
Future of telephone numbers

Second consultation

Non-confidential version – redacted for publication [X]

[Future of telephone numbers: second consultation](#) – Welsh overview

CONSULTATION:

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1. Overview

This document proposes amendments to the rules that govern the use of phone numbers in the UK, to ensure they take account of the substantial changes taking place in the country's networks, and continue to promote consumer confidence in telephone services.

Telephone calls are an essential service for many people and businesses. However, the way we use phones is changing. Mobile and online communications are increasing, and landline use is declining. The traditional landline telephone network in the UK – the public switched telephone network (PSTN) – is coming to the end of its life and is gradually being replaced. Over the next few years, landline calls will be carried over more modern Internet Protocol (IP) networks, with landline telephone services increasingly delivered over broadband connections.

The way we pay for calls has also evolved. Pricing is much simpler now, with the cost of most calls included in packages. So, when phone users are charged for individual calls and do not expect it, or if pricing is not clear, this can lead to a general lack of trust in numbers and, ultimately, reduced confidence in telephone services.

Against this backdrop, we have been reviewing our rulebook for phone numbers in the UK – called the National Telephone Numbering Plan (the Numbering Plan). We outlined our proposed approach to this review in [our First Consultation in 2019](#). In this next stage of our review, we set out specific proposals to amend the Numbering Plan.

What we are proposing

To remove the obligation on telecoms providers to provide a 'local dialling' facility. Local dialling lets someone make a call from one landline to another landline in the same area without dialling the area code. Our research has found that the value of local dialling for consumers has declined. Given the increased complexity of providing it on IP-based networks, we consider a requirement to provide this facility is no longer justified.

To ban direct and indirect sharing of revenue with any calling party for all geographic and non-geographic numbers. When a phone company divides the revenue that it receives for terminating a call with the calling party, this provides an incentive for making calls. This is the basis for 'cash for calls' schemes. Such schemes incur costs for the phone companies originating the calls and these costs could ultimately be passed on to their customers. Our proposal would remove the incentives for making these calls and prohibit these schemes.

To maintain existing rules on area codes corresponding to a particular location. The first few digits of a landline telephone number (the area code) traditionally represent a particular location. However, IP-based call technology does not need area codes to tell it where to send a call in the same way the traditional phone network does. Our research found that while recognition of this link between area codes and geographic locations is generally declining, it continues to be valued by some people and businesses. So, we propose not to remove this link. We also propose continuing to permit some out-of-area use of geographic numbers, so people and businesses can benefit from the convenience of using these numbers more flexibly.

Next steps

We invite responses to this consultation by 2 July 2021.

We plan to publish our statement in autumn 2021 setting out our decisions on the proposals on geographic numbers and prohibiting the sharing of revenue with calling parties in the Numbering Plan.

We will continue our review to ensure that our numbering rules promote consumer confidence. In the next stage, we will look at the future role for 084 and 087 non-geographic numbers.

2. Background

- 2.1 This consultation forms part of Ofcom's ongoing review of the future of telephone numbers (Future of Numbering Review). It follows our First Consultation (the First Consultation) published in April 2019.
- 2.2 In this document we consider the responses received to the First Consultation,¹ explain the work we have undertaken since its publication and present our proposals on geographic (landline) numbers and revenue share rules. We also set out the next steps for the Future of Numbering Review.
- 2.3 Below we explain the strategic context for the review and introduce its aims. We then set out our approach to the rest of the document.

Strategic context

- 2.4 Phone calls are an essential service for many people and businesses, with around 200 billion minutes of calls made in the UK during 2019. The total number of UK landlines (31.3 million in 2019) has remained relatively stable, with 78% of households still having one.² However, there has been a marked decline in the use of landline phones. Call minutes fell from 102.6 billion to 38.97 billion between 2012 and 2019. Also, while the majority of households might have a landline connection, only 54% of people actually use their landline to make calls.³ Instead, the use of mobile and Over-the-Top (OTT) voice and applications that enable, for instance, online messaging and video calls, continues to increase.⁴
- 2.5 Nevertheless, phone calls are likely to remain important. As with other platforms, the more people connected to a telephone network, the more each user benefits from the option to contact others. What makes phone services stand out is that it is an open platform, where anyone using a phone service can call any other user, whatever network they are on.
- 2.6 Phone numbers are necessary to make calls work and are fundamental to how people and businesses use telephone services. Despite the growth of other forms of identifiers, including IP addressing, numbers will remain a key means by which people identify calling and called parties.
- 2.7 Given the above context, the aims of our review are to:
- **Promote competition between providers of phone services**, recognising the changing market, where OTT, social media and messaging platforms offer alternatives to traditional phone calls.

