



Review of the 070 personal numbering range

Consultation

Publication date: 15 October 2008

Closing Date for Responses: 7 January 2009

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Section 1

Summary

- 1.1 Numbers within the 070 range have been designated as Personal Numbers, available for the use of Personal Numbering Services (PNS). The formal definition of such services, as set out in the National Telephone Numbering Plan (the “Numbering Plan”)¹ is: “a service based on number translation that enables End-Users to be called or otherwise contacted, using a single personal telephone number, and to receive those calls or other communications at almost any telephone number, including Mobile Numbers.”
- 1.2 Amongst the recommendations in Ofcom’s review of telephone numbering (*Safeguarding the future of numbers*²) in 2006, Ofcom stated its intention to close the 070 range and migrate users to the 06 range. This was based on a very high level of complaints in late 2005 that arose as a result of significant scamming activity on the range. We now need to make a final decision about whether it is appropriate to close the range, taking into account all relevant evidence, and if not, what other options are available. Therefore, we are carrying out this review to conduct a full assessment of any consumer detriment and in light of that, a cost-benefit analysis of options to address any detriment.
- 1.3 Ofcom and PhonepayPlus³ continue to receive complaints about the 070 range. Most of these complaints are concerned with scams, although some relate to the high pricing of calls to 070 numbers. Currently, the most prevalent scams are missed call scams where mobile phone users are left unsolicited “missed calls” encouraging them to call back an 070 number.
- 1.4 Since our review of telephone numbering in 2006, the number of complaints has significantly reduced and we have found that the use of 070 appears to be declining.
- 1.5 Given the continuing number of complaints regarding scams on 070 numbers, and the apparent characteristics of the range that enable these scams to exist, it remains important to carry out a review of the number range to decide the most appropriate and proportionate measures to address concerns about this range.
- 1.6 Our analysis of the consumer detriment and the costs and benefits of different options to address any consumer detriment leads us to conclude that closing the 070 number range as previously intended is not a proportionate response. Given our legal duty to provide end users with a migration path to another number allocation where a number range is closed, our analysis shows that the costs associated with migration significantly outweigh any benefits gained from closing the range.
- 1.7 We have therefore proposed a number of other measures which we consider proportionate in the light of the detriment that currently exists. These include:
 - supporting and monitoring current enforcement action being carried out by PhonepayPlus in relation to scams on the 070 range;

¹ The Numbering Plan is the system used for assigning telephone numbers in the UK:

<http://www.ofcom.org.uk/telecoms/ioi/numbers/numplan170608.pdf>

² <http://www.ofcom.org.uk/consult/condocs/numberingreview/statement/>

³ PhonepayPlus regulates phone-paid services in the UK: <http://www.phonepayplus.org.uk/>

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- requiring originating communications providers to publish their tariffs for calls to 070 numbers more prominently and to make them easier to understand for consumers; and
 - amending guidance on the acceptable use of numbers in relation to compliance with General Condition 17 by ensuring Personal Numbering Service providers who provide 070 numbers to end users to carry out due diligence of sub-allocatees of personal numbers.
- 1.8 We are also formally consulting on the removal of the requirement for pre-call announcements on this range, which we requested operators to carry out in December 2007, due to their impact on alarm systems and associated risks to life and property.

Section 2

Introduction and background

Personal numbers

- 2.1 Numbers within the 070 range have been designated as Personal Numbers, available for the use of Personal Numbering Services (PNS). The formal definition of such services, as set out in the National Telephone Numbering Plan (the “Numbering Plan”)⁴ is: “a service based on number translation that enables End-Users to be called or otherwise contacted, using a single personal telephone number, and to receive those calls or other communications at almost any telephone number, including Mobile Numbers.”
- 2.2 The key attributes of a personal numbering service include:
- a single contact number for family, friends and business colleagues;
 - network independence (the owner of a personal number can change their provider without changing telephone number);
 - a dynamic, follow-me-anywhere service that is easy to use; and
 - ancillary services such as voice mail and messaging services.

Use of the 070 personal number range

End users

- 2.3 Ofcom carried out an online survey with individuals and companies who use 070 numbers as their contact numbers and received 192 responses from these end users. Further details of this survey can be found in Annex 5.
- 2.4 We found that most end users of 070 numbers are individuals and small businesses, who use the range for a variety of services, such as:
- facilitating rotas for out of hours support by general practitioners/IT support staff;
 - enabling customers to contact staff who are travelling;
 - allowing users to accept business calls on their mobile only during business hours and diverting calls to other lines (e.g. voicemail) at other times.
- 2.5 We also found that end users of 070 numbers value several characteristics of services provided by personal numbering, in particular:
- the ability to redirect calls to virtually any other telephone number, whether fixed or mobile;
 - the privacy of having a personal number;

⁴ The Numbering Plan is the system used for assigning telephone numbers in the UK: <http://www.ofcom.org.uk/telecoms/ioi/numbers/numplan170608.pdf>

- the convenience of having only one contact number; and
 - the ability to redirect calls internationally to a local mobile at a lower cost when overseas.
- 2.6 Further, end users were asked how important 070 numbers were to their business. 56% of respondents said that 070 numbers were essential, and 94% said that they were either important or essential, suggesting that the majority of businesses who use these services value them highly.
- 2.7 In addition, there are a small number of larger service providers who provide specific services using 070 numbers:
- Hospedia Limited (formerly Patientline) and Premier Telesolutions are two of the largest users of 070 numbers and provides hospital patients with a telephone number in order for friends and family to contact them; and
 - Trader Media runs advertising publications such as Auto Trader and Ad Trader and provides 070 numbers to individuals who wish to advertise in their publications. The 070 number allows the advertiser to have a temporary private number which is later returned to Trader Media.
- 2.8 We estimate that the number of 070 numbers in active use, based on information received from end users and Personal Numbering Service providers (“PNS providers”), to be around 1.25 million⁵. We also estimate that approximately 940,000 are used by businesses and 315,000 by individuals. The average number of lines per business was five which suggests that some 190,000 businesses use personal numbers.

Traffic and revenues⁶

- 2.9 The traffic to 070 numbers compared to other ranges is relatively small. We estimate from data provided by originating communications providers (“OCPs”)⁷ that 070 traffic will be approximately 98 million minutes for 2008, whereas for 0870 and 0871 numbers, traffic was around 6,900 million minutes for the period April 2006 to March 2007⁸. Most 070 traffic (approximately 55%) is terminated on a fixed network⁹, with approximately 15% on mobiles and 30% on other networks, such as international.
- 2.10 Therefore in comparison to other number ranges the traffic for 070 is small. In addition, the data supplied by both PNS providers and OCP show that 070 call traffic and revenues have been declining since the beginning of 2007.
- 2.11 PNS providers provide a number translation service that re-directs calls made to an 070 number to a mobile or landline telephone number chosen by the end user. There

⁵ Numbers in active use refers to only those numbers used regularly. However, a number of PNS providers have pointed out that there are numbers in use, but which are not particularly active, for example those used for alarm systems. As Ofcom is using numbers in active use as a proxy for the number of end-users, these should include those numbers which have little or no activity. However, Ofcom has not been able ascertain the extent of these types of numbers, and therefore it has estimated the number of end-users based on active use.

⁶ More detailed traffic and revenue data is contained in Annex 5.

⁷ OCPs are communications providers from whose network a call is made (i.e. “originated”).

⁸ For the 0870 range the total number of minutes between April 2006 and March 2007 was approximately 5,700 million and for 0871 range it was approximately 1,200 million minutes.

⁹ Much of this can be attributed to volumes to one PNS provider, Hospedia.

are currently 141 PNS providers who have a direct allocation of 070 numbers from Ofcom as of 30 September 2008. PNS providers also sub-allocate numbers to resellers who provide PNS to end users.

The history of personal numbers

- 2.12 In the past, Ofcom, and before that Oftel, have had concerns about abuses of the 070 number range.
- 2.13 Oftel recognised in its consultation on *Restoring trust in personal numbers* in 2001¹⁰ that there was extensive abuse of personal numbers, and in particular that they were being used by many providers to deliver Premium Rate Services (“PRS”), but in a manner that evaded the regulation which applies to PRS. Oftel noted that “the 070 range is at risk of becoming a by-word for scams and pseudo-premium-rate promotions” and attempted to remedy the problems by prohibiting revenue-share services on 070.
- 2.14 In January 2004, Ofcom updated guidance originally issued by Oftel on the acceptable use of 070 numbers¹¹. This guidance was intended to provide clarity over the types of services that Ofcom considered appropriate to be provided on the range, and reiterated the responsibility that communications providers have when sub-allocating numbers to other persons.
- 2.15 In the second half of 2005, there was a significant rise in 070 complaints to Ofcom. It suggested that the ban on revenue share introduced in 2001 was not sufficient to prevent abuse on the 070 range.
- 2.16 In 2006, Ofcom carried out a review of telephone numbering (*Safeguarding the future of numbers*)¹² which examined the structure of the Numbering Plan. Part of this review involved the introduction of a pre-call announcement (“PCA”) to callers of 070 numbers (where calls exceeded 20 pence per minute (“ppm”))¹³ in order to address the continued abuse arising on 070 numbers. The review also set out Ofcom’s intention to close the 070 range in the future and migrate users to the 06 range.
- 2.17 Following the introduction of PCAs in September, Ofcom received a number of complaints about them. In particular, there were certain automated calling services provided on the 070 range designed to protect human life or property, which PCAs caused to fail because they introduced a dialling delay.
- 2.18 Given the risk of such services not working as a result of PCAs, Ofcom decided to withdraw the requirement for PCAs on 070 numbers in December 2007¹⁴. Ofcom indicated that it would undertake a consultation to confirm this decision, and amend General Condition 17 and the designation of 070 numbers in the Numbering Plan.

Ofcom’s general duties as to telephone numbering functions

- 2.19 Ofcom has a general duty under the Communications Act 2003, in carrying out its numbering functions, to ensure that the best use is made of numbers and to encourage efficiency and innovation for that purpose.

¹⁰ <http://www.ofcom.org.uk/static/archive/oftel/publications/numbering/pers1001.htm>

¹¹ http://www.ofcom.org.uk/telecoms/ioi/numbers/num_070_guide

¹² <http://www.ofcom.org.uk/consult/condocs/numberingreview/>

¹³ <http://www.ofcom.org.uk/consult/condocs/numbering03/statement/gc17statement.pdf>;

<http://www.ofcom.org.uk/consult/condocs/numbering03/>

¹⁴ <http://www.ofcom.org.uk/consult/condocs/numbering03/070precall/>

- 2.20 As part of the fulfilment of these principal duties, it is Ofcom's responsibility to secure the availability throughout the UK of a wide range of numbering arrangements, having regard to the interests of consumers in respect of choice, price awareness, and consumer protection.
- 2.21 Ofcom therefore has a general policy to ensure trust in telephone numbers and to protect consumers from scamming and the misuse of these numbers.

Why are we conducting this review?

- 2.22 Our review of telephone numbering in 2006, set out Ofcom's stated intention to close the 070 range and migrate users to the 06 range. This was based on a very high level of complaints in late 2005 that arose as a result of significant scamming activity on the range. We now need to make a final decision about whether it is appropriate to close the range, taking into account all relevant evidence.
- 2.23 Although Ofcom has already set out its intention with respect to this range, this was almost two years ago, and therefore it is important that Ofcom reassesses the evidence in order to ensure that such an approach remains appropriate. Therefore, we are carrying out this review to conduct a full assessment of any potential consumer detriment and in light of that, a cost-benefit analysis of options to address any detriment that currently exists.
- 2.24 Ofcom continues to receive complaints about the 070 range. Most of these complaints are concerned with scams, although some relate to the high pricing of calls to 070 numbers. In December 2006, PhonepayPlus issued a statement that set out that its code of practice applied to PRS scams on 070 and since then it has also received complaints concerning 070 numbers. We have provided details of these complaints in Section 3 and Annex 6. Currently, the most prevalent scams are missed call scams where mobile phone users are left unsolicited "missed calls" encouraging them to call back an 070 number.
- 2.25 There are two characteristics of the 070 range which make it an easy target for scams:
- consumers in general are not aware of the intended purpose of 070 numbers, and therefore have a poor understanding of what service they should expect to receive and what tariff they should expect to pay when they call 070 numbers; and
 - the Numbering Plan sets no formal ceiling on charges for calls to 070 numbers, and this, coupled with the poor consumer awareness of what might constitute an appropriate tariff, gives providers substantial flexibility as to what tariff they charge. For example, charges for calls to some 070 numbers can range from about 1.5 pence per minute off-peak from a BT landline to £1.50 from some mobile phone operators.
- 2.26 Given the continuing level of complaints regarding scams on 070 numbers, and the characteristics of the range that enable these scams to exist, it remains important to carry out a review of the number range to decide the most appropriate and proportionate measures to address concerns about this range.
- 2.27 We are also formally consulting on the removal of the requirement for pre-call announcements.

Structure of this document

2.28 This document sets out our analysis of and proposals for the 070 number range and is structured as follows:

- Section 3 sets out the consumer detriment arising from the current use of 070 numbers;
- Section 4 sets out the options and our proposals to address this consumer detriment;
- Section 5 discusses conservation measures for 070 numbers in order to ensure there is sufficient future capacity;
- Section 6 sets out our proposal to withdraw the requirement for pre-call announcements;
- Annex 5 sets out the details of our consumer and end user research;
- Annex 6 represents our impact assessment and contains a more detailed analysis of consumer detriment and costs for some of the options;
- Annex 7 sets out the legal basis for changing the Numbering Plan and the General Conditions of Entitlement relating to Telephone Numbers (the “General Conditions”); and
- Annexes 8, 9 and 10 contain the notifications of proposed modifications to the Numbering Plan and General Conditions.

Section 3

Assessment of consumer detriment

Introduction

- 3.1 This section focuses on the extent to which consumer detriment may arise from the use of 070 numbers as a result of confusion with mobile numbers and a general lack of price awareness, combined with the use of the 070 number range for scamming.
- 3.2 The analysis presented in this section, together with Section 4 and Annex 6, represents an impact assessment of the options for the 070 number range as defined in section 7 of the Communications Act 2003 (the “Act”). A more detailed analysis of consumer detriment can be found in Annex 6.

Information collected to assess and quantify the possible consumer detriment and the cost benefit analysis for options

- 3.3 In order to carry out an assessment of consumer detriment and the subsequent analysis of options to remedy any possible detriment, we have collected information from a variety of sources.
- 3.4 We have carried out three separate pieces of consumer research:
- In May 2008, Ofcom carried out research to understand the degree to which people know what services are provided on 070 numbers and how much calls to these numbers cost. The research also looked at the level of concern about calling 070 numbers, the reasons for any concerns and the number of people who claim to have been a victim of a scam on the 070 number range;
 - In July 2008, we carried out research specifically to identify the likelihood of consumers calling back certain number ranges following a missed call; and
 - In July 2008 we carried out research that asked consumers to identify the types of services and pricing associated with all number ranges.
- 3.5 As already referred to in Section 2, we also carried out an online survey among end users of personal numbers to understand how personal numbers are currently used.
- 3.6 Further details of the consumer research and end user survey can be found in Annex 5.
- 3.7 We requested information from a number of PNS providers on the utilisation of 070 numbers, call traffic volumes, the networks on which this traffic was terminated and the revenues generated by 070 calls for the period January 2007 to March 2008.
- 3.8 We also requested information from originating OCPs on volumes and revenues generated from calls to 070 personal numbers and any instances of Artificially Inflated Traffic¹⁵.

¹⁵ Artificially Inflated Traffic is traffic where the flow of calls to a particular number or numbers is disproportionate to the flow of calls which would be expected from good faith commercial practice and usage of the network as defined by individual communications providers.

- 3.9 In addition, we have also used information collected by the Ofcom Advisory Team¹⁶ in relation to consumer complaints about 070 personal numbers and similar data from PhonepayPlus.

Quantifying the existence of any consumer detriment

- 3.10 In assessing the extent of consumer detriment, the key considerations include:
- the extent to which PNS are used both by end users and consumers;
 - whether there is confusion for consumers between PNS and mobile numbers;
 - the cost to end users and PNS providers from customer confusion due to opacity of the pricing structure (i.e. that there is limited pricing transparency);
 - the extent of scams on the range and consumer awareness of these; and
 - costs incurred by consumers (including psychological costs) from scams.

Use of the 070 personal number range by end users

- 3.11 As set out in Section 2, our end user survey indicated that most end users of the 070 range are individuals and small businesses, although there are also a small number of large service providers who provide hospital bedside communications and contact numbers for those placing advertisements in magazines.
- 3.12 In comparison to other number ranges, usage of 070 numbers is low in terms of the number and volumes of calls. However, there appear to be few alternatives to this service that would provide the same characteristics that end users value. Any alternatives that do exist are likely to involve additional costs, such as needing two mobile phones or call forwarding charges. Therefore, although the overall market is small, our end-user survey showed that there continues to be demand for PNS.

Use of the 070 personal number range by consumers

- 3.13 As referred to in Section 2, traffic on 070 compared to other ranges is relatively small. We estimate using data provided by OCPs that approximately 98 million minutes will be made to 070 numbers in 2008. This compares to about 6,900 million minutes for 0870 and 0871 number ranges for the period April 2006 to March 2007¹⁷. Therefore, it is clear that the market for 070 is considerably smaller than the market for 0870/0871 numbers (less than 1%).
- 3.14 Our estimate of total revenue for PNS providers for 2008 is approximately £32 million.
- 3.15 The data also shows that there has been a decline in call traffic and revenues since the beginning of 2007 and that the introduction of the PCA may have exacerbated this. For some providers call traffic and revenues have started to increase for the first quarter of 2008. However, responses received from the OCPs also indicate that

¹⁶ The OAT, formerly known as the Ofcom Contact Centre, collects complaints made to Ofcom regarding telecommunications and broadcasting services

¹⁷ For the 0870 range the total number of minutes for the period April 2006 to March 2007 was approximately 5,700 million and for 0871 range 1,200 million minutes.

overall call volumes and revenues for 070 calls have been declining, although a number of new providers have entered the market in 2008.

- 3.16 As the market for 070 numbers is small, it follows that in general any consumer detriment will be small relative to other markets.

Confusion between 070 personal numbers and mobile numbers

- 3.17 In order to understand whether there is confusion between 070 personal numbers and mobile numbers, we carried out consumer research that would enable us to assess the level of consumer detriment that may arise from any confusion.
- 3.18 In our recent survey carried out in May 2008, 34% of respondents claimed to have heard of 070 numbers compared to 28% in a similar survey in 2004¹⁸. However, when this 34% were then asked to identify the type of service associated with 070 numbers, only 8% were able to identify them as personal numbers, whereas 48% thought they were mobile numbers (16% of all respondents).
- 3.19 In separate research carried out in July 2008, we asked consumers whether they would call back a number that appeared as a missed call for a variety of numbers. 21% said they would call a mobile number, whereas only 10% said they would call back an 070 number. We also asked more generally about whether they were concerned about calling a variety of numbers, consumers were more likely to be concerned about calling an 070 number than a mobile number or an 0870 number.
- 3.20 In a separate survey carried out in June 2008¹⁹, the majority of consumers, 93% were able to correctly identify 077, 078 and 079 as mobile numbers, whereas only 21% identified 070 as a mobile number when asked what types of service they would be calling.
- 3.21 This research suggests that consumers might distinguish between 070 and mobile numbers, even though they are unsure about the services provided on 070 numbers.
- 3.22 In trying to quantify any detriment caused by confusion, the call charges of mobile and personal numbers need to be assessed. Detriment will only occur if the costs of the calls to these numbers are widely different. However, due to the current pricing structure for 070 calls it is difficult to assess what the actual differences between the prices of mobile and 070 calls are. Some OCPs have a large number of pricing bands for 070 numbers, whereas other operators only have a single price. This is set out in detail in Annex 6.
- 3.23 It is important that many mobile numbers are included in call packages, effectively making the cost of calling a mobile for the user “free”. If this is the case and a caller rings an 070 number thinking it is a mobile and included in their call package, this will result in consumer detriment. However, this appears not to be the case in a significant majority of cases as our research shows that less than a third of mobile customers have inclusive minutes as part of their call package.
- 3.24 Therefore, it is clear that consumers in general are unaware of the types of services provided on 070 numbers. However the consumer research shows that only 16% of consumers confused 070 numbers with mobile numbers. On balance, and based on

¹⁸ Survey research conducted for Ofcom by ICM Research in 2004.

¹⁹ See Futuresight research, Annex 5, para. A5.19

the consumer research available, it is difficult to conclude that there is significant confusion between 070 and mobile numbers.

The costs arising from limited pricing transparency

- 3.25 Some communication providers have as many as 25 different pricing bands for 070 numbers. As a result, many consumers calling 070 numbers are likely to find it difficult to know the cost of the call before they make it.
- 3.26 The research showed that the main concerns consumers have with calling 070 numbers are the high cost or price uncertainty (75-85%). These reasons outstripped the concern over scams, which mattered for between 3-4% of those surveyed. In terms of the perceived cost of calling 070 numbers, calls made from a landline to an 070 number were estimated on an average basis to be 46ppm compared to 27ppm in 2004. The average cost from a mobile was estimated at 54ppm up from 43ppm in 2004.
- 3.27 In the April 2006 statement on *Number Translation Services: The Way Forward*, pricing misconceptions regarding number translation services (“NTS”)²⁰ were discussed. It focused on the fact that the research conducted showed that consumers believed that the prices of calls were higher than they actually were. A consequence of this was that customers avoided making such calls.
- 3.28 That document went on to discuss, in particular, that the link between lack of pricing transparency and consumer detriment could lead to reduced welfare. In trying to assess the consumer detriment for 070, we have adopted a similar approach.
- 3.29 As recognised in the model used in that document, quantifying such a welfare loss is difficult. The approach we have taken sets the counterfactual as the model where consumers know the actual price of a call against the one where consumers know the average perceived price of calls. The difference between the two estimates of consumer welfare equates to the consumer detriment.
- 3.30 Regarding the average perceived cost, we have had to aggregate this across all callers of 070 numbers. As such this average includes a mix of callers all of whom value the calls differently and so may be either making too few or too many calls i.e. it does not accurately reflect an individual’s willingness to pay for an 070 call. This means that the consumer detriment calculation is based on an average.
- 3.31 Based on this model²¹, the loss of consumer welfare for 070 numbers, is approximately £160k for fixed lines and £1k. for mobiles.
- 3.32 In addition, the above analysis has focused on pricing misconceptions, which stem from a lack of price transparency, where the difference is between the actual and perceived price. As stated above, it has not focused on the difference between what a consumer is willing to pay and the perceived price. Thus there is likely to be an additional welfare loss associated with uncertainty over price as a result of risk-averse consumers not making calls. This is because despite reasonably accurate

²⁰ NTS numbers are used by organisations and individuals to provide a wide range of services, including sales lines, customer service/enquiries and recorded information services. They are also widely used for dial-up pay-as-you-go internet services. NTS numbers are examples of non-geographic numbers in that the number dialled does not relate to a specific geographic location but instead relates to a particular service. For more details, see

<http://www.ofcom.org.uk/telecoms/ioi/nwbnd/ntsindex/>

²¹ http://www.ofcom.org.uk/consult/condocs/nts_forward/statement/

perceptions of price, the lack of certainty is enough to persuade them not to make the call i.e. that calls are not made even though a consumer's willingness to pay is greater than or equal to the cost of making the call. However, we have not been able to ascertain an estimate of this loss due to the complexities of gathering such data.

- 3.33 These figures only focus on the detriment caused by the *opacity* in the pricing structure, not the actual cost of the call. The reason these figures are relatively low compared to that for 0871 numbers (£49-52m) is in part due to the size of the market and also to the fact that for calls made from both mobile and fixed networks, consumers have more accurately predicted the average cost of a call.

The extent of scams on the 070 range

- 3.34 We have looked at three sources of information to assess the extent to which scams are present on the 070 number range:

- Artificially Inflated Traffic on the 070 number range;
- complaints data from the Ofcom Advisory Team ("OAT") and PhonepayPlus²²; and
- consumer research.

Artificially Inflated Traffic on the 070 number range

- 3.35 Artificially Inflated Traffic ("AIT") relates to where the flow of calls to a number is, as a result of any activity on or on behalf of the party operating that number, disproportionate to the flow of calls which would be expected from good faith commercial practice and usage of the network.
- 3.36 Communications providers typically have processes in place to identify AIT, following which, subject to a dispute process, they may withhold payment of fees to terminating operators in cases where they suspect that AIT has occurred.
- 3.37 Figure 3.1 below sets out the AIT data that we have received from OCPs in response to an information request sent to 8 major communications providers in August 2008, which also includes AIT data transiting the BT network. However, whether these data are entirely reflective of all scams that take place on the 070 range depends on each OCP's policy on AIT and how proactive each operator is at identifying AIT. A number of operators have made representations that the vast majority of scams go undetected by the AIT regime.

