

Numbering arrangements for new voice services

Statement

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Section 1

Summary

1.1 Traditional telephony has existed for over a century and although liberalisation has changed the telecoms sector beyond all recognition over the past twenty years, substantial change is predicted again before the end of the decade. This change is partly driven by the development of voice services delivered using Voice over Internet Protocol (VoIP) technology. These new voice services have the potential to deliver significant choice and benefits to consumers and therefore Ofcom (the Office of Communications) considers it important to develop a regulatory framework that will support their development.

1.2 This statement sets out Ofcom's decision in relation to numbering arrangements for new voice services¹. It is published as part of Ofcom's package of documents intended to provide consumers, Communications Providers and other stakeholders more clarity on a number of important and strategic issues involving new voice services. Together with this statement on numbering arrangements, Ofcom has simultaneously published a consultation and interim guidance on new voice services, a summary document setting out the consumer issues covered in the consultation and an overarching strategic statement on the regulatory framework for VoIP and Voice over Broadband (VoB) services.

1.3 This statement follows on from Ofcom's consultation *Numbering arrangements for Voice over Broadband services* published on 24 February 2004 ('the February 2004 Consultation'). That document sought stakeholders' views on Ofcom's proposal that 056 numbers be determined as available for allocation for Voice over Broadband (VoB) services and also sought views on whether, in addition, geographic numbers should be made available for VoB services. The February 2004 Consultation also contained a statutory consultation on consequent changes to the National Telephone Numbering Plan ('the Plan') in relation to 056 numbers and a draft Direction specifying an application form for 056 numbers. All these elements of the February 2004 Consultation are brought to a conclusion in this statement.

1.4 Ofcom received 51 submissions during the consultation period and has considered these responses in coming to the conclusions set out in this statement. Ofcom has decided that 056 numbers should be determined as available for Location Independent Electronic Communications Services. Therefore, Ofcom has decided that the Modification to the Plan in relation to 056 numbers and the Direction to use an 056 application form as set out in the February 2004 Consultation should be implemented with certain changes made in light of comments received during the consultation period. Ofcom has also come to the conclusion that allocation of geographic numbers is appropriate for new voice services (Option 1 in the consultation).

1.5 Section 2 of this document provides an introduction and background to the decisions set out in this statement. Section 3 summarises the responses received by Ofcom during the consultation period and Ofcom's comments on those responses. Section 4 contains an analysis of the policy options, whilst Section 5 presents Ofcom's conclusions in light of this analysis and the comments received. The Annexes to this document list the respondents to the consultation, set out the final Modification to the Plan in relation to 056 numbers and the final 056 application form Direction. They also explain the legal framework and confirm that the necessary legal tests to make these modifications have been satisfied. There is also a glossary of terms used in this document.

¹ The services referred to in this statement as 'new voice services' are generally the same as the services referred to in the February 2004 Consultation as 'Voice over Broadband' or 'VoB' services.

Section 2

Introduction and background

Introduction

2.1 The Office of Communications ('Ofcom') exists to further the interests of citizen-consumers as communications industries enter the digital age. This includes balancing promotion of choice and competition with the duty to ensure consumers are adequately informed and protected. Ofcom partly achieves this by supporting innovation and encouraging the evolution of Electronic Communications Networks (ECNs) and Electronic Communications Services (ECSs). As technology develops, services evolve. New types of voice services are developing which can, for example, deliver calls using the internet rather than the public telephone network. It is Ofcom's objective to foster a regulatory environment which can support such innovation – this includes ensuring that suitable and sufficient numbering resource is available so that Communications Providers can launch their services.

Scope

2.2 This statement sets out Ofcom's decision in relation to numbering arrangements for new voice services². This is that 056 numbers should be determined as available for 'Location Independent Electronic Communications Services' (Location Independent ECS) and, in addition, that it is appropriate to allocate geographic numbers for publicly available new voice services. In order to make 056 numbers available, certain changes to the National Telephone Numbering Plan ('the Plan') are required and Ofcom must direct the use of a telephone number application form for 056 numbers ('the 056 application form'). This document contains the necessary Modification to the Plan (see Annex 2) and the Direction to specify the 056 application form (see Annex 3) to be used to apply for 056 numbers.

2.3 New voice services raise a range of regulatory issues, one of which – telephone numbering – is the focus of this statement. Other important regulatory and consumer issues are considered in Ofcom's *New voice services - a consultation and interim guidance* ('the September 2004 Consultation and Interim Guidance'), also published on 6 September. This statement, the September 2004 Consultation and Interim Guidance, a summary document of the consumer issues in the consultation and an overarching strategic statement on the regulatory framework for VoIP and Voice over Broadband (VoB) services form a package of documents intended to provide consumers, Communications Providers and other stakeholders more clarity and, in the case of the consultation, an opportunity for debate on a number of important and strategic issues involving new voice services.

Background: the consultation on numbering arrangements for Voice over Broadband services

2.4 Ofcom's consultation document *Numbering arrangements for Voice over Broadband services* ('the February 2004 Consultation') was published on 24 February 2004. That document is available on the Ofcom web site at: <http://www.ofcom.org.uk/consultations/past/vob/?a=87101>³

2.5 The purpose of the February 2004 Consultation was to determine the appropriate numbering resource for VoB services – a form of new voice service. These are services that allow consumers to make and receive calls over a broadband access connection. In the February 2004 Consultation, Ofcom proposed that numbers in the 056 range be made available for VoB services. It considered that non-geographic numbers were suitable and should be available to meet the demands of Communications Providers requiring numbers to launch VoB services. None of the existing non-geographic ranges were considered to adequately meet the requirements, although Ofcom felt it

² The services referred to in this statement as 'new voice services' are generally the same as the services referred to in the February 2004 consultation as 'Voice over Broadband' or 'VoB' services.

³ Web links supplied in this document are accurate at time of publication but are subject to change.

likely that VoB services would share a number of characteristics with services developed on existing number ranges. Ofcom believed it would be appropriate to use numbers from the 05X range, which would provide sufficient spare capacity for future expansion if required. In order to make 056 numbers available for allocation for VoB services, and to confine the Corporate Number service to the 055 range rather than the entire 05 range, it was necessary to modify the Plan. A Direction to specify an 056 application form was also required.

2.6 In addition, Ofcom also consulted on whether geographic numbers were suitable for VoB services, independent of the fact that Ofcom was proposing that 056 numbers be made available. Ofcom was initially unsure of the appropriateness of geographic numbers for several reasons, including potential service features such as mobility, concerns over protection for consumers using VoB services that might not provide the same level of service as traditional telephony and the implications for number conservation. Ofcom identified a series of options, ranging from a) allocation of geographic numbers for all types of VoB services; b) restricted allocation dependent on type of service/amount of spare numbers in a Geographic Area Code; to c) prohibiting allocation for any VoB services.

2.7 The deadlines for responses to the consultations were 24 March 2004 for the 056 element and 4 May 2004 for the geographic element. A summary of responses and Ofcom's comments on those responses forms Section 3 of this statement.

Links to other Ofcom work

The package of documents on new voice services

2.8 As mentioned in paragraph 2.3, this statement is closely linked to other regulatory work on new voice services, which is covered in a package of documents published simultaneously. Ofcom welcomes the emergence of innovative voice services, such as VoB, as new forms of market entry which have the potential to provide additional competition in UK communications. One of Ofcom's key objectives is to create a regulatory environment that can foster the successful deployment of new technologies, which in turn allow consumers to benefit from a wide range of services. This is a major aim of Ofcom's work on new voice services, which is carried forward in the package of documents.

The September 2004 Consultation and Interim Guidance

2.9 The September 2004 Consultation and Interim Guidance recognises that some new voice services have the potential to 'look and feel' like traditional voice services but might not offer the same standard of features that consumers generally expect to receive. Such services offer benefits in terms of increased opportunities for competition and reduced costs, but also challenges, in terms of potentially lower levels of consumer protection. The September 2004 Consultation and Interim Guidance examines how a balance can be struck between creating the right conditions for new voice services and new providers to enter the market whilst enabling consumers to make informed choices and benefit from the services.

2.10 The September 2004 Consultation and Interim Guidance proposes initiatives in three important areas, namely:

- an interim policy, pending further clarification from the European Commission⁴, to forbear from enforcing Publicly Available Telephone Service (PATS) obligations against new services, such as VoB services, that offer access to 999/112 (see paragraphs 2.25 – 2.27 for further explanation of PATS);

⁴ The European Commission published its information and consultation document *The treatment of Voice over Internet Protocol (VoIP) under the EU Regulatory Framework* on 15 June 2004. http://europa.eu.int/information_society/topics/ecom/doc/useful_information/library/commiss_serv_doc/406_14_voip_consult_paper_v2_1.pdf. The consultation ended on 31 August 2004. The Commission has indicated that it will provide further clarity on this issue later in 2004.

- a proposal to withdraw existing guidelines relating to network integrity and to consult on how network integrity and emergency call location can relate to new voice services; and
- a consultation on the appropriate framework for a consumer information policy. Ofcom's initial preference is for a co-regulatory approach.

2.11 It should be noted that although the February 2004 Consultation touched on issues beyond numbering, such as consumer protection and the definition of PATS, it is the September 2004 Consultation and Interim Guidance that will be taking these issues forward.

2.12 The September 2004 Consultation and Interim Guidance is available on the 'New voice services' section of the Ofcom website, as is the strategic statement *New voice services - a regulatory framework for VoIP and VoB services* and the consumer summary *New voice services – a consultation on consumer issues. A summary*. Comments are invited on the September 2004 Consultation and Interim Guidance by 15 November 2004.

The Strategic Review of Telecommunications

2.13 Ofcom published its consultation on Phase 1 of the Strategic Review of Telecommunications ('the Strategic Review') on 28 April 2004. This began the first wide-ranging analysis of the telecommunications sector since the 1991 Duopoly Review. It will enable Ofcom to set out a strategic direction for its activities in relation to regulation of telecommunications and form a new settlement between Ofcom, those it regulates and the citizen-consumer. As well as taking stock of the telecommunications sector today, the Strategic Review will examine the evolution of the telecommunications sector and, in particular, the potential impact of Broadband and Internet Protocol (IP). Due to the far reaching nature of the review, a final statement is not expected to be published until early 2005. In the meantime, Ofcom is conscious that consumers and service providers need clarity on certain issues, including numbering, as they relate to new voice services and these are addressed, where possible, in the package of documents published on 6 September 2004. It should, however, be stressed that the current work on regulation of new voice services is being undertaken in line with the overall objectives of the Strategic Review and that the interdependencies are carefully monitored to ensure consistency in approach and outcome.

Terminology and service descriptions

Voice over internet technology

2.14 Various terms are used to describe voice over internet technology and services. Ofcom's understanding of commonly used terms is:

- Voice over Internet Protocol (VoIP) is the generic name for the transport of voice traffic using IP technology. VoIP traffic can be carried on a private managed network or the public internet or a combination of both. A wide range of applications and services could use VoIP technology, from traditional telephone services to interactive games;
- Internet telephony (also referred to as Voice over the Internet) is a specific type of VoIP service that uses the public internet to carry the IP traffic; and
- Voice over Broadband (VoB) refers to VoIP services that allow consumers to make and receive calls over a broadband access connection - for example, Digital Subscriber Line (DSL) or cable.

New voice services

2.15 The development of IP technologies means that services are becoming more sophisticated. New types of voice services are being developed that use the internet rather than the public

telephone network to deliver calls. There is a broad spectrum of new voice services, ranging from peer-to-peer to primary line substitutes.

2.16 New voice services may, but not necessarily, have different characteristics from traditional voice services. Ofcom has outlined its initial understanding of possible characteristics below:

- location and network independence: some new voice services can be used over any broadband internet connection. There are two key implications of this. Firstly, the service can, in principle, be provided independently of both the Internet Service Provider (ISP) and the underlying access operator, and potentially without their knowledge. Secondly, users can potentially employ the service at any location in the world which has internet access – such services are sometimes termed ‘nomadic’.
- reliability: some new voice services rely on a standard broadband internet connection for their connectivity to the end user. For some such services, reliability may therefore be dependent on the reliability of the user’s broadband internet connection. Depending on the user’s ISP and the underlying broadband access provider, this connection might not be as reliable as a traditional telephone service.
- new features: the use of new technology is likely to make it much easier for providers of new voice services to offer innovative features than for providers of traditional voice services. For example, compared to upgrading a traditional telephone switch, new VoIP applications can be quickly developed and deployed. New features could include integrated messaging, conferencing, video and personalised call handling.
- lower costs: new voice services could incur lower costs than traditional telephone services due to the use of VoIP technology. Costs might also be saved because a single network could be used for voice and data services, rather than running two separate networks.

Voice over Broadband services

2.17 Many providers are starting to offer a range of VoB services; these services are real world examples of what new voice services can offer. In the February 2004 Consultation, Ofcom focused on a set of services that it termed ‘Voice over Broadband’ or ‘VoB’. These are emerging services that allow the end user to make and receive calls using a broadband connection, for example, using DSL or cable broadband links. Although some new voice services can be used over a narrowband dial-up connection, in practice the ‘always on’ connection and higher bandwidth offered by broadband access makes VoB a more compelling service. Access to VoB services is commonly through a broadband telephone adapter, which allows the use of an ordinary telephone handset with the existing broadband internet connection. Current residential VoB services include Personal Computer (PC) to telephone services, PC to PC services and telephone to telephone services. However, this is not an exhaustive list of possibilities; in a rapidly developing and diverse market, these are offered as examples of the types of new voice service that are currently available. Different combinations and completely new services may emerge in the future.

2.18 Ofcom has paid due regard to the comments received during the February 2004 Consultation and the concern expressed regarding both the use of the term ‘Voice over Broadband’ to describe the services that were the subject of that consultation and the description of such services. It has re-examined the use of the term as a general service description and further detail of Ofcom’s thinking on this issue is provided in its comments on Question 7 of the February 2004 Consultation (see paragraphs 3.23 and 3.24).

2.19 Ofcom has chosen to refer to the services in question as ‘new voice services’ in general and to services to be offered on 056 as ‘Location Independent Electronic Communications Services’ in particular. This represents a change of terminology but not of the principles consulted on in the February 2004 Consultation. As it is a change made in response to widely held and strongly

communicated views in the consultation responses, Ofcom's opinion is that further statutory consultation is not required in order to implement the proposed Modification to the Plan in relation to 056 numbers and to specify the 056 application form.

Location Independent Electronic Communications Services

2.20 Location Independent ECS are a form of new voice service. These are defined as being services where:

- (i) the Numbering Plan of the Communications Provider offering the service has no geographic significance;
- (ii) the location of the Customer's Apparatus identified by a given Telephone Number at the time of use is not necessarily permanently associated with a particular Network Termination Point;
- (iii) number translation to a Geographic Number is not involved; and
- (iv) the service is not a Mobile Service.

2.21 The types of service that the definition covers are services which:

- (i) are not necessarily associated with or specific to a geographic location;
- (ii) may, but not necessarily, be nomadic;
- (iii) are not Number Translation Services (NTS); and
- (iv) are not Mobile Services (which will continue to use 077 - 079 mobile numbers).

2.22 Communications Providers should note that the sharing of revenue obtained from the provision of a service on an 056 number with an end user is not permitted. This is enforced through a specific restriction on the use of 056 numbers in part B of the Plan (see the Modification to the Plan at Annex 2).

Legal framework

2.23 The legal framework for Ofcom's involvement in determining the appropriate numbering resource for new voice services was set out in Section 2 of the February 2004 Consultation and is provided for reference at Annex 4 of this document.

2.24 This statement sets out Ofcom's decision in relation to the Modification to the Plan with respect to 056 numbers and Ofcom's Direction to use an 056 application form as proposed in the February 2004 Consultation. Annex 4 of this statement describes the required legal tests for making such changes and how these legal tests are satisfied in this particular case.

Publicly Available Telephone Services (PATS)

2.25 The February 2004 Consultation referred to PATS as a possible criterion for deciding whether geographic numbers were appropriate for VoB services. There are four core elements of PATS namely (i) a service available to the public; (ii) the origination and receiving of national and international calls; (iii) access to Emergency Services; and (iv) service provided through a number or numbers in a national or international telephone numbering plan. Where providers are offering PATS, the General Conditions of Entitlement provide that a service provider must comply with a number of additional conditions. These obligations include a requirement to take all reasonable steps to maintain uninterrupted access to Emergency Organisations as part of any PATS offered at fixed locations (General Condition 3) and a requirement to ensure that any end user can access Emergency Organisations by using the numbers 112 and 999 at no charge (General Condition 4). There are also rights associated with the provision of PATS, including the right to port numbers from other undertakings providing PATS.

2.26 The February 2004 Consultation explained that some emerging services would meet the PATS definition whilst others would be non-PATS. The consultation referred to services as being PATS or non-PATS as a convenient means of describing whether a service displayed all the features of PATS (as described in the preceding paragraph) and met the regulatory obligations relevant to

PATS (e.g. the General Conditions relevant to PATS providers as listed in Annex B of the February 2004 Consultation). The February 2004 Consultation, and also this statement, have referred to the PATS definition and to services that display the features of PATS. This is due to the PATS/non-PATS distinction being relevant to some of the debate in the February 2004 Consultation and also because it is relevant to some issues discussed in this statement, for example subscribers' right to number portability.

2.27 As mentioned in paragraph 2.3, this statement is one in the set of co-ordinated documents on new voice services published simultaneously by Ofcom. The September 2004 Consultation and Interim Guidance takes the PATS debate forward, explains the difficulty with a strict interpretation of the PATS definition in relation to new voice services, provides guidance on Ofcom's interim position and seeks stakeholders' further views on these issues. Stakeholders are encouraged, therefore, to consider the complete set of documents when considering regulatory issues involving new voice services.

Section 3

Summary of responses to the consultation and Ofcom's comments

Introduction

3.1 The February 2004 Consultation consisted of three separate but related elements with respect to numbering arrangements for new voice services:

- 1) it consulted on Ofcom's proposal that 056 numbers be determined as available for allocation for VoB services;
- 2) in addition, it consulted on the appropriateness of allocating geographic numbers for VoB services; and
- 3) the document also contained a consultation on a draft Notification on modifications to the Plan in relation to 056 numbers and on a draft Direction proposing a telephone numbering application form for 056 numbers.

3.2 There were two timetables for responses. The consultation on the proposed Modification to the Plan in relation to 056 numbers and the 056 application form ran for the statutory one month consultation period and concluded on 24 March 2004. The consultation on the appropriateness of geographic numbering for VoB services lasted for the standard ten week consultation period and concluded on 4 May 2004.

3.3 The February 2004 Consultation posed 15 specific consultation questions. General comments were also invited. During the consultation period, Ofcom received 51 responses from 37 respondents, of which five responses from three respondents were confidential. (As indicated by these figures, some respondents provided separate responses to the two consultations.) The 46 non-confidential responses are available on Ofcom's web site at:

<http://www.ofcom.org.uk/consultations/past/vob/?a=87101>

A list of non-confidential respondents is provided at Annex 1.

3.4 In this Section, Ofcom summarises the responses received to the consultation questions and comments on those responses. Other general comments have also been summarised together with Ofcom's responses. Ofcom values the consultation process and is committed to an open-minded review of respondents' comments. All submissions were taken into account in the formulation of the decision on numbering arrangements for new voice services. An analysis of how Ofcom reached its decision forms Section 4 of this document.

Responses to the 15 specific consultation questions

Question 1: Ofcom believes that non-geographic numbers would be suitable for VoB services. Do you agree?

3.5 The majority of respondents agreed that non-geographic numbers were suitable for *some* VoB services. However, most comments stressed that whilst non-geographic numbers may be suitable for some services it did not necessarily follow that geographic numbers were unsuitable. Indeed, many made the point that VoB services were unlikely to be homogenous and, therefore, more than one type of numbering was likely to be the most suitable solution – that would depend on the particular service. Various respondents felt that non-geographic numbers rather than geographic numbers would be suitable for VoB services with certain features such as those with an element of mobility and for services without the characteristics of PATS.

3.6 Ofcom agrees that the suitability of a number range for a service depends on the characteristics of that particular service. For instance, non-geographic numbers are suitable for services that have no geographic significance. However, Ofcom agrees that a similar voice service may be offered where the user requires geographic significance and for such services geographic numbers are suitable. Ofcom's conclusion is that non-geographic numbers are suitable for new voice services but that they are not the only suitable option.

Question 2: Ofcom's provisional view is that none of the non-geographic number ranges currently determined for allocation fully meet the requirements of VoB services. Do you agree?

3.7 In the main, respondents did not entirely agree with Ofcom's provisional view although most did not disagree. It was commonly felt that some existing non-geographic ranges would be suitable and some felt that these should be used where the service met the characteristics of the existing number range. In particular 070 Personal Numbers were considered to share characteristics with the emerging new voice services. It was also felt that Special Service 08 and 09 numbers would be as suitable for contact and information services provided over IP as they are for such services offered on the Public Switched Telephone Network (PSTN).