¹ We received 27 responses and the non-confidential versions are published on our website [here](#).

² Ofcom, 2020. [Communications Market Report 2020](#).

³ Ofcom, 2021. [Wholesale Voice Markets Review 2021-2026](#), Statement (2021 WVMR Statement).

⁴ Ofcom 2020. [Online Nation – 2020 Report](#), Figure 5.2 and page 143.

- **Promote confidence in phone numbers and services** by tackling nuisance and scam calls and addressing pricing practices that lead to unexpected or unreasonable charges.
- **Protect consumers from harm** by making sure they continue to have access to important services.

Our duty to administer the UK's telephone numbers

2.8 Ofcom is responsible for the administration of the UK's phone numbers. This duty is carried out as part of our regulation of the communications sector under the Communications Act 2003 (the Act). In particular, we are required by section 56 of the Act to publish the Numbering Plan, setting out the telephone numbers available for allocation and any restrictions on how they may be adopted or used.⁵ We must also keep day to day records of the numbers allocated in accordance with the Numbering Plan, known as the 'National Numbering Scheme'.⁶ In carrying out our telephone numbering functions, we have a general duty to ensure that the best use is made of phone numbers and to encourage efficiency and innovation for that purpose.⁷

Policy principles

2.9 Our numbering decisions are guided by the following principles which were identified in our 2006 Numbering Review:⁸

- the numbers consumers want are available when they are needed;
- the numbers consumers currently use are not changed if this is avoidable;
- the meaning which numbers provide to consumers is protected;
- number allocation processes support competition and innovation; and
- consumers are not avoidably exposed to abuse.

2.10 In the First Consultation we explained that while our policy principles for managing numbers remained valid, we recognised that they were set during our last strategic review of numbering which took place over ten years ago.⁹ Developments since then may have an impact on the future use of numbers and may require changes to the Numbering Plan to

⁵ [The Numbering Plan](#) is amended from time to time subject to consultation – see Annex 4. The version currently in force was published on 4 January 2021. Modifications to certain definitions used in the Numbering Plan will take effect from 17 December 2021 further to Ofcom's [Notification](#) dated 17 December 2020. Our current proposals do not affect and are not affected by these modifications.

⁶ *The National Numbering Scheme* is available on our [website](#).

⁷ Section 63 of the Act.

⁸ In 2006 we reviewed how we manage telephone numbers and set out our strategic decisions on how we would do this. Ofcom, 2006 [Telephone Numbering – Safeguarding the future of telephone numbers](#), Statement (2006 Numbering Review).

⁹ In the intervening period, we have reviewed our policy for geographic and non-geographic numbers. For geographic numbers see: [Geographic telephone numbers: Safeguarding the future of geographic numbers](#); three documents published on 25 November 2010, 7 September 2011 and 20 March 2012; and Ofcom, 2012. [Promoting efficient use of geographic telephone numbers](#), Statement. For non-geographic numbers, see Ofcom, 2013. [Simplifying non-geographic numbers: final statement on the unbundled tariff and making the 080 and 116 ranges free-to-caller](#).

ensure that it continues to deliver what consumers and businesses understand, want and need from numbers to promote consumer confidence.

The Numbering Plan

2.11 The Numbering Plan is designed to provide information on the type of service and/or call cost associated with different types of numbers. It has been shaped over the years by the following factors:

- **Competition and choice.** We allocate large blocks of numbers to telecoms providers so that they can offer a wide choice of services to their customers (including end-users, other providers and resellers). Competition has driven many of the benefits that users of telephony services currently enjoy, with an increasing demand for numbers from an ever-growing number of providers. We need to manage the Numbering Plan in a way that meets this increased demand, ensuring competition is not constrained by the availability of sufficient numbers and consumers' choice of telecoms provider will not be restricted when they want new phone services.
- **Technology.** The UK's Numbering Plan, like those around the world, has been shaped by the development of the PSTN.¹⁰ The Numbering Plan and the National Numbering Scheme need to reflect the capabilities of networks so that telecoms providers can handle calls correctly. PSTN networks have a limited capacity to analyse the digits of dialled phone numbers to extract (or 'decode') the necessary information for routing and tariffing of calls. This means that the minimum size of block that we can allocate must be sufficiently large to accommodate the restrictions of the networks.
- **Service innovation.** The Numbering Plan has expanded over the years and has gone from including only landline numbers to providing different distinct number ranges as new types of services emerge. From the 1980s onwards, additional number types have been introduced for such services as mobile, personal numbering, freephone and a variety of chargeable non-geographic call services.
- **Regulatory framework.** We regulate the electronic communications sector under the framework established by the Act.

