographic calls, calls to mobiles and call packages, including bundles[638];

  - publish in advertising and promotional material which refers to call pricing, alongside maximum prices applying to NTS and 0870 calls, a clear reference as to where on website and published price list the complete set of charges can be found[639]; and

  - when a new customer signs up for a service, provide, alongside maximum prices applying to NTS and 0870 calls, a clear reference as to where on websites and published price lists the complete set of NGC charges can be found.[640]

- **General Conditions 23 and 24:** mobile and fixed providers must, before entering into or amending a contract with a customer, use reasonable endeavours to ensure the customer is provided with a range of clear comprehensible and accurate information that is provided in a durable form.

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[634] [✂]
[635] GC10.1 and 10.2(d)(ii).
[636] GC14.2, this specifically refers to Premium Rate Services (i.e. 118, 09 and 0871 numbers), NTS calls (which includes 0845 and 0844/3 numbers), 0870 numbers and calls to Personal Numbers (which are not being considered in this consultation).
[637] Annex 1 to GC14, paragraph 3.1 and 3.3(ii)
[638] Annex 2 to GC14, paragraph 3.1 and 3.2.
[639] Annex 2 to GC14, paragraph 4.4.
[640] Annex 2 to GC14, paragraph 4.2.

Information that must be provided to the consumers includes a description of the service, key charges and payment terms.[641]

12.130 We think that these some of these provisions may require amendment as part of the implementation of the unbundled tariff.

12.131 Given that SPs will have more control over their SCs, we propose moving away from a system in which OCPs must publish a list of all charges to non-geographic numbers, in favour of one in which OCPs provide information about the AC, and SPs provide information about the SCs, to their customers. Thus, SPs will be responsible for changing their promotional material and, updating the central SC database (or whatever form of notification to OCPs is put in place), to ensure that consumers are made aware of the correct SC price, and are billed correctly. Nevertheless, it may be helpful for OCPs to provide information to its customers on the maximum SC caps for each number range, for example through the proposed Numbering Guide set out in Section 6. In addition, if a public facing database of SCs is developed (as discussed above), it may also be useful for the OCP to provide a link to that database for its customers.

12.132 OCPs will be required to ensure that the AC for a given tariff package is clear and available. As discussed above, in paragraphs 12.33 to 12.36, we would expect the AC to appear on customer bills, provided on enquiry, to be made clear at the point of sale and to be published in OCPs websites, price lists as well as its advertising and promotional materials. In considering what General Conditions we propose to set and modify in implementing the unbundled tariff, we will review the obligations noted above, including GC14, GC23 and GC24 to determine whether these are sufficient to achieve this. We consider that the AC should be treated as a 'key charge' as described in some of those conditions, and it will be identified specifically as a price that must be brought to the attention of new customers.

Q12.6: Do you agree with our proposal that existing price publication obligations (with some modifications) are sufficient to ensure that consumers are made aware of their ACs? Do you agree that we would need to specify the AC as a key charge?

Price publication obligations on SPs

12.133 Most respondents agreed that consumers should be informed, at the point of call, about the SC, and therefore supported improved price publication by SPs. However, only a minority of respondents agreed with the proposal for PPP regulation to be extended in order to achieve this. For example, Antelope Consulting considered that other NGCs should be subject to the same price information regulation as currently applied to 0871 where they had non-zero service charges.[642]

12.134 EE also considered it made sense for Ofcom to consider extending the remit of PPP to include 0843/4 numbers. It noted, however, that Ofcom should avoid the temptation to require OCPs to provide this information simply by dint of the fact they were regulated by Ofcom whereas SPs were not.[643] O2 noted concern that Ofcom had not indicated that 0845 or 0870 numbers would be subject to PPP oversight, and it suspected that excluding those ranges would just lead to a migration of SPs to

[641] GC23.5(c) and GC24.6(c).
[642] Antelope Consulting, December 2010 Consultation response, Q7.5, p.7-8
[643] EE, December 2010 Consultation response, pp.84-85, Q7.5 paragraph 9.

0845 as was evidenced by the industry's response to PPP regulation of 0871 numbers.[644]

12.135 PPP agreed that any regulatory regime for 0843/4 numbers would need to be appropriate to the level of risk and identified consumer harm. It recognised that if the proposal was pursued, it would need to consider how to proportionately apply regulation to this market, so as not to place unreasonable burdens on these lower rate services, which would also need to extend to the appropriate funding mechanism.

12.136 Fixed operators (TCPs, and a number of firms who are both TCPs and OCPs), however, indicated considerable concern about the proposal to extend PPP regulation to 0844/3 numbers and argued that it would be disproportionate to the level of consumer harm on those ranges. The FCS, Colt, ITSPA, [✂], C&W, 4D Interactive, Sky, TalkTalk and UKCTA all indicated opposition to this approach, questioning the justification. Colt and [✂] noted that registering with PPP would be a considerable burden for 0844 and 0843 providers and considered it would damage the market for these services.[645] FCS noted its members were very clear that such an approach was not necessary and would in fact be 'ridiculous' if it was implemented. It said it was clear from the 0871 range that the association with much higher premium rate services damaged the confidence and trust in the range overall.[646]

12.137 UKCTA said that many 084 SPs already published pricing information and did not want to be associated with 'premium rate'. Given the low levels of consumer complaints, it considered that it would be disproportionate to apply the PPP code to 084 without a cost benefit analysis.[647]

12.138 C&W also questioned whether PPP regulation was a cost efficient way of regulating the 084, and indeed the 087 range. It noted that PPP had not launched a formal investigation into abuses on the range, but that the cost of the additional regulation amounted to in excess of £400k in pure regulatory costs. It noted that applying that same calculation to the 084 range would result in an additional £1.7m per annum and this cost of regulation far outweighed any demonstrable benefit on a range with only limited potential for consumer harm because of the relatively low price points used.[648] It highlighted that feedback from some of its reseller customers already questioned how 'light-touch' current PPP regulation of 0871 really was and suggested that its application to 087, let alone 084, was a wholly disproportionate approach.[649]

12.139 Sky said that the improved clarity achieved through the unbundled tariff should provide sufficient certainty and transparency to the consumer. It considered that adding an additional layer of governance and micro management by PPP was entirely disproportionate and not justified by any evidence.[650]

12.140 4D Interactive noted that the level of complaints on 0871 had been low and it was difficult to see how the regulatory effort had been matched by improvements in customer experiences. 4D said it had found that because it was considered 'lower risk' the level of regulation on 087X was light and inconsistent and had created a

[644] O2, December 2010 Consultation response, p.31.
[645] Colt, December 2010 Consultation response, p.12.
[646] FCS, December 2010 Consultation response, p.16.
[647] UKCTA, December 2010 Consultation response, p.12.
[648] C&W, December 2010 Consultation Response, p.61.
[649] C&W, December 2010 Consultation Response, pp.61-62.
[650] Sky, December 2010 Consultation response, p.10 & 12-13.

more uneven playing field for providers in the market, which in turn led to a loss of consumer confidence. It considered that regulation should only be extended where there was a clear requirement and where there was an intention to comprehensively enforce the code that was implemented.

12.141 C&W favoured industry collaboration over intrusive regulatory oversight in relation to 084 where there was little evidence of fraudulent activity. It believed the industry could achieve the same result as PPP regulation through the establishment of a co-regulatory code of practice setting out the informational remedies expected across the 084 ranges. It noted that if that approach was successful the 087 range could also be subject to the same approach and removed from PPP regulation. Other respondents also advocated the removal of 0871 from the PRS Condition.[651] TalkTalk considered that there was emerging evidence for concluding that there was little if any need for PPP to regulate 0871 since it generated very few complaints. It believed that Ofcom should encourage and reassure industry that there might be scope for developing some kind of industry code of practice around the use of 0844/0871 services.[652]

12.142 CMA raised a number of questions about the publication requirements for SCs. It noted that it would only help where consumers took the number from a visual presentation that included that information (e.g. on TV or a website), it questioned how it would help for numbers that were called from other sources, e.g. personal records, or where advertisements did not include this information, or for radio advertisements or people with visual impairments.[653]

12.143 One individual respondent (David Hickson) noted that despite the description of the 0871 range as ‘business rate’ in Ofcom’s proposed numbering Code, there was no indication of Ofcom correcting the error it made in designating these numbers as premium rate, purely for the purpose of imposing a price declaration requirement. He considered it was important that the same mistake did not occur for 084, and suggested that it was not too late for Ofcom to revise its approach to the 0871 range. He argued that the requirement for price publication did not necessarily require direct regulation from Ofcom. He noted that through a public awareness campaign and engaging with the relevant bodies such as the ASA, the Cabinet Office, Trading Standards and other independent industry regulators, Ofcom could achieve a much better outcome for the users of the services on these ranges.

12.144 Sky considered that existing regulatory requirements (including General Conditions, the Advertising Codes and the Consumer Protection from Unfair Trading Regulations (‘CPRs’) already provided a framework under which pricing information was presented for non-geographic numbers where necessary (for example under the Advertising Codes, advertisers are required to include pricing information in marketing communications where consumers are asked to dial an 084 number) and it considered this was sufficient. It argued that the evidence of consumer harm did not justify wholesale changes in CPs communication obligations. It also highlighted that the CPRs were subject to a maximum harmonisation obligation, under the Unfair Commercial Practice Directive, therefore any proposed regulation of matters under the CPRs could not impose a greater restriction than was currently required by the CPRs.[654] In terms of Ofcom’s communications proposals, Sky considered that any obligation on advertisers to include an icon to represent the tariff characteristics of a

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651 [✂]
652 TalkTalk, December 2010 Consultation response, p.5.
653 CMA, December 2010 Consultation response, pp.4-5.
654 Sky, December 2010 Consultation response, p.11.

particular number range went beyond the CPRs. It considered that at most, the icons should be optional.

12.145 The Advertising Association noted that it wanted to ensure that the presentation of the new structure to consumers was done in such a way as to be compatible with current requirements and not unnecessarily burdensome to advertisers who already complied with a number of rules in this area.

Ofcom's response and updated position

12.146 The purpose in requiring publication of the SC is to ensure that it is clear and readily accessible to consumers. The 2011 Experimental Research found that providing accurate information at the point of call significantly improved participants' decision making.[655] In particular, the experiment showed that where participants were provided with the SC at the point of call the unbundled model performed better than the status quo; however, where they were not provided with the SC, the unbundled model performed the same as the status quo.[656]

12.147 We therefore consider that publication of the SC by SPs so that it is available to at least the majority of consumers at the point of call is a crucial element in the success of the unbundled tariff. We recognise that the imposition of caps on the SC will help enable presentation of a clearer message of the likely SCs involved for each number range at a more general level (i.e. consumers may be able to learn that an 084X number will have an SC of no more than 7ppm for example, without having to be told this in the SP's advertising). This general pricing information and structuring of the number ranges will form part of Ofcom's communications campaign and could also be information that OCPs can provide as part of their pricing information to consumers (for example through the proposed Numbering Guide set out in Section 6).

12.148 Nevertheless, we consider it important that there is a requirement for SPs to make their SCs clear (and that an AC will apply) in their promotional material in order to increase consumer awareness of the exact SC for the number they are going to call, in line with the findings of the 2011 Experimental research. The 2011 Consumer survey found that 65% of callers obtained the telephone number for the last company or public organisation they called from at least one of the following sources: the internet; a letter, bill or leaflet from the company being called; a written advert; or an advert on the TV or radio.[657] Each of these sources is likely to allow the SP to indicate alongside its number the SC for that number (as well as noting that an AC will apply).