3.8 A few respondents disagreed with Ofcom's provisional view. Some argued that the 055 range, reserved for Corporate Numbers, should be re-designated to meet the requirement of new voice services and be made available to all classes of end user. It was felt that existing services on the 055 range would also fit the criteria suggested for the 056 range and that demand for Corporate Numbers, as described in the relevant Ofcom consultation⁵, was currently low. A few other respondents believed that existing number ranges could accommodate all the requirements of new voice services and that it was premature and/or unnecessary to designate a further 100 million numbers from the National Numbering Scheme ('the Scheme') for VoB/new voice services.

3.9 However, a number of respondents agreed with Ofcom's provisional view that none of the existing non-geographic number ranges adequately met the requirements of VoB services. These respondents felt that a new number range was required as existing ranges were either too restrictive through tariff or service description or had unfavourable connotations, e.g. the high tariffs often associated with Personal Numbers.

3.10 Ofcom remains of the view that none of the existing non-geographic ranges fully meets the requirements of all new voice services. However, it also agrees with the view commonly expressed that for some services existing number ranges may be suitable. For clarity, Ofcom stresses that whilst it believes a new dedicated number range is required so that retail price and interconnection arrangements conducive to new voice services may evolve, the range is intended to be permissive rather than prohibitive. That is, by making 056 numbers available for 'Location Independent ECS' it is not the intention that other ranges cannot be used for new voice services if appropriate. Indeed, existing number ranges may continue to be more suitable for some services, such as those where end users wish to benefit from a share of the revenue generated by the call. As NTS interconnection arrangements will not apply as a matter of regulation to 056 numbers and revenue sharing with the end user is prohibited, a service proposing to offer a share of the generated revenue from the call with the end user may be more suitably offered on an 08 or 09 number.

3.11 Ofcom considered the suggestion of re-designating the 055 Corporate Number range to accommodate all end users, but decided that whilst it could be argued that existing services in that range would not be affected, future services may display characteristics that would not be the same as the VoB/new voice services to be accommodated on the proposed 056 range. One of the major differences is the intention to allocate Corporate Numbers direct to non-Communications Providers, making it the only existing range whose numbers may be allocated direct to the end user, regardless of whether that end user is a Communications Provider. This is because Corporate Numbers were envisaged in the Ofcom consultation as a new type of service dedicated primarily to businesses with

⁵ *Corporate Numbering: a new option for businesses*, a consultation document issued by the Director General of Telecommunications on 28 March 2003.

private telecoms networks that would be able to negotiate how calls entered their private or virtual private networks. Another difference is that the 055 range may become synonymous with a more resilient, higher quality business orientated service whereas 056 may also accommodate services aimed more towards the residential second line/cheap calls market. Therefore, Ofcom is not of the opinion that the 055 range should be re-designated to accommodate new voice services. In conclusion, Ofcom's view is that none of the existing non-geographic number ranges fully meets the requirements of all new voice services. However, this does not mean that existing number ranges cannot be used for some new voice services provided that the service being operated on that number range is in line with the Plan.

Question 3: Do you agree with Ofcom's proposal to make 056 numbers available as a dedicated non-geographic number range for VoB services and why?

3.12 There was general acceptance of Ofcom's proposal to make 056 numbers available for the services described as 'Voice over Broadband' in the February 2004 Consultation. The main opposition was the proposed designation – this is dealt with under Question 7. Other concerns expressed were whether 100 million numbers would be warranted. In contrast, other respondents felt that 100 million numbers may be insufficient and that Ofcom should consider designating the 06 range. A few respondents were also concerned that international inbound access to new number ranges, such as 056 numbers, was a difficult and protracted process to implement, resulting in calls being undelivered.

3.13 Also of concern was whether the 056 range was the most appropriate part of the Scheme from a consumer perspective. It was felt that its proximity to the 055 Corporate Number range might cause consumer confusion. It was also pointed out that releasing another number range could confuse consumers and that additions to the Plan should be handled as part of Ofcom's overall numbering strategy. A couple of respondents held stronger opinions against the proposal and argued that a dedicated range for new voice services was unnecessary and could result in a waste of the numbering resource. A further respondent argued that a consultation on the suitability of non-geographic numbers for VoB services was irrelevant and premature and that the consultation should have focussed on the consequences of not allocating geographic numbers.

3.14 Ofcom acknowledges that it is difficult to predict the required level of numbering capacity for emerging services. However, it is of the opinion that a number range that differs from existing ranges by at least the first two digits (after the leading '0') is required to differentiate it from other ranges. As Ofcom has decided that geographic numbers may be used for new voice services, it is unclear that a dedicated non-geographic range at the level of 06, i.e. 1,000 million numbers, would ever be required for new voice services. Given the concerns regarding potential demand, Ofcom proposes a staged approach to the opening of the 056 range, commencing with 0560. Therefore, should the demand for 056 numbers be low and remain low, Ofcom would have the opportunity to explore other uses for the unopened 056 levels. However, if the demand for numbers for Location Independent ECS was high, the 057 – 059 ranges would be available for expansion if required. As for international inbound access to 056 numbers, in order to disseminate information on the 056 range, Ofcom will ensure that the International Telecommunications Union is notified and Communications Providers with international interconnection partners are encouraged to make use of their relationship to publicise the 056 range globally.

3.15 In the February 2004 Consultation, Ofcom acknowledged that there were likely to be similarities between the services offered on 055 and 056 numbers, and that for some services there would inevitably be an overlap of eligibility to both number ranges. However, this was not considered to necessarily create difficulties for the industry or confusion for consumers. In time it is anticipated that stakeholders will associate 055 and 056 numbers with the services that are developed for those ranges. For instance, services offered on 055 numbers would be business orientated, whereas services on 056 numbers may have more of a residential focus – however, this should not be a source of confusion for consumers. On the issue of strategy, Ofcom considers all proposed changes to the Plan in light of its overall strategic approach to numbering, as introduced to stakeholders in a

recent news release⁶. Ofcom's conclusion is that it is appropriate to make 056 numbers available as a dedicated non-geographic range for new voice services such as VoB.

Question 4: Ofcom has not proposed a sub-structure for the 056 number range. Do you think one should be imposed and, if so, on what basis and for what advantage?

3.16 The vast majority of respondents supported Ofcom's proposal not to have a sub-structure for the 056 range. However, some felt that 056 numbers should be allocated in a manner that would allow for the instigation of a sub-range at a later date if considered to be of benefit. Suggestions were made for different price points or service categorisation, however, none of these sub-range proposals were strongly held. A couple of respondents argued for two tariffing principles to be applied to the 056 range, such as 0560 upwards for geographic interconnection arrangements and 0569 downwards for NTS arrangements.

3.17 Ofcom continues to believe that the 056 range would not benefit from a sub-range structure at this time but agrees with respondents that it would be sensible not to exclude the possibility in the future. It is Ofcom's strong opinion that revenue sharing be banned with end users on the 056 range, as it is considered both unjustified and undesirable for revenue generated from calls to 056 numbers to be shared with end users, given the existence of other suitable ranges which support revenue sharing through NTS arrangements. Ofcom, therefore, does not support the creation of a pseudo NTS range in 056. Ofcom has decided not to incorporate a sub-structure into the 056 range, but will initially allocate blocks of numbers from the 0560 sub-range which would allow for the setting of a substructure at a later date if required.

Question 5: Ofcom suggests that the 056 range should have a tariff ceiling of no higher than 5 pence-per-minute (ppm). What are your views on setting a tariff ceiling for 056 numbers at this level?

3.18 Whilst many respondents supported the principle of a low tariff ceiling, the general opinion was that it was too early in the development of new voice services to speculate on an appropriate maximum tariff for the 056 range. Some felt that 5ppm was still too high and that 2ppm-3ppm would be more in the interests of the consumer. It was the generally held opinion that competitive pressures would preclude the need for a tariff ceiling. Most importantly the point was made that Ofcom could only control the retail prices of Communications Providers found to have Significant Market Power (SMP) following a market review. Thus any tariff information proposed by Ofcom, for instance in the Scheme, could only function as guidance and would not be enforceable. A couple of respondents thought that it was inappropriate and misleading for Ofcom to suggest in Question 5 that it could set a tariff ceiling.

3.19 Ofcom agrees that it is too early to speculate on what the retail prices are likely to be for 056 numbers, particularly given that interconnection arrangements are not yet settled and are still a matter for industry negotiation. Ofcom is therefore not proposing to include tariff information for 056 numbers in either the Plan or the Scheme at this stage. Ofcom would also like to clarify that it was not suggesting, by using the term 'tariff ceiling', that it could impose a retail price control 'by the back door'. Ofcom recognises that it is not able to do this, in part because of the legal status of the Scheme (a day-to-day record of numbers allocated). Therefore if Ofcom were to include tariff information for the 056 range at a later date, it would ensure that different price points were available so that providers could choose the appropriate tariff for their service.

Question 6: Ofcom suggests that fixed and mobile Communications Providers should consider treating 056 numbers like geographic numbers in terms of retail pricing and inclusion in calling options schemes. Do you agree that this would be a desirable approach?

3.20 On the whole, respondents agreed that this would be a reasonable approach and that treatment of calls to 056 numbers would need to be similar to the treatment given to calls to geographic numbers for the range to be successful, particularly the inclusion in calling options

⁶ http://www.ofcom.org.uk/media_office/latest_news/nr_20040713

schemes. However, Communications Providers stressed that it was too early in the development of new voice services to make any commitments. Interconnection arrangements, which are currently undetermined, would need to be established before Communications Providers could consider the retail treatment of services on 056 numbers. Respondents' opinions on this question varied - it was commented both that Ofcom should ensure 056 numbers were treated appropriately in terms of retail pricing, and that Ofcom should only intervene if considered proportionate and if the potential for consumer harm was identified. A few respondents were sceptical that such a treatment could be enforced and therefore believed that Ofcom's suggestion was misleading and futile.

3.21 Ofcom's view is the same as set out in paragraph 3.19 - that it is too early to speculate on likely retail prices for 056 numbers. However, Ofcom is concerned that consumers should get a good deal and not run up huge bills that they cannot afford to pay by calling such numbers. Ofcom will monitor the situation closely and will consider the use of the powers available to it as appropriate should it become clear that consumers are suffering harm because of the charges for calling 056 numbers.

Question 7: Ofcom proposes to designate the 056 range as 'Voice over Broadband services'. Do you have any comment on this designation, for example, with respect to its reference to technology?

3.22 There was almost universal criticism for Ofcom's suggested designation of 'Voice over Broadband' for the 056 range. It was argued that one of the Community requirements of section 4 of the Communications Act 2003 ('the Act') was that regulation should be independent of the technology used. The designation was considered too restrictive with regard to technology (i.e. referring to broadband when it should be technology neutral) and with regard to service (i.e. referring to voice when services were likely to encompass data, video, instant messaging etc.). The designation could also unintentionally capture Mobile Services. It was also commented that a designation of VoB would become increasingly meaningless as more services were supported by VoIP. Ofcom was urged to reconsider the designation and focus on the characteristics of the service rather than the technology.

3.23 Ofcom acknowledged in the February 2004 Consultation that its proposed designation for 056 numbers was problematic. Ofcom reasoned, in that document, that it could be considered that due to the technology used for delivery of the calls, the characteristics of the VoB service would differ from those of traditional services delivered over the PSTN, arguably resulting in a different service. Ofcom also suggested that possibly the best way to ensure that Communications Providers requesting numbering resource, and consumers using the service, clearly understand some of the probable differences between traditional and new voice services was to be explicit in the designation about the technology used.

3.24 Ofcom has given due regard to the comments on its proposed designation for 056 numbers and has decided against the original proposal of VoB. Instead, Ofcom has decided to designate 056 numbers as 'Location Independent Electronic Communications Services'. Ofcom considers that it has acted in accordance with the responses to the consultation and selected a designation that:

- is not technology specific or overly service specific;
- would not unduly restrict the type of service that may be eligible to use 056 numbers at this early stage in the market's development;
- would encompass the essence of distinctive and possibly nomadic services; and
- makes clear in its definition that it is not an NTS or a Mobile Service (see paragraphs 2.20 and 5.2).

Question 8: Ofcom proposes to modify the Plan so that 056 numbers are available for allocation for VoB services and 055 numbers are available for allocation for Corporate Number services? Do you have any specific comment on the proposals to modify the Plan in this manner?

3.25 Respondents generally agreed with Ofcom's proposed Modification to the Plan to make 056 numbers available, provided that the designation was changed from 'Voice over Broadband' to one that was technology neutral. Respondents requested clarity regarding the position of Corporate

Number services and some respondents argued again for a re-designation of the 055 range to cover new voice services.

3.26 Ofcom has responded to the suggestion of re-designating the 055 range in its response to Question 2. Ofcom plans to provide clarity on Corporate Number services with the publication of a statement and statutory consultation on any necessary Modification to the Plan in respect of 055 numbers and Direction to use an 055 telephone number application form later this year. The February 2004 Consultation only touched on the issue of Corporate Numbers in its explanation of why it believed the 05 range was the most suitable range for numbering for VoB services. Modifications to the Plan in relation to Corporate Numbers were only proposed in order to restrict it to the 055 rather than the entire 05 range.

Question 9: Communications Providers have put forward arguments (involving consumer perception and ease of competing with existing services) in support of allocation of geographic numbers for VoB services and Ofcom has provided its thoughts in response. What are your views?

3.27 Question 9 was seen by respondents as the fundamental question of the February 2004 Consultation. The majority agreed with the arguments put forward by Communications Providers in support of the allocation of geographic numbers for VoB services. It was argued that geographic numbers are the most well known and understood numbering brand and that their use was essential for the success of services where a geographic identity was required. Providers planning to launch VoB services argued that access to geographic numbers was fundamental to their plans otherwise consumers would be confused and deterred from using their service. The underlying technology was not considered to be important to the consumer, particularly the residential consumer - only the type of number. In the case of businesses, it was argued that there would be a move from PSTN Customer Premises Equipment to broadband Virtual Private Networks for internal calls and eventually external calls. Respondents considered that unless geographic numbers were allocated for new voice services the absurd situation would arise whereby a change in number from geographic to non-geographic would be required when business (and indeed residential) customers migrated from the PSTN to IP networks. Some respondents felt that Ofcom's counter arguments presented in the February 2004 Consultation were unconvincing.

3.28 A number of respondents felt that allocation of geographic numbers should be restricted to either PATS or services without nomadic features. It was argued that this was current allocation policy and should not be changed without further consultation and consideration of the implications. A further small number of respondents felt that geographic numbers should not be allocated for any VoB services as they were likely to be location independent making the geographic significance meaningless.

3.29 Ofcom found the respondents' arguments in support of the allocation of geographic numbers for VoB/new voice services compelling. It has considered the question in great depth since the close of the consultation, particularly from the point of view of the consumer's experience and in the overall context of creating a regulatory framework that can encourage and support innovation and investment in new voice services. It has also analysed the implications of prohibiting the allocation of geographic numbers for new voice services and of restricting the allocation of geographic numbers to only PATS and/or non-nomadic services. Following this consideration, for the reasons set out in Section 4 of this statement, Ofcom considers that geographic numbers should be made available for allocation for all publicly available new voice services. Ofcom considers that this not a policy change in numbering eligibility criteria, however, it may be different from some Communications Providers' previous expectations of Ofcom's policy and number allocation procedures.

Question 10: Ofcom would be interested in hearing views from fixed and mobile Communications Providers as to how they might charge for calls to 056 numbers and whether they are likely to be included in calling options packages.

3.30 The majority of respondents agreed with the principle that the cost of making a call to an 056 number should be relatively inexpensive and that such calls should be included in Communications

Providers' calling options packages. Some felt this approach was vital to consumers' acceptance of 056 numbers. However, it was generally felt that it was premature to consider retail charging arrangements. A couple of respondents argued that it was inappropriate and misleading of Ofcom to launch a debate on tariff treatment when it had no legal means to compel Communications Providers to treat 056 calls in a certain manner.

3.31 In the February 2004 Consultation, Ofcom considered that the demand for a dedicated number range for VoB services could be the demand for a range without geographic significance which would be treated by Communications Providers in line with their treatment of geographic numbers. Ofcom considered that it would be desirable for the cost of calling 056 numbers from fixed lines to be no more expensive than the cost of calling geographic numbers. Ofcom also noted that it would be desirable for consumers if such services were to be included in Communications Providers' calling options packages. A further concern was the likely cost of calling 056 numbers from mobiles - traditionally more expensive for non-geographic numbers. In posing Question 10, Ofcom was interested in hearing Communications Providers' preliminary views on charging. This was due to concerns regarding consumer protection; it was not intended to suggest that Ofcom could force Communications Providers to treat charging for 056 numbers in a particular manner. Ofcom agrees that it would be premature to be definitive about charging arrangements for 056 numbers, but it continues to consider that it would be desirable for consumers if retail prices and discount arrangements for 056 numbers were similar to those for geographic numbers.

Question 11: VoB services might offer an element of mobility – do you think that this raises definitional issues for geographic numbers?

3.32 Respondents were divided as to whether an element of mobility in a service raised definitional issues for geographic numbers⁷. Some respondents believed that the common understanding of geographic numbering had changed over time and that location significance was no longer necessarily associated with physical location. The main argument presented by those who believed that the definition of geographic numbers supported mobility was that it was already a feature of services using geographic numbers in the form of call forwarding and out of area lines. According to these respondents, provided that the calling party pays the tariff he/she expects to pay then mobility presented no issues for the definition of geographic numbers. However, other respondents felt that the use of geographic numbers for services with an element of mobility was not in line with the intentions of the Plan and that geographic numbers should only be permitted for non-nomadic services, thus preserving the location significance of the geographic range.

3.33 Ofcom has given further consideration to the definition of geographic numbers in the Plan and considers that the wording 'where the Network Termination Point does not relate to the Geographic Area Code but where the tariffing remains consistent with that Geographic Area Code' provides for nomadic services within the geographic number definition.

Question 12: Ofcom has identified four options for how it might allocate geographic numbers for VoB services. Which of the four options do you prefer and why? Are there any other options that Ofcom should consider?

3.34 The February 2004 Consultation contained the following four options for the allocation of geographic numbers for VoB services:

Option 1: allocate to all VoB providers

⁷ The definition of a Geographic Number is taken from the Plan: 'a Telephone Number, from a range of numbers in Part A of this document ..(the Plan).., where part of its digit structure contains a Geographic Area Code..that is Adopted or otherwise used for routing of calls to the physical location of the Network Termination Point of the Subscriber to whom the Telephone Number has been assigned, or where the Network Termination Point does not relate to the Geographic Area Code but where the tariffing remains consistent with that Geographic Area Code'.

- Option 2: allocate to PATS VoB only
- Option 3: allocate to PATS VoB in abundant areas
- Option 4: allocation not permitted to any VoB services

3.35 Responses to the February 2004 Consultation on the options were as follows:

26 respondents supported the allocation of geographic numbers for VoB services, of which:

- 10 preferred Option 1
- 11 preferred Option 2
- 1 preferred Option 3
- 4 did not express a preference or did not support any of the 3 options for allocation of geographic numbers for VoB services

4 respondents were against the allocation of geographic numbers for VoB services (Option 4)

1 respondent believed the debate on PATS and the regulatory framework for VoB services should be resolved before selecting an option.

7 respondents supported geographic numbers only for fixed location/ limited nomadicity (i.e. not one of the specific options included in the February 2004 Consultation).

3.36 Respondents that expressed a preference for Option 1 generally felt that it was the only option that would avoid pre-judging regulatory and market developments and thus creating artificial distortions through the Plan. It was supported as the option that would offer consumers the most choice. The main argument was that access to geographic numbering was an important element in VoB providers' ability to compete with existing service providers. For example, existing geographic numbers could be ported (between PATS providers); consumers were more comfortable with familiar numbering; and call charges were low. Some supporters of Option 1 had considered Option 2 but felt that the current uncertainty regarding the regulation of PATS meant that this option was impractical.

3.37 Respondents that favoured Option 2 generally felt that it struck the right balance between Communications Providers' demands and consumers' needs. Some felt that ideally all VoB services should be eligible for geographic numbers but that consumer protection issues meant that geographic numbering should be restricted to PATS.

3.38 One respondent supported Option 3, arguing that numbers could be ported in geographic areas with limited available capacity thus making it possible for service provision without the allocation of new numbers. A few respondents supported Option 4, the reasons being, first of all, that nomadic services were felt to be at odds with the definition of geographic numbers and would create confusion for consumers and secondly, there was pressure on the availability of geographic numbers and restrictive tariffing arrangements.

3.39 Some respondents felt that the specific options set out by Ofcom in the February 2004 Consultation were essentially flawed or were not particularly attractive. It was argued that the PATS/non-PATS distinction was irrelevant for numbering arrangements and that the options should have concentrated on differences in service characteristics rather than on the technology and the regulatory framework.

3.40 One respondent suggested an alternative approach to deciding whether geographic numbers are suitable for a service. It suggested that services with the following characteristics should be eligible for geographic numbers: those where location significance is desirable; those that support national and international inbound and outbound calls from the PSTN; services which use a conventional telephone handset and cradle or a direct VoB phone; and services which operate in the relevant Geographic Area Code and were not nomadic. The implications of this suggestion would be that geographic numbers would not be deemed suitable for the following services: location independent services; those which do not offer inbound or outbound calls over the PSTN; and those

offering nomadic services or numbers in additional Geographic Area Codes for incoming only calls ('virtual numbers'). It was argued that this approach would achieve a balance between conflicting elements by easing the pressure on available geographic numbers, avoiding complex debates on PATS, providing consumer choice and supporting a competitive, innovative and efficient market.