2.12 The Numbering Plan must evolve to make best use of numbers and reflect developments in the above areas. This enables us to meet demand and support innovation. For instance, with respect to technology, once networks are all-IP, without the decoding restrictions of the PSTN, numbers could be allocated in far smaller blocks, allowing them to be used more efficiently and managed more dynamically.

¹⁰ For example, geographic telephone numbers were originally devised to allow a caller to automatically 'trunk dial' without needing a human operator to connect their national call. From the 1950s, a person could dial a geographic telephone number to automatically instruct their local telephone exchange (say in Bristol) to put the call through to someone connected to a different telephone exchange (say in Glasgow), thus creating area codes and providing location significance for people.

- 2.13 The Numbering Plan must also continue to provide the information needed to promote consumer confidence in telephony, through numbers providing service and/or reliable call cost information. This helps people to make informed decisions on whether to make or answer a call based on the phone number.
- 2.14 Part A of the Numbering Plan sets out the telephone numbers available for adoption. Part A1 includes Public Communications Network Numbers. These are all the telephone numbers that people dial for communications services, including all geographic and non-geographic numbers. Part B of the Numbering Plan sets out the restrictions and requirements relating to telephone numbers in Part A of the Plan. Some of these are general restrictions on number use, while others are more specific in nature.

The need for the Future of Numbering Review

- 2.15 In the First Consultation, we explained that we had identified a number of important developments in voice telephony that we considered would have an effect on how numbers are used. We launched the Future of Numbering Review to take a forward look at how those developments may change the Numbering Plan of the future.
- 2.16 All 12 respondents that commented on the need for a review of numbering agreed with the principles behind conducting it at this time and that developments in voice telephony would have an impact on how numbers are used.¹¹
- 2.17 A few respondents remarked on the approach to undertaking the review. TalkTalk believed that high-level consumer protection should be at the forefront but cautioned against making decisions that restricted competition and consumer choice. BT considered that while the First Consultation addressed several key areas that needed attention in the immediate future, it was not a comprehensive review of the Numbering Plan and numbering in general. It asked that we take a holistic view across all number ranges to enable the Numbering Plan to be simplified further. Magrathea urged caution in making too many major changes simultaneously. ITSPA believed that it was too early to take a view, with emerging technologies still being developed and implemented, and suggested a watching brief.
- 2.18 We welcome stakeholders' support for the Future of Numbering Review. We agree that consumer protection and promotion of customer interests should be at its heart. We also agree that the promotion of competition between providers is important. We confirm that these remain the aims for this review, as set out in paragraph 2.7.
- 2.19 We have noted respondents' comments on the process. The First Consultation set out our overall aims for the review and we plan to address the different elements in subsequent

¹¹ [BT](#), pages 3-4; [DWP](#), page 2; [FCS](#), page 1; [GCI](#), page 2; [Magrathea](#), page 1; [Sky](#), page 2; [Telecom2](#), page 2; [Telefonica](#), page 2; [Virgin Media](#), page 2; [Organisation Withheld 1](#), page 2; [Name Withheld 4](#), page 2; and [redacted] [a confidential respondent], in their responses to the First Consultation.

consultations and through our ongoing Numbering Programme activities,¹² as appropriate. We will prioritise issues; for instance, this consultation focuses on the effect of IP migration on geographic numbers as this has the highest priority. Telecoms companies need to be certain of the future rules on local dialling and location significance as they make their migration plans. We are also looking at revenue sharing with calling parties in this consultation, as we consider that this practice can lead to inefficiency and higher prices, putting call allowances at risk, leading to unexpected charges and undermining consumer confidence. The next stage of our review will focus on the future role for 084 and 087 non-geographic numbers.

- 2.20 We agree with BT's comment that this is not a comprehensive review of the Numbering Plan and numbering in general. It is a strategic look at developments in voice telephony, how they might affect how numbers are used and how the Numbering Plan may need to be adapted to support those developments.