²² PhonepayPlus is the regulator of premium rate services (<http://www.phonepayplus.org.uk/>)

Figure 3.1 Cases investigated where AIT was agreed

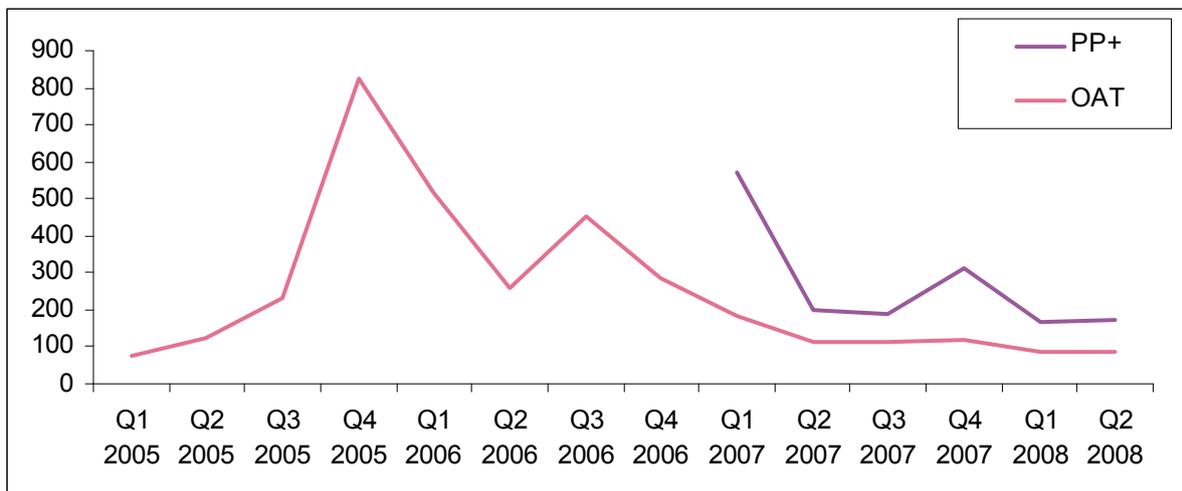
Period	Number of Cases	Volume of calls (mins)	Value of calls (£)
January – December 2006	229	9,934,773	2,519,998
January – December 2007	261	4,374,196	1,061,364
January - June 2008	63	1,175,763	230,647

Source: Responses from OCPs to information request

3.38 The data shows that in terms of the value and volume of minutes, these have declined substantially since 2006.

Complaints information from the OAT and PhonepayPlus

3.39 Figure 3.2 below sets out the total number of 070 complaints that the OAT has received from January 2005 to June 2008 and PhonepayPlus has received from January 2007 to June 2008²³. The number of complaints made to the OAT has significantly fallen over the last 18 months. Since a peak of 250 complaints per month in late 2005, the OAT currently receives about 20 per month²⁴. PhonepayPlus has observed a similar trend to OAT data since January 2007, allowing for a temporary surge of complaints when the PCA was introduced.

Figure 3.2 070 Complaints to OAT and PhonepayPlus

Source: OAT and PhonepayPlus

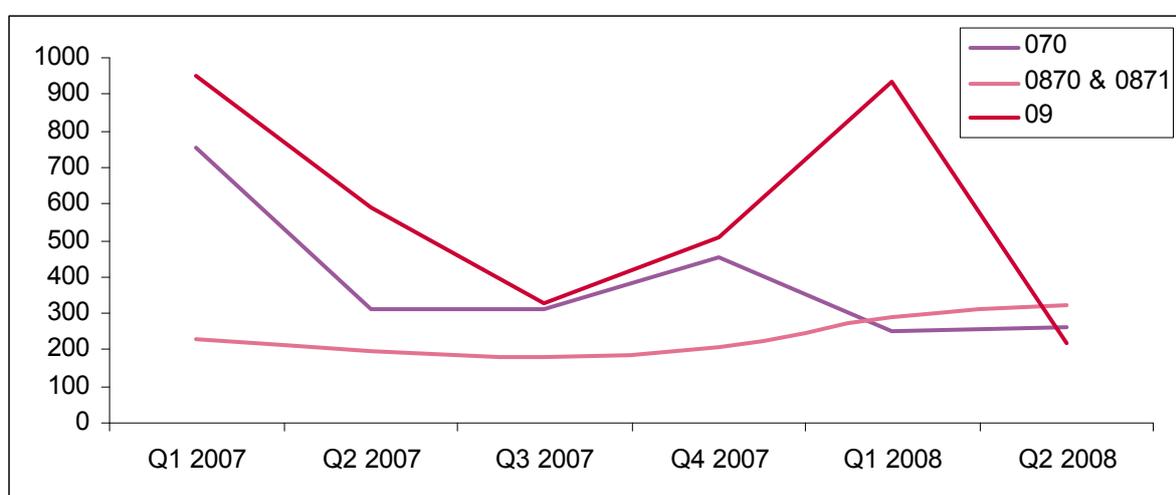
Note: Figures for September 2007 and December 2007 includes calls from consumers related to the pre-call announcements that ran during in this period

²³ In December 2006, PhonepayPlus issued a statement setting out that its code of practice applied to premium rate services on 070 numbers.

²⁴ This peak was significant to the position reached by our numbering review ("*Safeguarding the future of numbers*") in 2006 in relation to 070 numbers

- 3.40 It is important to interpret the complaints figures with caution. Whilst these complaints do not necessarily indicate that a consumer has been a victim of a scam - for example, some calls will simply relate to the cost of calls to 070 - many complainants consider these to be a scam. However, there will be a large number of people who are scammed and do not complain or are not aware that they have been scammed.
- 3.41 Therefore, the data on the number of complaints is not sufficient on its own to suggest how large any consumer detriment associated with scamming might be, although it is useful to set out the general trend of complaints in relation to 070. In order to help assess the extent of detriment it is useful to put into context the number of complaints compared against other number ranges. Whilst the sizes of the 0870/0871 and 09 markets are much larger than that of 070, as discussed in Section 2, it can provide a useful benchmark. The figure 3.3 shows the number of 070, 0870, 0871 and 09 complaints made between January 2007 and June 2008.

Figure 3.3 Total OAT and Phonepay Plus complaints for 0870/71, 070 and 09 for January 2007 to June 2008



Source: OAT and Phonepay Plus data – as above

- 3.42 The graph shows that 09 complaints, mostly exceed 070 complaints. For the 0870/71 complaints these only exceed 070 complaints for 2008. As traffic volumes on both 09 and 0870/71 are much higher than 070, we would expect that complaints on these ranges should be much higher.
- 3.43 Therefore it remains the case that this market generates a significant number of complaints relative to call volumes in comparison to other number ranges. We consider that this is the case because the level of scamming on the range is high relative to overall call volumes. As stated in Section 2, there are characteristics of the 070 number range that make it particularly susceptible to scamming.
- 3.44 In terms of the amount of money that scams on 070 generally cost consumers; some complainants gave an indication of the amount that they had been charged to make the call. This ranged between less than 50p to much higher sums of money – one consumer stated £35 in total (over a number of calls to the same number). From the PhonepayPlus data it appears, from the small sample analysed²⁵, that the most common amount spent was around £2 per call (this was on a mobile) – however in

²⁵ A small sample of the data given to Ofcom by PhonepayPlus was analysed and from this a number of complainants stated the amount of money these calls had cost.

many cases people phoned the 070 number several times. Thus the total cost may be much higher than the individual cost.

- 3.45 In addition, according to OFT research²⁶, there can be psychological costs incurred as a result of scamming. For example the research found that consumers can experience loss from dealing with a business in many ways including: financial loss, deprivation of important services, disappointment, loss of confidence in suppliers and inconvenience, stress or anxiety. However, it has not been possible to estimate a figure for this, but factors such as intrusion of privacy and the negative feelings that go with being scammed would be included.

Consumer Research

- 3.46 In the July 2008 research, 7% of consumers claimed to have been a victim of an 070 scam. However, this figure should be treated with caution and is likely to represent the very upper bound of consumers experiencing 070 scams. We are aware from our work generally on scamming that consumers have very different concepts of what might constitute a scam. It is likely that consumers have included incidents involving high 070 call costs, where fraudulent activity did not actually take place.

Conclusion on consumer detriment

- 3.47 The above analysis suggests that there is consumer detriment present in this market. This detriment has not been fully valued due to a number of complexities, such as the psychological effects of being scammed. Nevertheless, the sources of this detriment have been considered and include:
- lack of transparency in the market (calculations indicate a £161k welfare loss);
 - general confusion over what the 070 range is and some confusion with mobile numbers; and
 - the incidence and costs of scams (AIT data indicating a £1m loss in 2007).
- 3.48 However, this is a small market especially in comparison to other number ranges (the volume of traffic to 070 numbers is around 1% of that for the 0870/71 range) and one that is declining both in terms of call traffic and revenue. Thus any significant change is likely to create costs for communications providers that are large relative to the size of the 070 market.
- 3.49 In addition whilst consumer detriment may be present in this market, the analysis suggests that the overall size of detriment is likely to be small. For example, it appears: that there is not significant confusion between 070 and mobile numbers; that despite the opacity of the market consumers are able to predict, relatively accurately, the average cost of an 070 call; and that a fall in AIT traffic and complaints signals that the number of scams is declining.
- 3.50 It is important that the consumer detriment in this market is assessed against the costs of implementing any changes. The cost benefit analysis of various options to address the consumer detriment arising in the 070 market is set out in Section 4.
- 3.51 Further detailed analysis of the consumer detriment can be found at Annex 6.

²⁶ Ibid

Question 1: Do you agree with our analysis of consumer detriment on the 070 number range?

Section 4

Options for the 070 personal number range

- 4.1 The analysis presented in this section, together with Section 3 and Annex 6 of this document, represents an impact assessment of the options for the 070 number range as defined in section 7 of the Communications Act 2003 (the “Act”).
- 4.2 We have considered the following non-mutually exclusive options to address the level of consumer detriment set out in the previous section:
- Option 1: Close the 070 number range and migrate users to an alternative range;
 - Option 2: Do not close the 070 number range and monitor the market in light of PhoneyPayPlus enforcement action;
 - Option 3: Improve price publication for calls to 070 numbers;
 - Option 4: Amend Ofcom guidance on acceptable use of 070 numbers in relation to compliance with General Condition 17 by ensuring that PNS providers carry out due diligence of sub-allocatees of personal numbers; and
 - Option 5: Bar presentation of Calling Line Identification for 070 numbers.

Option 1: Close the 070 number range and migrate users to an alternative ranges

- 4.3 Section 62(3) of the Act, states that a numbering allocation cannot be withdrawn without replacement by allocations as similar as possible to the original allocation. Therefore, Ofcom has a duty to provide a migration path for legitimate users where a number range has been withdrawn, i.e., where a number range is closed.
- 4.4 We have identified various ranges to which current 070 users could migrate to. In particular, we have considered opening new ranges, such as 065, and migrating users to existing number ranges, such as 08 or 09.

The 08 number range

- 4.5 There are users who might be able to migrate to a current 08 number. The most likely range would be 0871, 0872 or 0873 as these ranges are charged at higher retail call rates relative to other current 08 ranges (but capped at 10ppm from a BT landline). However, while the rates on these ranges would accommodate termination on fixed lines (around 65% of calls to personal numbers are terminated on fixed lines), they are unlikely to be able to accommodate mobile or international termination as termination charges are too high to be covered by retail call rates. On these number ranges, therefore, those users who use 070 numbers to receive calls on their mobile and internationally will not be able to use existing 08 ranges.
- 4.6 Ofcom could consider opening a new 08 range that allowed higher call charges. The simplest way to do this is through a “lift and shift” approach where the 070 prefix would simply be replaced with another, for example, 085. This would minimise costs

associated with needing to hand back and reapply for numbers, and may lead to simpler renegotiations of existing contracts between PNS providers, resellers and OCPs. A more complex migration, where a new number range was opened from scratch and communications providers would have to re-apply for numbers, is likely to involve greater cost and inconvenience.

- 4.7 However, opening up a new personal number range on 08 would be contrary to current Ofcom policy and attempts to link 08 pricing to geographic pricing in order to restore trust in 08 numbers.
- 4.8 In addition, certain 08 numbers are not accessible from abroad and therefore if that is an important feature of a personal numbering service, migration to 08 would not be suitable.

The 09 number range

- 4.9 Existing sub-ranges 090, 091 and 098 have been designated for Premium Rate Services (“PRS”) as defined in section 120(7) of the Act. As summarised in the statement “*The conditions regulating PRS*”, published on 17 October 2006²⁷, personal numbering services are not PRS as defined in section 120(7) of the Act.
- 4.10 Therefore in order to accommodate PNS on the 09 range, we would need to open a new sub-range (in the same way as we have considered for 08) for PNS that are not PRS. This approach has the benefit that many consumers associate the 09 range with higher call charges. However, this may also have an adverse impact on end users of personal numbers as consumers may avoid making calls to what they might believe to be a very expensive number. For example according our research conducted in May 2008, the perceived price of an 09 call, on a fixed network is 61ppm, which is substantially higher than the estimated actual price of 36.5ppm for a 070 call. Thus there is likely to be substantial consumer welfare loss from migration to this range.
- 4.11 In addition, the 09 range currently only carries revenue share services and PhonepayPlus regulation which can only apply to PRS. Therefore, adding more services to the 09 range would make it harder to distinguish services on that range using simplified and enduring meanings. In addition, it may cause confusion for consumers to have services provided on the 09 range that are not subject to PhonepayPlus regulation, or cause consumers to believe that the services provided by personal numbers are not unlike PRS, leading to reduced confidence in PNS in general.
- 4.12 It is also relevant that 09 numbers tend not be accessible from abroad and therefore the same arguments as for 08 apply here.

The 06 number range

- 4.13 As set out in previous documents, Ofcom originally considered migrating 070 users to a new 06 number range.
- 4.14 As for opening a new range on 08, the simplest way to create this range would simply to change the prefix of personal numbers.

²⁷ Paragraphs 2.30, 2.34, 3.4 and 4.11,
<http://www.ofcom.org.uk/consult/condocs/prsconditions2/statement/prsconditions.pdf>

Cost-benefit analysis of migration

- 4.15 We have carried out a cost-benefit analysis for each migration option and estimated the cost of migration of PNS providers/resellers, end users and OCPs to another number range. Given the difficulties with assessing these costs, we have taken a fairly conservative approach to evaluating costs. Further the majority of the costs for PNS providers, end-users and Ofcom are one-off rather than recurring.

Costs associated with migration

- 4.16 There are a number of types of costs that apply regardless of which number range a user might migrate to, although certain costs such as loss of business and system changes may vary depending on the number range.
- 4.17 The costs to PNS providers and resellers associated with migration include: costs associated with notifying end users; costs associated with re-drafting contracts with end users; costs associated with changing switches and billing systems; costs of renegotiations of wholesale termination rates with OCPs; and loss of business. We estimate migration costs for PNS providers to be around £10 million. The majority of these costs are associated with changes to switches and billing systems and are thus one-off costs.
- 4.18 The costs to end users include: stationery costs; costs associated with website changes; costs associated with changes to telecoms equipment; marketing costs; and loss of business. As discussed in Ofcom's previous consultations on NTS²⁸, these costs are very difficult to estimate. However, we have attempted to estimate the cost of stationery based on a similar model as that used for Ofcom's consultation on *Extending Premium Rate Services Regulation to 087 Numbers* in May 2008²⁹. As such we estimate that stationery costs alone could be in the region of £22 million. However, given that the types of businesses using 070 numbers will vary and so will their need to update stationery, we need to be cautious with any estimate used. Loss of business is also likely to be significant and will occur with any number changes. In addition, there might be additional loss of business depending on the number range a user migrates to. For example, consumers may be less likely to call an 09 number that they might associate with very high charges and PRS. As with the costs to PNS providers the majority of these would be one-off costs.
- 4.19 There will also be costs associated with systems changes for OCPs. These costs will differ, depending on the range chosen. Whilst migration to existing ranges is likely to require some changes, the costs associated with opening up a new range are likely to be much more substantial as new and possibly more complicated technology solutions have to be built. During this consultation we will be requesting estimates of these costs from OCPs and would welcome any relevant data in response to this consultation.
- 4.20 Whilst the majority of costs fall to the PNS providers and end users, Ofcom will also incur some costs due to the migration of PNS services to another range. We estimate that the salary and overhead costs of migration to be approximately £3k.

²⁸ <http://www.ofcom.org.uk/telecoms/ioi/nwbnd/ntsindex/>

²⁹ <http://www.ofcom.org.uk/consult/condocs/087prs/prscondoc.pdf>

- 4.21 Further if a new range were to be used, such as the 06 range then Ofcom may decide to carry out a national advertising campaign promoting this new range, similar to that carried out for the 020 3 range, which will mean further costs.
- 4.22 We have set out our analysis of costs in Annex 6, which forms part of our impact assessment.

Benefits of migration

- 4.23 The benefits of migration will only arise if migration addresses the three main sources of consumer detriment we have found, namely confusion with mobile numbers, lack of pricing transparency for 070 numbers and the cost of scamming.
- 4.24 However, from the results of our market research, we cannot be certain that the main reason for the prevalence of scams or price confusion on the 070 range is because consumers confuse personal numbers with mobile numbers. Indeed, it is likely that the key drivers of scams are the high prices of calls to personal numbers and a general lack of awareness of call prices, regardless of confusion with mobile numbers.
- 4.25 From our consumer research, it is not clear that consumers have more awareness about the cost of calling 08 or 09 numbers. Further, if we were to create new 08 and 09 ranges for PNS, consumers would be likely to have even less awareness of pricing unless there was substantial promotion of the types of services of these ranges when launched, in that they may assume that pricing is the same as other 08 or 09 ranges. Therefore, it is unclear that migration will improve pricing transparency for PNS.
- 4.26 As with quantifying consumer detriment, it has not been possible to estimate the total benefits to consumers (and possibly to users) from such a change. Nevertheless, it is likely given the discussion above that any benefits would be significantly smaller than the costs involved and this is likely to be the case even if costs were significantly smaller.
- 4.27 Overall, it is not clear that moving PNS to a recognisably different range will help to remedy the consumer detriment that arises with 070 calls and will not, on its own, prevent the same types of scams appearing on a new range or similar price confusion.

Conclusion

Figure 4.1 Costs and benefits associated with migration of personal numbering services to other ranges

Cost to PNS Providers/Resellers	£10m
Changes to Notices	£1m
Changes to Contracts to End-user	£0.3m
Renegotiating POLO rates	£1.7m
System costs	£6.9m
Cost to End User	£22m
Overhead and Stationery costs	£22m
Website changes	Minimal expenditure
Telecoms costs	Will vary according to end-user needs and may be incurred on a regular basis
Marketing costs	Minimal expenditure
Loss of business	This could be substantial
Cost to OCPs	These costs are associated with changes to systems and could be substantial
Cost to Ofcom	£3k
Benefits	These are likely to be minimal as migration does not address the main sources of consumer detriment. It is likely that similar scams will occur on any new personal numbering range.

- 4.28 Ofcom estimates that the total costs to PNS providers, resellers, end users and Ofcom of migrating personal numbers to another range could be as high as around £40 million (not factoring in significant loss of business to end-users and costs to OCPs).
- 4.29 As set out above in figure 4.1, the benefits of migration are likely to be small, given that migration will not address the sources of consumer detriment identified. Whilst it may provide more clarity for some consumers in terms of confusion with mobile numbers, the opaque pricing, high costs and scams are likely to remain with personal numbering and with them the majority of consumer detriment.
- 4.30 In addition, the costs are high in comparison to the revenue generated in this market – approximately £32 million per year. This suggests that even if the benefits of migration were high, it would not be profitable for the market to migrate in terms of a pure cost-benefit analysis test.

- 4.31 We therefore conclude that costs are likely to significantly outweigh benefits and therefore the migration of 070 end users to an alternative range is a disproportionate response to the consumer detriment identified.

Question 2: Do you agree that the costs outweigh the benefits in relation to closing the 070 number range and migrating users to an alternative range?

Option 2: Do not close the 070 number range and monitor the market in light of PhonepayPlus enforcement action

- 4.32 This option involves keeping the 070 personal number range open and monitoring the market in light of PhonepayPlus enforcement action.
- 4.33 Since December 2006, PhonepayPlus has increased its activity in relation to scamming activity on the 070 number range. In particular, PhonepayPlus issued a statement that set out the application of its Code of Practice to PRS on 070 numbers (where the call rate exceeds 10 pence per minute or is a chatline or Internet dialler service)³⁰.
- 4.34 In July 2008, PhonepayPlus adjudicated on a case involving several breaches of its Code of Practice in relation to the 070 number range³¹. The breaches consisted of calls being made to mobile phones that lasted approximately 5 seconds during which a voice, which sounded like a recording, stated: "Hello, hello, can you hear me?" (or similar), after which point the call was terminated. An 070 CLI was left that prompted consumers to return the call whilst being unaware of the higher call charges that applied to the 070 number. Given the serious nature of the breach, the PhonepayPlus Tribunal imposed a fine of £200,000 in respect of the breaches.
- 4.35 In addition, PhonepayPlus is currently carrying out a number of preliminary investigations into other activities involving 070 numbers and has recently announced the use of its emergency procedures in relation to a specific 070 number range. One investigation involves emails that resemble invoices for computer equipment, which encourage recipients to call '070' prefixed numbers.
- 4.36 Ofcom fully supports the action that PhonepayPlus is taking in this area. We are of the view that this swift approach and the imposition of appropriate fines may succeed in having a real impact on scamming activities on the 070 number range. In addition, Ofcom is exploring informal action that would complement the work of PhonepayPlus. In particular, this may involve advising PNS providers of potential scams on their number ranges at an early stage in order that they can take appropriate action.
- 4.37 As set out in Section 3, there appears to be genuine demand for 070 services, although overall the market is small. In addition, based on AIT and complaints data, scamming activity appears in decline. Therefore, and given that the cost benefit analysis does not support closing the 070 range, Ofcom considers that it should keep the 070 range open. Ofcom also considers that it would be appropriate to support and monitor current enforcement action.

Question 3: Do you agree that Ofcom should keep the 070 range open and monitor the market in light of enforcement action by PhonepayPlus?

³⁰ http://www.phonepayplus.org.uk/pdfs_news/070.pdf

³¹ http://www.phonepayplus.org.uk/service_providers/adjudications/default.asp?cmd=3&id=776

Option 3: Improve price publication for 070 numbers

- 4.38 To improve pricing transparency on 070 calls, we propose requiring communications providers to publish tariffs for calls to 070 numbers more prominently and make them easier to understand for consumers
- 4.39 The research shows that consumers are not clear about the price of 070 calls. Price misperceptions may bring about significant detriment to consumers. If consumers overestimate³² the price of 070 calls, they may avoid making calls to these numbers, call less often, or make shorter calls. In other words, they may be consuming a sub-optimal amount of these services. This, in turn, has a negative impact both on consumers and on the industry that provides such services.
- 4.40 Therefore, we consider it important that consumers are provided with better information in relation to the cost of 070 calls. This would appear to be a more proportionate response to addressing the consumer detriment identified in Section 3 than Option 1.
- 4.41 To address the market failure associated with the lack of pricing transparency on 070 calls, we propose requiring communications providers to publish tariffs for calls to 070 numbers more prominently and to make them easier to understand for consumers.
- 4.42 We propose amending General Condition 14 to impose the same price publication requirements on OCPs as have been imposed for NTS calls. This would require OCPs to modify their codes of practice to ensure 070 call prices are given greater prominence in published price lists and in promotional material for different service packages, so that they are not hidden. The information provided should include clear statements of whether or not discount schemes apply to 070 calls.
- 4.43 We propose that this should be implemented within 6 months, as it is likely that the majority of promotional literature published by communications providers would be replaced in any event within this period. This is likely to limit the costs to communications providers in order to comply. We note, however, that there may be additional costs associated with amending OCPs' codes of practice. In particular, we would welcome any cost information in relation to this.

Question 4: Do you agree that Ofcom should require OCPs to give greater prominence to the cost of calling 070 numbers in published price lists and promotional material?

Option 4: Amend Ofcom guidance on acceptable use of 070 numbers in relation to compliance with General Condition 17 by ensuring PNS providers carry out due diligence of sub-allocatees of personal numbers

- 4.44 Communications providers are obliged to comply with the General Conditions of Entitlement relating to Telephone Numbers (the "General Conditions")³³.
- 4.45 Specifically, Condition 17.8 of the General Conditions states that:

"The Communications Provider shall take all reasonably practicable steps to ensure that its Customers, in using Telephone Numbers,

³² Consumer detriment will also occur when consumers underestimate the price of 070 calls.

³³ http://www.ofcom.org.uk/telecoms/ioi/g_a_regime/gce/

comply with the provisions of this Condition, where applicable, and the provisions of the National Telephone Numbering Plan.”

- 4.46 Ofcom published guidance on the acceptable use of 070 numbers in January 2004³⁴ regarding compliance in relation to the sub-allocation of these numbers. To comply with this condition, the guidance states that:

“... if sub-allocatees or resellers are not complying with rules it is the range holder's responsibility to ensure that this is remedied. It is therefore in range holders' interests to ensure that resellers are aware of these obligations. This should be made clear in the Numbering Plan that range holders are required to produce in accordance with Condition 17.4 of the General Conditions”

- 4.47 We propose to amend the guidance in order to make clear the due diligence processes that we consider to meet the requirements set out in General Condition 17.8.

- 4.48 The proposed amendments would reflect the due diligence requirements of paragraph 2.3 of the PhonepayPlus Code of Practice³⁵, which applies to those providing premium rate services. Our guidance would require companies who have been allocated 070 personal numbers (“070 allocatees”) to carry out similar due diligence checks on those that they sub-allocate their numbers to.

- 4.49 Specifically, we would expect that before making their network and/or services available to sub-allocatees, 070 allocatees would be required to:

- collect and maintain information such as the full address of the sub-allocatee, the registered name and company of that company (if a limited company), the name and address of each of the directors, the name of the director with primary responsibility for the personal numbers, the name of the person responsible for the day-to-day operation of each personal number, and phone, email, and fax details for those named persons enabling contact to be made with any of them at all necessary times;
- make sufficient inquiry so as to satisfy themselves fully that the information supplied to them by service providers is accurate. In undertaking these inquiries, 070 allocatees must obtain clear evidence, in particular in respect of the identity of the people named above;
- retain the information collected and the records of the inquiries made and responses to those inquiries and a copy of all evidence obtained, and make those records and copies available to Ofcom upon being directed by Ofcom to do so; and
- bring the Numbering Plan and General Condition 17 to the attention of their sub-allocatee and retain a copy of the registration form lodged by each sub-allocatee with Ofcom and the acknowledgement of receipt by Ofcom.

