



Simplifying Non-geographic Numbers

Detailed proposals on the unbundled tariff and
Freephone

This is a non-confidential version
of the consultation. Redactions
are indicated by [✂]

	Consultation
Publication date:	4 April 2012
Closing Date for Responses:	27 June 2012

Part A

Contents

Section		Page
1	Executive Summary	1
2	Non-geographic numbers, background and structure of this consultation	8
3	The NGCS market and scope of the review	14
4	Summary of concerns	46
5	Legal and analytical framework	62
6	Addressing the identified consumer detriment and summary of next steps	88

Section 1

Executive Summary

Our review of non-geographic numbers

- 1.1 Non-geographic calls are those made to 03, 05, 070/076, 080, 0845, 0870, 0843/4, 0871/2/3, 09, 116 and 118 numbers. Consumers use these number ranges to call businesses, financial institutions, helplines and government agencies, to get information, and to make payments for services.
- 1.2 Despite the growth of alternative ways to make contact or obtain information, such as the internet, the option to call organisations directly continues to be valued by consumers. For some groups (for example, those not able to access the internet), voice calls are the only practical form of contact for these services.
- 1.3 In December 2010, we published our preliminary findings in our strategic review of the market for non-geographic calls.¹ We highlighted our concerns about how the market appeared to be failing consumers. The responses to that consultation and our subsequent research, provided further evidence of our view that there is clearly identified substantial consumer detriment arising from the retail market failures and this supports a case for reform of that market.
- 1.4 Today, non-geographic calls are confusing; consumers often do not know how much those calls cost. This confusion arises, in part, because each phone company chooses its own structure of prices (per call, per minute, in or out of bundle, and so on) and information about prices (that is complex to begin with) may be confusing, or hard to obtain. This complexity also means that it is very difficult for the organisation being called to let consumers know how much they will be charged for contacting them.
- 1.5 Our review sets out the evidence that this lack of awareness combined with other factors, such as incomplete understanding of revenue sharing, leads callers to overestimate the costs of calling non-geographic numbers, making them generally suspicious of these numbers and reluctant to use them. In turn this is contributing to a reduction in demand for services, particularly from mobile phones. With little incentive to make things clearer for consumers, some providers are emboldened to charge what the market will bear. Suspicion of non-geographic numbers can also make socially important services harder to access, particularly for vulnerable consumers such as those in mobile-only households. It can also mean that there are fewer, and less innovative, services offered using non-geographic numbers.
- 1.6 Having reviewed the options, we think that a new approach to the regulation of non-geographic numbers will tackle these problems.
- 1.7 In May 2011, the Communications Act was modified to provide Ofcom with powers to set maximum prices and tariff principles for the purpose of protecting consumers in relation to the provision of electronic communication services by means of telephone numbers. In this consultation we are setting out how we intend to draw on these new powers to protect consumers from the effects of the problems we have identified in this market.

¹ 'The December 2010 Consultation', available here:
<http://stakeholders.ofcom.org.uk/consultations/simplifying-non-geo-numbers/>

Proposals for reform















- 1.8 This consultation includes our main proposals (refined from the December 2010 Consultation) which are intended to simplify the non-geographic number ranges by making the pricing structures clearer to consumers and removing confusing and misleading inconsistencies.
- 1.9 In the December 2010 Consultation we set out a number of options for reform. In this consultation we provisionally conclude that the options of setting maximum prices for all non-geographic number ranges, wholesale intervention and additional information remedies are either insufficient or sub-optimal for addressing the consumer consumers we have identified.
- 1.10 Accordingly, our key proposals are:
- **Maximum retail prices for:**
 - Freephone (080 and 116 numbers) to be free from all telephones, fixed and mobile²; and
 - 03 to become the only non-geographic number range linked to the price of a call to a geographic number (i.e. the 01/02 number ranges);
 - **A new tariff structure for other non-geographic calls:** which involves splitting (and making transparent to consumers) the money that is paid to their phone company and the money that is paid to cover the costs of routing and managing the non-geographic numbers, the cost of the receiving the call service and, where this occurs, payment for the service the consumer is receiving. This will apply across the majority of non-geographic number ranges (in particular those that involve revenue-sharing) to ensure greater transparency for consumers and enhanced competition among communication and service providers.
- 1.11 Making 080 numbers free to caller from all telephones will enable service providers on this range to advertise a clear message to their customers that these numbers are always free. This will encourage demand for services and improve consumer understanding of the range, as well as vulnerable consumers' access to socially important services provided on the range. We recognise that this change will not be without cost, particularly for the service providers using 080 numbers, but we consider that there are considerable benefits (to both consumers and service providers) in having a readily recognised number range that is free to call.
- 1.12 The 03 range is the logical choice for a non-geographic number range to be linked to the price of a normal landline call; it is already set up to serve this purpose and no regulatory change is required. Whilst usage and consumer awareness of the range has been up to now been low, we consider the package of changes we are proposing offer an opportunity to reinvigorate the range and encourage usage.
- 1.13 We think that there are benefits in removing the potential for confusion between the price and treatment of the other non-geographic number ranges that have traditionally been linked to geographic call prices (the 0845 and 0870 ranges) and the other 084 and 087 numbers. Having a consistent treatment of the 084 and 087

² We are also proposing that the Harmonised European 116XXX numbers for services of social value should always be free to caller.

number ranges will lead to a more intuitive numbering plan in the long term, clearly defining differences in number ranges and improving consumer awareness.

- 1.14 We also think that consistent pricing treatment of revenue sharing ranges 084, 087, 09, and 118, will enable competing service providers to compete more transparently on price as well as the brand/service they offer.
- 1.15 Taken as a whole, we consider these changes will provide a non-geographic structure which will help consumers regain trust and confidence and which can be presented far more clearly and simply – see Figure 1.1.

Figure 1.1 – Illustrative guide to the different number ranges

		Free 080
For these numbers, you only pay your phone company for the cost of the call.		
		UK numbers 01, 02 03 03 numbers are UK wide numbers that are charged in the same way as 01 and 02 numbers.
		Mobile 07
		International 00
For these numbers, the total cost is made up of an access charge that goes to your phone company PLUS a charge that goes to the organisation receiving the call.		
		08 Numbers The charge for these numbers will be no more than 7p per minute for 084 numbers and 13p per minute for 087 numbers PLUS your phone company's standard access charge.
		09 Premium Rate numbers The charge for these numbers will be no more than £1.45 per minute PLUS your phone company's standard access charge.
		Directory Enquiries 118

- 1.16 The proposed new tariff structure (the ‘unbundled tariff’) will introduce a consistent treatment of all the ‘revenue-sharing’ ranges by ‘unbundling’ the retail price for those calls. We are proposing that this new approach will apply in:
- all 08 ranges (including 0843/4/5, 0870/1/2/3) other than 080;
 - all 09 premium rate numbers; and
 - 118 Directory enquiry numbers.
- 1.17 The unbundled tariff will ensure consumers can know, for the first time, how much of their money is paid to their phone company and how much is passed to others, such as the organisation or service being called. It will require that, instead of paying a single charge to their phone company, they will instead pay two separate charges:
- i) **the Access Charge:** which will cover the costs and revenues of the phone company which originates the call; and
 - ii) **the Service Charge:** which is paid to the terminating companies and the company providing the service for the number (a bank for example) to cover or contribute towards their costs.
- 1.18 There will be no change to the basic structure of payments; phone companies will continue to bill consumers for the full cost of all their calls to non-geographic numbers (as today) and organisations and services will continue to receive a share of retail revenue in those cases where it is lawful for them to do so (as today). But consumers will be able to see the division of this money.
- 1.19 In order to ensure these different charges are made transparent to consumers, we are proposing to specify rules for simplifying these charges including:
- one Access Charge per tariff package, for all unbundled non-geographic number ranges;
 - the Access Charge to be set as a simple ‘pence per minute’ rate (but may be subject to a minimum call charge) to assist consumers’ understanding;
 - each service (i.e. each individual 08, 09 or 118 number) to have a single Service Charge that applies from all fixed and mobile phones;
 - fewer choices in setting the Service Charge than currently offered, making the system clearer and simpler; and
 - a rule requiring organisations and service providers to tell consumers their Service Charge whenever the number is presented (i.e. in advertising and marketing).
- 1.20 As a result, the cost to a consumer of a call to a non-geographic number will be the sum of:
- the Access Charge, in pence per minute, that is the rate the consumer *always* pays for these numbers; and
 - the Service Charge, specific to that number, that must be advertised whenever the service or number is promoted.

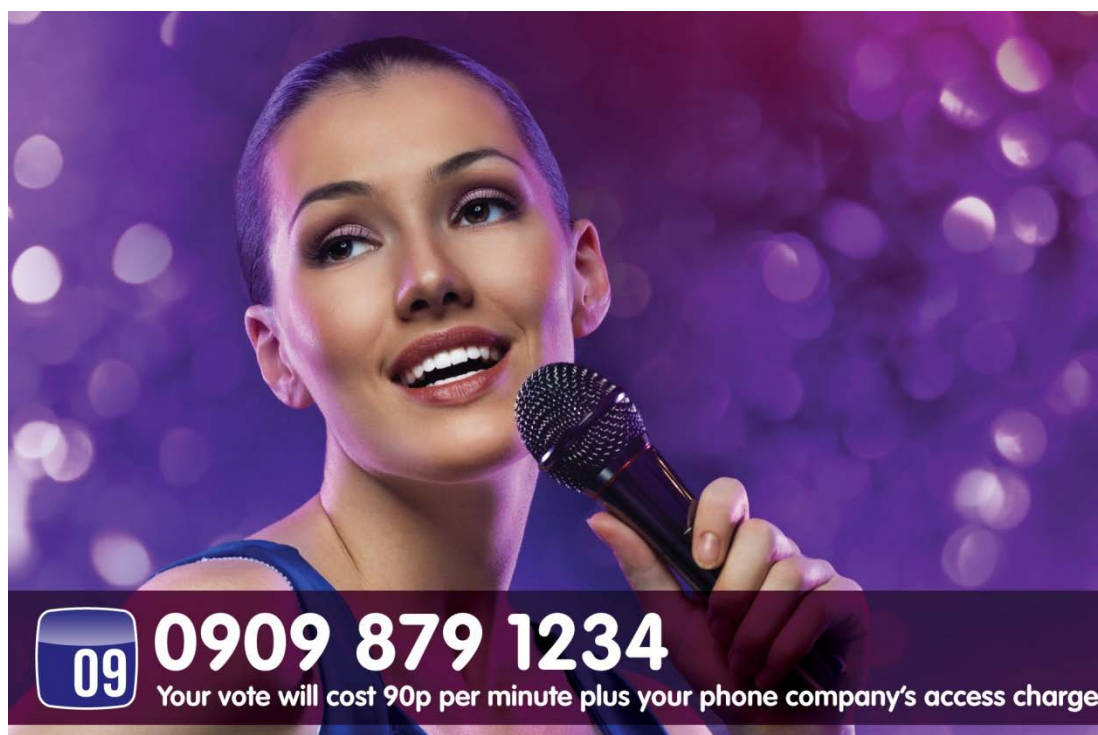
1.21 Currently call cost descriptions follow the format:

“this call will cost you X pence per minute on a BT line, other landline providers may vary and calls on mobiles may cost considerably more.”

1.22 Under the new structure we expect the announcement to follow the format of (see Figure 1.2 below):

“This call will cost you X pence per minute plus your phone company’s access charge.”

Figure 1.2 – Example of future call costs advice



1.23 The unbundled tariff appears to provide significant benefits to consumers: clearer prices, better competition between phone companies and, perhaps, service providers, and reinvigorated consumer confidence in using these numbers.

1.24 As well as benefits for individual consumers, UK businesses stand to gain. Those who do not obtain revenue from these calls will have access to number ranges where that is clear to consumers; those who do get paid for the calls they receive will have greater control over the prices. It is this effect, along with the increase in consumer confidence that we think may lead to more, and more innovative, services using these numbers.

1.25 For the growing number of UK mobile-only households, access to socially important services will be improved. Calls to 080 numbers will be free, and for other numbers, prices will be clearer and more likely to reflect consumer preferences.

1.26 This is our provisional view, and this consultation aims to draw out views and evidence, for and against, to enable us to take a decision about whether these reforms are right for UK consumers.

Implementing our proposals

- 1.27 To achieve these changes will require significant work and take time. Most importantly, consumers need a fair opportunity to be informed about this new charging structure. If we go ahead with these reforms, we anticipate the need for a communications campaign.
- 1.28 Implementing an unbundled tariff obviously involves costs imposed on phone companies and service providers, but our provisional assessment is that this cost is outweighed by the benefits of increased demand and greater consumer price awareness. In addition we expect other benefits in terms of competition and innovation highlighted above, which may also be considerable.
- 1.29 Given the scope and significant of the changes we are proposing, we recognise that communications providers will need sufficient time to implement the changes as well as inform their customers. We are proposing that implementation of all the changes should take place within 18 months of our final statement, although we also set out an option for the changes to the Freephone 080 range to take place sooner.
- 1.30 There are a number of detailed implementation issues which require further engagement with industry and we welcome further stakeholder input into these discussions, which we expect to take place over the coming months.

Consultation and next steps

- 1.31 This consultation sets out our proposals for Freephone (the 080 number range) and for the unbundled tariff. There are other issues with respect to the non-geographic ranges which will be covered in forthcoming separate consultations:
 - **0500:** this is a Freephone range, and we see a strong argument for treating it in the same way as the other Freephone range, 080. However, there are other options including closing the range or treating it differently from the 080 range. We will consult separately on 0500, in order to allow companies that use that range to respond on the issues that are specific to them.
 - **055/056:** we did not make any specific proposals for the 055/056 ranges in the December 2010 Consultation. We have very little evidence about these ranges and their use and it is therefore not currently clear whether the unbundled approach is a suitable option for these ranges. We therefore propose to issue a separate consultation (possibly combined with the 0500 consultation highlighted above) to set out potential options for these ranges.
 - **070/076:** in the December 2010 Consultation we highlighted the concerns we had over the continuing abuses of the 070 range, and more recently, the 076 ranges and how we had sought to tackle these problems through enforcement and in a number of reviews. However, the considerations relating to these ranges are somewhat different to the other non-geographic ranges, because of the greater risk of fraud, and the potential confusion with mobile numbers. We therefore consider that the best approach is to tackle these issues within a separate consultation.
 - **Higher rate Premium Rate Services tariff:** in the December 2010 Consultation, we noted several stakeholders had argued that the £1.53 cap for calls to 09 services (in terms of what BT can charge its retail customers) was out-of-date

(not having been adjusted for 13 years) and that the substantial discrepancy between the maximum prices for premium rate calls for fixed and mobile services was putting 09 content providers at a competitive disadvantage. We consider that this issue needs to be considered in the context of the proposals for applying the unbundled tariff to this range. We therefore propose to issue a separate consultation on options for raising the £1.53 cap within the next few months, which will allow stakeholders to consider the specific issues relating to this proposal. This consultation will also consider whether any cap is required for the 118 Directory enquiries range. This does not necessarily mean that any changes to the caps will be undertaken on a longer timescale to the other changes we are proposing to non-geographic numbers.

- **Detailed legal instruments:** in order to implement our proposed changes, modifications would be required to several of the existing General Conditions and the Numbering Plan. The effect that these modifications would have is set out in this document. We intend to publish shortly a separate consultation on the precise wording of the modifications

- 1.32 In summary, therefore, there will be a number of smaller consultations on these specific issues ahead of the final statement on this review as a whole.
- 1.33 We will aim to publish these separate consultations within the next few months.
- 1.34 Our objective is to have consulted on all issues, and gained stakeholder feedback, before taking a final decision on the key recommendations by the end of 2012.

Part A - Section 2

Non-geographic numbers, background and structure of this consultation

Introduction: Non-geographic numbers

- 2.1 This is our second consultation in our review of non-geographic numbers. These are telephone numbers which consumers call to access a wide range of services, including services provided by businesses and Government agencies, information and entertainment services, payment services and voting on TV shows.
- 2.2 Unlike geographic numbers (01 and 02 numbers) which contain an area code identifying the area within which the called home or business is located, non-geographic numbers are not associated with a particular place and therefore can be used nationwide without variation.
- 2.3 There are currently 16 separate non-geographic number ranges in the National Telephone Numbering Plan ('the Numbering Plan'), the document published by Ofcom, which sets out the telephone number ranges which are available for allocation. For each of the non-geographic number ranges, the Numbering Plan designates the purpose for which numbers in that range may be used and, in some cases, gives information in relation to the prices which may apply on the range.
- 2.4 Our review considers all of the current non-geographic number ranges except the 07 ranges which are used for mobile services. The non-geographic number ranges within the scope of our review are listed below, together with their designation in the Numbering Plan and the way in which they are typically priced:
 - **080 and 0500 numbers** are principally used to offer private and public sector voice services such as sales, enquiries and help lines. Calls are typically free from landlines but, with some exceptions, are charged from mobiles;
 - **03 numbers** were introduced in 2007 to provide a range for which retail call charges were the same as the price charged by communications provider for geographic calls, with matching discounts and inclusion in bundled minutes. Revenue sharing, whereby the originating communications provider passes some of its call revenues to the service provider operating the number, is prohibited on this range. Ofcom reserved a part of this range for public sector bodies and not-for-profit organisations. The remainder is available for use by other organisations and provisions have been made for services to migrate from numbers in the 08 ranges to identical numbers in 03.
 - **0843, 0844 and 0845 numbers** are used to offer a wide range of lower cost services including pre- and post-sales enquiry lines, public sector services, transaction services and information services, as well as legacy pay-as-you-go dial-up narrowband internet services (predominantly using 0845 numbers). Revenue-sharing between the originating communications provider and the service provider using the number takes place on this range;
 - **0870 numbers** were re-designated in 2009 as non-geographic numbers charged at geographic prices in the same way as calls to 03 numbers, unless call charges

are published in accordance with regulatory requirements.³ Revenue sharing is not banned on this range, as it is for 03 numbers, but where calls to these numbers are retailed at geographic call prices, it is not supported by the revenues generated. For this reason, 0870 numbers are typically used to provide access to low cost voice and data services such as sales, enquiries and helplines;

- **0871/2/3 numbers** are principally used to offer higher cost pre- and post-sales enquiry lines, some public sector services and services such as the international telephony services provided by resellers;
- **09 numbers** are premium rate numbers which are used mainly to offer competitions, TV voting lines, scratch cards, adult entertainment, chat lines and some post-sales services such as technical support. Call prices vary widely and calls can be charged by time duration or per call, or a combination of both. Prices are currently capped at £1.53 per minute or per call from most landlines;
- **116 numbers** were recently introduced to provide harmonised European-wide access to services of social value, including ‘Missing Children’, ‘Victims of Crime’ and ‘Medical On-Call Services’ and are free to call;⁴
- **118 numbers** are used to offer the wide range of competing Directory Enquiries services offered by specialist providers such as ‘The Number’, telecoms companies such as BT and directory services offered by specific social interest groups;
- **055 numbers** are corporate numbers which were introduced for firms (larger firms in particular) to have their own numbers allocated to them by Ofcom rather than acquiring them from telecoms providers. We have seen little use of this range;
- **056 numbers** are used by providers of “Voice over Internet Protocol” (‘VoIP’) services so that users can make and receive VoIP calls without the use of the fixed telecoms network. Again, they have experienced little use up to this point, with many VoIP operators preferring to use geographic numbers;
- **070 numbers** are designated as ‘Personal Numbers’ providing follow-me services on a single number where an individual can receive calls on both fixed and mobile numbers and messaging services and thus remain in contact wherever they go; and
- **076 numbers** have been designated for calls made to mobile radio-paging services.

³ Specifically, as part of General Condition 12 (Annex 2), communications providers are required to give equal prominence in their published price lists and websites to charges for 0870 calls as charges to geographic calls, calls to mobiles and call packages. In addition, origination communications providers are required to publish the maximum prices of 0870 calls in their advertising and promotional material, and give equal prominence to these charges when a consumer is signing up for a service.

⁴ See Ofcom’s page on numbering for a link to all documents relevant to the 116 range: <http://stakeholders.ofcom.org.uk/telecoms/numbering/guidance-tele-no/116-euro-numbers> .

Review of non-geographic numbers - first consultation and subsequent steps

- 2.5 We published our first consultation, entitled *Simplifying Non-Geographic Numbers; improving consumer confidence in 03, 08, 09, 118 and other non-geographic numbers*, in December 2010 ('the December 2010 Consultation'). This reviewed the use and regulation of non-geographic call services ('NGCS') and explained why we considered that the market was not working well for consumers. We consulted on options for wide-ranging changes to the regulation of non-geographic numbers to address the consumer problems we identified.
- 2.6 The December 2010 Consultation was strategic in nature because the proposals it contained were made in anticipation of changes to the Communications Act ('the Act') linked to the revised EU Framework Directives which provided new powers to set maximum prices and tariff principles for specific number ranges for the purposes of consumer protection (see Section 5 for further details).
- 2.7 Our high level proposals for reform in that consultation were intended to rationalise the non-geographic number ranges by making the pricing structures clearer and removing confusing and misleading inconsistencies. To this end, two of our key proposals were:
- **A new general tariff structure for non-geographic calls:** charges for calls to most non-geographic ranges (except for 080, 0500, 116 and 03) would be split between the access charge paid to the OCP and the service charge paid to the TCP. We said that this would ensure greater transparency for consumers and enhanced competition among communication and service providers.
 - **Maximum retail prices:** we recognised that this would be a highly interventionist approach that carried a number of significant risks. However, we said that it could have a valuable role to play for a limited set of numbers, notably Freephone (080) and non-geographic ranges charged at the same rate as geographic calls (03).
- 2.8 The consultation closed in March 2011 and we received over 110 responses from a range of stakeholders, including fixed and mobile communications providers, NGCS providers, consumer groups and individuals. We have set out stakeholders' comments, and responded to them, throughout this document. All the non-confidential responses are available on our website.⁵
- 2.9 Following the closure of the consultation, we have spent time gathering a wide range of additional evidence and working with the NGCS industry in order to refine our proposals in light of the comments we received. Where possible, we have published the research we have commissioned in advance of this document to allow stakeholders to consider the evidence in advance of this consultation.
- 2.10 The additional work we have undertaken has included:
- 2.10.1 **Industry working groups:** we facilitated a series of working groups from May to October 2011 to discuss various aspects of our NGCS proposals. Separate groups dealt with issues relating to commercial, technical and
-

communications issues generated by our proposals. The output of these groups is summarised in Annex 14.

- 2.10.2 **Behavioural economic experiment:** undertaken by London Economics, this experiment tested how individuals reacted to different models of charging, including the unbundled tariff, with the aim of identifying which option offers the best prospect of addressing our concerns about the consumer experience. We published the results of this experiment in September 2011.⁶
- 2.10.3 **Survey of Service Providers ('SPs')**: we received relatively few responses from SPs in response to the December 2010 Consultation, and we were aware that the relatively limited sample of our previous research with SPs might not be sufficiently representative. We therefore commissioned research with a larger sample of SPs offering services (on the 080 and 0845 ranges in particular) to understand their preferences for these ranges, as well as their likely reactions to some of our proposals.⁷ We also conducted a number of informal discussions with SPs to understand other potential impacts of our proposals, for example migration costs.⁸
- 2.10.4 **Additional consumer omnibus survey:** we presented consumer research as part of the December 2010 Consultation (which included surveys conducted in 2009 and 2010).⁹ We conducted an Omnibus survey of consumers during October 2011, which updated some of our previous evidence on consumer price awareness and understanding of different number ranges.¹⁰
- 2.10.5 **International comparisons:** our international work has involved a number of different elements. First, we participated in a BEREC (the Body of European Regulators for Electronic Communications) working group looking at regulatory options for NGCS.¹¹ This included BEREC questionnaires to other national regulatory authorities ('NRAs') examining the different issues surrounding special rate services. Second, we commissioned a report which sets out case studies of particular international markets, specifically France, Portugal, the Netherlands, the USA and Germany. We published the resulting report on 16 December 2011.¹²

⁶ <http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/interventions-non-geographic/>

⁷ 'the 2011 SPs survey', available at: <http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/Non-geographic-numbers.pdf>

⁸ Annex 12 sets out our view on migration costs based on these discussions.

⁹ 'the 2009 Consumer survey', available at:

<http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/annexes/transparency.pdf> and 'the 2010 Consumer survey', available at:

<http://stakeholders.ofcom.org.uk/binaries/consultations/simplifying-non-geo-numbers/annexes/nts.pdf>

¹⁰ 'the 2011 Consumer survey', available at:

<http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/omnibus-survey.pdf>

¹¹ BEREC published its draft report on Special Rate Services in December 2011. Available at:

http://erg.eu.int/doc/berec/bor/bor11_68_srsreport.pdf

¹² '2011 International study', available at <http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/International-experience.pdf>

- 2.10.6 **Information gathering from CPs:** we have gathered additional information and evidence from mobile OCPs, fixed OCPs, and TCPs using our information-gathering powers under section 135 of the Act, as well as through informal information requests, for example to gather cost estimates for some of our proposals.

Structure of this consultation

- 2.11 Given the scope and complexity of the issues involved in this consultation, we have divided this document into three parts:
- **Part A: Context, concerns and overall approach:** This comprises six sections, including the current section, and 15 Annexes. Here we describe the supply of NGCS (Section 3), why we consider the market is not working well for consumers (Section 4 and Annexes 8 to 11), the legal and analytical framework for assessing the options for addressing these problems (Section 5) and summarise our preferred options (Section 6).
 - **Part B: Remedies for the 08X, 09 and 118 ranges:** This comprises seven Sections and four Annexes. Here we explain why regulatory intervention on these ranges is required and set out in more detail our preferred option for regulating prices for calls to these ranges - the unbundled tariff – including proposals for its implementation. We also consider in this Part whether changes to the regulation of the 03 range are required.
 - **Part C: Freephone and 116:** This comprises four Sections and seven Annexes. Here we detail our proposals for the Freephone ranges (0800, 0808 and 0500) and the 116 range, and again set out our proposals for implementing our preferred option.
- 2.12 Later in the year, we will publish separate consultations to consider what action, if any, is needed to protect consumers in relation to the 05 and 070/076 ranges, and the question of higher rate tariffs for premium rate services (see Section 6 of this Part for further details).

Approach to this consultation

- 2.13 This consultation presents a number of regulatory options, many of which have been refined from the original proposals we presented in the December 2010 Consultation in the light of stakeholder comments and further evidence gathering (as set out above). We are also presenting additional options on the detail of our proposals and how they could be implemented.
- 2.14 Since the publication of the December 2010 Consultation we have gathered new evidence, which stakeholders have not yet had an opportunity to comment on, in relation to the following provisional conclusions:
- the NGCS market failures and consumer detriment arising from those market failures (set out in Section 4, and in more detail in Annexes 8 and 10); and
 - that the unbundled tariff is the best option for addressing those market failures (Section 9).

- 2.15 The issues on which we are presenting additional options on the details of our proposals and how they could be implemented, in light of evidence gathered since the December 2010 Consultation, are:
- the structure of the unbundled tariff (in Section 10);
 - the inclusion of the 0845 and 0870 ranges within the unbundled tariff (Section 11);
 - the implementation of the unbundled tariff and potential exceptions that should apply (Section 12);
 - the options for changes to the 080 and 116 ranges (Section 16); and
 - the implementation of our preferred option for the 080 and 116 ranges (Section 17).
- 2.16 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 (see Section 11).
- 2.17 We welcome stakeholder comments on all aspects of our proposals. The deadline for responding to this consultation is 27 June 2012.

Part A - Section 3

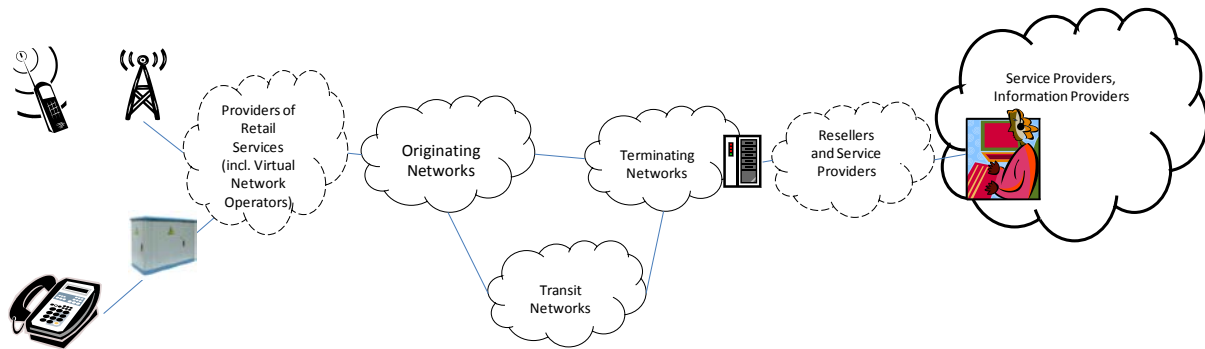
The NGCS market and scope of the review

Introduction

- 3.1 In this Section we describe:
- how calls to non-geographic numbers are conveyed;
 - data in relation to the size and structure of the NGCS market; and
 - how the NGCS market operates at the retail and wholesale levels.
- 3.2 This is relevant context to the analysis that follows of the consumer problems we have identified in relation to the provision of NGCS and the remedies we are proposing (which are discussed in the following Sections).
- 3.3 In the light of this background, we then consider the scope and rationale of our review in the light of comments we received on these matters in response to the December 2010 Consultation.