Developments in voice telephony that will shape our Future of Numbering Review

- 2.21 In the First Consultation we identified the following developments in voice telephony that would shape our review.¹³
- **Evolution of the UK's telephone networks.** The UK's telephone networks are undergoing substantial change as the companies that run them upgrade their technology and move their landline customers from traditional legacy networks to newer IP technology, potentially changing the way landline numbers are organised and dialled.
 - **Alternatives to the phone bill as a micropayment mechanism for non-geographic call services.** The dynamics of service provision have changed considerably since the introduction of non-geographic numbers in the 1980s and 1990s, and alternatives to using the phone bill as a micropayment mechanism for contacting service providers are more readily available. The payment of a 'premium' for what is often no more of a 'value-added' service than making contact by phone may be increasingly difficult to justify to consumers.
 - **Changes in call prices.** Call prices have become much simpler over the past decade. With most calls included in call allowances, customers have become used to calls being 'free' at the point of use. When calls are charged for, this can result in unexpected expense, lack of trust in numbers and ultimately reduced confidence in voice

¹² Our Numbering Programme manages the day-to-day numbering activities, including allocation of numbers to telecoms companies, auditing number use and promoting compliance with the Numbering Plan and [General Condition B1 on the Allocation, adoption and use of telephone numbers](#).

¹³ Annex 1 contains a more detailed description of the developments.

telephony. Anomalies and different call pricing practices can have a detrimental impact on customers.

- 2.22 We considered that, while convergence of fixed and mobile services was an important development, it was not the appropriate time to review the distinction between fixed and mobile number ranges in the Numbering Plan. This was due to the continued difference in telecoms providers' call termination costs and the regulated termination rates¹⁴ for fixed and mobile calls.
- 2.23 We also stated that the review was focused on promoting consumer confidence in voice telephony and therefore we would limit its scope to the types of numbers that consumers use to make and receive calls. While there are important developments relating to demand for numbering resources for non-interpersonal communications, such as machine-to-machine (M2M) services, and for network functioning, such as Mobile Network Codes, we will consider separately whether a review of these types of numbering resources is required.
- 2.24 All respondents that referred to our analysis of the developments in voice telephony supported our assessment of their impact on numbering and agreed that we had identified the key developments for consideration as part of this review.¹⁵
- 2.25 Several respondents commented on the developments, as well as on additional numbering issues for consideration, either as part of the Future of Numbering Review or more generally in our administration of the Numbering Plan. We provide a summary of those responses in Annex 1. Having taken them into account, we have decided to proceed with the review on the basis that it will be shaped by the developments in voice telephony as proposed in the First Consultation and set out in paragraph 2.21 above. Further explanation of how we reached that decision is also provided in Annex 1.

First Consultation

- 2.26 In the First Consultation, we also invited stakeholder views on:
- **Geographic (landline) numbers:** we considered how the move to IP networks might change the way landline numbers are dialled, and whether we should retain area codes and the location significance that they provide.¹⁶
 - **Non-geographic 084 and 087 numbers:** our consumer research had found low awareness and poor perceptions of value and trust for 084 and 087 numbers.¹⁷

¹⁴ Termination rates are the wholesale prices that telecoms providers charge each other for connecting a call to the called party.

¹⁵ BT, page 4; DWP, page 2; FCS, page 1; GCI, page 2; Magrathea, page 1; Sky, page 2; Telecom2, page 2; Telefonica, page 2; Virgin Media, page 2; Organisation Withheld 1, page 2; Name Withheld 4, page 2; and [X] [a confidential respondent] in their responses to the First Consultation.

¹⁶ We provide a summary of responses to this issue and our proposals in Section 3.

¹⁷ See more on our consumer research in paragraph 2.27.