12.149 As highlighted above, the 09, 118 and 0871 ranges are already covered by PPP's Code of Practice, which includes an obligation to ensure that consumers are fully informed of the cost of the call prior to incurring any charge. We expect that, under an unbundled tariff, this will mean that SPs will be required to advertise their SCs in accordance with the requirements of the Code of Practice. The question remains as

[655] 2011 Experimental Research, page vii, point 1.
[656] 2011 Experimental Research, page vii, point 1 and Table 2. In particular subjects made significantly better call decisions under treatments 4 and 5 (the unbundled tariff with the SC provided at the point of call) than under treatment 1 (the status quo). And subjects performed similarly under treatment 6 (the unbundled tariff with the SC not provided at the point of call) and treatment 1 (the status quo).
[657] 2011 Consumer survey, question GL14: "Thinking about the last time you made a call to a company, shop or public organisation which of the following did you use to get the telephone number?"

to how a similar requirement is enforced for the other number ranges, i.e. 084X and 0870.

12.150 We did not consult on price obligations for SPs on the 0845 and 0870 numbers ranges in the December 2010 Consultation. This was in part due to the fact that a number of different options were being considered for these ranges (as discussed in the previous Section), including closure and geographic rating. We now consider that this requirement should apply to all number ranges which the unbundled tariff is being applied to and so will include 0870 and 0845 (as set out in the previous Section).

12.151 In response to EE's comment, we are not proposing that OCPs should be responsible for publishing information about individual SCs for each number. We have set out above the pricing information we consider OCPs should be responsible for publishing and this primarily relates to the AC.

12.152 It is clear from the responses that there is significant opposition to the extension of PPP remit to include 084X numbers as a mechanism for enforcing the advertising of SCs. This issue was also discussed as part of the industry Commercial Working Group and in line with the stakeholder comments summarised above, the majority of the group was opposed to PPP regulation of the 084X ranges, and there was also some support for the removal of 0871 from PPP's remit.[658]

12.153 There was, however, no clear consensus on alternative enforcement mechanisms for ensuring that SCs for the 084X range were advertised by SPs. Some group members suggested that maximum caps on the SC would be sufficient to give consumers an understanding of the different number ranges. Furthermore, they argued that the SC did not necessarily need to appear in every advertisement by the SP, given the lower price points for these number ranges. One option that was discussed was a General Condition applied to TCPs which required them to ensure that their SPs complied with the requirement to state SCs in their advertising. This seems to us to have a number of disadvantages, raising enforcement difficulties, and creating additional burdens for TCPs and suffering from a fundamental flaw of regulatory design: it regulates the conduct of someone other than the person upon whose behaviour it is focused.

12.154 Several stakeholders have suggested that existing regulatory requirements might offer a more plausible alternative to PPP regulation. In particular, the Advertising Standards Authority ('ASA') regulates broadcast and non-broadcast advertising in the UK through the Committee of Advertising Practice ('CAP) Advertising Codes.[659] CAP currently issues guidance on what call cost information should appear in marketing communications for 084 and 0870 numbers (other numbers are covered by PPP Code of Practice as highlighted above).[660]

[658] At the meeting on the 29 September 2011: http://stakeholders.ofcom.org.uk/telecoms/groups/nts-focus-group/notes-of-meetings/ngcs-290911 . See also the summary in Annex 14.
[659] See www.asa.org.ukand www.cap.org.uk.
[660] The CAP AdviceOnline database recommends that for 084 numbers, where a number costs more to call than an 01 or 02 number using BT's Unlimited Weekend package, the marketing communication using that number should include pricing information that states the cost per minute of a call to BT customers as well as stating that other non-BT providers charges are likely to vary, and if space allows, that callers can check the price with their phone company. If the cost to call is always less than the cost of a call to BT's Weekend Unlimited customers to a geographic number made at the same time (for example 0845 numbers) CAP recommends that no pricing information has to be

12.155 As stated above, our objective is to ensure that the SC for a particular number is presented by SPs in their advertising and promotional material to a sufficient degree, i.e. where reasonably practical, in order to ensure that that information is available to the majority of consumers. We recognise that there are different options for achieving this and are not committed as yet to a specific option. Based on the discussion above, and taking into account stakeholder comments, we consider that there are two options:

- **Option 1:** Extension of PPP remit to include all revenue-sharing ranges; or
- **Option 2:** Regulatory Condition on SPs (enforced through an industry Code of Practice and/or ASA/CAP guidance);

12.156 We discuss these options below. We would welcome further stakeholder engagement and discussion on which of these would be most effective at achieving the overall objective whilst minimising the cost to consumers.

12.157 In looking at these options, our previous statement on principles for analysing self and co-regulation is relevant.[661] In that statement, we identified the following steps in assessing the appropriateness of self- or co-regulation:

i) Do the industry participants have a collective interest in solving the problem?

ii) Would the likely industry solution correspond to the best interests of citizens and consumers?

iii) Would individual companies have an incentive not to participate in any agreed scheme?

iv) Are individual companies likely to 'free-ride' on an industry agreed solution?

v) Can clear and straightforward objectives be established by industry?

Discussion of options for regulation of SC advertising

Option 1: extension of PPP regulation

PPP Call for Inputs

12.158 In view of the significant industry concerns raised in response to the December 2010 Consultation, and as part of the Commercial Working Group discussions, we asked PPP to consider how it might address those concerns in the event that its remit was extended to 084X numbers. In December 2011 PPP issued a Call for Inputs around the extension of its regulation to the remaining revenue sharing ranges (specifically 084X numbers), which looked at how it could apply a proportionate approach that recognised the lower prices of these ranges and responded to the concerns that had previously been raised.[662]

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given. Similarly, CAP recommends that pricing information does not have to be included for 0870 numbers.

[661] Ofcom, *Identifying appropriate regulatory solutions: principles for analysing self- and co-regulation Statement*, 10 December 2008.

[662] PhonepayPlus, *Call for Inputs around the extension of PhonepayPlus regulation to remaining revenue sharing ranges*, 12 December 2011, (PPP Call for Inputs')

12.159 As part of that Call for Inputs, PPP outlined its experience with regulating the 087X ranges (excluding 0870) and set out its view that the extent of consumer harm on these ranges had reduced as a result of PPP regulation, highlighting also that the market appeared to have remained stable despite some fears that regulation would undermine the range.

12.160 The Call for Inputs also set out PPP's response to the particular concerns raised by industry about any extension of its remit. These concerns fell into three categories:

i) that regulation by PPP would lead to 084X services being branded as 'premium rate', further reducing consumer confidence in using these numbers: PPP said it would be willing to consider options with the industry for how regulation of these number ranges could be branded differently.

ii) Concerns around the regulatory burden of falling under PPP Code of Practice: PPP said it was confident that its regulatory regime could be applied in a way that was proportionate for the remaining 08X services; and

iii) Concerns around the financial cost of the regulation, in particular the PPP levy: PPP said it expected that the overall levy rate would decrease if its remit was widened and that its experience with 087X was that payment of the levy had not had a noticeable revenue impact on the market.

Responses to PPP Call for Inputs

12.161 PPP received 16 responses to its Call for Inputs.[663] Whilst there was some support for the extension, for example from some consumer groups, there were also a significant number of respondents, industry members in particular, who raised strong opposition to the approach, making similar arguments as set out above in terms of the proportionality of the proposal. We have summarised the relevant points made in the responses below:

- Most respondents, particularly industry members, considered that there was insufficient evidence of consumer harm on these ranges to justify the case for PPP regulation. Respondents noted, for example, that fraud was not an issue on these ranges because of the low revenue share and that the calling costs of these numbers were sometimes lower than standard geographic and mobile calls. In particular, Lexgreen Services, FCS, HSBC Merchant Services, UKCTA, BT, HSBC, 24 Seven Communications, Surgery Line, Virgin Media, InfoDial and the Mobile Broadband Group ('MBG') were of this view.

- The CAB, the Communications Consumer Panel ('CCP'), Which? and the OFT indicated some support for the proposal, agreeing that consumer protection could be improved with PPP regulation, and a single regulatory approach might be more appropriate. They noted, nonetheless, that the PPP Code would need to be reviewed to ensure it was appropriate for the types of services provided on the 084X ranges.

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http://www.phonepayplus.org.uk/~/media/Files/PhonepayPlus/Consultation%20PDFs/PhonepayPlus_Call_for_Inputs_08xx_Numbers.pdf

[663] The non-confidential responses are available on the PPP website here: http://www.phonepayplus.org.uk/For-Business/Consultations-and-Invitations-to-Tender/Previous-consultations/Call-for-inputs-around-the-extension-of-PhonepayPlus-regulation-to-remaining-revenue-sharing-ranges.aspx

- Several respondents remained of the view that PPP would lead to an association with ‘premium rate’ which would be damaging for services on the 084 range and cause unnecessary concern to consumers, thereby reducing confidence in these services. The CCP suggested that this could be resolved through different branding of PRS services and those services that were primarily used for cost-recovery (i.e. the 084 ranges).

- A number of respondents noted that the regulation of 0871 services had led a number of SPs to migrate away from the range (to the 084 range) and were concerned that PPP regulation of this range would leave no alternative ranges for those providers. These respondents considered that regulation of 0871 had had a damaging effect on that number range, despite PPP’s view to the contrary.

- In terms of the levy, there was a concern that extension of PPP regulation would lead to services on 084 ranges cross-subsidising higher rate services on mobile shortcodes, the 09 and 118 ranges. The CAB and Which? also noted concern about the increased costs involved with PPP regulation, in particular if that cost was passed on to consumers, or if charities/not-for-profit services could not afford to offer their services on these ranges. Other respondents noted that a significant proportion of the existing PPP levy came from 087X, but these ranges had generated a low level of complaints.

- Some respondents argued that an extension of the regulation was not appropriate because the 084X number ranges were used for different purposes compared to existing PRS services, in particular the revenue generated was not the reason the services existed, unlike the higher rate 09 numbers. In this respect, some respondents also questioned how the regulation would work in practice, because not all services on these number ranges actually involved revenue share (e.g. some services on the 0845 range).

- In terms of alternative options, some respondents suggested that a voluntary industry agreement would be sufficient, others suggested that the current ASA/CAP guidance could be built upon. BT also proposed that the Communications Working Group could develop best practice guidelines which drew on the existing ASA/CAP guidance.

Ofcom view on extension of PPP regulation

12.162 It is clear that a significant level of concern remains about the extension of PPP to regulation of 084X. There is also a strong view that its regulation of 0871/2/3 might not be necessary in future if the unbundled tariff were to address the issues of price transparency, which was one of the primary reasons for the decision to include it within PPP remit in the first place.[664]

12.163 We consider that PPP plays an important consumer protection role in regulating the 0871/2/3, 09 and 118 ranges and consider there is still a case for the regulation of 0871/2/3 numbers to remain in place at the current time, given the level of revenue these number raise and the resultant increased potential for scams. We nevertheless recognise that the implementation of the unbundled tariff is likely to address some of the problems which led to the extension of PPP regulation to the 087X ranges and therefore we intend to monitor implementation and the use of the 087 range to see whether such regulation remains necessary in the future.

[664]Ofcom, *Extending Premium Rate Services Regulation to 087 Numbers*, 5 February 2009.http://stakeholders.ofcom.org.uk/binaries/consultations/087prs/statement/statement.pdf

12.164 In terms of the 084X and 0870 ranges, we consider that there is a risk that inclusion of the 084 and 0870 number ranges in the PPP regime would impose an unnecessary additional regulation on a very large number of organisations who might, in any case, voluntarily meet the requirements for price publication. A critical factor in weighing up this concern is the question of whether, without the role that might be played by PPP, consumers would receive adequate information in any event. In addition, there are potentially some practical difficulties given that not all ranges within the 0845 range necessarily involve revenue sharing.

12.165 Our preliminary view is that extending the remit of PPP remains a viable option for ensuring that SCs are advertised to consumers. The fact that some industry players seem to prefer to minimise the impact of SPs on the 084 range having to make clear to customers how much of the call cost they are receiving is not, of itself, a reason to choose a different approach. Preserving the 'value' to TCPs and SPs in having 084 as a micropayment method should not take precedence over ensuring that consumers are well-informed.