The conveyance of a call to a non-geographic number

- 3.4 The image below describes what happens when a consumer calls a non-geographic number:
- 3.4.1 The call is made by a caller on a fixed or mobile network operated by the originating communications provider ('OCP');
- 3.4.2 the OCP then identifies this as a non-geographic call and conveys the call to the appropriate terminating communications provider ('TCP') either directly or by using a transit operator;
- 3.4.3 the TCP then identifies the geographic number mapped to the non-geographic number (this operation is known as a 'number translation service', or 'NTS') and sends it to that location; and
- 3.4.4 the call is received by the service provider or 'SP' (this may include going through an intermediary such as a reseller, which offers hosting services for non-geographic numbers).

Figure 3.1: Parties involved in delivering non-geographic calls

Source: Ofcom's analysis

- 3.5 There are many variations of this sequence, as non-geographic calls are conveyed between callers and SPs. In many cases, a single organisation (particularly BT) can have many roles - for example BT can act as the OCP, transit provider and TCP. Equally, the service can be delivered with each leg of the delivery chain being provided by a separate organisation.
- 3.6 We have summarised the role of each of the parties in the chain below.

Retail callers

- 3.7 Retail consumers – that is people who make calls for purposes not connected to their trade or business – account for the majority (perhaps between two-thirds and three-quarters) of call minutes to non-geographic numbers.¹³ Our review of non-geographic numbers (of which this consultation forms part) primarily looks at how the use and regulation of non-geographic numbers serves these consumers.

OCPs

- 3.8 Retail consumers have a choice of communications providers from which to purchase their telephone service. In the case of fixed services, consumers may buy services directly from a fixed network operator such as BT and TalkTalk or they may buy services from other businesses who purchase wholesale use of a network (termed 'wholesale access') and re-sell it to consumers. Examples of such retailers include high street shops such as Tesco or Carphone Warehouse. In the case of mobile services, there is similarly a choice from amongst four major mobile networks or a large number of retailers (sometimes termed 'virtual mobile network operators'). For simplicity, the text in this consultation generally reflects the case where the retailer and the CP providing access to the network are the same.
- 3.9 When a call is made, the call prefix (03, 0845, 070 etc) followed by the first three digits of the non-geographic number tells the OCP which network operator has been allocated the relevant block of numbers within that number range and, hence, where to route the call. The conveying of signals between the caller and the point where the call is handed over is termed "call originating" (and, in our consultation, the provider is called the 'originating communications provider' or 'OCP'). Not every call is passed between networks; where the OCP holds the number itself (that is, the organisation being called is also a customer of the OCP) then the OCP can also connect the call

¹³ The split between business and residential callers varies substantially between OCPs. See Annex 16 for further details.

to the called organisation. These calls may not leave the OCP's network e.g. on networks such as BT, TalkTalk, Virgin Media and Cable & Wireless ('C&W').

- 3.10 The conveying of signals from an OCP to the called organisation is called 'call termination' and the provider that does so is the 'terminating communications provider' or 'TCP'. Where the call is handed over from an OCP to a TCP, the OCP typically keeps a portion of the money paid by the consumer for making the call. The rest of the money is paid to the TCP as a termination payment (the level of this payment is called the 'termination rate'). Where calls are not charged to the consumer (e.g. 080 from fixed lines) there may be a payment in the other direction (in other words, the OCP may receive an origination payment from the TCP).
- 3.11 We refer to the provision of services by OCPs to callers as the 'retail level' and the relationship between the OCP and the TCP as the 'wholesale level'.

Transit networks

- 3.12 There are many fixed and mobile OCPs and TCPs, but not all networks are connected directly to each other. Instead, particular pairs of OCPs and TCPs commonly use a third network to carry calls between them. This service is 'transit'. Reflecting the costs of interconnection, transit services are most often provided by the larger networks with national reach and spare capacity, primarily BT and C&W.

TCPs

- 3.13 As explained above, TCPs receive calls from OCPs, and then 'terminate' those calls with the relevant organisation or service being called (the 'service provider' or 'SP'). The SP is therefore a customer of the TCP, buying the use of a number, and the carriage of calls from all of the OCPs to the SP. The TCP receives each call either directly from an OCP or via a transit network. TCPs also supply other services to SPs such as 'intelligent routing' where calls can be switched to different destinations at different times of day, or where traffic levels exceed the ability of the SP to receive them. Other services may range from providing calling statistics, to the use of call centres to answer calls on behalf of SPs. We refer to the various services TCPs supply to SPs as 'hosting'.
- 3.14 Generally, TCPs receive termination revenue from OCPs for calls to non-geographic numbers which they host, which is a proportion of the price charged by the OCP to the caller. Typically, in the case of higher-cost calls or calls to premium rate services, the TCP will pass some of the termination revenue to the SP and this pays for the service being provided by the SP.
- 3.15 The TCP may also charge the SP for the hosting services it provides. In the case of low-cost calls to non-geographic numbers, the TCP may not share the termination revenues with the SP but instead may reduce or waive the charges for hosting services that the SP would otherwise pay.

Resellers

- 3.16 Resellers purchase small blocks of the numbers allocated by Ofcom to TCPs and 'resell' these, either singly or in small numbers to SPs. They also offer hosting services to their SP customers who may have no commercial relationship with the TCP itself. One important role played by resellers is aggregating, across a number of SPs, the small volumes of calls each attracts. This reduces transaction costs and enables the reseller to negotiate a higher share of termination revenue from the TCP

than each SP would be able to secure individually. In this way, the reseller can carve out a margin for itself and offer either services or a revenue share to the SP that the SP may not have been able to obtain on its own.

SPs

- 3.17 The final link in the NGCS value chain is the SP – that is, the customer who buys a connection over which callers can reach them using a non-geographic number. The services provided by SPs to callers cover a wide range of activities including providing access to essential public and Government bodies, commercial activities, entertainment, TV voting, information and adult services and personal ‘follow-me’ numbers. The thing they all have in common is their use of non-geographic numbers to receive calls.
- 3.18 Not all SPs use NGCS to earn income from the services they provide via non-geographic numbers - some are happy to pay for the ability to reach their consumer audience in a way which is convenient for them. However, many do use the income generated by calls to either contribute towards the costs of running their services or as a stand-alone income stream. An example of a service that relies heavily on call revenues is the premium rate number voting line, employed by high profile TV shows where the revenue earned may contribute towards the costs of making the programme.

Size and structure of the NGCS market

- 3.19 As part of the December 2010 Consultation, we presented the 2010 Flow of Funds study. This was a report commissioned by Ofcom and carried out by Analysys Mason which aimed to establish a flow of funds relating to non-geographic numbers, i.e. to ascertain how money moves, and how many calls are passed, through various points of the supply chain for each non-geographic number range. This study therefore provides useful data on the size of the NGCS market.¹⁴
- 3.20 The majority of the figures we have presented below therefore relate to data gathered in 2009 as part of that study. We have gathered more recent data from CPs where it is directly relevant for the purposes of our assessment of different regulatory options (and we have referenced this more up to date evidence in our assessment where relevant). We have not, however, repeated the exercise of gathering this extensive, cross-market data. Nevertheless, it is clear from subsequent related research that the overall picture remains broadly unchanged and the trend in call volume decline has continued. In particular:
- A significant factor reducing call volumes over the last decade has been the fall in the use of dial-up internet services.¹⁵ However, even if dial-up internet services are excluded, non-geographic calls minutes are likely to be declining. For example, for several fixed OCPs non-geographic call minutes in 2010 were lower than in 2009;¹⁶

¹⁴ See the limitations of the study, summarised at pages 23 – 24, in particular in relation to the quality of some of the underlying data.

¹⁵ Communications Market Report 2008, Ofcom, Figures 5.24 and 5.25 on page 312.

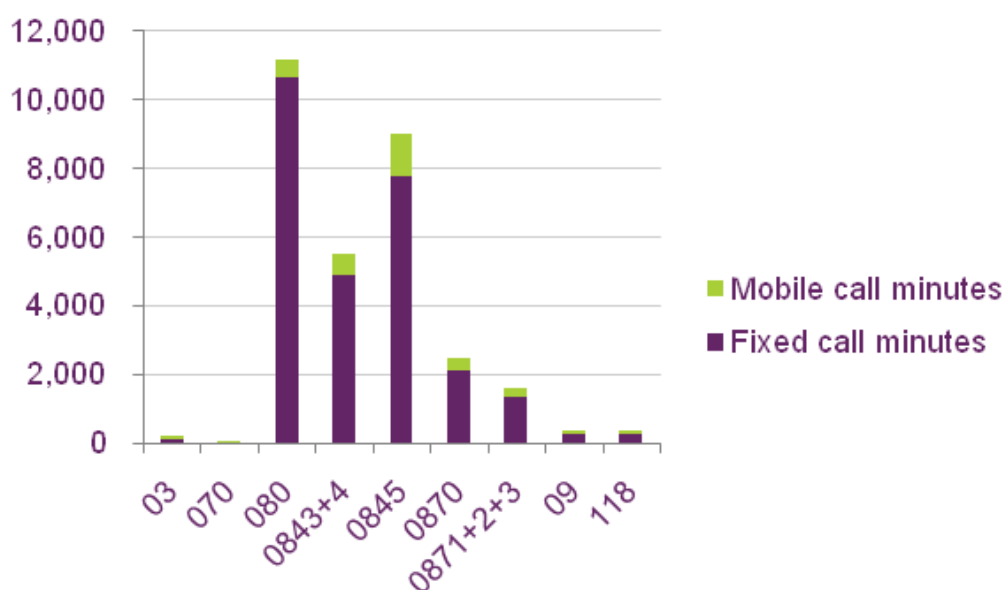
¹⁶ [X]. Responses dated 11 November 2011 to Ofcom information request dated 21 October 2011 from BT (question 6(i)), C&W (question 6(i)), Talk Talk (question 6(i)) and Virgin Media (question 7(i)). Limitations to the available data mean we have not calculated the trend in mobile non-geographic call minutes.

- As well as the impact of changing volumes on call revenues, OCPs have also changed their retail prices since 2009. In particular, the Competition Appeal Tribunal ('CAT') judgment¹⁷ on BT's tiered termination rates for 080, 0845 and 0870 numbers has led to changes in mobile call prices for calls to these numbers (although as explained at paragraphs 3.85 to 3.92 below, call prices remain in a state of flux and we do not consider these prices to be reflective of those that would be set in normal market conditions); and
- VAT has increased to 20% since 2009.

3.21 The Flow of Funds study related to the 03, 070, 08, 09 and 118 number ranges and thus the data below excludes calls to the 05 and 076 ranges. Overall, it found that non-geographic calls accounted for approximately 12% of voice call traffic and 10% of call revenue in 2009.¹⁸

3.22 Strikingly, most non-geographic calls are made from landlines. In 2009, there were approximately 27.5bn minutes of calls to non-geographic numbers from fixed lines and 3.3bn minutes of calls from mobiles.¹⁹ Figure 3.2 shows the breakdown of call minutes between different number ranges. Figure 3.3 shows the percentage share of mobile call minutes for each number range. Non-geographic calls accounted for around 20% of total fixed voice call minutes and just under 3% of total mobile voice call minutes.²⁰ This contrasts with the trend in calls to geographic and mobile numbers, where the trend over many years has been for more calls to be made from mobiles. In 2010 49% of all call minutes originated from mobiles.²¹

Figure 3.2: Non-geographic call minutes (2009)



¹⁷ 'The 08X CAT Judgment', Case numbers 1151/3/3/10, 1168/3/3/10 and 1169/3/3/10.

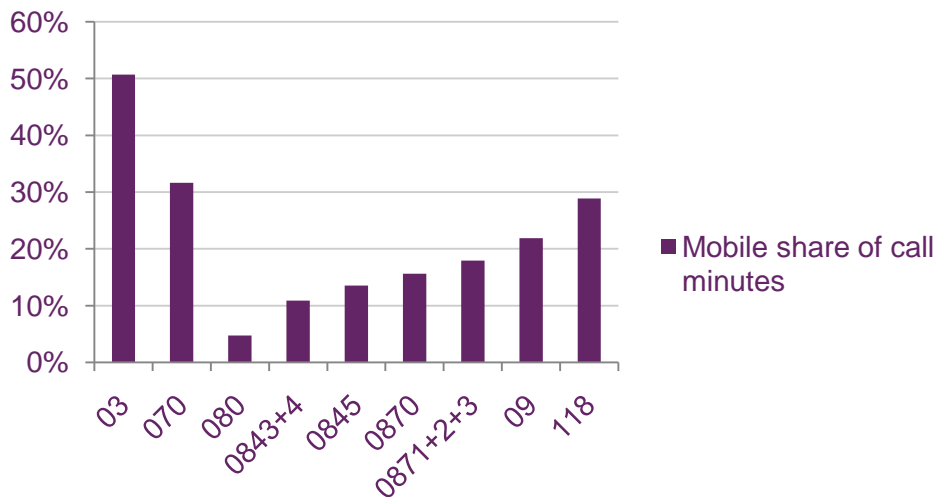
<http://www.catribunal.org.uk/238-7221/Judgment.html>

¹⁸ 2010 Flow of Funds study, page 4.

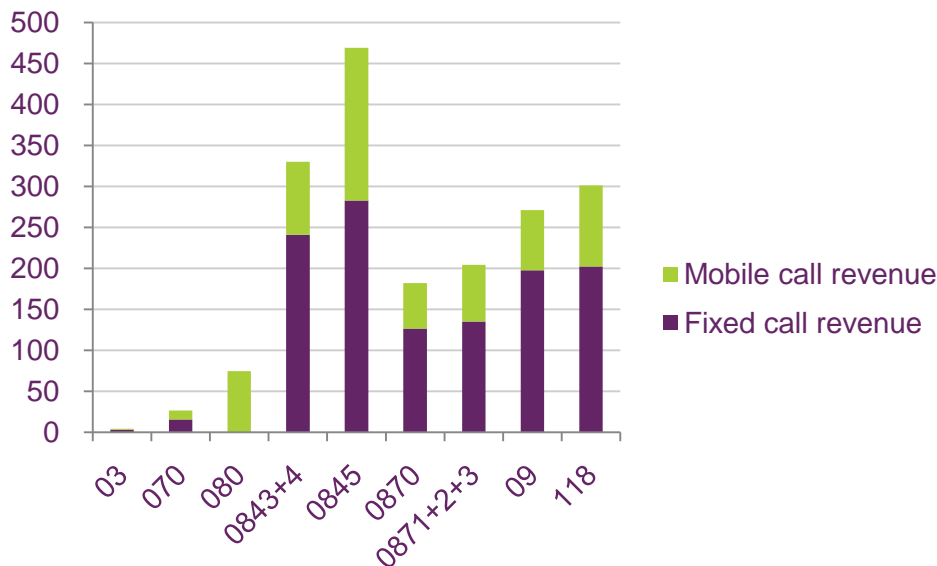
¹⁹ 2010 Flow of Funds study, page 26.

²⁰ 2010 Flow of Funds study, pages 2 and 4.

²¹ Ofcom, CMR, 2011, Figure 5.1 on page 245.

Figure 3.3: Mobile percentage share of call minutes (2009)

3.23 In 2009, callers paid OCPs £1,863m for non-geographic calls (excluding VAT).²² Of this, £1,204m was accounted for by fixed calls and £659m by mobile calls. Figure 3.4 shows the breakdown of call revenue between different number ranges.

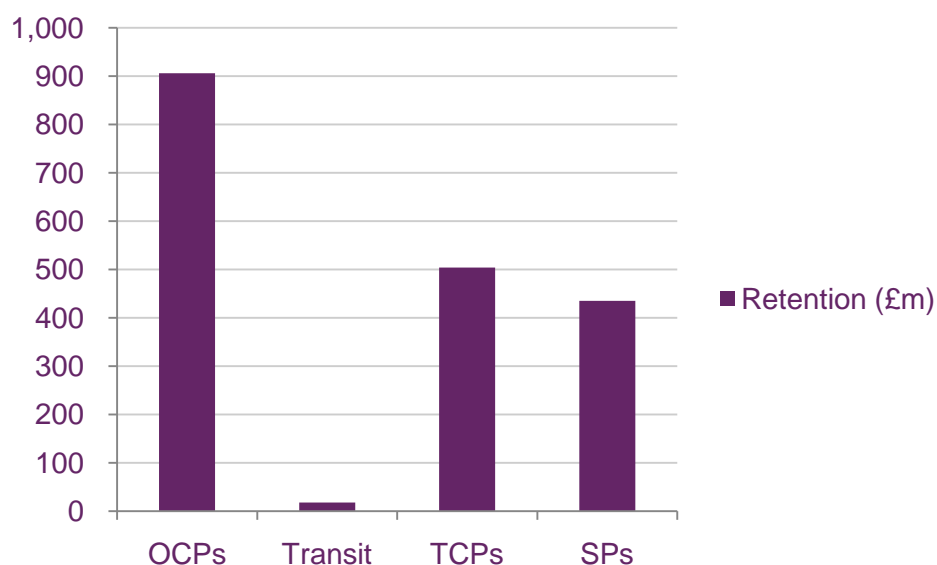
Figure 3.4: Non-geographic call revenue (excluding VAT) (2009)

3.24 As noted above, not all of this retail revenue is retained by OCPs. Overall OCPs retained £906m, transit providers retained £18m, TCPs retained £504m and SPs retained £435m.²³ This split is shown in Figure 3.5; fixed OCPs retained £463m and mobile OCPs retained £443m. In other words, despite accounting for only 11% of call minutes, mobile OCPs accounted for 49% of the retail revenue retained by OCPs.

²² This rises to £2,143m if VAT at 15% (the prevailing rate in 2009) is added. The £1,863m figure above is fractionally lower than the £1,865m figure given on page 38 of the Flow of Funds study. This is because the underlying data from one fixed OCP erroneously attributed retail revenue to 080 calls.

²³ 2010 Flow of Funds study, pages 38-39. OCP retention has been fractionally reduced to address the erroneous inclusion of retail 080 revenue by one fixed OCP.

Figure 3.5: Breakdown of overall retention (2009)



3.25 OCPs' retention varies significantly between number ranges. Table 3.6 below shows average retail prices (including VAT at 15%) and average ppm retention for both fixed and mobile OCPs.²⁴ This table highlights that OCPs' retention appears to be higher on 070, 09 and 118 calls, all of which also have comparatively high average retail call prices. Further, as mentioned above, it shows that mobile OCPs' retention is generally higher than for fixed OCPs.

²⁴ For the purposes of these calculations, no revenue was attached to calls that were part of a bundle of inclusive ('free') minutes. 2010 Flow of Funds study, page 57.

Table 3.6: Average call prices and average OCP retention (2009)

Number range	Average fixed call price (incl. VAT)	Average fixed OCP retention	Average mobile call price (incl. VAT)	Average mobile OCP retention
03	3.4ppm	2.6ppm	1.1ppm	0.4ppm
070	44.0ppm	11.6ppm	67.1ppm	25.9ppm
080	0ppm	0.5ppm	16.2ppm	14.7ppm
0843/4	5.6ppm	1.8ppm	17.1ppm	11.4ppm
0845	4.2ppm	2.0ppm	17.6ppm	13.4ppm
0870	7.0ppm	3.0ppm	16.4ppm	10.6ppm
0871/2	11.8ppm	0.7ppm	27.7ppm	12.2ppm
09	85.1ppm	17.6ppm	113.0ppm	36.1ppm
118	87.0ppm	12.9ppm	104.1ppm	23.1ppm

3.26 SPs' retention also varies significantly between number ranges. For example, 080 SPs make a net payment to TCPs while 09 SPs receive a net income from TCPs. To illustrate, Table 3.7 below sets out net SP revenue from TCPs (where this figure is negative then SPs are making an overall payment). It also shows the average net SP revenue in pence per minute ('ppm') terms.²⁵

²⁵ This ppm figure has been rounded to the nearest whole penny.

Table 3.7: Net SP revenue/payments (2009)

Number range	Call minutes	Net SP revenue	Average SP revenue
03	223m	£0m	0ppm
070	59m	£14m	23ppm
080	11,188m	-£120m	-1ppm
0843/4	5,506m	£88m	2ppm
0845	9,010m	£16m	0ppm
0870	2,477m	£21m	1ppm
0871/2	1,609m	£96m	6ppm
09	342m	£181m	53ppm
118	377m	£139m	37ppm

The marketing and pricing of non-geographic calls at the retail level

3.27 Consumers do not buy non-geographic calls separately. Typically, either:

3.27.1 Consumers choose an OCP from whom they buy general voice services, a connection, a number that they can be called on and the ability to make geographic calls, non-geographic calls and international calls;²⁶ or

3.27.2 Consumers' fixed or mobile voice services are only one component of a bundle of services – that could include telephony, broadband and pay TV. In 2011, 53% of UK households bought two or more communications services from a single supplier in a bundle.²⁷

3.28 Therefore, non-geographic calls, which represent just over 10% of all voice calls, are likely to be a relatively small component of the services which the consumer acquires from its chosen OCP.

3.29 This has affected the way in which prices for non-geographic calls have developed. In looking at this, we set out first the current regulation of retail prices for these calls before analysing the prices that consumers can pay for non-geographic calls.

Current regulation of retail prices for non-geographic calls

3.30 The OCP is responsible for setting the retail price of non-geographic calls. With the exception of BT, OCPs are relatively free in how they set these retail prices.

²⁶ An exception to this situation, not directly relevant for this consultation, is one where the supplier of some or all calls, and the supplier of the connection, are different companies (ie buying a BT fixed line and international calls from another company).

²⁷ Communications Market Report ('CMR') 2011, Ofcom, page 21, http://stakeholders.ofcom.org.uk/binaries/research/cmr/753567/Consumer_research_2010_FINAL.pdf

- 3.31 All OCPs are subject to the following regulatory conditions in relation to the 03, 080 and 0870 ranges²⁸:
- 03 calls must be charged at up to the same rate the customer would pay to call a UK geographic number. Moreover, calls to 03 numbers should count towards inclusive call minutes and be included in any discount structures that apply to UK geographic numbers;
 - the OCP should not charge the caller for 080 calls, except where charges are notified to callers at the start of the call. Subject to this requirement, OCPs are free to set whatever level of prices they wish. We have previously expressed a policy preference that 080 calls ought to be free to the caller, and if they are not free, that they are as close to free as possible;²⁹
 - for 0870 calls, the OCP should charge no more than the caller would pay for a call to a geographic number (with calls to 0870 numbers counting towards inclusive call minutes and included in any discount structure that applies to geographic calls), except where call charges have been published in accordance with regulatory requirements. We have previously expressed a policy preference that 0870 calls should be treated the same as calls to geographic numbers;³⁰
- 3.32 Subject to these constraints, OCPs, other than BT, are free to set whatever retail price they wish for calls to non-geographic number ranges.
- 3.33 BT's position is different because it is subject to additional regulatory requirements in relation to call origination to non-geographic numbers. In 2003, Oftel (Ofcom's predecessor) concluded that BT had SMP in the wholesale call origination market and imposed a number of SMP conditions on BT, including a requirement to originate and retail calls to NTS numbers on behalf of other TCPs known as the "NTS Call Origination Condition".³¹
- 3.34 The NTS Call Origination Condition allows BT to deduct the costs it incurs in: (i) originating the call; (ii) retailing the call (the "NTS Retail Uplift"); and (iii) making provision for bad debt for premium rate services ("PRS") calls, before passing the remainder of the retail charge (the amount that the caller pays) on to the relevant TCP. The amount that BT passes to the TCP can then be used by the TCP to fund revenue share payments to its NTS service providers. BT's call origination charges and NTS Retail Uplift charge are regulated by a charge control – another of the remedies imposed by Ofcom to address BT's SMP in the wholesale call origination market (see previous paragraph). The other deductions that BT makes are also regulated.

²⁸ All OCPs are also required to charge 116XXX numbers at the rate designated in the Numbering Plan (which is either free to caller or Freephone).

²⁹ Ofcom, *Determination to resolve a dispute between BT and each of T-Mobile, Vodafone, O2 and Orange about BT's termination charges for 080 calls*, 5 February 2010 ('the 080 Dispute Determination'), see paragraph 2.33,

http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_bt_tmobile_vodafone/nonconf.pdf

³⁰ Ofcom, *Determination to resolve a dispute between BT and each of Vodafone, T-Mobile, H3G, O2, Orange and Everything Everywhere about BT's termination charges for 0845 and 0870 calls*, 10 August 2010 ('the 0845/0870 Dispute Determination'), paragraph 2.51,

http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/closed-cases/all-closed-cases/761146/Final_Determination.pdf

³¹ 'SMP' means 'significant market power'.

- 3.35 The NTS Call Origination Condition remains in place today although it has been amended a number of times.³² It applies to the 0500, 080, 082, 084, 0871/2/3 and 09 number ranges.
- 3.36 In relation to those ranges where the condition does apply, the amount that BT can retain from its retail charges for calls to those ranges is constrained. Consequently, its practice is to charge in line with the pricing guidance set out in the Numbering Plan, namely:
- for 0843/44 calls, no more than 4.26ppm or ppc (excluding VAT);
 - for 0845 calls, BT's Standard Local Call Retail Price (as for 0870 calls, BT charges these calls at the equivalent rate for a geographic calls);
 - for 0871/2/3 calls, no more than 8.51ppm or ppc (excluding VAT);
 - for 09 calls, no more than 127.66ppm or ppc (excluding VAT).

Retail prices which consumers pay for non-geographic calls

- 3.37 As a result of this regulatory patchwork, different consumers pay very different prices for calls to the same numbers, when calling using different OCPs. In analysing this as part of the December 2010 Consultation, we obtained information in relation to:
- OCPs pricing policies as regards non-geographic calls and the extent to which they were charged within a bundle of inclusive minutes;
 - the price of non-geographic calls compared to that for geographic calls;
 - price variations between OCPs and between number ranges.

Pricing policies for non-geographic calls

- 3.38 We asked OCPs for a high level description of their pricing policy towards NGCs, for example how they determined whether NGCs would form part of bundle of inclusive ('free') call minutes.³³
- OCPs' responses varied, with some suggesting that NGCs were not a significant focus in their own right (viewing them as part of an overall proposition), while others considered cost recovery on each non-geographic number range individually.
 - Fixed and mobile OCPs appear to take different approaches to setting prices, most noticeably in terms of whether to charge for non-geographic calls. Some OCPs indicated that the reason why NGCs were outside bundles of inclusive ('free') call minutes was, at least in part, due to the revenue share arrangements on some number ranges. In simple terms, some mobile OCPs seek to avoid including calls to particular number ranges in their inclusive bundles (so that calls were 'free' to consumers if they did not exceed their monthly bundle of minutes) if

³² *Wholesale charges for Number Translation Services and Premium Rate Services*, 20 July 2011 ('Retail Uplift Statement'), published at: http://stakeholders.ofcom.org.uk/binaries/consultations/nts-retail-uplift/statement/NTSRU_statement.pdf

³³ Informal information request, June 2010, OCP question 2.

the OCP knew they would pay money to a TCP for every minute or call to that number.

- 3.39 This description of the pricing policy and consumer attitudes appeared to be supported by some actual price changes. For example, BT has included 0845 calls within its call plans since January 2009 (unless they are used for internet access). In response to a question asking BT how consumers had reacted to this change, BT stated: "... the cost of 0845 calls is only one factor among many which affects customer perceptions, which are affected by the prices for a whole range of services, not least the overall rates for bundled propositions so it is difficult to trace any direct effect on VFM [value for money] perceptions from just from one price change."³⁴
- 3.40 Many consumers opt for call plans from their fixed provider which offer them unlimited calls at certain times of the day or week (for example weekends, evenings, or all day). For post-pay mobile consumers, calls to geographic and mobile numbers are generally part of a bundle of inclusive ("free") minutes. Pre-pay consumers generally incur a charge each time they call a geographic or mobile number.
- 3.41 In May to June 2010 we asked OCPs to provide data on the proportion of calls that fell into the following two categories:
- "Within bundle" calls which was defined as calls to non-geographic numbers that are part of a bundle of inclusive minutes and for which the caller does not pay any additional charge; and
 - "Out of bundle" calls which was defined as calls to non-geographic numbers that are not part of a bundle of inclusive minutes and for which the caller pays an additional charge.
- 3.42 The responses to this question form part of the underlying the 2010 Flow of Funds study and are summarised in Table 3.8 below.

³⁴ BT response dated 12 July 2010 to Ofcom's informal information request dated 21 June 2010, OCP Q6.