- 4.50 In order to limit the administrative burden of the due diligence process, we propose that the above due diligence checks should be carried out where a person makes or has made an application for 50 or more 070 numbers from a range holder. For new

³⁴ http://www.ofcom.org.uk/telecoms/ioi/numbers/num_070_guide

³⁵ http://www.phonepayplus.org.uk/pdfs_code/PhonepayPlus11CoP_Apr08v3.pdf

applications, we envisage that these due diligence checks could be carried out at the time of application by requesting the information from the applicant. With existing sub-allocatees, we envisage that these checks could be carried out through simple email correspondence to request the information required.

- 4.51 To allow a reasonable time for 070 allocatees to comply with the guidance, we propose to allow a period of 12 months³⁶ for communications providers to carry out the relevant due diligence on existing customers at the time of publication of our decision.
- 4.52 We understand that the proposed amendments will impose some costs on communications providers, such as checking the accuracy of information provided, and would welcome views on this.

Question 5: Do you agree that Ofcom should amend its guidance to ensure that PNS providers carry out appropriate due diligence of sub-allocatees of personal numbers?

Option 5: Bar the presentation of Calling Line Identification for 070 numbers

- 4.53 Calling line identification (“CLI”) is a service that transmits the caller’s telephone number to the called party’s telephone equipment. A small number of 070 providers offer this service to end users to enable them to provide a number to the party they call to ring back.
- 4.54 Recent cases of scams we have identified, and the subject of a recent investigation by PhonepayPlus, relate to the abuse of this facility in order to create false records of a “missed call” to entice victims to call back. Therefore, we have considered barring the presentation of CLI on 070 to prevent these types of scams.
- 4.55 Implementation of such a bar, however, is not straightforward. CLIs are presented initially by the caller’s service provider, which are handed over via several networks in good faith to the called party’s network.
- 4.56 While barring CLI by 070 providers is possible, and it would be likely that most 070 providers would comply, it would not necessarily prevent all 070 numbers from being presented on a called party’s equipment. We understand that it is possible and not difficult to present numbers of any range using certain types of voice-over-IP (VoIP) software. Therefore, anyone could still present an 070 number despite being in deliberate breach of regulation. Given CLI information is handed over several times between operators, it would be virtually impossible to trace those who have breached the rules to take enforcement action.
- 4.57 The only way to ensure that 070 CLI is not presented would be to require CPs to put in place expensive filter equipment, which is unlikely to be proportionate.
- 4.58 Therefore, currently we are not minded to propose the barring of CLI presentation as it is unclear that this would substantially reduce these types of missed call scams such that the benefits delivered would offset the costs of implementation. In addition, there is the risk that this would limit the legitimate use of 070 CLI. However, we would greatly welcome any additional evidence on implementing such a solution, such as the means and costs associated with implementation, and its effectiveness as a solution.

³⁶ For reasons of presentation, the notification for a proposed modification only allows 2 months, but the intention is that in practical terms, it will be 12 months from the date of publication of a statement.

Question 6: Do you agree that Ofcom should not bar the presentation of 070 CLI? Please provide evidence to support your response

Other options considered

- 4.59 The current pricing structure for 070 stems from the need of PNS providers to be able to terminate calls on mobile phones. Historically, the cost of calling a mobile phone was high and therefore the cost of calling an 070 number needed to be high in order to be able to connect to a PNS user's mobile phone. Over time, however, the cost of calling a mobile phone has fallen significantly, but the typical cost of calling an 070 number has stayed relatively high.
- 4.60 If we wanted to consider regulating the wholesale charges for PNS calls, we would need to carry out a market review for PNS. This would involve an examination of markets for each individual PNS terminating operator, which is likely to be very onerous on both Ofcom and communications providers. Given the size of the market for 070 numbers, we do not believe that this would be proportionate in the circumstances.
- 4.61 As mentioned previously, there are a number of larger service providers who provide specific services using 070 numbers, such as Hospedia Ltd and Premier Telesolutions, who provide services to hospital patients and Trader Media who provide 070 numbers to customers who advertise in publications such as Auto Trader and Ad Trader. These types of services may not align perfectly with the original concept of "follow me" personal numbering services.
- 4.62 In 2004, Ofcom amended its guidance on the acceptable use of 070 numbers³⁷ to permit these services on the range. As part of this review, we are revisiting this guidance and the types of services that should be permitted on this range.
- 4.63 Ofcom therefore welcomes views on whether these services should be provided on the 070 ranges, or whether these services might be more appropriately provided on an alternative range.

Question 7: Should services provided by, for example, Hospedia, Premier Telesolutions and Trader Media be provided on an alternative number range to 070? Please provide any evidence to support your views.

Conclusions

- 4.64 Ofcom has a duty to further the interests of consumers in relevant markets. However, Ofcom also must have regard to proportionality and can only impose regulation where appropriate.
- 4.65 Our analysis suggests that there is consumer detriment present in the market for personal numbers. The sources of detriment include:
- lack of price transparency in the market (calculations indicate a £161k welfare loss);
 - confusion over what the 070 range is, including confusion with mobile numbers; and

³⁷ http://www.ofcom.org.uk/telecoms/ioi/numbers/num_070_guide

- the costs of scams (AIT data indicates a £1 million loss in 2007).
- 4.66 We do not believe that migrating users of 070 numbers to another number range (Option 1) will address the lack of price transparency or the level of scamming on the range. It will address confusion between personal and mobile numbers but it is not clear that this confusion is the main cause of scamming. As the high costs of calls to personal numbers will continue on any new number range, we believe that scams will simply transfer to the new range and consumer detriment will persist. In addition, due to the large costs associated with migration, our cost benefit analysis leads us to conclude that closing the range would not be proportionate.
- 4.67 The cost benefit analysis together with a continued genuine demand for 070 services and declining scamming activity suggests that Ofcom should keep the 070 range open and continue to support and monitor the impact of enforcement action (Option 2).
- 4.68 In order to tackle the issue of price transparency for 070 numbers, we propose to require originating communications providers to publish clearer tariffs for calls to 070 numbers (Option 3).
- 4.69 We also propose to require PNS providers to carry out due diligence checks on those they sub-allocate numbers to, in order to ensure compliance with the Numbering Plan.
- 4.70 Our cost-benefit analysis suggests that options 2-4 together form a more proportionate approach than option 1. We therefore propose to implement options 2-4.
- 4.71 We have also considered whether to bar the presentation of CLI for 070 numbers. Due to the fact that current technology cannot prevent all 070 CLIs from being presented, and to do so would incur substantial costs, we do not propose to implement Option 5.

Section 5

Conservation of personal numbers

- 5.1 In proposing not to close the 070 personal number range, there is a risk that the 070 number range could be completely allocated in the medium term.
- 5.2 Ofcom does not foresee any immediate problems in supply based on current and historical demand for numbers, particularly as blocks in the 070 number range are now allocated in 10k blocks instead of 100k blocks.
- 5.3 However, in order to further conserve number blocks, we encourage communications providers to return any unused 10k blocks from 100k allocations to extend the use of the range and ask any communications providers with unused blocks to contact us to arrange their return.

Section 6

The removal of pre-call announcements

Introduction and background

- 6.1 This section sets out Ofcom's intention to remove the requirement to provide pre-call announcements ("PCAs") on the 070 number range from General Condition 17 and the Numbering Plan.
- 6.2 In its statement *Raising confidence in telephone numbers*³⁸ published on 31 May 2007, Ofcom put in place a requirement on communications providers ("CPs") to provide free pre-call announcements for calls to 070 numbers where either the per minute or the per call charge exceeded 20p. The PCA advised consumers of the maximum charges that could apply to the call.

Impact of the PCAs

- 6.3 Following the introduction of PCAs in September 2007, Ofcom received a number of complaints about them. In particular, there were certain automated calling services provided on the 070 range, mainly alarm systems, that were affected by the introduction of PCAs. The PCAs had caused these remotely activated calling services to fail as a result of the recorded message introducing a dialling delay. This was potentially endangering the life and security of people who depended on the reliability of such services.
- 6.4 Examples of these services are personal safety or burglar alarms, which when activated trigger an auto-dialler to contact a monitoring centre. In the event the call is not completed, the unit automatically disconnects and tries again for a set period or a certain number of times. For many units, the duration of the time-out meant that after the PCA had been played there was little or no time for the call to be completed before the unit disconnected and retried.
- 6.5 Ofcom also received a number of complaints from businesses and consumers about the PCA. Most of these complaints were about loss of business and consumer annoyance and not about any risk to human life or property.

Assessing the risk

- 6.6 In light of these complaints, Ofcom undertook a detailed assessment of the potential use of 070 numbers for emergency-type services. We sent out a formal information request, under section 135 of the Act, to all CPs to whom Ofcom had allocated 070 number blocks, asking whether they provided such services. We obtained responses from CPs accounting for nearly 99% of all the 070 number blocks issued.
- 6.7 In each case where the CP stated that such services were being used on 070 numbers, we assessed the services to ascertain whether they were based on automated dialling with no human intervention. If the service did not rely on automated dialling, there was unlikely to be a risk to human life or property arising from PCAs. The responses showed that while there were other emergency-type services operating on the range, such as cave or mountain rescue, none of these services used automated dialling.

³⁸ <http://www.ofcom.org.uk/consult/condocs/numbering03/statement/>

- 6.8 Although we received responses accounting for the vast majority of 070 numbers, our view was that there was a considerable risk that many of the CPs to whom 070 numbers had been allocated may not have known precisely the uses to which the numbers were being put.

Addressing the risks

- 6.9 Ofcom considered whether the problems could be circumvented in any way, such as by increasing the duration of the time-out of the automated dialling systems or by moving these services to a different number range. Ofcom was advised that these settings could not be changed remotely and therefore any changes would require a site visit. Further, if the time-out duration was a factory setting, this could not be changed without replacing at least part of the unit. Both of these options would have taken several months to complete and would not have addressed the risks quickly enough.
- 6.10 As an interim measure, Ofcom asked the major fixed line providers to suspend PCAs in respect of three 100k 070 number blocks where we had identified emergency-type services operating with automated dialling. However, given the widespread use of 070 numbers, it was not possible to be certain that similar services might not be operating on other 070 number blocks. The nature of these services is such that a failure to operate correctly might only become apparent when the service is called upon to perform its function.
- 6.11 The risk to human life and property was the determining factor in Ofcom's decision making and, on 17 December 2007, Ofcom issue a statement withdrawing the requirement for PCAs on 070 numbers³⁹. Ofcom did not remove the requirement in General Condition 17 and the National Numbering Plan but stated that it would not enforce the requirement on 070 numbers.
- 6.12 Because the PCA is a regulatory requirement, set out in the General Conditions and the National Numbering Plan, Ofcom is now formally consulting on amending both.

Impact Assessment

- 6.13 The analysis presented in this section represents an impact assessment as defined in section 7 of the Act.
- 6.14 The rationale behind the decision to withdraw this requirement is that new information has come to light, which was not available at the time Ofcom decided to impose this requirement in 2007.
- 6.15 The main benefit of removing PCAs is that it will ensure that there is no risk to human life or property from emergency-type services operating on the 070 range. The main cost of removing PCAs is that consumers will no longer benefit from the improved price transparency that PCAs provided.
- 6.16 It is difficult to quantify both the costs and benefits in this case and carry out a rigorous and conclusive analysis. The decision to remove this requirement was made on the basis that the possible risk to human life and property would outweigh any risk of consumer detriment from a lack of number transparency or abuse of this range. However, we do not believe that implementing a technical alternative to pre-call announcements can be achieved without substantial costs incurred.

³⁹ <http://www.ofcom.org.uk/consult/condocs/numbering03/070precall/>

Changes to General Condition 17 and the National Telephone Numbering Plan

- 6.17 The notification at Annex 8 proposes to amend GC 17.12 so that it no longer refers to Personal Numbering Service (070) numbers.
- 6.18 The notification at Annex 9 proposes to amend the National Telephone Numbering Plan to remove the requirement for pre-call announcements.

Question 8: Do you agree that Ofcom should withdraw formally the requirement for pre-call announcements on 070 Personal Numbers?

Annex 1

Responding to this consultation

How to respond

- A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 7 January 2009**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at <http://www.ofcom.org.uk/consult/condocs/070options/howtorespond/form>, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 For larger consultation responses - particularly those with supporting charts, tables or other data - please email 070options@ofcom.org.uk attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.
- Lester Mak
Competition Group
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- Fax: 020 7981 3333
- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact on you.

Further information

- A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Lester Mak on 020 7783 4314.

Confidentiality

- A1.8 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, www.ofcom.org.uk, ideally on receipt. If you think your response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.

- A1.9 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and will try to respect this. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.10 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's approach on intellectual property rights is explained further on its website at <http://www.ofcom.org.uk/about/accoun/disclaimer/>

Next steps

- A1.11 Following the end of the consultation period, Ofcom intends to publish a statement in 2009.
- A1.12 Please note that you can register to receive free mail Updates alerting you to the publications of relevant Ofcom documents. For more details please see: http://www.ofcom.org.uk/static/subscribe/select_list.htm

Ofcom's consultation processes

- A1.13 Ofcom seeks to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.
- A1.14 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at consult@ofcom.org.uk . We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.15 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Vicki Nash, Director Scotland, who is Ofcom's consultation champion:

Vicki Nash
Ofcom
Sutherland House
149 St. Vincent Street
Glasgow G2 5NW

Tel: 0141 229 7401
Fax: 0141 229 7433

Email vicki.nash@ofcom.org.uk

Annex 2

Ofcom's consultation principles

A2.1 Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

A2.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

A2.3 We will be clear about who we are consulting, why, on what questions and for how long.

A2.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

A2.5 We will consult for up to 10 weeks depending on the potential impact of our proposals.

A2.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Ofcom's 'Consultation Champion' will also be the main person to contact with views on the way we run our consultations.

A2.7 If we are not able to follow one of these principles, we will explain why.

After the consultation

A2.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We would usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

Annex 3

Consultation response cover sheet

- A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.
- A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at www.ofcom.org.uk/consult/.
- A3.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title: **Review of the 070 personal numbering range**

To (Ofcom contact): **Lester Mak**

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing Name/contact details/job title

Whole response Organisation

Part of the response If there is no separate annex, which parts?

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name

Signed (if hard copy)

Annex 4

Consultation questions

Question 1: Do you agree with our analysis of consumer detriment on the 070 number range?

Question 2: Do you agree that the costs outweigh the benefits in relation to closing the 070 number range and migrating users to an alternative range?

Question 3: Do you agree that Ofcom should keep the 070 range open and monitor the market in light of enforcement action by PhonepayPlus?

Question 4: Do you agree that Ofcom should require OCPs to give greater prominence to the cost of calling 070 numbers in published price lists and promotional material?

Question 5: Do you agree that Ofcom should amend its guidance to ensure that PNS providers carry out appropriate due diligence of sub-allocatees of personal numbers?

Question 6: Do you agree that Ofcom should not bar the presentation of 070 CLI? Please provide evidence to support your response

Question 7: Should services provided by, for example, Hospedia, Premier Telesolutions and Trader Media be provided on an alternative number range to 070? Please provide any evidence to support your views.

Question 8: Do you agree that Ofcom should withdraw formally the requirement for pre-call announcements on 070 Personal Numbers?

Annex 5

Research

Introduction

- A5.1 In order to carry out our cost-benefit analysis of options to address the consumer detriment associated with the use of 070 numbers, we carried out research with consumers and end users in order to understand in greater detail perceptions of the range.
- A5.2 In May to July 2008, we conducted consumer research to understand the degree to which people know: what 070 numbers are; what service is associated with 070; how much calls to 070 numbers cost; the level of concern about calling 070 numbers and the reasons for any concerns; and the number of people who claim to have been victim of scams on the 070 number range.
- A5.3 In June 2008, we also conducted research with end users of 070 numbers in order to understand what services are provided on 070 numbers, why end-users chose to use an 070 number to receive calls, and how changes to the number range is likely to affect them.

Consumer research

Methodology

- A5.4 The main research was conducted in two parts by ICM research:
- telephone omnibus interviews with 1033 UK adults over the weekend of 11 May 2008. Data was weighted to the UK population of adults aged 18 and over; and
 - online omnibus survey of 2032 GB adults in July 2008. Data was weighted to the GB population of adults aged 18 and over.
- A5.5 Additional research from focus groups with 163 individuals conducted by Futuresight in June 2008.
- A5.6 This report also draws on previous research:
- telephone omnibus survey of 1005 GB adults over the weekend of 9 June 2004 by ICM research.

Summary of key research findings

- A5.7 Two-thirds (66%) of respondents had not heard of 070 numbers. Of those who had heard of 070 numbers: 8% knew they are personal numbers; and 48% said they were mobile numbers (16% of overall sample).
- A5.8 In a separate survey, the majority of respondents are able to recognise mobile numbers quite readily (92%). Significantly, only 21% of respondents thought that 070 numbers were mobile numbers.

- A5.9 The average *estimated* cost of calling numbers beginning with 070 was 46 ppm from a landline and 54 ppm from a mobile. This has increased since 2004 (27 ppm and 43 ppm respectively).
- A5.10 Price uncertainty contributed to concern about calling 070 (and other non-geographic) numbers. Fewer respondents would call back numbers beginning with 070 or 090 in response to a missed call or business email than other number ranges.
- A5.11 7% of respondents claimed to have been a victim of a scam on the 070 number range. 3% would be concerned about scams when calling 070 numbers from a landline and 4% from a mobile.

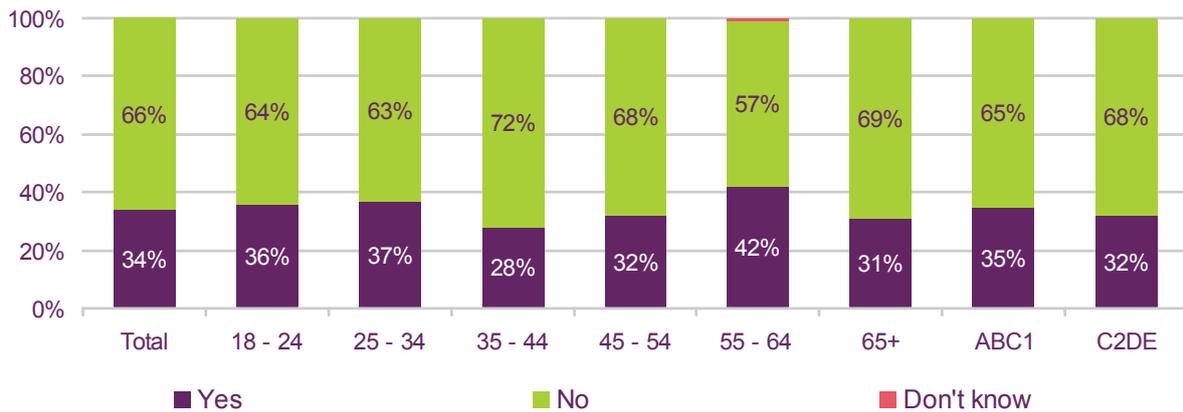
Research findings

Awareness of 070 numbers

- A5.12 A third (34%) of respondents said they had heard of numbers that begin with the 070 dialling code (figure A5.1). This compares with 28% in 2004⁴⁰.

Figure A5.1 Awareness of numbers beginning with 070

Q. Some telephone numbers begin with an 070 dialling code. Before today had you heard of these types of telephone numbers?



Source: Ofcom/ICM research, May 2008
 Base: 1033 UK adults

⁴⁰ Source: Survey research conducted for Ofcom by ICM Research in 2004

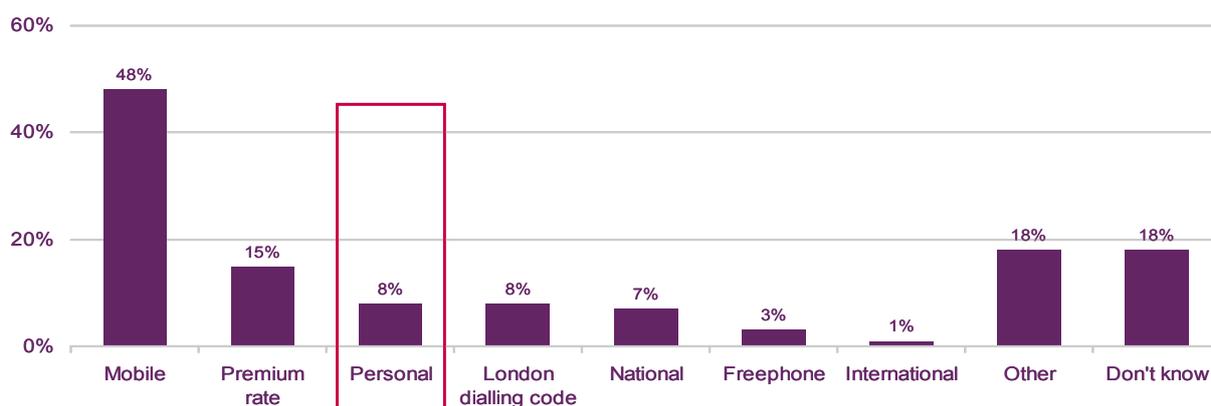
A5.13 Figure A5.2 shows that of the third who claimed to have heard of 070, 8% correctly identified them as personal numbers (3% of all respondents). In 2004 fewer than 1% of respondents identified 070 as personal numbers.

A5.14 Nearly half (48%) of respondents who said they had heard of 070 numbers confused them with mobile numbers. These respondents make up 16% of the total sample.

A5.15 There was little variation in awareness across different ages and social groups.

Figure A5.2 Identifying 070 numbers as personal numbers

Q. What type of telephone numbers do you think these are?

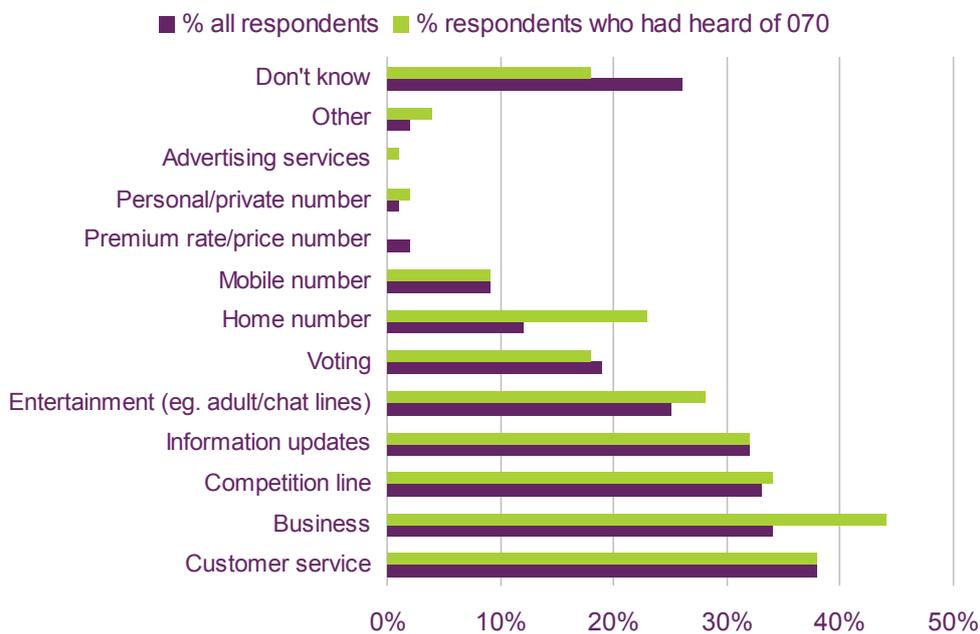


Source: Ofcom/ICM research, May 2008
Base: 348 UK adults – all aware of 070

- A5.16 Respondents named a variety of services that they thought might be provided on 070, including customer service, business and competition lines (figure A5.3).
- A5.17 A quarter of all respondents (26%) said they didn't know what type of service they would be calling if they dialled a number starting with 070. Of those who said they had previously heard of 070, 18% were unable to name the type of service it represented.
- A5.18 1% of all respondents identified 070 numbers as offering personal or private number services.

Figure A5.3 Perceptions of services on 070 number range

Q. Which of the following types of services do you think you would be calling, if you dialled an 070 number?



Source: Ofcom/ICM research, May 2008
 Base: 1033 UK adults

A5.19 The majority of consumers are able to recognise mobile numbers quite readily (92%). Significantly, only 21% thought 070 numbers were mobile numbers. Very few, however, were able to identify 070 numbers as personal numbers (figure A5.4)

Figure A5.4 Perceptions of services on different number ranges

Q. Which types of services do you think you would be calling, if you dialled the following numbers?

Number ranges	Percent of respondents claiming to recognise range	Services that respondents believe to be provided on the range (% of all responses)
01 or 02	94%	Landline (93%)
070	24%	Mobile numbers (21%); Premium rate (4%); Landline (3%)
077/078/079	92%	Mobile numbers (92%)
0800	88%	Freephone (63%); Premium rate (13%); Landline (6%)
0845	74%	Premium rate (34%); "Local rate" (15%); "National rate" (6%); Business (3%)
0870	56%	Premium rate (39%); "National rate" (5%)
0871	34%	Premium rate (25%); "National rate" (3%)
09	20%	Premium rate (20%)

Source: Ofcom/Futuresight research, June 2008
 Base: 163 UK adults

Cost of making calls

- A5.20 Our research shows that the majority of adults do not know the accurate cost of different call types made from both landline and mobile telephones (figures A5.5 and A5.6).
- A5.21 The mean estimated price per minute shows that on average: respondents thought that calls made from mobiles were more expensive than landline calls. The mean price estimates also show that in general people are aware that calls to 01 and 02 numbers are cheapest and calls to 090 numbers the most expensive.
- A5.22 On average people tend to overestimate the cost of making calls from landlines, however a significant minority underestimate costs.
- A5.23 As a result of the wide range of mobile tariffs and different payment options available it is not possible to assess the accuracy of particular cost estimates of calls from mobile phones.
- A5.24 When calling from a mobile, at least 10% said they didn't know the cost of each number type.