Concerns about call costs, including uncertainty about those costs, may be a factor in reducing confidence in voice telephony. We looked at what the future role might be for 084 and 087 numbers.¹⁸

- **Unexpected call costs:** we planned to identify and address call pricing anomalies to establish a position where customers can be confident about the cost of a call based on the phone number and the information that it conveys. This included ensuring that revenue share rules are functioning appropriately, which in turn would support the inclusion of number types in call allowances for the benefit of consumers.¹⁹

Consumer research

- 2.27 In January 2019 we published our report, *The Future of Telephone Numbering: a qualitative research study*.²⁰ This report presented the findings of in-depth qualitative consumer research conducted in June 2018 by Futuresight on behalf of Ofcom. To update our understanding of number use in the UK, we wanted to find out more about what individuals and micro-businesses thought about location significance in geographic numbers and the use of non-geographic numbers as a micro-payment mechanism.
- 2.28 We followed up the Future of Numbering research with a further report on *Declining calls and changing behaviour: a qualitative research study*.²¹ This report, also conducted by Futuresight on behalf of Ofcom, used in-depth qualitative research conducted in September 2019 to enhance our understanding of how consumers and micro-businesses use communication services. In particular, the report sought to gain insights into why the volume of landline calls has declined. The aim was to help us understand the markets we regulate and to ensure that any changes in behaviour were a matter of choice and were not being caused by consumer detriment.
- 2.29 The research reports are significant for both Ofcom and stakeholders and have informed our thinking on the future of numbers.

Impact assessment and equality impact assessment

Impact assessment

- 2.30 Where appropriate, we have included analysis in this document which constitutes an impact assessment for the purposes of section 7 of the Act.
- 2.31 Impact assessments provide a valuable way of assessing the options for regulation and showing why the chosen option was preferred. They form part of best practice policymaking. This is reflected in section 7 of the Act, which means that, generally, we have

¹⁸ We provide a summary of responses to this issue and our next steps in Section 5.

¹⁹ We provide a summary of responses to this issue and our proposals in Section 4.

²⁰ Ofcom, 2019, *The Future of Telephone Numbering: a qualitative research study* (Future of Numbering research).

²¹ Ofcom, 2020, *Declining calls and changing behaviour: a qualitative research study* (Declining Calls research)

to carry out impact assessments in cases where our conclusions would be likely to have a significant effect on businesses or the general public, or where there is a major change in Ofcom's activities. However, as a matter of policy Ofcom is committed to carrying out impact assessments in relation to the great majority of our policy decisions.

Equality Impact Assessment

- 2.32 Section 149 of the Equality Act 2010 (the 2010 Act) imposes a duty on Ofcom, when carrying out its functions, to have due regard to the need to eliminate discrimination, harassment, victimisation and other prohibited conduct related to the following protected characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex and sexual orientation. The 2010 Act also requires Ofcom to have due regard to the need to advance equality of opportunity and foster good relations between persons who share specified protected characteristics and persons who do not.
- 2.33 Section 75 of the Northern Ireland Act 1998 (the 1998 Act) also imposes a duty on Ofcom, when carrying out its functions relating to Northern Ireland, to have due regard to the need to promote equality of opportunity and regard to the desirability of promoting good relations across a range of categories outlined in the 1998 Act. Ofcom's Revised Northern Ireland Equality Scheme explains how we comply with our statutory duties under the 1998 Act.
- 2.34 To help us comply with our duties under the 2010 Act and the 1998 Act, we assess the impact of our proposals on persons sharing protected characteristics and in particular whether they may discriminate against such persons or impact on equality of opportunity or good relations.
- 2.35 Our proposals to remove the obligation to provide local dialling and to prohibit the sharing of revenue with any calling parties on all geographic and non-geographic numbers may affect services used more frequently by customers sharing particular protected characteristics, such as age, disability, race and religion or belief. We consider those equality impacts in Section 3 (paragraph 3.48) and Section 4 (paragraphs 4.46-4.49) respectively.

Strategic Statement position

- 2.36 As required by section 2B(2) of the Act, we have had regard to the UK Government's Statement of Strategic Priorities for telecommunications, the management of radio spectrum, and postal services (SSP).²² In particular, we have had regard to furthering the interests of telecoms consumers, which is a priority area covered by the SSP.

²² DCMS, October 2019, [Statement of Strategic Priorities for telecommunications, the management of radio spectrum, and postal services](#) [Accessed 20 April 2021].