Table 3.8: Proportion of NGCs that are sold in and out of inclusive bundles by number range (2009)

	Fixed		Mobile	
	“Within bundle” calls	“Out of bundle” calls	“Within bundle” calls	“Out of bundle” calls
03	13%	87%	92%	8%
070	4%	96%	0%	100%
080	0%	100%	3%	97%
0843+4	1%	99%	3%	97%
0845	20%	80%	3%	97%
0870	20%	80%	1%	99%
0871+2+3	1%	99%	0%	100%
09	0%	100%	0%	100%
118	0%	100%	0%	100%
Across all NGCs	7%	93%	5%	95%

3.43 As shown in the Table above in 2009 non-geographic calls were generally charged ‘out of bundle’, on the definition set out above. The main exception was mobile calls to 03 numbers, almost all of which were included ‘within bundles’. This reflects the regulatory requirement that calls to this number range be priced in the same manner as calls to geographic numbers. Apart from this, very few mobile calls were ‘within bundle’.³⁵ For fixed OCPs, in 2009 calls to the 0845 and 0870 number ranges (and to a lesser extent 03) were the most likely to be ‘within bundle’.³⁶

3.44 More recently, in October 2011, we asked mobile OCPs for updated figures on the proportion of 080, 0845 and 0870 calls that were ‘in bundle’. The Table below demonstrates that the proportion of 0845 and 0870 calls ‘in bundle’ has increased slightly (e.g. from 3% in 2009 to 5% in 2011 for 0845 calls and from 1% to 5% for 0870 calls). The proportion of 080 calls ‘in bundle’, has, however, increased significantly (from 3% in 2009 to 32% in 2011). We consider that this increase is more likely to represent 080 calls that are now free to call rather than that 080 calls being included ‘within bundles’ of call minutes (for example, the zero-rating of a number of 080 helplines offered by the Department of Work and Pensions (‘DWP’) in January 2010).

³⁵ As discussed in the December 2010 Consultation, some mobile OCPs offered bolt-on packages for consumers that are particularly interested in making NGCs. For example, Vodafone offered its post-pay customers the opportunity to pay an additional £5 per month to be able to use their inclusive minutes to call 0800, 0845 and 0870 numbers (source: email from Vodafone dated 12 August 2010).

³⁶ In addition, fixed OCPs did not charge for calls to 080 numbers.

Table 3.9: Proportion of 080, 0845 and 0870 mobile residential calls (pre and post-pay) that are sold in and out of inclusive bundles (August 2011)³⁷

	“Within bundle” calls	“Out of bundle” calls
080	32%	68%
0845	5%	95%
0870	5%	95%

Price of NGCs compared to geographic calls

- 3.45 Non-geographic call prices are often higher than the price of geographic calls. This is perhaps unsurprising given that several non-geographic number ranges support a degree of revenue sharing with the SP (e.g. 0845, 0844, 0871/2/3 and 09).
- 3.46 To illustrate, in 2009, NGCs accounted for approximately 20% of fixed call minutes but 23% of fixed call revenue. If 080 calls are excluded, then approximately 23% of call revenue came from 13% of fixed call minutes.³⁸ Similarly, in 2009 NGCs accounted for approximately 3% of mobile voice call minutes and nearly 6% of total mobile call revenue.³⁹
- 3.47 This can also be illustrated by a number of examples (some of which are taken from the December 2010 Consultation):⁴⁰
- Virgin Media either do not charge for geographic calls (over and above the monthly subscription fee) or charge 9.94ppm (plus a 14.94p set up fee), depending on the package selected.⁴¹ This is consistently lower than the maximum prices for NGCs (excluding 080) – see Table 3.11 below.
 - The difference is much less stark for BT, given the regulatory constraints on its NGC prices. Its daytime rate of 7.95ppm (plus a 13.1 set up fee) for geographic calls on its Unlimited Weekend tariff is much more in line with many more NGC prices (with the exception of 0871 and 09), particularly given that 0845 and 0870 numbers are included within its call packages – see Table 3.11 below.⁴²
 - O2 (like most mobile OCPs) includes geographic calls in bundles of inclusive minutes for post-pay customers. In contrast, with the exception of some 080 calls, callers on its most popular post-pay tariffs in 2010 faced an additional charge for calling non-geographic numbers – see Table 3.12 below.⁴³

³⁷ Source data from EE, O2, Three and Vodafone in response to formal information requests issued under s.135 of the Act in October 2011.

³⁸ 2010 Flow of Funds study, page 3.

³⁹ These figures relate to the five national mobile networks in 2009 (O2, Vodafone, T-Mobile, Orange and Three). 2010 Flow of Funds study, page 4.

⁴⁰ December 2010 Consultation, paragraphs A2.47-A2.48.

⁴¹ <http://shop.virginmedia.com/phone/calling-costs.html>

⁴² <http://www.productsandservices.bt.com/consumerProducts/displayTopic.do?topicId=25512>

⁴³ O2 charges 20ppm for geographic calls made outside of the bundle of inclusive minutes. However, most consumers did not use up all their inclusive minutes and therefore face an effective per minute charge of zero for geographic calls (in 2008, only 14% of mobile contract users claimed to usually

- This difference is less stark for O2's pre-pay customers who pay 25ppm for geographic calls. This was in line with many NGC prices on its most popular pre-pay tariffs in 2010 (see Table 3.12 below). However the geographic call price falls to 5ppm after the first three minutes which is significantly lower than NGC prices.⁴⁴
- Similarly Vodafone includes geographic calls in inclusive minutes for post-pay customers and charges pre-pay customers 25ppm for geographic calls.⁴⁵ This is lower than prices for NGCs under its most popular tariffs in 2010 – see Table 3.12 below.

Degree of price variation in NGCs

3.48 Below we discuss three types of price variations in NGCs:

- variation between OCPs: we explain how the charges to call a specific number – e.g. a call to a bank – vary between providers;
- variation within number ranges: we explain how prices for NGCs vary within each number range (i.e. whether customers on a particular tariff face multiple price points for calls to the same number range); and
- variation between similar number ranges: we explain how retail prices can vary for calls to non-geographic numbers with similar prefixes, for example 0844 and 0845, and 0870 and 0871.

3.49 We now consider each of these below.

Variation between OCPs

3.50 In order to consider the extent of this variation, in May-June 2010 we asked OCPs about the cost of a three minute call under their most popular tariff to specific non-geographic numbers (e.g. Odeon cinemas, Argos, and Easyjet).

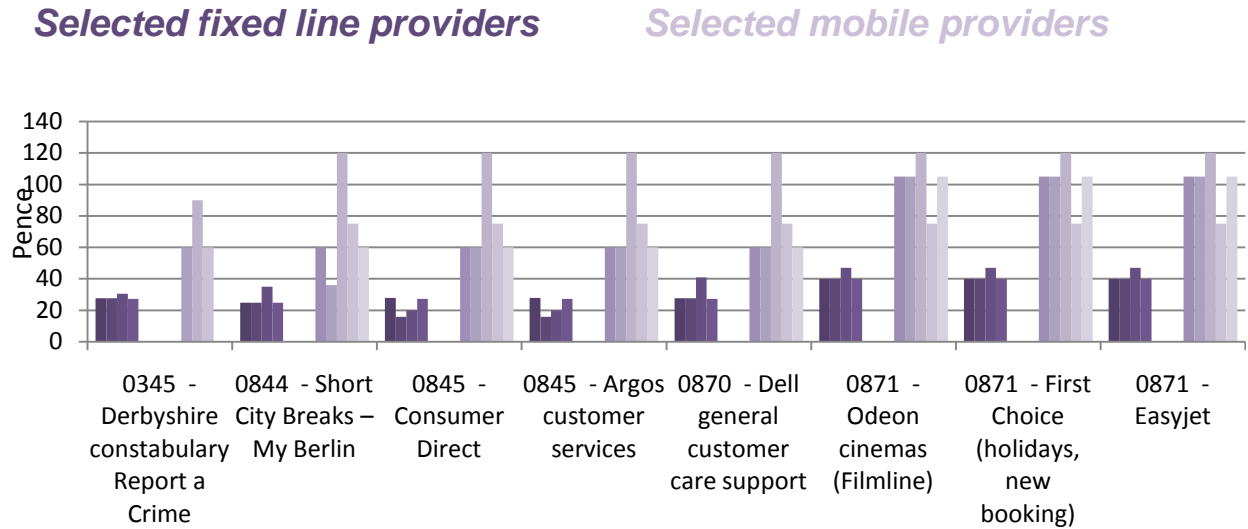
3.51 Figure 3.10 below summarises the responses to this question. In 2010 there was significant variation in the price of calls to the same non-geographic numbers across a selection of both fixed and mobile OCPs. Calls from mobiles tended to be significantly more expensive than calls from fixed lines, but even within the fixed and mobile categories there are some variations for calling the same number. These variations are less frequent and less significant for fixed OCPs.

exceed their allowance of inclusive minutes. 2008 Communications Market Report, Figure 5.7 on page 298).

⁴⁴ <http://www.o2.co.uk/tariffs/payandgo>

⁴⁵ <http://www.vodafone.co.uk/personal/price-plans/pay-as-you-go/call-charges/index.htm>

Figure 3.10: Variation in price of three minute call to specific SPs under fixed OCP's "most popular" tariff in daytime and mobile OCPs "most popular" post-pay tariff (2010)



3.52 The variation between OCPs means it is almost impossible for SPs to provide concise, accurate pricing information for all callers. As a result SPs can currently only provide a generic message such as

“calls cost 10ppm from a BT landline, costs from other providers may vary and from mobiles it may cost considerably more”.

Variation within number ranges

3.53 Current data (and data from August 2010 in the case of mobile OCPs) shows that for many OCPs, there was a range of retail price points within a single non-geographic number range. Although mobile call prices tend to be higher than fixed NGC prices (see above), multiple price points within a number range appear to be more common for fixed OCPs. Although there is sometimes a single price within a tariff for cheaper NGCs (i.e. 080, 0845 and 0870), this becomes much less common in the case of more expensive NGCs, where a range of prices appears to be more prevalent for both fixed and mobile OCPs (and this range can be relatively wide).⁴⁶

⁴⁶ There can also be multiple price components for NGCs – namely a call setup or connection charge and a pence per minute price.

Table 3.11: Range of retail prices for non-geographic number ranges for customers of specific tariff for each fixed OCP⁴⁷

Daytime (excluding any call set-up charges)	BT Unlimited Weekend Plan	Talk Talk Plus Plan	Virgin Media “M” Package	Sky Talk Freetime package
0800	free	free	free	free
0844	1-5.1ppm	0.5-8ppm	0-9.18ppm	1-6.13ppm
0845	Inclusive in package up to 60 mins per call then either 0.5 or 2ppm thereafter.	Inclusive in package up to 60 mins per call then 7.95ppm thereafter	10.22ppm	6.13ppm
0870	Inclusive in package up to 60 mins per call then either 1.05 or 7.95ppm thereafter	Inclusive in package up to 60 mins per call then 7.95ppm thereafter	10.22ppm	Inclusive in package up to 60 mins per call then 7.6ppm thereafter
0871	1-10.2ppm	5 or 10.22ppm	0-14.26ppm	1-10.21ppm
09	5-153ppm	1.5-168.57ppm	0-153ppm	5-153ppm

Source: Respective company websites accessed March 2012

⁴⁷ We presented the same table with information from August 2010 in the December 2010 Consultation (A2.4 on page 139).

Table 3.12: Range of retail prices for non-geographic number ranges for customers of specific tariffs for each major mobile OCP (August 2010)⁴⁸

	Vodafone		Orange		O2		T-Mob		Virgin Mobile*	
	Post-pay	Pre-pay	Post-pay	Pre-pay	Post-pay	Pre-pay	Post-pay	Pre-pay	Post-pay	Pre-pay
0800	0-20 ppm	0-25 ppm	0-15 ppm	0-25 ppm	0-20 ppm	0-20 ppm	0-40 ppm	0-40 ppm	Up to 15ppm	Up to 15ppm
0844	20ppm	25ppm	10, 12 or 75ppm	40p min. charge	20ppm	25ppm	40ppm	40ppm	No more than 50ppm	No more than 50ppm
0845	20ppm	25ppm	20ppm	40p min. charge	20ppm	25ppm	40ppm	40ppm	40ppm	40ppm
0870	20ppm	25ppm	20ppm	40p min. charge	20ppm	25ppm	40ppm	40ppm	No more than 50ppm	No more than 50ppm
0871	35ppm	25ppm	35ppm	40ppm	35ppm	35ppm	40ppm	40ppm	No more than 50ppm	No more than 50ppm
090	50-200 ppm	50-200 ppm	50-170 ppm or ppc	50-170 ppm or ppc	50 or 80ppc or 80, 100, 150 or 200ppm	50 or 80 ppc or 80, 100, 150 or 200 ppm	75-300	75-300	50-250ppm	50-250ppm

*Information provided is for mobile-only tariffs, and so excludes any tariff available when bundled with TV and/or broadband

Source: Respective company websites accessed August 2010

3.54 This kind of variation means that, once a consumer has subscribed to a particular retail tariff package, there are potentially a range of prices relating to individual non-geographic number ranges that consumers would either have to remember or look up before making a call.

3.55 For consumers wishing to look up this information, it can often involve opening large files from the website of an OCP and searching for the specific number in question, potentially using up to five, six or even seven digits. Whilst this is most prevalent for the 070, 09 and 118 number ranges,⁴⁹ some OCPs also appear to use such lists for 0844 and 0871.⁵⁰ In addition, some OCPs use such a price list only to provide a call classification code which then requires a customer to search another list to find the actual price⁵¹ which may even be in a different file/on a different webpage.⁵²

⁴⁸ As explained in paragraph 3.91 we consider that current mobile prices do not reflect prices that would be set in normal market conditions and we have therefore not updated this table to reflect more recent prices. In Part C, Section 14 we set out, however, the most recent prices for 080 numbers.

⁴⁹ See for example, the post-pay price list for Orange:

http://www1.orange.co.uk/service_plans/downloads/09-Premium-rate-numbers-August-2010.pdf.

⁵⁰ For example, Talk Talk's 171 page price list

https://m1.ttxm.co.uk/sites/broadband.talktalk.co.uk/pricing/pdf/TalkTalk_NGN_prefixes_01FEB12.pdf

Whereas Asda Mobile just states 'various' for these numbers and consumers are told to contact customer services to find out the cost: http://www.asdamobile.com/compare_tariffs.html

⁵¹ See for example, BT's tariff guide for "Prices for calls to Specialised Numbers from BT Residential Fixed Lines"

<http://www.productsandservices.bt.com/consumer/consumerProducts/pdf/SpecialisedNos.pdf>

⁵² Virgin Media's guide "Calls from home UK non-geographic calls"

http://shop.virginmedia.com/content/dam/all yours/pdf/010911_Non%20geo_V1.pdf

- 3.56 Some mobile OCPs in particular have tried to make it easier for consumers to check the price of a number by providing special ‘number checker’ tools, where the consumer can enter the individual number they wish to call and they will be advised of the cost.⁵³

Variation between similar number ranges

- 3.57 There is also variation in the prices of calls to non-geographic number ranges which have similar prefixes and may only differ in the fourth digit, such as 0844 and 0845 or 0870 and 0871.⁵⁴
- 3.58 As shown in Tables 3.11 and 3.12 above, consumers can face quite different retail prices for some NGCs with similar prefixes, although this variation appears to be less for mobile customers. For example, the maximum price for 0871 calls on those fixed tariffs considered is consistently above the maximum price for 0870 (which is often included in inclusive call bundles now). Indeed for some of them, 0871 calls may be double the price of 0870 calls. There is a similar picture for 0845 and 0844 calls from the fixed tariffs, where some 0844 calls are more than double the 0845 price (and three times the price for Virgin Media “M” customers). For those mobile tariffs considered in Table 3.12, price variations between non-geographic number ranges with similar digits are much less common, particularly for 0844 and 0845.
- 3.59 This variation may be unsurprising given that prices, in part, reflect the extent of revenue share which varies across these numbers (for example there is no revenue share for 0870 but there is for 0871).
- 3.60 In summary, this analysis helps explain why the retail prices for non-geographic calls are particularly complex. There is a patchwork of retail price regulation and a wide variation of prices between OCPs and within number ranges in an individual OCP price list. As a result price information is not always readily accessible in relation to a number of number ranges, although some OCPs have sought ways to present clearer information to consumers. Nevertheless, given this underlying complexity in the prices, we consider there is likely to be consumer confusion about the prices they might face when making a call. We discuss this in more detail in Annex 8.

The operation of the wholesale level

- 3.61 When an OCP conveys a NGC to a TCP this can be thought of as:
- the TCP providing call termination to the OCP; or equivalently
 - the OCP providing call origination to the TCP.⁵⁵

⁵³ For example, Three, http://www.three.co.uk/standalone/Number_checker, Vodafone (for 09 and 118 numbers) <http://www.vodafone.co.uk/personal/price-plans/pay-monthly/call-charges/index.htm>, T-Mobile <https://www.t-mobile.co.uk/pricing-data/dest-num-check/>.

⁵⁴ Vodafone raised concerns about 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) in its response to the Call for Inputs, paragraph 14, May 2010.

⁵⁵ This is a simplification, and it is not always simply a matter of convenience or preference to choose between these two models of service provision – the substantive situation in relation to any particular OCP/TCP relationship may vary reflecting a number of case-specific factors, including the nature of the interconnection agreement, the commercial arrangements surrounding that agreement (for example, commercial practices in relation to the passing of calls and money) and the relationships

- 3.62 In this consultation, we adopt a convention to describe this situation as the provision of ‘call termination’, and the revenue earned by the TCP is referred to as the ‘termination rate’ (and we use both these terms throughout the rest of this document).⁵⁶
- 3.63 We set out how termination rates are determined, in detail in Section 5 and Annex 3 of the December 2010 Consultation.⁵⁷
- 3.64 In addition to that analysis, we consider below the other potential regulatory constraints on the setting of termination rates, in particular the relevance of the access-related condition⁵⁸ applied to BT and the role of Ofcom’s dispute resolution function. We also set out how number ranges are activated and tariffs established.
- 3.65 In summary, termination rates for non-geographic calls differ by number range and by time of day, as well as also depending on the point at which the call is handed over to the terminating network. Recently BT and a number of other operators have introduced termination rates that vary depending on the retail price of calls. We discuss this in further detail in paragraphs 3.85-3.92 below.
- 3.66 In the following sub-section we describe how termination rates are determined for calls originating on BT’s network, for calls terminating on BT’s network and for calls where BT is neither the OCP nor the TCP. Finally we summarise recent developments at the wholesale level.

Calls originating on BT’s network

- 3.67 We have previously concluded that BT has SMP in wholesale call origination on fixed narrowband networks in the UK excluding the Hull area. As a result of that SMP finding, BT is subject to the NTS Call Origination Condition. As set out earlier, this condition applies to calls to 0500, 080, 082, 084, 0871/2/3 and 09 numbers.⁵⁹ The condition regulates the margin that BT can retain on these calls. As a result, the termination rate when these calls are retailed by BT is the residual left after the regulated charges permissible under the NTS Call Origination Condition are deducted from the retail price. In other words, given the retail price of a call, the termination rate can be determined automatically.
- 3.68 As explained above, BT’s retail call prices for non-geographic calls tend to be set by reference to the price guidance in the designations in the Numbering Plan. Nevertheless, it has not always priced to the top of the guidance limit. For example, in 2006, BT effectively reduced the price of 0845 calls (by increasing the level of retail discounts offered on such calls) which had the effect of reducing the termination

with various wholesale and retail customers. It may also vary between types of traffic (i.e. between number ranges) and even, under some circumstances, from one call to another.

⁵⁶ Note that BT sometimes refers to the termination rate that it pays to third party TCPs as the POLO (‘Payment to Other Licensed Operator’).

⁵⁷ In particular see paragraphs 5.48 to 5.51 and A3.38 to A3.58 of the December 2010 Consultation.

⁵⁸ Access-related condition set under section 73(2) of the Act, 13 September 2006

http://stakeholders.ofcom.org.uk/binaries/consultations/end_to_end/statement/statement.pdf

⁵⁹ Condition AAA11 (“Requirement to provide NTS Call Origination”). The NTS Call Origination Condition does not apply to calls to 0844 04 and 0808 99 numbers, which are used for Surftime Internet access and fixed rate internet access call origination (“FRIACO”) respectively. See the definition of “NTS Calls” set out in the Wholesale Narrowband Statement, Annex 8, Schedule 1.

http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/summary/main.pdf

rate received by other TCPs.⁶⁰ BT has also varied its call set-up fees. An increase in these will raise the termination rate that BT pays for calls originating on its network.

- 3.69 In addition to the NTS Call Origination Condition, BT is also subject to an Access Condition set under s73(2) of the Act. This Condition obliges BT to purchase wholesale narrowband call termination services on reasonable terms and conditions (including charges) from a requesting CP.
- 3.70 Therefore, although calls to the 03, 055, 056, 070, 0870, 116 and 118 number ranges are not covered by the NTS Call Origination Condition, BT remains obligated to purchase termination. As no exact rate is set under the Access Condition, termination rates for calls to these numbers are essentially determined by commercial negotiations, subject to the rate being determined by dispute should negotiations fail. We have determined some of these rates through disputes under the Act.⁶¹
- 3.71 From the perspective of the TCP, calls that originate on BT's network but which are retailed by a third party (as in the case of carrier pre-selection), are indistinguishable from calls retailed by BT. They thus attract the same termination rates as if BT retailed the call.

Calls terminating on BT's network

- 3.72 For calls terminated by BT (i.e. where BT is the TCP), the termination rate is not directly regulated and is instead determined commercially. However, historically BT set the same termination rate as if the call originated on its network i.e. the termination rate determined by the operation of the NTS Call Origination Condition. In recent years, this situation has started to breakdown, especially in relation to calls originating on mobile networks. BT has introduced laddered termination rates, which we discuss further in paragraphs 3.85-3.92 below.
- 3.73 Although there is no *ex-ante* regulation in place for these calls, where commercial negotiations fail to agree a rate, the parties can bring a dispute to Ofcom for a rate to be determined. Dispute resolution powers derive from the European Common Regulatory Framework and we are required to resolve disputes in accordance with relevant policy objectives. Dispute resolution is, therefore, a regulatory tool in its own right. We discuss dispute resolution in more detail as part of our legal framework in Section 5 below.

Calls between non-BT networks

- 3.74 Finally, we discuss the case where BT is neither the OCP nor the TCP.
- 3.75 We understand that, in principle and subject to dispute resolution, the termination rate is determined commercially in these circumstances. However few communications providers other than BT interconnect directly with each other.⁶² As a result, the OCP generally uses a third party transit provider, such as BT, to convey the call to the TCP's network.

⁶⁰ This ultimately led to a dispute between BT and some TCPs. See *Determination to resolve a dispute between BT and various communications providers about NTS outpayments*, 4 June 2007, available at http://stakeholders.ofcom.org.uk/binaries/consultations/deter_nts/bt_nts.pdf

⁶¹ See the 0870 Dispute Determination and the 03 Dispute Determination.

⁶² There is a fixed cost associated with interconnecting at each interconnection point, which means it is generally uneconomic for competing network operators to establish direct interconnection unless large volumes of traffic are involved.

- 3.76 Historically, where non-geographic calls transit BT's network, BT has paid the TCP the same termination rate that it (BT) would have paid if the call originated on its network and BT has charged that termination rate to the third party OCP that originated the call. As explained above, for most non-geographic calls this termination rate is determined by regulation. This arrangement was a consequence of the way in which BT's billing system operated. As a result, for calls that transited BT's network, TCPs were unable to charge a different termination rate to that charged to BT. Moreover, because the OCP had the option of routing calls via BT's network (and thereby obtaining the BT termination rate), this constrained the ability of TCPs to significantly diverge from the termination rate paid by BT, even if they directly interconnected with the OCP. The asymmetry between BT's position (being able to vary termination rates, subject to commercial constraints) and that of other TCPs (being unable to vary termination rates) played a major part in our past statements and consultations.
- 3.77 However, we understand that the situation is changing. BT has informed us that it has introduced a cascade billing capability which allows TCPs to charge OCPs different termination rates to those charged to BT.⁶³

Summary of regulation affecting termination rates

- 3.78 As explained above, the manner in which termination rates are generally determined depends on whether or not BT is involved in a particular call, as they are subject to the only *ex ante* regulatory obligation in this area. The following table summarises the different positions:

⁶³ 0845/0870 Dispute Determination, paragraph 5.212 of Annex 3.

Table 3.13: Current regulation of termination rates

OCP	TCP	Regulation affecting termination rate		
BT	Non-BT	SMP Regulation NTS Call Origination Condition applies to 0500, 080, 082, 084, 0871/2/3 and 09 ranges. Termination rate is BT's retail price minus regulated margin	Access Regulation BT required to purchase termination services on reasonable terms and conditions	Dispute Resolution A failure to commercially agree a termination rate can be referred to Ofcom as a dispute. Disputes will be resolved with reference to statutory policy objectives.
Non-BT	BT	SMP Regulation No regulation. No SMP held by non-BT OCP / any TCP in relation to non geographic numbers	Access Regulation No regulation relevant where BT acts as TCP.	Dispute Resolution A failure to commercially agree a termination rate can be referred to Ofcom as a dispute. Disputes will be resolved with reference to statutory policy objectives.
Non-BT	Non-BT	SMP Regulation No regulation. No SMP held by non-BT OCP / any TCP in relation to non geographic numbers	Access Regulation No regulation.	Dispute Resolution A failure to commercially agree a termination rate can be referred to Ofcom as a dispute. Disputes will be resolved with reference to statutory policy objectives.

3.79 The Table above therefore shows that the termination rate paid by BT is more heavily influenced by regulation. Historically, for a number of reasons including the regulation of BT, the same termination rate has generally applied to all types of calls. However, as we highlighted in the December 2010 Consultation, these arrangements are increasingly breaking down. For calls originated by parties other than BT, in particular for calls that are terminated by BT, TCPs are increasingly diverging away from the rates that apply when BT originates a NGC.

Number range activation and changes to wholesale tariffs

3.80 In order to open up a new non-geographic number range, a CP must first submit an application to Ofcom's Numbering Team for a block of numbers within a specific number range.⁶⁴ The size of allocated number blocks varies for different non-

⁶⁴ There are specific Numbering Application forms for each of the different number ranges which CPs are required to complete in order to submit an application. See, <http://stakeholders.ofcom.org.uk/telecoms/numbering/applying-activating-tele-no/applying-tele-numbers/>

geographic number ranges, but they are usually either allocated in 1,000 or 10,000 blocks of numbers. Ofcom's Numbering Team manages and publishes the National Numbering Scheme which contains details of all the allocated number ranges and those still available for allocation.⁶⁵ Once a number block is allocated, the Numbering Team issues a Numbering Certificate which confirms the allocation, including the relevant tariff details.

- 3.81 Once a CP has been allocated a number block, it has to ensure that calls to numbers in that range will be connected. This is referred to, in industry, as 'opening up' the number block, or 'building' the number range, on each originating network. Ofcom is not directly involved in the processes for building new number ranges.
- 3.82 The effect of BT's access-related condition (imposed in 2006 in the End to End Connectivity Statement⁶⁶) is that BT is required to open up number ranges as soon as reasonably practicable, subject to agreeing reasonable terms. At the time that obligation was imposed on BT, Ofcom considered that it should result in end to end connectivity between all CPs because of BT's position as the largest provider of transit and the largest purchaser of call termination in the UK. However, there is some evidence to suggest that it may not have had that effect in relation to the 'opening up' of number blocks by OCPs.
- 3.83 There is no established process by which the industry opens up new number ranges, beyond the use of an email group for notifying CPs that a range is available to be built onto their networks.⁶⁷ This means that the process can vary considerably from CP to CP, taking from 24 hours to several months. This *ad hoc* approach can cause issues with either significant delays, or even refusals, to connect certain numbers by some OCPs. Some TCPs, and SPs, have brought concerns about this process to our attention as part of this review.
- 3.84 Recently, in an industry forum (the NGCS Focus Group)⁶⁸, a proposal for a voluntary Code of Conduct relating to the process for building new number ranges (including both non-geographic and geographic numbers) has been developed by industry. In particular it proposes a set time for 'opening up' number ranges (no less than thirty days). We support this initiative. As we set out in the 2006 End to End Connectivity Statement, we recognise the benefits of ensuring that all users are able to call each other regardless of the network used, and a more standardised industry process for opening up number ranges will help contribute towards that objective.

Recent developments at the wholesale level

- 3.85 The wholesale level is currently in a state of flux. The historic approach to determining termination rates described above has begun to break down, with BT and other TCPs seeking to vary the termination rates that they charge.
- 3.86 From 1 July 2009, BT (when it acts as a TCP) introduced a new schedule of termination rates for 080 calls. This 'ladder pricing' (or tiered termination rates) schedule linked the level of the termination rate to the retail price charged by the OCP, meaning that OCPs that set higher retail prices tended to pay higher

⁶⁵ <http://stakeholders.ofcom.org.uk/telecoms/numbering/telephone-no-availability/numbers-administered/>

⁶⁶ http://stakeholders.ofcom.org.uk/binaries/consultations/end_to_end/statement/statement.pdf

⁶⁷ Ofcom's Numbering Team also publish a list of CP contact details for the purposes of Numbering Activation, <http://stakeholders.ofcom.org.uk/telecoms/numbering/applying-activating-tele-no/number-activation>

⁶⁸ http://stakeholders.ofcom.org.uk/binaries/telecoms/groups/nts/NGCS_Focus_Group_131011.pdf

termination rates. BT has subsequently introduced similar ‘ladder pricing’ structures for termination rates for 0845, 0870 and more recently also for 0844, 0871 and 09 calls that it terminates.⁶⁹ In addition, a number of other TCPs have introduced similar structures that link their termination rates for non-geographic calls to the retail price.