Confusion about the cost of calling 070 numbers

- A5.25 In line with the broad lack of understanding about the cost of making calls to different number ranges, our research shows a wide range of estimates for the cost of calling 070 numbers from both landline and mobile phones.
- A5.26 11% and 13% of respondents respectively were unable to estimate the cost of making a call to an 070 number from a landline or mobile.
- A5.27 The estimated cost of calling 070 numbers has increased since 2004. Our latest research shows that the average estimated cost of calling 070 from a landline is 46p per minute, compared with 27p per minute in 2004. From a mobile, the average estimated cost is 54p per minute; this compares with 43p per minute in our 2004 research.
- A5.28 39% of respondents estimated calls to 070 numbers from a landline would cost between 1p and 25p per minute.
- A5.29 29% respondents estimated calls to 070 numbers from a mobile would cost between 26p and 50p per minute.

Figure A5.5 Average estimated cost of calls from landline telephones

Q. How much do you think it costs to call the following types of telephone numbers from your landline phone at home during the daytime on a weekday?

pence per minute	01 or 02	070	Other 07	0845	0870	090
Free	7%	2%	2%	6%	4%	2%
1-5p	28%	9%	8%	18%	9%	7%
6-10p	20%	12%	13%	17%	17%	11%
11-25p	14%	18%	22%	16%	18%	13%
26-50p	13%	26%	28%	19%	20%	23%
51p-£1	6%	15%	12%	10%	15%	21%
£1+	3%	6%	4%	4%	6%	11%
It depends	<1%	<1%	<1%	<1%	1%	1%
Don't know	8%	11%	12%	9%	11%	12%
Mean PPM (including free)	24	46	40	32	41	61
Approximate actual cost (based on BT calling plans 2008 and Ofcom numbering plan)	4ppm	13ppm - 50ppm	13ppm - 50ppm	4ppm	8ppm	10ppm - £1.50pm (or per call)

Source: Ofcom/ICM research, May 2008

Base: 1033 UK adults

Percentages highlighted with red circles indicate broadly correct estimates based on approximate actual costs.

Figure A5.6 Average estimated cost of calls from mobile telephones

Q. How much do you think it costs to call the following types of telephone numbers from your landline phone at home during the daytime on a weekday?

pence per minute	01 or 02	070	Other 07	0845	0870	090
Free	7%	4%	6%	4%	3%	3%
1-5p	8%	4%	5%	5%	4%	4%
6-10p	18%	8%	10%	10%	5%	5%
11-25p	25%	15%	20%	21%	14%	14%
26-50p	18%	29%	28%	27%	20%	20%
51p-£1	10%	19%	14%	15%	24%	24%
£1+	3%	8%	5%	6%	17%	17%
It depends	1%	1%	1%	<1%	<1%	<1%
Don't know	10%	13%	12%	11%	14%	13%
Mean PPM (including free)	33	54	42	45	52	54
Approximate actual cost	Average actual prices unavailable due to the wide range of tariffs and payment options open to consumers.					

Source: Ofcom/ICM research, May 2008

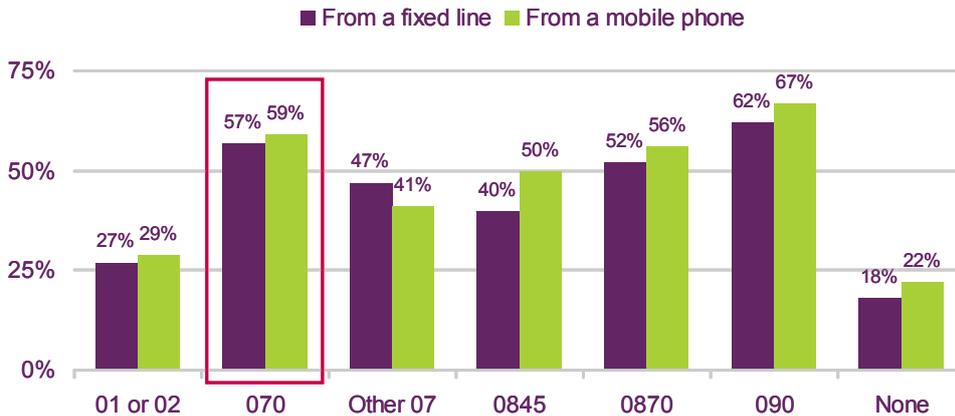
Base: 830 UK adults who have a mobile phone

Concern about calling 070 numbers

A5.30 More than half of respondents would think twice about calling an 070 number: 57% would be concerned about calling from a landline and 59% from a mobile.

Figure A5.7 Levels of concern about calling different number types

Q. Which of these numbers would you be concerned about calling from your home landline/mobile? By concerned we mean that you may think twice before calling.



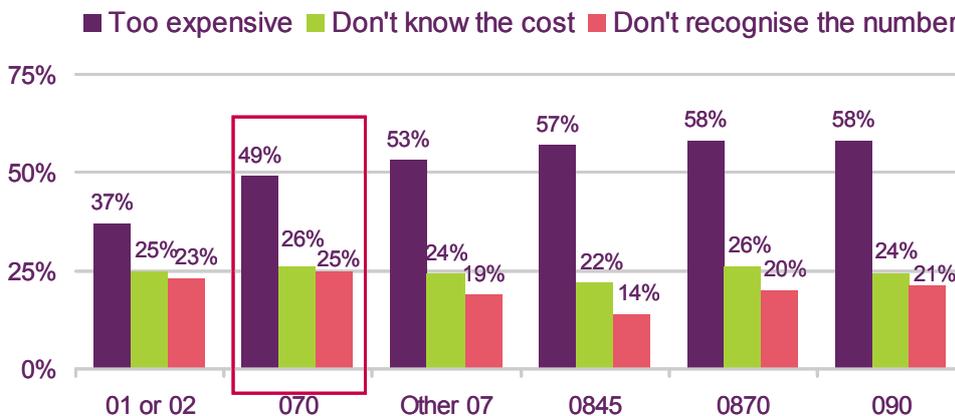
Source: Ofcom/ICM research, May 2008
 Base: 1033 UK adults/830 UK adults who have a mobile phone

A5.31 When calling from both landlines and mobiles, cost was the main reason for concern about calling 070 numbers. Cost was also the main reason for concern about calling other number ranges.

A5.32 3% would be concerned about scams when calling 070 numbers from a landline and 4% from a mobile.

Figure A5.8 Top reasons for concern – from a landline

Q. What are the main reasons why you would be concerned about calling X number from your home landline?



Source: Ofcom/ICM research, May 2008
 Base: All who were concerned: 01 or 02 (n = 279), 070 (n = 592), Other 07 (n = 490), 0845 (n = 410), 0870 (n = 537)

* No other reason was given by more than 5% of the sample

Figure A5.9 Top reasons for concern – from a mobile

Q. What are the main reasons why you would be concerned about calling X number from your mobile phone?



Source: Ofcom/ICM research, May 2008

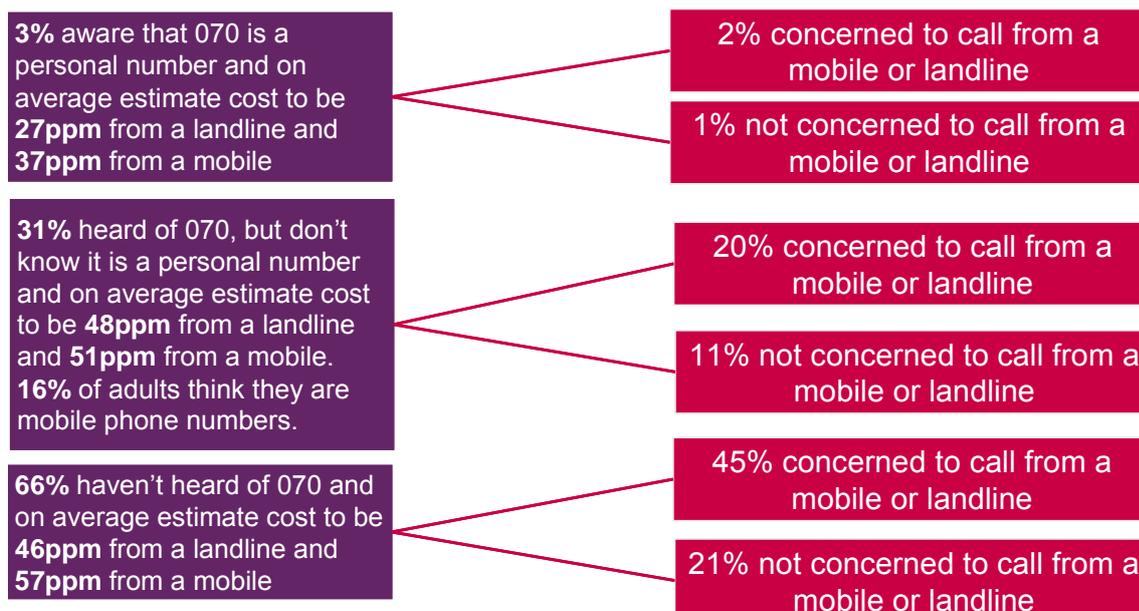
Base: All who were concerned: 01 or 02 (n= 251), 070 (n = 486), Other 07 (n = 360), 0845 (n = 410), 0870 (n = 472)

* No other reason was given by more than 5% of the sample

A5.33 Respondents who had not heard of 070 were more likely to be concerned about calling an 070 number and on average estimated the cost to be higher than those who were aware of the number range (figure A5.10).

A5.34 Of the 16% of adults who thought 070 numbers were mobile numbers, 62% said they would be concerned about calling a number beginning with 070.

Figure A5.10



Source: Ofcom/ICM research, May 2008

Base: 1033 UK adults

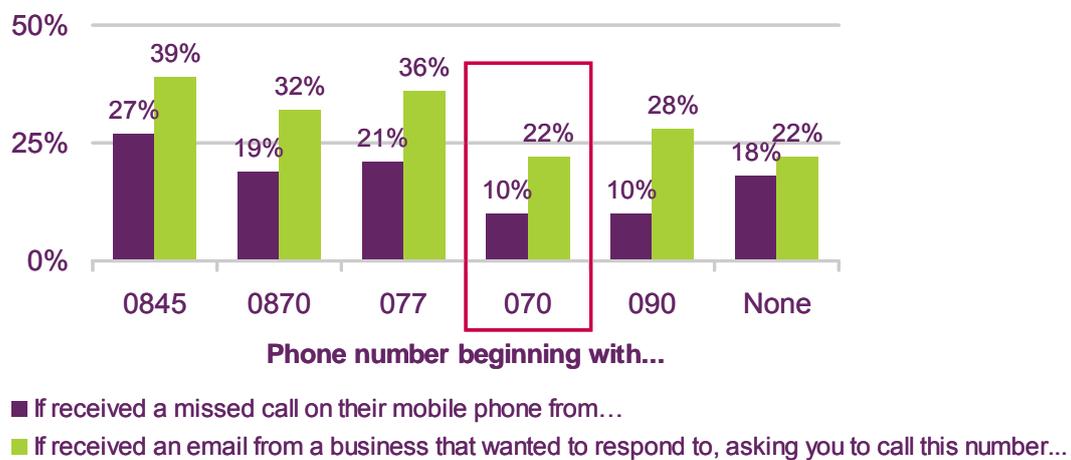
- A5.35 Fewer respondents said they would be likely to call numbers beginning with 070 and 090 than other number ranges when asked whether they would call back different numbers on receiving a missed call on their mobile phone.
- A5.36 Similarly, when asked whether they would call certain numbers on receiving an email from a business that they wanted to respond to, fewer said they would be likely to call numbers beginning with 070 and 090 than other number ranges.
- A5.37 Looking in particular at how likely respondents said they would be to call back a number beginning with 070, 22% said they would call in response to a business email while 10% said they would call back following a missed call on their mobile.
- A5.38 More respondents said they would be likely to call back a number beginning 077 - a mobile number - than 070: 21% would respond to a missed call and 36% to a business email.

Figure A5.11 Likelihood of calling different number types

Q. If you received a missed call from this number, how likely or unlikely would you be to call it back?

Q. And if you received an email from a business that you wanted to contact telling you to call this number, how likely or unlikely would you be to call it?

% who said they would be certain or likely to call back...



Source: Ofcom/ICM research, July 2008
 Base: 2032 GB adults

7% adults claimed to have been victim of scam on 070

- A5.39 7% of respondents said they had been a victim of a scam on the 070 number range.
- A5.40 Vulnerability to 070 scams appears similar across all groups in society: those who claim to have been scammed come from all age groups and socio-economic groups.

End-user survey

Methodology

A5.41 Ofcom carried out an online survey of end-users of 070 numbers in June 2008. The questionnaire was posted on Ofcom's website. To obtain a sample of end users, we wrote to 20 PNS providers asking them to forward details of the questionnaire to its end users. We received 192 responses.

Research Findings

Use of the range

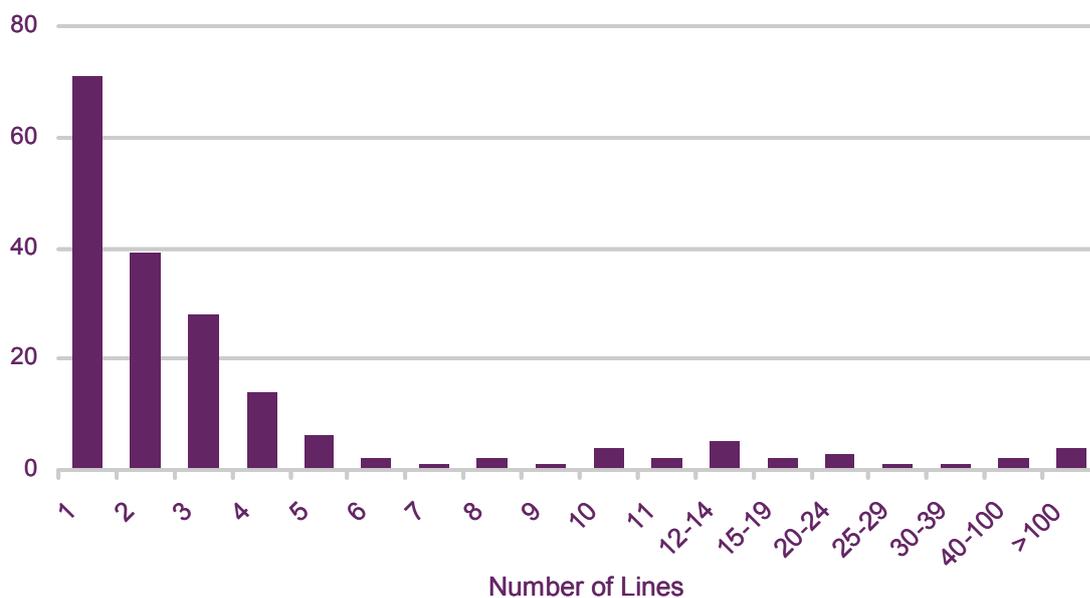
A5.42 Excluding the use of 070 by three very large users (Hospedia, Premier Telesolutions and Trader Media), the average number of lines owned per user was just under 5. More than 80% of respondents own 1-4 070 numbers (figure A5.11).

A5.43 However, there are some users such as Trader Media and Hospedia, who use much larger numbers of lines.

Figure A5.12 Ownership of 070 numbers

Q1. How many 070 telephone numbers do you have?

Frequency



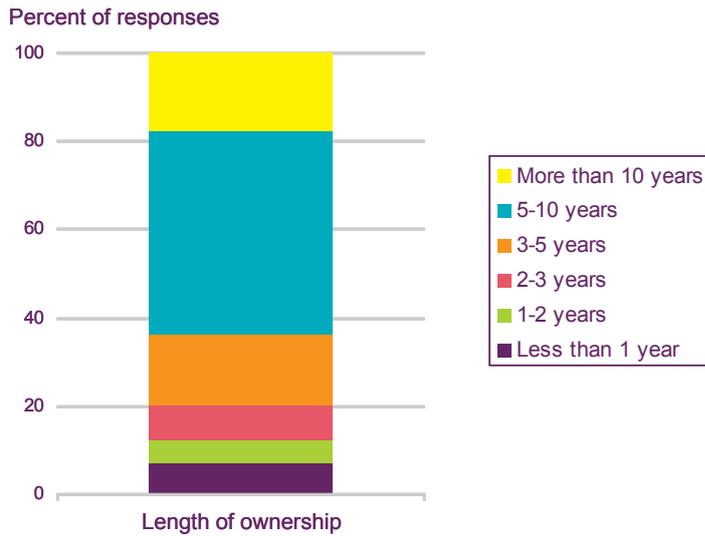
Source: Ofcom End-User Questionnaire, June 2008
Base: 189 responses

Length of time of use of 070 numbers

A5.44 Most users of 070 numbers have had their numbers for a relatively long time - 63%⁴¹ have owned a number for more 5 years, with the vast proportion of this group owning it for 5-10 years (figure A5.12).

Figure A5.13 Length of ownership of 070 numbers

Q2. How long have you been using telephone number(s) in the 070 telephone number range?



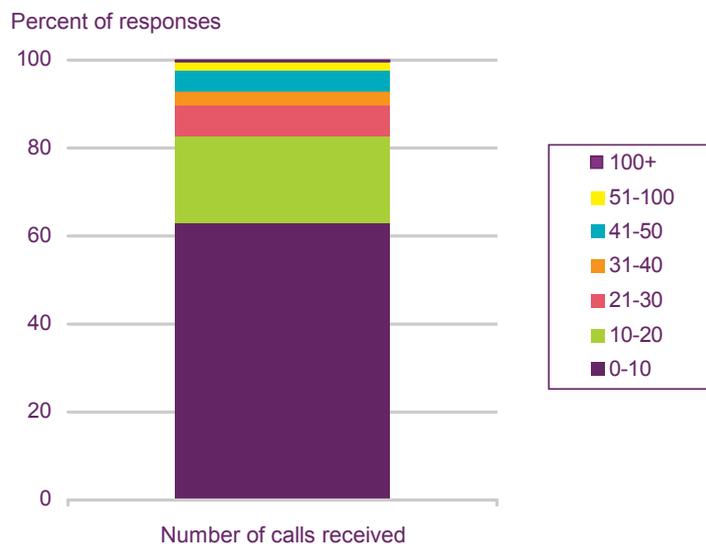
Source: Ofcom End-User Questionnaire, June 2008
 Base: 191 responses

⁴¹ Calculation is a proportion of total based on 5-10 year and 10 year + users.

A5.45 On average, users receive 13 calls on their 070 lines (figure A5.13), with the majority (63%) receiving 0-10 calls a week.

Figure A5.14 Number of calls received per week

Q3. How many calls do you receive, on average, on each 070 telephone number in a week?



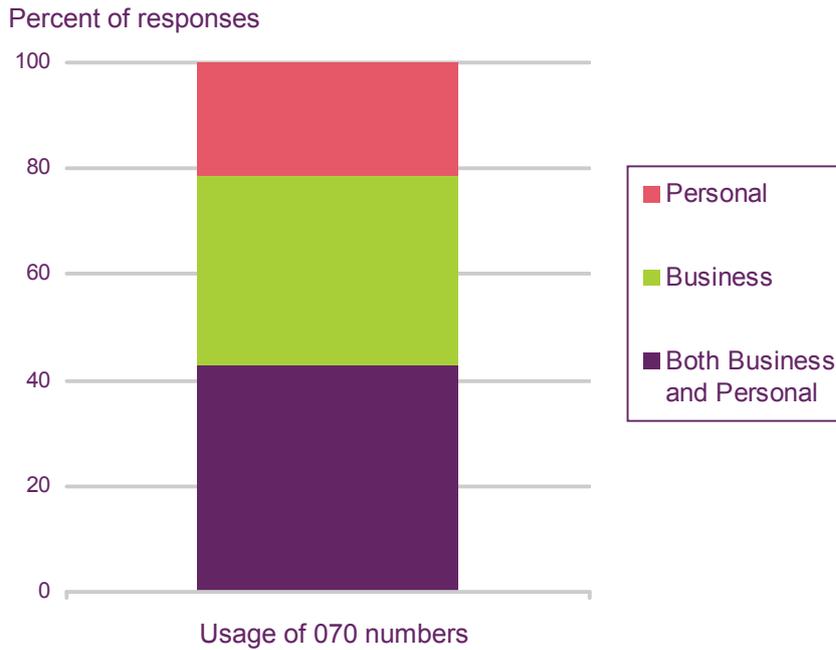
Source: Ofcom End-User Questionnaire, June 2008
Base: 184 responses

A5.46 There is a mix of usage between personal and business use for 070 numbers, with 43% of users using for business and personal. Business use, whether it be exclusive or alongside personal use, is clearly a popular reason for use for a significant proportion of users.

A5.47 According to responses, the types of business who use 070 varies greatly according to the response, across the private, public, and charitable sectors, and types of industry.

Figure A5.15 Number calls received per week

Q4. Do you use your 070 telephone number(s) for business or for personal use?

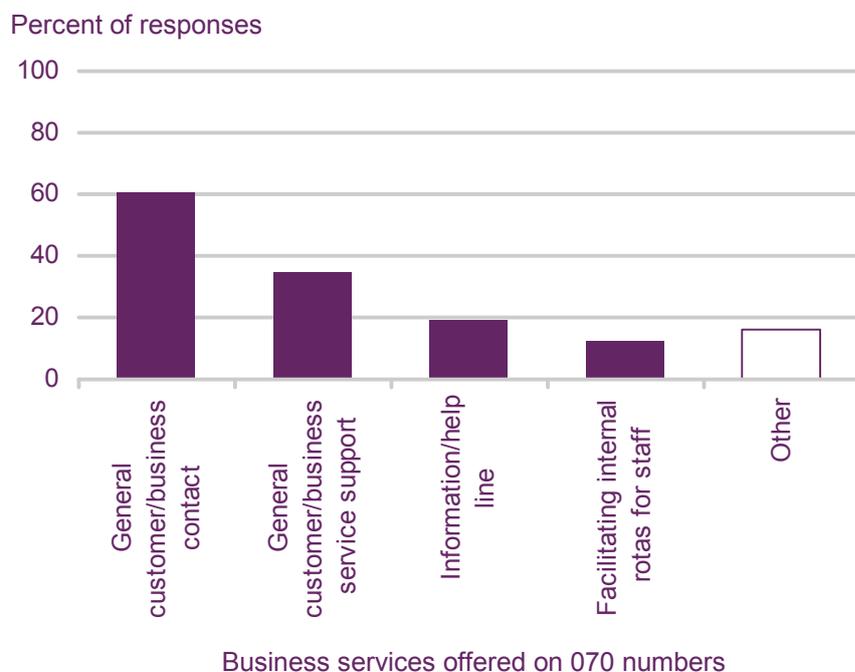


Source: Ofcom End-User Questionnaire, June 2008
Base: 190 responses

A5.48 Most users deploy 070 to contact business and customers. Some examples of services mentioned in the 'other' category include, emergency support, fax to email services and for contact abroad.

Figure A5.16 Services offered by business users on 070 numbers

Q6. If you use your 070 telephone number(s) for business, what services do you provide using those number(s)?



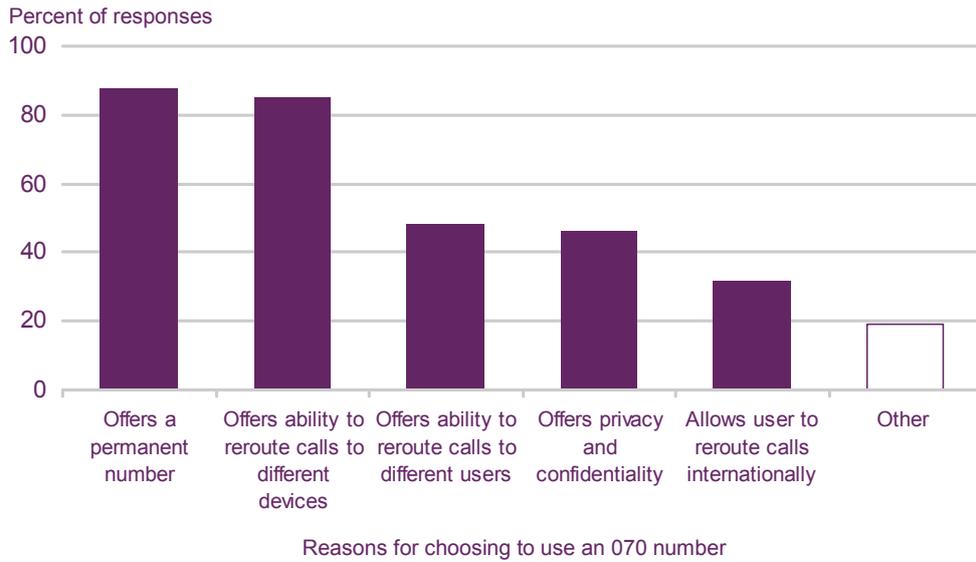
Source: Ofcom End-User Questionnaire, June 2008
Base: 191 responses

Purchasing decision

A5.49 Respondents generally quoted more than one factor influencing their purchasing decisions. However, the ability to re-route calls to many devices using the one 070 number and the belief that it offers a permanent number, were the most popular reasons for using an 070 number.

Figure A5.17 Reason for choosing the 070 number range

Q9. Why have you chosen to use the 070 telephone number range?



Source: Ofcom End-User Questionnaire, June 2008
 Base: 191 responses

A5.50 94% of respondents attached some degree of importance to 070 number ownership for business use. More than half of respondents (56%) believed it was essential.

Figure A5.18 Importance of 070 to businesses

Q10. How important do you consider that 070 telephone numbers are to your business?