The rest of this document

- 2.37 In Section 3 we look at geographic numbers. We summarise responses to our First Consultation and set out our proposals for local dialling and the location significance of area codes.
- 2.38 In Section 4 we turn to revenue share rules in the Numbering Plan and explain our proposals to ensure they are functioning correctly.
- 2.39 In Section 5 we look at 084 and 087 non-geographic numbers. We provide a high-level summary of the responses received to the First Consultation and an update on information gathered since its publication. We then explain our next steps for the review of 084 and 087 numbers.
- 2.40 In Annexes 1 to 3 we provide supplementary information to the earlier sections. In Annex 1 we include a detailed summary of responses to the First Consultation on the developments in voice telephony that will shape this review and set out our position having taken them into account. Annex 2 provides background information on how closing local dialling increases the supply of numbers in an area code. Annex 3 includes a more detailed summary of responses to the First Consultation on 084 and 087 numbers.
- 2.41 Annex 4 sets out the legal framework and Annex 5 contains the notification of proposed modifications to the Numbering Plan to implement our proposals on local dialling and revenue sharing with calling parties.
- 2.42 The remainder of the annexes set out the process for responding to this consultation and reference material.

Next steps

- 2.43 We invite responses to this consultation by 2 July 2021.
- 2.44 We plan to publish our statement in autumn 2021 setting out our decisions on the proposals on geographic numbers and prohibiting the sharing of revenue with calling parties in the Numbering Plan.
- 2.45 We will continue our review to ensure that our numbering rules promote consumer confidence. In the next stage, we will look at the future role for 084 and 087 non-geographic numbers, as explained further in Section 5.

3. Geographic numbering: Area codes and local dialling

- 3.1 In this section we set out our proposals for local dialling and location significance of area codes. Local dialling is considered in the following section and the link between phone numbers and geographic areas in paragraph 3.58 onwards.

Summary of our proposals for consultation

- 3.2 Having considered the analysis set out in this section, **we propose to remove the obligation on telecoms providers to make local dialling available to their landline customers.** We have reached the provisional conclusion that the value of local dialling for consumers has declined and, given in particular the increased complexity of providing it on IP-based voice services, we consider a requirement to provide this facility is no longer justified.
- 3.3 Telecoms providers are likely to consider withdrawing local dialling as part of the switchover to IP and could communicate this change to customers individually as they are migrated. Landline phone users would thereafter always need to dial the whole number, including the area code, when dialling a local number, in the same way they do when calling from a mobile phone.
- 3.4 We have also provisionally concluded that the location significance of landline numbers continues to be recognised and valued by consumers and businesses, even though it will be technically redundant following the migration to IP. **We propose to maintain the requirement for landline numbers to include an area code which corresponds to the customer's location, unless the telephone user requests to use a number out-of-area** (i.e. use a number with an area code different from where they are located).

Local dialling

What is local dialling?

- 3.5 Geographic numbers are fixed-line telephone numbers that begin with the digits 01 and 02, where the first part of the number forms the area code and has location significance. For example, landline telephone numbers for Edinburgh begin with the 0131 area code and are thus recognised by phone users as local to the city. The country is divided into 610 area codes.
- 3.6 The UK has an 'open dialling plan' to facilitate consumer dialling of local phone numbers. This means that landline calls to geographic numbers in the same area as the caller can be

dialled without using the area code.²³ For example, in Edinburgh, consumers and businesses calling from one 0131 number to another do not need to dial the 0131 area code before the local number. This facility is known as local dialling and we require telecoms providers to make it available to landline phone customers.

Factors affecting the provision of local dialling

- 3.7 **The migration to IP will affect all landline phone users over the next few years.**²⁴ This change fundamentally restructures the way voice services are provided across the UK and local dialling may be increasingly difficult to maintain.
- 3.8 In traditional PSTN networks, the local exchange plays an important role in the routing of calls and connects callers directly to other numbers within the local exchange area when the area code is omitted. IP phone networks are structured very differently; all calls are routed centrally and there is no local exchange or local call routing.
- 3.9 Local dialling on IP networks therefore requires additional functionality and configurations to be added to the IP network and/or the phone user's home router to correctly route calls when the area code is omitted. These configurations, or dialling plans, which help to route calls will have a degree of customisation for each landline customer depending on their location and may require ongoing maintenance to update if they move to a new property. Due to this complexity, we recognise that telecoms providers may increasingly wish to provide voice services to customers without local dialling.
- 3.10 There are additional technical feasibility constraints on the provision of local dialling for some telecoms providers offering IP-based services to large organisations and they commonly do not offer the local dialling facility.
- 3.11 **Usage of landline phones is in decline** and so the use, value and knowledge of local dialling may be diminishing, particularly as phone users are more used to mobile phones which do not provide the facility and require the full number to be dialled. This was reflected in our Future of Numbering research which showed that some phone users are unaware of the local dialling facility and others considered it only of marginal benefit.²⁵
- 3.12 **Many landline telephone users would like to keep their number when moving home** and this will be easier with IP-based services. This means that more geographic numbers may be used out-of-area, which may further diminish the value of local dialling since over time the location of landline users may increasingly differ from their area code.
- 3.13 **Our approach to addressing number scarcity in an area code is to prohibit the provision of local dialling.** The number of telecoms providers has increased considerably in recent years, leading to more choice for consumers but also increasing demand for the limited

²³ There is an exception for six area codes where we require local dialling not to be provided in order to make more telephone numbers available. This is explained in paragraphs 3.13 and 3.15.