3.41 Ofcom has found respondents' comments and option preferences extremely useful in reaching its decision on numbering arrangements for new voice services. Responses to the consultation demonstrated very strong support for the allocation of geographic numbers for VoB/new voice services, with the selection of options evenly divided between Option 1 - allocation to all VoB services, and Option 2 - allocation to PATS VoB services only. There was virtually no support for restricting the allocation of geographic numbers to areas with an abundant supply of such numbers and only limited support for no allocation of geographic numbers for VoB services.

3.42 Ofcom also considered some respondents' comments that the options were either unattractive or flawed and was interested in respondents' alternative approaches of limiting allocation of geographic numbers to non-nomadic services and the option as outlined in paragraph 3.40. Ofcom considers these alternatives as Options 5 and 6 in its analysis of policy options in Section 4. The latter suggestion would be in line with Ofcom's existing policy that services which do not require E.164⁸ numbers should not receive an allocation of such numbers. Therefore, services which allow inbound and outbound calls, rather than, for example, peer-to-peer services, would be eligible for an allocation of geographic numbers. Ofcom has commented on the implications of nomadicity for geographic numbers in relation to Question 11. It plans to consider the implications of virtual number services on the geographic number resource in a future consultation on number conservation.

Question 13: If Option one ('allocate to all VoB services') or Option two ('allocate to PATS VoB only') were adopted, which of the five sub-options intended to ensure sufficient capacity was available for allocation would you favour and why?

3.43 The February 2004 Consultation contained sub-options on arrangements to make the necessary geographic capacity available if geographic numbers were allocated for VoB services. These sub-options can be summarised as:

- A: 'do nothing'
- B: 'set aside' 1x 10k block in each geographic area for 1k allocation for VoB services
- C: 'conservation policy' for all 01 geographic areas resulting in allocation at 1k level
- D: 'Wide Area Code' policy – wholesale move to Wide Area Codes
- E: 'new geographic code area' – new 01 code created as 'national' geographic code

3.44 In responses to the February 2004 Consultation, the number of respondents who expressed a preference for a particular sub-option for the conservation of geographic numbers if allocated for VoB services were as follows:

- 4 respondents selected Option B
- 4 respondents selected Option C
- 2 respondents selected Option B initially with a move to Option C over time
- 3 respondents selected Option D
- No respondents selected Option A or Option E

3.45 Two respondents suggested additional options for Ofcom to consider in relation to geographic number conservation measures and area code changes. Briefly, these options were:

- to close the Scheme and end local dialling, potentially increasing the supply of numbers by 20%, as local numbers with the leading digits of '0' and '1' would become available for use;

⁸ E.164 is an International Telecommunications Union recommendation which defines the international public telecommunication numbering plan used in the PSTN and some other data networks.

- to utilise unused geographic codes, for example the old Leeds and Leicester codes 01532 and 01533, to alleviate pressure on ranges with limited available capacity through an overlay of new codes;
- to re-designate unused 100k/10k number block(s) from an area without a number shortage adjacent to an area with limited available numbers;
- to convert five-digit local numbering areas to six-digit numbers;
- to introduce a Wide Area Code overlay into areas with limited numbers available for allocation in preparation for full implementation but without enforcing a code change on existing numbers until the future demand for additional numbering resource was clear; and
- to change geographic area codes with a limited supply of numbers available for allocation to Wide Area Codes.

3.46 Ofcom considers that conservation measures are a justified means of ensuring sufficient numbering resource is available to meet Communications Providers' needs – existing conservation measures have successfully offset the need for code changes in some Geographic Area Codes. It has found the responses to this question useful and they will contribute to the preliminary work on the most appropriate approach - Ofcom plans to consult separately on geographic number conservation measures. Ofcom also appreciates the additional options submitted by respondents. These will form useful input into Ofcom's ongoing work on planning for any necessary Geographic Area Code changes.

Question 14: What comments and quantitative data can Communications Providers supply on the likely impact and timescales for implementing the five approaches (sub options a – e) for ensuring that sufficient geographic numbering capacity is available to meet demand if allocated for VoB services?

3.47 Ofcom received relatively few responses to its request for comments and quantitative data on approaches to geographic number conservation. Communications Providers found it difficult to forecast without knowing the potential volume and location of affected code areas. Two respondents considered that Option B (to 'set aside' a 1k block in each geographic code area for VoB services) and Option C (to instigate 'conservation policy' in all geographic areas) would require engineering resource but would be achievable. One respondent commented that the impact of conservation measures should be equally applied to PSTN and VoB providers. A couple of respondents commented on the likely levels of VoB take-up. One predicted that it would be considerable but not as high as forecasted levels, whilst another estimated that 20% of broadband users would adopt a telephone number on next generation telephone systems.

3.48 Ofcom appreciates that Communications Providers may be unable or unwilling to share comments and data on the impact of conservation measures for geographic numbering at this time. Ofcom will be consulting separately on ways of ensuring that sufficient geographic numbers are available to meet Communications Providers' needs when it may revisit this question.

Question 15: Do you have any comments on Ofcom's proposed telephone numbering application form (as set out in Annex E of the February 2004 consultation) for 056 numbers?

3.49 Ofcom received a few minor comments on the proposed telephone numbering application form for 056 numbers. Two respondents thought it was premature to consult on the application form ahead of a decision on whether to designate 056 numbers. It was also felt that the existence of an application form for VoB services suggested that it was inappropriate to use application forms for other number ranges for similar services. A further comment was that completion of the application form was onerous, particularly the Annex. A couple of points were made specifically on the form. First, that it was inappropriate to use a geographic market (i.e. Preston) on an application form for a non-geographic range and second, that there was no provision to select the tariff band on the form.

3.50 A comment on the numbering application forms in general was that the definitions and interpretations section used highly legalistic language which appeared out of place in context of the rest of the application form. The respondent felt a Plain English translation would be useful.

3.51 The issue of eligibility to apply for numbering was raised in relation to Section 4 and the Annex of the 056 application form. It was questioned whether the general policy to allocate numbers to ECN providers as opposed to ECS providers was specific to 056 or applied to all applications for all number ranges. It was pointed out that the ECN/ ECS distinction was reasonably well understood in the context of conventional telephony but less clear in the context of IP based services. Again it was mentioned that a Plain English guide would be helpful.

3.52 Ofcom welcomes the comments on the proposed application form for 056 numbers as ensuring the right questions are asked is vital to the application process. Ofcom felt that as the February 2004 Consultation contained a strong proposal to make 056 numbers available as a non-geographic numbering option for services described as Voice over Broadband, the document needed to contain the statutory consultations necessary to make those numbers available for allocation at the earliest opportunity, subject to the outcome of the consultation. However it was always the case that the proposals to modify the Plan and specify the 056 application form would be abandoned should the outcome of the consultation be not to designate the 056 range.

3.53 Ofcom has taken care not to request more detail on the numbering application forms than required for the decision making process. Although completion of the forms may be felt by some Communications Providers to be an onerous task, the information is required both to process the application for numbers and to serve as an audit record. It should be noted that providers of ECNs need only complete the Annex once, on the first application form submitted to Ofcom.

3.54 Ofcom has heeded the comment on the inappropriateness of using a geographic area to describe the market on an application form for non-geographic numbers and has removed the reference to Preston from the 056 application form.

3.55 Ofcom's view on interconnection and retail pricing for 056 numbers is that this is a matter for industry negotiation which should not be pre-empted by Ofcom stating what these arrangements should be (apart from a ban on revenue sharing with end users). In addition, as stated in paragraph 3.19 above, Ofcom is not able to control retail prices through numbering rules. A respondent expressed the view that tariffing should be at the 100k level. A further respondent questioned the omission of a tariff column on the 056 application form. These observations suggest the assumption that the Terminating Communications Provider would be setting the retail tariff and that Ofcom should collect tariff information to enable allocation of blocks set at the Terminating Communications Provider's proposed tariff. However, unlike with NTS, BT currently has no regulatory obligation to charge the retail price requested by the Terminating Communications Provider who has been allocated the 056 block.

3.56 As explained in paragraph 3.19 above, Ofcom has not given a tariff designation to the 056 range and, therefore, Ofcom is publishing the 056 application form without a reference to tariff information, as proposed in the February 2004 Consultation. Subject to industry negotiation and request, Ofcom could accommodate any reasonable industry-agreed retail pricing arrangements in its number allocation procedures. This might require a consultation on changing the 056 application form if tariff information were required to be collected as a result. In the meantime, Ofcom intends to allocate 056 blocks sequentially to applicants, which could mean that different Communications Providers are allocated 10k blocks within the same 100k block, and would have to share retail price arrangements on the BT network if BT decides to tariff at the 100k level. For maximum flexibility, Ofcom suggests that BT considers retail tariffing at the 10k block level for the new 056 range. Ofcom is currently examining the feasibility of finer digit analysis for tariffing purposes in the wider context of numbering for NTS. The results of this work may inform the possibility of tariffing at the 10k level in general.

3.57 The application forms are legal documents referred to in General Condition 17: Allocation, Adoption and Use of Telephone Numbers ('the Numbering Condition'). Modifications must follow specific procedures as set out in Section 49 of the Act. It is due to the legal nature of the application forms that a certain amount of 'legalise' must be incorporated. Ofcom is not aware of previously receiving similar stakeholder comments regarding legalistic language. It considers that the statutory consultation necessary to add Plain English translations to all the various numbering application forms used by Ofcom may not be proportionate to what the modification is intended to achieve at this time. However, should it become apparent that Communications Providers are experiencing difficulties with the forms, the attachment of explanatory notes may be considered.

3.58 Eligibility to apply for Telephone Numbers, as expressed by Ofcom in the numbering application forms, is that numbers should not be allocated directly to service providers if they cannot use the numbers. Traditionally, service providers cannot use the numbers if they do not have a relationship with an ECN provider, whether directly or indirectly, as numbers can only be used in relation to such a network. ECS providers without a network have, therefore, been expected to take reasonable steps to obtain a sub-allocation from an ECN provider. This position has applied to all number ranges. However, an ECS provider is only expected to take *reasonable* steps to have obtained a sub-allocation. If there is no relationship with an ECN provider, either directly or indirectly through another ECS provider, then it could be unreasonable to expect that ECS provider to obtain a sub-allocation of numbers rather than a direct allocation from Ofcom. The use of IP technology may mean that relationships between ECS and ECN providers are different from those between providers of services and networks on the PSTN. It may follow, therefore, that applications for numbers will need to be analysed differently from those submitted by more conventional ECS providers who offer their services over the PSTN (and who may be expected to seek a sub-allocation from their ECN provider). It remains the case, however, that an ECS provider will need to exercise control of the service as provided to the end user to be eligible to apply for an allocation of telephone numbers from Ofcom. Such control of service could include, for example, the provision, denial and restriction of service to a specific number/end user within a given number range.

General comments on the consultation

3.59 In addition to responses received to the 15 specific consultation questions, Ofcom also received general comments on the consultation. These general comments are summarised below under their respective headings and Ofcom's responses to the comments are provided.

The consultation process

3.60 A number of respondents commented on the consultation process. There was some criticism of the order in which Ofcom had chosen to address regulatory issues relating to new voice services. It was felt that the strategic approach to regulation of new voice services should have been the primary consideration, providing a context for consulting on numbering arrangements. Some respondents felt that it would have been more appropriate to consult on other areas of regulatory concern, such as consumer protection and the PATS definition, ahead of consulting on numbering arrangements. A few respondents urged Ofcom to delay its final decision on numbering until other interdependent areas of regulatory concern had been resolved. A particular concern was that options for allocation of geographic numbers were, in part, dependent on the definition of PATS. Ofcom and indeed many stakeholders, it was argued, were unclear on how best to interpret the definition of PATS, which resulted in an inconsistent understanding of the term. Therefore, a crucial element of the consultation was felt to be not properly defined and understood. Respondents argued, therefore, that many of the numbering issues could not be concluded until the definition of PATS and its associated regulatory obligations were reviewed.

3.61 There was also criticism of the two-part consultation process, with separate deadlines for the consultation on 056 numbers and for geographic numbers. It was argued that the issues relating to both sets of numbers were tightly interwoven and that a more holistic approach, with one consultation timescale, would have been preferred. There was also concern that responses to the 056 element of the consultation would pre-empt Ofcom's decision on the wider policy issue of allocation of

geographic numbers for new voice services. This concern was heightened by Ofcom's indication that the availability of 056 numbers may be seen as a justification for the view that geographic numbers were inappropriate for new voice services⁹. It was stressed that Ofcom should refrain from making any changes to the Plan until the conclusions on the suitability of geographic numbering had been reached.

3.62 Some respondents felt that the shorter timescale for responses to the 056 element of the consultation was not justified. The proposal to make 056 numbers available was considered to have significant consumer impact and therefore a longer consultation period to allow consumer groups more opportunity to respond to the issues may have been desirable. It was stressed that Ofcom must be wary of creating market distortions through the designation of 056 numbers ahead of reaching its decision on the suitability of geographic numbers for new voice services. One respondent questioned whether the policy debate for a dedicated non-geographic range for new voice services had been fully presented in the Oftel consultation on Corporate Numbers as asserted in paragraph 4.17 of the February 2004 Consultation. Concern was expressed that the proposal for a VoIP range, albeit for corporate customers, was originally championed by BT. It was considered inappropriate for Ofcom to implement that proposal without fully consulting other Communications Providers outside the narrow context of Corporate Numbers.

3.63 A couple of respondents criticised Ofcom's entire approach to the consultation. One argued that Ofcom should have consulted on the implications of not allocating geographic numbers for new voice services and should not have addressed the question of a non-geographic solution first. It felt Ofcom had rushed the consultation procedure and erroneously reached its provisional view that geographic numbers may not be suitable for new voice services. Another respondent criticised Ofcom for not giving proper weight to the fundamental principles of equal treatment and non-discrimination in relation to the Plan and numbering procedures, nor taking full account of the principle of technological neutrality; of established means of dealing with number exhaustion; of other means of dealing with consumer protection issues; and of the economic impact of not allocating geographic numbers for VoB services. Some respondents were also concerned that the consultation did not address the fundamentals of the proposed 056 service, such as routing, retail tariff and interconnection arrangements.

3.64 Ofcom strongly believes that consultation plays a vital role in ensuring its decisions are taken at the right time and in the right way. It strives to ensure that the consultation process is effective and takes due account of stakeholders' views on the process. Ofcom took full regard of the responses to the consultation and, where possible, took measures to address the concerns expressed regarding the consultation process.

3.65 Ofcom acknowledges that new voice services raise a number of regulatory and consumer issues, however, it needed to prioritise those where clarity was urgently required. At the stakeholder discussion group meeting hosted by Ofcom on 25 February 2004, and at subsequent meetings with stakeholders, Ofcom was given the clear message that it should be focussing its attention initially on three specific areas, namely, numbering arrangements, the level of regulation appropriate for new voice services and on access to Emergency Organisations. In particular, Ofcom recognised the need to provide clarity on numbering arrangements to ensure Communications Providers could launch their services. Also Ofcom did not consider that dependencies existed which would inhibit it from consulting on numbering arrangements in a different timescale to regulatory and consumer protection issues. Therefore, Ofcom felt it was appropriate to move ahead with the consultation on numbering arrangements in advance of Ofcom's other work on regulatory arrangements for new services. This decision has provided clarity for stakeholders on numbering arrangements for new voice services without further delay.

3.66 Ofcom chose to consult on appropriate numbering arrangements for VoB services in three parts, equating to two deadlines for comments. Ofcom reasoned that its proposal to make 056 numbers available for VoB services was robust enough to include a statutory consultation on the

⁹ February 2004 Consultation, paragraph 5.23, 3rd bullet point

necessary Modification to the Plan and the Direction to use an 056 application form. Statutory consultations on such Notifications and Directions last for at least one month. Ofcom considered it necessary to provide a shorter consultation period than the Ofcom standard ten week period in order to provide numbering resource for Communications Providers and limit the delay in the launch of their services. The consultation on the appropriateness of geographic numbers for new voice services was a 'greener' and more complex issue which required the standard ten week consultation period. Nevertheless, Ofcom paid full regard to the comments outlined in paragraphs 3.61 and ensured that both consultations had closed before reaching a decision on the policy options for numbering arrangements. Ofcom's decision to make 056 numbers available for Location Independent Electronic Communications Services was taken with care to ensure that it did not influence its decision on allocation of geographic numbers for new voice services.

3.67 For the avoidance of doubt, Ofcom wishes to make it clear that the consultation on whether geographic numbers were suitable for VoB services was not dependent on the outcome of the statutory consultations on making 056 numbers available. In other words, Ofcom proposed that 056 non-geographic numbers were suitable for VoB services and, **in addition**, asked whether geographic numbers were also suitable - it was never a question of one range or the other.

3.68 Ofcom does not share the respondent's view that the principle of a dedicated number range for VoIP services was essentially a BT proposal. The original concept for Corporate Numbers was for a dedicated range for corporate users with VoIP services being a likely driver. BT may have been the first Communications Provider to launch a service on the 055 range but the service was in line with the designations in the Plan. A number of respondents to the consultation on Corporate Numbers clearly set out the arguments in favour of part of the 05 range being used for VoIP services for both corporate and residential consumers.

3.69 Ofcom believes it gave appropriate weight to the fundamental principles of regulation in its deliberations on numbering resource for new voice services and that the impact of these principles was adequately explained in the February 2004 Consultation. In order to deliver to a dynamic market place, Ofcom must balance due process with due pace. At the time of consulting, and indeed at this time, Ofcom cannot comment on what interconnection and retail tariff arrangements for the 056 range should be implemented. Indeed, as was stressed in the responses to the consultation, these are initially issues for industry debate and negotiation.

Ofcom's statutory duties

3.70 A few respondents questioned whether Ofcom had acted beyond the scope of its statutory powers by suggesting that it could limit the use of a number range based on the underlying delivery technology. References were made to Article 8 of the Framework Directive, which sets out the policy objectives of the EU regulatory framework (implemented in the UK via section 4 of the Act). In particular, attention was drawn to Article 8(1) which sets an over-arching requirement that National Regulatory Authorities (NRAs) "take the utmost account of the desirability of making regulations technologically neutral". Reference was also made to Article 6 of the Authorisation Directive which provides that rights of use for numbers may only be subject to the conditions listed in the Annex to the Authorisation Directive. This includes the designation of the service for which the numbers shall be used, including any requirements linked to the provision of that service. Respondents submitted, therefore, that number ranges should not be designated based on the technology used, but only in relation to the service provided.

3.71 Respondents also stressed that providers of VoB services competing in the same market as conventional telephony providers should be afforded the same numbering facilities, otherwise competition would be distorted in a manner which breached Article 8 of the Authorisation Directive. Reference was also made to Article 10 of the Framework Directive and the principle that numbering plans and procedures should be applied in a manner that gives equal treatment to providers of publicly available ECS. A respondent considered that making 056 numbers (rather than geographic numbers) available to VoB providers would be unduly discriminatory and that Ofcom had failed to give any objective justification for this apparent difference in treatment. One respondent felt that the

February 2004 Consultation should have provided economic analysis of the competitive disadvantage suffered by VoB providers who compete or may compete in the same economic market as conventional voice telephony should geographic numbers be considered inappropriate for VoB services.

3.72 Ofcom has paid the utmost regard to comments about technological neutrality and the desirability of limiting restrictions on numbering to service-related restrictions. In light of those comments, the proposed designation in the Plan of 'Voice over Broadband' for 056 numbers has been replaced with 'Location Independent Electronic Communications Service'. The revised designation is more clearly technologically neutral, although Ofcom considers the term VoB to also describe a service albeit with reference to broadband. With regard to the point about discriminatory treatment, Ofcom's position in the February 2004 Consultation was that it was unsure of the appropriateness of geographic numbers for what Ofcom at that time termed VoB services, hence the need for consultation. Ofcom considered that there might be good reasons why it was not suitable to allocate geographic numbering to providers of VoB services and therefore wished to consult and consider fully the impact of any decision regarding the allocation of geographic numbering. At the time of the February 2004 Consultation, Ofcom did not have access to quantitative data to undertake a Cost-Benefit Analysis (CBA) on the proposed options for allocation of geographic numbers for VoB services. This remains the case, however, the consultation did consider the qualitative impact in the document as part of its Regulatory Impact Assessment (RIA). Comments received on the consultation have contributed to further analysis, which represents the finalised RIA included in Section 4 of this statement. However, the final position is that Ofcom has decided that geographic numbering should be made available and hence Ofcom can see no discrimination in the outcome of the February 2004 Consultation.

Regulation of new voice services: consumer protection and interpretation of PATS

3.73 Respondents generally agreed that consumer protection issues were important and measures needed to be developed but that this work should not be conducted in association with numbering arrangements. Many respondents argued against Ofcom's consideration that the differentiating service characteristics of some new voice services (e.g. non-guaranteed service quality and lack of access to Emergency Organisations) could be highlighted by using a distinctive number range, thus raising consumer awareness. It was also stressed that customer perceptions of quality and features associated with a service should not turn on whether a geographic or non-geographic number were used for calls to that service, but rather on how a service provider educates potential consumers about the attributes of their specific service – both its limitations and strengths. One respondent questioned whether Ofcom could substantiate its assertion in paragraph 5.5¹⁰ of the February 2004 Consultation that consumers had set expectations of what a service offered on geographic numbers would deliver.