12.166 However, it is clear from the responses that a more detailed consideration of how the PPP regime could operate is required, given that the services currently on these ranges are, for the most part, not primarily designed to generate revenue. It could be that moving the number range into PPP's remit means that SPs that could more appropriately be using number ranges that are easier and cheaper for consumers to call may decide to move their service, benefiting consumers (providing there is a well-managed transition). We would welcome Stakeholder views on this.

<u>Option 2: Condition on SPs, enforced through the CAP Advertising Code and/or industry code of practice</u>

12.167 An alternative to PPP regulation would be for Ofcom to impose a requirement on SPs to advertise their SCs, for example through a condition under section 59(1) of the Act. Under that section, Ofcom can set conditions on persons other than communications providers, in particular relating to the allocation of numbers to such persons and the use of numbers by such persons.

12.168 However, whilst we could impose such a condition on SPs, our enforcement powers are more limited than is the case for General Conditions. In the event of breach, our powers to enforce are confined to power to bring civil proceedings for enforcement (for example, by an injunction or specific performance). Therefore, in order to better secure industry-wide compliance, it may be appropriate to develop, in conjunction with such a condition, an industry code of practice. We would expect compliance with such a code could become a condition of the SP's contract with the TCP. In addition, guidance issued by CAP could be updated to reflect that requirement and subsequently enforced by the ASA when dealing with complaints about advertisements.

12.169 We consider that this option could have some advantages over Option 1 in that it will be less burdensome and costly to SPs, with the ASA offering a means to enforce the requirement against the regulatory backstop of the Condition on SPs. We intend to discuss this further with the ASA/CAP to establish whether this would be a viable approach and how it would work in practice.

12.170 However, our primary concern would be the effectiveness of the regime.

12.171 Such a requirement would have to be reasonably flexible so that the obligation to publicise would only apply to suitable types of marketing material/advertising. For example, there may be cases where is not practical to include up-to-date pricing information in all marketing material (e.g. a very small classified advertisement, or where a number is displayed permanently on a vehicle for example). Hence, a degree of flexibility is important in order not to cause significant unnecessary costs to SPs, particularly where the actual level of SCs involved could be quite low (e.g. where an SC is 1-2p, it is clearly not as essential for it to appear in all types of advertising as a charge of 10p). We consider that it will be sufficient to meet our consumer transparency objectives if the SPs primary marketing material (e.g. websites, TV advertising, large print ads, posters etc) prominently displayed the SC in the same way as required under the PPP Code for the higher rate number ranges.

12.172 In terms of developing an industry Code of Practice, we agree with BT's comment made in response to the PPP Call for Inputs that the Communications Working Group could offer an appropriate forum for this purpose. In establishing such a Code, the objectives are relatively clear and therefore we do not consider it would represent significant challenge. In addition, there would be an incentive for industry participants to agree such a scheme given the demonstrated opposition to the alternative approach of extending the PPP regulation.

Overall proposed approach to SC price publication requirements

12.173 We consider that, based on the evidence currently available, in particular the concerns about the costs involved with the PPP regulation, there are still a number of issues to be resolved about how this regulation would work in practice before settling on this approach. We would therefore particularly welcome views on the alternative two options, and whether enforcement of a condition on SPs through the ASA and an industry Code of Practice is likely to be sufficient to meet our objectives.

12.174 Our provisional view is that, in line with our principle of bias against intervention, it would be preferable to pursue Option 2 rather than widening PPP's remit, subject to the industry being able to establish a robust and code to supplement the regulatory obligation.

12.175 If, on the other hand, industry cannot do so, then the logical alternative is Option 1.

Q12.7: Do you agree with our provisional view that the requirement for SPs to advertise their SCs could be implemented through a condition on SPs that is enforced through an industry Code of Practice and the ASA? Are there any other options (beyond the two outlined) which Ofcom should be considering? What do you consider is the best approach for securing industry commitment and developing a Code of Practice?

Other implementation issues

12.176 Stakeholders also raised a number of other miscellaneous implementation issues not covered by the discussion above. We have set out and addressed these comments below.

Stakeholder comments in response to the December 2010 Consultation

12.177 BT raised the issue of internationally originated calls to NGCs, which it considered should be excluded from this review.[665]

[665] BT, December 2010 Consultation response, p.18, section 5.6.

12.178 In relation to payphones (where BT has a unique role as universal service provider), BT noted that one in three payphones “fails to recover day-on-day operating costs” and that use of NGCs numbers from payphones would reduce further if reforms were implemented (it highlighted the example of the zero-rating of DWP helplines).[666] It also noted there would be operational challenges in implementing the unbundled tariff for payphones and these would not be unique to BT, e.g. call charges can only be applied in terms of time against the smallest commercially viable coins for payphones (currently 10p). It suggested these challenges could be addressed by amending customer price list messages to make clear that the minimum fee would be applied as a pence per call charge for NGCS calls from payphones and noting that there were likely to be restrictions imposed by payphone operators against numbers which used a fixed ppc charge that was higher than the minimum fee on the payphone.[667]

12.179 Some stakeholders (e.g. BT, C&W and Colt) also highlighted that implementation required clarification of how porting differentials would be handled (these arise when a customer ports their number to a CP with a different termination rate to the CP that is the rangeholder of that number). Colt considered that the unbundled tariff would make porting differentials worse, because TCPs would set more widely differing termination rates.

12.180 C&W analysed a number of different models for how calls with a porting differential should be charged and interconnect accounting would operate arguing that the only realistic approach was one where the SC was set by the number range holder. It noted this would bring NGC portability in line with the process for mobile number portability.[668] BT also considered a number of different options and suggested that a model where the SC could not be changed would prevent SPs porting their number to obtain a higher SC.[669]

12.181 FCS said that the unbundled model would create problems for resellers that purchase termination from TCPs, which arose from the fact that the TCP would need to add a margin to the SC to recover their cost of providing access to these numbers. It said that interconnected TCPs would be clear of what POLOs they would receive and the termination rates they would pay, because those rates were identified in the BT Carrier Price List (‘CPL’) but that would not apply to resellers. The SC for resellers would be likely to be higher than the level in the BT CPL, because the reseller would not want to retail those calls at a loss. FCS noted that one solution would be for the reseller to adjust their AC to mitigate against losses on the SC, however, it said that would put them at a competitive disadvantage when competing against larger providers which were fully interconnected.[670]

12.182 [✂] noted that the December 2010 Consultation did not materially recognise a difference between individual domestic consumers and business consumers. It suggested that Ofcom needed to consider, when drawing up the appropriate regulations, whether or not there should be carve outs or exemptions for business to business selling.[671]

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666 BT December 2010 Consultation response, p.18. The DWP data is discussed in more detail in Section 16 in relation to Freephone numbers.
667 BT, December 2010 Consultation response, p.18, section 5.7
668 C&W, December 2010 Consultation response, pp. 41-42 and Annex 3.
669 BT, December 2010 Consultation response, pp.39-40.
670 FCS, December 2010 Consultation response, p.22.
671 [✂]

12.183 [✂] was concerned that insufficient consumer research had been carried out in relation to business users. It argued that one of the characteristics of the current market for business customers was that OCPs enjoyed considerable pricing flexibility. It was possible, for instance, to tailor a commercial proposition such that the supplier and customer agreed tariffs that might result in very little margin being earned on calls to some number ranges (e.g. 0844/45) whereas calls to others (e.g. 09x) may be priced to reflect a much higher margin. It noted that, in its experience, this type of agreement suited many business users and it argued that if pricing transparency were to be enforced, this would remove incentives for such flexible tariff packages and would act as a barrier to innovation.[672]

12.184 [✂] indicated concern that if the NTS Call Origination Condition was removed, it would be giving BT the tools to increase its customer prices and push the TCPs and SPs out of the market.[673] A number of other stakeholders also raised more general concerns about the NTS Call Origination Condition and in particular the link between BT's retail prices and the termination rates BT paid. BT stated that this link had caused commercial disagreements between BT and TCPs and created uncertainty for TCPs about the amount of revenue they would receive.[674] UKCTA and Verizon expressed concern particular concern about the operation of the Condition in relation to 0845 calls because of the linkage. UCKTA considered it meant that termination rates were unpredictable and unduly controlled by BT.[675]

12.185 Scottish and Southern Energy ('SSE') said Ofcom should ensure that consistent obligations were applied separately to retail and wholesale CPs, because in order to provide information about the proposed ACs to retail customers, retail only OCPs must be provided with relevant wholesale ACs on a basis consistent with the retail charges. It said that wholesale OCPs (who themselves were often retail OCPs as well) should not be allowed to disadvantage retail-only OCPs in any of the wholesale terms and conditions around the use of NGCs. It its view that might require obligations on how wholesale ACs were set.[676]

Ofcom response and updated position

International calls

12.186 We have considered BT's submission that the unbundled tariff proposal should not be applied to calls that are originated overseas in the context of our duty under section 4 of the Act to act in accordance with the six Community requirements, notably:

- the second Community requirement to secure that Ofcom's activities contribute to the development of the European internal market; and
- the third Community requirement to promote the interests of all persons who are citizens of the EU.

12.187 We have also had regard to Article 28 of the Universal Services Directive, which requires the national regulatory authority to take all necessary steps to ensure that,

672 [✂]
673 [✂]
674 BT, December 2010 consultation response, page 20. Also page 25.
675 UKCTA, December 2010 consultation response, section 1.3 on page 6. Verizon consultation response, paragraphs 16-19.
676 SSE, December 2010 Consultation response.

subject to technical and economic feasibility end-users are able to access and use services using non-geographic numbers within the Community. Ofcom has implemented this in General Condition 20.

12.188 The AC element of the price for a NGC will plainly not apply to a call that is originated outside of the UK, where the OCP in question is outside of Ofcom's regulatory jurisdiction.

12.189 We also accept that the additional costs incurred by a domestic OCP when originating a NGC for a caller overseas are such that it would not be appropriate to require calls to be charged the same AC as for domestic callers. We therefore propose that the OCP should be able to set a different AC for NGCs made outside of the UK (and which may vary country by country). However, the other design features of the AC (a single AC for all the relevant non-geographic number ranges, no time of day variation and ppm charging structure with optional charge for a minimum call duration) should apply.

12.190 It is not clear to us on the information that BT has provided, why the SC element of the price for a NGC should not be the same, regardless of the location of the caller. BT has said that price changes for NGCs which are originated overseas can be difficult to agree but other than this transaction cost, it has not identified any relevant cost differential. The unbundled tariff structure will simplify tariffs for these calls. While this is intended for the benefit of consumers, we consider that the enhanced clarity about the level of the SC will also simplify the contractual arrangements between the OCP and TCP and therefore may facilitate, rather than hinder, negotiations with overseas originators. Accordingly, we propose that the same SC should apply to an overseas call as for an equivalent domestic call. We invite BT and other stakeholders to provide further evidence on this matter.

Q12.8: Do you agree internationally originated calls should be charged at the same SC as an equivalent domestic call? If not, please set out your reasons. Do you agree that originators should be able to set a separate AC level for roaming calls in a given country, though the other characteristics of the AC should still apply?

Payphones

12.191 It is clear that there are technical difficulties in implementing the unbundled structure on payphones that do not arise elsewhere.

12.192 Our preliminary view is that the BT proposal set out in their consultation response, i.e. that a minimum fee must be applied linked to coinage denomination and that numbers with fixed ppc SCs over a certain level are blocked (as we understand happens currently), is reasonable, provided that there is clear consumer information presented with the payphone.

12.193 The question of the Payphone Access Charge ('PAC') was also raised during the Technical Working Group. We are not aware of any reason why the unbundled tariff structure would require a change to the PAC.

Q12.9: We would welcome stakeholder views on our proposed approach for applying the unbundled tariff to payphones. Do you agree that it is appropriate to allow payphones to set a minimum fee for NGCs?

Porting differentials

12.194 We believe that the concerns expressed about porting differentials are addressed by ensuring that the SC will not vary within a given 10k number block originally allocated to a rangeholder as we propose in Section 10. This was confirmed during the Commercial Working Group discussions (see Annex 14).