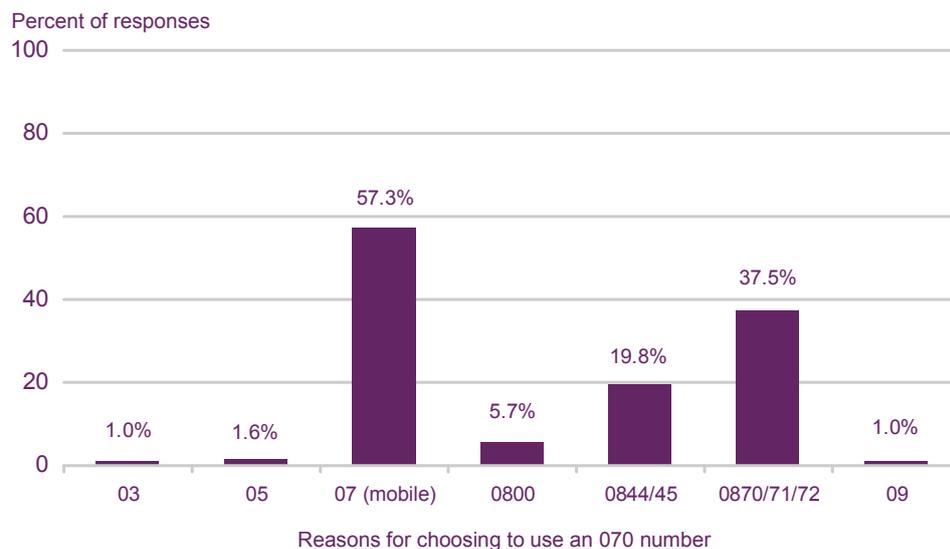


Source: Ofcom End-User Questionnaire, June 2008
Base: 158 responses

A5.51 070 users also tend to use other number ranges to receive calls. Mobile and 087 number ranges are the most popular alternative number ranges used with 57% of respondents saying they use mobiles and 38% receiving calls on 087 numbers.

Figure A5.19 Use of number ranges

Q 11. Which of the following other number ranges do you also use for incoming calls?

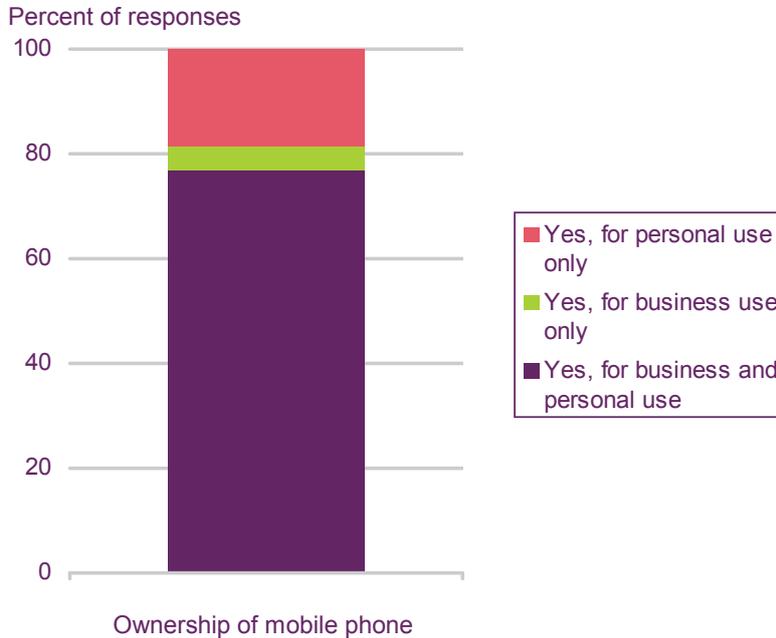


Source: Ofcom End-User Questionnaire, June 2008
Base: 187 responses

A5.52 77% of respondents use the mobile range for business use and personal use, 19% for personal use only, and 4% for business use only.

Figure A5.20 Ownership of a mobile phone

Q13. Do you own a mobile phone?

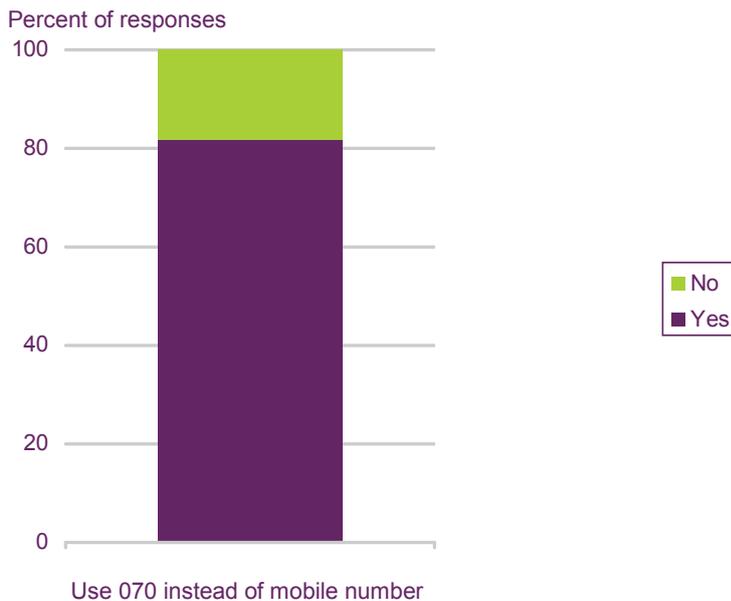


Source: Ofcom End-User Questionnaire, June 2008
 Base: 177 responses

A5.53 However, 81% of respondents noted that they currently use 070 instead of their mobile phone

Figure A5.21 Use of 070 numbers in place of a mobile number

Q14. Do you use your 070 telephone number(s) instead of / in place of a mobile phone?



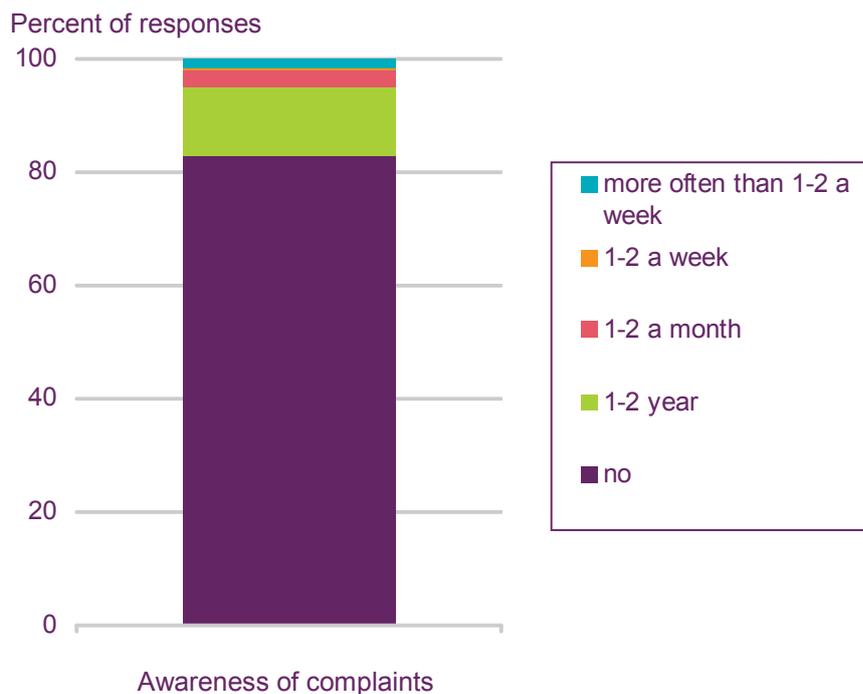
Source: Ofcom End-User Questionnaire, June 2008
 Base: 153 responses

Call Prices

A5.54 End users of 070 numbers tend not to receive frequent complaints about the cost of calls to their numbers, with over 80% of users receiving complaints less frequently than once a year.

Figure A5.22 Known complaints of 070 call costs

Q15. Are you aware of any callers to your 070 telephone number(s) who have complained to you or your company about the cost of calling?



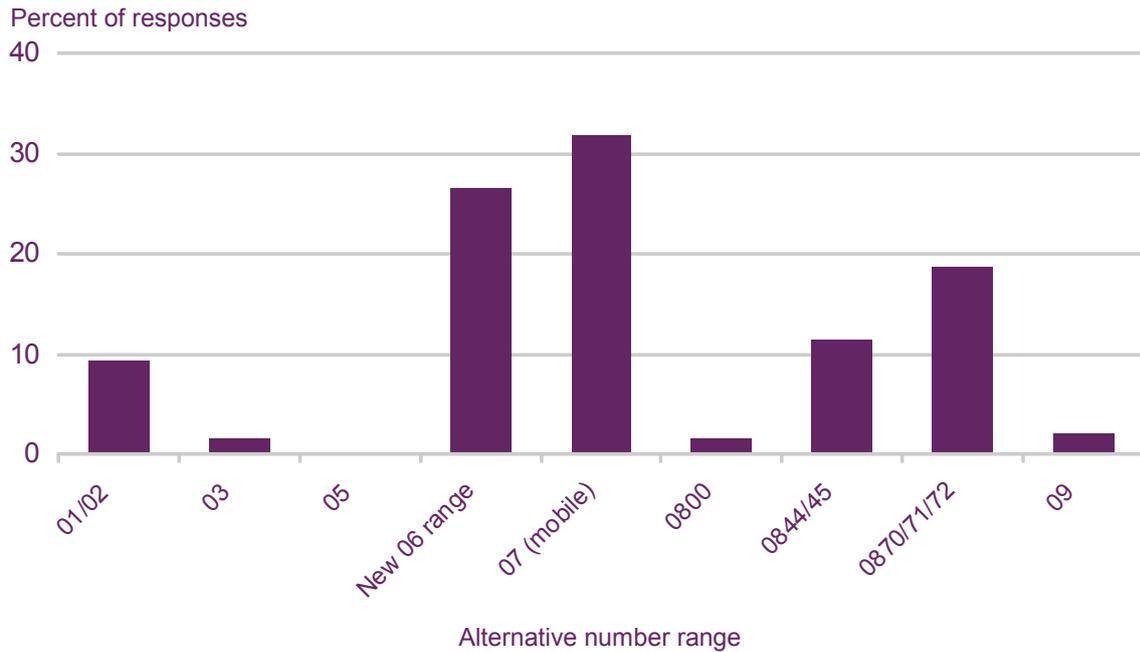
Source: Ofcom End-User Questionnaire, June 2008
Base: 185 responses

Alternative number ranges

A5.55 When asked about which alternative number ranges end-users would use if the 070 number range was closed, the largest response was to use a mobile number instead (32%). However, 27% of end-users would use the 06 number range if it were available.

Figure A5.23 Alternative number ranges to 070

Q20. What alternatives that would you use if the 070 telephone number range was closed?



Source: Ofcom End-User Questionnaire, June 2008

Base: 192 responses

Questions asked in the End User Questionnaire

Using the range

1. How many 070 telephone numbers do you have? (Please type in text box)
2. How long have you been using telephone number(s) in the 070 telephone number range? (Please type in text box)
 Years Months
3. How many calls do you receive, on average, on each 070 telephone number in a week? (Please select from below)
4. Do you use your 070 telephone number(s) for business or for personal use? (Please select from list)
5. If you use your 070 number(s) for business purposes, what is the nature of your business? (Please type your answer in the text box below)
6. If you use your 070 telephone number(s) for business, what services do you provide using those number(s)? (Please tick all that apply)
 General customer/business contact
 General customer/business service support
 Information/help line
 Facilitating internal rotas for staff
 Other [please specify]
7. Of the calls you receive on your 070 number(s), please estimate the percentage of these calls by the type of service provided. (Please enter in text boxes)

Percentage of calls

- | | |
|---|--------------------------|
| General customer/business contact | <input type="text"/> |
| General customer/business service support | <input type="text"/> |
| Information/help line | <input type="text"/> |
| Facilitating internal rotas for staff | <input type="text"/> |
| Other [please specify] <input type="text"/> | <input type="text"/> |
| If you do not know the answer please tick this box: | <input type="checkbox"/> |

8. On average, what percentages of calls to your 070 telephone number(s) are received on the following devices? (Please type in text box)

Average percentage of calls

Fixed line phone	<input type="text"/>
Mobile phone	<input type="text"/>
Fax	<input type="text"/>
Other (specify) <input type="text"/>	<input type="text"/>

If you do not know the answer please tick this box:

Purchasing decision

9. Why have you chosen to use the 070 telephone number range? (Please tick all that apply)

- 070 allows calls to be re-routed to various communication devices, under one number (e.g. fixed, mobile, faxes)
- 070 allows calls to be re-routed to other users (e.g. support staff)
- 070 allows the user privacy and confidentiality
- 070 offers a permanent contact number
- 070 allows calls to be re-routed internationally without incurring higher roaming charges
- Other (please specify:)

10. How important do you consider that 070 telephone numbers are to your business? (please select from list)

Why? (Please type in text box)

11. Which of the following other number ranges do you also use for incoming calls?
(Please tick all that apply)

- 03
- 05
- 07 (mobile)
- 0800
- 0844/45
- 0870/71/72
- 09

- Don't know

12. If you use your 070 telephone number(s) for business, does your company use other number ranges (e.g. 03, 0870 etc) to provide the same types of services as you offer over 070 telephone numbers? If so, which ones? (Please type in text box)

Number ranges

- General customer/business contact
- General customer/business service support
- Information/help line
- Facilitating internal rotas
- Other [please specify]

If you do not know the answer please tick this box:

13. Do you own a mobile phone? (Please select from list)

Yes, for business and personal use; Yes, for business use; Yes, for personal use; No

14. Do you use your 070 telephone number(s) instead of / in place of a mobile phone? (Please select from list)

Yes; No

Why? (Please type in text box)

Call prices

15. Are you aware of any callers to your 070 telephone number(s) who have complained to you or your company about the cost of calling?
- no
- 1-2 year
- 1-2 a month
- 1-2 a week
- more often than 1-2 a week
16. Do you advise consumers of the cost of calling your number(s) wherever your phone number is displayed? (Select from list below)
- | | |
|-----------------------------|---|
| In advertising | <input type="text" value="Yes; No; N/A"/> |
| On letterheads | <input type="text" value="Yes; No; N/A"/> |
| On business card | <input type="text" value="Yes; No; N/A"/> |
| In other marketing material | <input type="text" value="Yes; No; N/A"/> |
| Other (please specify) | <input type="text"/> |
17. If you include information on the cost of the call in your advertising or other marketing material, does the way you provide the information differ by medium (i.e. TV, radio, press)? Please explain. (Please type in text box)
-
18. Please estimate the costs of providing consumers with this information? (Please type details in text box)
-

Migration from 070 range

19. If Ofcom decided to close the 070 telephone number range, what impact would this have on your business? (Please type details in text box)
-

20. What alternatives that would you use if the 070 telephone number range was closed? (Please tick all that apply)

Use another number range:

- 01/02
- 03
- 05
- 06 (a new range that could be created for PNS)
- 07 (mobile)
- 0800
- 0844/45
- 0870/71/72
- 09
- Other number range (please specify)
- Do something else (please specify):

Why? (please type into text box)

21. Please estimate the costs that you would incur if you had to change your 070 telephone number(s) to another number range. (Please enter in text box)

Stationary costs:	£ <input type="text"/>
Sign costs:	£ <input type="text"/>
Marketing costs:	£ <input type="text"/>
Technical / Admin costs:	£ <input type="text"/>
Contacting customers / clients:	£ <input type="text"/>
Lost business if customers don't know the number has changed:	£ <input type="text"/>
Other costs (specify): <input type="text"/>	£ <input type="text"/>

Any other comments

If you have any other comments about your usage of 070 telephone numbers, please feel free to enter details in the following box here

Annex 6

Impact Assessment

Introduction

- A6.1 The analysis presented in this annex, together with Section 3 on the consumer detriment, Section 4 on the assessment of options, represents an impact assessment, as defined in section 7 of the Communications Act 2003 (the “Act”).
- A6.2 You should send any comments on this impact assessment to us by the closing date for this consultation. We will consider all comments before deciding whether to implement our proposals.
- A6.3 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

Ofcom’s policy objective

- A6.4 We are conducting this review in order to make a final decision about whether the 070 number range should be closed, therefore we need to conduct a proper assessment of any consumer detriment associated with 070 numbers, and a cost/benefit analysis of the options put forward to address any detriment.

The citizen and/or consumer interest

- A6.5 As set out in the main body of the consultation document the analysis in the first part of this annex focuses on the extent to which consumer detriment is present in this market, because of a lack of price transparency, confusion with mobile numbers and the illegal use of the 070 number range through scamming. These causes of consumer detriment can negatively impact consumers; as such it is imperative that we understand the extent of this market failure.
- A6.6 The second part of this annex considers the costs and benefits of closing the 070 number range and migrating users to an alternative range.

Data sources

- A6.7 In order to carry out an assessment of consumer detriment and subsequent analysis of options to remedy any detriment, we have collected information from a variety of sources.
- A6.8 We have carried out three separate pieces of consumer research (the details of this consumer research can be found at Annex 5):

- In May 2008, Ofcom carried out research to understand the degree to which people know what services are provided on 070 numbers and how much calls to these numbers cost. The research also looked at the level of concern about calling 070 numbers, the reasons for any concerns and the number of people who claim to have been a victim of a scam on the 070 number range;
 - In July 2008, we carried out research specifically to identify the likelihood of consumers calling back certain number ranges following a missed call; and
 - In July 2008 we carried out research that asked consumers to identify the types of services and pricing associated with all number ranges.
- A6.9 We carried out a survey among end users⁴² of personal numbers to understand how personal numbers are currently used. Details of this survey can also be found in our market research Annex 5.
- A6.10 We requested information from a number of PNS providers⁴³ on utilisation of 070 numbers, call traffic volumes, where this traffic terminates and the revenues generated by 070 calls for the period January 2007 to March 2008.
- A6.11 We also requested information from originating communications providers (“OCPs”)⁴⁴ on volumes and revenues generated from calls to 070 personal numbers and any instances of Artificially Inflated Traffic (AIT)⁴⁵.
- A6.12 In addition, we have used information collected by the Ofcom Advisory Team (OAT) in relation to consumer complaints about 070, 0870, 0871 and 09 numbers and requested similar data from PhonepayPlus.
- A6.13 We have referred to Ofcom’s statement on *Number Translation Services: The Way Forward, April 2006*⁴⁶ and Ofcom’s consultation on *Extending Premium Rate Services Regulation to 087 Numbers, May 2008*⁴⁷.

Inputs to the impact assessment

- A6.14 In order to be able to carry out a cost-benefit analysis (CBA), a number of inputs are required and a number of assumptions need to be defined. Further, for consistency with the impact assessment carried out for the consultation on *Extending Premium Rate Services Regulation to 087 Numbers* (which will be referred to as the “0871 consultation”), the analysis, where appropriate, uses a number of the same assumptions.

Current traffic volumes

- A6.15 In order to be able to ascertain the size of the market for 070 numbers, we used the information provided by eight fixed and mobile OCPs in an information request requesting data on traffic volumes. We also used BT transit data to triangulate

⁴² End-users are users who receive the calls made to a personal number.

⁴³ PNS providers are communications providers who provide personal numbering services.

⁴⁴ OCPs are communications providers from whose network a call is made (i.e. “originated”).

⁴⁵ Artificially Inflated Traffic (AIT) means that traffic where the flow of calls to any particular service is, as a result of any activity on or on behalf of the party operating that service, disproportionate to the flow of calls which would be expected from good faith commercial practice and usage of the network.

⁴⁶ http://www.ofcom.org.uk/consult/condocs/nts_forward/nts_way_forward.pdf

⁴⁷ <http://www.ofcom.org.uk/consult/condocs/087prs/prscondoc.pdf>

figures for the whole 070 market. We estimate that total traffic to 070 numbers in 2008 will be approximately 98 million minutes.

Retail prices for 070 calls

- A6.16 In order to be able to calculate the consumer welfare loss that results from the current lack of pricing transparency, we have needed to understand both the prices that consumers believe an 070 call costs, as well as the actual cost.
- A6.17 The consumer research carried out in May 2008 suggested that for an 070 call made from a landline during the day consumers believed this to cost, on average, 46ppm and from a mobile, on average, 54ppm.
- A6.18 From our information request to OCPs, the average daytime cost of a call was estimated at 36.5ppm for a fixed call and 52.5ppm for a mobile call⁴⁸. However, in practice the cost of a call to an 070 number varies widely, with multiple price bands, as can be seen in figure A6.1 below.

Number of PNS providers, resellers and users

- A6.19 Currently, as of 30 September 2008, there are 141 communications providers who have 070 number blocks allocated to them, accounting for 916 100k blocks and 190 10k blocks.
- A6.20 PNS providers are also able to sub-allocate numbers to resellers, however we do not have a record of the number of resellers who have this arrangement. As such we have used a number of 150, based on estimates set out in the CBA model used for the 0871 consultation. This figure has been estimated based on discussions with PNS providers known to have significant business with resellers. It is likely that for the 070 range this number would be an upper limit.
- A6.21 We have also estimated the number of users of 070 numbers, based on responses received from PNS providers to our information request and from end users to our questionnaire.
- A6.22 We estimate that there are approximately 1.25 million 070 numbers in active use⁴⁹. This is based on the information provided by the PNS providers which has been uplifted, in the same way as for call traffic. Based on our survey of end users, we estimate that approximately 940,000 are used by businesses and 315,000 by individuals. The average number of lines per business was 5 which suggests that some 190,000 businesses use personal numbers. Our analysis has taken into account the high usage of the range by a small number of service providers such as Hospedia, Premier Telesolutions and Trader Media.

⁴⁸ This average was calculated using the data provided from a number of mobile operators.

⁴⁹ Numbers in active use suggest that this captures only those numbers used regularly. However, a number of PNS providers have pointed out that there are numbers in use, but which are not particularly active, for example those used for alarm systems. As Ofcom is using numbers in active use as a proxy for the number of end-users, these should include those numbers which have little or no activity. However, Ofcom has not been able ascertain the extent of these types of numbers, and therefore it has estimated the number of end-users based on active use and market size.

Consumer Detriment

- A6.23 We have looked at whether there is any consumer detriment present in the market for personal numbering services. As such the way in which a market works is important.
- A6.24 Markets work best when consumers are fully informed about what they are buying. If this is not the case, then consumers can make incorrect or inefficient decisions⁵⁰. For example, if the perceived price is greater than the actual price, a consumer is likely to under-purchase a good or service. Similarly, if the perceived price is lower than the actual price, a consumer may purchase too much of a good or service. Further, even if a consumer guesses correctly the actual price they may nevertheless decline to purchase a good or service, if they believe that there is a risk that they could be charged a significantly high price.
- A6.25 There are a number of reasons why inefficient decisions may be made. The ones that appear most relevant to the 070 number range include:
- information asymmetry; and
 - transaction costs.

Information Asymmetry

- A6.26 When consumers do not have full (including understandable) information about goods or services, it is likely that incorrect purchasing decisions will be made, which in turn leads to inefficient market outcomes. This lack of information is often caused by the asymmetric nature of the market, i.e. that the producer (e.g. a communications provider) has access to better information than the consumer.
- A6.27 Regarding the 070 range, examples of where information asymmetry may lead to incorrect purchasing decisions include: possible confusion between mobile and personal numbers; not knowing whether a call is a scam; perceived prices being lower than actual prices, leading to unexpected charges; and perceived prices being higher than actual prices, leading to calls not being made.

Transaction costs

- A6.28 Transaction costs are the costs of organising and transacting exchanges, i.e. trading with others. If these costs are very high it may result in the market failing to produce the goods or services required, i.e. that they can create a barrier to entry (or switching). These costs can take a variety of forms, including: search and information costs (particularly for consumers); bargaining costs, policing and enforcement costs; and the costs of writing contracts.
- A6.29 In this case, although it is possible for consumers to find out the costs of an 070 call there are two concerns: firstly the time it takes for a consumer to search for this data; and secondly their ability to understand the price point they will be charged, given the often differing prices for 070 calls both from mobiles and landlines.

⁵⁰ An efficient decision is where a consumer who values the good or service equal to or at more than its price consume the good or use the service. Thus an inefficient decision is where this does not occur. One cause of this is incorrect information about the actual price.

Assessing consumer detriment

- A6.30 The above types of market failure are likely to be relevant when assessing consumer detriment regarding the 070 range – we have attempted to quantify this detriment.
- A6.31 Consumer detriment at its broadest level can be defined as that which may arise from any instance, “where a customer suffers as a result of their dealings with an organisation, and where that suffering is partly or wholly the result of the organisation accidentally or deliberately treating the customer unfairly”⁵¹. Research commissioned by the OFT found that consumers can experience loss from dealing with a business in many ways including: financial loss, deprivation of important services, disappointment, loss of confidence in suppliers and inconvenience, stress or anxiety⁵².
- A6.32 In assessing the extent of consumer detriment in the 070 market, the key categories of evidence include:
- the extent to which PNS is used both by user and consumer;
 - how much confusion exists for consumers between PNS and mobile numbers;
 - cost to users and PNS providers arising from customer confusion due to opacity of the pricing structure (i.e. that there is limited pricing transparency);
 - the extent of scams on the range and consumers awareness of these; and
 - costs incurred by consumers (including psychological) from scams.

Use of the 070 personal number range by end users

- A6.33 Ofcom carried out an online survey with individuals and companies who use 070 numbers and received 192 responses from end users. Further details of this survey can be found in Annex 5.
- A6.34 We found that most end users of the 070 personal number range are individuals and small businesses, who use the range for a variety of services, such as:
- facilitating rotas for out of hours support by general practitioners/IT support staff;
 - enabling customers to contact staff who are travelling;
 - allowing users to accept business calls on their mobile only during business hours.
- A6.35 We found that end users of personal numbers value several characteristics of services provided by personal numbering, in particular:
- the ability to redirect calls to virtually any other telephone number, whether fixed or mobile;
 - the privacy of having a personal number;

⁵¹ From OFT press release “OFT highlights consumer detriment”, note 1, 3 February 2006.