3.74 Respondents encouraged Ofcom to consider the broader regulatory issues concerning new voice services, in particular consumer awareness and protection issues. It was suggested that Ofcom should consider an industry co-regulatory or self-regulatory approach, which had worked successfully for other areas of consumer protection such as premium rate services and mobile content. Also, Ofcom was encouraged to re-examine Oftel's *Guidelines on the essential requirements for network security and integrity and criteria for restriction of access to the network* ('the Essential Requirements Guidelines')¹¹ in light of new voice services.

¹⁰ 'Aside from the regulatory definition of geographic numbers, Ofcom believes that there is the common understanding by consumers that a service with a geographic number is something with which they are familiar - that is, they have a general appreciation of the cost, the quality of the call and the consumer protection features associated, such as access to Emergency Organisations.'

¹¹ http://www.ofcom.org.uk/static/archive/oftel/publications/ind_guidelines/esre1002.htm

3.75 Respondents also expressed concern regarding the definition of PATS. Generally it was argued that the current distinction as to whether providers of voice services are offering PATS or non-PATS created an unhelpfully rigid framework for considering the wider policy issues. There was particular concern that the distinction between PATS and non-PATS was predicated on the presence or absence of access to the Emergency Organisations; that is, a strict interpretation would appear to imply that if a service connects 999/112 calls, it is designated PATS and must meet the General Conditions of Entitlement relevant to PATS providers, whereas if it blocks calls to 999/112 it is non-PATS and can pick and choose which of the General Conditions it meets. It was recognised that the PATS definition resulted from the EU Directives but Ofcom was encouraged to work with the European Commission and other NRAs to achieve a harmonised solution to this challenge. Ofcom was encouraged to consider a new and flexible framework and to consider permitting non-PATS providers to allow access to 999/112 on a 'best efforts' basis. Ofcom was also asked to confirm who may make the decision on whether a service is PATS.

3.76 Respondents particularly felt that the current circular definition of PATS was unhelpful for decisions on suitability of using different number ranges. It was felt impossible to draw conclusions on the question of whether geographic numbers should be made available to non-PATS providers until a detailed discussion on the implications of the current PATS definition had been completed. One respondent commented that Ofcom's primary consumer protection concerns should lie in making consumers who choose non-PATS telephony services aware of any limitations in such services. As these issues concerned call origination, the number range allocated to the service was felt to be largely irrelevant.

3.77 As explained in paragraph 2.3 of this statement, Ofcom has published a package of documents intended to provide consumers, Communications Providers and other stakeholders more clarity on a number of important and strategic issues involving new voice services. Ofcom decided to publish these documents at the same time as this statement to ensure that a coherent approach to regulation of new voice services is communicated. Therefore, Ofcom recommends that stakeholders consider all the documents in the package together with this statement when considering the regulatory issues surrounding new voice services.

3.78 The package of documents includes the September 2004 Consultation and Interim Guidance, which explores how consumers may benefit from being offered a variety of voice services that offer different features and/or lower prices than traditional telephone services. It considers how the regulatory framework should be applied to new types of voice services and how consumer awareness can be achieved where the attributes of the service are different from those that might normally be expected, in particular where no access to 999/112 is offered. Ofcom, in agreement with responses to the February 2004 Consultation, does not believe that limiting the use of geographic numbers to services which are carried over the PSTN or are PATS would provide the necessary protection for consumers. Equally, Ofcom does not believe that allocating geographic numbers for new voice services that do not provide access to 999/112 will jeopardise consumer protection; this important objective is better promoted by ensuring that consumers are adequately informed of a services' characteristics at the point of purchase and/or at the point of use as explored in the September 2004 Consultation and Interim Guidance. Ofcom's view in the February 2004 Consultation that consumers have a common understanding of a service offered on a geographic number may be correct (although Ofcom does not have empirical evidence), however, it also considers that consumers expectations may adapt with the growth of new voice services.

3.79 The broader regulatory and consumer protection measures relating to new voice services are being taken forward in the September 2004 Consultation and Interim Guidance (see paragraphs 2.9 – 2.12. That document addresses the issues raised in responses to the February 2004 Consultation relating to consumer protection measures, the PATS definition and the re-examination of the Essential Requirements Guidelines as summarised above.

Representation of Voice over Broadband services

3.80 The point was made by a couple of respondents that the description of VoB services set out in paragraph 4.5 of the February 2004 Consultation is misleading and misrepresents the nature of those services. The effect of this misrepresentation, it was argued, was that Ofcom had reached the wrong initial conclusions on suitability of number ranges for those services, particularly as the service description blurred the divide between fixed VoB and mobile VoB. Additional respondents were concerned that voice services using 3G networks (a form of VoB) could be included in Ofcom's service description and that this would be completely impractical, given that calls may transfer between 2G and 3G bearers during the course of a call.

3.81 The February 2004 Consultation included a broad introduction to VoB services, which focussed on the regulatory aspects; that is, how VoB services may differ from traditional voice telephony services and the possible implications for the regulatory framework. The description of VoB services could not, given the new and evolving nature of the services, be exhaustive; rather the description was aimed at giving a flavour of the services. However, Ofcom notes that this approach may have caused confusion for the industry if taken as being a comprehensive and inclusive list of VoB attributes, particularly as it could include Mobile Services (which Ofcom believes should remain on the mobile number ranges 077 - 079). Ofcom has taken steps to address this confusion by re-examining the service terms (see paragraph 5.2) and by ensuring the definition of Location Independent ECS explicitly excludes Mobile Services.

Service characteristics of the 056 number range

3.82 One respondent, for reasons of operational efficiency and tariff transparency, urged that at least initially, tariffing should be at the 100k level, as for the majority of the 08 and 09 number ranges. Another commented that guidance on preferred number layout should be provided so that the more commonplace and logical 344 pattern, i.e. 056 XXXX XXXX is used, reducing the potential for error and consumer confusion over the new number range.

3.83 Further comments were made on the billing treatment of 056 numbers. It was suggested that Ofcom use its powers to oblige all Communications Providers to behave in a non-discriminatory way, particularly in relation to building all number blocks on their networks promptly and also tariffing them in a manner not entirely inconsistently with range-holders' intentions. It was felt that unless Ofcom took action, consumers could be faced with 'number not recognised' or heavy call charges when dialling an 056 number. A respondent considered that it could have serious implications for new entrants into the market using 056 numbers.

3.84 Negotiations on interconnection and retail pricing arrangements for services on 056 numbers have yet to be undertaken by the industry. Ofcom is not proposing at this stage to mandate that the retail tariff be set by the Terminating Communications Provider (as is the case with many 08 and 09 NTS numbers) - although of course this outcome may be achieved by industry negotiation. Whilst there are no such arrangements in place, Ofcom would not need to be informed of the intended tariff at the time of number allocation in order to reflect this in the Scheme. As for preferred number layout, Ofcom only provides guidance but believes that confusion can be minimised by displaying a consistent number layout. Ofcom supports the suggested layout of 056 XXXX XXXX.

3.85 Only BT and Kingston have end-to-end connectivity obligations, other Originating Communications Providers do not. Guidance on end-to-end connectivity obligations was published by Oftel in May 2003¹². This guidance sets out that only BT and Kingston are expected to ensure that their customers can call other customers and services irrespective of the terminating network - that is, to provide end-to-end connectivity. Oftel considered that other providers would have a commercial incentive to provide end-to-end connectivity to their customers, and that this commercial incentive should be sufficiently strong to ensure no additional ex ante regulation was required in this area. However, Ofcom could consider the need for such regulation if there was a potential effect on competition or potential detrimental impact on consumers.

¹² www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/endcon0503.htm

3.86 Ofcom cannot control the retail prices of Originating Communications Providers without SMP in relation to charges for calls to 056 numbers. Crucially, it is not presently clear whether origination of calls to 056 numbers would be in the same market as fixed narrowband wholesale call origination. Instead, Ofcom would encourage the industry to negotiate appropriate wholesale tariffs

Interconnection arrangements for 056

3.87 A few respondents commented on possible interconnection arrangements for 056 numbers. One respondent suggested that the industry negotiated arrangements for 055 services might present a fair precedent for interconnect arrangements for the 056 range. Ofcom notes this suggestion but is conscious that the market for new voice services is only emerging and has taken the decision not to intervene at this stage. However, Ofcom will be monitoring the situation closely and this decision will be kept under review based on how the market develops.

3.88 One respondent argued that the general principle of the pricing models for VoB should be directly comparable with those currently in existence for geographic and NTS services. It was suggested that the 056 range should accommodate these two different tariffing principles. The question of transit costs was also mentioned, with a comment that the Terminating Communications Provider should not be penalised for any lack of innovation and investment in technology by the Originating Communications Provider.

3.89 It is Ofcom's decision that, as set out in this statement, providers of new voice services can generally choose whether to offer their services on geographic or 056 numbers (or indeed 08 or 09 numbers if in line with the Plan). Ofcom has decided that it would be in the interest of consumers to ban revenue sharing with end users on 056 numbers, and it has specifically stated that 056 is not an NTS range. (NTS is a remedy to BT's SMP in fixed narrowband wholesale call origination. As the VoB call origination market is immature it is not yet clear whether it is part of the same market or not, therefore an extension of BT's obligation to revenue share (i.e. the NTS obligation) is unwarranted at present.) Ofcom does not, therefore, presently think it would be appropriate to mandate pricing models similar to those used in the NTS ranges on the 056 range.

3.90 Ofcom notes that there are a variety of different approaches that could be applied to transit costs for 056 calls, but feels that this should be subject to industry negotiation. To a certain extent, the type of number used for services may dictate whether the Originating Communications Provider or the Terminating Communications Provider pays the transit costs, for example, it may not be technically possible for different geographic numbers to have different transit payment arrangements.

Number portability

3.91 Ofcom stated in the February 2004 Consultation that 056 numbers would be considered portable. It also commented that portability was only a requirement between providers of PATS. Hence, Ofcom noted that subscribers of non-PATS services should bear in mind that they would not have a right to port their telephone number.

3.92 A number of comments were made on the issue of portability. On the subject of definitions, it was mentioned that the definition of PATS that applies to number portability in General Condition 18 ('the number portability condition') is different from the definition in the Universal Service Directive and generally used elsewhere. It is defined in the number portability condition as "a service made available to the public for originating and receiving or only receiving calls through a number or numbers in a national or international telephone numbering plan." This definition makes no reference to access to Emergency Organisations and this definition would be likely to capture most new voice services.

3.93 Ofcom has addressed the issue of number portability in detail in Annexes 8 and 9 of the September 2004 Consultation and Interim Guidance, including the issue of the definition of PATS in the number portability condition. In brief, Ofcom considers that portability should be a benefit for any provider choosing to provide PATS and to comply with the obligations which correspond with

providing such services. Conversely, Communications Providers who choose not to provide PATS and comply with the corresponding obligations should neither have the benefits, which crucially include the ability to attract subscribers by being able to port-in customers' existing telephone numbers.

3.94 The PATS definition in the number portability condition is different from the PATS definition used elsewhere because of concern that the latter was not clear in terms of ensuring the provision of number portability in respect of non-geographic numbers; a clear intention of the Universal Service Directive. Ofcom will seek to take steps to resolve this tension over the definition of PATS in the number portability condition and the provision of non-geographic number portability but in the interim wishes to make its policy clear that number portability must be considered as any other PATS condition. Ofcom would not expect a Communications Provider to provide portability to a provider (whether providing access to Emergency Organisations or not) that, under Ofcom's interim policy of regulatory forbearance, was not complying with any PATS obligations. Ofcom has already been in contact with the European Commission in respect of these matters.

3.95 Further comments were made on the possibility of extending portability rights to subscribers of non-PATS. One respondent argued that Ofcom would be acting against the interests of consumers if this was not done and urged Ofcom to reconsider the position at least between providers of services using 056 numbers. Another respondent suggested that the limitation of portability to PATS providers was artificial, restrictive and anti-competitive and that Ofcom would be acting against its obligation to conserve numbers if it did not extend portability to non-PATS. Some respondents suggested that Ofcom could apply specific conditions to the rights of use for numbers including the obligation to offer number portability.

3.96 Article 6 of the Authorisation Directive limits Member States in terms of the conditions which may be attached to general authorisations for the provision of ECNs or ECSs. Annex C of Article 6 specifies that, with regard to conditions which may be attached to rights of use for numbers, number portability requirements must be in conformity with Article 30 of the Universal Service Directive. The latter specifically, and very clearly, ties portability rights to subscribers of PATS. This position has been further reinforced by the European Commission's information and consultation document *The treatment of Voice over Internet Protocol (VoIP) under the EU Regulatory Framework*,¹³ 14 June 2004, which states that only subscribers of PATS have the right to port numbers from one PATS supplier to another. Ofcom's duties in section 3 of the Act (e.g. furthering the interests of citizens and consumers) do not override the Community obligations in sections 4 and 25 of the Act. Section 58(1)(d) of the Act allows for general conditions to "impose requirements on a Communications Provider in connection with the adoption by him of telephone numbers". However the power to impose conditions must be exercised in conformity with the Directives, including Article 30 of the Universal Service Directive. In the light of the current legal framework, the extension of rights to number portability to subscribers of non-PATS would seem to Ofcom to be a policy issue for the European Commission.

3.97 One respondent questioned the fact that number portability between 056 and geographic ranges would not be available even when the services were PATS. Ofcom's response is that portability concerns the retention of a telephone number and not the transfer of service. Retention of a telephone number must be in line with the Plan. As Ofcom's decision is that geographic numbers are suitable for new voice services consumers would have the opportunity to port their existing geographic number to the new provider as long as both were providers of PATS.

3.98 A couple of respondents made comments on the number portability regime in general and how it could be better used to conserve geographic numbers. One suggested that the number portability regime should be amended, particularly with regard to the complex charging regime which, the respondent believed, discouraged consumers from porting their numbers. It was argued that number

¹³

portability should become a major consideration for Ofcom in determining the regulatory framework for new voice services. A further suggestion was whether it was necessary in all circumstances to apply the requirement of reciprocal code swapping with BT.

3.99 Recital 40 to the Universal Service Directive explains that number portability is a key facilitator of consumer choice and effective competition in a competitive telecommunications environment. Ofcom notes, with reference to, inter alia, the European Commission's 1996 *Green Paper on a Numbering Policy for Telecommunications Services for Europe* that the purpose of number portability regulation was to respond to the recognition that changing telephone numbers acts as a barrier to competition. Extending the number portability regime for the purpose of conserving geographic numbers may not be viewed as being in conformity with Article 30. Furthermore, any policy of extending the number portability regime in order to conserve geographic numbers would require economic justification.

3.100 The number portability charging regime reflects the current technical solution, that is, Onward Routing. This solution was adopted following an economic assessment of various options and against the background of meeting the policy aim of providing number portability for those consumers who would not switch in a competitive marketplace unless they could retain their number. Ofcom notes that consumer surveys carried out by Oftel¹⁴ indicate that very few consumers cite having to change telephone numbers as a reason for not switching now that number portability has been implemented.

3.101 The current cost recovery rules for geographic portability do not act as a disincentive to the switching consumer themselves as the one off port-order and average porting conveyance charges for geographic portability are levied by the donor provider against the recipient who absorbs these costs. It is estimated that some 300,000 consumers per annum port their geographic telephone numbers.

3.102 Ofcom published its consultation *An assessment of alternative solutions for UK number portability* on 26 August 2004¹⁵. The technical alternative to Onward Routing which is probably most viable is a direct routing approach (All Call Query) where calls generated by originating networks are queried against a database and the call is routed direct to the recipient network. However the implementation costs of this alternative solution are high and likely to significantly outweigh the benefits according to Ofcom analysis. Moreover investment now, at a time when established fixed network providers are considering migration to IP-based Next Generation Networks, risks assets becoming obsolete and stranded in a relatively short period.

3.103 On the issue of reciprocal code swapping, Ofcom understands this to refer to a 'requirement' to have a 10k block in a relevant Geographic Area Code to become a recipient of a ported geographic number in that area. If so, it may be the case that this represents one of the industry's own business rules for geographic number portability and, in particular, service establishment. It is not clear to Ofcom why it is necessary for a Communications Provider who requests number portability from another Communications Provider to already have geographic numbering capacity of its own in the relevant geographical area, although ordinarily Ofcom would expect this to be the case. Typically a Communications Provider would want its own block of numbers in an area to provide services to consumers in addition to setting up porting agreements to import subscribers who want to retain their existing numbers. In the event that a dispute arose regarding the provision of portability (for example because a Communications Provider without a number block in a particular area was not able to import numbers from other Communications Providers in that area), Ofcom would consider each case on its merits. Ofcom notes that General Condition 18.2 requires the provision, on

¹⁴ Consumers' use of fixed telecoms services – Summary of Oftel's residential survey Q6 August 2001 published 4 November 2001 accessible at

<http://www.ofcom.org.uk/static/archive/oftel/publications/research/2001/q6fixr1101.htm>

Consumers who had never switched supplier were asked why they had never switched. Only 2% of respondents said that they did not want to change telephone number

¹⁵ http://www.ofcom.org.uk/consultations/current/uk_num_port/

request, of portability as soon as is reasonably practicable, on reasonable terms and in accordance with the Functional Specification.

Carrier Pre-Selection (CPS)

3.104 In the February 2004 Consultation, it was stated, for the avoidance of doubt, that calls to 056 numbers would be included in the CPS 'all calls' option. One respondent assumed that this related to calls to 056 ranges originating on local exchanges where CPS preferences were stored for traditional voice services. The respondent requested confirmation that CPS would not apply to calls from 056 numbers.

3.105 Another respondent commented that any voice telephony service, regardless of the mechanism or technology by which it conveys calls to the end user, should be regarded as comparable and substitutable to existing and competing services that are delivered currently via the PSTN. Therefore, it was considered that the same regulations should be imposed on BT for the provision of CPS on calls from 056 numbers.

3.106 It is Ofcom's current view that call origination of new voice services, including Location Independent ECS, is at an immature stage and that it is unclear whether it is in the same market as PSTN services or in a separate call origination market. If it is considered to be in a separate market, it would be one where a market review had not yet taken place and where there had been no finding of SMP. Clearly this may change in the future once the market has matured, but the current position is that calls from 056 numbers would not be subject to CPS.

3.107 The current lack of an obligation to provide CPS in relation to outbound calls from new voice services may generate confusion for consumers, particularly if geographic numbers are used. Service providers may need to consider the best means of informing consumers, at the point of sale, that CPS can not be applied to outbound calls using new voice services.

ENUM and the delegation for +87810 in e164.arpa

3.108 A few respondents referred to the potential for Electronic Numbering or ENUM to support a number range for new voice services and to be an enabler of convergence between traditional and new voice services. ENUM is a proposed international public database that links telephone numbers to internet names and other related destinations and identities such as the subscriber's email address, mobile telephone number or web page. These identities can then be used to establish various forms of communications with the ENUM subscriber.

3.109 One respondent hoped that Ofcom would support a public ENUM delegation of 056 at the earliest opportunity. A further respondent believed 056 could become the de facto 'number for life'. It was suggested that as VoB and associated services were potentially nomadic and not necessarily associated with one piece of apparatus, the assignment of numbers to individuals 'for life' was a real possibility.

3.110 A further respondent commented that number range +87810 had been delegated for ENUM global multi-media applications. It was suggested that the 087810 range could provide an alternative to 056, which could then be mapped directly to the ENUM number range either now or in the future.

3.111 The Department of Trade and Industry (the DTI) is currently consulting on the proposed UK arrangements for ENUM¹⁶. These arrangements were defined by an open group of interested UK parties, including Ofcom. Amongst the issues examined in the DTI's consultation is the viability of a dedicated number range for ENUM. Whilst it recognised that the creation of a separate number range

¹⁶ *ENUM - consultation on the Proposed Arrangements*, was issued by the DTI on 10 August 2004. The consultation closes on 10 November 2004. The document is available from the DTI website at: <http://www.dti.gov.uk/consultations/files/publication-1286.pdf>

for ENUM was an issue for Ofcom, the DTI took the opportunity to question the level of interest in such an option. During the discussion on ENUM in both the European Telecommunications Standards Institute and the ITU, various experts suggested that a range of telephone numbers could be allocated exclusively for use as identifiers in ENUM. The creation of a specific number range for ENUM would give end users and application service providers an indication that ENUM queries for numbers in that range would be successful and this could be an important factor in developing some applications. Ofcom will be working closely with the DTI on this issue and awaits the outcome of the consultation.

3.112 Ofcom has considered the suggestion of using 087810 numbers instead of 056 numbers for new voice services. However it has decided to reject the suggestion as a) the 08 range is almost exclusively used for NTS services; b) it may be confusing for consumers in terms of lack of service and tariff differentiation; and c) available numbering capacity would be limited to 100k numbers, allowing for only ten allocations of 10k numbers.