²⁴ As set out in paragraphs A1.2 and A1.3.

²⁵ Future of Numbering Research, page 31.

stock of numbers available for use in each area.²⁶ In area codes where we forecast that our supply of numbers available to allocate to telecoms providers is likely to run out, our approach to releasing additional capacity is to close local dialling. As explained in Annex 2, closing local dialling increases the supply of numbers in an area code by allowing local numbers beginning with the digits 0 and 1 to be used.²⁷

Local dialling rules in the Numbering Plan

3.14 The requirement for telecoms providers to make local dialling available to their landline phone customers is set out in paragraph B3.1.2 of the Numbering Plan:

B3.1.2 Geographic Numbers shall not be Adopted or otherwise used other than where Calling Parties with Geographic Numbers with the same Geographic Area Code as the Called Party are able to dial using only the Local Number except where:

- a) those numbers are National-Dialling-Only Numbers – see B3.1.5 below; or
- b) Calling Parties are dialling from Geographic Numbers with a Geographic Area Code in respect of which Local Dialling has been closed – see B3.1.3 below.

3.15 Paragraph B3.1.3 of the Numbering Plan provides an exception to the local dialling requirement for six area codes where we require local dialling not to be provided, to alleviate a shortage of numbers.²⁸

Consideration of local dialling in the First Consultation

3.16 In our First Consultation we stated our intention to look at the requirement to provide local dialling in the Numbering Plan. We considered the migration to IP and the declining value of local dialling to phone users would shape our review of the future of numbers.²⁹

Responses to our First Consultation concerning local dialling

3.17 We received 24 responses to our First Consultation on the subject of local dialling.³⁰ These set out views as to whether there is sufficient value in local dialling to retain the facility;

²⁶ Ofcom allocates geographic numbers to telecoms providers in large blocks, typically of 1,000 numbers due to technical routing constraints. Although the quantity of numbers that telecoms providers hold exceeds the likely demand from their customers, individual telecoms providers need new allocations of geographic numbers from time to time to be able to offer their services. So even though consumers' use of landlines might be declining, telecoms providers' demand for geographic number allocations continues to grow.

²⁷ This approach was set out in Ofcom, 2011. [Geographic telephone numbers: safeguarding the future of geographic numbers](#).

²⁸ The six area codes are: 01202 (Bournemouth); 01224 (Aberdeen); 01273 (Brighton); 01274 (Bradford); 01642 (Middlesbrough) and 01908 (Milton Keynes).

²⁹ First Consultation, paragraphs 2.13, 3.5 and 3.27.

³⁰ BT, DWP, FCS, FTC, GCI, ITSPA, Lexgreen, Magrathea, Sky, TalkTalk, Telecom2, Telefonica, Virgin Media, Vodafone, A Martin, M Kurrein, R Hinton, Organisation Withheld 1, Name Withheld 1, Name Withheld 2, Name Withheld 3, Name Withheld 4, [redacted] [a confidential respondent] and [redacted] [a confidential respondent].

whether there are technical difficulties in maintaining it; how any closure should be approached and its use in addressing number scarcity.