Residential versus business consumers

12.195 We appreciate the concerns expressed by stakeholders about the potential differences between residential and business consumers. We accept that it may be appropriate to allow bespoke business to business telephony contracts though we do not current have evidence as what flexibility in the rules would be required to allow this. As we have noted in Annex 8, and Section 4, our evidence is based on the residential consumer. It is the evidence of residential consumer harm that has driven the proposals.

12.196 We are open to considering whether exemptions to some of the constraints on the AC and SC should be allowed for business-to-business telephony contracts. We would need to ensure that any exemptions was not allowed to affect the effectiveness of regulation designed to protect consumers so we would also need to determine the nature/size of the companies to which any exemption would apply. We also note that 'consumers' does not exclude business customers, depending on the context, and we would be concerned at modifications which undermined the simplicity of the proposals, given the risks of further consumer confusion.

Q12.10: Do you consider there is a need to exempt business to business telephony contracts from some of the constraints of the unbundled tariff regime? Is so what exemptions do you consider appropriate and why are they necessary (please give examples of the conflicts you would identify if exemptions are not provided). To which contracts should the exemptions apply and why?

Resellers

12.197 We do not consider that there is evidence of a likely material impact on the relative competitive position of resellers that should affect the proposed changes to the structure of charges. We are sceptical that any such effect exists; resellers seek a margin above that earned by a TCP on a call. This situation will remain regardless of the specification of the SC, although increased transparency of the SC may put pressure on the TCP and the reseller in their commercial discussion with SPs.

NTS Call Origination (narrowband MR)

12.198 Stakeholders have identified a concern about BT exercising market power in relation to call origination if the retail uplift remedy was removed as well as indicating concern about its current operation. This review is not considering BT's market position in relation to call origination or the operation of the Condition. We have begun a new review of narrowband call markets (including wholesale call origination) and expect to publish a 'call for inputs' in mid-2012 and detailed proposals early in 2013.

Retail versus wholesale OCPs

12.199 We understand SSE's concern about the relationship between wholesale and retail OCPs. We do not think those relationships are relevant to this review, nor do any of our proposals seek to regulate that relationship directly.

12.200 The Mobile Sector Assessment[677] did not establish any competitive concerns with respect to this relationship and we cannot see that these changes would negatively impact on this position. Equally we are not aware of any concerns in the retail environment. Under our proposals, the establishment of the AC by the retail OCP is a matter of negotiation with its supplier.

Timing

12.201 Having set out our proposed overall approach to implementation of the unbundled tariff, we now consider the appropriate implementation period to allow sufficient time for all the activities described above. As highlighted earlier, we proposed in the December 2010 Consultation that 18 months was likely to be an appropriate time period.

Stakeholder comments in response to the December 2010 consultation

12.202 Some stakeholders indicated concern at the length of the implementation period and in particular that that would mean that the detriment to consumers caused by the current system would remain in place for some time. The CFC noted that from a consumer point of view the sooner the changes came into effect the better; however, it accepted that the changes should not be unduly rushed. It said time needed to be taken to inform consumers, particular disadvantaged consumers about the changes.[678] Safe@Last considered that it would be more desirable to move quickly to restructuring of tariffs and that the implementation timescale should be six months.

12.203 TNUK indicated concern at the length of the proposed timescales given the scale of the consumer detriment identified. It considered the proposed implementation time was an unacceptably and unnecessarily long period of time to implement a relatively straightforward interim solution. It said it could be argued that it was not reasonable or proportionate to perpetuate consumer harm for three years after it had been identified and it was concerned that by the time the review was complete the market would be further broken and more dysfunctional than it currently is. It suggested that a separate consultation on interim remedies could be published ahead of any statement on detailed implementation matters; in particular it suggested that unbundled tariff could be applied theoretically even though it did not appear on retail bills. It noted that this could bring some pressure on OCPs to engage more quickly with the final solution. It considered that this interim solution could be implemented with minimal changes to OCPs billing systems.[679]

12.204 Several respondents, including Three, Verizon, Vodafone, BT and C&W said it was too difficult to estimate the length of time needed because the proposals had not yet been fully specified. For example Verizon said that it was too early to speculate about the likely implementation timescales, because of the wide range of possibilities of the

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[677] http://stakeholders.ofcom.org.uk/consultations/msa/statement/

[678] CAB, December 2010 Consultation response, Q7.1

[679] TNUK, December 2010 consultation response, p.31 & 33.

different options.[680] C&W submitted that the full extent of the impact could only be clarified once the final detailed proposals were known.[681]

12.205 Nevertheless, the majority of stakeholders considered that implementation would be a significant project in terms of time and cost and therefore some argued that a longer period than 18 months would be required. TalkTalk estimated that overall the implementation period would need to extend to 18-24 months.[682] Virgin Media believed at least two years would be needed to implement the unbundled tariff remedy, which it saw as involving "fundamental" changes to the regulatory regime, citing concerns relevant to implementation.[683]

12.206 Vodafone noted that the disaggregation of ACs and SCs was not on CPs technology roadmaps currently and it was necessary to fully scope the requirements before estimating a realistic timescale for implementation. It considered that 18 months should be a minimum not a maximum and would run from when requirements were confirmed rather than from the broad outline concept.[684]

12.207 [✂] believed that the implementation period should be longer. Its two main concerns were the implementation of billing system changes and the alignment of business customer contracts.[685] [✂] believed that the operational changes would take longer than Ofcom proposed.[686]

12.208 24 Seven Communications considered that 18 months was too short a time to negotiate contracts, marketing and related number change issues.[687] The British Security Industry Association ('BSIA') considered that 18 months was the minimum timeframe needed for industry to prepare for the changes.[688] Lexgreen Services considered that 18 months would not be sufficient to make the necessary changes to contracts, marketing communications and billing systems and a longer timescale was likely to be needed.[689] The Direct Marketing Association ('DMA') noted that Ofcom should be conscious of that fact that numbers might form part of a company's branding and there would be cost consequences if the company had to change its numbers. It noted, however, that those costs would be minimised by a long changeover period.

12.209 The DWP noted that the challenge of implementation challenge would be significant if it had to migrate its existing 0845 numbers to 03 (which it indicated it was likely to do if 0845 numbers were not geographically rated). It highlighted that it had around 1,300 0845 numbers in use across the DWP and given the extent of the changes required to IT systems and marketing materials, a process for change rather than a blanket 'to do' date might benefit the DWP and other organisations like it, because it would enable the implementation of 03 to be linked to business change initiatives and bids for associated funding. It considered that three years might be a reasonable

[680] Verizon, December 2010 Consultation response.
[681] C&W, December 2010 Consultation response, p.43.
[682] TalkTalk, December 2010 Consultation response, p.4.
[683] Virgin Media, December 2010 Consultation response, p.27
[684] Vodafone, December 2010 Consultation response, Q7.1, p.64.
[685] [✂]
[686] [✂]
[687] 24Seven Communications, December 2010 Consultation response, Q7.1
[688] BSIA, December 2010 Consultation response, Q7.1-5.
[689] Lexgreen Services, December 2010 Consultation response, Q7.1.

timescale, but noted that a detailed impact assessment would need to be undertaken by the Department when the required changes were confirmed.[690]

12.210 Three, however, considered that on the basis on a number of assumptions about the design (for example, that the number of price points was limited to 60, itemised billing was not required and SPs gave at least one month's notice of any price changes), it should be possible to implement unbundled tariff within 12 months, subject to a full audit of its marketing materials.[691]

12.211 BT said that if disaggregated billing was essential, it recommended two phases of implementation to allow benefits to be realised before changes in billing.[692] SSE also considered that a staged approach would be more appropriate, and was more likely to be effective, than a 'big bang' approach.

12.212 A number of stakeholders were, however, against any staged approach to implementation. EE also noted that a staged approach should not necessarily be preferred, because if the proposals required two discrete sets of changes to systems, it would in fact add to the total costs of implementation.[693] Magrathea believed a staged approach to implementation would cause unnecessary consumer confusion and it suspected it was unnecessary because the required changes would be done more efficiently in one stage in less than 24 months.[694] THA considered that all the proposed changes should take place at the same time so that the communications campaign could look at the changes as a whole. FCS also recommended that a 'switchover date' should be derived for implementation as any staging period was likely to cause further consumer harm together with revenue uncertainty for SPs.[695]

12.213 [✂] and Independent Radio News ('IRN' – a DQ provider) strongly supported the two-stage approach to implementation. However, it suggested that, in order to urgently address the consumer detriment in the market, there should be an immediate introduction of a rule limiting retail charging to the wholesale charge plus a capped AC. They noted that this could be conducted in parallel with the work considering more detailed implementation issues.[696]

Ofcom position on timing

12.214 The development of the new regime for NGCs has, and will be, through detailed discussion and consultation with industry to ensure that implementation matters are well understood and costs are kept to a minimum. We consider that a key to the timing of any change is the capacity of OCP billing systems to accommodate the AC/SC charging structure. While it is possible for some OCPs to undertake this immediately, we recognise that for some OCPs this can only be accommodated as part of their current proposed replacement programme. Our understanding that this is broadly expected to complete by the end of 2013.

12.215 Accordingly, we consider that any implementation of the unbundled structure should be undertaken no earlier than January 2013.

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690 DWP, December 2010 Consultation response, Q7.4.
691 Three, December 2010 Consultation response, p.29, Q7.1.
692 BT, December 2010 Consultation response, p.31, Q7.1.
693 EE, December 2010 Consultation response, p.81, Q7.1 paragraphs 14, 15.
694 Magrathea, December 2010 Consultation response, Q7.1, p.18.
695 FCS, December 2010 Consultation response, p.24.
696 TNUK, December 2010 consultation response, p.32.

12.216 Our preliminary view, based on the evidence reviewed thus far, does not suggest that contract renegotiations or communication between wholesale or retail providers or customers should take more than 18 months (as suggested by some stakeholders).

12.217 We accept these changes would be complex but we note also the problems we have identified and on the evidence on on-going consumer harm. Based on that evidence, we think it is in the interest of all parties – and for us, significantly, in the interests of consumers - that implementation is undertaken as soon, and proceeds as quickly, as technically possible.

12.218 We note that there are arguments for longer timeframes to minimise the costs associated with migration between number ranges. However, we do not consider that the proposals, including those for 0845/0870 should necessitate immediate migration on implementation of the revised structure, given that the revenue provided to the SP should be largely unchanged. We expect it will be greater transparency about the level of the SC, rather than any impact on revenue, that may lead SPs to migrate to cheaper ranges so as not to deter consumers.

12.219 Accordingly, on the assumption that we will complete the decision on the revised structure by the end of 2012, we consider that a migration period of 18 months should ensure that implementation is technically and commercially feasible.

12.220 We have constructed our cost estimates in our impact assessment on this period.

Q.12.11: Do you agree with our proposal that implementation should take place 18 months from the date of the final statement?

Summary of view on implementation of the unbundled tariff

Requirements for relevant parties to implement the unbundled tariff

12.221 We anticipate that, in order for consumers to get the benefit of effective the unbundled tariff of non-geographic access and service charges, the following steps need to be undertaken:

12.221.1 For a retail originating CP:

- calculate and inform each of its customers of their relevant AC;
- update their website and promotional material to display the AC (and remove existing NGC pricing information that is no longer relevant);
- modify their billing platforms to accommodate the revised charging structure; and
- modify their bill presentation format to allow their customers to identify the AC within the NGC charge.

12.221.2 For a wholesale originating CP:

- modify their billing platform to accommodate the revised charging structure and populate the platform with the revised wholesale charge information

12.221.3 <u>For a terminating CP:</u>

- map existing number range allocations to agreed SC tariff price points and notify the SCs to OCPs;
- review and update contracts with SPs;
- where appropriate arrange number range migration for an SP; and
- inform SPs of their new SC and their obligations with respect to price information presentation.