- 3.87 As the Table above indicates, BT was not under any *ex ante* obligation in relation to the level of termination rates that it set. We therefore received disputes in relation to BT’s termination rates for 080, 0845 and 0870 calls from the mobile OCPs who were most affected by these changes. On 5 February 2010 and 10 August 2010 we issued our determinations resolving these disputes.⁷⁰
- 3.88 In both cases we concluded that BT’s termination rates could not be shown to be fair and reasonable. In making that decision we had regard to our relevant statutory policy objectives in sections 3 and 4 of the Act. We also considered our own policy preferences for these number ranges, which themselves derive from our duties.⁷¹
- 3.89 BT appealed the determinations and they were subsequently overturned by the CAT.⁷² That judgment is currently under appeal by the mobile OCPs who are challenging some of the factors applied by the CAT in upholding BT’s appeal.
- 3.90 The CAT, in upholding BT’s appeal, ordered the mobile OCPs to pay unpaid termination charges, but allowed them to adjust their prices before some of those payments were calculated. This allowed the mobile OCPs to consider what level of retail price to set, and therefore what level of termination payment would be due to BT. The mobile OCPs made different pricing decisions, including leaving prices unchanged, reducing prices to varying degrees and in some cases subsequently raising those reduced rates.
- 3.91 We consider that mobile OCPs retail prices do not reflect the prices that would be set in normal market conditions. They have been affected by both the specific incentives created by the CAT judgement and the potential for the decision to be altered on appeal. The situation is further complicated by the mobile OCPs differing reactions to the current litigation and therefore, we do not consider that it would be appropriate to place much weight on current mobile pricing levels for calls to these number ranges, or indeed to calls to other ranges that are subject to ladder pricing.
- 3.92 For this reason, we consider that our 2010 Flow of Funds analysis, which is based on 2009 prices, continues to provide a more appropriate basis for assessing mobile pricing for calls to these ranges. We also consider that the on-going appeal against the judgement means that current operation of the wholesale level can be considered to be in flux.

⁶⁹ For 0844 and 0871 it was introduced on 1 October 2011 - See NCCN 1107 (https://www.btwholesale.com/pages/static/Library/Pricing_and_Contractual_Information/carrier_price_list/not_nccnoctober2011december2011archive.htm). It introduced the same on the 09 range on 1 December 2011 – See NCCN 1101, https://www.btwholesale.com/pages/static/Library/Pricing_and_Contractual_Information/carrier_price_list/not_nccnjuly2011september2011archive.htm

⁷⁰ The 080 Dispute Determination and the 0845/0870 Dispute Determination

⁷¹ For example that calls to 080 numbers should be free or as close to free as possible for callers.

⁷² The 08X CAT Judgment.

Scope and rationale for the NGCS review

Approach in the December 2010 Consultation

- 3.93 The scope of our review, as set out in the December 2010 Consultation, is all non-geographic number ranges, with the exception of mobile numbers.⁷³
- 3.94 In terms of rationale, we stated in the December 2010 Consultation that the existing regime for the operation of non-geographic numbers was under significant strain. We noted some specific factors which were particularly pressing in terms of the need for the review:
- the evidence (as discussed in the next Section) that consumer confidence in the system was low, that prices did not appear to be constrained effectively by competition and the range of services available was stagnating. We noted that of major concern was the impact of the current regime on low income mobile only households who appeared to be particularly affected by the weaknesses of the current system;
 - the original regulatory framework relied heavily on the position of BT in the retail market to establish levels of call charges (through the Numbering Plan) and to enforce revenue flows to the service providers (via a wholesale origination condition which impacted on the retail freedom of BT). We noted that with the removal of BT's significant market power ('SMP') that aspect of the Numbering Plan no longer appeared well founded.⁷⁴ We also considered that it was clear that targeting regulation on BT did not address the behaviour of other market participants, thus it is of limited effectiveness in protecting consumers;
 - some SPs had strongly expressed their unhappiness with their inability to control or even notify accurately the retail prices of their services. They argued that this was undermining the market for their services and posed a risk to future investment in the business;
 - at the wholesale level, commercial agreements that had up to recently maintained stability in the termination rates charges for NGC numbers had begun to break down. We noted this had already led to a series of the disputes; and
 - the changes to the EU Telecoms Framework (discussed in the next Section) would be likely to provide greater clarity in UK legislation as to Ofcom's powers to intervene with respect to consumer welfare concerns in this area.

- 3.95 We then asked the following questions about the scope and proposed approach for the review:

Q2.1: Do you consider that the scope for this review, set out above, is appropriate? If not, how would you suggest that it should be modified and why?

Q2.2: Do the summary of the history of NGC services and the rationale for this review capture all the essential concerns which this review should be

⁷³ December 2010 Consultation, paragraph 2.6.

⁷⁴ The Wholesale Narrowband Statement, http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/summary/main.pdf

seeking to address? If not, please set out those issues which you consider are not being considered and why these should be included in the review at this stage.

Scope

Stakeholder responses

- 3.96 A number of stakeholders (including BT, Antelope Consulting and EE), noted that the 055/056 ranges were included within the scope of the review but Ofcom had not set out a specific proposal for those ranges. They requested clarity on those ranges and noted that measures needed to be taken for these ranges to minimise the risk that today's problems with 08 and 09 were not simply moved to 05.⁷⁵ BT noted that there was no service charge element for these calls and therefore considered an unbundled tariff model was inappropriate. It suggested that a maximum price should be introduced in line with 03 calls, along with a prohibition on revenue sharing.⁷⁶
- 3.97 Antelope Consulting also noted that shortcodes beginning with '1', apart from 116 and 118, had not been mentioned. It considered that all these numbers should be brought within the scope of the proposals. It considered that whether or not they were active was irrelevant because if they ever became active they could cause unnecessary problems by not being within a coherent and comprehensive scheme. It noted that until now there had been no such scheme and the proposals offered an opportunity to provide one, which could be designed to last for a decade at least.⁷⁷
- 3.98 [X] noted disappointment that the review missed an opportunity for Ofcom to address issues around General Condition 18 and the fixed porting regime, which had a significant impact on NGCS.
- 3.99 Some stakeholders expressed concerns that the review was too ambitious and that Ofcom was attempting to tackle in one go too broad a spread of issues. EE said Ofcom had made the mistake in the past of undertaking reviews which were so wide-ranging that the ultimate outcome was significantly impaired.⁷⁸ Virgin Media –noted that the issues extended across a wide sphere of different services and aspects of the regime, with the consequence that the exercise was unwieldy and overly complex, and the net impact of the proposals was almost impossible to assess. It considered that a more measured, phased or sequential approach would be more appropriate, in particular that Ofcom should prioritise the aspects of the regime that demonstrated the most serious cause for concern (which it considered was the failure of the NTS regulatory regime).⁷⁹
- 3.100 Vodafone, however, agreed that it was sensible to include all non-geographic numbers within the scope of the review, given the problems that had been created by previous piecemeal interventions focussing narrowly on individual number ranges. However, it also noted that the range of services supported behind various non-geographic numbers were very different from one another and that a single 'one size fits all' approach might not be appropriate.⁸⁰

⁷⁵ BT, December 2010 Consultation Response, p.22.

⁷⁶ BT, December 2010 Consultation Response, p.12.

⁷⁷ Antelope Consulting, December 2010 Consultation Response, p.1-2.

⁷⁸ EE, December 2010 Consultation Response, p.6.

⁷⁹ Virgin Media, December 2010 Consultation response, p.4.

⁸⁰ Vodafone, December 2010 Consultation Response, p. 52.

- 3.101 Vodafone also noted that mobile shortcodes did not exhibit the same problems Ofcom had identified with NGCS and it therefore considered it appropriate that these were excluded from the scope of the review.⁸¹ The Consumer Forum for Communications ('CFC'), in contrast, suggested that mobile shortcodes, as well as issues arising from mobile termination rates and the needs of consumers that were disadvantaged by disability, should have been more prominently considered in the consultation.
- 3.102 [X] considered that the scope of the review should be focussed on the mobile market, because this was the area that required the most reform. It argued that the effect of mobile OCP pricing was skewing the overall analysis and there should be a separate analysis of mobile and fixed line markets.

Ofcom response

- 3.103 We note the comments on the 055/056 ranges and agree that it is important to ensure that the issues which we see today on the 08X ranges are not transferred to those ranges as a result of any changes we make. We intend to issue a further consultation on the potential options for these ranges within a revised NGCS framework – see Section 6 for further details.
- 3.104 The issue of mobile shortcodes has been raised with us by some stakeholders and we acknowledge the potential for overlap with the NGCS review. We have set out a more detailed description of how shortcodes work in Annex 13. We can confirm that mobile shortcodes are not within the scope of this review. We have discussed in Annex 8 in particular the argument that these numbers might offer an alternative to non-geographic numbers. Currently, we see no evidence of significant consumer concerns (for example in terms of price awareness) in relation to mobile shortcodes. Nevertheless, we note in Annex 13 that it is within our legal remit to regulate shortcodes if we consider it necessary and therefore in the light of the concerns that have been raised, we intend to keep this issue under review.
- 3.105 With regards to other 'shortcode' numbers starting with '1' (which we term "Access Codes" in General Condition 17), these are subject to a different designation process from other numbers within the Numbering Plan. The specific tariff relevant to these numbers will usually be considered as part of the designation process, or it will be a matter for the relevant service provider.⁸² Therefore, we do not consider it would be appropriate to apply a specific tariff to these numbers in advance, when it will depend to a large extent on the nature of the service that is offered on those numbers, and selection of the tariff will form part of the considerations when designating the Access Code. We therefore consider that it would not be appropriate to include these Access Codes within scope of this review.
- 3.106 In terms of the other issues mentioned by the CFC, we completed a market review of mobile termination rates in March 2011 (the appeals against this statement are ongoing). We do not agree with the CFC that the changes to mobile termination rates specified in that separate review fundamentally affects the operation of the non-geographic call sector. In particular, none of the three underlying retail market failures that we identified in the December 2011 Consultation are affected by the

⁸¹ Vodafone, December 2010 Consultation Response, p. 52.

⁸² For example, the '111' three digit number which was designated for "Access to NHS Non-emergency services". See: http://stakeholders.ofcom.org.uk/consultations/three_number_non_emergency/statement/

level of mobile termination rates.⁸³ That said, as explained in Annexes 22 to 26 we do recognise that the level of mobile termination rates does have some implications for the detailed design of the possible interventions in relation to 080 e.g. the level of origination payments.

- 3.107 [X] referred to the regime for SPs porting numbers between TCPs. We explained in paragraphs A3.223 to A3.228 of the December 2010 Consultation why this issue was outside the scope of this review. One way of addressing this issue would be a move to direct routing. However this raises a large number of issues that are distinct from those considered in this review and which we have considered fairly recently.⁸⁴ Moreover, it is not clear that there are significant problems at the hosting level. We thus consider that our resources should be focused on identifying the significant concerns that we have identified, particularly at the retail level.
- 3.108 We note stakeholder concerns that the scope of the review is too ambitious. However, Ofcom has previously implemented piecemeal regulatory approaches, focussing on specific number ranges and, as many stakeholders comment, many of those changes have not led to the outcomes they were intended to achieve. In fact it is likely that the implementation of regulatory requirements which differ by number range has contributed to the level of consumer confusion which we now see.
- 3.109 We acknowledge that reviewing the use and regulation of all non-geographic numbers is a significant and challenging task. However, we believe this is the best approach for securing a consistent, regulatory regime across the number ranges to give greater certainty for both consumers and the industry. In recognition of the significant task involved in reviewing all these numbers, this consultation focuses on the largest ranges plus smaller ranges which can be treated in a similar manner. We will then separately consult on proposals for the other ranges, where separate remedies may be appropriate (although still bearing in mind the wider context of this review). Our proposed approach to dealing with the issues that are not within the scope of this consultation is set out in more detail in Section 6.

Summary of position on scope of the NGCS review

- 3.110 In summary therefore, we remain of the view that the following NGC ranges are within scope:
- 116 Harmonised European numbers for services of social value;
 - 118 DQ numbers;
 - 08 numbers(including 080, 0844/3, 0845, 0870 and 0871/2/3);
 - 05 numbers (including 0500, 055 and 056);
 - 070/076 numbers; and
 - 09 numbers.

⁸³ Those market failures were poor consumer price awareness and the horizontal and vertical externalities. These market failures are explained and analysed in Annex 8.

⁸⁴ See: http://stakeholders.ofcom.org.uk/consultations/gc18_routing/statement/

- 3.111 We have outlined a summary of our approach to addressing the issues on each of these number ranges in Section 6, some of which are dealt with in this document, others will be addressed separately in smaller consultations.
- 3.112 Other Access Codes (such as ‘111’) and mobile shortcodes are not within scope of this review, but we will nevertheless keep the issue of mobile shortcodes under review given the concerns that have been raised.

History and rationale for review

Stakeholder comments

- 3.113 A number of stakeholders noted that, with reference to the history of NGCS regulation, many of Ofcom and Oftel’s previous interventions had been unsuccessful in this area. FCS considered that the previous ‘consumer focussed’ review of 0870 did not achieve its objective and noted concerns that Ofcom had not included an analysis of the reasons for that failure, as well as other interventions through amendments to General Condition 14 to increase price transparency. It considered that an analysis of the failure of these interventions should be clearly identified as part of the framework of the review and used as a benchmark for consideration of preferred policy objectives.⁸⁵
- 3.114 Similarly, [3<] suggested that if the lessons learnt from the previous regulatory interventions had been disclosed and discussed in more detail, the industry as a whole would have more faith and ‘buy-in’ to the current process. Antelope Consulting also noted that several previous changes in numbering for the UK, both geographic and non-geographic, had been inadequate or incomplete. It considered they deserved to be mentioned at this point in the review to confirm that this time Ofcom intended to have a coherent and comprehensive implementation strategy. It also noted that the history did not discuss the proliferation of other new number ranges, which had compounded the problem. It said that 03, 055 and 056 were examples of this.
- 3.115 Virgin Media considered that Ofcom had trivialised the problems at the wholesale level in comparison to the other perceived problems and that these wholesale problems had not been afforded the prominence which it considered was warranted. It also considered that Ofcom had overemphasised and misinterpreted the problems at the retail level. It therefore encouraged Ofcom to reconsider the significance and categorisation of the perceived problems with the NGCS regime and to amend its focus accordingly.⁸⁶
- 3.116 EE noted that Ofcom’s summary of the history of the regulation of NGCS had not included a reference to Oftel’s determination on the dispute between Orange and BT on 080 origination charges in 2001. It noted that it was that regulatory decision which had been the catalyst for the current mobile OCP practices of charging for 080 calls to ensure that they could fully recover their costs of origination.⁸⁷
- 3.117 C&W, however, noted that it should not be forgotten that the NTS market has been a highly successful contributor and innovator to the UK economy as a whole, generating over a billion pounds in revenues. It noted that competition between

⁸⁵ FCS, December 2010 Consultation Response, p. 5.

⁸⁶ Virgin Media, December 2010 Consultation, p.5.

⁸⁷ <http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/oran0901.pdf>, Everything Everywhere December 2010 Consultation Response, p. 7.

terminating NTS providers had been a real Ofcom success story, with a large number of suppliers competing and innovating in the market, offering businesses and consumers a wide range of services not available anywhere else.⁸⁸

- 3.118 BT argued that the market had developed in such a way as to become closer to a ‘free for all’ where consumers had no real idea what they were likely to pay for calls to these services and the revenue certainty for terminators had disappeared.⁸⁹ BT emphasised its view that it should be treated in the same way as any other player in the terminating market.
- 3.119 Vodafone noted that it did not entirely agree with Ofcom’s characterisation of the history of NGCs or the presentation of concerns. It queried Ofcom’s purported reference to “voluntary agreements by OCPs’ to follow the regulated pricing model mandated by BT ...”⁹⁰
- 3.120 FCS expressed concern that Ofcom had not prioritised a strategic implementation plan for its proposals, or immediate regulatory intervention. It considered that the fundamental issue that had not been addressed was prioritising the protection of consumers and the review should capture that and consider temporary measures if a full implementation of the preferred option was not feasible in a short timeframe.
- 3.121 [S&K] considered that Ofcom had paid little attention to the concept of differential pricing by TCPs and ‘laddering’, which it believed was relevant especially given the ongoing appeals relating to NGCS products that might materially affect Ofcom’s decisions relating to this review.

Ofcom response and updated position

- 3.122 We acknowledge that many of Oftel’s, and Ofcom’s previous regulatory interventions did not achieve the outcomes which were desired at the time of implementation. This is one reason why we are now undertaking a more wide-ranging review looking at the issues in the round, rather than focussing on individual number ranges. As we highlight in Section 4 (where we look at why the NGCS market is not working well), one of the particular market failures is the ‘horizontal externality’, where individual OCPs and SPs do not have an incentive to take into account the impact that their non-geographic call pricing has on the reputation/brand perception of a particular number range or on the non-geographic number system as a whole. This is a factor which we have not specifically taken into account as part of our previous interventions in non-geographic numbers, and may be part of the reason why those interventions have not always achieved their aims. However, as part of the assessment of the different proposed options in this document we specifically consider how the horizontal externality issue will be addressed by the options under consideration.
- 3.123 Our history of regulatory interventions did not mention the decision by Oftel on 080 origination payments and we agree that this is relevant to the history of Freephone ranges. It is now described in Section 14, where we discuss the more specific background to the Freephone ranges.
- 3.124 We recognise that one contributing factor to the confusion experienced by many consumers is likely to be the proliferation of different number ranges with differing

⁸⁸ C&W December 2010 Consultation Response, p.7.

⁸⁹ BT December 2010 Consultation Response, p.22.

⁹⁰ Vodafone, December 2010 Consultation Response, p.53.

pricing messages and meanings attached. New number ranges have been introduced to cater for different types of services - for example the 055 range is specifically for corporate services, and was introduced in response to an identified need for such a range at the time. Sometimes, attempts to move sufficiently quickly to ensure that new or innovative services had sufficient numbers available (in the interests of consumers) have meant that the regulator's early estimates about the nature and level of demand for future services have turned out to be wrong. That said, one of the primary aims of this review is to make the non-geographic numbering system as a whole simpler for consumers to understand, by simplifying the pricing structures that apply to different number ranges.

- 3.125 We do not agree with stakeholders' concerns that we failed to focus sufficiently on the wholesale level. We set out our analysis of the problems at the wholesale level in Annex 3 of the December 2010 Consultation and considered whether regulation of termination rates was appropriate.⁹¹ We also considered whether termination rates that are linked to retail prices (as is the case with the ladder charging introduced by BT) were a viable solution to the problems within the market.⁹² We have responded to more specific comments about the option of wholesale intervention in Annex 17 of this document.
- 3.126 We agree with C&W's comments that the successes of the NGCS market should not be overlooked, and we want to ensure that this success is maintained and not adversely affected by the proposals we are making. We have taken this into account in our assessment of the options. Annex 9 provides more detail on the hosting market in particular, which we note is largely competitive.
- 3.127 We do not agree that Vodafone's comment accurately reflects the position set out in the December 2010 Consultation. We understand Vodafone to be referring to paragraph 2.13. This paragraph makes it clear that we were referring to voluntary arrangements at the wholesale level (specifically the historic practice of TCPs charging the same termination rate as if BT has originated the call).
- 3.128 The December 2010 Consultation was preliminary, and strategic, in nature (particularly given that it was published ahead of the implementation of the revised EU Framework which provided the legal basis for many of the proposed interventions) and therefore it was not appropriate at that time to set out a detailed plan of implementation for the different number ranges. This consultation, however, aims to do that. We have discussed implementation timescales in more detail in Section 12 in relation to the unbundled tariff, and Section 17 in relation to our Freephone proposals, and we have also set out below how we intend to deal with each of the number ranges/issues that are not covered by this document in Section 6. We recognise FCS's concerns about protection of consumers, however, we do not consider, for the reasons outlined above (in terms of the need for assessing these issues as a whole) that implementing temporary measures ahead of wider changes would be appropriate.

⁹¹ December 2010 Consultation, paragraphs A4.97-A4.100.

⁹² December 2010 Consultation, paragraphs A4.54-A4.96.

Part A - Section 4

Summary of concerns

Introduction

- 4.1 In the December 2010 Consultation, we explained why we thought the market for NGCS was not working well and the consumer harm that resulted. In this section, we summarise that analysis, stakeholder comments on our findings, Ofcom's response to those views and our updated analysis where necessary.
- 4.2 In particular this Section sets out our provisional conclusions on problems we observe at the retail level in the NGCS market. We also set out our provisional conclusions on concerns at the wholesale level and within the hosting market.
- 4.3 This section is a summary of Annexes 8 to 10 which consider the retail, wholesale and SP hosting experience. A more detailed discussion of stakeholder responses and our conclusions can be located there. The full range of evidence on which our conclusions about the retail market are based is presented in Annex 8. Whilst we have highlighted some key pieces of evidence in this summary, we refer stakeholders to this Annex for the further details that are necessary for a full understanding of the basis for our conclusions.

Harm identified in the December 2010 Consultation

- 4.4 We identified and assessed three market failures in the December 2010 Consultation:
- lack of consumer price awareness;
 - the vertical externality; and
 - the horizontal externality.
- 4.5 Evidence presented in the December 2010 Consultation showed how callers often do not know the cost of calls to non-geographic numbers from mobile and fixed lines, with significant numbers of respondents (40-70% depending on the number range) stating that they were 'not confident'. In addition, callers may find it difficult to obtain correct prices. We said that the combination of these factors led to callers generally overestimating prices of NGCs and to a general lack of trust in NGCs. We argued that this had direct impacts on consumer outcomes and behaviour as well as on OCPs' incentives to compete – that is, the lack of price awareness meant OCPs' behaviour was less constrained by competitive pressure on prices for NGCs.
- 4.6 The second market failure we identified was the vertical externality. We defined the vertical externality as arising from the fact that OCPs are not sufficiently motivated by the preferences of SPs of NGC services and thus generally do not take the impact of their call pricing decision on SPs into account when setting their retail prices. We also said that the vertical externalities were likely to be exacerbated by a lack of price awareness, which in turn leads to a reduction in call volumes for SPs. We said that was likely to be a problem for consumers because they would not benefit from the full range and diversity of services that non-geographic numbers could support.

- 4.7 Finally, we concluded that each non-geographic number range was effectively a collective brand created by all in the supply chain. We considered it was consumers' lack of confidence in this brand that currently sat at the heart of consumer concerns and consumers' lack of engagement with the non-geographic calls market. We noted that individual OCPs and SPs did not have an incentive to take into account the impact their NGC pricing had on the reputation/brand perception of a particular number range or on the non-geographic number system as a whole. The horizontal externality was thus defined by free riding actions of individual OCPs and SPs which negatively affected all OCPs, TCPs, SPs and ultimately consumers.
- 4.8 Following the identification of the three market failures above, we then identified, and discussed, five harmful impacts of these market failures on consumers in the December 2010 Consultation.
- 4.9 The first of these harmful impacts was that consumers are making fewer and shorter duration calls to non-geographic numbers. We stated this was the result of a combination of factors, namely, consumers being deterred from making NGCs through uncertainty over call prices, an over-estimation of prices as a result of this uncertainty and price competition being less strong in these calls compared with other telephony services. We also noted that due to the lack of awareness over NGC prices, some consumers were affected by bill shock.
- 4.10 The second impact was that current non-geographic prices were likely to be higher than they should be (in order to promote the greatest benefits to consumers). We presented evidence to suggest that higher margins on non-geographic calls may be associated with lower margins on other telephony services such as geographic calls. We also considered that the lack of price awareness weakened competitive pressure on NGCs, allowing OCPs to raise NGC retail prices without a strong consumer reaction. Consequently, the structure of prices did not in our opinion reflect callers' or SPs' preferences.
- 4.11 The third impact on consumers which we identified related to consumers' ability and willingness to access socially important services as a result of the three market failures identified by Ofcom. We argued that uncertainty about the call price, over-estimation of the call price and relatively high call prices from some OCPs are all likely to increase the extent to which consumers adopt call avoidance strategies for NGCs. Low income households are more likely to solely rely on a mobile phone. Since calls to non-geographic numbers from mobiles tend to be more expensive than from a fixed line, we said that it is more difficult for these households to access socially important services (such as doctors surgeries which use a non-geographic number) affordably.
- 4.12 The fourth impact was higher consumer vulnerability to fraud. We noted several examples of this occurring on the 070/076 ranges in particular.⁹³ The December 2010 Consultation attributed instances of fraud on these ranges to poor consumer engagement with, and understanding of, non-geographic call services that contributed to an environment in which consumers were ill-equipped to recognise / minimise their exposure to fraud.
- 4.13 Finally, the fifth impact we identified was that SPs have less incentive to invest in the range and quality of their services. SPs have difficulty positioning a service to properly reflect consumer demand in terms of the relationship of price and service.

⁹³ December 2010 Consultation, pp.183-184.

As a result, we considered that consumers are not utilising the full benefits of services that non-geographic numbers could support.

Stakeholder responses

The market failures

Lack of consumer price awareness

- 4.14 Stakeholders made a number of challenges to our conclusion in the December 2010 Consultation that a significant proportion of callers have a very poor understanding of NGC prices. These included views that there are no particular difficulties in finding out a price of a NGC and that price awareness is low because NGCs are not important to consumers. Some respondents also said that the main reason for consumer dissatisfaction / confusion is excessive retail pricing, particularly by mobile OCPs.
- 4.15 Vodafone and Three both commented that they provide pricing information on their website that is straightforward to find and use. Some stakeholders argued that consumers did not value NGC services to the same extent that they did other services, with Vodafone stating that it was rational for consumers to attach less weight to the cost of call types they make infrequently compared to call types they make more often and which were more important in budgetary terms.

The vertical externality

- 4.16 The mobile OCPs questioned the existence of the vertical externality. EE and Vodafone pointed to the example of the zero-rating of a number of Department of Work and Pensions ('DWP') 080 helplines (negotiated bilaterally with the mobile OCPs) as proof that, to the extent the vertical externality existed, it could be addressed through contractual agreement.⁹⁴ They argued that the fact that other, similar negotiations had not been pursued suggested that the vertical externality did not exist. Vodafone also said that the absence of negotiations reflected the fact that not all 080 calls fell into the same 'socially important' category and that not all SPs care to the same extent about the retail charges faced by the consumer.
- 4.17 Other stakeholders, while acknowledging that some problems existed, argued that the strength of the vertical externality was not as substantial as Ofcom had made out. One response stated that service provision was "thriving" and generated many millions of pounds of revenue annually. Some stakeholders highlighted the existence of alternatives to the number ranges SPs currently use, for example migrating to the 03 number range or using mobile shortcodes.
- 4.18 There was support for Ofcom's conclusions regarding the vertical externality from a number of responses, in particular from SPs (and groups representing SPs). Magrathea stated that the vertical externality was one of the main sources of consumer detriment.

The horizontal externality

- 4.19 There was disagreement between respondents about our conclusions regarding the existence of a horizontal externality. EE agreed that it existed to an extent whilst

⁹⁴ <http://www.dwp.gov.uk/previous-administration-news/press-releases/2010/january-2010/dwp007-150110.shtml>

Vodafone, O2 and BT raised concerns over the accuracy and validity of our conclusions in this area. Some stakeholders believed that the incentive of OCPs and SPs to free ride was overstated and disputed. Three believed that the complex structure of non-geographic number ranges was likely to contribute to consumer confusion (e.g. 070 numbers are often confused with mobile numbers, etc.), exacerbating horizontal externalities.

Impacts of the market failures

Call volumes falling

- 4.20 The primary response from stakeholders to this point was that price awareness was unlikely to increase overall demand for NGCs. Other themes included a belief that these calls are declining for reasons other than decreasing confidence in prices, and SPs have not created an environment for sustaining demand for NGCs.
- 4.21 A number of stakeholders argued that providing more price information to consumers was unlikely to increase call volumes. Virgin Media referred to Ofcom research that suggested a significant number of consumers had no need to call non-geographic numbers more often, and callers tended to avoid making out of bundle calls in general. EE questioned the existence of evidence that callers were in fact being discouraged from making calls to non-geographic numbers as a result of price uncertainty and/or price overestimation. O2 undertook its own research that indicated only 4% of participants would be inclined to make more calls once they had certainty about the price of calling.
- 4.22 Use of the internet to access the kind of services offered by NGCs, consumer dissatisfaction / anger over past experiences with NGCs, the growth of alternative media such as smart phones and the internet which competed to provide a range of entertainment and information services previously only available through NGCs, were all reasons put forward to challenge Ofcom's conclusions about why NGC call volumes were declining.
- 4.23 EE argued that Ofcom had not considered the role of the SP in creating and sustaining demand for their own NGCs. EE also commented that a lack of demand might be because SPs' service propositions were not compelling enough. In addition, it argued that some SPs had themselves sown mistrust in consumers (e.g. misleading services, excessively long call durations etc.).
- 4.24 Finally, O2, EE and Virgin Media all disagreed that NGCs were a major cause of bill shock.

NGC prices higher than they should be

- 4.25 The main arguments made by stakeholders in response to Ofcom's conclusions on this issue included a belief that NGC charges do reflect consumers' preferences, prices are more expensive because they include revenue sharing and there are few complaints about NGCs (the assumption being that consumers are broadly happy with the service provided).
- 4.26 Some stakeholders argued that retail markets were competitive. EE commented that OCPs choose to recover their costs through charges for NGCs rather than through the cost of calling other numbers; and consumers received the most competitive prices for those services that are most important to them. Vodafone commented that consumers specifically rejected the proposition that an increase in other prices in

return for lower prices for NGC calls was a good trade-off. Some responses noted the introduction of NGC bolt-ons (i.e. bundles of inclusive minutes) and highlighted the low take up of these tariff options.