⁵² Ipid

- the convenience of having only one contact number; and
- the ability to redirect calls internationally to a local mobile at a lower cost when overseas.

A6.36 Further, end users were asked how important 070 numbers were to their business. 56% of respondents said that 070 numbers were essential, and 94% said that they were either important or essential, suggesting that the majority of businesses who use these services value them highly.

A6.37 In addition, there are a small number of larger service providers who provide specific services using 070 numbers:

- Hospedia Limited (formerly Patientline) and Premier Telesolutions are two of the largest users of 070 personal numbers and provides hospital patients with a telephone number for the duration of their stay in hospital in order for friends and family to contact them; and
- Trader Media runs advertising publications such as Auto Trader and Ad Trader and provides 070 personal numbers to individuals who wish to advertise in their publications. The 070 number allows the advertiser to have a temporary private number which can later be returned to Trader Media.

A6.38 We estimate that the number of 070 numbers in active use, based on information received from end users and also PNS providers, to be around 1.25 million⁵³. We also estimate that approximately 940,000 are used by businesses and 315,000 by individuals. The average number of lines per business was five which suggests that some 190,000 businesses use personal numbers.

A6.39 In comparison to other number ranges, usage of personal numbers is low in terms of the number and volume of calls. However, there appear to be few alternatives to this service that would provide the same characteristics that end users value. Any alternatives that do exist are likely to involve additional costs, such as needing two mobile phones or call forwarding charges. Therefore, although the overall market is small, our survey showed that there continues to be demand for PNS.

Use of the 070 personal number range by consumers

A6.40 In terms of trying to quantify the size of consumer detriment it is useful to consider the size of the market both on its own and in comparison to other number ranges. This helps to put into context any consumer detriment present in the market.

A6.41 Call traffic is a good indicator of the size of the market and it is often easier to compare against other number ranges. Call traffic to 070 numbers has been estimated to be 98 million minutes in 2008.

⁵³ Numbers in active use refers to only those numbers used regularly. However, a number of PNS providers have pointed out that there are numbers in use, but which are not particularly active, for example those used for alarm systems. As Ofcom is using numbers in active use as a proxy for the number of end-users, these should include those numbers which have little or no activity. However, Ofcom has not been able ascertain the extent of these types of numbers, and therefore it has estimated the number of end-users based on active use.

- A6.42 For the 0870 and 0871 number ranges the total amount of traffic generated for the period April 2006 to March 2007 was approximately 6,900 million minutes⁵⁴. Therefore the 070 market is considerably smaller than 0870/71 at less than 1%.
- A6.43 For 2008, based on information received from PNS providers to our information request, the total 070 revenue for PNS providers is approximately £32 million.
- A6.44 According to the PNS provider responses, the majority (approximately 55%) of calls to 070 numbers are terminated on a fixed network⁵⁵, with approximately 15% on mobile and 30% on other networks, such as international.
- A6.45 The data also shows that there has been a decline in call traffic and revenues since the beginning of 2007 and that the PCA may have exacerbated this. For some providers call traffic and revenues have started to increase for the first quarter of 2008. However, responses received from the OCPs also indicate that overall call volumes and revenues for 070 calls have been declining. Although, a number of new providers have entered the market in 2008.
- A6.46 As the market for personal numbers is small, it follows that in general any consumer detriment will be small relative to other markets.

Confusion between 070 and mobile numbers

- A6.47 We have conducted consumer research to understand the level of confusion that may exist between 070 and mobile numbers. In our research, 34% of respondents claimed to have heard of 070 against 28% in 2004. However when asked to identify the services provided on 070 numbers, only 8% of these 34% (3% of all respondents) were able to state that they were personal numbers from a selection of options presented and 16% of all respondents thought they were a mobile number.
- A6.48 In separate research carried out in July 2008, we asked consumers whether they would call back a number that appeared as a missed call for a variety of numbers. 21% said they would call a mobile number, whereas only 10% said they would call back an 070 number. We also asked more generally about whether they were concerned about calling a variety of numbers, consumers were more likely to be concerned about calling an 070 number than a mobile number or an 0870 number.
- A6.49 In a separate survey carried out in June 2008⁵⁶, the majority of consumers, 93%, were able to correctly identify 077, 078 and 079 as mobile numbers, whereas only 21% identified 070 as a mobile number when asked what types of service they would be calling.
- A6.50 This suggests that consumers might distinguish between 070 and mobile numbers, even though they are unsure about the services provided on 070 numbers.
- A6.51 In trying to quantify any detriment caused by confusion, the call charges of mobile and personal numbers need to be assessed. Detriment will only occur if the costs of the calls to these numbers are widely different. However, due to the current pricing structure for 070 calls it is difficult to assess what the actual differences between the

⁵⁴ For the 0870 range the total number of minutes was approximately 5,700 million and for 0871 range it was 1,200 million minutes.

⁵⁵ This is partly because Patientline terminates all its minutes on the fixed network.

⁵⁶ See Futuresight research, Annex 5, para. A5.19

prices of mobile and 070 calls are. Some OCPs have a large number of pricing bands for 070 numbers, whereas other operators only have a single price. This is set out in detail in figure A6.1 below.

A6.52 It is important that many mobile numbers are included in call packages, effectively making the cost of calling a mobile for the user “free”. If this is the case and a caller rings an 070 number thinking it is a mobile and included in their call package, this will result in consumer detriment. However, this appears not to be the case in a significant majority of cases as our research shows that less than a third of mobile customers have inclusive minutes as part of their call package.

A6.53 Therefore, it is clear that consumers in general are unaware of the types of services provided on 070 numbers, However the consumer research shows that only 16% of consumers confused 070 numbers with mobile numbers. On balance, and based on the consumer research available, it is difficult to conclude that there is significant confusion between 070 and mobile numbers

The costs arising from limited pricing transparency

A6.54 Some communication providers have as many as 25 different pricing bands for 070 numbers, As a result, many consumers calling 070 numbers are likely to find it difficult to know the cost of the call before they make it.

A6.55 The following table sets out the current pricing structure for 070 calls as of 3 April 2008: for a number of communication providers

Figure A6.1 Cost of calls to 070 numbers from different OCPs

Communication Provider	Prices
BT	<u>25 bands:</u> 5 to 50ppm;
Talk Talk	<u>14 bands:</u> Daytime – 16.15 to 47.5pm; Evening – 15.2 to 47.5ppm; Weekend – 7.6 to 47.5ppm.
O2	50ppm
Orange	55ppm
T-Mobile	<u>2 bands:</u> Cost same as calls to other UK mobile operators; 75ppm.
3 UK	<u>3 bands:</u> 25ppm; 70ppm £1 per call plus 70ppm.
Vodafone	Up to 60ppm
Virgin Mobile	Range from 35ppm - £1.50pm

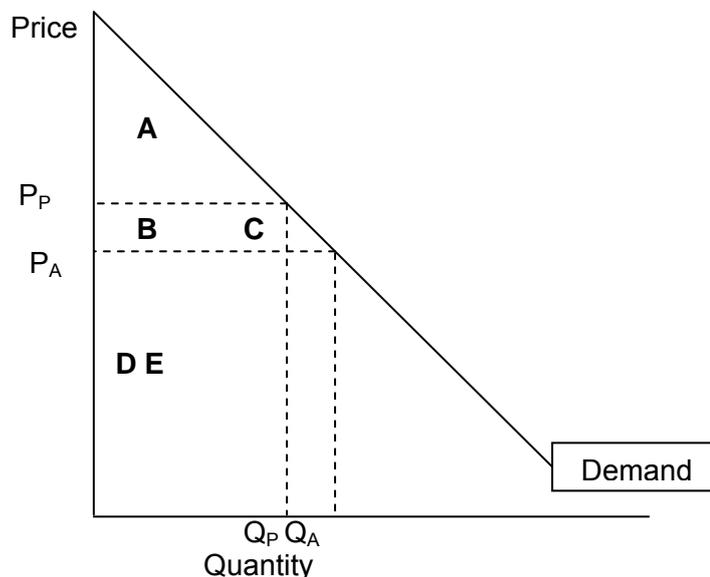
Source: Company websites

A6.56 The consumer research showed that the main concerns consumers have with calling 070 numbers are the high cost or price uncertainty (75-85%). These reasons outstripped the concern over scams, which mattered for between 3-4% of those surveyed. In terms of the perceived cost of calling 070 numbers, calls made from a landline to an 070 number were estimated on an average basis to be 46ppm

compared to 27ppm in 2004. The average cost from a mobile was estimated at 54ppm up from 43ppm in 2004.

- A6.57 In the April 2006 statement on *Number Translation Services: The Way Forward* pricing misconceptions regarding NTS numbers were discussed. It focused on the fact that research conducted showed that consumers believed that the prices of calls were higher than they actually were. A consequence of this was that customers avoided making such calls.
- A6.58 This document went on to discuss, in particular, that the link between lack of pricing transparency and consumer detriment, a form of information asymmetry, could lead to reduced welfare. For example, when customers incorrectly perceive that prices are above their true level, consumers will purchase less of a product leading to a deadweight loss. However, provided that the lack of price transparency does not lead to actual prices being raised above competitive levels, consumer price misconceptions will not lead to any transfer of welfare from consumers to producers.
- A6.59 As stated in the NTS consultation document, trying to quantify such a loss is problematic. One way would be to set the counterfactual as the model where consumers know the actual price of a call against the one where consumers know the average perceived price of calls. The difference between the two sets of consumer welfare would equate to the consumer detriment. Figure A6.2 below sets this out.
- A6.60 Figure A6.2 shows the equilibrium price and quantity for the actual price - P_A , Q_A and for the perceived price - P_D , Q_D . Here the welfare loss associated with pricing misconceptions is equal to the area C.

Figure A6.2 Consumer Detriment due to price misconceptions



- A6.61 In addition to the difficulties discussed above (A6.62) there are a number of other assumptions that need to be made regarding, among other things, 070 call prices both perceived and actual. Regarding average perceived cost we have had to aggregate this across all callers of 070 numbers, using the data from figures A5.5 and A5.6, (in annex 5), which show the distribution of perceived prices which range

from free to over £1 for mobile and fixed calls. As such this average includes a mix of callers all of whom value the calls differently and so may be either making too few or too many calls i.e. it does not accurately reflect an individual's willingness to pay for an 070 call. Further as discussed in paragraph A6.18, we have had to use an estimate for average actual cost, which will also affect the accuracy of the results.

- A6.62 The above analysis has focused on pricing misconceptions, which stem from a lack of price transparency, where the difference is between the actual and perceived price. It does not focus on the difference between what a consumer is willing to pay and the perceived price. Thus there is likely to be a welfare loss associated with uncertainty over price as a result of risk-averse consumers not making calls. This is because despite reasonably accurate perceptions of price, the lack of certainty is enough to persuade them not to make the call, i.e. that calls are not made by consumers who value them the most. Thus, if full transparency were possible, i.e. that a consumer could know the exact price of a call and the type of call (i.e. whether business or personal) when it is made, then providing that the willingness to pay is independent of the perceived price, then the benefit of full transparency is equivalent to one sixth of the market size – in this case approximately £5.3m based on revenue to PNS providers.
- A6.63 However, although this is possible in theory, full transparency is unlikely to be achieved in this market. As such we have not been able to estimate the exact increase in consumer welfare from such an event, suffice to say that the one sixth of the market calculation would be the upper limit.
- A6.64 In terms of assessing the welfare loss associated with pricing misconceptions (area C) for 070, we have adopted a similar approach to that used in the NTS document, for example using the same own price elasticity of demand figure.
- A6.65 Assuming that the (market) own price elasticity of demand for 070 calls is -0.327^{57} at the current perceived price, and assuming a standard formulation for a nonlinear demand curve of $Q = A - \lambda p$, we have estimated the impact that correcting the price misperceptions outlined above would have on consumer surplus (assuming simplistically that the current actual prices for 070 calls represents the – constant – marginal cost of retailing these call types). We assumed that these misperceptions apply to all the 070 calls originated by all CPs.
- A6.66 Thus we estimate that the loss of consumer welfare for calls to 070 numbers from fixed lines is approximately £160k and from mobiles is approximately £1k.
- A6.67 These figures only focus on the detriment caused by the *opacity* in the pricing structure, not the actual cost of the call. The reason these figures are relatively low compared to the 0871 numbers, is in part due to the size of the market and also to the fact that, consumers' estimates of call costs are not dissimilar to the average cost of a call.

⁵⁷ Arriving at an exact estimate for this variable is necessarily subjective. We view an estimate of 0.3 as a conservative estimate (i.e. one that will tend to understate the detriment associated with price misperceptions). This view is supported by, for example, the following quote from Rappoport, P.N. and Taylor, L.D. (1997), "Toll Price Elasticities Estimated from a Sample of U.S. Residential Telephone Bills," *Information Economics and Policy*, Vol. 9, No. 1, pp. 51-70: *The conventional view in the literature is that the price elasticity is of the order of -0.3 to -0.4 for intralata calls and -0.7 for long-haul interstate calls.*

The extent of scams on the 070 range

A6.68 We have looked at three sources of information to assess the extent to which scams are present on the 070 number range:

- Artificially Inflated Traffic;
- complaints data from the Ofcom Advisory Team (OAT) and PhonepayPlus; and
- consumer research.

Artificially Inflated Traffic (AIT)

A6.69 AIT relates to where the flow of calls to a number is, as a result of any activity on or on behalf of the party operating that number, disproportionate to the flow of calls which would be expected from good faith commercial practice and usage of the network.

A6.70 Communications providers typically have processes in place to identify AIT, following which, subject to a dispute process, they may withhold payment of fees to terminating operators in cases where they suspect that AIT has occurred.

A6.71 Figure A6.2 below sets out the AIT data that we have received from originating operators in response to our information request, it also includes AIT data transiting the BT network. However, whether this data is entirely reflective of all scams that take place on the 070 range depends on each originating operator's policy on AIT and how proactive each operator is at identifying AIT. A number of operators have made representations that the vast majority of scams go undetected by the AIT regime.

Figure A6.3 Cases investigated where AIT was agreed

Period	Number of Cases	Volume of calls (mins)	Value of calls (£)
January – December 2006	229	9,934,773	2,519,998
January – December 2007	261	4,374,196	1,061,364
January - June 2008	63	1,175,763	230,647

Source: Responses from OCPs to information request

A6.72 The data shows that in terms of the value and volume of minutes, these have declined substantially since 2006. However, it should be noted that this data relates to AIT cases investigated where AIT was agreed, although some of the data relating to the number of cases and volume of minutes, includes traffic that was not necessarily agreed in full.

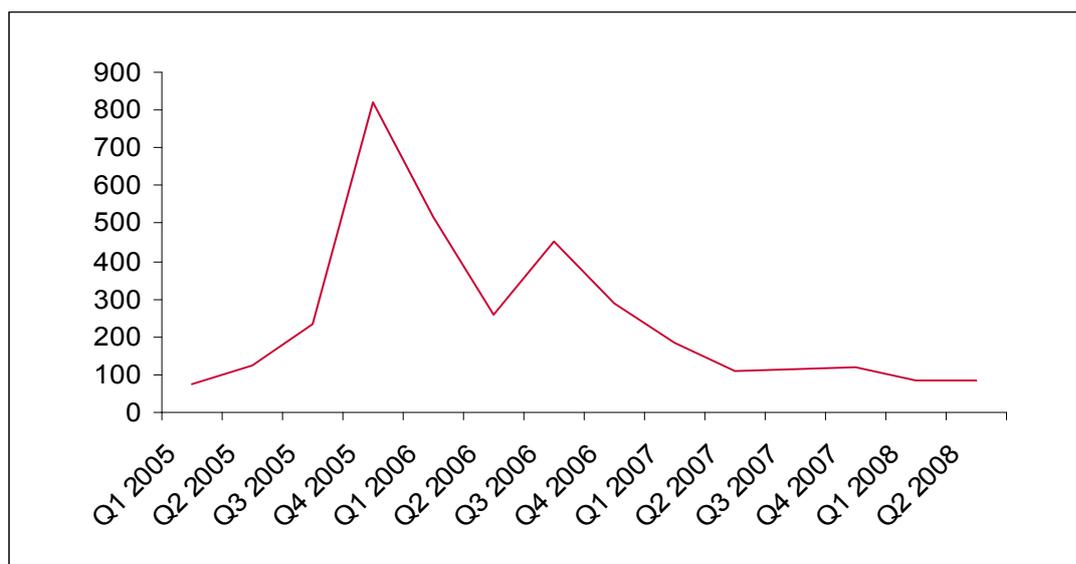
Complaints data from OAT & Phonepay Plus

A6.73 We have used complaints data from both the OAT and PhonepayPlus.

OAT

A6.74 Figure A6.4 below sets out the total number of 070 complaints that the OAT has received from January 2005 to June 2008. The graph indicates that there is a declining trend in calls made to the OAT about 070 numbers.

Figure A6.4 OAT 070 complaints

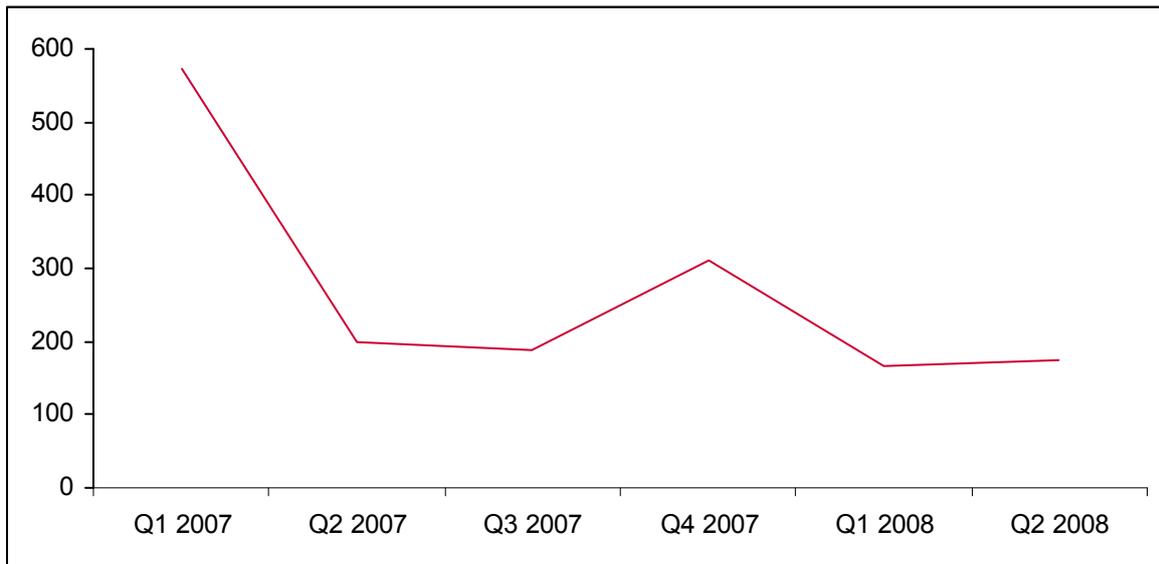


Source: OAT data from January 2005 to June 2008

A6.75 Many of the complaints also cited the frequency of “missed” calls over a long duration as an ‘invasion of privacy’. This type of psychological harm also carries a cost with it.

PhonepayPlus

A6.76 PhonepayPlus has also provided Ofcom with data on the frequency of 070 complaints from January 2007 to June 2008 as shown in figure A6.5 below.

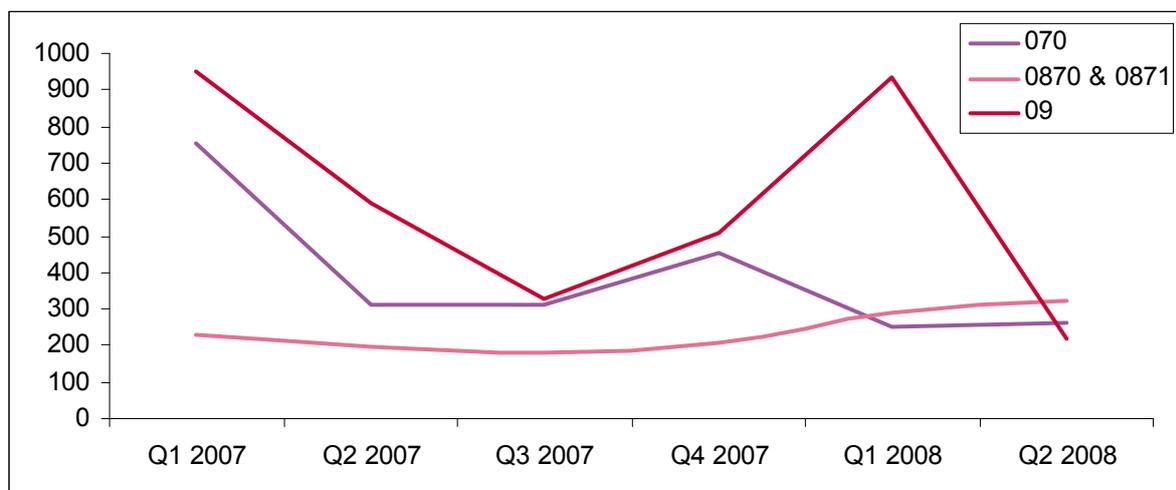
Figure A6.5 Phonepay Plus 070 complaints

Source: Data from Phonepay Plus on 070 complaints received January 2007 to June 2008.

- A6.77 The graph at first sight appears to be less smooth than that of the OAT complaints, where the decline is steadier. This is due to two peaks in complaints in March 2007 and October/November 2007, where more than one hundred complaints were made. The peak in October/November is, in part, attributable to the introduction of pre-call announcements (PCA) on the 070 number range, where consumers called to complain about the announcement.
- A6.78 It is important to interpret the complaints figures with caution. Whilst these complaints do not necessarily indicate that a consumer has been a victim of a scam - for example, some calls will simply relate to the cost of calls to 070 - many complainants consider these to be a scam. However, there will be a large number of people who are scammed and do not complain or are not aware that they have been scammed. According to our research, on average 75% of respondents check their bills, and this is the same for fixed line and mobile customers. However, whether there would be an increase in complaints would depend on the likelihood of these people complaining. For example an OFT report⁵⁸ published in December 2006 stated that for mass marketed scams, less than 5% of victims had reported the problem to the relevant authorities.
- A6.79 Therefore, the data on the number of complaints is not sufficient on its own to suggest how large any consumer detriment associated with scamming might be, although it is useful to set out the general trend of complaints in relation to 070. Thus in order to help assess the extent of detriment it is useful to put into context the number of complaints compared to other number ranges. Whilst the size of the 0870/0871 market is much larger than that of 070, as discussed further below, it can provide a useful benchmark. Figure A6.5 shows the number of 070, 0870, 0871 and 09 complaints made between January 2007 and June 2008.

⁵⁸ http://www.offt.gov.uk/shared_offt/reports/consumer_protection/oft883.pdf

Figure A6.5 Total OAT and Phonepay Plus complaints for 0870/71, 070 and 09 for January 2007 to June 2008



Source: OAT and Phonepay Plus data – as above

A6.80 The graph shows that 09 complaints, mostly, exceed 070 complaints. For the 0870/71 complaints these only exceed 070 complaints for 2008. Taking into account that traffic volumes on both 09 and 0870/71 are much higher than 070, it would be expected that complaints should be much higher.

A6.81 Therefore it remains the case that this market generates a significant number of complaints relative to call volumes in comparison to other number ranges. We consider that this is the case because the level of scamming on the range is high relative to overall call volumes. As stated in Section 2, there are characteristics of the 070 number range that make it particularly susceptible to scamming.

Consumer Research

A6.82 In the July 2008 research, 7% of consumers claimed to have been a victim of an 070 scam. However, this figure should be treated with caution and is likely to represent the very upper bound of consumers experiencing 070 scams. We are aware from our work generally on scamming that consumers have very different concepts of what might constitute a scam. It is likely that consumers have included incidents involving high 070 call costs, where fraudulent activity did not actually take place.

Cost of scams

A6.83 In terms of the amount of money that scams on 070 generally cost consumers; some complainants gave an indication of the amount that they had been charged to make the call. This ranged between less than 50p to much higher sums of money – one consumer stated £35 in total (over a number of calls to the same number). From the PhonepayPlus data it appears, from the small sample analysed⁵⁹, that the most common amount spent was around £2 per call (this was on a mobile) – however in many cases people phoned the 070 number several times. Thus the total cost may be much higher than the individual cost.

⁵⁹ A small sample of the data given to Ofcom by PhonepayPlus was analysed and from this a number of complainants stated the amount of money these calls had cost.

A6.84 In addition, according to OFT research⁶⁰, there can be psychological costs incurred as a result of scamming. For example the research found that consumers can experience loss from dealing with a business in many ways including: financial loss, deprivation of important services, disappointment, loss of confidence in suppliers and inconvenience, stress or anxiety. However, it has not been possible to estimate a figure for this, but factors such as intrusion of privacy and the negative feelings that go with being scammed would be included.

Conclusion on consumer detriment

A6.85 The above analysis suggests that there is consumer detriment present in this market. This detriment has not been fully valued due to a number of complexities, such as the psychological effects of being scammed. Nevertheless, the sources of this detriment have been considered and include:

- lack of transparency in the market (calculations indicate a £161k welfare loss);
- general confusion over what the 070 range is and some confusion with mobile numbers; and
- the incidence and costs of scams (AIT data indicating a £1m loss in 2007).

A6.86 However, this is a small market especially in comparison to other number ranges (the volume of traffic to 070 numbers is around 1% of that for the 0870/71 range) and one that is declining both in terms of call traffic and revenue. Thus any significant change is likely to create costs that are equivalent to a large portion of the market.