12.221.4 <u>For a SP</u>:

- decide whether to remain on the number range or whether to migrate to an alternative number with the price point they prefer; and
- update their advertising and promotional materials to display their new SC.

12.221.5 <u>Additional measures by Ofcom and/or CPs</u>:

- a consumer awareness campaign in relation to the changes and the date they come into effect; and
- establishment of SC database for use by CPs and, potentially, consumers.

Timing and communication

12.222 In summary, we are proposing that implementation of the unbundled tariff should take place over a period of 18 months. This time period should allow sufficient time for the necessary communications activities, including a potential national campaign by Ofcom in order to ensure consumers are made fully aware of the changes.

Industry working groups

12.223 There is a clear need for further industry discussions and working groups, in particular for the following areas:

- Development of mapping of existing POLOs to new SC price points;
- Development of the SC database and industry process for notifying changes to SCs;
- Refinement of communications activities, including the proposed Numbering Guide (see Section 6) and wording for SP advertising as well as potential industry Code of Practice for publication of SCs.

Section 13

Impact assessment and legal tests for the implementation of the unbundled tariff

Introduction

13.1 This Section sets out our assessment of the impact of applying an unbundled tariff remedy for certain non-geographic number ranges and the appropriateness of this remedy in the context of our legal powers. This builds on our assessment of the impacts of the unbundled tariff in the preceding Sections.

13.2 In order to inform our decision as to whether the benefits of the unbundled tariff are likely to outweigh the costs, in this Section we set out further detail on the costs of the unbundled tariff and some further calculations that assist in our assessment of the order of magnitude of benefits relative to those costs.

13.3 At the outset it is important to distinguish between those elements of the impact assessment that are quantified and those that are taken into account through a qualitative evaluation. Both are valid and relevant impact assessment methods, e.g. an impact may be important but hard to quantify. In this Section we take account of both quantified and qualitative analysis.

Further detail on the resource costs of the unbundled tariff

13.4 Below we set out further detail on the resource costs associated with the unbundled tariff, in the light of our proposals for 0845/0870 and for the structure of the AC and SC. The costs we discuss below are:

- the cost of changes to OCPs' billing systems;
- costs for SPs of migrating their non-geographic numbers; and
- costs for OCPs and TCPs of communicating the new unbundled pricing regime to their customers.

Billing costs

13.5 In order to correctly charge callers and support the number of SC points that we are proposing, OCPs would need to make changes to their billing systems. We have considered these costs in greater detail since the December 2010 Consultation and our revised analysis is set out in Annex 19. We now estimate that, based on the additional information we have gathered on costs, on a per firm basis:

- the one-off, up front costs for OCPs lie between £10,000 to £3m; and
- the additional annual costs of billing on an unbundled basis are between £10,000 and £50,000.

13.6 The costs vary between OCPs because of differences in their billing and network architecture. Most OCPs face costs at the lower end of our ranges but a few OCPs (mainly the large mobile OCPs) with a larger range of systems would incur higher costs within our range.

13.7 We have estimated the costs of industry as a whole as follows.

- We have assumed that 20 OCPs with more complex billing systems incur costs at the top end of our range i.e. one-off costs of £3m each plus additional annual costs of £50,000 each.[697]

- We have assumed that a further 80 OCPs do not need to make substantial changes to their billing systems.[698] These OCPs incur costs at the lower end of our range i.e. one-off costs of £10,000 each plus additional annual costs of £10,000 each.

- This implies that the total costs of changes to billing systems are a one-off, up front cost of £60.8m plus additional annual costs of £1.8m.

13.8 The number of OCPs that do not need to make substantial changes to their billing systems and the costs that they incur are particularly uncertain. Thus, as a sensitivity, we have explored the impacts of a substantial increase in our assumptions.[699] Specifically we have assumed that there are 240 (rather than 80) OCPs that do not need to make substantial changes to their billing systems. Moreover the one-off costs for these OCPs are £20,000 and the additional annual costs are also £20,000 (i.e. double those above). Our assumptions about the OCPs with more complex billing systems are unchanged.[700] This implies our upper estimate of the total costs of changes to billing systems are a one-off, up front cost of £64.8m plus additional annual costs of £5.8m.

Migration costs

13.9 Where the unbundled tariff leads SPs to move services to a different number then they may incur migration costs e.g. stationery and other costs to inform consumers of their new number. Below we first discuss migration by 0845/0870 SPs away from unbundled number ranges. We then discuss migration between numbers within those number ranges that are unbundled.[701]

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697 The assumption that 20 OCPs incur this level of costs might be somewhat high. The largest OCPs such as BT, Virgin Media, TalkTalk, Vodafone, EE and O2 are likely to have more complex billing systems and thus incur greater costs. Rather than using a figure of around six (to reflect these named OCPs) we have used a higher figure of 20 to account for the possibility that some OCPs with a large number of reseller customers may also have relatively high billing costs.

698 We do not know how many OCPs originate calls to non-geographic numbers. Evidence gathered for the Wholesale Narrowband Statement suggested that just under 100 firms purchased call origination from BT in 2009. We do not know whether all of these originate calls to non-geographic numbers. We assumed that there was a total of 100 OCPs meaning that, once the 20 that incur higher billing costs are deducted, 80 remain. Since this figure is particularly uncertain, we include a sensitivity varying this assumption.

699 We recognise that the size of the increase in the number of OCPs may be unrealistically large. However, even if our cost estimates are somewhat high, as explained later in this Section they are still outweighed by the benefits of the unbundled tariff.

700 In the light of our discussions with stakeholders, we are more confident about the costs for OCPs with more complex billing systems. Moreover our assumption that there are 20 such OCPs may already be somewhat high and thus we have not considered increasing it further.

701 SPs that currently use 03 or geographic (01/02) numbers may choose to switch to an unbundled number as a result of our proposed changes. We have not estimated the costs associated with such migration. However, these SPs will only move to an unbundled number if the migration costs are

Migration by 0845 and 0870 SPs away from unbundled number ranges

13.10 As discussed in Section 11, some SPs prefer 0845 calls to be priced the same as calls to geographic numbers and may migrate away from the 0845 number range if it is unbundled. Table 13.1 below repeats the estimates of the costs for SPs of migrating away from 0845 and 0870 from that Section. As explained in Section 11, this calculation assumes that 0870 SPs' propensity to migrate is the same as that of 0845 SPs. In addition to the figures in this Table, we estimated that misdialling costs might be £1.1m to £3.6m (depending on SPs' propensity to migrate).

Table 13.1: SPs' cost of migration away from 0845/0870 due to the unbundled tariff

	Higher estimate of migration costs	Lower estimate of migration costs
Higher propensity to migrate (Scenario 1)	£10.9m	£4.3m
Lower propensity to migrate (Scenario 2)	£5.5m	£2.2m

13.11 Adding together migration costs for SPs and misdialling costs for callers gives a range for costs of £4.0m to £14.4m.[702]

Migration within unbundled number ranges

13.12 We recognise that the unbundled tariff may also lead to migration within number ranges, such as a SP moving from one 0843 number to another, say. Such migration may be prompted by three factors:

- the limited number of SC price points;
- changes in termination rates; and
- increased competitive pressure on SPs.

13.13 In terms of the first cause of migration within unbundled number ranges, we propose fewer SC points than the current number of retail price points that exist for BT callers. For example, calls to a 0843 number in BT chargeband g16 currently cost BT customers 2.041ppm (day) or 1.02ppm (evenings and weekends).[703] If, under the unbundled tariff, that particular configuration of prices no longer existed and the number block were instead associated with a SC of 2ppm (for example) it is possible that some SPs may in fact prefer a SC of 1ppm. These SPs might thus migrate in order to achieve that 1ppm SC. However, we consider that the costs of migration due to the more limited number of SC price points are likely to be small:

outweighed by the benefits for the SP of moving. In other words, for these SPs the effect of the unbundled tariff is likely to be positive.

[702] i.e. our misdialling range of £1.1m to £3.6m plus the range of £2.2m to £10.9m in Table 13.1.

[703] Plus a call set up charge of 13.1ppc. Prices taken from 1 February 2012 BT price guide available at: http://www.productsandservices.bt.com/consumer/assets/downloads/BT_PhoneTariff_SpecialNos.pdf

- Continuing the above example, migration will only be profitable if the costs of migration are less than the opportunity cost of having a SC of 2ppm rather than 1ppm. This suggests that SPs that face high costs of migration are unlikely to find it profitable to move in this way.

- As explained in Section 10 we are proposing 60 SC price points (paragraphs 10.384 to 10.387). In deriving that figure of 60 price points we observed that over 95% (approximately) of 084/087 call minutes were to 10 price points and over 90% of 09 call minutes (approximately) were to 20 price points. This suggests that few SPs are on price bands that could not be replicated under an unbundled structure.

13.14 In terms of the second cause of migration within unbundled number ranges, as explained in Section 12, the process for moving from the current termination rate associated with a number block to a new SC will be led by industry. TCPs are likely to be sensitive to the needs of SPs and are thus unlikely to adopt SCs that are different to existing termination rates if this would be disruptive for SPs using that number block. Similarly the maximum SC for each number range will also reflect the current termination rate that TCPs/SPs receive. Avoiding a significant change in termination rates will help avoid this cause of migration by SPs.

13.15 Finally, as explained in Section 9, the unbundled tariff will increase competitive pressures on SPs. As a result, some SPs might choose to migrate to a number with a lower SC. Depending on the extent of the competitive pressures created by the unbundled tariff, this could lead to a reasonable degree of migration. However, it is difficult for us to determine a reasonable range for SPs' propensity to migrate in this way, particularly given the diversity of SPs. Accordingly we have not attempted to estimate a monetary figure for these costs. However, we take such costs into account in our overall impact assessment through qualitative analysis.[704]

13.16 In summary, we have not estimated a figure for the costs of migration within unbundled number ranges. As explained above, the number of SC price points and the level of termination rates is unlikely to lead to significant migration costs. The costs of migration by SPs in response to increase competitive pressure may be larger, but we have not estimated a monetary figure for these costs given the uncertainties (but they are included in the overall impact assessment through qualitative analysis).

Communications costs associated with transition

13.17 The unbundled tariff represents a significant change in how NGC prices are presented. If it were introduced then we anticipate that, as part of the transition process, OCPs and SPs would incur additional costs of communicating the changes to their customers.

[704] As explained below, our modelling of the benefits for residential callers does not take into account lower actual prices for NGCs as a result of the introduction of the unbundled tariff. In other words, omitting this factor from our quantification of costs is unlikely to materially affect our subsequent analysis since we have also omitted it from our quantification of the benefits. Our view is that the overall effect (looking at all stakeholders, including callers) of increased competitive pressures on SPs is generally likely to be positive.

OCP communications to callers

Evidence from OCPs

13.18 We informally asked some communications providers about the likely steps they would take to inform customers if the unbundled tariff were introduced, and for estimates of the costs involved in that work. In particular we asked about the additional costs (i.e. costs that would be incurred over and above any costs normally occurred in communicating with their customers) involved in activities such as informing call centres of new information to tell customers, newsletters, training, posters, other changes to printed literature and advertising etc.

13.19 [✂] noted that provided sufficient notice was given (at least three months), the proposed changes could be worked into business as usual updates, reprints etc. It noted that the only incremental cost might be to fund a specific communications campaign for its staff (involving posters, desk drops etc), but it estimated that this would cost no more than [✂].

13.20 [✂] stated that it would be helpful to have at least six months to roll out its communications plan, because this would enable it to minimise some of its costs and allow its regular billing leaflets to notify customers of the changes in advance. It estimated that it would incur costs of [✂]. This figure breaks down as follows:

- **Call centre costs:** this OCP noted that internal communications were constantly being updated and call centre staff could be informed of any changes in relation to NGCs as part of these regular updates. The one area that this OCP identified as an additional cost would be the incremental calls to its call centre as a result of the change. [✂];

- **New printed material for notifying consumers:** this OCP considered that this was the largest area of cost and estimated it would be around [✂]. It also noted that there would not be any costs for changes to advertising materials provided there was a sufficiently long lead time.