- 4.27 The CAB rejected this hypothesis, and argued that a rebalancing of prices would represent a better deal for consumers in general. It highlighted that under the current regime, people who call non-geographic numbers from their mobile phone (who are more likely to be on low incomes) were paying over the odds for such calls, while simultaneously subsidising other elements of the phone market (e.g. handsets, other parts of call packages). The CAB likened this to the personal current account market in which charges paid by vulnerable, low income people were subsidising the ‘free’ banking enjoyed by many more affluent customers.
- 4.28 O2 stressed that mobile retail prices reflected higher origination costs which reflected the fact that unit costs in providing mobile services tended to be higher than for fixed services. Vodafone similarly argued that the cost base for NGCs was generally significantly above that of geographic calls because interconnect outpayments reflect the funding of revenue share outpayments by TCPs to SPs.
- 4.29 EE argued that complaints about NGCs neither appear in Ofcom’s list of most complained about issues, nor feature as a significant consumer concern in EE’s own data. For example, consumers do not generally identify any major issues with the existing regime whether prompted or unprompted.

Access to socially important services

- 4.30 The mobile OCPs were critical of Ofcom's conclusions in this area. Their disagreement focused on arguments that:
- 4.30.1 cost avoidance strategies were not disproportionately costly;
 - 4.30.2 there was no evidence of vulnerable consumers having a preference for using NGCs more than other services;
 - 4.30.3 most socially services are already on Freephone or geographically rated services;
 - 4.30.4 Ofcom could consider more explicit measures to encourage SPs who operate socially important services to use only Freephone or geo-rated numbers; and
 - 4.30.5 there are alternative options to provide access to vulnerable consumers.
- 4.31 The CAB agreed with our conclusions, presenting evidence that consumers had suffered as a result of the current system. We refer to this evidence in the next section.

Vulnerability to fraud

- 4.32 The majority of submissions from stakeholders argued that fraud was not a problem for all non-geographic number ranges in general; rather, these problems tended to be isolated to the 070 and 09 ranges.
- 4.33 Vodafone argued that the principal opportunity for fraud associated with NGCs stemmed from revenue share outpayments at the TCP/SP end of the value chain. It

argued that this was not fundamentally a product of lack of price transparency but of termination charges pitched at a level that allowed a substantial surplus over the underlying cost of call termination. O2 also highlighted that customer exposure to fraud was likely on the 09 and 118 ranges because of the opportunities for high levels of revenue sharing. The Serious Organised Crime Agency commented that the 070 number range was an enabler of fraud and was being exploited by criminals involved in several types of mass marketing fraud.

Investment in range and quality of SP services

- 4.34 The mobile OCPs were critical of Ofcom's conclusions in this area.
- 4.35 O2 considered that the diminished service availability and innovation for consumers' argument rests on unsafe assumptions. It argued that even if consumers' price awareness was increased, demand for NGCs was unlikely to increase and result in the positive outcomes to the extent that Ofcom suggests.
- 4.36 BT, however, agreed that consumer overestimation of NGC prices and vertical externalities resulted in SPs having less incentive to invest in new services.
- 4.37 Two DQ providers commented that retail overcharging had led to reduced consumer confidence in non-geographic numbers, which had subsequently stifled SP innovation and service provision. Lexgreen Services, a SP, described the difficulties it faced trying to launch new services only to find that many OCPs, in particular mobile OCPs, were failing to allow their customers to call other numbers at acceptable rates. The Number UK ('TNUK') commented that the mobile OCPs' control of retail pricing allowed them to set lower retail prices for calls made to their own DQ services, whilst it was unable to choose the same number of lower tariffs in order to compete.

Ofcom's response / updated analysis

The market failures

Lack of consumer price awareness

- 4.38 We recognise the efforts of some stakeholders to make prices more accessible to their customers. However, our concern is that these efforts have either not been successful or have not been made consistently across the market. For example, Sky customers must check a 75-page price guide to obtain prices for NGCs, and TalkTalk customers have to open a 171 page list.⁹⁵ This will limit the usefulness even of readily accessible price information, as customers of OCPs making efforts to increase transparency will not be able to compare prices easily with other OCPs. Furthermore, online price lists may not address problems of a lack of information at the point of call and/or the subscription decision. Indeed our 2010 Consumer Survey found that around a quarter of respondents who switched or considered switching in the past 12 months would have liked to have received information about 08/09 calls but did not. Difficulty in locating easily accessible pricing information contributes to problems with price awareness. The evidence indicates that poor price awareness in

⁹⁵ http://www.sky.com/shop/_PDF/SkyTalkSpecialisedPhoneNumbers.pdf and <https://m0.ttxm.co.uk/sites/sales.talktalk.co.uk/pdf/talktalk-ngn-prefixes-01mar12.pdf>

the market for NGCs is leading to a number of callers over-estimating the price of NGCs and this, in turn, is causing callers to make fewer calls.⁹⁶

- 4.39 We accept that not all consumers may place significant weight on the price of NGCs, even if they had good information. However, some do, and others would make more calls if information at the point of sale (and call) was clearer and easier to access.⁹⁷ Lack of interest is only one reason why NGCs are not important to consumers – other reasons include the fact that price information is considered so difficult to obtain that it is not worth looking for.⁹⁸ Our objective is not necessarily to achieve perfect price transparency but to allow those who want to know the price of these calls to be able to do so in an easy way when it most matters to them, such as at point of call or subscription decisions.
- 4.40 As noted in Section 3, the vast majority of non-geographic call minutes are from fixed lines and this may be in response to the difference in mobile and fixed retail prices. For reasons explained below, we consider that better transparency and increased consumer price awareness should lead to more efficient price setting by both fixed and mobile OCPs.

The vertical externality

- 4.41 The evidence suggests that OCPs and SPs are likely to have different preferences for the retail prices of NGCs because each has their own independent objectives to pursue. Under the current system, OCPs have incentives to set relatively high mark-ups on these calls in order to offer lower prices on the more visible aspects of their retail offering. Many SPs, on the other hand, would like OCPs to reduce retail prices of NGCs in order to grow demand for their services and/or to improve customer satisfaction for existing users. This misalignment of incentives will create a vertical externality unless SPs are able to contract with OCPs to set a retail price that takes into account their objectives.
- 4.42 We draw different conclusions about the ability of SPs to contract with OCPs in this way from the DWP example cited by respondents. The fact that stakeholders could only point to a small number of examples where an SP has negotiated bespoke retail charges, and all on a single number range (080), demonstrates how rare such agreements are across the NGC range. We note in Annex 20 that some attempts to negotiate deals have failed even when the service concerned is important for people's safety.⁹⁹ Furthermore, evidence from internal briefings collected by Ofcom in information requests suggests that some OCPs will only consider a deal like the DWP agreement if they think it will increase their revenues. This shows that the cost of reaching an agreement with those OCPs could potentially be high as SPs would have to more than compensate the OCP concerned for any reduction in revenue resulting from a lower mark-up on NGCs, in addition to incurring other transactions costs involved in a negotiation.
- 4.43 We accept that some SPs are satisfied with the current regime and are either not concerned or do not consider that they lack control of their retail prices. In some

⁹⁶ See for example Table A8.10 in Annex 8.

⁹⁷ 2010 Consumer survey, 29% of landline users and 42% of mobile users who rarely/never call non-geographic numbers say the reason for this is because they are expensive (Q23/27).

⁹⁸ 2009 Consumer survey, 29% of consumers who had never looked up 08/09 pricing information cited reasons for not doing so relating to pricing complexity and the search costs (Q33). See A8.47 to A4.48 in Annex 8 for further discussion of this evidence.

⁹⁹ For example, the National Grid was not able to achieve zero-rating of calls to its '0800 Smell gas' number.

instances, SPs may have taken advantage of the system, particularly the limited price transparency, which has allowed some SPs to conceal that they obtain some revenue share from their numbers. Our evidence nonetheless suggests that many SPs would prefer alternative pricing arrangements to those they currently have, but are unable to negotiate them successfully with OCPs.

- 4.44 The 2010 SPs survey reflects this point, 45% of 080 SPs stated that if there was one thing they could change about 080 numbers, it would be the price that callers from mobile phones pay for the call.¹⁰⁰ Similarly, 65% of SPs using 0845 numbers stated that the one thing they would change about 0845 numbers would be that callers are charged the same amount as for a call to a normal landline.¹⁰¹
- 4.45 We have not found evidence to suggest that realistic alternatives currently exist for SPs that prefer alternative charging arrangements. The 03 range is currently relatively unknown by consumers and thus SPs are generally reluctant to migrate to it under the current regime. Mobile shortcodes do have some attractive features, but it is not clear that they will provide a universal solution, particularly given their very different pricing structure and very low take-up (to date). Whilst it is not entirely clear to us why mobile voice shortcodes have not been more popular, we have seen some evidence suggesting possible reasons for this. These include higher set-up/rental costs, lack of consumer understanding (particularly association with premium rate services) and lack of a single, clear price point due to the requirement to use separate numbers for fixed and mobile calls.

The horizontal externality

- 4.46 The horizontal externality refers to the potential negative impact that the consumer experience in some number ranges can have on consumers' behaviour on other number ranges. Therefore, if prices are not transparent for one number range, and/or consumers perceive them to be too high, this may have negative implications for other number ranges.
- 4.47 The results of our statistical analysis provides some evidence that consumers' perceptions of calling a particular range from a fixed line are related to their perceptions of calling the same range from a mobile, and vice versa.¹⁰²
- 4.48 Despite a number of responses suggesting otherwise, we remain concerned that some OCPs and SPs may be incentivised to take advantage of the lack of consumer price awareness adversely affecting the reputation of non-geographic numbers as a whole.
- 4.49 If callers are unable or unlikely to distinguish between subtle differences in prefixes used for different number ranges, the prices set by individual OCPs and SPs may affect the reputation of that range, adjacent number ranges or the non-geographic number system as a whole.¹⁰³ Individual OCPs and SPs have few or no incentives to take this into account when setting prices, which they will set to reflect their own objectives rather than those of the system as a whole. Mobile OCPs are also unlikely to take into account the impact their pricing behaviour has on fixed callers (and vice

¹⁰⁰ 2011 SPs Survey. Q13: "If you could change only one of the following aspects of 080 numbers, which one would it be?" [Base: all SPs with an 080 number]

¹⁰¹ 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]

¹⁰² See paragraphs A8.190–A8.226 in Annex 8.

¹⁰³ See paragraphs A8.190–A8.226 in Annex 8.

versa). Furthermore, most SPs only operate on one or a few numbers and ranges and thus they are not incentivised to consider the impact of their behaviour on the reputation of different number ranges.

- 4.50 We consider that the free-riding behaviour of OCPs and SPs is likely to have contributed to increased confusion and, ultimately, the diminished reputation of non-geographic number ranges to consumers as a whole.

Impacts of the market failures

Call volumes falling

- 4.51 We consider that the main argument put forward by stakeholders can be summarised as follows: many consumers are uninterested in making NGCs and those who make them have limited choice – i.e. the call is difficult to avoid. Therefore, mobile OCPs argue that those making NGCs are price insensitive and even if we increased the quality or the amount of information available prior to them making a call, demand for NGCs would not increase.
- 4.52 Our concern is that consumers' general tendency to overestimate the price of NGCs is causing a number of callers to suppress their demand for these calls. It is difficult to discern the true scale of this suppressed demand. However, the evidence suggests that improved price awareness may stimulate at least a relatively small but significant increase in call volumes as customers increase both the number and duration of calls. Some consumers appear to be sensitive to price and have been put off from making NGCs as a result of their perceived cost.¹⁰⁴ Others have indicated they try to limit the length of NGCs because of their concerns about cost, suggesting there is scope even for customers with limited choice to vary call volumes in response to price.¹⁰⁵ Given the degree of price over-estimation, even if there is little sensitivity to price, material changes in volumes are still likely to result from greater awareness. Stimulating additional call volumes is likely to benefit consumers, OCPs and SPs.
- 4.53 We accept stakeholders' comments on the decline in volumes of NGCs relative to other types of call. We also accept that the general decline in volumes of NGCs is being caused by a variety of factors. But there is an important distinction between:
- 4.53.1 The extent of existing levels of market failures, such as price over-estimation, and harmful effects, such as suppressed demand (compared to the levels they might be at in the absence of, or with significantly alleviated, market failures); and
- 4.53.2 The trend over time in over-estimation and call volumes.
- 4.54 We now accept that the evidence does not suggest that the problems are necessarily getting worse over time (i.e. the second of the points above). However, we emphasise that our main concern in this area is the first point, i.e. that consumers are overestimating prices and consequently making fewer NGCs than we would expect them to otherwise make even in the context of a generally declining market.

¹⁰⁴ Evidence from the CAB and the Samaritans, as well as our own Consumer Surveys, appears to support this view (see A8.262 and A8.264 for evidence from the CAB and the Samaritans, and A8.273 for evidence from our Consumer Survey)

¹⁰⁵ Evidence from our 2010 Consumer Survey supports this view (see A8.101-A8.102)

- 4.55 As to the argument that SPs do not offer compelling propositions, we note that one of the possible causes is that the current regime does not offer them sufficient incentives to invest and innovate. In some cases they are deprived of the opportunity to innovate because of their limited control over retail prices. Consequently, we are concerned that consumers could be missing out on a more diverse range of better quality services. We accept stakeholders' comments about bill shock. As illustrated by research recently published by Ofcom, bill shock is not a significant problem associated with NGCs.¹⁰⁶ However that is not to say that there have not been cases of NGC-related bill shock. Furthermore, these cases are likely to contribute to consumers' general tendency to overestimate NGC prices. For example, when asked what effect paying more for a call than expected had on landline/mobile use, 28% of mobile respondents and 21% of landline respondents stated that they would try not to phone that particular number range again. In addition, 26% of mobile respondents and 24% of landline respondents stated they consciously spent less time calling that particular number range the next time.¹⁰⁷ Indeed, instances of very significant bill shock are likely to attract public attention and exacerbate this effect.

NGC prices higher than they should be

- 4.56 It is difficult to draw accurate and reliable inferences from current consumer behaviour and current prices about consumer's price preferences due to the current market failures we have identified above. The fact that consumer price awareness is so poor, coupled with the vertical and horizontal externalities, means that we do not believe that current price levels can be said to truly reflect consumers preferences. We do not believe there is sufficient competitive pressure on OCPs and SPs to maintain price levels that reflect efficiency. In particular, we consider customers' lower awareness of NGC prices compared with other aspects of OCPs' retail offerings creates incentives for OCPs to set higher NGC prices in order to offer lower prices on more visible components. Should our current proposals be implemented, we will closely monitor the impact that these proposals have on retail price levels following implementation.
- 4.57 With respect to arguments put forward by the mobile OCPs regarding the suggestion that Ofcom's consumer evidence shows that consumers do not favour re-balancing, we do not consider this evidence is sufficiently reliable to support the proposition the mobile OCPs are advancing. Survey questions of this nature are difficult to frame and prone to misunderstanding by consumers (e.g. the available evidence suggests that participants in the survey may have interpreted the question as relating to an increase in their bills, not a question about pure rebalancing as we had intended).¹⁰⁸
- 4.58 We recognise that evidence of the limited take-up of bolt-ons (i.e. additional mobile call packages that included non-geographic numbers) could be interpreted to suggest that consumers have limited interest in making these calls. However, we note that low take-up may reflect a range of other factors. In particular, it is not clear whether these bolt-ons represent value for money for the majority of customers. Indeed our illustrative calculations suggested they would only be attractive to those consumers

¹⁰⁶ <http://stakeholders.ofcom.org.uk/consultations/unexpectedly-high-bills/statement/>

¹⁰⁷ 2009 Consumer Survey. Q20/26: "What effect, if any, did paying more for a call than you expected have on your landline/mobile use?" [Base: all respondents who check their bill when they have been surprised by the size of their landline/mobile bill in the last 12 months].

¹⁰⁸ See paragraphs 16.125-16.131 in Part C, Section 16 for further discussion of this evidence.

with a high usage level for NGCs, about four times larger than the average level of usage.¹⁰⁹

- 4.59 We agree that the origination cost of mobile calls may be higher than fixed overall costs. However, the extent to which mobile prices are higher than prices from fixed networks substantially exceeds the cost differential. Similarly, the price differential between mobile charges for NGCs and geographic calls typically exceeds the difference in termination charges.
- 4.60 We accept that NGCs are not featured in Ofcom's list of most complained about issues. However, as set out in Annex 15 of the December 2010 Consultation, people do complain about non-geographic calls. The evidence suggests that many consumers have disengaged with these numbers and feel forced to call them despite their concerns over the call costs and lack of transparency. Other consumers are deterred from making these calls altogether and so may not make the effort to complain. In addition, we note there is significant evidence to suggest customers are not happy with the current regime. For example, O2's own consumer survey found the majority of respondents would prefer a change to the current regime (either maximum prices or unbundling).¹¹⁰ A report by Analysys Mason for PhonepayPlus found a significant increase between 2008 and 2010 in the percentage of phone-paid service users who said accurate pricing was the single most important factor that would help improve trust in premium rate services, suggesting increasing levels of customer dissatisfaction.¹¹¹

Access to socially important services

- 4.61 High actual or expected call prices can deter consumers from making calls. We have a particular concern if vulnerable consumers are impeded from accessing socially important services such as healthcare, state benefits or social care by the operation of the non-geographic call regime. The CAB provided examples of individuals who struggled to obtain state benefits as a result of the cost of making calls to non-geographic numbers.¹¹² This was compounded by the potential length of calls, including time whilst on hold, and difficulties in being put through to the correct official. We accept that not all services provided on non-geographic ranges are "essential". We are also aware of examples of socially important services that are free to caller from fixed or mobiles. However, as set out above, some SPs providing services that are important to consumers have not been able to negotiate successful deals with OCPs for lower retail call prices. We are concerned that this leads to some customers being deterred from making very important calls. We note the number of such calls need not be very large for the social costs to be high given the nature of services provided.
- 4.62 There is also evidence of avoidance strategies. The CAB has highlighted that people often visit them for the purposes of making phone calls. The 2010 CAB Survey asked respondents whether they had ever requested the CAB or another organisation to

¹⁰⁹ See paragraphs A8.337-A8.338 in Annex 8.

¹¹⁰ See paragraph A8.347.

¹¹¹ 2010 PhonepayPlus PRS report, pp.139-140; http://www.phonepayplus.org.uk/About-PhonepayPlus/Annual-Report-2010-11/~media/Files/PhonepayPlus/Research/2011_CurrentandemergingtrendsintheUKPRSmarket2010-AnalysysMasonreport.pdf

¹¹² See page 4/5 of the CAB December 2010 Consultation response, http://stakeholders.ofcom.org.uk/binaries/consultations/simplifying-non-geo-numbers/responses/Citizens_Advice_Bureau.pdf.

call a helpline because they could not afford to do so themselves. 20% of mobile-only respondents and 15% of respondents overall replied yes.

- 4.63 We accept that cost avoidance strategies are not always disproportionately costly to consumers but we have evidence to suggest that they can be in some cases. Whilst this evidence is anecdotal and affects a minority of customers, we do not consider this invalidates it given the nature of our concern, which relates to a problem directly affecting relatively few people but with very significant social costs. Our primary concern is that some consumers fail to access socially important services, rather than that they do so but at a cost. We are also concerned about vulnerable consumers who are unable to make use of alternatives such as visiting a CAB, for example because they have mobility difficulties or because they do not live close to a bureau.
- 4.64 Stakeholders presented many good ideas to ensure access to socially important services for vulnerable consumers. Ultimately however, we would argue that our remedies would achieve this objective more consistently without the need for numerous negotiations with individual organisations.

Vulnerability to fraud

- 4.65 Consumers' lack of price awareness does increase the potential for mistakes because they are often unaware of differences in number ranges. For example, they call what they think is a mobile number when it is a 070 number. Realistically, however, fraudsters have mainly tended to focus on the 070 ranges that are easily confused with mobile numbers, rather than the non-geographic number ranges that receive much higher relative volumes of calls. Therefore we accept that consumers' vulnerability to fraud is not a significant concern in the context of this document.

Investment in range and quality of SP services

- 4.66 We believe that since consumers have low price awareness, SPs are often limited in their ability to use price to differentiate their offerings from one another. In other words, if SPs cannot charge a high price for a higher quality product they will have limited incentives to develop that higher quality product. The vertical externality limits the control SPs have over retail prices and therefore limits their ability to offer different price-quality packages in this way. We agree that an alternative strategy would be to choose a different number range. However, that may imply additional migration costs and for some number ranges that is not an option – i.e. for directory enquiry services which have a specific number range (e.g. 118), or premium rate services which require a certain revenue level not offered on other ranges. Furthermore, the choice of number range does not ensure that there is the desired difference or consistency in prices as OCPs other than BT are free to set the retail rate and different OCPs set different prices. As we have discussed above, negotiations with OCPs have rarely been successful.
- 4.67 If SPs cannot guarantee the cost of a call to their customers they are also limited in the extent to which they can use funding sources other than revenue sharing (e.g. using advertising revenue to offer a free-to-caller directory enquiry service) or use Freephone numbers to encourage contact. The evidence suggests this is likely to have limited innovation in the sector to date. Also suppressed demand for NGCs means that some services which would be viable if customers had more confidence in NGCs are not currently attractive for SPs to provide. For example, PhonepayPlus

finds that high mobile charges and a lack of consumer trust are dampening the use of PRS as billing systems.¹¹³

- 4.68 As a result of suppressed demand for NGCs and the vertical externality, SPs currently have limited incentives to differentiate their services in terms of price or quality. They are also being deterred from introducing some services which would be viable with greater levels of consumer confidence. Our concern is that, as a result consumers are not benefiting from as diverse and as high a level of quality of services that they otherwise could be. We accept that higher SP revenues would not always be directed towards investment in innovation. But there is evidence that investment and innovation are being deterred in the current regime to the detriment of the consumer experience of NGCs.

Summary of Ofcom's position on the three market failures and consumer harm

- 4.69 Having reviewed all stakeholder responses and investigated any issues arising wherever possible, we consider that most of our concerns outlined in the December 2010 Consultation remain valid. The two areas where further evidence has caused us to revise our preliminary conclusions are in relation to:
- i) the potential for fraud; and
 - ii) decreasing trends in consumer confidence and call volumes.
- 4.70 In relation to the first, stakeholder evidence showed that the potential for fraud was confined to a small selection of number ranges including 070 and 076 and did not occur in the number ranges under consideration in this review. As a result, we are no longer considering fraud as a harmful impact on callers resulting from the three market failures we have identified in the provision of NGCs.
- 4.71 In relation to decreasing trends in confidence and NGC volumes, we now recognise there is no clear evidence to suggest the situation is worsening. However, this does not allay our concerns about the effects of the current system on both. Instead we consider that consumer confidence in NGCs, and hence their demand for calls to these numbers, is lower than it would be under a more effective system.
- 4.72 Our remaining provisional conclusions are unchanged. Specifically, we find that consumers' awareness of the price of making calls to non-geographic numbers is generally poor. This is because callers do not have consistently good access to clear price information across all call providers and/or at the points when they make their calling and subscription decisions. Our fundamental concern is that, as a result, callers tend to overestimate the price of calling non-geographic numbers and, more generally, they tend to be suspicious about NGCs.
- 4.73 We are also concerned that SPs lack control in determining the retail price of calls to their services. We accept that some SPs are satisfied with the current operation of the retail market. However, many are not and would prefer alternative pricing arrangements. Evidence suggests that the ability of SPs and OCPs to negotiate bilateral deals is restricted and a number of attempts have been unsuccessful. This is in part because OCPs are not incentivised to account for SPs' preferences. This asymmetry often leads to OCPs setting retail prices that are higher than SPs would prefer and is reflected in the division of retail revenues from NGCs currently being skewed towards OCPs (49%), compared to TCPs (27%) and SPs (23%). The

¹¹³ See paragraph A8.453 in Annex 8, also see Annex 11.

problem is exacerbated by poor consumer price awareness, because there is less downward competitive pressure on NGC prices, allowing OCPs to further increase the retail prices of these calls without a strong consumer reaction.

- 4.74 Customer perceptions of a particular NGC number range are likely to be related to their perceptions of other ranges within the NGC system. Similarly their perceptions of calling a particular range from a fixed line are likely to be related to their perceptions of calling the same range from a mobile, and vice versa. As a result, we consider that each NGC number range, and the NGC system as a whole, is a collective brand created by all in the supply chain. Individual OCPs and SPs do not have incentives to take into account the effect their retail prices have on the brand as a whole. When combined with the current lack of pricing transparency, this creates incentives for some OCPs and SPs to free-ride on the NGC brand by charging high retail prices. This behaviour by some OCPs and SPs adversely affects customer confidence in NGCs as a whole, and suppresses the overall level of demand for NGCs.
- 4.75 Taking account of the available evidence, we are of the view that these three market failures have the following harmful impacts on callers:
- a. a reduction in demand for NGCs, particularly from mobile phones;
 - b. the relative prices of NGCs and GCs do not reflect consumer preferences;
 - c. loss of access to socially important services, particularly for vulnerable consumers; and
 - d. consumers' loss of service diversity and innovation and SPs' lack of incentives to invest in the market.

Wholesale concerns

- 4.76 We set out in detail in Annex 10 the concerns we identified at the wholesale level in the December 2010 Consultation, the responses of stakeholders to that assessment and our updated view. In summary, having considered the responses to the December 2010 Consultation, overall our assessment of the wholesale concerns remains unchanged. In particular, we are not confident that the termination rates that would arise commercially (absent regulation or involvement by Ofcom) are likely to lead to desirable outcomes for consumers. More specifically:
- In the absence of *ex ante* regulation, OCPs and TCPs would negotiate over the level of termination rates. There are inherent tensions in the relationship between OCPs and TCPs: OCPs always prefer lower termination rates whereas TCPs generally prefer higher termination rates.
 - Predicting the outcome of negotiations in these circumstances is complicated. There are large numbers of OCPs and TCPs. Our analysis of the factors that influence their negotiating strength suggests that different OCPs and TCPs are likely to be in different commercial positions. In other words, negotiations will depend upon the particular OCP and TCP involved, rather than one side consistently being in a strong position. As a result, commercial negotiations are likely to produce a range of termination rates that depend on the parties involved.
 - We identify a number of factors influencing negotiating strength, in particular:

- OCPs accounting for a high share of call origination would likely be in a stronger position than OCPs accounting for a low share of call origination.
 - Similarly, TCPs accounting for a high share of termination would likely be in a stronger position than TCPs accounting for a low share of termination.
 - Vertically integrated firms would likely be in a stronger position than vertically separate firms of comparable size.
 - We consider that BT is likely to be in a strong position, both in its role as an OCP and its role as a TCP. We also consider that C&W, the second largest TCP, is likely to be in a strong position when negotiating with smaller OCPs (albeit not when negotiating with BT). Similarly, TalkTalk and Virgin Media, the second and third largest OCPs, are likely to be in a strong position when negotiating with smaller TCPs (albeit not when negotiating with BT). Mobile OCPs currently account for a smaller share of non-geographic call origination, compared to calls more generally. Nonetheless EE, Vodafone and O2 may be in a strong position when dealing with the smaller TCPs.
 - In terms of the impact on consumers, in the absence of regulation or involvement by Ofcom:
 - Some OCPs may be able to drive termination rates down to a particularly low level. In the long run this would result in detrimental effects for SPs, harming service provision and innovation, which are not offset by significant benefits for callers.
 - Some TCPs may be able to set high termination rates that allow SPs to exploit features such as weak competitive constraints on the price of their service. This results in higher retail prices for non-geographic calls. If competition in hosting is effective, the proceeds are likely to be passed through to SPs. This is the opposite of the outcome described in the preceding bullet point – it results in the balance of prices between callers and SPs being tilted in the SPs' favour (although there be some offsetting benefits to callers through SPs having improved incentives to enhance service availability, quality or innovation).
 - Different TCPs are likely to negotiate different termination rates. Over the longer term, this asymmetry between TCPs is likely to lead to consolidation in hosting. This potentially harms competition at that level, which would have detrimental impacts on both SPs and callers.
- 4.77 The one possible change in our analysis is if TCPs are unable to identify the network on which transited calls ultimately originated. It is unclear whether this is the case, particularly as TCPs are currently setting bespoke termination rates, but we cannot rule out this possibility. In these circumstances smaller OCPs may be able to secure comparable termination rates to those paid by the large transit providers. However this would not alter our view that there are likely to be significant imbalances in wholesale negotiating positions. Nor would it alter our view that these imbalances can lead to detrimental effects for consumers.
- 4.78 We thus remain of the view that we are not confident that the termination rates that would arise commercially (absent regulation or involvement by Ofcom) are likely to lead to desirable outcomes for consumers.

- 4.79 In any event it is not clear that, even if these imbalances were removed and termination rates competitively derived, this would address consumer concerns alone. The market failures we have identified are not as a result of wholesale problems or even overall competition in the retail market but are externalities related to the nature of the market for these services. Hence our focus on directly addressing these retail concerns. Where this also has a consequence of addressing wholesale imbalances this is an additional benefit.

The provision of hosting services

- 4.80 In the December 2010 Consultation, we concluded that the hosting market appeared to be operating well. Bar a few minor problems concerning the arrangements for ported numbers, the hosting level of the supply chain appeared to be broadly working well for SPs and TCPs. Having received very few comments on this matter, we have seen no reason to change our original view. We have set out stakeholder comments and our response in Annex 9.
- 4.81 Overall, we believe that the hosting market is broadly competitive. Our concerns are focussed on the operation of the retail and wholesale levels.