A6.87 In addition whilst consumer detriment may be present in this market, the analysis suggests that its overall size is likely to be small. For example: it appears that there is not significant confusion between 070 and mobile numbers; that despite the opacity of the market consumers are able to predict, relatively accurately, the average cost of an 070 call; and that a fall in AIT traffic and complaints signals that the number of scams is declining.

A6.88 It is therefore important that the consumer detriment in this market is assessed against the costs of implementing any changes. The cost benefit analysis of various options to address the consumer detriment arising in the 070 market is set out below and in Section 4.

Cost benefit analysis for closing the 070 number range and migrating users to other ranges

A6.89 Section 62(3) of the Communications Act 2003, states that a numbering allocation cannot be withdrawn without replacement by allocations as similar as possible to the original allocation. Therefore, Ofcom has a duty to provide a migration path for legitimate users where a number range has been withdrawn, i.e., where a number range is closed.

A6.90 We have identified various ranges to which current 070 users could migrate to. In particular, we have considered opening new ranges, such as 065, and migrating users to existing number ranges, such as 08 or 09.

⁶⁰ From OFT press release "OFT highlights consumer detriment", note 1, 3 February 2006.

The 08 number range

- A6.91 There are users who might be able to migrate to a current 08 number. The most likely range would be 0871, 0872 or 0873 as these ranges are charged at higher retail call rates relative to other current 08 ranges (but capped at 10ppm from a BT landline). However, while the rates on these ranges would accommodate termination on fixed lines (around 65% of calls to personal numbers are terminated on fixed lines), they are unlikely to be able to accommodate mobile or international termination as termination charges are too high to be covered by retail call rates. On these number ranges, therefore, those users who use 070 numbers to receive calls on their mobile and internationally will not be able to use existing 08 ranges.
- A6.92 Ofcom could consider opening a new 08 range that allowed higher call charges. The simplest way to do this is through a “lift and shift” approach where the 070 prefix would simply be replaced with another, for example, 085. This would minimise costs associated with needing to hand back and reapply for numbers, and may lead to simpler renegotiations of existing contracts between PNS providers, resellers and OCPs. A more complex migration, where a new number range was opened from scratch and communications providers would have to re-apply for numbers, is likely to involve greater cost and inconvenience.
- A6.93 However, opening up a new personal number range on 08 would be contrary to current Ofcom policy and attempts to link 08 pricing to geographic pricing in order to restore trust in 08 numbers.
- A6.94 In addition, certain 08 numbers are not accessible from abroad and therefore if that is an important feature of a personal numbering service, migration to 08 would not be suitable.

The 09 number range

- A6.95 Existing sub-ranges 090, 091 and 098 have been designated for Premium Rate Services (“PRS”) as defined in section 120(7) of the Communications Act 2003. As summarised in the statement “The conditions regulating PRS”, published on 17 October 2006⁶¹, personal numbering services are not PRS as defined in section 120(7) of the Act.
- A6.96 Therefore in order to accommodate PNS on the 09 range, we would need to open a new sub-range (in the same way as we have considered for 08) for personal numbering services that are not PRS. This approach has the benefit that many consumers associate the 09 range with higher call charges. However, this may also have an adverse impact on end users of personal numbers as consumers may avoid making calls to what they might believe to be a very expensive number. For example according our research conducted in May 2008, the perceived price of an 09 call, on a fixed network is 61ppm, which is substantially higher than the estimated actual price of 36.5ppm for a 070 call. Thus there is likely to be substantial consumer welfare loss from migration to this range.
- A6.97 In addition, the 09 range currently only carries revenue share services and PhonepayPlus regulation which can only apply to premium rate services. Therefore, adding more services to the 09 range would make it harder to distinguish services on that range using simplified and enduring meanings. In addition, it may cause

⁶¹ Paragraphs 2.30, 2.34, 3.4 and 4.11,
<http://www.ofcom.org.uk/consult/condocs/prsconditions2/statement/prsconditions.pdf>

confusion for consumers to have services provided on the 09 range that are not subject to PhonepayPlus regulation, or cause consumers to believe that the services provided by personal numbers are not unlike PRS, leading to reduced confidence in PNS in general.

A6.98 It is also relevant that 09 numbers tend not be accessible from abroad and therefore the same arguments as for 08 apply here.

The 06 number range

A6.99 As set out in previous documents, Ofcom originally considered migrating 070 users to a new 06 number range.

A6.100 As for opening a new range on 08, the simplest way to create this range would simply to change the prefix of personal numbers.

Cost-benefit analysis of migration

A6.101 We have carried out a cost-benefit analysis for migration and estimated the cost of migration of PNS providers/resellers, end users and originating communications providers (OCPs) to another number range. Given the difficulties with assessing these costs, we have taken a fairly conservative approach to evaluating costs. Further the majority of these costs are one-off rather than recurring.

Costs to PNS Providers and Resellers

A6.102 The costs to PNS providers and resellers are discussed below.

Notification to users

A6.103 PNS providers and resellers would need to contact each of their customers (end users) to notify them that their current personal number was due to change.

A6.104 The following assumptions have been applied⁶²:

- drafting of standard letter to user would take no more than one working day per provider/reseller at an effective wage rate of £18 per hour⁶³; and
- dispatching of standard letters at a rate of 12 letters per hour by an administrative resource with an effective wage rate of £18 per hour.

A6.105 In terms of the drafting costs, these are likely to total approximately £36,500⁶⁴ for all providers and resellers. Associated administrative costs will ultimately depend on the number of users needing to be contacted. We estimate this to be £1m, although this is an upper limit as some providers/resellers may routinely contact their 070 customers and could include such correspondence with this.

⁶² This approach is consistent with that used in the 0871 consultation.

⁶³ Measuring Administrative Costs <http://www.berr.gov.uk/bre/policy/simplifying-existing-regulation/administrative-burdens/page44061.html>

⁶⁴ This has been calculated by multiplying £18 by 7 hours (one working day), which gives the cost for one provider/reseller and then multiplied by the total number of providers/resellers.

Changes to contracts between end-users and PNS providers

A6.106 The end user contracts with PNS providers/resellers will also need to be updated to reflect any migration changes⁶⁵.

A6.107 We estimate that the legal drafting should take no more than 7 hours and estimate the cost per provider/reseller to be £126 for internal legal resource and approximately £1,200 for external legal resource⁶⁶. Based on these assumptions we estimate the total cost to providers/resellers in updating their contracts to range from £36,500 to £345,000⁶⁷, depending on the number of businesses that need to use external lawyers.

A6.108 We believe that most providers/resellers would send a copy of the notification and contract at the same time, thus only one set of administration costs would be incurred.

Changes to contracts between PNS providers and OCPs

A6.109 Changes are likely to require renegotiation of terms between PNS providers and OCPs but not resellers. There are a number of categories of costs associated with renegotiation of contracts with OCPs these include:

- Drafting of new contracts with the OCPs, we have assumed that each PNS provider would need to renegotiate with 10 OCPs, this includes mobile and fixed line operators. As with the drafting of contracts above this may be done with either internal or external legal resource. On this basis the total cost of all PNS providers renegotiating contracts could range from £180,000 to £1.7m. However, we consider it likely that many PNS providers do not have access to internal legal resource thus the cost is likely to be nearer £1.7m.
- In addition there is also the cost of negotiations in terms of the time taken by managers, however we have not been able to credibly estimate what this might be as each negotiation will be different. Further it may also be the case that wholesale termination rates change as a result and depending on the reasons for the change this could be a cost to providers (unless they were reduced). However, it is not possible to know the outcome of any negotiations and therefore it is not possible to include a figure in the cost assessment.

Costs of telecoms and billing systems changes to PNS providers/resellers

A6.110 Providers and possibly some resellers would have to make system changes and would incur engineering costs. The different types of costs associated with system changes are set out below⁶⁸:

- A provider would need to apply for numbers in the new range incurring administrative costs. Based on an average daily salary cost of £85⁶⁹ and

⁶⁵ The assumptions used are consistent with those in the 0871 consultation.

⁶⁶ Measuring Administrative Costs <http://www.berr.gov.uk/bre/policy/simplifying-existing-regulation/administrative-burdens/page44061.html>

⁶⁷ This has been calculated in the same way as the costs for notification, however the wage rate for the external lawyers is higher than the £18 internal wage rate.

⁶⁸ It should be noted that this assumes that the 070 and new range operate in parallel for a period of time.

⁶⁹ This is the same rate that was used in the 0871 consultation regarding overhead costs.

assuming that it would take a provider 0.5 days to process the paperwork etc. The overall cost to all providers would be approximately £10,000.

- A provider would then need to follow the process associated with receiving a new block of numbers.
- Once the provider has received the new number block(s)⁷⁰ changes to the switch are required. The time involved could vary substantially depending on the complexity of the switch and whether a script needs to be produced to run the changes, as each number in the block might need a manual rewrite. We have estimated that a single switch operator changing one block of numbers could take between 4 hours to 5 days.
- Once the switch has been updated the billing systems will need changing. For the retail side of the billing the costs of doing so would also be incurred by resellers. The time taken to make the changes will depend on whether a script needs to be developed and run which could take between 4 hours to 5 days.
- Based on the estimated time taken to make changes to the switch and billing systems we have assumed that on average this would take an engineer 30 hours. For a PNS provider the cost of updating one block of 10,000 numbers on a single switch would be approximately £1,500⁷¹. For a systemless reseller the cost of updating their billing systems would be approximately £700.
- However, although there are a number of PNS providers who have very few blocks, there are 36 providers with more than 10 and many of these are blocks of 100,000 numbers. In addition there are likely to be providers who have multiple switches. Thus the total cost to these providers could be substantially higher. However, it should be noted that there are likely to be some economies of scale involved and that for billing systems it may be the case that updating these are independent of the number of switches and blocks a provider has. Further, given the amount of numbers in active use it may be the case that providers with underused multiple blocks request a smaller number of blocks in the new range, thus needing to make a smaller number of changes.
- Thus to get an upper limit for the total cost for PNS providers we have assumed that for each block of 10,000 numbers the same process for switching would be followed i.e. that it would take an engineer approximately 15 hours per block.⁷² We have also assumed that PNS providers would request the same amount of numbers as they currently have. However, for billing it has been assumed that this would only need to be done once. Based on this assumption the total cost for all PNS providers would be approximately £6.9m.

A6.111 In terms of the total costs facing PNS providers and resellers these range substantially depending on the assumptions made but could be as high as £10m.

⁷⁰ It has been assumed that this will be in blocks of 10,000 numbers.

⁷¹ This calculation takes number of hours (30) * engineer wage rate of £47.73.

⁷² It has also been assumed that the same number of blocks/numbers would be required by each PNS provider. This may not occur in practice if there are currently providers who are not utilising such blocks.

Costs to end-users

A6.112 In addition to the costs incurred by PNS providers and resellers associated with the migration of the personal number range, end users are also likely to incur costs in migrating to another number range. These costs include: stationery costs (e.g. letterheads, business cards); changes to websites; marketing costs; and loss of business because previous clients have an incorrect number.

- Stationery costs

A6.113 Annex 5 of the 0871 consultation sets out the methodology adopted when assessing the one-off costs associated with replacing stationery. We have followed the same approach and have estimated firstly the number of business users affected and then assessed the costs involved using a number of assumptions. These assumptions include:

- businesses all print the personal numbers on their stationery;
- 25% of businesses would replace their stationery over a 12 month period (in line with the notice period that would be given if migration was to take place). This was taken from the *NTS: A way forward* consultation;
- whilst we are aware that some companies print their letterheads on to plain paper as an alternative to using letter headed paper, it is difficult to assess the percentage of companies which do this. As such it has been assumed that all businesses would require new stationery, which is likely to overestimate the cost;
- in the 0871 consultation, Ofcom assumed that not all employees would need business cards, because some staff performed roles where they were not required. In addition, there is again the possibility of cards needing to be reordered in any event during the time period involved. As such, we have chosen to use the estimates for number of employees requiring business cards as set out in the 0871 consultation;
- the 0871 consultation took into account the fact that businesses of different sizes were likely to spend differing amounts on stationery (letterheads and business cards), this was based on business directory data reviewed in the 2004 NTS Consultation (Annex 6). For the purposes of this CBA we have used different proportions and assumed that 100% of businesses using these numbers are small with less than 10 employees using 070 personal numbers;
- regarding the amounts that would need to be spent, we have used the figures set out in the 0871 consultation. For letterheads, businesses would spend £50; and for business cards it is assumed that only 3 employees will need business cards at a cost of £15 per card.

A6.114 The total stationery cost to users based on these assumptions is approximately £13.4m. This is based on the number of businesses affected, which is estimated at 140,000. In addition, we have assumed that there are some administrative overheads associated with reordering stationery, which is based on the 0871 consultation. Thus, in total, the cost to users of personal numbers could be as high as £21.8m, this equates to approximately £155 spent on stationery per user.

A6.115 As part of the end user questionnaire we asked businesses what costs they would incur in terms of changes to stationery; responses suggested a range of £1,500 to £3,500.

- Changes to website

A6.116 It is likely, given the current technological climate that many of the business users of personal numbers have websites on which these numbers are displayed. Whilst there would be some costs involved in needing to change these web pages, we consider that such changes would be straightforward and that businesses would incur minimal expenses.

- Telecom costs

A6.117 End users are likely to incur some cost in obtaining new numbers/lines to replace 070. Although, the extent of this will depend on the type of number an end-user chooses. For example, if they were to migrate to the range chosen to replace PNS then the costs are likely to be minimal. However, if they decided that the new range will not meet their current needs i.e. that there are some features of current PNS that are not on the new range, then they might need to take an alternative approach⁷³. This may require getting a new mobile/mobile contract, a new geographic line (incurring line rental charges) etc. Or it may mean that some end users just use their existing mobile or fixed line numbers.

A6.118 The end-user questionnaire asked respondents what alternatives would be considered if the range were to close. The majority of responses selected mobile and 08 numbers – and many picked more than one option. It has been difficult to estimate with any accuracy what the total costs involved would be because it is unclear how many users would in fact switch to using existing telecom products, rather than purchasing new ones. Nevertheless, we note that some cost is likely to be incurred and therefore this is in addition to the total estimates given below.

- Marketing costs

A6.119 In the 0871 consultation, it was suggested that because marketing material was updated every quarter and was often seasonal that service providers would be able to add the necessary pricing information as part of the normal replacement cycle for promotional material. In terms of users of 070 numbers, the responses to the questionnaire were quite varied regarding whether marketing material was used. Of those that did respond to the question, the average cost was stated to be approximately £1,000, although this depended on the size of the company. Due to the high variability of marketing costs associated with individual companies, we have not assessed what the size of the cost might be, however we note that any costs would be in addition to the total estimates we have made.

- Loss of business

A6.120 Many of the responses to the questionnaire pointed out that having to change numbers would result in previous clients not being able to get in touch. If migration was to occur, then it is likely that for a period of time the two systems would run in parallel and for a period of time those ringing the old number would be able to

⁷³ However, if the new PNS range was an exact replication of the current one, then any costs incurred by end-users moving to a different range, above the costs of moving to the new PNS range, would not be included in a CBA as this spend is discretionary i.e. up to the end-user.

contact the business. However, it was discussed that many clients ring on a sporadic basis with long gaps between calls. In which case, there is likely to be a loss of business. It has not been possible to estimate such costs and therefore, as with the 0871 consultation, they have not been quantified. But we note that these could arise and could be significant.

A6.121 Further if closure of the 070 range and migration of PNS to the 09 range were to occur, then there is the possibility that further business would be lost as consumers may not call an 09 number where they perceive they will incur higher call charges. Our consumer research asked whether consumers were concerned about calling certain number ranges from a landline and a mobile.

Figure A6.7 Level of concern about calling certain number types

Number Range	From Fixed Line	From Mobile
070	57%	59%
09	62%	67%
0870	52%	56%
07 (Mobile)	47%	41%

Source: May Omnibus survey – sample 1033 GB adults with a fixed line phone/ 830 adults who have a mobile phone

A6.122 Figure A6.7 shows that more consumers are concerned about calling 09 than any other number range – 5 percent more than 070 on fixed and 8 percent more on mobile. The main reason for this concern stems from the perceived cost of calling. As such it is likely that a move to this range for PNS would result in further loss of business, although again it is difficult to estimate the cost this would impose. In addition, in the responses obtained from the end-user questionnaire only four respondents stated that if the 070 range were to close that they would switch to the 09 range.

A6.123 Further we have data from Hospedia⁷⁴ which states that when NHS bedside systems first started these were on 09 numbers, they were subsequently moved to 070 and Hospedia saw approximately a 10-20% lift in call volumes. Thus it is likely that any shift back to 09 would result in a fall in call volumes of this magnitude.

- Total costs of migration

A6.124 In terms of the total cost to users of personal numbers, as discussed above, not all of these can be quantified. However, for those which can, we estimate these to be approximately £20m.

Costs to CPs – from opening new range

A6.125 There will also be costs associated with systems changes for originating providers. These costs will differ, depending on the range chosen. Whilst migration to existing ranges is likely to require some changes, the costs associated with opening up a new range are likely to be much more substantial as new and possibly more complicated technology solutions have to be built. During this consultation we will be requesting estimates of these costs from originating providers and would welcome any relevant data in response to this consultation.

⁷⁴ Letter from Hospedia to Ofcom dated 27 August 2008

Costs to Ofcom

A6.126 Whilst the majority of costs fall to the PNS providers and end users, Ofcom will also incur some costs as a result of the migration of PNS services to another range. In order to facilitate this it is estimated that four members of staff would be required for a week. The salary and overhead cost of this would be approximately £3,150.

Benefits of migration

A6.127 The benefits of migration will only arise if migration addresses the three main sources of consumer detriment we have found, namely confusion with mobile numbers, lack of pricing transparency for personal numbers and the cost of scamming.

A6.128 However, from the results of our market research, we cannot be certain that the main reason for the prevalence of scams or price confusion on the 070 range is because consumers confuse personal numbers with mobile numbers. Indeed, it is likely that the key drivers of scams are the high prices of calls to personal numbers and a general lack of awareness of call prices, regardless of confusion with mobile numbers.

A6.129 From our consumer research, it is not clear that consumers have more awareness about the cost of calling 08 or 09 numbers. Further, if we were to create new 08 and 09 ranges for PNS, consumers would be likely to have even less awareness of pricing unless there was substantial promotion of the types of services of these ranges when launched. Therefore, it is unclear that migration will improve pricing transparency for PNS.

A6.130 As with quantifying consumer detriment, it has not been possible to estimate the total benefits to consumers (and possibly to users) from such a change. Nevertheless, it is likely given the discussion above that any benefits would be significantly smaller than the costs involved and this is likely to be the case even if costs were significantly smaller.

A6.131 Overall, it is not clear that moving PNS to a recognisably different range will help to remedy the consumer detriment that arises with 070 calls and will not, on its own, prevent the same types of scams appearing on a new range or similar price confusion.

Conclusion on migration

Figure A6.8 Summary of costs and benefits associated with migration of personal numbering services to other ranges

Cost to PNS Providers/Resellers	£10m
Changes to Notices	£1m
Changes to Contracts to End-user	£0.3m
Renegotiating POLO rates	£1.7m
System costs	£6.9m
Cost to End User	£22m
Overhead and Stationery costs	£22m
Website changes	Minimal expenditure
Telecoms costs	Will vary according to end-user needs and may be incurred on a regular basis
Marketing costs	Minimal expenditure
Loss of business	This could be substantial
Cost to OCPs	These costs are associated with changes to systems and could be substantial
Cost to Ofcom	£3k
Benefits	These are likely to be minimal as migration does not address the main sources of consumer detriment. It is likely that similar scams will occur on any new personal numbering range.

A6.132 Ofcom estimates that the total costs to PNS providers, resellers, end users and Ofcom of migrating personal numbers to another range could be as high as around £40 million (not factoring in significant loss of business to end-users and costs to OCPs).

A6.133 As set out above in figure 4.1, the benefits of migration are likely to be small, given that migration will not address the sources of consumer detriment identified. Whilst it may provide more clarity for some consumers in terms of confusion with mobile numbers, the opaque pricing, high costs and scams are likely to remain with personal numbering and with them the majority of consumer detriment.

A6.134 In addition, the costs are high in comparison to the revenue generated in this market – approximately £32 million per year. This suggests that even if the benefits of migration were high, it would not be profitable for the market to migrate in terms of a pure cost-benefit analysis test.

Annex 7

The legal basis for changes to the National Telephone Numbering Plan and proposed modification to General Conditions 14 and 17

Consultation on the proposed changes notified in this document

- A7.1 As described in Section 4 of this document, we propose to (a) modify the General Conditions of Entitlement relating to Telephone Numbers (the “General Conditions” or “GC”) in two respects and (b) modify the National Telephone Numbering Plan (the “Numbering Plan”).
- A7.2 Firstly we propose to modify General Condition 14 (“GC14”) to improve price transparency for 070 numbers, by requiring originating communications providers to give greater prominence for 070 prices in their published price lists (Option 3).
- A7.3 Secondly, we propose to modify General Condition 17 (“GC17”) and the Numbering Plan to reflect the withdrawal of the requirement for pre-call announcements on 070 numbers (Section 6 of this document).
- A7.4 The legal framework for the proposed modifications to the Numbering Plan and General Conditions is discussed below

The legal framework

- A7.5 Ofcom regulates the communications sector under the framework established by the Communications Act 2003 (the “Act”).
- A7.6 The Act provides, amongst other things in relation to numbering, for the publication by Ofcom of the Numbering Plan and the ability of Ofcom to set General Conditions. The Act also sets out statutory procedures that apply when Ofcom wishes to make modifications to the Numbering Plan, the processes for the giving of directions under conditions such as the General Conditions and the processes and tests that must be satisfied before setting or modifying the General Conditions.

Specific provisions under the Act

Powers and duties in relation to the General Conditions (GC 14 and 17)

- A7.7 Section 45 of the Act gives Ofcom the power to set conditions:
- “(1) Ofcom shall have the power to set conditions under this section binding the persons to whom they are applied in accordance with section 46.
- (2) A condition set by Ofcom under this section must be either –
- (a) a general condition.....

(3) A general condition is a condition which contains only provisions authorised or required by one or more of sections 51, 52, 57, 58 or 64.”

A7.8 Ofcom must not modify a condition unless it is satisfied that the modification satisfies the test in section 47(2) of the Act as follows:

“That the modification is:

- a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
- b) not such as to discriminate unduly against particular persons or against a particular description of persons;
- c) proportionate to what the modification is intended to achieve; and
- d) in relation to what it is intended to achieve, transparent.”

A7.9 Section 48(2) further provides that:

“Before setting conditions under section 45, or modifying or revoking a condition so set, Ofcom must publish a notification—

- a) stating that they are proposing to set, modify or revoke the conditions that are specified in the notification;
- b) setting out the effect of those conditions, modifications or revocations;
- c) giving their reasons for making the proposal; and
- d) specifying the period within which representations may be made to Ofcom about their proposal.”

General duties of Ofcom

A7.10 The principal duty of Ofcom to be observed in the carrying out of its functions is set out in section 3(1) of the Act as the duty:

- “a) to further the interests of citizens in relation to communications matters; and
- b) to further the interests of consumers in relevant markets, where appropriate by promoting competition.”

A7.11 As part of the fulfilment of these principal duties, it is Ofcom's responsibility to secure the availability throughout the UK of a wide range of numbering arrangements, having regard to the interests of consumers in respect to choice, price awareness, and consumer protection.

Duties for the purpose of fulfilling Community obligations

A7.12 In addition to its general duties as to telephone numbers, when considering revisions to the Numbering Plan, Ofcom must also take into account the six Community requirements in carrying out its functions as set out in section 4 of the

Act. These include the requirement to promote competition in the provision of electronic communications networks and services, and the requirement not to favour one form of network, service or associated facility or one means of providing or making available such network, service or associated facility over another, as well as the requirement to promote the interests of European citizens.

- A7.13 The various legal tests and duties, and how Ofcom has complied with them in consulting on the proposals in this consultation document, are set out below.

Powers and duties in relation to the Numbering Plan

- A7.14 Section 56(1) of the Act states that:

"It shall be the duty of Ofcom to publish a document (to be known as "the National Telephone Numbering Plan") setting out-

- a) the numbers that they have determined to be available for allocation by them as telephone numbers;
- b) such restrictions as they consider appropriate on the adoption of numbers available for allocation in accordance with the plan; and
- c) such restrictions as they consider appropriate on the other uses to which numbers available for allocation in accordance with the plan may be put."

- A7.15 The Act provides for Ofcom to review and revise the Numbering Plan. Section 56(2) states that:

"It shall be Ofcom's duty –

- a) from time to time to review the National Telephone Numbering Plan; and
- b) to make any modification of that plan that they think fit in consequence of such a review; but this duty must be performed in compliance with the requirements, so far as applicable, of section 60."

- A7.16 Section 60 of the Act provides for the modification of documents referred to in the General Conditions (which includes the Numbering Plan) and explains the procedures to be followed in order to conduct this review. Section 60(2) of the Act provides that:

"Ofcom must not revise or otherwise modify the relevant provisions unless they are satisfied that the revision or modification is -

- a) objectively justifiable in relation to the matters to which it relates;
- b) not such as to discriminate unduly against particular persons or against a particular description of persons;
- c) proportionate to what the modification is intended to achieve; and
- d) in relation to what it is intended to achieve, transparent."

A7.17 Section 60(3) further provides that:

"Before revising or otherwise modifying the relevant provisions, Ofcom must publish a notification -

- a) stating that they are proposing to do so;
- b) specifying the Plan or other document that they are proposing to revise or modify;
- c) setting out the effect of their proposed revisions or modifications;
- d) giving their reasons for making the proposal; and
- e) specifying the period within which representations may be made to Ofcom about their proposal."