- **Changes to existing printed literature:** This OCP identified this as an area where a longer communications timescale would be helpful, because any printed materials could be phased out and replaced during the communications window.

13.21 [✂] stated that it did not expect any significant costs from communication over and above what it had to spend currently. This observation explicitly did not take into account the impact on the volume of calls to the OCP's call centres and it emphasised the caveat that it did not yet know the details of Ofcom's proposal. [705]

Ofcom's assessment of OCPs' costs of communicating with callers

13.22 We have considered the magnitude of these costs. As explained in Section 12, we are proposing that the unbundled tariff will be introduced 18 months after our final statement. Stakeholders indicated that a longer implementation period would help mitigate OCPs' costs of informing their callers about the unbundled tariff (since it can be worked into their regular customer communications).

[705] Similarly this comment does not reflect any costs related to billing changes or system alternations or the impact on revenues. [✂].

13.23 In the light of the above evidence, the two sources of costs appear to be extra call volumes handled by call centres and potentially the costs of creating additional printed material in order to notify callers of the change.

13.24 In terms of call centre costs we have scaled up the [✂] figure provided by [✂] to produce an estimated cost for the industry as a whole of £0.4m.[706]

13.25 In terms of additional printed material, we received a range of estimates from stakeholders, from effectively zero in the case of [✂] to [✂] in the case of [✂]. Accordingly our range for the additional cost to the industry as a whole of producing this material is:

- A lower estimate of zero, which rests upon the assumption that callers can be informed about the unbundled tariff as part of OCPs' regular communications, implying that there are negligible additional costs.

- An upper estimate of £2.3m. This was calculated by scaling up the [✂] figure provided by [✂].[707]

13.26 Thus, in summary, we estimate that OCPs' additional costs of informing callers about the introduction of the unbundled tariff lie in the range of £0.4m to £2.7m.

TCP communications with SPs

Evidence from OCPs

13.27 We informally asked three TCPs, [✂], about the process they would use to communicate the changes as a result of the unbundled tariff to their SP customers. In particular, TCPs would need to contact each SP to advise of the change and their new SC price point as well as managing any negotiation over that price and updating contracts.

13.28 [✂] noted that the following factors needed to be considered[708]:

- **Contact database:** this TCP stated that getting the right customer contacts to inform them of the change could be difficult and time consuming. It noted that it could not just communicate with the recipient of the bill, because that was not necessarily the same person making commercial decisions;

- **Tailored communications:** this TCP noted that different approaches were needed for each customer type. For example, its larger customers would expect face to face communications from the product team (or similar). [✂];

- **Complex customer portfolios:** SP customers could have multiple numbers from different ranges and that could mean multiple communications. It noted that it

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[706] In order to scale up these costs we have used data on call minutes from the 2010 Flow of Funds study. Using call volumes for this calculation seems reasonable since OCPs that retail more non-geographic minutes are likely to receive more enquiries from their customers about the price of those calls. [✂].

[707] In order to scale up these costs we have used data on the number of connections. Using connection numbers for this calculation seems reasonable since OCPs that have a large number of subscribers may need to write to a large number of customers, even if that OCP accounts for a comparatively small share of call volumes. [✂].

[708] [✂].

would be a complex process to manage that communication and customers could get confused about the different changes to each number range;

- **Follow-up:** SP customers did not tend to read leaflets, letters etc, which lead to queries and complaints. Following up on letters could be just as costly as the original communication. This TCP estimated that [✂]; and

- **Timing:** this TCP stated that plenty of time was needed for the communication process and therefore the SC price points would be needed in advance before that communication process could begin.

13.29 In terms of costs, this TCP estimated that, cost estimates, taking into account the different approaches needed for different customers (as set out above), the overall cost would be [✂].[709]

13.30 [✂] noted that the following activities would be involved in communicating with its SP customers:[710]

- **Preparing the initial SP customer briefing:** It estimated that this would cost around [✂] in staff time;

- **Customer service and account manager training:** To enable customer service representatives and account managers to deal with SP customer questions. It estimated this would cost around [✂];

- **Customer contact letters:** It noted there would be distribution and printing costs for sending out letters to customers and that follow up letters were also likely to be needed. It estimated that each of these would cost [✂];

- **Customer query handling:** The additional resource required to answer customer questions relating to the change. It did not provide an estimate of this item.

- **Contract review, amendment and negotiation:** This TCP noted that it would need to review all customer contracts to see what amendments would be needed to introduce the change and migrate customers to the appropriate price point as well as legal drafting of contract changes. It also noted was likely that a proportion of SP customers would seek to negotiate the terms of the change and resource would be needed for that negotiation. It estimated the costs of these activities to be [✂]; and

- **Visits for larger customers:** It noted that its top SP customers were likely to require visits and specialist in-depth advice. It estimated that this would cost [✂].

13.31 Adding up these cost items gives a total of [✂]. This TCP said that once other costs were taken into account, a total estimated cost of [✂] seemed reasonable.

13.32 [✂][711] said that the process of informing its SP customers would be relatively easy and not expensive, provided Ofcom had approved a mapping of existing POLOs to

709 [✂].
710 [✂]
711 [✂].

SCs (if this was not the case then the process could be expensive and take a lot longer).[712] In particular it noted the following:

- that conceptually the process for informing its SP customers would be no different to passing through changes to termination rates, which occurred regularly as a result of the NTS Call Origination Condition. In those cases, it sent a letter to each customer ([✂]) which explained the background and advised of the variation in their outpayment. It noted that a number of customers were likely to complain and account managers would have to spend time explaining the situation. Part of these costs represented business as usual, but there was also likely to require some additional resources. It estimated the approximate total cost of this activity would be around [✂];

- [✂] also noted it would like to be able to tell customers of a specific changeover date, and to provide links to Ofcom documents confirming the changes. It said it would be likely to send two or three letters, each costing [✂].

- In terms of contractual changes, [✂] noted that the majority of its contracts had "regulatory knock-out" clauses, which allowed them to make variations required by regulatory decisions. It noted, however, that the interplay with the regulatory decision meant it may or may not have to abide by notice periods. It said that the notice period could range from 7 days to 120 days, but the majority were on 30 days.

Ofcom's assessment of TCPs' costs of communicating with SPs

13.33 As explained in Section 12 we intend to facilitate a process by which the industry maps existing termination rates to SC points. [✂] indicated that this would tend to mitigate TCPs' costs.

13.34 [✂] estimated that the costs of communicating the changes to their SP customers would be around [✂] respectively. We have scaled these estimates up using these TCPs' shares of non-geographic termination minutes, namely [✂].[713] This implies the total costs for TCPs of communicating with SPs could lie in the range £3.6m to £4.8m.

13.35 We recognise that these TCPs may tend to provide hosting for relatively large SPs. However, the evidence set out above appears to suggest that informing larger SPs may be more costly. [✂]. This is also consistent with [✂]. We thus consider that our range of £3.6m to £4.8m is reasonable.

The quantified resource costs of the unbundled tariff

13.36 Table 13.2 summarises our quantitative estimates of the costs of the unbundled tariff, as discussed above.

[712] [✂] estimated that without a mandated, or Ofcom approved, set of SCs, it would have to develop a new set of rates that were bespoke to each customer and it suggested it would require around [✂].
[713] Calculated using data for 2009 underlying Figure 5.3 in 2010 Flow of Funds study. [✂].

Table 13.2: Quantified resource costs of introducing unbundled tariff

Cost item	One off, up front costs	Annual costs
Billing costs	£60.8m to £64.8m	£1.8m to £5.8m
Migration costs (including misdialling)	£4.0m to £14.4m	None
OCP communication with callers	£0.4m to £2.7m	None
TCP communication with SPs	£3.6m to £4.8m	None
TOTAL	£68.8m to £86.7m	£1.8m to £5.8m

Questions on cost estimates

13.37 We would welcome stakeholder comments on our estimates of each of the costs discussed above, and set out in Table 13.2.

Q13.1: Do you agree with our estimates of the billing costs for implementing the unbundled tariff, taking into account the discussion in Annex 19? If not, please explain why and provide evidence to support your response, particularly of the level of costs you are likely to incur as a result of our proposals.

Q13.2: Do you agree with our estimates of the level of migration and misdialling costs for service providers who may migrate as a result of the unbundled tariff (taking into account the analysis and evidence in Annex 12)? If not please explain why and provide evidence.

Q13.3: Do you agree with our estimates of the communication costs of implementing the unbundled tariff? In particular:
(i) the costs of OCP communication with their customers; and
(ii) the costs of TCP communication with their SP customers.
If not, please explain why and provide evidence to support your response, particularly of the level of costs you are likely to incur as a result of our proposals.

Magnitude of resource costs compared to potential benefits

13.38 We consider that the unbundled tariff is likely to have a positive effect on callers to non-geographic numbers – see Section 10. However, we have also considered:

- whether the benefits for residential callers alone are likely to outweigh the resource costs of the unbundled tariff; and
- whether the benefits for residential callers, business callers, OCPs, TCPs and SPs are likely to outweigh the resource costs of the unbundled tariff.

13.39 We have placed the resource costs of introducing the unbundled tariff in context by calculating by how much consumer demand would need to improve in order for the benefits to residential callers to outweigh those costs i.e. what is the threshold at which the benefits to residential callers are likely to outweigh the quantified resource costs. We then discuss whether it is plausible that the improvement in demand as a result of the unbundled tariff is likely to exceed that threshold. We also take into account, through qualitative analysis, those elements of the impact assessment which we have not quantified.

13.40 This section of our analysis is structured as follows:

- we provide an overview of our calculations, including the limitations and the factors that have not been included;
- we set out our results; and
- we consider whether the improvement in demand is likely to outweigh the thresholds that we have calculated (also taking account of elements of the impact assessment which we have not quantified).

Overview of our calculations

13.41 The purpose of our calculations is to place the resource costs we have calculated above in context. The detail of our calculations is explained in full in Annex 16. Given an estimate of the resource costs of the unbundled tariff, we calculate:

- **Threshold for reduction in price overestimation:** Residential consumers currently overestimate the price of NGCs. If the unbundled tariff led to improved price awareness then the gap between residential callers' expected price for NGCs and the actual price of those calls would narrow. We have calculated by how much this gap would need to narrow in order for the benefits to residential callers of the unbundled tariff to outweigh the quantified resource costs; and
- **Threshold for shift in demand:** The unbundled tariff may also prompt a general increase in demand for NGCs (separate from the impact on price overestimation), for example because fewer consumers are deterred from making NGCs by price uncertainty and/or because the quality and variety of services available via non-geographic numbers improve. We have calculated by how much demand would need to increase in order for the benefits to residential callers of the unbundled tariff to outweigh the quantified resource costs

13.42 Both a reduction in price overestimation and a shift in demand will tend to increase the number of NGCs made by residential consumers. We have calculated two ways in which this is likely to benefit residential consumers:

- Residential consumers are likely to enjoy extra utility (consumer surplus) from the extra the calls that they make; and
- Higher call volumes are likely to increase OCPs' profits. A proportion of these additional profits are likely to be passed onto residential consumers in the form of lower prices for telecoms services (the tariff package effect).

13.43 It is important to recognise that this quantified element of our impact assessment does not capture all the benefits of the unbundled tariff:

- We have not modelled the effects of improved competition between OCPs and SPs, such as a more efficient structure of prices.

- Similarly we have not modelled any distributional effects (i.e. improved access to socially important services by vulnerable consumers).

- We have only modelled the benefits for residential callers. We have not modelled the benefits of higher NGC volumes for OCPs, TCPs or SPs. We have not modelled any benefits for business callers.