International dimension

3.113 One respondent mentioned its strong interest in seeing a harmonised set of rules emerge from the new EU regulatory framework - one that contributes to creation and innovation in a single European electronic communications market. It stressed that the policies Ofcom develops on numbering for new services were important not only in the UK context, but also for the influence they were likely to have on the way other European countries addressed the issue.

3.114 Ofcom is very aware of the need to work in harmony with other Member States in creating the framework for the communications market and that this particularly applies to numbering arrangements. Ofcom is represented at the Numbering, Naming and Addressing Working Group (NNA WG) which is part of the Electronic Communications Committee (ECC). One of the objectives of the NNA WG is to promote harmonisation of the different national numbering, naming and addressing policies. The NNA WG set up a project team to promote this objective in the context of numbering arrangements for VoIP services and produced a draft report *Numbering arrangements for VoIP services* which the ECC has now opened to public consultation¹⁷. The report aimed to support National Numbering Authorities such as Ofcom in decisions on whether and how to adapt their numbering plans to support VoIP Services. The main message of the report was that there were likely to be a great variety of commercial service descriptions and therefore the most appropriate numbering resource may vary. However, numbering options that consisted of a geographic range (possibly modified) and options for opening a new non-geographic number range were most likely to meet, in a balanced way, the interests of VoIP subscribers, end-users, VoIP service providers and the NRAs. Ofcom's decisions on numbering arrangements for new voice services are very much in line with the policies set out in the draft report.

3.115 Ofcom has also paid heed to the European Commission's information and consultation document on the application of the EU regulatory framework for electronic communications to Voice over IP (see paragraph 2.10 and footnote 4). The consultation clearly stated that geographic and non-geographic numbering should be made available for VoIP services.

Industry self-regulation of number management

3.116 One respondent suggested that there may be additional measures that could assist Ofcom in managing the allocation and use of geographic numbers for new voice services. One suggestion was that Communications Providers willing to participate in industry discussions could agree a Code of Practice which would encourage moderation in requests for allocation and best practice in use of telephone numbers.

¹⁷ The draft report *Numbering arrangements for VoIP services* is available on the ERO website www.ero.dk. The consultation on the report ends on 17 September 2004.

3.117 Ofcom considers this to be an interesting suggestion which, provided that the Code of Practice complied with Communications Providers' obligations in the Plan and the Numbering Condition, may produce a useful guide to best practice in adoption of numbers.

Further numbering issues

3.118 One respondent considered how Ofcom could address the potential impact on available numbering resource if geographic numbers were made available to providers of new voice services. Ofcom was urged to take the Wide Area Code policy forward in a more forceful manner and determine which areas are to be covered by each potential Wide Area Code. Also, the respondent considered that urgent action should be taken to move five-digit code areas such as Hornby 015242 to Wide Area Codes at the earliest opportunity, not because of the issues relating to VoB, but because of the limited amount of available numbering capacity in these areas. It was also commented that the introduction of overlay codes would relieve the pressure on some Geographic Area Codes.

3.119 The respondent also suggested that Ofcom considers restricting the use of geographic numbers to Communications Providers that are providing service to an installation address in that Geographic Area Code and not providing a virtual number service. This could be done by establishing criteria that must be met before a geographic number block is allocated.

3.120 Finally, the respondent questioned the 'protected' status of some blocks and whether these should be returned to the pool of 'free' numbers, which may ease the pressure on available capacity in some Geographic Area Codes. In general, it was suggested, the protection should last for a strict two year limit after withdrawal from previous allocation. If blocks are protected for a reason other than sterilisation following previous use, then the reason should be provided in the Scheme.

3.121 A different respondent questioned the justification for allocation of geographic numbers in 10k blocks, citing this as the main cause of pressure on the Scheme. Ofcom was urged to compel BT to change what it considered to be an administrative inadequacy and requested clarification of the technical limitations and Ofcom's actions to ensure allocation in future in smaller blocks of 100 to 500 numbers.

3.122 Wide Area Codes are the Geographic Area Codes that were introduced by Oftel in 2000 to provide relief for regions and cities where the existing number ranges were close to exhaustion. These included, for example, 020 for London, 024 for Coventry and 028 for Northern Ireland. Wide Area Codes offer significant advantages in terms of numbering efficiency for the long term but also have substantial implications for the telecommunications industry and consumers in terms of transition from the current numbering arrangements. Oftel studied how the wide area scheme might be implemented nationwide and modelled a number of options. Ofcom is considered the next steps for Wide Area Codes, including suitable timescales for a public consultation on the potential options.

3.123 In the shorter term, Ofcom will be consulting on conservation measures to ensure sufficient numbering capacity is available in all Geographic Area Codes before code changes are required or can be implemented. Conservation Areas are Geographic Area Codes which have a realistic expectation of number exhaustion in the foreseeable future. Special measures for allocation and use of numbers exist for Conservation Areas restricting adoption or other use to blocks of 1k numbers. Ofcom plans to consult shortly on which Geographic Area Codes should be made Conservation Areas, taking into account Communications Providers' forecasts for use provided as part of Ofcom's Annual Audit 2003 and the potential use by Communications Providers for traditional and new voice services. As part of this consultation Ofcom may consider the impact of virtual geographic numbers on the available resource and whether a separate conservation category could be introduced to indicate Geographic Area Codes that could support the allocation of virtual numbers without an impact on available resource. Ofcom will also be examining the best means of providing additional numbering capacity in the short term in the five-digit code areas.

3.124 In addition to the Plan, Ofcom publishes the Scheme, a day to day record of telephone numbers on its internet site to help Communications Providers apply for number ranges that are available for allocation. In the Scheme, the status of some number blocks is shown as 'protected'. The main reason Ofcom protects number ranges is for future code and number planning – Ofcom does not protect number blocks after withdrawal from a Communications Provider. Where there is a specific date for the removal or reassessment of the protection, Ofcom tends to show this on the Scheme. However, where there is no date shown the range may be protected for as long as Ofcom considers necessary. Ofcom believes it is not necessary to show the reason why a range is protected because Communications Providers only need to know which ranges are available for allocation, that is, those shown as 'Free' on the Scheme. Also, Communications Providers may make specific enquires to Ofcom about protected ranges.

3.125 Ofcom agrees that finer digit analysis for routing of geographic numbers would be beneficial for the conservation of the geographic numbering resource. Indeed, allocation of 1k rather than 10k blocks forms the basis of its Conservation Area policy. In previous years, Oftel has discussed the possibility of smaller block allocations with the industry but issues relating to legacy networks restricted the technical ability of various Communications Providers to handle smaller blocks. Also, some Communications Providers have explained that they can only route a finite number of 1k blocks. Ofcom plans to revisit this issue with the industry in 2005. In addition, Ofcom anticipates that Next Generation Networks will result in a situation where a wholesale move to routing at a more granular numbering block level could occur. Ofcom will ensure that this expectation is communicated to ECN providers during their implementation of Next Generation Networks.

Section 4

Analysis of policy options

4.1 In this section, Ofcom assesses the advantages and disadvantages of the policy options considered in the February 2004 Consultation and also considers additional options put forward by respondents to that consultation. Analysis of the options is provided against criteria drawn from Ofcom's relevant duties as set out in the Act and through a Regulatory Impact Assessment (RIA).

Options considered

4.2 The February 2004 Consultation presented Ofcom's proposal to make a dedicated non-geographic number range available for new voice services. The specific proposal was to make 056 numbers available for VoB services. This proposal has been modified to be a proposal to make 056 numbers available for Location Independent Electronic Communications Services. The options in relation to this proposal are therefore:

- **Option A: 056 numbers made available for Location Independent ECS**
- **Option B: 056 numbers not made available for Location Independent ECS**

4.3 Additional options for making a dedicated non-geographic number range available for new voice services were suggested in the responses to the February 2004 Consultation. These were:

- **Option C: 06 numbers made available for Location Independent ECS** providing access to 1,000 million numbers (rather than 100 million numbers in the 056 range) in a range completely distinct from existing number range designations.
- **Option D: 057 - 059 numbers made available for Location Independent ECS** mirroring for new voice services current 07 - 09 number range designations.

4.4 The February 2004 Consultation proposed four options for the allocation of geographic numbers for VoB services. Where Ofcom referred to the services in question as VoB in the consultation, the options have been revised to refer to new voice services in general. The options for allocation of geographic numbers are therefore:

- **Option 1: Allocate to all publicly available new voice services**
Option 1 would be to permit the allocation of geographic numbering for all publicly available new voice services. No discrimination would be made between a new voice service, e.g. VoB, and a PSTN voice service, or between a PATS and non-PATS new voice service.
- **Option 2: Allocate to new voice services which are PATS only**
Option 2 would permit the allocation of geographic numbers for new voice services which were PATS only, thus reducing the impact on the geographic numbering resource and making a contribution towards addressing consumer protection concerns.
- **Option 3: Allocate to new voice services which are PATS and only in geographic code areas with abundant numbering capacity**
Option 3 would permit allocation of geographic numbers for new voice services which were PATS only, and then only in areas with sufficient available numbering capacity (e.g. at least 20 blocks of numbering capacity available), thus easing the impact on the geographic numbering resource as well as making a contribution towards addressing consumer protection concerns.

- **Option 4: Allocation not permitted to any new voice services**

Option 4 would not permit the allocation of geographic numbers for any new voice services.

4.5 In the February 2004 Consultation, Ofcom took the opportunity of including, within Option 1, five sub-options on proposed measures to ensure that sufficient geographic numbering capacity was available to accommodate the potential demand for such numbers should they be made available for all, or PATS only, new voice services. The responses to those options are useful for Ofcom's ongoing work on number conservation measures. Ofcom will be consulting on Conservation Area and code change measures separately and, therefore, is not assessing these sub-options in this statement.

4.6 Additional options for allocation of geographic numbers were proposed by respondents to the February 2004 Consultation, namely:

- **Option 5: Allocation not permitted for nomadic or virtual number services**

Option 5 would restrict allocation of geographic numbers to services which did not offer an element of mobility and to services which are used predominantly at an installation address which corresponds with the Geographic Area Code.

- **Option 6: Allocation of geographic numbers subject to specific service criteria**

Option 6 would permit allocation of geographic numbers if the service required location significance; supported national and international inbound and outbound calls from the PSTN; used a conventional telephone handset and cradle or a direct VoB phone; operated in the relevant Geographic Area Code; and was not nomadic.

Criteria for evaluating policy options

4.7 The main criteria for assessing the options have been developed from the six European Community requirements for regulation as set out in section 4 of the Act; the general duties of Ofcom as set out in section 3 of the Act; and general duties as to telephone numbering functions as set out in section 63 of the Act. These include the requirements to:

- encourage efficient and sustainable competition in the market for ECNs, ECSs and Associated Facilities (AFs);
- further the interests of citizens in relation to communications matters and in relevant markets, where appropriate by promoting competition;
- not favour one form of ECN, ECS or AF over another;
- have regard to regulatory activities being transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed – representing the best regulatory practice; and
- secure what appears to Ofcom to be the best use of telephone numbers and encourage efficiency and innovation for that purpose.

4.8 Ofcom has examined these requirements and considers that the criteria for evaluation of policy options may be summarised as the promotion of competition; the promotion of the interests of consumers; neutrality in the treatment of networks and services; and best regulatory practice, including the best use of telephone numbers.

Assessment of options

Assessment of options for making a dedicated non-geographic range available for new voice services

Promotion of competition

4.9 It is Ofcom's duty in administering the Scheme that it ensures Communications Providers have appropriate access to sufficient and suitable numbering resource for both existing and new services. Without such access, the provision of services and therefore competition would be stifled.

Ofcom understands from Communications Providers that there is demand for a dedicated non-geographic range for some types of new voice services. As set out in paragraphs 3.10 and 3.11 of this statement, Ofcom does not consider that existing non-geographic ranges would meet the requirements of all new voice services and therefore a dedicated range is required. As a consequence, Option B would not be considered to promote competition. Similarly, Ofcom does not consider that replicating existing service designations for new voice services would deliver any benefits, therefore, Option D is also not considered to promote competition.

4.10 The differences between Options A and C are the amount of available numbering capacity and the proximity of the range to existing ranges. As discussed in paragraph 3.14, Ofcom is not convinced that 1,000 million numbers would ever be required for Location Independent ECS, particularly as existing number ranges, including geographic numbers, may be used for new voice services provided the service is in line with the Plan. Also, as discussed in paragraph 3.15, Ofcom does not believe that Option A's proximity to 055 Corporate Numbers would have a detrimental impact on the success of the 056 range and its benefits for competition in the new voice market. Therefore, Option A is considered the best option for promotion of competition.

Promotion of consumer interests

4.11 The designation of a dedicated non-geographic number range for new voice services is likely, to some extent, to relieve pressure on the geographic numbering resource, which may in turn postpone or eliminate the need for code changes in areas with limited available numbering capacity. It may also help highlight to consumers the potential differences in characteristics of services offered on the dedicated numbers. It is possible that new and innovative pricing models for services on a dedicated range may be offered by Communications Providers to the advantage of consumers. Therefore, Option B, and to a lesser extent Option D which would only replicate characteristics in existing ranges, are not considered to promote consumer interests. Options A and C could be considered to equally promote consumer interests.

Neutrality in the treatment of networks and services

4.12 All options are neutral in the treatment of networks and services.

Best regulatory practice

4.13 It would be contrary to Ofcom's objective of promoting competition in new voice services if it were to restrict service innovation by forcing Communications Providers to shape their services according to the tariff and/or service restrictions of existing non-geographic number ranges. Therefore, Option B would not be considered best regulatory practice. It is Ofcom's duty to ensure that best use is made of the numbering resource – replication of existing service criteria would not be considered best use of 300 million numbers, therefore, Option D is also unsound. Similarly, Ofcom must ensure that the finite resource of numbering is administered prudently, therefore, it does not consider the designation of 1,000 million numbers at the outset for new voice services to be an example of good husbandry. Therefore, Option A is considered to exercise the best regulatory practice of the four options.

Assessment of options for making geographic numbers available for new voice services

Promotion of competition

4.14 Numbering strategy can play a crucial role in the promotion of competition and the evolution of ECNs and ECSs by providing access to numbering resource in a non-discriminatory manner. Option 1 is the only option which does not discriminate according to service or provider characteristics. Ofcom recognises that a balance needs to be struck between creating the right conditions in which new voice services and new providers can enter the market and ensuring that consumers are properly informed and protected. As explored in the September 2004 Consultation and Interim Guidance, Ofcom's initial views are that it is not desirable for all voice services to be required to offer

the same features as traditional voice services nor is it desirable to rely on criteria such as the appearance of the service to make distinctions as to how that service should be regulated. Viewing this approach in the context of numbering, non-discrimination in the allocation of geographic numbers would allow providers to enter the new voice service market and develop services at the level that best suits their market plans yet still gain access to the number range of their choice. It is conceivable that a provider may wish to launch service at a non-PATS level due to difficulties in meeting all the associated General Conditions at the time of launch but may, as their service and/or the market develops, wish to provide a PATS service in future. This 'upgrade' of service should be possible without consumers having to change their telephone numbers. If geographic numbers are allocated to PATS only, market entry could be delayed in the case of those providers wishing to use geographic numbers at the outset and/or wanting to avoid their customers having to change their telephone numbers in order to use a geographic number in future. It could also be considered that some PATS and non-PATS voice services may be in competition for the same customers and should have equal access to the same type of numbers.

4.15 On the other hand, it could be argued that some discrimination in eligibility for geographic numbers is justified in order for competition to be efficient and sustainable. Option 2 promotes the allocation of such numbers to PATS only. This approach would offer a cautious starting position, which could then evolve if necessary to a point where geographic numbers were also allocated to non-PATS should the market develop in a way which suggested that this is vital for effective competition. It would also provide an opportunity to assess the sustainability of new voice services and new providers in the market before widespread geographic number allocation possibly generates Geographic Area Code changes. It is also debateable whether PATS and non-PATS are in direct competition. Potential providers of non-PATS services, it could be argued, may market their services as cheap second line options and not as a substitute for existing services. Hence doubt could be cast on the assertion that non-PATS providers need geographic numbers to compete effectively.

4.16 The advantage of Option 3 is that it would lessen the impact on the available geographic numbering resource, possibly avoiding the need for some code changes. Code changes implemented by Ofcom as a result of an apparent 'bow wave' of demand from service providers in all geographic areas, who may then exit the market or not launch services, could be inefficient and detrimental to competition and stakeholder interests. However, Option 3 would discriminate according to service attributes and would create a 'Geographic Area Code lottery'.

4.17 Option 4 would prohibit the allocation of geographic numbers for all VoB/new voice services. Such services, therefore, would need to be provided on non-geographic numbers such as the 056 range. Access to numbers in the new and dedicated 056 number range would be unrestricted. New entrants and existing providers would have equal access to the resource. This would be in contrast to existing number ranges where existing providers may have a ready supply of numbers and agreed interconnection arrangements and may, therefore, be at a competitive advantage compared to new entrants. The resulting focus on the 056 range could help promote competition by concentrating the industry's efforts in negotiating retail price and interconnection arrangements for new voice services. However, Option 4 presents the most restrictive approach, which contrasts with Ofcom's regulatory principle of seeking the least intrusive mechanism to achieve its policy objectives, in this context promotion of competition in new voice services.

4.18 Options 5 and 6 would restrict allocation of geographic numbers to non-nomadic and non-virtual number services. It could be argued that such an approach would restrict the offering of new and innovative service elements and that this would be counter to the promotion of competition in ECSs.

4.19 In conclusion, Options 1, 2, 5 and 6 would support the promotion of competition, with Option 1 providing the widest access to geographic numbers and so could be considered to facilitate the highest level of competition. The arguments for Options 1 and 2 in particular are finely balanced, however, Option 1 has the advantage of encouraging the launch of new services with innovative elements through the provision of geographic numbers. It also avoids reliance on the PATS/non-PATS distinction (particularly as the European Commission's interpretation of the definition is

unclear), which could otherwise dissuade providers from entering the market and providing consumers with additional choice.

Promotion of consumer interests

4.20 It is one of Ofcom's key objectives that consumers are well informed, enabling them to make effective choices and be adequately protected. Numbering arrangements provide broad indications of service type and/or relative tariff to consumers, however, as mentioned earlier in this statement, Ofcom considers that numbering arrangements are neither the best nor the primary means of informing and protecting consumers as to the potentially different attributes of new voice services.

4.21 Option 1 would not use numbering policy as a means of addressing more fundamental issues of consumer awareness, consumer protection and delivery of social objectives. These issues are rightly being addressed through proposals in the September 2004 Consultation and Interim Guidance. By allowing geographic numbers for all publicly available new voice services, Option 1 would encourage consumer take-up by reducing the number of unfamiliar elements associated with the new service through the provision of a recognisable type of number and the possibility of porting existing geographic numbers (noting that portability would only be between providers of PATS). Also, interconnection and retail tariff arrangements for geographic numbers are established, providing consumers with certainty and possibly cheaper calls than to other ranges, particularly because of inclusion in calling options packages.

4.22 Alternatively, Option 2 would give an incentive for providers to offer PATS, delivering important consumer benefits and social objectives. It could be argued that restricting geographic numbers to PATS would maintain the quality of service consumers associate with 'traditional' numbering and that if this most recognisable of numbering resource were to be used for non-PATS, with features different from those associated with standard telephony voice services, then the opportunity to inform consumers of these differences via the telephone number would have been lost. Also, it is likely that allocation of geographic numbers to non-PATS (as envisaged under Option 1) would significantly increase the impact on available geographic numbering resource, imposing additional number changes on the general public regardless of whether they subscribe to a new voice service. Both Options 2 and 3 would mitigate the impact on numbering resource by limiting geographic number allocation to PATS only.

4.23 Option 4 would restrict geographic numbers to traditional voice services, resulting in the continuation of the current consumer experience of services on geographic numbers. However, in this case, Ofcom considers the promotion of competition is very strongly in the interests of consumers, and that there are other routes available to ensure adequate protection of consumers using new voice services. Responses to the February 2004 Consultation have clearly stated that access to geographic numbers is vital for new services and new providers to compete with existing services and providers.

4.24 Options 5 and 6 would also preserve consumers' current experience of services on geographic numbers, however, the restrictions on eligible service characteristics under Options 5 and 6 would mean a reduction in the innovation that consumers could enjoy from new services.

4.25 Similar to the assessment of the options against the promotion of competition criterion, an assessment against the promotion of consumer interests' criterion suggests that the most suitable choice would be Option 1 or Option 2. Again, the arguments for both are finely balanced, however, Option 1 has the advantage of making the consumer's experience of new voice services more attractive through the provision of familiar numbering, as well as the advantage of not trying to address consumer protection concerns through the relatively blunt instrument of numbering policy when other more targeted measures are possible (as set out in the September 2004 Consultation and Interim Guidance).

Neutrality in the treatment of networks and services

4.26 Section 4 of the Act states that it is desirable for Ofcom to carry out its functions in a manner which, as far as is practicable, does not favour one form of network or service over another. Option 4 may be said to discriminate against VoB/new voice services on the basis of a broadband connection being used to deliver the calls rather than the PSTN. Apart from Option 1, the remaining options may be said to discriminate on the basis of service characteristics. For instance, Options 2 and 3 restrict the allocation of geographic numbers to services that display the characteristics of PATS, such as provision of access to 999/112, directory enquiries and operator assistance. Options 5 and 6 restrict allocation of geographic numbers to services that do not offer nomadic features or virtual numbering services. Therefore, on the basis of neutrality in the treatment of networks and services, Option 1 is the most suitable option.