Ofcom's general duty as to telephone numbering functions

A7.18 Ofcom has a general duty under section 63(1) of the Act in carrying out its numbering functions

"a) to secure that what appears to them to be the best use is made of the numbers that are appropriate for use as telephone numbers; and

b) to encourage efficiency and innovation for that purpose."

A7.19 An important part of Ofcom's telephone numbering functions is the duty to publish the Numbering Plan. Section 56(1) of the Act provides:

"It shall be the duty of Ofcom to publish a document (to be known as the "National Telephone Numbering Plan") setting out

a) the numbers that they have determined to be available for allocation by them as telephone numbers;

b) such restrictions as they consider appropriate on the adoption of numbers available for allocation in accordance with the plan; and

c) such restrictions as they consider appropriate on the other uses to which numbers available for allocation in accordance with the plan may be put."

Legal tests

A7.20 Ofcom must, when proposing a modification to the General Conditions and the Numbering Plan to show how it considers that its proposals comply with the legal tests in the Act set out above.

Proposal to modify General Condition 14

A7.21 To address the market failure associated with the lack of pricing transparency on 070 calls, we propose requiring communications providers to publish tariffs for calls

to 070 numbers more prominently and to make them easier to understand for consumers.

- A7.22 We consider it important that consumers are provided with better information in relation to the cost of 070 calls. This would appear to be a more proportionate response to addressing the consumer detriment identified in our analysis than carrying out Option 1 (closing the 070 number range and migrating users to another range).
- A7.23 We propose amending General Condition 14 to impose the same price publication requirements on OCPs as have been imposed for NTS calls. This would require OCPs to modify their codes of practice to ensure 070 call prices are given greater prominence in published price lists and in promotional material for different service packages, so that they are not hidden. The information provided should include clear statements of whether or not discount schemes apply to 070 calls.
- A7.24 Ofcom welcomes any information on costs associated with the implementation of these proposals.
- A7.25 Ofcom is satisfied that its decision to modify GC 14 meets the tests set out in sections 47(2) of the Act being:
- **objectively justifiable**, as the proposed modification will provide consumers greater accessibility to pricing information for calls to 070 numbers in order to make informed choices;
 - **not unduly discriminatory**, in that the obligations will apply to all CPs who offer their customers the ability to call 070 numbers;
 - **proportionate**, in that the modification to GC 14 is a measure that Ofcom believes will enable it to address effectively part of the consumer detriment it has identified on the 070 number range. The modification will do this because it will raise consumer awareness of the cost of calls to 070 numbers. Ofcom also believes the modification is proportionate and the least intrusive means to achieve the objectives of improving pricing transparency; and
 - **transparent**, in that the notification modifying GC 14, and the effects of this modification, are set out in this document.
- A7.26 Ofcom considers that the decision to modify GC 14 is also consistent with its general duties and Community obligations. In particular, Ofcom's decision takes account of the interests of consumers with respect to choice of service, price awareness and consumer protection by addressing the lack of price transparency amongst consumers in the market for 070 calls.

Notifications of proposed modifications to GC14

- A7.27 The notification of the proposed modifications to the GC14 is set out in Annex 8 of this consultation document and have been marked in **yellow highlight**.

A7.28 It is worth noting that other proposed modifications to GC14 are currently being consulted on⁷⁵ and we propose these modifications in addition to the earlier proposals.

Proposal to modify General Condition 17

A7.29 The proposed modification to GC17 removes the requirement on communications providers to comply with the Numbering Plan, i.e. in relation to the requirement for OCPs to provide a free-to-caller pre-call announcement for those calls to 070 numbers that are charged in excess of either 20 pence per minute or a fixed fee of 20 pence per call.

A7.30 Ofcom is satisfied that its decision to modify GC 17 meets the tests set out in sections 47(2) of the Act being:

- **objectively justifiable**, as it removes the risk of endangering the life and security of citizens and consumers who rely on the use of particular services provided on 070;
- **not unduly discriminatory**, in that the regulation is removed for all OCPs;
- **proportionate**, in that the proposed modification to GC17 is the minimum revision necessary to meet the objective of addressing risk to life and security of PCAs; and
- **transparent**, in that the notification proposing the modifications to GC17, and its effects, are set out in this consultation document.

A7.31 Ofcom considers that its proposal to modify GC17 is also consistent with its general duties and Community obligations. In particular, it considers that the proposals further the interests of citizens generally in relation to communications matters and consumers in relevant markets by removing the risk of endangering the life and security of citizens and consumers who rely on the use of particular services provided on 070.

Notifications of proposed modifications to GC17

A7.32 The notification of the proposed modifications to GC17 is set out in Annex 9 of this consultation document and have been marked in **yellow highlight**.

Proposal to modify the Numbering Plan

A7.33 Ofcom must, when proposing a modification to the Numbering Plan to show how it considers that its proposals comply with the legal tests in the Act.

A7.34 The proposed modifications to the Numbering Plan remove the requirement for OCPs to provide a free-to-caller pre-call announcement for those calls to Personal Numbers that are charged in excess of either 20 pence per minute or a fixed fee of 20 pence per call.

A7.35 Ofcom is satisfied that the proposal for modifications to provisions of the Numbering Plan meets the tests set out in sections 60(2) of the Act being:

⁷⁵ <http://www.ofcom.org.uk/consult/condocs/0870calls/>

- **objectively justifiable**, as it removes the risk of endangering the life and security of citizens and consumers who rely on the use of emergency alarm type services provided on 070;
- **not unduly discriminatory**, in that the regulation is removed for all communications providers;
- **proportionate**, in that the proposed modification to the Numbering Plan is the minimum revision necessary to meet the objective of addressing risk to life and security of PCAs; and
- **transparent**, in that the Notification proposing the modifications to the Numbering Plan, and its effects, are clearly set out in this consultation document.

A7.36 Ofcom considers that in making its proposal it is fulfilling its general duty in relation to telephone numbering functions as set out in section 63 of the Act. In particular, the proposal secures the best use of appropriate numbers by ensuring that the use of the number range for emergency type services continues without risk to life and property.

A7.37 Ofcom considers that its proposal to modify the Numbering Plan is consistent with its general duties and Community obligations. In particular, it considers that the proposals further the interests of citizens in relation to communications matters and consumers in relevant markets by removing the risk of endangering the life and security of citizens and consumers who rely on the use of emergency alarm type services provided on 070.

Notifications of proposed modifications to the Numbering Plan

A7.38 The notification of the proposed modifications to the Numbering Plan is set out in Annex 10 of this consultation document and have been marked in **yellow highlight**.

Annex 8

Notification of a proposed modification under section 48(2) of the Act to General Condition 14

Proposal for modification of General Condition 14 on Codes of Practice and Dispute Resolution which is set out in the schedule to the notification under Section 48(1) of the Communications Act 2003 published by the Director General of Telecommunications on 22 July 2003.

1. Ofcom in accordance with section 48(2) of the Act hereby makes the following proposals for the modification of General Condition 14 on codes of practice and Dispute Resolution;
2. The proposed modification is set out in the schedule to this notification;
3. The reasons for making the proposals and the effect of the proposed modifications are set out in Sections 3 and 4, and Annex 6 of the accompanying consultation document;
4. Ofcom considers that the proposed modification complies with the requirements of sections 45 to 50 of the Act and specifically section 48(2) of the Act, as appropriate and relevant to each of the proposals;
5. In making the proposals set out in this notification, Ofcom has considered and acted in accordance with its general duties in section 3 of the Act and the six Community requirements in section 4 of the Act;
6. Representations may be made to Ofcom about the proposals set out in this notification and the accompanying schedule by 5pm on 7 January 2009;
7. Copies of this notification and the accompanying schedule have been sent to the Secretary of State in accordance with section 50(1)(a) of the Act.
8. In this notification:
 - (i) “the Act” means the Communications Act 2003; and
 - (ii) “Ofcom” means the Office of Communications;
9. Except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them in this notification and otherwise any word or expression shall have the same meaning as it has in the Act.
10. For the purpose of interpreting this notification:
 - (i) headings and titles shall be disregarded; and
 - (ii) the Interpretation Act 1978 shall apply as if this notification were an Act of Parliament.
11. The schedule to this notification shall form part of this notification.

Signed by

A handwritten signature in black ink, appearing to be 'D. Stewart'.

David Stewart

A person authorised by Ofcom under paragraph 18 of the schedule to the Office of Communications Act 2002

8 October 2008

Schedule

Proposal for modifications to General Condition 14 on Codes of Practice and Dispute Resolution which is set out in the schedule to the notification under section 48(1) of the Communications Act 2003 published by the Director General of Telecommunications on 22 July 2003

General Condition 14 on Codes of Practice and Dispute Resolution shall be deleted and replaced in its entirety as follows:

14. CODES OF PRACTICE AND DISPUTE RESOLUTION

Basic Code of Practice regarding provision of Public Electronic Communications Services

14.1 The Communications Provider shall produce a basic code of practice for its Domestic and Small Business Customers which sets out at least where such customers may avail themselves of the information required to be published under Condition 10.2, as relevant to the provision of Public Electronic Communications Services. The code of practice shall be drafted in plain English which is easy to understand, and copies of the code of practice shall be provided on request and free of charge to any Domestic and Small Business Customer.

Codes of Practice for Premium Rate Services, NTS Calls⁷⁶ and calls to Personal Numbers⁷⁷

14.2 Within two months of this Condition entering into force, all Originating Communications Providers who provide Premium Rate Services, NTS calls or calls to Personal Numbers, as appropriate shall:

- (a) establish and thereafter maintain a Code of Practice for the provision of information relating to Premium Rate Services for its Domestic and Small Business Customers, which conforms with the Guidelines set out in Annex 1 to this Condition;
- (b) establish and thereafter maintain a Code of Practice for NTS Calls and calls to Personal Numbers for its Domestic and Small Business Customers, which conforms with the Guidelines set out in Annex 2 to this Condition; and
- (c) comply with the provisions of the Code of Practice referred to at 14.2 (a) and (b) above.

14.3 The codes of practice referred to in Condition 14.2 shall be drafted in plain English which is easy to understand, and copies of the codes of practice shall be provided on request and free of charge to any Domestic and Small Business Customer.

Codes of Practice for Complaints⁷⁸⁷⁹

⁷⁶ Providing citizens and consumers with improved information about Number Translation Services and Premium Rate Services, Statement and notification, 19 April 2006.

⁷⁷ [Link to Ofcom statement to be added, when appropriate]

14.4 Within one month of this Condition entering into force, the Communications Provider shall establish and thereafter maintain procedures that conform with any applicable Code of Practice for Complaints for the handling of complaints made by its Domestic and Small Business Customers in relation to the provision of Public Electronic Communications Services.

Codes of Practice for Sales and Marketing

14.5 Those Communications Providers who provide Fixed-line Telecommunications Services shall:

(a) establish and thereafter maintain a Code of Practice for Sales and Marketing for dealing with its Domestic and Small Business Customers, which conforms with the Guidelines set out in Annex 3 to this Condition; and

(b) comply with the provisions of the Code of Practice for Sales and Marketing established according to Condition 14.5(a) above.

14.6 The Code of Practice for Sales and Marketing shall be drafted in plain English which is easy to understand, and copies of it shall be provided on request and free of charge to any Domestic and Small Business Customer, and be prominently available on the Communications Provider's public website.

Dispute Resolution

14.7 The Communications Provider shall implement and comply with a Dispute Resolution Scheme, including any final decision of the Dispute Resolution Body made in accordance with that Scheme, for the resolution of disputes between the Communications Provider and its Domestic and Small Business Customers in relation to the provision of Public Electronic Communications Services.

Code on the provision by Service Providers of consumer protection information for the provision of Services⁸⁰

14.8 Within two months of this Condition entering into force, all Service Providers shall:

(a) comply with the requirements set out in the Code at Annex 4.

14.9 In this Condition⁸¹:

⁷⁸ Protecting citizens and consumers from mis-selling of fixed-line telecommunications services, Notification, 13 April 2005.

⁷⁹ Protecting consumers from mis-selling of telecommunications services, Notification, 22 May 2007 – deleting text in 14.5 and adding text in 14.6.

⁸⁰ Regulation of VoIP Services, Notification, 29 March 2007, obligations in Annex 4 in force from 29 May 2007.

⁸¹ Protecting citizens and consumers from mis-selling of fixed-line telecommunications services, Notification, 13 April 2005 – applies to insertion of definitions (a), (d), (h), (j), (m) – (p), and (s) – (v), Providing citizens and consumers with improved information about Number Translation Services and Premium Rate Services, Statement and notification, 19 April 2006 - applies to insertion of definitions (i), (k) and (l), Regulation of VoIP Services, Notification, 29 March 2007 - applies to insertion of definitions (q) and (r), Protecting consumers from mis-selling of telecommunications services,

- (a) **“Cable Network”** means a hybrid fibre-coax Electronic Communications Network that uses a combination of optical fibres and coaxial cable;
- (b) **“Communications Provider”** means a person who provides Public Electronic Communication Services to Domestic and Small Business Customers;
- (c) **“Code of Practice for Complaints”** means a code of practice approved from time to time by the Director for the purpose of this Condition in accordance with sections 52 and 53 of the Act;
- (d) **“Code of Practice for Sales and Marketing”** means a Code of Practice established in accordance with Condition 14.5(a);
- (e) **“Dispute Resolution Body”** means the body of persons responsible for administering a relevant Dispute Resolution Scheme;
- (f) **“Dispute Resolution Scheme”** means procedures approved or established from time to time by the Director for the purpose of this Condition in accordance with sections 52, 54 or 55 of the Act;
- (g) **“Domestic and Small Business Customer”** means, in relation to a Communications Provider, a Customer of that Provider who is neither-
- (i) himself a Communications Provider; nor
 - (ii) a person who is such a Customer in respect of an undertaking carried on by him for which more than ten individuals work (whether as employees or volunteers or otherwise);
- (h) **“Fixed-line Telecommunications Services”** means Narrowband call and/or line rental services provided to Domestic and Small Business Customers;
- (i) **“Guidelines”** mean the guidelines as set out in either Annex 1, 2 or 3 to this Condition;
- (j) **“Narrowband”** means services provided over a traditional Public Telephone Network, excluding services provided over a Cable Network;
- (k) **“Mobile Number”** means a Telephone Number, from a range of numbers in the National Telephone Numbering Plan, that is Adopted or otherwise used to identify Apparatus designed or adapted to be capable of being used while in motion;
- (l) **“NTS Calls”** means calls to numbers identified in the National Telephone Numbering Plan as Special Services operating on the 08 number range and including calls to 0500 freephone numbers, but excluding calls to 0844 04 numbers for Surftime internet access services, calls to 0808 99 numbers for flat rate internet access call origination and calls to 0870 numbers;

Notification, 22 May 2007 – applies to insertion of definitions (a) “Cable Network” and (j) “Narrowband”, modification of definition (h) “Fixed-line Telecommunications Services” and deletion of definitions (a) “Carrier Pre-selection”, (j) “Indirect Access”, (o) “Pre-selected Provider”, (p) “Relevant Period”, (s) “Subscriber”, (t) “Wholesale Calls”, (u) “Wholesale Inputs”, (v) “Wholesale Line Rental”.

(m) **“Originating Communications Provider”** means a Communications Provider on whose network a call originates;

(n) **“Personal Number”** means a Telephone Number, from a range of numbers in the National Telephone Numbering Plan, assigned by a Personal Numbering Service Provider, which allows a Subscriber to receive calls or other communications at almost any Telephone Number, including a Mobile Number;

(o) **“Personal Numbering Service”** means a service based on number translation that enables End-Users to be called or otherwise contacted, using a single Personal Number, and to receive those calls or other communications at almost any Telephone Number, including Mobile Numbers;

(p) **“Personal Numbering Service Provider”** means a provider of Personal Numbering Services;

(q) **“Publicly Available Telephone Services”** means a service available to the public for originating and receiving national and international calls and access to Emergency Organisations through a number or numbers in a national or international telephone numbering plan, and in addition may, where relevant, include one or more of the following services: the provision of operator assistance services, Directory Enquiry Facilities, Directories, provision of Public Pay Telephones, provision of service under special terms, provision of specific facilities for End-Users with disabilities or with special social needs and/or the provision of non-geographic services;

(r) **“Public Telephone Network”** means an Electronic Communications Network which is used to provide Publicly Available Telephone Services; it supports the transfer between Network Termination Points of speech communications, and also other forms of communication, such as facsimile and data; (o) **“Service”** means a Public Electronic Communication Service, but only to the extent it comprises the conveyance of speech, music or sounds;

(s) **“Service Provider”** means a provider of a Service;

Annex 2 to General Condition 14

[Draft] guidelines for codes of practice for the publication of prices of calls to Number Translation Services, and Personal Numbers

1. Introduction and overview

- 1.1 The key objective of these Guidelines is to ensure that Originating Communications Providers provide their Domestic and Small Business Customers with readily accessible and accurate information relating to the usage charges for NTS Calls and calls to Personal Numbers on their networks.
- 1.2 These Guidelines seek to ensure that there is a clear framework within which Originating Communications Providers should be operating in relation to the publication and provision of information to Domestic and Small Business Customers about usage charges for NTS Calls and calls to Personal Numbers
- 2.1 All Originating Communications Providers who provide NTS Calls and calls to Personal Numbers are required under General Condition 14.2 to establish a Code of Practice for NTS Calls for their domestic and small business customers (the “Code”), which conforms with these Guidelines and to comply with the provisions of the Code.

2. Status of code

- 2.2 Compliance with the Code does not guarantee compliance with any legal requirement.
- 2.3 Non-compliance with the Code does not affect the validity of any contract between the company and the consumer, unless otherwise provided by law.

3. Customer information and advice

- 3.1 The Originating Communications Provider that is responsible for the retail billing of NTS Calls and for calls to Personal Numbers to the end-user shall publish the usage charges required to be published under General Condition 10.2(d)(ii) for NTS Calls and calls to Personal Numbers on its website and in published price lists in a way that gives those charges the same prominence in terms of location and format given to charges for geographic calls, calls to mobiles and call packages, including bundles.
- 3.2 Without prejudice to the generality of paragraph 3.1, Originating Communications Providers to give prominence to the following, in particular:
 - (i) any usage charges that apply for calls to freephone numbers including details of when those charges will apply;
 - (ii) usage charges for NTS Calls which include variations by time of day. For example, “08xx calls are charged at x pence per minute or per call during weekday evenings inclusive of value added tax”;

(iii) usage charges for calls to Personal Numbers which include variations by time of day. For example, "070 calls are charged at x pence per minute or per call during weekday evenings inclusive of value added tax";

(iv) whether or not any special offers, discount schemes or call bundling arrangements apply to NTS Calls and calls to Personal Numbers, including details of which arrangements apply to which numbers; and additionally

4. Customer information and advice: advertising, promotional material and new customers

4.1 Originating Communications Providers shall publish in their advertising and promotional material which refer to call pricing, alongside maximum prices applying to NTS Calls and calls to Personal Numbers, a clear reference as to where on websites and published price lists the complete set of NTS Call charges, as specified in paragraph 3.2, can be found.

4.2 When a new customer signs up for the provider's service, Originating Communications Providers shall provide, alongside maximum prices applying to NTS Calls and calls to Personal Numbers in the relevant correspondence, a clear reference as to where on websites and published price lists the complete set of NTS Call and Personal Number call charges, as specified in paragraph 3.2, can be found.

4.3 Wherever an Originating Communications Provider states a price for a call package or bundle which includes geographic calls the Originating Communications Provider must include a prominent statement indicating whether or not this price includes NTS Calls and calls to Personal Numbers.

5. Processes and Procedures

5.1 Procedures should be in place for Originating Communications Providers' enquiry and helpdesk staff to know of the existence and content of the Code in order for them to be able respond to complaints and enquiries about NTS Calls and calls to Personal Numbers and to monitor their compliance with the Code.

5.2 There should be fully documented procedures in place to make customers and advice agencies aware of the existence and content of the Code, for example by referring to the Code in sales and marketing literature and by making the Code available through Originating Communications Providers' websites.

5.3 The Code shall be drafted in plain English, which is easy to understand, and copies of the Code are to be provided on request, and free of charge, to customers.

5.4 The Code shall include the name and contact details (including e-mail address) of the Originating Communications Provider's representative who is responsible.

6. Terms used in these Guidelines

6.1 Terms used in these Guidelines shall have the same meaning, if any, as set out in Condition 14.

Annex 9

Notification of a proposed modification under section 48(2) of the Act to General Condition 17

Proposal for modification of General Condition 17 on Allocation, Adoption and Use of Telephone Numbers which is set out in the schedule to the notification under section 48(1) of the Communications Act 2003 published by the Director General of Telecommunications on 22 July 2003

1. Ofcom in accordance with section 48(2) of the Act hereby makes the following proposal for the modification of General Condition 17 on Allocation, Adoption and Use of telephone numbers;
2. The proposed modification is set out in the schedule to this notification;
3. The reasons for making the proposal and the effect of the proposed modifications are set out at Sections 3 and 4 and Annex 5 of the accompanying consultation document;
4. Ofcom considers that the proposed modification complies with the requirements of sections 45 to 50 of the Act and specifically section 48(2) of the Act, as appropriate and relevant to each of the proposals;
5. In making the proposal set out in this notification, Ofcom has considered and acted in accordance with its general duties in section 3 of the Act and the six Community requirements in section 4 of the Act;
6. Representations may be made to Ofcom about the proposals set out in this notification and the accompanying schedule by 5pm on 7 January 2008;
7. Copies of this notification and the accompanying schedule have been sent to the Secretary of State in accordance with section 50(1)(a) of the Act.
8. In this notification:
 - (i) "the Act" means the Communications Act 2003; and
 - (ii) "Ofcom" means the Office of Communications;
9. Except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them in this notification and otherwise any word or expression shall have the same meaning as it has in the Act.
10. For the purpose of interpreting this notification:
 - (i) headings and titles shall be disregarded; and
 - (ii) the Interpretation Act 1978 shall apply as if this notification were an Act of Parliament.
11. The schedule to this notification shall form part of this notification.

Signed by

A handwritten signature in black ink, appearing to be 'D. Stewart'.

David Stewart

A person authorised by Ofcom under paragraph 18 of the schedule to the Office of Communications Act 2002

8 October 2008

Schedule

Modification of General Condition 17: Allocation, Adoption and Use of Telephone Numbers which is set out in the schedule to the notification under section 48(1) of the Communications Act 2003 published by the Director General of Telecommunications on 22 July 2003

General Condition 17 shall be modified as set out below:

A. The following wording is to replace the current condition 17.12:

“Requirements in connection with the use of telephone numbers

17.12 Where Customers of a Communications Provider are making calls to UK-wide Numbers (03) ~~or Personal Numbering Service (070) numbers~~, the Communications Provider shall comply with the designations for those numbers in the National Telephone Numbering Plan.”

Annex 10

Notification of a proposed modification under section 60(3) of the Act to the National Telephone Numbering Plan

Proposal for the modification to Appendix A of the Numbering Plan which is set out in the schedule to the notification under section 56(2) of the Communications Act 2003 published by the Director General of Telecommunications on 22 July 2003

1. Ofcom, in accordance with section 60 of the Act, hereby makes the following proposal for a modification to the provisions of the Numbering Plan.
2. The Condition has effect by reference to provisions of the Numbering Plan.
3. The proposed modification is set out in the schedule to this notification.
4. The reasons for making the proposal and the effect of the proposed modification are set out in Section [] and Annex [] of the accompanying consultation document.
5. Ofcom considers that the proposed modification referred to in paragraph 1 above complies with the requirements in sections 56 to 63 of the Act and specifically section 60(2) of the Act.
6. In making the proposal set out in this notification, Ofcom has considered and acted in accordance with its general duties in section 3 of the Act, the six Community requirements in section 4 of the Act and its duty as to telephone numbering in section 63 of the Act.
7. Representations may be made to Ofcom about the proposal set out in this notification and the accompanying consultation document by 5pm on 7 January 2009.
8. Copies of this notification and the accompanying consultation document have been made available to the Secretary of State.
9. In this notification-
 - (i) "the Act" means the Communications Act 2003;
 - (ii) "Condition" means General Condition 17 of the General Conditions of Entitlement set by the Director by way of publication of a notification on 22 July 2003;
 - (iii) "Ofcom" means the Office of Communications; and
 - (iv) "the Numbering Plan" means the National Telephone Numbering Plan published from time to time by Ofcom.
10. Except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them in this notification and otherwise any word or expression shall have the same meaning as it has in the Act.

11. For the purpose of interpreting this notification:
 - (i) headings and titles shall be disregarded; and
 - (ii) the Interpretation Act 1978 shall apply as if this notification were an Act of Parliament.
12. The schedule to this notification shall form part of this notification.

Signed by:



David Stewart

A person authorised by Ofcom under paragraph 18 of the schedule to the Office of Communications Act 2002

8 October 2008

Schedule

1. The following amendment shall be made to the Definitions and Interpretation in section 1 of the Numbering Plan as follows:

'Personal Number' means a Telephone Number, from a range of numbers in Part A of this document, assigned by a Personal Numbering Service Provider, which allows a Subscriber to receive calls or other communications at almost any Telephone Number, including a Mobile Number, that is charged to the Customer at up to the rates set out in Part A, except where a free to caller pre call announcement is provided at the start of the call;

2. The following amendment shall be made to the row in Table A1 in Appendix A of the Numbering Plan as follows:

Number(s) beginning	Designation
070	Personal Numbering Service; from 1 September 2007, calls to these numbers that are charged in excess of either 20p per minute or a fixed fee of 20p per call, inclusive (in either case) of value added tax, must be notified to callers at the start of the call before any call charges start to apply, by means of a free to caller pre call announcement which at least states the maximum charge that could be incurred for a call to a personal number by a Customer of the Originating Communications Provider