13.44 As explained in more detail in Annex 16, this modelling rests upon a number of assumptions which creates a number of uncertainties about the resulting estimates. We have generally adopted conservative modelling assumptions i.e. assumptions that will tend to underestimate the benefits of the unbundled tariff. For example:

- We have separately looked at the effects of reduced price overestimation and a shift in demand. If the unbundled tariff leads to both of these effects then the benefits will tend to be larger than we have modelled.

- We have proxied the effects of increased innovation by SPs by looking at a shift in callers' demand. However we have done so in a way that is likely to understate the benefits of extra demand created by new or higher quality services.[714]

13.45 Especially given these uncertainties, it is important to treat the thresholds produced by our modelling as indicative. We have used them to help make an order of magnitude comparison between the resource costs that we have quantified and the quantified benefits of the unbundled tariff.

Results of our quantified analysis

13.46 Using the range for quantified resource costs set out in Table 13.2 above, we have adopted three cost scenarios. A high cost scenario using the upper end of this range, a low cost scenario using the bottom end of this range and a medium cost scenario using the midpoint. These three scenarios are shown in Table 13.3 below.

Table 13.3: Resource cost scenarios

Scenario	One off, up front costs	Annual costs
Low costs	£68.8m	£1.8m
Medium costs	£77.8m	£3.8m
High costs	£86.7m	£5.8m

13.47 As explained above, we have quantified the benefits to residential callers from a reduction in price overestimation. Table 13.4 below shows by how much the gap between actual and expected prices would need to narrow in order for the benefits to residential callers of the unbundled tariff to outweigh the resource costs. To illustrate how to interpret this Table, suppose that the actual price of calls were 10ppm but

[714] As explained in Annex 16, we modelled a pivot in the demand curve rather than a parallel shift in the demand curve. This generates a lower estimate for the benefits of an increase in demand. However arguably the alternative 'parallel shift' approach might be a more appropriate way of modelling an improvement in the quality or availability of services.

consumers expected the price to be 25ppm.[715] The gap between actual and expected prices is thus 15ppm. If the threshold were 10% then a 10% fall in this gap would imply the expected price falls to 23.5ppm, i.e. by 1.5ppm.

Table 13.4: Threshold for reduction in price overestimation

	Low costs	Medium costs	High costs
Base case	2.1% to 6.7%	2.8% to 8.7%	3.4% to 10.7%

Note: figures rounded to one decimal place

13.48 The figures in this Table reflect our base case. The range for the threshold reflects the impact of varying our assumptions about expected prices. As explained in Annex 16, the assumptions used to produce the upper end of this range in each cell may not be reasonable.[716] In other words, the upper end of the range in each cell may be unduly pessimistic and thus less weight should thus be placed on it. In that Annex we carry out a range of sensitivity tests.

- Individually varying our assumptions does not significantly affect this threshold.
- A combination of multiple assumptions that tend to reduce the modelled benefits of the unbundled tariff will raise the above thresholds, although even in these particularly pessimistic cases the threshold is between 9.5% and 21.1%.[717]
- We have also looked at the combined effect of multiple assumptions that tend to lower the threshold. In these optimistic cases the threshold is between 0.3% and 0.9%.

13.49 We have also calculated the effect of a shift in the demand curve. Table 13.5 below shows by how much call minute volumes would have to increase for the benefits to residential callers of the unbundled tariff to outweigh the resource costs.

Table 13.5: Threshold for shift in demand

	Low costs	Medium costs	High costs
Base case	0.8% to 1.5%	1.1% to 1.9%	1.3% to 2.3%

Note: figures rounded to one decimal place

13.50 The figures in this Table reflect our base case. The range for the thresholds reflects the impact of varying our assumptions about expected prices. As explained above, the assumptions used to produce the upper end of this range in each cell may not be

[715] These figures are purely illustrative. Actual and expected prices differ between number ranges and between mobile and fixed calls. We have taken these differences into account in our modelling.
[716] Specifically, the upper estimates in each cell reflect the mean expected prices provided by respondents to question GL02 in the 2011 Consumer survey. This question was only asked to respondents that previously claimed that they knew the price of NGCs. Such respondents are unlikely to be representative of consumers in general and, in particular, are less likely to overestimate the price of NGCs. This has the effect of diminishing the modelled benefits.
[717] The exception is if our pessimistic case is combined with the use of expected price figures from question GL02 in the 2011 Consumer survey. This raises the threshold to 34.9%. However, as explained above, we do not consider that the responses to this survey are reasonable for the purposes of this modelling.

reasonable. Since the upper end of the range in each cell may be unduly pessimistic, less weight should be placed on it. In Annex 16 we carry out a range of sensitivity tests.

- Individually varying our assumptions does not significantly affect this threshold.
- However a combination of multiple pessimistic assumptions that all tend to reduce the modelled benefits of the unbundled tariff will raise the above thresholds to around 2.7% to 3.7%.[718]
- We have also looked at the combined effect of multiple assumptions that will tend to lower the threshold. In these optimistic cases the threshold for the shift in demand is around 0.2%.

Evidence that thresholds for improved demand are likely to be exceeded

13.51 In response to the December 2010 Consultation, several stakeholders questioned whether the benefits of the unbundled approach would outweigh the costs.[719]

13.52 As shown in Table 13.4 above, eliminating between 2.1% and 10.7% of the gap between expected and actual prices would suggest that the benefits to residential consumers (just) outweigh the resource costs. Table 13.6 below illustrates what this range means in ppm terms. It shows the ppm reduction in 084 and 087 price overestimation necessary for the benefits to residential consumers to (just) outweigh the resource costs.

- The lower end of this range (2.1%) uses the mode expected price from the 2009 Consumer survey (together with our low costs scenario).
- The higher end of this range (10.7%) uses the mean expected price from the 2011 Consumer survey (together with our high cost scenario).[720] Note that using this measure of expected prices means that the ppm gap between actual and expected prices is smaller.[721] This tends to reduce the effects of a higher threshold (10.7%) in ppm terms.
- Finally we also show a 3.3% threshold. This was calculated using the mean expected prices from the 2009 Consumer survey together with our medium costs scenario.

[718] This excludes the case where our pessimistic case is combined with the use of expected price figures from question GL02 in the 2011 Consumer survey.
[719] Stakeholders that considered that further analysis was needed to establish that the benefits of the unbundled tariff outweigh the costs included EE (December 2010 Consultation response, p.51), Verizon (December 2010 Consultation response, paragraph 22) and TalkTalk (December 2010 Consultation response, p.7).
[720] Note that using these price expectations would imply that consumers do not overestimate the price of mobile 0871/2/3 calls (rather they underestimate these prices). In these circumstances, we have adopted the simple (and conservative) assumption that the unbundled tariff has no effect on the consumer surplus from mobile 0871/2/3 calls.
[721] Indeed this is one of the reasons why the percentage threshold is higher.

Table 13.6: Threshold for fall in price overestimation for fixed calls expressed in ppm terms

	0843/4	0845	0870	0871/2/3
2.2% threshold	0.66 ppm	0.70 ppm	0.63 ppm	0.51 ppm
3.4% threshold	0.76 ppm	0.82 ppm	1.01 ppm	0.83 ppm
10.9% threshold	0.87 ppm	1.05 ppm	1.71 ppm	1.11 ppm

Table 13.7: Threshold for fall in price overestimation for mobile calls expressed in ppm terms

	0843/4	0845	0870	0871/2/3
2.2% threshold	0.35 ppm	0.33 ppm	0.36 ppm	0.07 ppm
3.4% threshold	0.80 ppm	0.78 ppm	1.00 ppm	0.54 ppm
10.9% threshold	1.12 ppm	1.06 ppm	1.38 ppm	N/A

13.53 We consider that it is likely that the unbundled tariff would improve price expectations by considerably more than this amount. Indeed even if the threshold were higher (due to a combination of pessimistic assumptions about the benefits of the unbundled tariff) we consider that it is still likely to be exceeded:

- We explained the likely impact of the unbundled tariff on price awareness in Section 9.

- In particular, the unbundled tariff allows SPs to clearly communicate an important element of the price of calling them, namely the SC. The 2011 Consumer survey found that 65% of callers obtained the telephone number for the last company or public organisation they called from at least one of the following sources: the internet; a letter, bill or leaflet from the company being called; a written advert; or an advert on the TV or radio.[722] Each of these sources is likely to allow the SP to indicate what the SC is alongside its number. In other words, for around two-thirds of calls the consumer may have the SC in front of them at the point of call. Price awareness for these consumers is likely to be substantially improved.

- Moreover, providing consumers with the SC for some calls may improve the accuracy of their price expectations for other calls. In other words, if for some 084/087 calls consumers are informed of the SC, they are likely to expect that similar SCs will apply to other 084/087 calls (an example of the horizontal externality working in a way that could benefit consumers).

[722] 2011 Consumer survey, question GL14: "Thinking about the last time you made a call to a company, shop or public organisation which of the following did you use to get the telephone number?"

- In terms of the AC, as explained in Section 10, we accept that consumers may not always be able to exactly recall their AC e.g. due to the low frequency with which consumers make NGCs (particularly from mobiles). However, we think it is plausible that many consumers will recall its broad magnitude. Moreover, we propose that the AC should have a straightforward structure: a simple ppm amount. It will be easier for OCPs to communicate the AC to their customers than the current plethora of retail price points.

13.54 As shown in Table 13.7 above, the effects of a shift in demand of 0.8% to 2.3% would suggest that the benefits to residential consumers of the unbundled tariff (just) outweigh the resource costs. Such a shift in demand might be prompted by a general increase in consumer confidence in making NGCs or by improved service availability. We consider it plausible that the unbundled tariff would increase demand by this amount:

- The scope for an increase in demand is likely to vary depending on the type of service. There seems greater scope for increases in demand for discretionary services provided via non-geographic numbers (e.g. chatlines) than for calls to services such as utilities.

- That said, demand is likely to have some sensitivity even for services where there are few alternatives. For example, in the 2011 Consumer survey we asked respondents how many times in the last three months they had made, or considered making, a call to an 08 number that they did not know the cost of.[723] We then asked them to think about the last occasion this had happened and asked what type of service it was and what they did. 2% of respondents said they ultimately did not contact the 08 service and a further 1% used an alternative contact method (e.g. email). In addition, 33% of respondents said they kept the length of the call as short as possible.[724] This suggests that there may be scope for a (fairly small) increase in demand. It is worth noting that the services in question were utilities (40%), retail banking (19%), public services related to health (13%), sales (9%) and public services related to an area other than health (9%).[725] These are services where callers may have limited choice about whether to make the call. Similarly, as discussed in Section 16, data from the Samaritans suggests that some callers may be sensitive to call prices even for services such as emotional support.

- We discussed the difficulties that callers are currently experiencing in Annex 8. In particular, a substantial proportion of consumers currently say that they do not know the price of NGCs. For example, in the 2011 Consumer survey, 24% of respondents said they didn't know the price of 0845 calls from a landline and didn't know whether they were expensive. The corresponding figures were 32% for fixed 0870 calls, 27% for mobile 0845 calls and 30% for mobile 0870 calls.[726]

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[723] 2011 Consumer survey, question GL05.
[724] 2011 Consumer survey, question GL08. Note that only 21% of the respondents to the 2009 Consumer survey claimed that they would always make calls where there is a number not contained in their package that they don't know the cost of (the mean response implies that more than three fifths of calls in this category are not made). We do not believe the responses to this 2009 question give a reliable indication of the scale of suppressed demand. However, they do give an indication of the direction of the effect, i.e. that some calls are likely to be deterred by a lack of price awareness or information. 2009 Consumer survey, Q39.
[725] 2011 Consumer survey, question GL07.
[726] The proportion of respondents that didn't know the price but thought these calls were expensive was 39% for fixed 0845 calls, 37% for fixed 0870 calls, 51% for mobile 0845 calls and 46% for mobile 0870 calls. 2011 Consumer Research, questions GL01X: and GL01Y: "Which of the following

Similarly, the majority of respondents to the 2009 Consumer survey stated "don't know" when asked the price of NGCs – see Table 13.8 below.[727] This uncertainty is likely to contribute to consumers' lack of confidence in these numbers and discourage them from making NGCs. As explained above, the unbundled tariff is likely to improve price awareness for consumers. It is thus likely to lead to a shift in demand.