Best regulatory practice

4.27 It is amongst Ofcom's regulatory principles to always seek the least intrusive regulatory mechanisms to achieve its policy objectives. Option 1 is the least interventionist as all the other options would require Ofcom to differentiate to various degrees according to service or provider characteristics and deny geographic numbers for some services. It is also amongst Ofcom's principles to strive to ensure its interventions are evidence-based, proportionate, consistent, accountable and transparent in both deliberation and outcome. These considerations have been taken into account in Annex 4 of this statement, where Ofcom sets out how the implementation of Option 1 meets the legal tests.

Regulatory Impact Assessment

4.28 Sections 4 and 5 of the February 2004 Consultation included a Regulatory Impact Assessment (RIA) on the proposal to make 056 numbers available for VoB services and the options for allocation of geographic numbers for VoB services. This was required by section 7 of the Communications Act 2003. RIAs 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 as recommended by the Better Regulation Task Force, and are commonly used by other regulators. This is reflected in section 7 of the Act, which means that generally, Ofcom has to carry out RIAs where its 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. In producing the RIA, as part of the consultation and this statement, Ofcom had regard to such general guidance as it considered appropriate, including related Cabinet Office guidance. Comments received on the consultation have contributed to the analysis below, which represents the finalised RIA.

Proposal to allocate 056 numbers for Location Independent ECS

Costs and benefits

4.29 The proposal to make 056 numbers available for Location Independent ECS would generate costs for Communications Providers who would need to modify their networks to accommodate the new number range. Consumers would also experience costs in updating their dialling equipment, (e.g. auto-diallers, switchboards etc) and for printing, signage and contact records. However, these would not be expected to represent significant costs.

4.30 One of the benefits of making 056 numbers available is that the abundance of numbering capacity within the range would make entry by new voice service providers unrestricted from a numbering perspective. This would promote competition and provide a 'level playing field' in terms of Communications Providers' access to the numbering resource, as existing service providers would not have an existing supply of 056 numbers and established interconnection arrangements. Another benefit is that Communications Providers and consumers would have clear recognition of new voice services through the use of a distinctive number range.

4.31 A decision not to make 056 numbers available for Location Independent ECS would result in providers using existing number ranges for their services (or an alternative option, i.e. 06 or 057-059,

although these options are not considered further in this RIA as the assessment against the evaluation criteria earlier in this section concluded that 056 was the most suitable option for a dedicated non-geographic range). This may not be to the advantage of the service provider or the consumer. For example, although new voice services might possibly be marketed at much lower prices than services typically offered on 08 and 09 ranges, there might be a consumer perception that services within these ranges are relatively expensive. Such a perception could inhibit the take-up of new voice services and deter market entry by some service providers if a more suitable numbering alternative were not made available.

Risks

4.32 There are no significant risks in terms of numbering capacity associated with making 056 numbers available for Location Independent ECS. Whilst it necessitates the designation of part of the finite numbering capacity in the Scheme, allocation of 056 numbers would be managed so that should their take-up be low and remain low, the unopened 056 subranges could be re-designated. On the other hand, not making a dedicated non-geographic range available for Location Independent ECS runs the risk of deterring market entry by some new voice service providers.

Comparison of the options

4.33 Ofcom believes that the benefits of making 056 numbers available for Location Independent ECS would outweigh any costs that may arise, whereas not making 056 numbers available would have no significant benefits. In conclusion, therefore, Ofcom believes that making 056 numbers available for Location Independent ECS services is a suitable regulatory measure to foster competition in the provision of new voice services.

Options for allocation of geographic numbers for new voice services

4.34 Ofcom has assessed the likely costs and benefits resulting from the options for allocation of geographic numbers for new voice services in qualitative rather than quantitative terms. This is due to unavailability of reliable and up-to-date quantitative data. In Question 14 of the February 2004 Consultation, Ofcom requested comments and quantitative data from Communications Providers on the likely impact and timescales for implementing conservation and code change measures, however, responses to the question were very limited.

4.35 The lack of quantitative data is also due to the uncertain impact of new voice services and the potential level of demand for geographic numbers. The market for new voice services is still in its infancy and the entry of service providers depends on a number of factors such as the regulatory environment, interconnection arrangements, consumer acceptance of services with different features, the pricing relative to traditional voice services etc. These factors mean that it is very difficult to provide a robust forecast of the likely growth of new voice services and the resulting impact on the geographic number resource.

4.36 Neither is it possible to estimate, with any certainty, the likely costs of each option. Ofcom has not yet undertaken a detailed study of the costs of conservation and code changes measures in relation to the impact of new voice services. This is because such a study would require many assumptions, for example when, how many and in what manner Geographic Area Codes would require conservation measures and/or require a code change; the likely take-up of new voice services; estimates of Communication Provider and consumer costs etc. The level of assumption required would be very unlikely to provide a robust estimate of the specific costs caused by the growth in new voice services and the decision to allocate geographic numbers for such services.

4.37 Indications of costs can, however, be taken from previous studies –

- a 1995 study conducted by the European Committee for Telecommunications Regulatory Affairs (ECTRA), which estimated on the basis of experience in seven European countries

(including the 1995 phONEday changes in the UK) that a code change would cost Communications Providers between 1 and 10 euros per subscriber; and

- NERA¹⁸ estimated that as a result of introducing number portability, the approximate financial value of the benefits per subscriber who ports their number was £220 (in 1993 prices) or £290 in 2004 prices. This could be taken as the rough value to consumers in keeping their telephone number rather than having to change it by taking service from a new provider or presumably experiencing a number change.

4.38 There have been a number of independent studies estimating the growth (or restrictions on growth) of VoB/VoIP services in the UK, including:

- an Enders Analysis report on VoIP¹⁹ which predicted that ISPs would be the main VoB service providers but would face competition from CPS and Indirect Access providers whose business models had been built on the PSTN. Enders considered that customer acquisition for CPS and indirect access had been slow and it was not clear that VoB services would mark a different trend;
- a report prepared by HSBC²⁰ which suggested that VoB would be rebalancing in disguise as incumbent Communications Providers would resell DSL for VoIP providers rather than PSTN minutes for indirect access providers. As such, the growth of VoB services would be dependent on the take-up of broadband; and
- the Analysis final report for the European Commission on IP voice and associated convergent services²¹, which predicted broadband adoption to be the key to the growth of VoB services.

4.39 At present, broadband take-up in the UK is less than 5 million subscribers, as against 34 million subscribers of PSTN services²² – although this take-up is growing rapidly. If all the present broadband subscribers were to move to VoB services and take a new geographic number, this would cause a 15% increase in the number of new geographic numbers in the UK. However, this growth may cause little impact in terms of available geographic numbering resource if Communications Providers' broadband provision is focussed on larger cities and business oriented areas, where available geographic number capacity is in greater supply. It is also possible that new voice services may be used as substitutes for existing PSTN voice services, thereby freeing up existing allocations of geographic numbers for reallocation, and that existing numbers may be ported (providing portability is between PATS providers). Therefore the growth of VoB services might have only a limited initial impact on the availability of the geographic number resource, however, it may contribute to bringing forward the need for conservation and code change measures in the medium to long term.

Costs of the options

4.40 Broadly speaking, a decision to allocate geographic numbers for new voice services may result in costs to Communications Providers and costs to residential and business consumers. Options 3 and 4 do not involve significant costs to these categories of stakeholder, therefore, the following assessment refers to costs likely to be incurred under Options 1, 2, 5 and 6.

Costs to Communications Providers

4.41 The costs to Communications Providers would, in part, arise from technical requirements as a result of conservation measures and number changes driven by available number shortages in some Geographic Area Codes. These costs would arise from the need to change databases, directories, information (e.g. on public phone boxes); the need to notify other administrators; and from additional calls to customer services. These costs are likely to be moderate and some would be incurred for any

¹⁸ *Cost-benefit analysis of number portability* – a report prepared for Oftel by NERA, January 1994

¹⁹ <http://www.endersanalysis.com/publications/publication.aspx?id=238>

²⁰ *Global Telecoms: 2020 vision - and the road to it*, HSBC, 12 March 2004

²¹ *IP Voice and Associated Convergent Services* – Analysys, 28 January 2004

²² *The Communications Market 2004 - Telecommunications*, Ofcom, August 2004

increase to the base of geographic numbers regardless of whether that increase was due to allocation for new voice services.

4.42 The larger cost element would be due to the need to change software or hardware to implement number conservation and code change measures. These may be necessary due to the increased impact on available geographic numbers if allocated for all publicly available new voice services. These services have a massive growth potential, particularly as service providers may seek an allocation of geographic numbers in many and possibly every Geographic Area Code (although as discussed in paragraph 4.38 this may be closely linked to the take-up of broadband). The risk of running out of numbers has not previously arisen in many Geographic Area Codes with limited available capacity because it was extremely unlikely that new providers would have offered new services in those areas using traditional access means (and hence requiring new geographic numbers). In order to ensure sufficient geographic numbers are available in all code areas number conservation measures may need to be introduced in additional areas. Number conservation measures can take two forms:

- in order to utilise the remaining numbers more efficiently, certain Geographic Area Codes may need to become Type A Conservation Areas²³, that is, numbers would be allocated in 1k rather than 10k blocks to conserve capacity. Finer digit analysis for routing purposes would mean increased processing by the networks. Communications Providers may need to upgrade their software and hardware to be able to accommodate the increased processing requirements; and
- if conservation measures were not sufficient, a code change would be required. This would result in incremental network and support system costs for Communications Providers as they would need to configure software to recognise the new Geographic Area Codes.

4.43 Option 1 has the highest potential to impose number conservation and code change costs on Communications Providers due to the liberal allocation of geographic numbers. Options 2, 5 and 6 would be likely to incur reduced costs in comparison to Option 1.

4.44 Ofcom estimates that the allocation of geographic numbers for all publicly available new voice services may contribute to approximately 40 Geographic Area Codes becoming Conservation Type A Areas. This is a rough estimation based on the likely number of nationwide new voice service providers and the level of available numbering capacity. This total also includes approximately 20 Geographic Area Codes that may require conservation measures regardless of allocation to new voice services. To the extent that the allocation of geographic numbers for PATS, nomadic and virtual number services would hasten the need to make a Geographic Area Code into a Conservation Area or bring about the requirement for a code change, the incremental cost would be the cost of financing those measures over the length of time that such measures are brought forward. As mentioned earlier in this statement, Ofcom plans to consult separately on conservation measures, when it will provide analysis and justification for its conservation measure proposals. In the meantime, stakeholders who wish to consider the position of Geographic Area Codes where conservation measures might be required may consider the table of areas with 20 or fewer blocks available or potentially available for allocation as included in Annex F of the February 2004 Consultation and the current position of those areas in the Scheme.

4.45 Ofcom also designates certain Geographic Area Codes as Type B Conservation Areas. These are areas that it predicts are within two years of becoming Type A Conservation Areas. Communications Providers with an allocation of numbers in a Type B Conservation Area are restricted to using specific 1k blocks within the 10k block, allowing for unused 1k blocks to be withdrawn and reallocated to a different Communications Provider should that Type B Conservation Area become a Type A Conservation Area in the future. The possible increase of Type B Conservation Areas due to allocation of geographic numbers for new voice services would not involve costs for software or hardware changes, since numbers would continue to be routed in 10k blocks until changed to a Type A Conservation Area (although there might be some minor administrative

²³ Type A Conservation Areas are Geographic Area Codes that Ofcom believes are within two years of having less than ten spare 10k blocks available for allocation.

costs for Communications Providers in ensuring that they only allocate numbers to end users from specific 1k blocks).

Costs to residential and business consumers

4.46 The designation of an area as a conservation area would have no impact on consumers, however, they would be affected by a Geographic Area Code change. Residential consumers would be likely to experience costs such as:

- the need to update address books and reprint stationery;
- the need to update pre-programmed equipment, such as alarms;
- time and frustration involved in misdialled calls before the new codes became familiar; and
- time spent dialling additional digits.

4.47 Business consumers would be likely to experience the following categories of cost:

- telephone usage: changes in auto-dialling, call barring and routing equipment; changes in equipment using code tables; telephones and faxes with short-code dialling memories; switchboard equipment, call diversion instructions and numbers stored in the memory of any telephone or fax; messages on answering machines; changes to national enquiry/support centre numbers and help-line numbers;
- security: alarm systems, emergency instructions and documentation, hazard control instructions and labels;
- printing work: stationery – letterheads, invoices, fax header sheets, business cards, address labels; literature – advertisements, company and product brochures, company art work, packaging, internal directories;
- signage: vehicle livery, company signs;
- other: computer databases, overseas contacts, personnel records; and
- lost business: where businesses lose trade as a result of lost telephone calls because of a Geographic Area Code change there may be some offsetting gain by other business that are not affected by a code change, however, there would be a net loss to society.

4.48 Additionally, under Option 1, some new voice services using geographic numbers may not be PATS and therefore might not offer access to Emergency Organisations, provide directory enquiry facilities, itemised bills, measures for end users with disabilities and other characteristics of PATS. Residential consumers who choose to replace their PSTN service (or PATS VoB service) with a non-PATS service may face the risk of not being adequately informed or protected regarding the differences in the new voice service and traditional voice services, however, Ofcom is consulting on ways to address this issue in the September 2004 Consultation and Interim Guidance. Similarly, the lack of number portability between providers of non-PATS means that consumers would face barriers to transferring their geographic number to providers of competing new voice services. These risks would be present for non-PATS new voice services using 056 numbers, however, it could be considered that the allocation of geographic numbers for non-PATS increases the risk that consumers might be unable to distinguish between PATS and non-PATS new voice services.

Benefits of the Options

Communications and Service Providers

4.49 Options 1, 2, 5 and 6 are likely to promote increased demand for new voice services by ensuring that service providers are able to offer geographic numbers for some or all of their services. Option 1 has the advantage of providing geographic numbers in all Geographic Area Codes and for all forms of service, including non-PATS, nomadic and virtual number services and is most likely to foster competition.

Residential and business consumers

4.50 Options 1 and 2 would provide consumers with the potential for increased choice and access to innovative products. Option 4 would restrict choice and competition to 056 numbers, while Option 3 would disadvantage consumers who lived in Geographic Area Codes with limited available numbering resource. Options 5 and 6 would restrict innovation and consumer choice in terms of service characteristics available on geographic numbers.

4.51 Ofcom's policy is to ensure that consumers obtain the maximum benefit of competition through the least form of regulatory intervention. In this respect, Options 1 and 2 are the most beneficial. Option 2 may help to protect consumers due to all services using geographic numbers being PATS, however, Ofcom believes that there are better ways for consumers to be informed and protected regarding service features than through the type of number on which service is provided (such measures are the subject of the September 2004 Consultation and Interim Guidance). Therefore, Option 1 is considered to deliver the most benefits for consumers.

Risks

4.52 Option 4 poses the least risk in terms of scarcity of numbering resource but does not support competition in new voice services through allocation of geographic numbers. Option 3 allows for this competition in most areas; it would, however, disadvantage consumers living in areas with limited available geographic numbers whilst protecting against the need to introduce number conservation and code change measures. Depending on the number of service providers who enter the market and the number of subscribers for new voice services, Options 1, 2, 5 and 6 (particularly Option 1) run the risk of number exhaustion in some Geographic Area Codes.

4.53 Option 1 carries the additional risk that consumers would not be able to distinguish between services with the characteristics of PATS and those without on geographic number ranges. However, if consumers are adequately informed about the service, they should be able to make informed choices regardless of number range.

Conclusion

4.54 The assessment of policy options for making a dedicated non-geographic number range available for new voice services can be summarised as follows:

- Option A (056 numbers made available for Location Independent ECS) would promote competition and consumers' interests and, like all the options, would be neutral in the treatment of networks and services. It also provides the best approach in terms of regulatory objectives. There are no significant costs or risks in terms of numbering capacity associated with making 056 numbers available;
- Options B (056 numbers not made available for Location Independent ECS) and D (057-059 numbers made available for Location Independent ECS) would not promote competition or consumers' interests and therefore would not deliver Ofcom's regulatory aims as well as Option A; and
- Option C would be similar to Option A in the promotion of competition and consumers' interests, but may be too liberal with the UK's available numbering resource and therefore may not be an example of best regulatory practice.

4.55 The assessment of policy options for making geographic numbers available for new voice services can be summarised as follows:

- Option 1 (allocation of geographic numbers to all publicly available new voice services) would promote competition and consumers' interests, as well as being neutral in the treatment of networks and services. It would incur higher costs in terms of number conservation measures and possible code changes than the other options, but it is considered that the benefits of additional competition in the new voice services market

- would outweigh these costs. By fostering an environment where new voice services may flourish, this option is an example of best regulatory practice;
- Options 2 (restrict allocation of geographic numbers to PATS new voice services only), 5 (allocation of geographic numbers not permitted for nomadic or virtual number services) and 6 (allocation of geographic numbers subject to specific new voice service criteria) would promote competition (probably to a lesser extent than Option 1) and would also promote consumers' interests but would constrain certain services and providers and restrict innovative service developments. It would also incur costs which again would be likely to be outweighed by the benefits of increased competition;
 - Option 3 (allocate geographic numbers to PATS new voice services in abundant areas) would not promote competition and consumers' interests in areas with limited availability of geographic numbers as allocation of geographic numbers in such areas would be prohibited. It would also disadvantage certain providers. As such Ofcom considers that the reduced costs of implementing Option 3 would not outweigh the lack of benefits for competition and consumer interests; and
 - Option 4 (allocation of geographic numbers not permitted to any new voice services) would not promote competition and consumers' interests if the argument that access to geographic numbers is vital to the success of new voice services is accepted. Such lack of promotion of competition and consumers' interests would not outweigh the lack of costs and thus Ofcom considers that Option 4 would not be an example of best regulatory practice.

4.56 In Ofcom's view, the outcome of the RIA and the analysis of policy options against criteria drawn from Ofcom's relevant duties as set out in the Act is that Option A is the most suitable option for making a dedicated non-geographic number range available for new voice services and that Option 1 is the most suitable option for the allocation of geographic numbers for new voice services. Ofcom has reached this decision both by means of the analysis of the options set out in this section and after careful consideration of the responses to the February 2004 Consultation, with due regard to the view of the European Commission as expressed in its information and consultation document (as referred to in paragraph 2.10 and footnote 4). Ofcom has, therefore, decided to implement Option A, thereby making 056 numbers available for Location Independent ECS; and to implement Option 1, thereby making geographic numbers available for allocation for all publicly available new voice services.

Section 5

Ofcom's decision

5.1 Ofcom has considered all the responses to the February 2004 Consultation and its relevant duties and has decided:

- to make 056 numbers available for 'Location Independent Electronic Communications Services'; and
- that geographic numbers may be allocated for all publicly available new voice services.

Ofcom's decision in relation to the 056 number range

5.2 Ofcom has decided to designate 056 numbers for Location Independent ECS. This decision means that a dedicated non-geographic range will be made available for new voice services, although existing number ranges may also be used if the service is in line with the Plan. Ofcom has developed a definition for Location Independent ECS which is to be included in the Plan. The definition is designed to cover the types of service for which Ofcom foresees that service providers may wish to use numbers from the 056 range. These are:

- **services where the Numbering Plan of the Communications Provider offering the service has no geographic significance**
Some Communications Providers may not want to attach geographic significance in the form of a Geographic Area Code to their new voice services. This may be due, for instance, to an end user not wishing to be associated with one specific geographic area. Also, multi-site businesses may find it easier to manage their internal numbering plans from one 056 number block rather than an assortment of numbers from the different geographic areas in which they have a presence.
- **services where the location of the Customer's Apparatus identified by a given Telephone Number at the time of use is not necessarily permanently associated with a particular Network Termination Point**
Such services could be permanently fixed, offer an element of mobility or be completely nomadic. That is, the physical point at which the end user makes and receives calls may vary.
- **services where translation to a Geographic Number is not involved**
056 numbers would not need to be translated to a geographic number for the delivery of calls made to those 056 numbers. Calls to Location Independent ECS would terminate on the 056 number and there would be no need to translate for delivery and, hence, no requirement for a geographic number.
- **services which are not a Mobile Service**
Location Independent ECSs may be nomadic and be used in one or a series of discrete fixed locations, however, they would not be Mobile Services. Mobile Services are conveyed over an ECN where every signal is conveyed using Wireless Telegraphy to or from Apparatus designed or adapted to be capable of being used while in motion. Location Independent ECSs may be used on Wireless Fidelity (Wi-Fi) enabled laptops, however, this does not make them Mobile Services as it is not envisaged that every signal would be conveyed using Wireless Telegraphy. Mobile Services would continue to be provided on the mobile number ranges 077 – 079.