Q4.1 Do you agree that the analysis set out in Section 4 and the supporting annexes which draws on our initial assessment in the December 2010 review, stakeholder comments and the further research undertaken in 2011, appropriately characterises the market, the market failures and the effects on consumers? If not please set out your alternative views.

Part A - Section 5

Legal and analytical framework

Introduction

- 5.1 In this Section, we set out the legal framework which governs our powers to take action in relation to the use of non-geographic numbers and the provision of NGCS. We summarise the comments of stakeholders on the scope and application of our powers in this area and provide our response on these issues.
- 5.2 We also review the analytical framework we proposed in the December 2010 Consultation in the light of the consultation responses and set out our conclusions as to how we should assess the options for remedying the consumer harm we identified in Annex 8 and summarised above in Section 4.

Legal Framework

Ofcom's duties and powers under the Communications Act 2003

- 5.3 The legal framework for Ofcom's proposals was set out in Section 2 of the December 2010 Consultation. The purpose of the December 2010 Consultation was to set out preliminary views, and it noted that the revised EU Framework had not been transposed into UK legislation. In making more detailed proposals in this document, we have reviewed our analysis and added more detail to it where relevant, in order that stakeholders can understand the basis for our proposals.
- 5.4 The starting point remains as set out in the December 2010 Consultation in relation to our powers. Ofcom's powers derive largely from the Communications Act 2003 ('the Act'), which implements the EU Framework Directives.¹¹⁴
- 5.5 As set out in section 3(1) of the Act, Ofcom's principal duty in carrying out its functions is:
- a) to further the interests of citizens and consumers in relation to electronic communications matters; and
 - b) to further the interests of consumers in relevant markets, where appropriate by promoting competition.
- 5.6 In particular, Ofcom is required, by virtue of its duty under section 3(1), to secure, amongst other things, the availability throughout the UK of a wide range of electronic communications services.
- 5.7 In addition, Ofcom must have regard in all cases to:
- a) the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed; and

¹¹⁴ The common regulatory framework for telecommunications consisting of the Framework Directive, the Authorisation Directive, the Access Directive, the Universal Service Directive and the Privacy and Electronic Communications Directive (2002/58/EC).

- b) any other principles appearing to Ofcom to represent the best regulatory practice.
- 5.8 In carrying out its principal duty, Ofcom must have regard to certain, specified objectives and considerations to the extent they are relevant. These include:
- the desirability of promoting competition in relevant markets (s.3(4)(b));
 - the desirability of encouraging investment and innovation in relevant markets (s.3(4)(d));
 - the vulnerability of those whose circumstances appear to Ofcom to put them in need of special protection (s.3(4)(h));
 - the needs of persons with disabilities, of the elderly and of those on low incomes (s.3(4)(i));
 - the opinions of consumers in relevant markets and of members of the public generally (s.3(4)(k)); and
 - the interests of consumers in respect of choice, price, quality of service and value for money (s.3(5)).
- 5.9 In carrying out its functions under Chapter 1 of Part 2 to the Act (which include its duties in relation to numbers set out in the following paragraphs), Ofcom is required to act in accordance with the six Community requirements.¹¹⁵ These include the requirements to: promote competition in the provision of electronic communications networks and services; contribute to the development of the European internal market; promote the interests of European Union citizens; take account of the desirability of not favouring one form of electronic communications network or service over another; and encourage the provision of network access for the purpose of securing efficiency, sustainable competition, efficient investment and innovation and the maximum benefit for the customers of communications providers.
- 5.10 Ofcom has a number of duties and functions in relation to numbers in sections 56 – 63 of the Act, including its duty to publish the Numbering Plan and to keep it under review, its function of making general conditions imposing requirements in relation to numbers and its general duty in section 63 of the Act to ensure that the best use is made of numbers and to encourage efficiency and innovation for that purpose. Section 63(2) also requires Ofcom to secure that there is no undue discrimination by communications providers against other communications providers in relation to the use of telephone numbers.
- 5.11 Ofcom's specific powers to make and modify general conditions in relation to numbers are set out in sections 57 – 60 of the Act. The matters which may be the subject of a general condition under these provisions include:
- Conditions for limitations on allocation of telephone numbers;¹¹⁶
 - Conditions to secure access to telephone numbers;¹¹⁷
 - Conditions about the allocation and adoption of telephone numbers,¹¹⁸ and

¹¹⁵ Section 4 of the Act.

¹¹⁶ Section 56A of the Act

¹¹⁷ Section 57 of the Act.

- Telephone numbering conditions binding non-providers.¹¹⁹

Revised EU Framework Directives

5.12 Revised EU Framework Directives for electronic communications were approved on 4 November 2009 by the EU Parliament ('the revised EU Framework') and introduced new provisions relevant to the regulation of numbers and NGCS. These are:

- An amendment to Part C to the Annex to the revised Authorisation Directive, which sets out the conditions which may be attached to rights of use for numbers.¹²⁰ The amendment clarified the condition specified in paragraph 1 of Part C, which provides for:

“Designation of service for which the number shall be used, including any requirements linked to the provision of that service and, for the avoidance of doubt, tariff principles and maximum prices that can apply in the specific number range for the purposes of ensuring consumer protection in accordance with Article 8(4)(b) of Directive 2002/21/EC (Framework Directive).”

- Changes to the substantive provisions in Article 21 of the Universal Services Directive which enable the national regulatory authority to impose obligations on communications providers in relation to the publication of pricing and tariff information, including:

“standard tariffs indicating the services provided and the content of each tariff element”,¹²¹

“applicable tariff information ...regarding any number or service subject to particular pricing conditions”.

5.13 Since the December 2010 Consultation, the amendments to the EU Framework Directives have been transposed into UK law (following consultation by the UK Government¹²²) by the Electronic Communications and Wireless Telegraphy Regulations 2011.¹²³ These came into force on 26 May 2011 and amended the Act.

5.14 The amendments that are relevant to this consultation are two-fold. First, an amendment to Ofcom's duty to publish the Numbering Plan to provide that it includes:

“such requirements as [Ofcom] consider appropriate, for the purpose of protecting consumers, in relation to the tariff principles and

¹¹⁸ Section 58 of the Act.

¹¹⁹ Section 59 of the Act.

¹²⁰ http://ec.europa.eu/information_society/policy/ecomms/index_en.htm.

¹²¹ Paragraph 2.2, Annex II, revised Universal Services Directive, http://ec.europa.eu/information_society/policy/ecomms/index_en.htm

¹²² The Department of Business, Innovation and Skills ('BIS') issued a public consultation on 13 September titled *Implementing the revised EU Electronic Communications Framework, Overall approach and consultation on specific issues*, <http://www.bis.gov.uk/Consultations/revised-eu-electronic-communications-framework?cat=closedawaitingresponse>

¹²³ http://www.legislation.gov.uk/ukxi/2011/1210/pdfs/ukxi_20111210_en.pdf

maximum prices applicable to numbers so adopted or available for allocation”.¹²⁴

- 5.15 The second change relates to Ofcom’s power to make general conditions in relation to the allocation and use of numbers. Section 58(1)(aa) of the Act provides that conditions about the allocation and adoption of numbers can:
- “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 adopted or available for use”.
- 5.16 Conditions set under section 58(1)(aa) must be set for the purpose of consumer protection. Therefore, if we impose or modify a general condition pursuant to this section, our purpose must be to protect consumers.
- 5.17 This power derives from the Authorisation Directive. The definition of “consumer” in the EU Framework Directives is different from that under the Act.
- 5.18 The Framework Directive defines consumer as “any natural person who uses or requests a publicly available electronic telephone service for purposes which are outside his or her trade, business or profession.”¹²⁵
- 5.19 The Act defines consumer more widely to include persons “in their personal capacity or, for the purposes of or in connection, with their business”¹²⁶.
- 5.20 Our starting point is the definition under the Act, as this provides the authority for Ofcom to act. However, how we interpret a provision may be influenced by the EU Framework Directives, especially where the power granted by the Act directly derives from the EU Framework Directives.
- 5.21 We describe in Section 3 the consumer harm that we consider arises from the market failures that we have identified in the provision of NGCS. This harm clearly affects consumers who are natural persons, acting for non-business purposes - for example, prices that do not reflect their preferences, loss of access to socially important services and loss of service diversity and innovation. However, as explained in Section 3, it also impacts SPs, which are consumers of electronic communications services for business purposes. For example, the reduced demand for NGCS adversely affects the demand for SP services; and retail prices take insufficient account of the SP preferences. We therefore consider that, irrespective of whether a narrow or wide definition of consumer is adopted, the measures that we propose in reliance on section 58(1)(aa) of the Act are “for the purpose of consumer protection”.
- 5.22 Furthermore, in line with our duties under section 3 and 4 of the Act, we must consider the interests and opinions of consumers under its wider definition in the Act, as well as the impact more generally on all stakeholders, when considering whether to impose General Conditions.

General conditions in relation to numbers

- 5.23 General conditions are specific conditions that can be imposed across all CPs, or a defined class of CPs, as appropriate. As they restrict the general authorisation and/or

¹²⁴ Section 56(1)(ba) of the Act

¹²⁵ Framework Directive Article 2(i)

¹²⁶ Section 405(5) Communications Act 2003

rights of use for numbers, they are limited in the circumstances in which they may be applied, and cover specified matters as access/interoperability, consumer protection matters, compliance with standards and the effective functioning of networks.¹²⁷

5.24 General conditions may be imposed under sections 51 to 58 of the Act and are not limited by their nature to exclude conduct at either wholesale or retail levels (i.e. activities at either or both levels may be needed to comply with a general condition).

5.25 There are a number of General conditions in force at present that relate to NGCS. As summarised in the December 2010 Consultation, these include:

- General Conditions that apply specifically to NGCS, namely General conditions 8, 10, 14 and 17 which apply to all communications providers and set out requirements on transparency, Codes of Conduct (including publication of pricing information) and use of numbers, as well as PRS co-regulation with PhonepayPlus ('PPP');
- The PRS Condition¹²⁸: Ofcom requires communications providers falling within the scope of the PRS Condition to comply with directions given by PPP in accordance with its Code of Practice and for the purposes of enforcing the provisions of that Code. The application of the PRS Condition is limited to 'Controlled PRS', so that only a specific subset of PRS are subject to Ofcom's enforcement powers for breach of the PRS Condition. The practical effect of the definition is that PPP regulates through a range of instruments¹²⁹ calls to the following non-geographic number services: 09, 0871, 118 (DQ), and mobile shortcodes. PPP also regulates 070 and 076 calls where the service is operating as a Controlled PRS in contravention of the Numbering Plan;
- The PPP Code of Practice¹³⁰: the Code is approved by Ofcom under section 121 of the Act and outlines wide-ranging rules to protect consumers as well as the processes that PPP applies when regulating the PRS industry.
- The NTS Call Origination Condition (Condition AAA11) which applies to BT in relation to calls to 0500, 080, 082, 0843, 0844, 0845, 0871, 0872, 0873, 090, 091 and 098 numbers and restricts the revenue that BT can retain from the retail price to certain regulated charges.¹³¹

¹²⁷ The Annex to the Authorisation Directive provides a list of conditions that can be attached to the General Authorisation. The Communications Act 2003 has implemented this Directive in the UK.

¹²⁸ http://stakeholders.ofcom.org.uk/binaries/telecoms/policy/narrowband/PRSCCondition_2_.pdf

¹²⁹ <http://www.phonepayplus.org.uk/output/about-phonepayplus.aspx>

¹³⁰ <http://stakeholders.ofcom.org.uk/consultations/ppp/>

¹³¹ Condition AAA11 ("Requirement to provide NTS Call Origination"). The NTS Call Origination Condition does not apply to calls to 0844 04 and 0808 99 numbers, which are used for Surftime Internet access and fixed rate internet access call origination ("FRIACO") respectively. See the definition of "NTS Calls" set out in *Review of the fixed narrowband wholesale services markets*, 15 September 2009 (the "Wholesale Narrowband Statement"), Annex 7, Schedule 1 available at: http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/summary/main.pdf.

- Single Transit SMP Conditions which apply to BT only and require BT to provide a regulated single transit product, including for NTS and other non-geographic calls.¹³²

- 5.26 In addition, General Conditions 1 and 20 are also relevant to this review.
- 5.27 General Condition 1 obliges CPs to negotiate (where requested) with a view to concluding an interconnection agreement. This requirement is derived from Article 4 of the Access Directive.¹³³
- 5.28 General Condition 20 obliges CPs to ensure, where technically and economically feasible, that end users can access non-geographic numbers and all telephone numbers provided in the EC. There is provision for a subscriber to limit access on a geographic basis. General Condition 20 transposes the requirement under Article 28 of the Universal Service Directive. As explained in the recitals to the Universal Service Directive, access by end-users to all numbering resources in the Community is regarded as a vital pre-condition for a single market.¹³⁴

The Numbering Plan

- 5.29 The Numbering Plan sets out the restrictions that apply in relation to the use of particular number ranges.¹³⁵ To the extent those restrictions are binding, they derive their power from General Conditions – the Numbering Plan itself does not apply additional restrictions to CPs over and above the restrictions that can be made through General Conditions. General Condition 17 provides an example where the authority for a restriction in the Numbering Plan is contained within a General condition, in that it obliges all CPs to comply with the designation for particular numbers in the Numbering Plan (for example where there is mandated treatment of a number, e.g. 03 and 116 ranges, rather than simply pricing guidance).

Access conditions

- 5.30 Access conditions typically apply at the wholesale level, as they relate to facilitating interconnection between CPs, and are aimed at ensuring end-users can reach designated numbers/services. Ofcom has a power to impose requirements by way of a General Condition under section 57 of the Act to secure that end-users are able to call telephone numbers. Ofcom also has specific powers under section 73(2) of the Act to impose access-related conditions for the purpose of securing: efficiency; sustainable competition; efficient investment and innovation; and the greatest possible benefit for end-users.¹³⁶ By virtue of section 74 of the Act, such conditions may impose obligations on a person controlling network access in order to secure end-to-end connectivity. BT is currently subject to an access-related condition of this nature.

¹³² Wholesale Narrowband Statement, Annex 7, Schedule 1 available at: http://stakeholders.ofcom.org.uk/binaries/consultations/wnmr_statement_consultation/summary/main.pdf.

¹³³ http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_907/

¹³⁴ Recital 38 Universal Service Directive

¹³⁵ Sections 56(1)(b) and (c) of the Act states that the Numbering Plan sets out such restrictions as Ofcom consider appropriate on the adoption and other uses to which number may be put

¹³⁶ Section 73(2) Communications Act 2003

Conditions binding non-providers

- 5.31 Section 59 of the Act also permits the setting of conditions on persons other than CPs relating to the allocation, transfer and use of telephone numbers. Such a power would enable the imposition of obligations, such as information requirements, on SPs.

Tests for setting or modifying conditions

- 5.32 When we seek to set or modify certain conditions including the access, general and non-provider conditions we have described above, we have to ensure that we comply with section 47 of the Act.
- 5.33 Section 47 requires that conditions cannot be set or modified unless they are:
- objectively justifiable (save for the case of the setting of new general conditions, when this requirement does not apply);
 - not unduly discriminatory;
 - proportionate; and
 - transparent.

Tests for modifying the Numbering Plan

- 5.34 Where we seek to revise or modify the Numbering Plan we are, under section 60 of the Act, required to apply a similar test to that required under section 47, in that we must show that any such change is:
- objectively justifiable;
 - not unduly discriminatory;
 - proportionate; and
 - transparent
- 5.35 In addition to the specific tests required by section 47 and 60, we must also have regard to our general duties under section 3 of the Act, or community duties, as set out in section 4 and, where the regulation relates to numbering, our general duty as to telephone numbering functions under section 63 of the Act, as discussed above.
- 5.36 Finally, when we consider imposing regulation, both section 47 and section 60 of the Act require that before any condition or provision is made that Ofcom must consult on its proposals.

Dispute resolution

- 5.37 Under sections 185 to 191 of the Act, we have duty to resolve certain disputes that arise between CPs. This duty is derived from Article 20 of the Framework Directive that requires a procedure for an NRA to resolve relevant disputes between undertakings, where decisions are to be aimed at achieving the policy objectives set out in Article 8 of the Directive.

- 5.38 Dispute resolution occurs in relation to issues that arise between CPs and therefore often concerns issues at the wholesale level.
- 5.39 Although any dispute determination only binds the parties to that dispute, such determinations may provide guidance as to how Ofcom considers its duties in relation to various issues. It can, therefore, act to influence the behaviour of the wider market.

Stakeholder comments on the legal framework

- 5.40 In response to the December 2010 Consultation, a number of stakeholders made comments on the legal framework for the NGCS review, and in particular Ofcom's powers under that framework to implement some of the proposals put forward. We have set out these comments below and provided a response.
- 5.41 EE submits that none of the current provisions in the Act legally empowered Ofcom to establish retail prices or retail pricing principles for calls to non-geographic numbers. It considered that as a national regulatory authority ('NRA') the powers available to Ofcom to regulate retail prices for NGCS were both established and constrained by the terms of the EU Framework Directives and in particular by Articles 14 to 16 of the Framework Directive and Article 17 of the Universal Service Directive, in exactly the same manner as for retail price regulation of other telecommunications services.
- 5.42 EE highlighted several quotes from the December 2010 Consultation which it believed demonstrated that Ofcom itself was not convinced that its preferred proposals could be legally justified as the only, or most proportionate, way to ensure a high level of consumer protection. It also submitted that the legal position was at best unclear as to whether or not the amendments to the Authorisation Directive were intended to, or did, empower NRAs to impose retail tariff regulation in such a way as to completely override the restrictions set out in the Framework Directive and the Authorisation Directive. Specifically, it had doubts as to the legal validity of Ofcom's interpretation that those powers would allow it to impose retail tariff regulations on operators who did not have SMP and without having first attempted to address the relevant issues through wholesale regulation. In EE's view, that was highly unlikely, and there were strong legal arguments for reading Part C of the Annex to the Authorisation Directive consistently with Article 16 of the Framework Directive and Article 17 of the Authorisation Directive.¹³⁷
- 5.43 Vodafone considered that the argument that the revised EU Framework Directives provided the ability to set maximum retail prices for certain number ranges flowed from a misinterpretation of the Authorisation Directive and a failure to take into account the wider objectives and approach of the revised EU Framework Directives. Vodafone also submitted that Ofcom itself seemed uncertain of its ability to impose retail price controls when considering its ability to regulate the level of the access charge.¹³⁸ Vodafone argued that originating operators plainly did not have a 'right of use' of the number ranges. Rather, they were in the position of accepting the terms of interconnection with terminating and hosting operators where they wished to enable their subscribers to call those number ranges. Vodafone therefore considered it was clear that the new conditions could only be imposed at a wholesale level and not the retail level of trade. It therefore queried whether Ofcom was indeed in a position to

¹³⁷ EE, December 2010 Consultation Response, p. 12.

¹³⁸ Vodafone highlighted paragraph A5.78 in the December 2010 Consultation as an example of this. Vodafone, December 2010 Consultation Response, Annex 4, p.43.

impose retail price controls for calls to non-geographic number ranges (whether in the form of an absolute price cap or regulation of the level of ‘access’ charge levied by an originating operator) absent a finding that the retail access market is not effectively competitive.¹³⁹ Vodafone considered that Ofcom’s powers in respect of consumer transparency were therefore limited to the relevant provisions of the Universal Service Directive (relating to the publication of tariffs).¹⁴⁰

- 5.44 Vodafone considered that this interpretation was also consistent with the wider objectives and ethos of the revised EU Framework Directives. It submitted that these made clear that NRAs were only able to intervene in markets following a review of a defined relevant market and a finding that the market concerned was not functioning effectively. It argued that in essence, retail price controls were a remedy of the last resort. It noted that in the UK there had been not finding that the retail access and call origination market was not effectively competitive, nor was there any evidence indicating that that was the case. Therefore any proposals to regulate retail charges for calls to non-geographic charges were in breach of the revised EU Framework Directives.¹⁴¹
- 5.45 Three also raised a similar challenge about the powers in the revised EU Framework Directives. It noted that they only applied to the ‘right of use for numbers’, which it considered could only relate to SPs or TCPs and could not be applied to OCPs.¹⁴²

Ofcom response

- 5.46 The stakeholder comments set out above all pre-date the transposition into UK law of the amendments to the EU framework by the Electronic Communications and Wireless Telegraphy Regulations 2011. The amendments to the Act introduced by those regulations include section 58(1)(aa), which clearly empowers Ofcom to set general conditions for the purpose of protecting consumers which “impose tariff principles and maximum prices” for an electronic communications service provided by means of telephone numbers.
- 5.47 Nonetheless, we have considered whether that power must be interpreted as constrained by other provisions of the revised EU Framework Directives, so that it may only be exercised in relation to communications providers that have significant market power and where wholesale regulation has proved ineffective.
- 5.48 Section 58(1)(aa) derives from paragraph 1 of Part C of the Annex to the Authorisation Directive. Part C sets out the conditions that may be attached to rights of use for numbers under Article 6(1) of the Authorisation Directive. Article 6(2) of the Authorisation Directive goes on to say that specific obligations that may be imposed on communications providers under the Access Directive and the Universal Service Directive (which include the obligations which may be imposed on undertakings identified as having significant market power following a market review (“SMP conditions”)) shall be “legally separate from the rights and obligations under the general authorisation”. This requirement is augmented by recital 17 of the Authorisation Directive which provides that SMP conditions “should be imposed separately from the general rights and obligations under the general authorisation”.

¹³⁹ Vodafone December 2010 Consultation Response, Annex 4, pp. 44-45.

¹⁴⁰ Vodafone December 2010 Consultation Response, Annex 4, p. 42.

¹⁴¹ Vodafone, December 2010 Consultation Response, Annex 4, p. 46.

¹⁴² Three, December 2010 Consultation Response, p. 20.

- 5.49 In the light of these provisions, our starting point is that the conditions that may be imposed under Article 6(1) of the Authorisation Directive are distinct from SMP conditions that may be imposed under Article 17 of the Universal Service Directive. Furthermore, while the latter may only be imposed following a market review carried out in accordance with Articles 15 and 16 of the Framework Directive, that does not apply to the imposition of conditions within the scope of Parts A and C of the Annex to the Authorisation Directive .
- 5.50 Turning to Article 17 of the Universal Service Directive, the purpose of this provision, as explained at recital 26, is to enable the NRA to tackle behaviour by an undertaking with significant market power which serves to “inhibit entry or distort competition, for example by charging excessive prices, setting predatory prices, compulsory bundling of retail services or showing undue preference to certain customers”. Hence, an SMP condition imposed under Article 17 should be designed to secure, as a key objective, the promotion of competition. This is made clear in Article 17(2), which empowers the NRA to apply measures “in order to protect end-user interests whilst promoting effective competition” (emphasis added).
- 5.51 That is not the case for conditions falling within paragraph 1 of Part C of the Annex to the Authorisation Directive, for which the purpose, as set out in that provision by reference to Article 8(4)(b) of the Framework Directive, is “ensuring a high level of protection for consumers in their dealings with suppliers”. The trigger for such conditions, therefore, is not an absence or weakness of competition but actual or potential consumer harm.
- 5.52 Further, we note that the retail price controls that the NRA may impose under Article 17 are much more extensive than those that can be made the subject of a condition falling within paragraph 1 of Part C of the Annex to the Authorisation Directive. In addition to retail price caps, the imposition of measures to control individual tariffs, cost-orientation obligations and benchmarking are also permitted under Article 17. In contrast and consistent with the fact that it has a different policy focus, the relevant provision of the Authorisation Directive only appears to allow for retail price controls in the form of “tariff principles and maximum prices that apply in the specific number range”.
- 5.53 For all these reasons, we consider that the power to set conditions in relation to rights of use for numbers under Article 6(1) of the Authorisation Directive, and to incorporate tariff principles and maximum prices under paragraph 1 of Part C of the Annex, is legally and conceptually distinct from the powers to impose SMP conditions under Article 17 of the Universal Service Directive. Provided the purpose of such a condition is consumer protection, rather than being targeted at the promotion of competition, we consider that it should not be regarded as constrained by the requirements of Articles 14 to 16 of the Framework Directive.
- 5.54 For completeness, and subject to the overarching requirement to demonstrate that such a condition is a proportionate means of protecting consumers, we do not, therefore, consider that it is necessary to demonstrate that SMP conditions imposed at the wholesale level under Articles 9 to 13 of the Access Directive would not achieve the desired objective. Nonetheless, we have considered whether a remedy at the wholesale level would be effective at addressing the consumer harm we have identified. For the reasons set out in Annex 17, we have concluded that it would not.
- 5.55 Vodafone and Three have contended that it is the TCP and not the OCP which has a right of use in relation to non-geographic numbers; since Part C of the Annex to the Authorisation Directive only provides for the imposition of conditions attached to

rights of use, this cannot form the basis of conditions regulating retail prices since these will bite on the OCP rather than the TCP.

- 5.56 We consider that the drafting of s.58(1)(aa) of the Act does not confine the imposition of a General condition imposing tariff principles and maximum prices on the electronic communications services provided by the TCP by means of the number range in question but applies, instead to any such service provided by that means. It therefore applies to allow for the imposition of retail price controls. We have nonetheless considered whether it must be more narrowly construed on the basis of the underlying EU framework.
- 5.57 We consider that the term “rights of use for numbers” in the Authorisation Directive should not be given a narrow interpretation to mean only the rights which are conferred by the allocation of a number to a communications provider. We note that by virtue of paragraph 4 of Part A to the Annex of the Authorisation Directive, communication providers may be subject to a general condition requiring them to enable end-users to access numbers from the national numbering plan. In addition, Article 28(1) of the Universal Services Directive requires that the NRA is able to take all necessary steps to ensure that end-users are able to access and use services using non-geographic numbers within the Community. We consider that such access could only be achieved if the OCP has a right of use in relation to the numbers in question.
- 5.58 This view is consistent with the approach taken in the Act. Notably, section 58 of the Act provides for the setting of general conditions in relation to the “adoption” of telephone numbers by a communications provider. The concept of “adoption of a telephone number by a communications provider” is defined in s.56(6) of the Act and includes “using that number for identifying a service or route used by that provider or by any of his customers”. We consider that this covers the activities of an OCP conveying a call by one of its customers to a non-geographic number and then billing the customer for that call.
- 5.59 We also consider that the narrow interpretation advocated by Vodafone and Three could defeat the consumer protection purpose of paragraph 1 of Part C of the Annex to the Authorisation Directive. If it only enabled the imposition of tariff principles and maximum prices on wholesale charges made by the TCP, it would be much harder to demonstrate that this would ensure a high level of consumer protection, as that provision requires. Furthermore, given that such measures at the wholesale level are primarily concerned with the protection of consumers through the promotion of competition, it is difficult to see the circumstances in which it would be appropriate to apply them rather than SMP conditions following a market review in accordance with Articles 14 to 16 of the Framework Directive.
- 5.60 We are therefore satisfied that s.58(1)(aa) of the Act does allow for retail price controls for the purpose of protecting consumers.
- 5.61 We also consider that it would not be appropriate to undertake a market review, as suggested by EE. As discussed above, the consideration of regulation through market reviews is one aspect of the revised EU Framework Directives. It operates without prejudice to consideration of whether access obligations or general authorisation conditions should be imposed. We have identified a consumer detriment across the NGCS market as a whole, and provider specific regulation would not be appropriate to address the identified harm. A more general approach is required, which, provided that it is justified under the Act (and the EU Framework Directives) is best achieved when considering remedies that apply across industry,

such as those contemplated under the Authorisation Directive, or the Access Directive in relation to end-to-end connectivity.

Analytical framework

5.62 In the December 2010 Consultation we asked the following question about our proposed analytical framework for the review:

Q2.3: Do you consider our proposed approach and framework for analysis is fit for the purpose of this review?

5.63 A number of stakeholders responded to this question. Below, we consider our analytical framework for assessing the options that are available to us for remedying the problems we identified in the previous Section in relation to the use of non-geographic numbers. Below we discuss three aspects of our analytical framework:

- the deregulated scenario;
- Ofcom’s duties and the objectives of this review; and
- Ofcom’s assessment criteria.

5.64 We also consider various miscellaneous arguments raised by stakeholders before setting out a summary of our analytical framework.

The deregulated scenario

Approach in the December 2010 Consultation

5.65 One of the analytical concepts we used in the December 2010 Consultation was the “deregulated scenario”. In particular we considered how the market would operate without the existing NGC-specific regulations. We considered that this was appropriate given the nature of the review and that it was in line with our regulatory principles, particularly our principle to impose regulatory obligations only when they are necessary.¹⁴³

5.66 In terms of our analysis of this scenario, we predicted that if current restrictions on BT were removed (such as limits on its call prices), then BT would have incentives to behave in a way similar to how other OCPs currently behaved. Our belief was that the incentives underlying the vertical and horizontal externalities would remain if this occurred. It was argued that the environment for SPs, in the absence of *ex ante* regulation, would also worsen as it was likely that BT would no longer offer the level of predictability that currently exists (i.e. price information). The culmination of our analysis on this point was that in short, we felt there was no reason to believe that this outcome would be better for consumers.