Table 13.8: Consumers responding "don't know" when asked the price of NGCs (2009)

	0845	0870	0871	09
Fixed calls	46%	57%	63%	72%
Mobile calls	51%	56%	60%	71%

- Similarly, research for PPP found that 74% of consumers that use PRS services cited "accurate prices" as a factor that would help improve trust (by far the most commonly cited factor).[728] Note, however, that 0871/2/3, 09 and 118 calls account for a minority of calls to the number ranges that we are intending to unbundle.[729]

- Demand may also increase as a result of SPs introducing additional services as a result of the unbundled tariff. Section 9 explains how the unbundled tariff may contribute to service availability, for example because improved price awareness makes it more attractive for SPs to operate non-geographic numbers, and Annex 11 provides some examples of new services that may be impeded by the current NGCs regime.

13.55 Given the threshold at which the benefits to residential consumers outweigh the resource costs, the size of a shift in demand due to the unbundled tariff does not need to be large. Under our optimistic assumptions, the threshold is even lower. Adopting more pessimistic modelling assumptions would also make it harder to judge whether the shift in demand exceeds that (pessimistic) threshold, although a 4.6% increase in demand is still not large given the potentially large structural change in the market that the unbundled tariff represents. Furthermore, it is important to recognise that this calculation looks at the effect of a shift in demand in isolation. In other words, it assumes that consumers continue to overestimate NGC prices to the same extent that they do today.

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statements best describes what you know about the cost of calling a number starting with xxx from your landline/your mobile?"

[727] 2009 Consumer survey, questions 43 and 44: "How much do you think it costs to call the following types of telephone numbers from your landline/your mobile phone at home during the daytime on a weekday?"

[728] *Current and emerging trends in the UK premium rate services market 2010, Analysys Mason for PhonePayPlus,* pages 7-8. Page 1 of this report explains that it uses the term "phone paid services" to mean PRS services. Available at: http://www.phonepayplus.org.uk/For-business/~/media/Files/PhonepayPlus/Research/2011_CurrentandemergingtrendsintheUKPRSmarket2010AnalysysMasonreport.pdf

[729] In 2009, calls to 0871/2/3, 09 and 118 numbers accounted for 12% of minutes and 44% of revenues from calls to 084, 087, 09 and 188 numbers. Calculated using data from the 2010 Flow of Funds study.

13.56 In practice, we consider that the unbundled tariff is likely to both reduce the extent to which consumers overestimate prices and lead to a shift in demand. As explained above, the benefits to residential consumers of the reduction in price overestimation alone are likely to substantially exceed the resource costs of the unbundled tariff. Taking any shift in demand into account will reinforce this conclusion.

13.57 As noted above, we did not quantify all the costs associated with the unbundled tariff e.g. the costs of SPs that migrate in response to increased competitive pressures. However given that the thresholds for the reduction in price overestimation are likely to be substantially exceeded, the presence of these unquantified costs is unlikely to change our conclusions. Moreover, as explained above, we have not quantified a number of important benefits of the unbundled tariff. These unquantified benefits include distributional effects and the impact of improved competition (e.g. a more efficient pattern of retail prices and greater constraints on SPs' pricing).

13.58 Moreover, the discussion above only related to the benefits for residential consumers. However, as explained in Part A, we also consider the impact of our proposed regulation:

- on consumers in a broad sense, relying on section 58(1)(aa), to encompass residential and business users and SPs who consume hosting services;

- this is in addition to considering the impact more generally on all stakeholders in accordance with our general duties.

13.59 As explained in Annex 16, increased call volumes (as a result of improved price awareness etc) are also likely to benefit OCPs, TCP and SPs. Put simply, all these parties are likely to benefit from originating and receiving more calls. There is thus an additional positive effect from increased NGC volumes that is not captured in the calculations of quantified effects set out above.

13.60 Moreover, increased competitive pressures on SPs and OCPs are likely to have a positive overall effect (looking at all stakeholders, including callers).[730]

13.61 Overall, taking into account the impact on stakeholders more widely (including consumers other than residential callers), we consider that there are additional positive effects that are not incorporated in the above modelling. Taking these additional effects into account reinforces our view that the benefits of the unbundled tariff are likely to outweigh the resource costs.

Q13.4: Do you have any comments on our impact assessment for the unbundled tariff?

Legal powers to implement the unbundled tariff proposal

Legal tests

13.62 We discuss the legal framework and our powers in relation to imposing retail level obligations on CPs at Part A, Section 5.

[730] Obviously increased competition is likely, on average, to have a negative impact on suppliers profits, but our view is that it is generally likely to be outweighed by the wider benefits, such as lower prices for customers and higher-quality services.

13.63 In proposing to make or modify a General Condition, we can only do so if the proposed General Condition (or modification) imposes an obligation that we are authorised to impose under sections 51, 52, 57, 58 or 64 of the Act.[731] In addition, we have power to set conditions applying to persons other than communications providers under section 59 of the Act

13.64 We propose to implement the unbundled tariff proposals described at in Section 10, by making and modifying General Conditions under our powers in sections 51(1)(a), 57 and 58 and by making a condition binding persons other than communications providers in relation to the allocation and use of telephone numbers under section 59 of the Act. We outline in paragraphs 13.74 to 13.77 the draft conditions and modifications we consider will be required to implement the unbundled tariff proposal. As outlined in Section 6, we will shortly publish a separate consultation on the terms of those conditions and modifications.

13.65 Section 51(1)(a) permits the setting of conditions that Ofcom considers appropriate for protecting the interests of the end users of public electronic communications networks. This power includes the power to require the provision, free of charge, of specified information to end users.

13.66 Section 57(1) empowers Ofcom to impose such requirements as Ofcom consider appropriate to securing that end-users of a public electronic communications service are able, by means of that service, to make calls to telephone numbers which are in use.

13.67 Section 58 gives Ofcom the power to set General Conditions about the allocation and adoption of telephone numbers. Under section 58(1)(aa), such General Conditions may impose tariff principles and maximum prices for the purpose of protecting consumers in relation to the provision of an electronic communications service by means of telephone numbers.

13.68 Section 59 empowers Ofcom to set conditions applying to persons other than communications providers that relate to the allocation of telephone numbers to such persons and the use of telephone numbers by them.

13.69 We consider that the current use of non-geographic numbers gives rise to consumer harm, as identified in Section 8 and Annex 8. For the reasons set out in Section 9, we consider that the best way to protect consumers from the harm identified is to implement the unbundled tariff proposal. This will entail the making and modification of General Conditions under section 58(1)(aa) to impose tariff principles and maximum prices in relation to the provision of electronic communications services provided by means of non-geographic numbers. It will also entail the imposition of tariff principles and maximum prices on service providers in relation to their use of non-geographic numbers under section 59 of the Act.

13.70 Additionally, the implementation of the unbundled tariff proposal will also necessitate amendments to the Numbering Plan to reflect the restrictions and requirements that apply in relation to the use of non-geographic numbers within the scope of our proposals. The modifications we propose to make to the Numbering Plan will form part of our separate consultation on the draft conditions and modifications to the General Conditions required to implement the unbundled tariff proposal.

[731] See section 45(3) of the Act.

13.71 When modifying the Numbering Plan or making or modifying a General Condition, or a condition set under section 59, Ofcom must be satisfied that the condition or modification complies with the legal tests set out in sections 60(2) and sections 47(2) of the Act, namely that the proposed conditions and modifications are objectively justifiable,[732] not unduly discriminatory, proportionate and transparent. The reasoning in this consultation document, notably Section B, will form the basis of our assessment as to whether the conditions and modifications we will propose satisfy these tests. The assessment will be carried out in the separate consultation on the draft conditions and modifications to the General Conditions and the Numbering Plan.

Ofcom's statutory duties

13.72 We have identified the unbundled tariff proposal as our preferred option under the assessment criteria that we have derived from our statutory duties for the purposes of this review. We are satisfied that the unbundled tariff proposal is consistent with our general duties in carrying out our functions as set out in sections 3 and 4 of the Act. In particular, we consider that imposing an unbundled tariff structure in relation to the provision of NGCS will ensure that consumers are protected against the market failures we have identified in Section 8, will help to restore consumer confidence in non-geographic number ranges while providing benefits to SPs, including increased call volumes and greater control of retail prices. This, combined with our proposed changes to the 080 and 116 ranges, will mean that the changes will further the interests of citizens in relation to communications matters and further the interests of consumers in relevant markets, and in the longer term, should contribute to the promotion of competition.

13.73 We also consider that the proposal will contribute to the fulfilment of Ofcom's general duty in carrying out its telephone numbering functions under sections 56 – 62 of the Act to:

- **Secure the best use of appropriate numbers**: by addressing the market failures and resulting consumer harm, we expect consumer confidence in non-geographic number ranges to improve so that call volumes should increase. This, in turn, should increase access to socially important services and enhance SPs' incentives to invest in service availability and innovation on these number ranges.

- **encourage efficiency and innovation**: by improving consumer price awareness and giving SPs greater control over retail prices, the unbundled tariff proposal should result in more efficient prices and encourage innovation in service provision.

Outline of draft conditions and modifications required to implement the unbundled tariff proposal

13.74 We anticipate that implementation of the unbundled tariff will entail the imposition and/or modification of the General Conditions to which CPs are subject. Those General Conditions (new or modified) will have the following effect:

13.75 In relation to the AC:

[732] This test does not apply to the setting or modification of General Conditions

- The retail price for a call to a 08X (other than 080), 09 or 118 number is the sum of the AC and the SC charged for that call to that number unless the call counts towards inclusive call minutes in a call bundle, package or discount which the caller has purchased.

- For each tariff package offered by the CP, the CP must set a single AC for conveying calls to 08X (other than 080), 09 and 118 numbers.

- Each AC set by the CP must comply with the following tariff principles:

  - It is set on the basis that the call is conveyed to the originating switch (or equivalent for a next generation network) including, where relevant, conveyance over an interconnection circuit to a transit provider ("the Assumed Point of Handover").

  - It is charged on a pence per minute basis but may be subject to a minimum call charge equivalent to a 1 minute call.

  - It does not vary by time of day.

- The AC applicable to a tariff package must be advertised prominently in all promotional material in relation to that package and is a key charge that is provided to new customers at the point of sale.

- The AC must be included in all bills issued and made available on request to the customer.

13.76 In relation to the SC:

- The SC is the price which the TCP charges the OCP for a call to a number within the 08X (other than 080), 09 or 118 range.

- The TCP must charge all OCPs the same SC for calls to a number in the 08X (other than 080), 09 or 118 range.

- The OCP must enable, in aggregate, [60] separate price points for the SC for billing calls to a number within the 08X (other than 080), 09 and 118 number ranges.

- Each SC must apply to at least one block of 10,000 numbers allocated from the 08X (other than 080) and 09 number ranges.

- Each SC set by the CP must be set on the basis that the call is conveyed by the TCP from the Assumed Point of Handover to the SP.

- The SC for a number within one of the 08X (other than 080) number ranges designated in the Numbering Plan must be no higher than the maximum specified for the relevant 08X range in the Numbering Plan.

13.77 We anticipate that conditions corresponding to some of these conditions will be set under section 59 of the Act in order to impose equivalent obligations on number range holders which are not communications providers. In addition, we anticipate that there will be a condition made under that provision applying to SPs which has the following effect:

- Where reasonably practicable, the SP must advertise in its promotional material the applicable SC for calls to the number in the 08X (other than 080X), 09 or 118 number range on which it provides services, giving similar prominence to the SC as it gives to the number.

- Such promotional material must also specify, where reasonably practicable, that an AC will apply to calls to the number advertised.