Characteristics of the 056 range

5.3 As set out in its responses to comments on the February 2004 Consultation, Ofcom's initial view of service characteristics for the 056 range is:

- no substructure is to be imposed on the 056 range;

- numbers will initially be available for allocation in the 0560 subrange. Unopened decades may be protected;
- 056 numbers will be allocated in blocks of 10k;
- retail price and interconnection arrangements are a matter for industry negotiation;
- the sharing of revenue generated by calls to 056 numbers with end users is not permitted;
- tariff information will not be collected by Ofcom and shown on the Scheme (although Ofcom is prepared in future to accommodate industry-agreed retail pricing arrangements in its number allocation procedures, subject to industry negotiation and request);
- 056 numbers are to be portable between PATS providers;
- calls to 056 will be included in the CPS 'all calls' option. Calls from 056 numbers will not be subject to CPS; and
- the suggested number layout is 056 XXXX XXXX.

Implementation of Ofcom's decision in relation to the 056 number range

5.4 In order to implement its decision to make 056 numbers available for Location Independent ECS, Ofcom has decided to make the modifications to the Plan as set out at Annex 2 of this document, and to issue the Direction to specify an 056 application form as set out at Annex 3 of this document. Ofcom considers that the modifications to the Plan and the Direction to specify the 056 application form meet all the required legal tests in the Act, as set out in Annex 4.

5.5 The modifications to the Plan and the Direction to specify an 056 application form are the same in principle as those on which Ofcom consulted in the February 2004 Consultation, but certain changes have been made in light of responses received and for the reasons set out in Sections 3 and 4 of this statement.

Modifications to the Plan

5.6 The following changes have been made to the draft Modification to the Plan as proposed in the Schedule to the Notification of proposals for a modification to provisions of the Plan under section 60(3) of the Act (Annex D of the February 2004 consultation):

- the following text has been deleted '056 Voice over Broadband Services' and replaced with '056 Location Independent Electronic Communications Services';
- the following text has been deleted from the proposed Definitions and Interpretations section of the Plan -

"Voice over Broadband' refers to services that allow end users to make and receive calls over a broadband connection and which differ from services provided using circuit switched technology.'

and replaced with -

'Location Independent Electronic Communications Service means a service where:

(i) the Numbering Plan of the Communications Provider offering the service has no geographic significance;

(ii) the location of the Customer's Apparatus identified by a given Telephone Number at the time of use is not necessarily permanently associated with a particular Network Termination Point;

(iii) number translation to a Geographic Number is not involved; and

(iv) the service is not a Mobile Service.'; and

- the following text has been inserted in part B: Restrictions for the Adoption of Telephone Numbers of the Plan -

‘B3.5 Location Independent Electronic Communications Services

B3.5.1 Those who adopt or otherwise use 056 numbers shall not share with any End-User any revenue obtained from providing a service on those numbers.’

The 056 application form

5.7 The following changes have been made to the 056 application form proposed in the Schedule to the draft Direction as set out in the Notification of proposals under section 49(4) of the Act (Annex E of the February 2004 Consultation) -

- the terms ‘Voice over Broadband’ and ‘VoB’ have been replaced with ‘Location Independent Electronic Communications Service’ throughout the 056 application form;
- the following italicised text has been deleted from section 1(i) of the form:

‘in the National Telephone Numbering Plan published by *the Director on 22nd July 2003* pursuant to section 56 of the Communications Act 2003 (the ‘Act’);

and replaced with –

‘Ofcom on 6 September 2004’

- the following italicised text has been deleted from section 6 of the form -

‘For each of the number blocks applied for above, give a brief description of the type of Public Electronic Communications Service for which the Telephone Numbers applied for will be Adopted, and the market to be served by the service e.g. VoIP for SME business customers *in Preston*, VoIP for residential customers nationwide, etc.’;

- the following text has been deleted from section A1 of the form -

‘Ofcom would also normally expect to see that the provider has arrangements in place for its service to be carried over a network, and, where appropriate, would usually expect the provider to have taken reasonable steps to seek a sub-allocation of Telephone Numbers of the type applied for prior to making the application.’

and replaced with –

‘Ofcom would normally expect to see that the provider has arrangements in place for its service to be carried over a network, and, where appropriate, may expect the provider to have considered taking reasonable steps to seek a sub-allocation of Telephone Numbers of the type applied for prior to making the application.’; and

- the following text has been deleted from section A2 of the form –

‘If you are applying for Telephone Numbers as a provider of Public Electronic Communications Services, where appropriate Ofcom would usually expect your company to have already taken reasonable steps to obtain a sub-allocation of Telephone Numbers of the type you are applying for from a provider of a Public Electronic Communications Network.’

and replaced with -

'If you are applying for Telephone Numbers as a provider of Public Electronic Communications Services, where appropriate Ofcom may expect your company to have considered taking reasonable steps to obtain a sub-allocation of Telephone Numbers of the type you are applying for from a provider of a Public Electronic Communications Network.'

Applying for 056 numbers

5.8 Communications Providers may apply for allocations of 056 numbers from Ofcom in the manner usual for applying for Telephone Numbers using the appropriate application form from 6 September 2004. In order for all those who wish to apply for 056 numbers to have access to the application forms from 6 September, Ofcom will not place the standard user name and password access requirement on the 056 application form until 13 September 2004. This will ensure that applicants making their first application for allocation of numbers to Ofcom will not be prevented from gaining access to the 056 application form whilst they complete the registration process. Access to the 056 application form may be gained through the 'Numbering Information' section of Ofcom's website and temporarily through the 'New voice services' section.

5.9 056 numbers will be allocated on a 'first come first served' basis. Initially, Ofcom will make numbers in the 0560 range available (some unopened decades may be protected). The Scheme will show 056 numbers available for allocation as 'free' from 6 September 2004.

Ofcom's decision in relation to making geographic numbers available for new voice services

5.10 Having considered all the responses to the February 2004 Consultation and its relevant duties, Ofcom has decided that geographic numbers are appropriate for new voice services. Accordingly, ECS providers of publicly available new voice services are eligible to apply for geographic numbers in the usual manner on the appropriate application form.

5.11 Ofcom will be consulting on geographic number conservation measures separately.

Annex 1

List of respondents and responses

A1.1 Ofcom received 51 responses from 37 respondents to the February 2004 Consultation. The respondents are listed below, except for three who requested that their five responses remain confidential. The remaining 46 responses are available on Ofcom's web site at <http://www.ofcom.org.uk/consultations/past/vob/vobresponses/?a=87101>

Antelope Consulting – March 2004
AT&T – March 2004
AT&T – May 2004
BON.net Limited – May 2004
BT – March 2004
BT – May 2004
Cable & Wireless – March 2004
Cable & Wireless – May 2004
Call UK (Telco Electronics Limited) - March 2004
Chris Pedersen – March 2004
CMA – March 2004
CMA – May 2004
Colloquim – March 2004
David Tomlinson – March 2004
Easynet Group – March 2004
Easynet Group – May 2004
Edinburgh Network Technologies – March 2004
France Telecom Group – May 2004
Freeserve.com Plc – March 2004
Gradwell dot com Ltd – March 2004
ISPA UK – March 2004
ISPA UK – May 2004
ITSPA – March 2004
ITSPA – May 2004
Ken Westmoreland – March 2004
Kingston Communications – March 2004
Lawrence Conroy – March 2004
Level 3 Communications – March 2004
Level 3 Communicatons – May 2004
Magrathea – March 2004
Magrathea – May 2004
MCI – March 2004
NTL – March 2004
NTL – May 2004
Orange PCS – May 2004
Skype – March 2004
TDK Systems Europe Ltd – May 2004
Telesoft – March 2004
Telewest – March 2004
THUS – March 2004
UK Broadband Limited – May 2004
UKCTA – March 2004
UKCTA – May 2004
Video Networks Ltd – May 2004
Vodafone – March 2004
Vodafone – May 2004

Annex 2

Modification to the provisions of the National Telephone Numbering Plan ('the Plan') under section 56(2) of the Act

Modification to Part A of the Plan under section 56(2) of the Act

WHEREAS:

- A. section 56(2) of the Act provides that it shall be Ofcom's duty from time to time to review the Plan and make such revisions that they think fit, provided such revisions are made in accordance with section 60 of the Act;
- B. section 60 of the Act applies whereby General Condition 17 is a numbering condition for the time being having effect by reference to provisions of the Plan;
- C. by virtue of the Transitional Provisions, references to the Director in General Condition 17 should be read as references to OFCOM;
- D. Ofcom issued a notification pursuant to section 60(3) of the Act of a proposal to make a modification to Part A of the Plan on **24 February 2004** ('the Notification');
- E. for the reasons set out in the Statement accompanying this modification OFCOM are satisfied that, in accordance with section 60(2) of the Act, this modification is:
 - objectively justifiable in relation to the matters to which it relates;
 - not such as to discriminate unduly against particular persons or against a particular description of persons;
 - proportionate to what the Modification is intended to achieve; and
 - in relation to what it is intended to achieve, transparent;
- F. for the reasons set out in the Statement accompanying this modification OFCOM are satisfied that they acted in accordance with the relevant duties set out in sections 3, 4 and 63 of the Act;
- G. a copy of the Notification was sent to the Secretary of State;
- H. in the Notification and accompanying consultation document OFCOM invited representations about any of the proposals therein by **24 March 2004**;
- I. by virtue of section 60(5) of the Act, OFCOM may give effect to the proposal set out in the Notification, with or without modification, only if-
 - i. they have considered every representation about the proposal that is made to them within the period specified in the notification; and
 - ii. they have had regard to every international obligation of the United Kingdom (if any) which has been notified to them for this purpose by the Secretary of State;
- J. OFCOM received responses to the Notification and have considered every such representation made to them in respect of the proposals set out in the Notification and accompanying consultation document and the Secretary of State has not notified OFCOM of any international obligation of the United Kingdom for this purpose;
- K. In considering whether to make the modification proposed in the Notification Ofcom have complied with all relevant requirements set out in section 60 of the Act.

NOW, THEREFORE, OFCOM, PURSUANT TO SECTION 56(2), HEREBY MAKES THE FOLLOWING MODIFICATION-

1. Ofcom in accordance with section 56(2) of the Act hereby make the following modifications to the Plan to take effect on the date of publication of this notification:

- (a) In paragraph 1 of the Definitions and Interpretation section of the Plan the following definition shall be inserted:

'Location Independent Electronic Communications Service' means a service where:

- (i) the Numbering Plan of the Communications Provider offering the service has no geographic significance;
- (ii) the location of the Customer's Apparatus identified by a given Telephone Number at the time of use is not necessarily permanently associated with a particular Network Termination Point;
- (iii) number translation to a Geographic Number is not involved; and
- (iv) the service is not a Mobile Service.

- (b) In Part A1 of the Plan the following section shall be deleted -

05 Corporate Numbers

- (c) In Part A1 of the Plan the following section shall be inserted (in numerical position) –

055 Corporate Numbers

056 Location Independent Electronic Communications Services

- (d) In Part B3 of the Plan the following section shall be inserted –

B3.5 Location Independent Electronic Communications Services

B3.5.1 Those who adopt or otherwise use 056 numbers shall not share with any End-User any revenue obtained from providing a service on those numbers.

2. In making the decisions referred to in paragraphs 1 above, Ofcom have considered and acted in accordance with the six Community requirements set out in section 4 of the Act and their duties in section 3 and 63 of the Act.

3. Ofcom have sent a copy of this notification to the Secretary of State.

4. In this Modification:

- 'the Act' means the Communications Act 2003;
- 'the Director' means the Director-General of Telecommunications as appointed under section 1 of the Telecommunications Act 1984;
- 'General Condition 17' means General Condition 17 of the General Conditions of Entitlement set by the Director on 22 July 2003 pursuant to section 45 of the Act by way of publication of a Notification pursuant to section 48(1) of the Act;
- 'OFCOM' means the Office of Communications;
- 'the Plan' means the National Telephone Numbering Plan published by Ofcom on 22 July 2004 pursuant to section 56 of the Act;
- 'Transitional Provisions' means sections 408 and 411 of the Act, the Communications Act 2003 (Commencement No.1) Order 2003 and the Office of Communications Act 2002 (Commencement No.3) and Communications Act 2003 (Commencement No 2) Order 2003.

5. Except in so far as the context otherwise requires, words or expressions shall have the meaning assigned to them otherwise any word or expression shall have the meaning it has in the Act, or if it has no meaning there, in the Plan.

6. The Interpretation Act 1978 shall apply as if this Modification were an Act of Parliament.

7. Headings and titles shall be disregarded.

Signed by Caroline Wallace

Director of Competition Policy

A person authorised on behalf of Ofcom under paragraph 18 of the Schedule to the Office of Communications Act 2002

6 September 2004

Annex 3

Direction under paragraph 17.9(a) of the Condition to specify an application form for 056 numbers

Direction under paragraph 17.9(a) of the Condition

WHEREAS-

- A.** paragraph 17.9(a) of the Condition provides that when applying for an Allocation or reservation of Telephone Numbers, the Communications Provider shall use an appropriate application form as directed by the Director from time to time as he thinks fit;
- B.** by virtue of the Transitional Provisions, references to the Director in General Condition 17 should be read as references to OFCOM.
- C.** for the reasons set out in the Statement accompanying this Direction OFCOM are satisfied that the application form in the Annex to this Direction is appropriate for use by Communications Providers when applying for an Allocation or reservation of Telephone Numbers;
- D.** for the reasons set out in the Statement accompanying this Direction OFCOM are satisfied that, in accordance with section 49(2) of the Act, this Direction is:
- objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - not such as to discriminate unduly against particular persons or against a particular description of persons;
 - proportionate to what it is intended to achieve; and
 - in relation to what it is intended to achieve, transparent.
- E.** for the reasons set out in the Statement accompanying this Direction OFCOM are satisfied that they have acted in accordance with the relevant duties set out in sections 3 and 4 of the Act;
- F.** OFCOM issued a notification pursuant to section 49(4) of the Act of a proposal to modify a direction given under Condition 17.9(a) directing the appropriate application form for 056 numbers on **24 February 2004** (the 'Notification');
- G.** a copy of the Notification was sent to the Secretary of State in accordance with section 50(1)(b) of the Act;
- H.** in the Notification and accompanying consultation document OFCOM invited representations about any of the proposals therein by **24 March 2004**;
- I.** by virtue of section 49(9) of the Act, OFCOM may give effect to the proposal set out in the Notification, with or without Modification, only if-
- i. they have considered every representation about the proposal that is made to them within the period specified in the notification; and
 - ii. they have had regard to every international obligation of the United Kingdom (if any) which has been notified to them for this purpose by the Secretary of State;
- J.** OFCOM received responses to the Notification and have considered every such representation made to them in respect of the proposals set out in the Notification and accompanying consultation document and the Secretary of State has not notified OFCOM of any international obligation of the United Kingdom for this purpose;

K. In considering whether to make the modification proposed in the Notification OFCOM have complied with all relevant requirements set out in section 49 of the Act;

THEREFORE

1. OFCOM in accordance with Condition 17.9(a) hereby direct that for the time being the application form in the Annex to this Direction shall be used by Communications Providers when applying for an Allocation or reservation of Telephone Numbers starting '056' for Location Independent Electronic Communications Services.
2. In this Direction-
 - 'the Act' means the Communications Act 2003;
 - 'Allocation' shall have the same meaning as in the Condition;
 - 'Communications Provider' shall have the same meaning as in the Condition;
 - 'the Condition' means General Condition 17 of the General Conditions of Entitlement set by the Director on 22 July 2003 pursuant to section 45 of the Act by way of publication of a Notification pursuant to section 48(1) of the Act;
 - 'the Director' means the Director-General of Telecommunications as appointed under section 1 of the Telecommunications Act 1984;
 - 'OFCOM' means the Office of Communications;
 - 'Telephone Number' shall have the same meaning as in paragraph 1 of Part 1 of the Schedule to the Notification published by the Director on 22 July 2003 under section 48(1) of the Act;
 - 'Transitional Provisions' means sections 408 and 411 of the Act, the Communications Act 2003 (Commencement No.1) Order 2003 and the Office of Communications Act 2002 (Commencement No.3) and Communications Act 2003 (Commencement No 2) Order 2003.
3. Except in so far as the context otherwise requires, words or expressions shall have the meaning assigned to them. Otherwise, any word or expression shall have the same meaning as it has-
 - i. in the National Telephone Numbering Plan published by Ofcom on 6 September 2004 pursuant to section 56 of the Act;
 - ii. if, and only if, it has no meaning ascribed as mentioned in (i) above, and only if the context so permits, in General Condition 17 (entitled 'Allocation, Adoption and Use of Telephone Numbers') in Part 2 of the Schedule to the Notification published by the Director on 22 July 2003 under section 48(1) of the Act;
 - iii. if, and only if, it has no meaning ascribed as mentioned in (i) and (ii) above, and only if the context so permits, in paragraph 1 of Part 1 of the Schedule to the Notification published by the Director on 22 July 2003 under section 48(1) of the Act; and
 - iv. if, and only if, it has no meaning ascribed as mentioned in (i), (ii) and (iii) above, and only if the context so permits, in the Act.
4. The Interpretation Act 1978 shall apply as if this Direction were an Act of Parliament.
5. Headings and titles shall be disregarded.

Signed by Caroline Wallace

Director of Competition Policy

A person authorised on behalf of Ofcom under paragraph 18 of the Schedule to the Office of Communications Act 2002

6 September 2004

Annex to Direction Form S56



LOCATION INDEPENDENT ELECTRONIC COMMUNICATIONS SERVICE NUMBERING APPLICATION

Definitions and Interpretation

1. Except in so far as the context otherwise requires, words or expressions shall have the meaning assigned to them. Otherwise, any word or expression shall have the same meaning as it has-

- (i) in the National Telephone Numbering Plan published by Ofcom on 6 September 2004 pursuant to section 56 of the Communications Act 2003 (the 'Act');
- (ii) if, and only if, it has no meaning ascribed as mentioned in (i) above, and only if the context so permits, in General Condition 17 (entitled 'Allocation, Adoption and Use of Telephone Numbers') in Part 2 of the Schedule to the Notification published by the Director on 22 July 2003 under section 48(1) of the Act;
- (iii) if, and only if, it has no meaning ascribed as mentioned in (i) and (ii) above, and only if the context so permits, in paragraph 1 of Part 1 of the Schedule to the Notification published by the Director on 22 July 2003 under section 48(1) of the Act; and
- (iv) if, and only if, it has no meaning ascribed as mentioned in (i), (ii) and (iii) above, and only if the context so permits, in the Act.

2. The Interpretation Act 1978 shall apply as if this Application Form were an Act of Parliament.

(Applicants should ensure that all sections have been completed where relevant – incomplete Application Forms may not be processed within the 3-week deadline).

1. <u>Your reference (optional):</u>	
2. <u>Applicant details and date of application:</u> Your name, company name, address, direct telephone, direct fax, direct e-mail, mobile. <i>(Where you are acting on behalf of a Communications Provider (e.g. a consultant, solicitor, etc), and if you have not previously supplied one, you should enclose a letter from that Communications Provider confirming that you are authorised to represent it).</i>	<u>Date of application:</u>

<p>3. <u>Communications Provider details:</u></p> <p>If different from 2. above (eg where you are a consultant, solicitor, etc), provide the name and address of the Communications Provider on behalf of whom you are applying for Telephone Numbers.</p>	
<p>4. <u>Declaration of ‘Public Electronic Communications Network’ or ‘Public Electronic Communications Service’</u></p> <p>The information requested in Annex A helps Ofcom to assess your eligibility to be allocated Telephone Numbers.</p> <p>If you are a provider of a Public Electronic Communications Network:</p> <p>confirm whether you have previously supplied the information requested in Annex A (or information equivalent to it), to Ofcom’s Numbering Unit; or</p> <p>if not, you <u>must</u> complete in full all relevant questions in Annex A and submit it along with this form.</p> <p>If you have previously supplied the information in Annex A, then move onto the next question – you do not need to submit Annex A with this form.</p> <p>If you are a provider of Public Electronic Communications Services:</p> <p>you MUST complete all relevant questions in Annex A each time you apply for Telephone Numbers and submit it with this form.</p>	<p><i>(For providers of Public Electronic Communications Networks, please ensure you <u>have</u> previously supplied the information requested, before you confirm this – your application may be rejected if this is not the case).</i></p>

5. Telephone Numbers required:

In the table below, you should give a 1st and 2nd choice of number block for each Location Independent Electronic Communications Service block applied for in case those you have selected are not available at the time the application is processed. A maximum of 10 blocks should be entered on this Application Form. A new Form S56 should be completed for further blocks.

		Code - first 4 digits after initial 'o' e.g. 5600, etc. (SABC)	Next 2 digits of number e.g. 34 (DE)	Planned 'In-Service' Date (N.B. applications should not be submitted more than 6 months prior to in-service date)	Forecast of expected Adoption in 1 st 12 months (%)	Forecast of expected Adoption in 2 nd 12 months (% cumulative)
e.g. 1 st Block	1 st Choice	5600	34	Early December 2004	10	20
	2 nd Choice	5600	64	Early December 2004	20	30
1 st Block	1 st Choice					
	2 nd Choice					
2 nd Block	1 st Choice					
	2 nd Choice					
3 rd Block	1 st Choice					
	2 nd Choice					
4 th Block	1 st Choice					
	2 nd Choice					
5 th Block	1 st Choice					
	2 nd Choice					
6 th Block	1 st Choice					
	2 nd Choice					
7 th Block	1 st Choice					
	2 nd Choice					
8 th Block	1 st Choice					
	2 nd Choice					
9 th Block	1 st Choice					
	2 nd Choice					
10 th Block	1 st Choice					
	2 nd Choice					

6. Service and Market:

For each of the number blocks applied for above, give a brief description of the type of Public Electronic Communications Service for which the Telephone Numbers applied for will be Adopted, and the market to be served by the service e.g. VoIP for SME business customers, VoIP for residential customers nationwide, etc.