Stakeholder comments on the use of the deregulated scenario

5.67 Vodafone considered that Ofcom’s attempt to justify regulation by reference to a hypothetical world in which there was no regulation of NGCs whatsoever was conceptually flawed. It said the question should not simply be ‘is some regulation better than no regulation’, but whether different regulation is better than current regulation, and, of the realistic alternatives, which flavour of different regulation (if

¹⁴³ December 2010 Consultation, paragraph A1.2.

any) stands to produce the greatest net benefit? It considered that this hypothetical baseline was not, in any case, available to Ofcom under the EU Framework Directives. Vodafone was concerned that failure to appreciate those points had skewed Ofcom's approach towards one in which market failure was simply asserted and then used as a catch-all justification for Ofcom's preferred intervention.¹⁴⁴

Ofcom's current position on the deregulation scenario

- 5.68 We have revisited our use of the deregulated scenario in the light of Vodafone's comments. Vodafone stated that the appropriate question is what form of regulation (if any) is the most appropriate, rather than a binary choice between 'regulation' and 'no regulation'. While this is clearly correct, we do not accept Vodafone's inference that this means the deregulation scenario is inappropriate. It merely formed a baseline for the December 2010 Consultation, against which we compared a wide variety of potential regulatory options. Nor do we accept that we simply "asserted" the existence of market failures in the December 2010 Consultation. The analysis of the retail and wholesale levels in Annexes 2 and 3 of the December 2010 Consultation covered over 100 pages and drew on a wide range of evidence including surveys and the actual behaviour of market participants. Vodafone's comments on that analysis are addressed separately in Annexes 8 and 10.
- 5.69 However we do acknowledge Vodafone's observation that the EU Framework means that no regulation is unlikely to be a realistic option in practice. We also accept that taking deregulation as a base case adds to the difficulty of the analysis. In particular it makes it more difficult to assess the advantages and disadvantages of different remedies, since they have been assessed against a hypothetical baseline, rather than the world as it is today. Accordingly we do not use the deregulation scenario as a base case when assessing different options for intervention.
- 5.70 Our analytical framework is thus the following:
- In Annex 8 we assess the current operation of the retail level and identify a number of market failures. At the end of that Annex we explain how those retail concerns would change in the absence of the retail regulation that is currently in place. This analysis implies that our concerns are unlikely to be alleviated by retail deregulation.
 - In Annex 10 we assess the current operation of the wholesale level. However, as explained in that Annex, we have adopted the "modified Greenfield" approach which results in our analysis disregarding the NTS Call Origination Condition and the possibility of dispute resolution under the Act. Accordingly our concerns about the operation of the wholesale level are subject to the caveat that they apply in the case where Ofcom is not involved at that level.
 - In Parts B and C we consider what, if any, additional regulation is appropriate to address the concerns we have identified. The benchmark against which we perform this assessment is the status quo.

¹⁴⁴ Vodafone, December 2010 Consultation Response, p. 53. Vodafone's comments on how the retail level would operate in absent retail regulation are set out and addressed in Annex 8.

Ofcom's duties and the objectives of this review

Approach in the December 2010 Consultation

- 5.71 In the December 2010 Consultation we stated that we considered consumers' and citizens' interests.¹⁴⁵ We noted that our primary focus was on the "consumer" intended to mean the caller and/or subscriber. We also had regard to the impact on SPs and the other market participants insofar as it had a bearing on the welfare of consumers. However, we recognised that there may be trade-offs between the interests of these two groups of consumers (SPs and callers). In the event that SPs' interests conflict with those of callers then we consider that callers' interests have primacy.
- 5.72 In relation to citizens' interests, we highlighted potential concerns if prices or other terms and conditions made it difficult for, or excluded, some citizens from using certain socially important services. These concerns particularly arise in the case of vulnerable consumers.

Stakeholder comments on the objectives of the review and the role of consumers' interests

- 5.73 [X] considered that the framework for the review was extremely consumer biased. Whilst it appreciated Ofcom's statutory responsibilities to ensure due consideration of consumers and citizens, it considered that there would be more confidence in the potential outcomes if Ofcom clearly set out the framework and objectives for ensuring the unintended and adverse consequences for OCPs, TCPs and SPs were minimised. The CMA also considered that Ofcom had focussed almost exclusively on the perceived consumer interest to the detriment of the business user, which it considered was unacceptable. Similarly [X] noted that very little research had been carried out in relation to business users of these services and Ofcom should ensure that the needs of business users, and the OCPs who supply them, were fully considered when drawing conclusions from this exercise.
- 5.74 Vodafone agreed that Ofcom's primary focus should be on consumer rather than producer interests. However, it noted that the consumer interest should not focus narrowly on consumers only as callers (or potential callers) of NGC without considering their interests more generally, notably in relation to the balance of pricing between NGCs and other calls. Vodafone considered that Ofcom has chosen to frame the problem very largely from an NGC SP/TCP perspective, and it was concerned that Ofcom's characterisation of consumer concerns and the consumer interest was unduly skewed as a result and did not reflect the real preferences and concerns of consumers as demonstrated by Ofcom's consumer survey evidence.¹⁴⁶
- 5.75 EE was concerned that Ofcom's proposed approach and framework for analysis did not provide a robust underlying basis for its review. Specifically, it was concerned that:
- Ofcom was seeking to rely on legal powers that were not designed to be used for what Ofcom was trying to achieve (as discussed above in relation to the legal framework);

¹⁴⁵ December 2010 Consultation, paragraphs A1.5-A1.7.

¹⁴⁶ Vodafone, December 2010 Consultation Response, p.53.

- Ofcom had overestimated the degree of consumer protection concerns currently present in the market;
 - Ofcom had overestimated the likely benefits to be brought by the implementation of its proposals from a consumer protection perspective; and
 - Ofcom’s proposals were disproportionate when considered against the aims they sought to achieve.¹⁴⁷
- 5.76 EE therefore considered that Ofcom should conduct a formal NGCS wholesale market review. It considered that this approach would be legally robust and would improve competition in the NGCS market which would benefit consumers. EE believed that the outcome of such a market review would be in accordance with Ofcom’s provisional conclusion in the NTS market review consultation of October 2004 that BT had SMP and would result in the regulation of non-geographic call termination.¹⁴⁸
- 5.77 EE was also concerned that in attempting to consider the consumer, SP, OCP and TCP issues for non-geographic numbers as a whole, Ofcom had overestimated the significance of particular concerns, which it in fact considered to be more localised to specific non-geographic number ranges (such as fraud, lack of price awareness, and access to socially important services). It considered that in order to ensure any regulatory intervention was proportionate and objectively justified, the costs and benefits of Ofcom’s proposed actions must be considered and established on a number range by number range basis.¹⁴⁹
- 5.78 Verizon noted some concerns about the framework, in particular, the priority given to some areas, the inter-relation of the different obligations, and, in particular, the intellectual jump from the legal framework to the stated policy objectives. It noted that Ofcom had identified a series of competition problems in its rationale for the review. However, in considering its duties and deriving an analytical framework, Ofcom focused largely on consumer matters, and the perceived detriment to consumers arising from the current regime. Verizon considered that this approach led to a risk of failing to give proper weight to the first Community Requirement in relation to promoting competition, given the stated rationale for the review. It considered this might mean that competition issues and those relating to market power were not given sufficient consideration. It urged Ofcom to give due weight to these issues, which affected providers at a wholesale level and ultimately consumers at a retail level.¹⁵⁰

Ofcom’s current position

- 5.79 [3<] indicated concerns about the consumer focus of the review. However, as we have set out in more detail above, the primary objective of this review stems from our principal duties which require that we further the interests of citizens in relation to communications matters, and consumers in the relevant markets. Therefore it is entirely appropriate that this should be the main focus of our review. In addition, the legal basis for some of the modifications we are proposing are linked specifically to ‘consumer protection’ and it is on that basis that we consider that our proposed interventions are justified. That said, we also recognise and agree that it is important

¹⁴⁷ EE, December 2010 Consultation Response, pp. 12-13.

¹⁴⁸ EE, December 2010 Consultation Response, pp. 12-13.

¹⁴⁹ EE, December 2010 Consultation Response, p.6.

¹⁵⁰ Verizon, December 2010 Consultation Response.

to consider the needs of businesses, and how this will impact them. We have undertaken more research with SPs in particular to understand their preferences for certain number ranges. To mitigate the risk of unintended consequences for OCPs, TCPs and SPs we have analysed the effects of our proposals carefully, using a range of evidence. We have also engaged with communications providers through a

- 5.80 In terms of Vodafone's comments, we agree that we should not focus on retail consumers' interests only with respect to non-geographic calls. Ofcom's primary duty (as highlighted above) is to further the interest of consumers (which includes both callers and consumers more generally) and therefore we will take into account all possible impacts on consumers as part of our assessment. We do not accept Vodafone's claim that we largely chose to frame problems from the perspective of TCPs and SPs operating non-geographic numbers.
- 5.81 In relation to Vodafone's criticisms of our characterisation of consumer concerns, our analysis in Annex 8 addresses the responses we have received on the operation of the retail level, including from Vodafone. We understand Vodafone to be particularly referring to the potential tariff package effect for mobile OCPs that could result from the changes we are proposing (i.e. that as a consequence of setting tariff principles or a maximum price in the case of 080 calls, prices for other services could rise and this would impact all consumers, not just those that call non-geographic numbers). This was an issue that we did consider directly as part of the December 2010 Consultation, and it also forms a part of our assessment of the different options in this consultation. We also respond directly to the evidence from the 2010 Consumer survey on consumer preferences for tariff rebalancing in Section 16 (see paragraphs 16.125-16.131).
- 5.82 Although the concerns raised by EE were presented in response to our analytical framework, we consider that they actually go to the substance of our analysis:
- EE's arguments in relation to our legal powers are addressed above;
 - whether the extent of consumer protection concerns is addressed as part of our assessment of the retail level in Annex 8. As is noted in that Annex and summarised in Section 4 above, we remain of the view that there is sufficient evidence to demonstrate significant consumer harm in this market;
 - in terms of whether we have overestimated the benefits of intervention or whether our proposals are disproportionate, we have responded to specific stakeholder concerns as part of our revised assessment of the different options (i.e. in Sections 7 to 13 for the unbundled proposals and Sections 14 to 17 for the Freephone ranges).
- 5.83 EE's argument that we should conduct a formal market review of the wholesale level is addressed in Annex 17. For the reasons set out in that Annex, we do not consider that such a review would address the concerns that we have identified.
- 5.84 We do not accept Verizon's characterisation of the rationale for this review in the December 2010 Consultation as being "a series of competition problems".¹⁵¹ While we did refer to prices not appearing to be effectively constrained by competition, the source of the market failures that we identified was other factors: low price awareness, horizontal and vertical externalities (see Section 4). Similarly, the five harmful effects of the market failures which we identified did not focus on competition

¹⁵¹ Verizon, December 2010 Consultation Response, Annex, Q2.3.

(although weakened competition is now one of the five harmful effects we identify). We also explicitly referred to the greater clarity provided by the revised EU Framework “as to our powers to intervene with respect to consumer welfare consumers in this area”.¹⁵²

5.85 As we discuss above, we acknowledge the importance of not only the first but of all of the Community Requirements, set out in section 4 of the Act. We consider our proposed approach to regulation in the context of both section 4 and our duties under section 3 of the Act, including our principal duty which includes a duty to further the interests of consumers in relevant markets, where appropriate by promoting competition. We explain, in describing the identified market failures and our proposals to remedy those failures, how we have taken account of our duties and why we consider the proposed approach to regulating this sector to be appropriate.

Ofcom’s assessment criteria

Approach in the December 2010 Consultation

5.86 In assessing the different regulatory options that we identified in the December 2010 Consultation, we identified the following assessment criteria. We considered these to be the appropriate assessment criteria in light of our principal and other regulatory duties.

- **transparency/consumer price awareness:** In order for consumers to make choices which are in their interest they need to have easy access to price (and non-price) information which is easy to understand and to act upon. If not properly informed, they are inhibited from making the best subscription and calling choices for their own preferences. In addition, providers could take advantage of the lack of price information and increase their prices or lower the quality of their services;
- **price:** consumers benefit from prices for NGCs that reflect, as closely as possible, a competitive outcome but also avoid distortions arising from market failures (such as vertical and horizontal externalities). Such prices should provide appropriate signals to encourage efficient consumption of NGCs, geographic calls and other elements of the voice telephony bundle of services;
- **service quality, variety and innovation:** consumers may often have different preferences in terms of the type and the quality of the services they are interested in. Therefore, it is important to ensure that the regulatory environment is conducive to providers offering those services that consumers demand including appropriate incentives for investment and innovation. Such incentives depend on both prices at either end of the NGC, i.e. the price to the caller or subscriber, which affects the volume of calls that the SP receives, and the hosting price charged to the SP by the TCP (and the revenue share received, if relevant), which affects the SP’s costs or revenue per minute. This means that the balance of prices is important to achieve the best outcome for consumers;
- **access to socially important services:** some non-geographic numbers are used to deliver socially important services. For some consumers this may be the only way to easily access these services. Therefore, it may be particularly important to ensure that we avoid the risk of “vulnerable” citizens and consumers being excluded from using these services; and

¹⁵² December 2010 Consultation, paragraph 2.28.

- **regulatory burden:** a framework which is disproportionately costly to implement and manage (relative to the benefits it provides) is undesirable and these costs may eventually fall on consumers.

Stakeholder comments on the our assessment criteria

- 5.87 Three¹⁵³ and Virgin Media noted that they largely agreed with the specific assessment criteria we had set out as part of the analytical framework for the review. Virgin Media said the objectives and assessment criteria that Ofcom set out were generally consistent with our regulatory duties and were, in particular, supportive of our principal duty relating to the furthering of the interests of citizens and consumers. However, it believed that the manner in which Ofcom had applied the framework, and the information and evidence that had been fed in to it, had a number of significant shortcomings. It considered that this had led to a number of proposals which were mis-targeted, disproportionate, inconsistent with generally accepted regulatory best practice and did not, in its view, fully satisfy the criteria that Ofcom had set out.¹⁵⁴
- 5.88 BT noted that Ofcom needed to have regard to the desirability of encouraging investment and innovation (section 3(4)(d) of the Act), which was underlined by a Government consultation on the economic framework for regulation. BT considered that any regulation imposed by Ofcom should support that initiative to make sure there was a stable regulatory environment for investors by ensuring that sufficient regard was given to investment incentives.¹⁵⁵
- 5.89 Some other respondents focussed more specifically on the access to socially important services criterion. EE acknowledged that there were important policy considerations in making sure that vulnerable consumers in mobile only households had access to socially important services at an affordable price.¹⁵⁶ However it considered that Ofcom should give greater recognition to the fact that not all services provided on non-geographic ranges were “essential”. EE also argued that Ofcom should not be questioning whether or not OCP pricing structures were excluding low income customers from the market, but rather should be questioning whether the choice of number range by SPs was exacerbating this problem. It noted that it was ultimately up to SPs which number range they choose to use to meet their own commercial and social welfare objectives and to ensure that access on an appropriately priced number range was available to vulnerable consumers.
- 5.90 The reality, EE argued, was that many “socially important” SPs had chosen revenue sharing ranges over other available choices because they needed the revenue to help subsidise the service they provide. EE noted this was their valid commercial policy prerogative, and it should not be seen as any reason for Ofcom to intervene at the level of OCP retail pricing for calls to these number ranges (which ultimately currently funds the revenue share flowing back to the SP). It also argued that access to essential services, such as key Government help-lines and certain charities, was already being catered for through bilateral agreements or arrangements which could be characterised as charitable donations, which result in these calls being zero rated.¹⁵⁷

¹⁵³ Three, December 2010 Consultation Response, p.4,

¹⁵⁴ Virgin Media, December 2010 Consultation Response, p.5 .

¹⁵⁵ BT December 2010 Consultation Response, p.22.

¹⁵⁶ EE, December 2010 Consultation Response, p.64.

¹⁵⁷ Ibid, pp. 28-29.

- 5.91 O2 also said it accepted that it was important to ensure that socially-important services were easily accessible to consumers.¹⁵⁸ It noted that this was the very reason why O2 did not impose a retail charge on consumers, or an origination charge on service providers, of 080 numbers that fell within the scope of the THA. Therefore, whilst O2 agreed that the concern about access to socially important services was a valid one, it considered that Ofcom should take into account options other than those considered in the December 2010 Consultation (for example Government funding or the use of geographic rated numbers).¹⁵⁹
- 5.92 Vodafone also agreed that appropriate safeguards should exist to protect low income and vulnerable groups and that readily available access to socially important services, by whatever means that may be, should be ensured. However, it also questioned whether the proposals in the December 2010 Consultation were the right way to do so. Rather, Vodafone argued that, targeted, specific measures would be more likely to deliver safeguards for vulnerable groups and assist with preserving access to socially important services, with a reduced likelihood of distorting the commercial environment.¹⁶⁰

Ofcom's current position on our assessment criteria

- 5.93 We believe that having considered stakeholders' responses and considered further the definition of each of these criteria, that the five criteria we identified in the December 2010 Consultation remain appropriate in light of our statutory duties¹⁶¹ and the objective of this review.
- 5.94 For clarity, we have changed the definition of the "price" criterion into "efficient prices" as this is better aligned with the description of that criterion. Similarly we have renamed the criterion "transparency/consumer price awareness" as "consumer price awareness".
- 5.95 In addition, below we provide further clarifications on the "service quality, variety and innovation" and the "access to socially important services" criteria. Finally, we set out our response to stakeholders' representations on our assessment criteria.

Service quality, variety and innovation

- 5.96 In the December 2010 Consultation we argued that it was important to consider the impact of any options on service quality, variety and innovation. We believe that what we stated in that consultation remains valid but it is also beneficial to explicitly clarify one issue that we believe should be assessed under this criterion.
- 5.97 Under this criterion we explicitly cover migration and service loss that may arise from implementing some of the options we consider in this consultation. For example, when an option could lead to SPs migrating or no longer providing their services via non-geographic numbers then this would impact on the services that may be available to consumers and therefore affect the quality of services available via a specific number range or via non-geographic numbers in general. In addition, the regulations that apply to a number range may affect the incentives for SPs to start using that number range to provide their services.

¹⁵⁸ O2, December 2010 Consultation response, p.7.

¹⁵⁹ O2, December 2010 Consultation response, pp. 28-29.

¹⁶⁰ Vodafone, December 2010 Consultation response, p.12.

¹⁶¹ See paragraphs 5.3 to 5.11 above.

Access to socially important services

- 5.98 As explained in Annex 8, a particular issue that emerges from our retail analysis is access to socially important services by vulnerable consumers. In particular, these concerns relate to our duties with respect to citizens' interests. As a result, we have adopted access to socially important services as a distinct assessment criterion.
- 5.99 We consider that it is useful to provide further explanation of four different aspects of this criterion.
- 5.100 First, we have refined our view of who constitutes a vulnerable consumer. In the December 2010 Consultation the characterisation we chose was of those that either have low income (i.e. less than £11,500 per year) or belong to low socio-economic groups – i.e. D and E.¹⁶²
- 5.101 We have given further thought to our definition of vulnerable consumers and consider that as well as low income consumers, the following sub-groups are also particularly relevant in the context of access to services provided through non-geographic numbers:
- consumers in households that are involuntarily mobile-only. These are consumers that decide not to have a fixed line because they may not be able to afford it; and
 - elderly and/or disabled consumers that are dependent on telecoms e.g. because they have mobility difficulties.
- 5.102 We recognise that the various categories that make up vulnerable consumers will overlap.
- 5.103 Second, we explain in more detail what constitutes a socially important service. These comprise a minimum set of services which citizens need to have access to in order to participate in society. Although it is difficult to precisely define what these services are, we believe that they should include the following:
- health services such as GPs' surgeries;
 - benefit payments services such as access to unemployment or invalidity services and state pensions;
 - social care by the public and private sector – e.g. help lines such as the Samaritans; and
 - utilities (gas, electricity and water supply).
- 5.104 Third, our main concern is about citizens' interests and arises when vulnerable consumers are unable to gain access to socially important services. In particular, vulnerable consumers may be deterred from accessing socially important services as a result of either the actual price of calls to these services or because they believe calls to these services to be expensive.
- 5.105 Fourth, this criterion is focused on cases where vulnerable consumers lose access to socially important services, rather than those consumers that maintain access to

¹⁶² December 2010 Consultation, paragraph A1.28.

such services but pay high prices for doing so. Relative prices for non-geographic and geographic calls are interrelated through the tariff package effect. Putting aside the issue of access, if we were to pursue an objective of lowering retail prices for vulnerable consumers then this may have the consequences of higher prices for other retail consumers i.e. a redistribution effect. We do not consider that pursuing an objective of redistribution between different classes of retail consumer though non-geographic call prices is appropriate. We do not believe that the regulation of non-geographic calls is an appropriate tool to be addressing such wider issues about income differentials.¹⁶³

- 5.106 Finally, in terms of what number ranges this criterion is relevant to, we consider that it primarily applies to the 080 and 0845 number ranges. A number of charity and government helplines are provided on these ranges, and they are also used by several utility companies. The 0843/4 ranges are also relevant, because a number of doctors surgeries use these number ranges.¹⁶⁴
- 5.107 We have attempted to gauge extent to which 080 and 0845 numbers are used by socially important SPs in two ways.
- 5.108 First, Table 5.1 uses data gathered formally from TCPs on the twenty most popular 080/0845 SPs that they host. Taking our definition of socially important services set out above, we have estimated what percentage of those SPs may be providing socially important services.

Table 5.1: Data from TCPs on largest SPs on the 080 and 0845 ranges

	080 SPs	0845 SPS
Socially important	7%	10%
Maybe socially important	2%	1%
Not socially important	91%	89%

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.

Note: This data was based on differing time periods

- 5.109 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. We accept that this data will omit the very smallest TCPs. Nonetheless, it gives a crude indication of the approximate proportion of SPs that provide socially important services via 080 and 0845 numbers.

¹⁶³ We note that the CC made an analogous observation during the appeals against the 2011 MCT Statement. In those appeals it was argued that our choice of cost measure was inappropriate because it would make vulnerable customers worse off. The CC agreed with Ofcom “that it was not appropriate to use MCT regulation as a vehicle for addressing a social welfare issue because such an approach would not be an efficient means of pursuing social objectives.” Further the CC stated that “Ofcom clearly did and was right to have regard to the effects of MCT regulation on vulnerable customers but the existence of negative effects does not necessarily mean that Ofcom erred ...” 2012 CC Determination, paragraphs 2.915-2.917.

¹⁶⁴ See for example NEG and the BMA’s response to the December 2010 Consultation. NEG’s response indicated that over 1,000 GP surgeries use the 0844/3 ranges.

5.110 Second, Table 5.2 uses data gathered from OCPs on the forty most popular 080/0845 numbers dialled by their customers. We have simply counted how many of those numbers relate to socially important services.¹⁶⁵

Table 5.2: Data from OCPs on most popular 080 and 0845 numbers

	Count of 080 numbers	Count of 0845 numbers
Socially important	23%	28%
Maybe socially important	10%	8%
Not socially important	58%	63%
Unclear ¹⁶⁶	10%	1%

Source: 13 OCP responses to a s.135 request issued October 2011 asking for the 40 most popular 080 and 0845 numbers (by volume of call minutes).

Note: This data was based on differing time periods

5.111 The approach in Table 5.2 counts some SPs multiple times, for example the NHS Direct 0845 number came up several times from different OCPs.¹⁶⁷ As a result, a SP that is frequently called from many different OCPs is given additional weight in Table 5.2. We accept that our treatment of this data is at a high level. However the proportion of socially important numbers in Table 5.2 is higher than in Table 5.1, which may suggest that the proportion of call minutes to socially important services is higher than the figures for the number of SPs given in Table 5.1. However, we accept there are several limitations to the data.¹⁶⁸

Our response to stakeholders' comments on our assessment criteria

5.112 We now turn to stakeholders' comments on our assessment criteria, most of which are addressed elsewhere in this document.

5.113 Virgin Media's concerns relate to the way we assessed the various options for intervention, which we set out and discuss later in this consultation.

5.114 BT referred to our duty to have regard to the desirability of encouraging investment and innovation in relevant markets (section 3(4)(d) of the Act). We are aware that we

¹⁶⁵ To illustrate, suppose that the top SPs dialled from one OCP were A, B, C and D and that the top SPs dialled from another OCP were B, C, D and E. Suppose that SPs A and B are socially important. Combining results from these two OCPs gives a list of A (once), B (twice), C (twice), D (twice) and E (once). This implies that 37.5% of these SPs are socially important i.e. out of the total of eight there is A once plus B twice.

¹⁶⁶ We were not able to identify the services provided on all the every 080 or 0845 number provided in the responses from the OCPs and therefore these are marked as 'unclear'.

¹⁶⁷ This same effect does not occur for the data from TCPs, because an SP usually contracts with one TCP for a specific number (although they may contract with multiple TCPs for various numbers).

¹⁶⁸ In particular, the figures in Table 5.2 should not be treated as accurate estimates of the proportion of call minutes to socially important numbers. We have only collected 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).

need to have regard to the desirability of encouraging investment and innovation and we consider that through the use of our assessment criterion “service quality, variety and innovation” we are having specific regard to that requirement. In addition, it will also be taken into account indirectly as part of the broader “regulatory burden” criterion.

5.115 EE, O2 and Vodafone did not appear to disagree with the principle behind our criterion of access to socially important services. However with regard to their specific comments:

- We agree with EE that not all services provided via non-geographic numbers fall within our definition of socially important, as is highlighted in paragraph 5.108 above. These services are concentrated on certain number ranges, in particular 080 and 084. We therefore accept that this assessment criterion mainly applies to these number ranges and in the case of ranges such as 09 is not relevant at all. We have taken this into account in our assessments of the different options for intervention.
- We consider EE’s argument that SPs, through their choice of number range, bear some responsibility for the price of calling the SP’s service in Annex 8. As explained in that Annex, we accept that current market failures may exacerbate the incentives for SPs to choose more expensive number ranges.
- EE, O2 and Vodafone all referred to their bilateral arrangements with some 080 SPs and their decision not to charge for certain 080 calls. As explained in Part C, we do not consider that these arrangements address our concerns in relation to 080 calls. We take some mobile OCPs’ practice of not charging for some 080 calls into account in our assessment of the options for intervention in relation to 080.
- Vodafone and O2 both argued that our proposals in the December 2010 Consultation may not be the most effective way of addressing this concern. We assess the different options for intervention in Parts B and C of this document.

Other miscellaneous points

5.116 We also received a number of responses from stakeholders about our analytical approach that do not fit into the categories discussed above.

Other miscellaneous stakeholder comments

5.117 C&W called upon Ofcom to define a clear mechanism for quantifying the success of the measures it sought to implement, noting that this potentially disruptive and highly expensive exercise was intended to tackle the selfsame pricing transparency, low consumer confidence and regulatory disputes that were confronted in 2006. It noted there were a number of facets to Ofcom’s proposals where the power of market forces and competition were relied upon to achieve Ofcom’s desired outcome. Although C&W was generally supportive of light-touch regulation, in the light of the long-term nature of the issues in this market, it called upon Ofcom to intervene more directly by setting clear boundaries at both ends of the value chain.¹⁶⁹

5.118 Vodafone noted that the December 2010 Consultation did not contain any formal competition analysis. It noted that, whether or not that was a strict requirement, the

¹⁶⁹ C&W December 2010 Consultation Response, p.6.

rigour of an established formal framework for analysis could be useful and allowed casual assertions, e.g. about market failure, to be tested against the available evidence.¹⁷⁰

5.119 [X] considered that the review was far too detailed and effectively prevented most stakeholders from reading and digesting the material in a manner that would allow them to provide a focussed response. Similarly, Antelope Consulting said that 700 pages (including the associated documents), should not be needed to establish the case for change. It noted it had been known for many years that consumers were badly serviced by the numbering rules. It noted that the need to argue repetitively point by point reflected poorly on a litigious industry and prevented organisations without large regulatory departments from responding at all. It urged Ofcom to minimise the length of further consultation documents.

Ofcom's response

5.120 We appreciate C&W's concerns about the costs to stakeholders of intervention, particularly if that intervention ultimately turns out to be unsuccessful. We have sought to mitigate the risks of unnecessary or disproportionate costs for stakeholders through engagement with communication providers, including the industry working groups, and will continue to do so. To help verify whether our proposals are likely to be successful, we have assembled evidence on the nature of the current concerns and how intervention may address them, including both consumer surveys and economic experiments. Moreover, in the case of the level of the access charge (which forms part of our unbundled remedy – see Part B of this document), while we are not proposing to regulate its level, we are proposing to monitor how competition develops to see whether or not further intervention might be needed in the future.

5.121 We do not agree with Vodafone that a formal competition analysis is a particularly helpful framework for approaching our analysis in this review:

- This project is not a formal market review under sections 79 to 84A of the Act. There is thus no requirement for Ofcom to define relevant markets. Rather the purpose of this project is to analyse the supply of non-geographic calls more generally and determine what regulatory action is appropriate, if any, using the full suite of powers that are available to us.
- The process of defining relevant markets and assessing the position of firms within those markets can be helpful for identifying whether parties possess market power. However our concerns in relation to non-geographic calls are not solely the result of market power. Rather the retail market failures that we identify stem from poor consumer price awareness, the horizontal externality and the vertical externality.
- Moreover we consider that the approach we have adopted in this consultation does allow us to test propositions against the available evidence. For example, we have not relied on “casual assertions ... about market failures...”¹⁷¹ Rather, in Annex 8 we set out the evidence in relation to retail market failures and carefully assess stakeholders' views.

¹⁷⁰ Vodafone, December 2010 Consultation Response, p.52, Q2.1.

¹⁷¹ Vodafone, December 2010 Consultation Response, p.52, Q2.1.

- 5.122 We appreciate [§<] and Antelope Consulting’s concerns about the length of the December 2010 Consultation. Indeed this was a factor which we considered in allowing stakeholders a period over three months to respond to that document.
- 5.123 We have sought to structure this current consultation in a way that allows stakeholders to focus on the level of detail that best suits their needs. For example, we have provided increasing levels of detail as the reader goes from the executive summary, to the main sections to the annexes. We have also divided the consultation into separate Parts, so that a stakeholder that is only interested in Freephone (for example) can simply focus on Part C. That said, our proposals are wide-ranging and we have to set out our reasons for making them, and the evidence and analysis that supports them, in a thorough and transparent manner. Moreover, a number of stakeholders considered that the December 2010 Consultation did not establish the case for intervention and/or did not provide enough details on our proposals. Addressing such responses inherently tends to increase the length of the documents that we publish.

Summary of our analytical framework

- 5.124 As set out above, in this document we have therefore structured the analytical framework as follows:
- We have first assessed whether the current operation of the retail or wholesale levels is causing problems.¹⁷²
 - We then consider what additional regulation is appropriate to identify the concerns we have identified. The benchmark against which we assess this performance is the status quo.
- 5.125 The assessment criteria we have used for the analysis in this document are as follows:
- consumer price awareness;
 - efficient prices;
 - service quality, variety and innovation;
 - access to socially important services; and
 - regulatory burden.

Impact assessment

- 5.126 This document incorporates an impact assessment of our proposals as defined in section 7 of the Act. In particular:
- a) Sections 7 to 13 (and especially Section 13), supported by the Annexes 12 and 16 to 19, represent an impact assessment of our proposals for the unbundled tariff; and

¹⁷² As noted above, we also explain how our retail concerns would change in the absence of the retail regulation that is currently in place. Also, given the way that we have analysed the wholesale level, our concerns about its operation are subject to the caveat that they apply in the case where Ofcom is not involved at that level.

- b) Sections 14 to 17 (and especially Section 16) supported by Annexes 12 and 20 to 27, represent an impact assessment of our proposals for the 080 and 116 number ranges.

5.127 Impact assessments provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best practice policy-making. This is reflected in section 7 of the Act, which means that generally we have to carry out impact assessments where our proposals would be likely to have a significant effect on businesses or the general public, or when there is a major change in Ofcom's activities. However, as a matter of policy, Ofcom is committed to carrying out and publishing impact assessments in relation to the great majority of our policy decisions. For further information about our approach to impact assessments, see the guidelines, Better policy-making: Ofcom's approach to impact assessment, which are on our website:

http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf

Equality impact assessment

5.128 We have also undertaken an equality impact assessment to consider whether our proposals raise specific equality issues. This is set out in Annex 15.

5.129 We conclude that our proposals are likely to have an overall positive impact on the equality groups we are required to consider but we would welcome stakeholder feedback on that assessment.

Q5.1: Do you have any comments on our Equality Impact Assessment? In particular do you agree with our view that our proposals for changes to non-geographic numbers are likely to have an overall positive impact on the equality groups identified in Annex 15?

Section 6

Addressing the identified consumer detriment and summary of next steps

Introduction

6.1 In this Section we set out a summary of our proposals for addressing the market failures we identified in Section 4 and the consumer harm that result. These include our proposals to improve consumer understanding of non-geographic numbers by simplifying the way in which they are charged, specifically by:

- making Freephone numbers (080 numbers) free to call from all telephones – fixed and mobile (as set out in detail in Part C);
- making 03 the only non-geographic number range which is charged in line with prices for geographic calls (as set out in detail in Section 11 of Part B); and
- creating a new, more transparent charging structure for calls to other non-geographic number ranges (as set out in detail in Part B).

6.2 In the remainder of this Section we consider:

- how we will address the remaining identified issue/gaps in the regulations for non-geographic numbers;
- timing and implementation.

Approach in the December 2010 Consultation

6.3 As set out in Section 2, proposals for reform in the December 2010 Consultation were intended to rationalise the non-geographic number ranges by making the pricing structures clearer and removing confusing and misleading inconsistencies. re:

6.4 The preliminary proposals we put forward were that:

- 080/0500/116¹⁷³ should be free to callers from all phone companies;
- we should maintain a non-geographic range charged at the same rate as geographic numbers. Ideally this should be confined to the 03 range, whose proximity to the geographic ranges would make it easily recognisable as a geographically rated number;
- the other number ranges aligned with geographic pricing should be rationalised. We recommended that 0845 and 0870 should be delinked from geographic rates either through closure of one or both the ranges or re-alignment with the principles that will apply to other 08 numbers

¹⁷³ 116 is subject to slightly different considerations compared to 080 and 0500, which are set out in more detail in the analysis, in particular in Annex 27.

- an unbundled tariff structure should apply to calls to revenue sharing ranges (087/084/09) and for directory enquiries (118 numbers);
- the 070/076 ranges should be reformed by aligning the charges for these calls more closely with calls to mobiles, removing the incentives for revenue sharing and fraud; and
- consideration should be given to increasing the maximum call charge limit for calls to 09 numbers, at least in some cases and subject to additional information requirements.

Updated approach to addressing the identified consumer detriment

- 6.5 As we set out in Section 4 and Annex 8 we find that consumers' awareness of the price of making calls to non-geographic numbers is generally poor and we are particularly concerned that, as a result, callers tend to overestimate the price of calling non-geographic numbers and more generally they tend to be suspicious about NGCs. We also have concerns that SPs lack control in determining the retail price of calls to their services, which is in part because OCPs are not incentivised to account for SPs' preferences. This is what we call the "vertical externality". The problem is exacerbated by poor consumer price awareness because there is less downward competitive pressure on NGC prices, allowing OCPs to further increase the retail prices of these calls without a strong consumer reaction.
- 6.6 We have also set out our view that each non-geographic number range, and the NGC system as a whole, is a collective brand created by all in the supply chain. Individual OCPs and SPs do not have incentives to take into account the effect their retail prices have on the brand as a whole. When combined with the current lack of pricing transparency, this creates incentives for some OCPs and SPs to free-ride on the NGC brand by charging high retail prices. This is what we call the "horizontal externality". This behaviour by some OCPs and SPs adversely affects customer confidence in NGCs as a whole, and suppresses the overall level of demand for NGCs.
- 6.7 Thus, we have an interrelated set of market failures which are linked to consumer perception of the non-geographic number ranges as a whole. As a consequence, in our view, addressing these market failures requires a systemic reformation across the whole set of non-geographic numbers, or at least those commonly accessed by consumers.
- 6.8 The detailed proposals presented in this consultation for addressing the market failures are largely consistent with our preliminary proposals set out in December 2010. There are a number of separate recommendations but we consider they together form a coherent programme of changes which collectively address the market failures identified to protect consumers while also individually providing a level of net benefits that justify the changes proposed.
- 6.9 We remain of the view that there are two broad interrelated approaches that are required to address the consumer detriment, i.e. rationalising the number ranges to reduce confusion; and restructuring tariffs to ensure a more standardised approach to charging. We set out our approach to each in turn below.

Rationalising the number ranges

- 6.10 As highlighted in Section 2, there are currently a large number of different designations for non-geographic numbers in the Numbering Plan, including:
- two ranges linked to geographic rates (0870 and 03) though this is not consistently applied by all CPs in the case of 0870, as well as a third range (0845) which some providers charge at similar rates to geographic calls and which has historic associations with 'local rate' which are no longer relevant;
 - two Freephone ranges (080 and 0500) which are not free on all telephone systems;
 - the range supporting mobile numbers (07) including two sub-ranges which have markedly different purposes and retail prices (070/076);
 - overlapping revenue sharing ranges some of which appear very similar to ranges linked to geographic rates (i.e. 0844/3 and 0871/2/3); and
 - a range to support a competitive directory enquiries system (the 118 range) where the directory providers are largely unable to compete on price.
- 6.11 This consultation includes most of our proposals to address this complexity (we will be addressing 070/076 and 05 numbers in later separate consultations). We propose:
- simplification of the geographic ranges – with 03 the only non-geographic number range linked to 01/02 (see Part B, section 11);
 - Freephone, specifically 080/116 numbers, to be free from all telephones (see Part C, we leave open the treatment of 0500 for a separate consultation); and
 - a single price structure for other non-geographic number ranges - 084 (including 0845), 087 (including 0870), 09, 118 - where competing services will be able to compete on price (by being able to present an accurate price for calls to their service) as well as brand/service (see Part B).
- 6.12 A key element of this rationalisation is the decision to re-affirm the position of Freephone (080/116) numbers. While this will have a significant impact on the industry we consider that the current situation is a significant factor in consumer mistrust of the non-geographic regime and that the desire of consumers and service providers for a true Freephone option is not being addressed. We discuss our reasoning and the implications of this proposal in detail in Part C.
- 6.13 The 03 range is the logical choice for a non-geographic number range linked to the price of a normal landline call; it is already set up to serve this purpose and no regulatory change is required. Whilst usage and consumer awareness of the range has been up to now been low, 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.
- 6.14 We also consider that there are benefits in removing the potential for confusion between the price and treatment of the other non-geographic number ranges that have traditionally been linked to geographic call prices (the 0845 and 0870 ranges) and the other 084 and 087 numbers. Having a consistent treatment of the 084 and















087 number ranges will lead to a more intuitive numbering plan in the long term, clearly defining differences in number ranges and improving consumer awareness. The consistent pricing treatment of revenue sharing ranges 084, 087, 09, and 118, will also enable competing service providers to compete more transparently on price as well as the brand/service they offer.

- 6.15 We consider that taken together, these changes will provide a simplified charging structure for non-geographic calls, which can be presented far more clearly and simply and will enable consumers to regain trust and confidence in non-geographic numbers.

Proposed Guide to Numbers

- 6.16 In the course of our review, we have developed a guide to the purposes of presenting the different number ranges which are available to call in the UK. We presented a proposal for a similar guide in the December 2010 Consultation. Stakeholders were largely supportive of the proposed approach, recognising that this visual message was a useful way to reinforce the proposed rationalisation of the ranges. There were some specific concerns about the original proposals, for example some stakeholders were concerned about the use of ‘£’ signs against what we called ‘business rate’ (i.e. 08X numbers) and premium rate (i.e. 09 numbers). In addition, some SPs in particular did not agree with the use of the term ‘business rate’ because the range is often used for charity and not-for-profit services.
- 6.17 The guide was discussed in detail as part of the Communications Working Group (see Annex 14 for further details). As a result of those discussions, the images and text were revised, as set out in Figure 6.1 below. We recognise that further refinement of this guide is likely to be required, and we intend to work further with the Communications Working Group to produce a version that we can publish on the Ofcom website and which can be used by other stakeholders. To be clear, we are not intending to mandate that CPs have to publish this guide or use the icons suggested. However, a guide of this nature is a useful tool for informing consumers of the way numbers are structured and where CPs consider it helpful, they might want to direct their customers to it.

Figure 6.1 – Proposed guide to UK telephone numbers¹⁷⁴

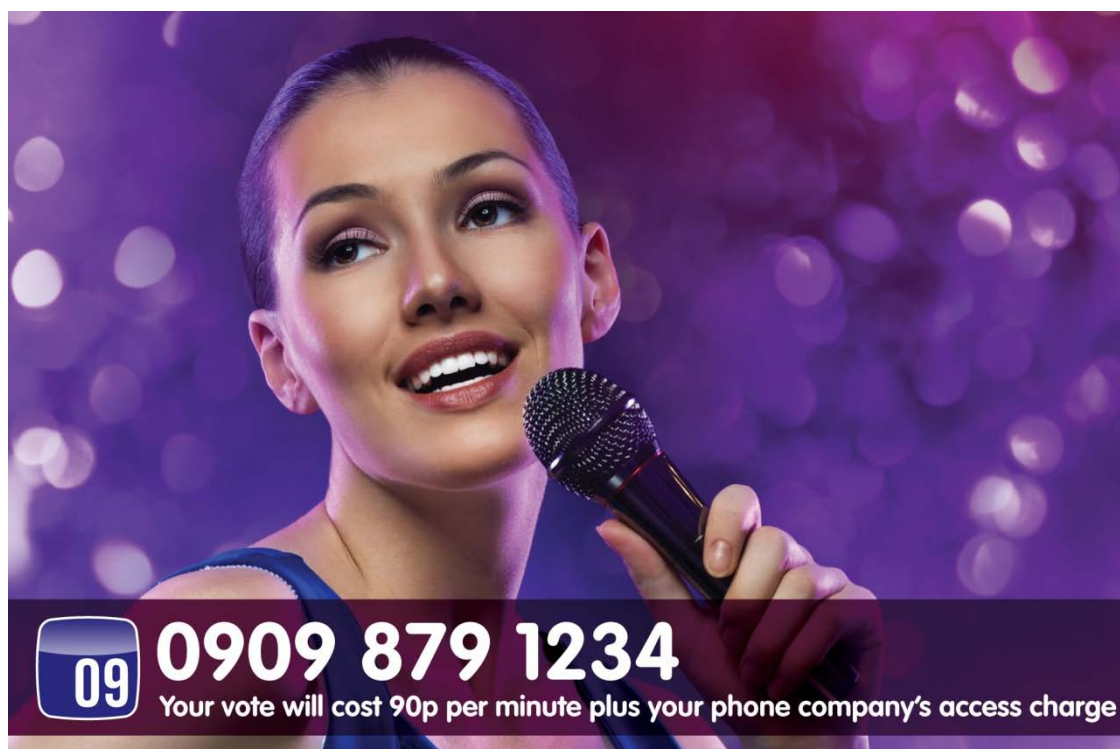
		Free 080
For these numbers, you only pay your phone company for the cost of the call.		
		UK numbers 01, 02 03 03 numbers are UK wide numbers that are charged in the same way as 01 and 02 numbers.
		Mobile 07
		International 00
For these numbers, the total cost is made up of an access charge that goes to your phone company PLUS a charge that goes to the organisation receiving the call.		
		08 Numbers The charge for these numbers will be no more than 7p per minute for 084 numbers and 13p per minute for 087 numbers PLUS your phone company's standard access charge.
		09 Premium Rate numbers The charge for these numbers will be no more than £1.45 per minute PLUS your phone company's standard access charge.
		Directory Enquiries 118

¹⁷⁴ Note that this guide does not yet take into account any changes we may propose for the 05 ranges, and 070/076 ranges. As highlighted below, we will be considering what changes, if any, are required for these ranges as part of separate consultations.

Restructuring tariffs for revenue sharing ranges

- 6.18 Complementing the rationalisation of the number ranges, as part of this consultation, we have also further developed our proposal for an unbundled tariff structure and we are presenting this as our preferred approach (the reasons for which are discussed in detail in Part B). We consider that the majority of the current non-geographic numbers could potentially be dealt with through this option, specifically:
- all 08 ranges (including 0843/4/5, 0870/1/2/3) other than 080;
 - all 09 premium rate numbers; and
 - 118 Directory enquiry numbers.
- 6.19 An unbundled tariff will require the retail price presentation for these revenue sharing ranges to separate the origination charge from the charge for terminating the call (in this consultation we call these components the Access Charge (“AC”) and the Service Charge (“SC”).
- 6.20 We have specified simplifying rules for these charges including:
- i) a single AC per tariff package to be charged for all calls to the relevant non-geographic number ranges, save where the call is within a bundle of inclusive minutes;
 - ii) the AC to only be priced in the form pence per minute, subject to a minimum call charge equivalent to the price of a one minute call;
 - iii) the same SC for a given non-geographic number to be charged by all telephone providers;
 - iv) the SC to be set within the maximum for the relevant number range; and
 - v) the SC to be promoted whenever the number is presented.
- 6.21 This separation will enable the provision of clearer price information about the cost of a call compared to price information that is typically provided at the moment:
- “this call will cost you X pence per minute on a BT line, other landline providers may vary and calls on mobiles may cost considerably more”.
- 6.22 Under the new structure we expect the announcement to follow the following format (see also Figure 6.2 below):
- “This call will cost you X pence per minute plus your phone company’s access charge.”

Figure 6.2: Revised advertising of non-geographic prices



Impact assessment of the changes

6.23 Part B (Section 13) and Part C (Section 16), set out the impact assessment of our proposals for the unbundled tariff and making 080 and 116 numbers free to caller respectively. In summary, the benefits identified are:

- **the unbundled tariff:** will lead to improved price transparency, addressing the current concerns about poor consumer price awareness. In particular consumers will be able to choose an AC which reflects their preferences as part of their overall phone package and they will be presented with a clear message about the SC for each call when numbers are advertised. SPs will have greater control over the price of their service and be able to advertise more clearly the cost of calls to their customers, encouraging competition on some number ranges between SPs, leading in turn to a positive effect on service availability and innovation. Furthermore, OCPs will be able to compete on a single AC for non-geographic calls, leading to prices that better reflect consumer preferences. This improved price awareness, and potential reduction in prices, will also lead to better access for mobile-only consumers to socially important services offered on the 084 range in particular.
- **Freephone (080/116):** consumers will benefit from free calls to 080/116 numbers from both their mobile and fixed line, leading to improved consumer awareness, particularly because SPs will be able to advertise the consistent message that 080/116 numbers are free to call. As a result demand for these services will increase, leading to a positive effect on service quality, variation and innovation, and in particular improving access to socially important services for vulnerable mobile-only households.

- 6.24 There will also be costs from these proposals. Particularly for communications providers in updating their billing systems and amending contracts with service providers, as well as communicating the changes to consumers. We have set out the detail of these costs as part of our analysis and impact assessment. The relevant sections of Parts B and C establish that our proposals will have a net benefit for consumers and the industry, i.e. the benefits outlined above will outweigh those costs.
- 6.25 We have also considered the impact of our proposed change to the Freephone range on service providers, in particular in terms of the potential impact of increased payments for providing services on this range. In order to provide some certainty to service providers, and to ensure that any increased charges are appropriate, we are proposing the implementation of an access condition where the origination payment will be required to be subject to fair and reasonable terms.
- 6.26 However, this analysis does not include the benefits deriving from the broader rationalisation of the number range to which the changes to Freephone (080/116) and the unbundled tariff contribute.
- 6.27 We consider that this means that the net benefits in Sections 13 and 16 underestimates (potentially significantly) the total benefits that the individual changes will deliver when taken together.
- 6.28 Specifically, we consider that the combined impact of the changes will improve consumer price awareness and substantially address the horizontal and vertical externalities we have identified. This in turn will provide a basis for increased confidence by consumers and SPs in the ranges, with benefits for consumer demand and the supply of new services – effectively increase the benefits identified in the individual sections.

Remaining issues and number ranges

- 6.29 As noted, there are a number of other issues with respect to the non-geographic ranges which we consider that we need to address. We are proposing to consult separately on these ranges, as set out below.

0500

- 6.30 We have discussed our proposed next steps for this range in more detail in Section 16. This is a Freephone range, and therefore there are strong arguments for treating it in the same way as the other Freephone ranges. However, as noted in Section 16, other options include closing the range or potentially treating it differently to the 080 range by setting a maximum (non-zero) price for mobile calls and thereby offering it as an alternative range for 080 SPs that could not afford to offer a completely free to caller 080 number. We are aware that we have limited information on the costs of closing 0500 which makes it difficult to assess this option. We consider that we are more likely to elicit responses from SPs operating on 0500 if we issue a separate, smaller consultation on this range.

055/056

- 6.31 As noted in Section 3, we did not make any specific proposals for the 055/056 ranges in the December 2010 Consultation. We have very little evidence about these ranges and their use and it is therefore not currently clear whether the unbundled approach is a suitable option for these ranges. We therefore propose to issue a

separate consultation (possibly combined with the 0500 consultation highlighted above) to set out potential options for these ranges. We are still considering the best approach for these numbers and would welcome any further stakeholder comments/evidence on how the ranges are used and what the effect might be of the different options discussed in this consultation (e.g. the unbundled tariff, maximum prices).

070/076

- 6.32 In the December 2010 Consultation we highlighted the concerns we had over the continuing abuses of the 070 range, and more recently, the 076 ranges and how we had sought to tackle these problems through enforcement and in a number of reviews.
- 6.33 We noted that much of the consumer detriment on these ranges arose from an inability of consumers to recognise that 070/076 numbers are not mobile numbers. We highlighted evidence from our consumer research which showed that a large proportion of consumers confused these numbers with mobile numbers.¹⁷⁵ As a consequence, consumers call these numbers expecting them to be priced the same as calls to mobile numbers. The consumer detriment is compounded when the caller is induced to call for fraudulent reasons.
- 6.34 We consulted on a number of different options for these ranges but noted that, given the continuing levels of complaints, and the concerns previously expressed by stakeholders, the status quo was contributing to general consumer confusion and concerns about NGCs. We considered that the impact of such numbers on the confidence of consumers pointed us to more direct measures. Our preference was to reduce the available revenue (for example by setting a maximum price) to make the cost of calls to 070/076 close to mobile calls, although we noted that this would require migration of some of the existing users to other number ranges. We considered closing the range completely, but noted that the impact on legitimate users of personal numbers and pagers could be severe and therefore that was not our preferred approach.
- 6.35 The vast majority of respondents to the December 2010 Consultation agreed that there was a real case for intervention on this range because of the tangible consumer harm from fraud. The Serious and Organised Crime Agency submitted evidence to support its view that the 070 range was a key enabler to mass marketing fraud on a global scale by organized criminals, noting that the use of 070 numbers enabled the fraud by deceiving the target into believing that the communication was legitimate.¹⁷⁶
- 6.36 Most respondents, including the majority of CPs, therefore agreed that call prices for 070/076 numbers should be aligned with mobile call charges. However, some raised objections to that approach. O2, for example, argued that our proposal would exacerbate the misperception that these are mobile numbers and create an expectation that they would be included within bundles. Vodafone argued that the current regulatory framework worked sufficiently and therefore it was not appropriate to regulate retail prices. A number of SPs that provided services on 070 numbers, including Hospedia (one of the largest users of 070 numbers)¹⁷⁷, noted that imposing

¹⁷⁵ In our 2009 Consumer survey, 34% of consumers claimed to recognise 070 numbers but 48% of these respondents thought they were mobile numbers. Only 8% recognised them as personal numbers.

¹⁷⁶ SOCA, December 2010 Consultation response.

¹⁷⁷ Hospedia, December 2010 Consultation response.

a maximum price would damage their business model and they would be forced to migrate to an alternative range at considerable cost.

- 6.37 It is therefore clear that there are specific issues with the 070/076 ranges which need to be addressed. However, the considerations relating to these ranges are somewhat different to the other non-geographic ranges, because of the greater risk of fraud on these ranges, and the potential confusion with mobile numbers. We therefore consider that the best approach is to tackle these issues within a separate consultation. We will respond more directly to the comments raised by stakeholders above as part of that consultation, which we propose to issue with the next few months.

Higher rate PRS tariff and maximum SC cap for 118 ranges

- 6.38 In the December 2010 Consultation, we noted several stakeholders had argued that the £1.53 cap for calls to 09 services (in terms of what BT can charge its retail customers) was out of date (not having been adjusted for 13 years) and that the substantial discrepancy between the maximum prices for premium rate calls for fixed and mobile services was putting 09 content providers at a competitive disadvantage. We recognised therefore that a case could be made for raising the current £1.53 maximum price for 09 calls.
- 6.39 However, we considered there was still likely to be a need for maximum prices on the 09 number range in order to ensure consumer protection. We were concerned that, in the absence of any maximum price cap for the SC (under the unbundled approach), it was likely that there would be increased incentives for fraudsters to use the 09 number range to scam consumers. We asked for submissions from the industry and consumer groups on what would be an appropriate level for the Service Charge. We also recommended that any higher rate SCs should be subject to additional consumer protection measures (such as PCAs, being subject to PPPs's Prior Permission regime¹⁷⁸ and/or call-barring to 09 calls) to help consumers control their expenditure and to reduce the prospect of scams taking place on these more expensive numbers. We therefore also asked for stakeholders views on what, if any, additional consumer protection measures should be imposed for higher-rate 09 calls and from what price threshold they should be required.
- 6.40 A number of respondents to the December 2010 Consultation agreed that there was a strong case for reviewing the £1.53 retail cap for 09 numbers. PRS providers in particular, for example ITV, the Association for Interactive Media and Entertainment ('AIME') and the Premium Rate Association ('PRA'), argued for this to be implemented immediately, claiming that the outdated cap had led to a sustained erosion in margins. AIME considered that higher rate PRS should be set in line with mobile pricing points, in order to allow them to compete fairly. BT suggested that the cap could be raised in two phases, first to £3 to reflect inflation, and second to price points up to £10 to align fixed and mobile price points.¹⁷⁹ PPP also noted that it would not object to further extensions of the current pricing cap for 09 numbers, provided that consumers were clearly and straightforwardly informed of the price using services prior to incurring a charge. However, some providers indicated concern about any possible increases. [X] noted that it would be worried about any increase beyond £2 per minute, because of the potential for furthering incentives for fraud.

¹⁷⁸ For details see: <http://www.phonepayplus.org.uk/For-Business/Prior-permission.aspx>

¹⁷⁹ BT December 2010 Consultation Response, p.13.

- 6.41 We acknowledge the issues caused by the current PRS cap as outlined in stakeholder's responses and note these issues have been repeatedly brought to our attention by stakeholders in the period since the December 2010 Consultation. We appreciate that there is a risk to industry of an extended timeframe for any change and in particular that the current cap risks placing fixed operators at a competitive disadvantage. We therefore recognise the importance of reviewing this cap and are committed to doing so. However, whilst we noted some stakeholder's calls for this issue to be dealt with ahead of this wider consultation on reform of the non-geographic ranges, we considered that there were a number of reasons why this would not be practical, in particular:
- firstly, and most importantly, we considered it would be inappropriate to put forward an argument about changing the pricing caps in the Numbering Plan when at the same time we have highlighted evidence of significant consumer confusion about prices in this market. It would be very difficult for us to justify raising pricing caps as a stand alone measure in that context; and
 - There is also a question of sequencing changes to the regime. We consider that we need to be clear about what the structure for the non-geographic numbering regime will be as a whole before we can consult on the more detailed and specific issues surrounding the raising of the PRS cap.
- 6.42 We therefore propose to issue a separate specific consultation on options for raising the PRS cap within the next few months, which will allow stakeholders to consider the specific issues relating to this proposal. This does not necessarily mean that any changes to the cap will be undertaken on a longer timescale to the other changes we are proposing to non-geographic numbers. We discuss implementation timescales in more detail in Section 6 where we note the potential for all the different proposals to come into effect at the same time.
- 6.43 We note also that 118 range does not currently have a maximum charge. As we discuss in Section 11, this may remain appropriate if an unbundled tariff is implemented. On the other hand, there may be arguments for a cap on the basis of consumer protection, and we therefore we propose to consider this issue also in the PRS maximum charge review.
- 6.44 The industry has recently set up a working group on higher rate PRS services in order to discuss the issues ahead of Ofcom publishing specific proposals. We welcome this initiative.

Legal Instruments

- 6.45 Our proposals relating to the unbundled tariff and the Freephone ranges would, if adopted, require modifications to certain General Conditions, the Numbering Plan, the PRS Condition and the Numbering Application Forms. In addition, for Freephone we are proposing the imposition of an access condition. The effect that these modifications and new conditions would have is set out in this document under the discussion of our proposals relating to the unbundled tariff and the Freephone ranges. We intend to publish shortly a separate consultation on the precise wording of the modifications that would be required.
- 6.46 Further details on what we envisage would be covered by the consultation on the proposed modifications are in Part B (Section 13) in relation to the unbundled tariff and Part C (Section 17) on the 080/116 ranges.

Summary of next steps in the NGCS Review and implementation

- 6.47 In summary therefore, there will be a number of smaller, specific consultations ahead of the final statement on this NGCS review as a whole (and on the proposals in this document relating to the unbundled tariff and the Freephone ranges), in particular:
- proposed modifications to the legal instruments;
 - options for 070/076;
 - options for the 05 range, including 0500 and 055/056; and
 - options for raising the PRS cap (within the context of the unbundled proposals put forward in this document) and consideration of a cap for 118.
- 6.48 We will aim to publish these consultations within the next few months.
- 6.49 Our objective is to have consulted on all issues, and gained stakeholder feedback, prior to reaching a final position on the key recommendations by the end of 2012.
- 6.50 We recognise there are a number of implementation issues which need to be considered in further detail as a result of our proposals. The discussions and output of the previous industry working groups was very helpful in this respect and we therefore intend to work with industry again in a similar way to refine our proposals. We discuss some of the specific areas where industry working group discussions are likely to be needed in Section 12.
- 6.51 In terms of timing of implementation, we discuss this separately for the unbundled tariff and Freephone proposals in Part B (Section 12) and Part C (Section 17) respectively. In summary we consider that, given the complexity of the changes, in particular the need for OCPs to amend their billing systems and the need for contractual discussions between TCPs and their SPs, which may lead to some migration between number ranges, an implementation period of 18 months is likely to be necessary.
- 6.52 We welcome stakeholder comments on all aspects of our proposals. The deadline for responding to this consultation is 27 June 2012.