7. Adoption of existing Telephone Number blocks:

For each of the number blocks applied for above, you should provide details, in the table below, of any other Location Independent Electronic Communications Service number blocks – consistent with its duty in the Communications Act 2003 to secure best use of numbers Ofcom requires a justification for applying for numbering capacity where there may be non-utilised numbers.

Code and Number (part) – first 6 digits after initial ‘0’ Show as ‘SABC’ ‘DE’		Total Numbers Allocated to End-Users: i.e., in use or ported out	Total Numbers not in use, but contracted out
(SABC)	(DE)	(Numbers or %)	(Numbers or %)
5600	59	66%	20%
5600	22	82%	5%
5600	24	85%	5%

(You should e-mail this application form to numbering.applications@ofcom.org.uk)

Form S56 - Annex A

A1. Confirmation of Status:

Ofcom generally only Allocates Telephone Numbers to providers of Public Electronic Communications Networks.

Ofcom may also Allocate numbers, where number resource implications do not preclude allocation, to providers of a Public Electronic Communications Service. Ofcom would normally expect to see that the provider has arrangements in place for its service to be carried over a network, and, where appropriate, may expect the provider to have taken reasonable steps to seek a sub-allocation of Telephone Numbers of the type applied for prior to making the application.

Providers of Public Electronic Communications Networks

It is not Ofcom's intention for a Communications Provider to be assessed more than once to determine whether or not it is a provider of a Public Electronic Communications Network.

Therefore, please now complete question A4. If you have answered 'yes' to question A4(a), you do not need to answer questions A1 (a) and (b) below.

If you have not registered i.e. you have answered no to question A4(a), Ofcom needs certain information from you in order to determine whether or not you are a provider of a Public Electronic Communications Network.

Please provide details of:

- a) the Electronic Communications Network on which the Telephone Numbers applied for are intended to be Adopted; (a diagram may be useful to assist Ofcom in assessing your eligibility for Telephone Numbers)
- b) the Electronic Communications Service which you are intending to provide over that network.

Providers of Public Electronic Communications Services

In order to determine whether or not you are a provider of a Public Electronic Communications Service, Ofcom needs certain information from you. Please provide details of:

- c) the Electronic Communications Service which you are intending to provide with the Telephone Numbers applied for. Please also provide details of the network on which the numbers you are applying for will be Adopted.

<p>A2. <u>Applications from providers of Public Electronic Communications Services</u></p> <p>If you are applying for Telephone Numbers as a provider of Public Electronic Communications Services, where appropriate Ofcom may expect your company to have considered taking reasonable steps to obtain a sub-allocation of Telephone Numbers of the type you are applying for from a provider of a Public Electronic Communications Network.</p> <p>a) Have you taken steps to obtain a sub-allocation of Telephone Numbers of the type for which you are applying? If not, would you please provide a justification for that; and</p> <p>b) If you have taken steps, would you provide a brief description of the steps you have taken, and state why did you not obtain a sub-allocation?</p>	
<p>A3. <u>Interconnection arrangements</u></p> <p>Describe your Interconnection arrangements (or those of the provider of a Public Electronic Communications Network on whose network the Telephone Numbers applied for would be Adopted), if any, with other Communications Providers – a simple network diagram may be useful.</p>	
<p>A4. <u>Register of providers of Public Electronic Communication Networks</u></p> <p>Ofcom maintains a voluntary register of providers of Public Electronic Communications Networks.</p> <p>a) Is your company listed on this register?</p> <p>b) If so, under which name is your company registered?</p> <p>c) If different from b), what is the 'trading name' under which your company will sub-allocate the Telephone Numbers applied for in this application?</p>	

(You should e-mail this application form to numbering.applications@ofcom.org.uk)

Annex 4

Legal framework and tests

The legal framework

A4.1 Ofcom regulates the communications sector under the framework established by the Communications Act 2003 ('the Act'). Ofcom assumed its functions, duties and powers under the Act on 29 December 2003, including the previous duties of Oftel in relation to telephone numbers. The Act provides, amongst other things in relation to numbering, for the publication of the National Telephone Numbering Plan ('the Plan') and the setting of General Conditions of Entitlement relating to telephone numbers ('Numbering Conditions'). It also sets out statutory procedures governing, for example, the modification of the Plan and the giving of directions under conditions such as the Numbering Conditions.

The Plan

A4.2 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."

A4.3 The Director-General of Telecommunications ('the Director') (who had powers under the Act in relation to numbers at that time) published the Plan on 22 July 2003 and it came into force on 25 July 2003. Modifications to the Plan have subsequently been consolidated in the document and Ofcom published the modified Plan on 22 July 2004 and on the same day as publication of this statement, that is, 6 September 2004. The Plan to be published on 6 September 2004 will include, for consistency, a change in reference from the Director to Ofcom. For example, Part A1 of the Plan sets out the public telephone network numbers that Ofcom, rather than the Director, have determined to be available for allocation in accordance with Section 56(1)(a) of the Act.

A4.4 The Act provides for Ofcom to review and revise the 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."

A4.5 Section 60 of the Act provides for the modification of documents referred to in the Numbering Conditions (which includes the 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.”

A4.6 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.”

Telephone Number application form

A4.7 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...”

A4.8 Under section 45, General Condition 17: Allocation, Adoption and Use of Telephone Numbers (‘the Numbering Condition’) was set. Section 49 applies to directions and approvals relating to conditions set under section 45 (such as the Numbering Condition). Section 49(2) provides that:

“A person must not give, modify or withdraw the direction, approval or consent unless he is satisfied that to do so 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 it is intended to achieve; and
- (d) in relation to what it is intended to achieve, transparent.”

Ofcom’s general duty as to telephone numbering functions

A4.9 As well as publishing the Plan, Ofcom is responsible for managing the UK’s National Numbering Scheme (‘the Scheme’), which constitutes the day-to-day records of numbers allocated in the UK. Ofcom also has a general duty in Section 63(1) of the Act in carrying out its numbering functions, as follows:

“It shall be the duty of OFCOM, in the carrying out of their functions under sections 52 to 62 -

- (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.”

General duties of Ofcom

A4.10 The Act confers principal duties on Ofcom to be observed in the carrying out of its functions. Section 3(1) of the Act gives these duties as:

“(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”.

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 electronic communications services (ECSs), having regard to the interests of consumers in respect of choice, price, quality of service and value for money.

Duties for the purpose of fulfilling Community obligations

A4.11 In addition to its general duties as to telephone numbers, when considering revisions to the 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 (ECNs) and ECSs and the requirement not to favour one form of ECN, ECS or associated facilities (AFs) or one means of providing or making available such an ECN, ECS or AF over another.

A4.12 Similar requirements exist for the making of directions under the Numbering Conditions (see also Section 49 of the Act). The various legal tests and duties, and how Ofcom has complied with them in consulting on its proposals, are set out below.

Legal tests for modifications to the Plan

A4.13 It is Ofcom’s duty when proposing a modification to the Plan that it shows how it considers that its proposals comply with the legal tests in the Act.

A4.14 The effect of the Modification as set out at Annex 2 is to determine 056 numbers as available for Location Independent Electronic Communications Services (Location Independent ECS) and 055 numbers as available for Corporate Numbers. A definition of Location Independent ECS and a restriction for the adoption of 056 numbers are also added to the Plan in order to set out in more detail how Ofcom intends numbers in the 056 range to be used.

Section 3 – Ofcom’s general duties

A4.15 Ofcom considers that the modifications to the Plan are consistent with its general duties in carrying out its functions as set out in section 3 of the Act. The modifications further the interests of citizens in relation to communications matters and consumers in relevant markets by supporting the more widespread use of new voice services, and in particular Location Independent ECS, thus promoting competition in communications. This also helps to secure availability throughout the UK of a wide range of ECSs.

Section 4 – European Community requirements for regulation

A4.16 In making the modification to the Plan, Ofcom has also considered the Community obligations set out in section 4 of the Act, in particular, the first requirement to promote

competition in the provision of ECNs and ECSs. By making 056 numbers available for Location Independent ECS, the modification to the Plan would support the development of innovative services and choices for consumers. In making 056 numbers available but not prescribing their use for all new voice services, Ofcom has also considered the fourth requirement to take account of the desirability of its carrying out its functions in a manner which, so far as practicable, does not favour (a) one form of ECN, ECS or AF or (b) one means of providing or making available such a network, service or facility, over another. Also, Ofcom considers that the term 'Location Independent Electronic Communications Services' is technology neutral.

Section 60 – procedures for modifying documents referred to in the numbering conditions

A4.17 Ofcom is satisfied that the modifications to the Plan meet the tests set out in section 60(2) of the Act being:

objectively justifiable, in that it relates to Ofcom's duty to publish and modify a Plan and is justified in order to ensure that appropriate numbering resource is available for new voice services, in particular Location Independent ECS, and Corporate Number services to meet Communications Providers' requirements and to encourage innovation by making the numbering resource available;

not unduly discriminatory, in that all Communications Providers eligible to apply for Telephone Numbers and who intend to use 055 and 056 numbers in accordance with the Plan may apply to Ofcom for an allocation of 055 and 056 numbers;

proportionate, in that the proposed modification to the Plan is the minimum revision to its provisions necessary to make 056 numbers available for allocation and determine the 055 range (rather than the 05 range) for Corporate Number services. A modification of the Plan to determine a dedicated number range for Location Independent ECS is considered less burdensome than requiring innovative voice services to necessarily meet the characteristics of existing number ranges; and

transparent, in that the Notification proposing the modifications to the Plan and their effect were set out in the February 2004 Consultation. Changes to the proposed modification were made in light of comments to the consultation and are set out in Section 5 of this statement and explained in Sections 3 and 4. These changes do not represent a departure from the principles consulted on in the February 2004 Consultation but make the intention more transparent and technology neutral. The modifications to the Plan are set out in Annex 2 of this statement.

Section 63 – Ofcom's general duty as to telephone numbering functions

A4.18 In making the modifications to the Plan, Ofcom considers that it is fulfilling its duty in Section 63 of the Act (which refers to Ofcom's general duty as to telephone numbering functions), namely that Ofcom is:

securing the best use of appropriate numbers, in that (for the reasons set out in Section 4 of this statement) the modifications would make available for allocation to eligible Communications Providers a new and dedicated non-geographic number range for Location Independent ECS, thus ensuring that appropriate numbering resource is available for new voice services and continues to be available for Corporate Number services. The restriction on the adoption of 056 numbers in relation to revenue sharing with end users will ensure that the 056 range develops to serve the requirements of Location Independent ECS rather than replicate existing

number ranges. The modification also takes account of the need to ensure sufficient future capacity for numbering resources by making numbers available in a range with sufficient capacity for growth; and

encouraging efficiency and innovation, in that the modifications to the Plan ensure that an appropriate numbering resource is determined as available for innovative services and that access to numbering resource on which to offer a service is not a barrier to the launch of new ECSs.

Legal tests for making a Direction to specify an application form for 056 numbers

A4.19 The effect of the Direction set out at Annex 3 is to direct the use of a telephone numbering application form for 056 Telephone Numbers. The 056 application form is attached to the Direction. Ofcom is satisfied that the 056 application form is appropriate for applications for 056 numbers and that the Direction to specify the form meets the legal tests as set out in Section 49(2) of the Act.

Section 3 – Ofcom’s general duties

A4.20 In making the Direction, Ofcom has considered its general duties in carrying out functions as set out in section 3 of the Act, in particular the requirement to further the interests of citizens in relation to communications matters and consumers in relevant markets, by making available the appropriate procedure for Communications Providers to request allocations of Telephone Numbers for Location Independent ECS, which may then be provided to citizen consumers in order to access such services. Access to the appropriate numbering resource is an important aspect of making a wide range of ECSs available throughout the UK, which promotes competition in the market for new voice services.

Section 4 – European Community requirements for regulation

A4.21 In making the Direction, Ofcom has also considered the Community obligations set out in section 4 of the Act, in particular the requirement to promote competition in relation to the provision of ECNs and ECSs. Telephone Numbers should be allocated to as wide a range of Communications Providers as possible, thus ensuring that consumers have as wide a choice as possible in terms of services and Communications Providers. Also, Ofcom has considered the requirement to take account of the desirability of it carrying out its functions in a manner which, so far as practicable, does not favour (a) one form of ECN, ECS or AF or (b) one means of providing or making available such a network, service or facility, over another. In Ofcom's view, numbers should be available equally to those who are eligible to apply, and applications processed in date of receipt order, rather than by showing any preferential treatment to any particular Communications Provider. However, Ofcom does consider that only providers of PECNs or PECSs should be eligible for Telephone Numbers from the Plan, which only contains numbers suitable for use in relation to such networks or services.

Section 49 – procedures for modifying Telephone Number application forms

A4.22 Ofcom is satisfied that the application form is appropriate to apply for 056 numbers and that the Direction meets the tests set out in section 49(2) of the Act, in that it is:

objectively justifiable, in that it relates to the need to ensure that appropriate application forms are used by Communications Providers to apply for numbering, to

ensure that Ofcom has the requisite information available to assess applications and comply with its duty to ensure best use of numbering;

non-discriminatory, in that all Communications Providers affected by the direction will have to use the same forms, and where there are differences in terms of the information requested in the forms this reflects differences between network providers and service providers. Service providers will need to provide details of the network over which their service will be provided each time and whether the service provider has tried to obtain a sub-allocation from a provider of a PECN (where considered reasonable and appropriate). This is so that Ofcom can assess, in each individual case, whether the service provider is eligible for numbers in those circumstances. If the service provider has no arrangements with a network provider and therefore cannot obtain a sub-allocation, then Ofcom may determine that the expectation to obtain a sub-allocation is unreasonable. Network providers will only need to complete network details once, unless the network varies depending on the type of services they are offering over the network;

proportionate, in that the application form only requests the minimum information necessary for Ofcom to make a decision on whether the applicant is eligible to be allocated Telephone Numbers, or to be allocated further Telephone Numbers; and

transparent, in that the draft Direction, and its effect, were set out in the February 2004 Consultation and have been set out in Annex 3 of this statement. Changes to the proposed Direction were made in light of comments received during the consultation and are set out in Section 5 of this statement and explained in Sections 3 and 4. These changes do not represent a departure from the principles consulted on in the February 2004 Consultation.

Annex 5

Glossary

Apparatus

Any equipment, machinery or device and any wire or cable and the casing or coating for any wire or cable.

Associated facility (AF)

A facility which -

(a) is available for use in association with the use of an Electronic Communications Network or Electronic Communications Service (whether or not one is provided by the person making the facility available); and

(b) is so available for the purpose of -

(i) making the provision of that network or service possible;

(ii) making possible the provision of other services provided by means of that network or service; or

(iii) supporting the provision of such other services.

Broadband

Higher bandwidth, always-on services.

Communications Provider

A person who provides an Electronic Communications Network or provides an Electronic Communications Service.

Carrier Pre-Selection

A facility which allows a Subscriber to whom a Publicly Available Telephone Service is provided by means of a Public Telephone Network to select which Pre-selected Provider of such Services provided wholly or partly by means of that Network is the Pre-Selected Provider he wishes to use to carry his calls by designating in advance the selection that is to apply on every occasion when there has been no selection of Provider by use of a Telephone Number.

Conservation Area

A geographic area that has a realistic expectation of number exhaustion within the foreseeable future. Type A Conservation Areas are those which Ofcom believes are within two years of having less than ten spare 10,000 number blocks available. Type B Conservation Areas are those which Ofcom believes are likely to become Type A Conservation Areas within ten years.

Corporate Number

A Telephone Number allocated to a Communications Provider where the number is to be assigned by that Communications Provider to a specific Customer and in this definition 'Customer' shall only refer to a customer which is a body corporate.

Director

The Director General of Telecommunications as appointed under Section 1 of the Telecommunications Act 1984.

Electronic Communications Network

(a) a transmission system for the conveyance, by the use of electrical, magnetic or electro-magnetic energy, of signals of any description; and

(b) such of the following as are used, by the person providing the system and in association with it, for the conveyance of the signals -

- (i) apparatus comprised in the system;
- (ii) apparatus used for the switching or routing of the signals; and
- (iii) software and stored data.

Electronic Communications Service

A service consisting in, or having as its principal feature, the conveyance by means of an Electronic Communications Network of Signals, except in so far as it is a content service.

Emergency Organisation

In respect of any locality:

- (a) the relevant public police, fire, ambulance and coastguard services for that locality; and
- (b) any other organisation, as directed from time to time by Ofcom as providing a vital service relating to the safety of life in emergencies.

Geographic Area Code

A Telephone Number identifying a particular geographic area.

Geographic Number

A Telephone Number, from a range of numbers in the National Telephone Numbering Plan, where part of its digit structure contains geographic significance used for routing calls to the physical location of the Network Termination Point of the Subscriber to whom the Telephone Number has been assigned, or where the Network Termination Point does not relate to the Geographic Area Code but where the tariffing remains consistent with that Geographic Area Code.

Internet telephony (also referred to as Voice over the Internet)

A specific type of VoIP service that uses the public internet to carry the IP traffic.

Mobile Service

A Mobile Service means a service consisting in the conveyance of Signals, by means of an Electronic Communications Network, where every Signal that is conveyed thereby has been, or is to be, conveyed through the agency of Wireless Telegraphy to or from Apparatus designed or adapted to be capable of being used while in motion.

National Numbering Scheme (the Scheme)

The day to day record of telephone numbers allocated by Ofcom in accordance with the National Telephone Numbering Plan, and as provided for in Section 56(3) of the Communications Act.

National Telephone Numbering Plan (the Plan)

A document setting out Telephone Numbers available for allocation and restrictions on the Adoption and other uses of those numbers, and as provided for in section 56(1) of the Communications Act.

Network Termination Point

The physical point at which a Subscriber is provided with access to a Public Electronic Communications Network and, where it concerns Electronic Communications Networks involving switching or routing, that physical point is identified by means of a specific network address, which may be linked to the Telephone Number or name of the Subscriber. A Network Termination Point provided

at a fixed position on Served Premises shall be within an item of Network Termination and Testing Apparatus.

Non-geographic Number

A Telephone Number from a range of numbers in the National Telephone Numbering Plan, the digit structure of which contains no geographic significance for routing calls.

Number Portability

A facility whereby Subscribers who so request can retain their Telephone Number on a Public Telephone Network, independently of the person providing the service at the Network Termination Point of a Subscriber-

- (i) in the case of Geographic Numbers, at a specific location; or
- (ii) in the case of Non-Geographic Numbers, at any location, provided that such retention of a Telephone Number is in accordance with the Functional Specification.

Numbering Condition

General Condition 17 of the General Conditions of Entitlement.

Number Translation Services (NTS)

Telephone services using a number identified in the Plan as a Special Service number or a Premium Rate Service number

- plus 0500 Freephone numbers
- excluding 0844 04 numbers for Surftime internet access services and calls to 0808 99 numbers for FRIACO.

Originating Communications Provider

The Communications Provider on who's Electronic Communications Network a call originates.

Pence-per-minute (ppm)

A retail price structure where the price of the call depends only on the duration of the call.

Personal Number

A Telephone Number, from the 070 range of numbers 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.

Public Electronic Communications Network

An Electronic Communications Network provided wholly or mainly for the purpose of making Electronic Communications Services available to members of the public.

Public Electronic Communications Service

Any Electronic Communications Service that is provided so as to be available for use by members of the public.

Publicly Available Telephone Service (PATS)

A service available to the public for originating and receiving national and international telephone calls and access to Emergency Organisations 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.

SMP: Significant Market Power

A regulatory concept set out in Article 14 of the Framework Directive – it is equivalent to the competition law concept of dominance.

Subscriber

Any person who is party to a contract with a provider of Public Electronic Communications Services for the supply of such services.

Telephone Number

Subject to any order of the Secretary of State pursuant to section 56(7) of the Act, any number, including data of any description, that is used (whether or not in connection with telephony) for any one or more of the following purposes: (a) identifying the destination for, or recipient of, an Electronic Communication; (b) identifying the origin, or sender, of an Electronic Communication; (c) identifying the route for an Electronic Communication; (d) identifying the source from which an Electronic Communication or Electronic Communications Service may be obtained or accessed; (e) selecting the service that is to be obtained or accessed, or required elements or characteristics of that service; or (f) identifying the Communications Provider by means of whose network or service an Electronic Communication is to be transmitted, or treated as transmitted.

Terminating Communications Provider

The Communications Provider on whose network a call terminates.

Voice over Broadband (VoB)

Services that allow end users to make and receive calls over a broadband connection and which differ from services provided using circuit switched technology.

Voice over Internet Protocol (VoIP)

Generic name for the transport of voice traffic using IP technology.