Views on the value of local dialling

- 3.18 Twelve respondents expressed a clear preference for allowing local dialling to be withdrawn as they considered it was no longer valued by phone users sufficiently to justify the increasing effort to maintain it.³¹ Several of these noted that phone users have become very used to dialling the full phone number due to growing experience of mobile or Voice over IP (VoIP) phone use where local dialling is not available.³²
- 3.19 Three respondents agreed that there was scope to consider withdrawal now, as long as there was no evidence that significant harm would arise, noting that local dialling may be valued more highly by older consumers.³³
- 3.20 A few of the respondents who favoured the withdrawal of local dialling noted the lack of any disruption encountered by consumers or businesses in the six area codes where Ofcom had already closed local dialling.³⁴ This was seen as a good reason to expect that any future plans for closure would not cause significant problems.
- 3.21 Five respondents opposed the more widespread removal of local dialling and noted concerns that closure could result in consumer harm or that local dialling retained significant value. These included one telecoms provider³⁵ and four individual respondents.³⁶ The reasons given for opposing removal were:
- Some groups of consumers, and in particular the older or more vulnerable, routinely make use of this facility and may be left confused and suffer harm as a result of its removal.³⁷
 - There was some concern about the potential cost and effort associated with the extensive customer information campaign that would be needed to implement a more widespread closure of local dialling.³⁸
 - One individual noted that local dialling had a particular benefit in cities and should be retained there for as long as possible notwithstanding the need to remove it in specific areas as required.³⁹

³¹ BT, pages 7-8; [Vodafone](#), pages 3-5; Sky, pages 2-3; Telefonica, paragraph 19; Organisation Withheld 1, page 3; FCS, page 1; Magrathea, page 2; Telecom2, page 2; [FTC](#), page 9; [M Kurrein](#), page 2; [Name Withheld 1](#), page 2; and Name Withheld 4, page 2, in their responses to the First Consultation.

³² Magrathea, page 2; [ITSPA](#), page 1; Vodafone, page 5; [Lexgreen](#), page 1; and M Kurrein, page 2, in their responses to the First Consultation.

³³ Virgin Media page 3; ITSPA pages 2-3; and [§<] [a confidential respondent] in their responses to the First Consultation.

³⁴ BT, paragraph 3.5; Magrathea, page 2; Virgin Media, page 3, in their responses to the First Consultation.

³⁵ TalkTalk response to First Consultation, page 2.

³⁶ [A Martin](#) page 2; Name Withheld 2, page 2; [Name Withheld 3](#), page 2; and [R Hinton](#), page 2, in their responses to the First Consultation.

³⁷ TalkTalk, page 2; and Name Withheld 2, page 2, in their responses to the First Consultation.

³⁸ TalkTalk response to First Consultation, page 2.

³⁹ Name Withheld 3 response to First Consultation, page 2.

Views on the technical difficulties of providing local dialling following migration to IP

- 3.22 Several responses from telecoms providers highlighted the technical difficulties of implementing or maintaining local dialling with VoIP services.⁴⁰ These responses emphasised the significant additional time and expense needed to maintain local dialling after IP migration. It was noted that it is not straightforward to provide the facility, as even the number of digits expected for a local number can vary according to the area code and so must be configured in the network for each user.⁴¹
- 3.23 Sky noted in its response that it expected the provision of local dialling to be disproportionately complex and costly, particularly for smaller telecoms providers. It highlighted the additional complexity arising where a telecoms provider allows numbers to be moved out-of-area.⁴²
- 3.24 Four responses, from two telecoms providers and two individuals, considered that the technical difficulties of providing a local dialling facility for VoIP customers had been overstated.⁴³

Views on the process of withdrawal

- 3.25 A few respondents noted the need for effective communications, informing affected consumers in advance of a withdrawal of the local dialling facility, to minimise the potential for consumer harm.⁴⁴ This included the DWP who considered that a consistent and clear approach was needed to address any potential for confusion among older or less digitally able groups of phone users and that this may require a communications campaign to help national organisations prepare.⁴⁵
- 3.26 However, views were split between:
- those who felt that a single closure date announced nationally was the most efficient;⁴⁶ and
 - those who saw merit in closure area-by-area or even customer-by-customer, which could be linked to efficient IP switch-over and avoid unnecessary and expensive changes to legacy systems.⁴⁷

⁴⁰ BT, paragraphs 3.6-3.8; Vodafone, page 3; Sky, pages 2-3; and Organisation Withheld 1, page 3, in their responses to the First Consultation.

⁴¹ Vodafone response to First Consultation, page 4, cited the example of 020 (London) with 8-digit local numbers compared with 01635 (Newbury), which has a mixture of 5- and 6-digit local numbers.

⁴² Sky response to First Consultation, pages 2-3.

⁴³ TalkTalk, page 3; A Martin page 3; Name Withheld 3, page 3; and [§<] [a confidential respondent], in their responses to the First Consultation.

⁴⁴ Telecom2, page 2; DWP, pages 2-3; BT, page 10; and Martin Kurrein, page 2, in their responses to the First Consultation.

⁴⁵ DWP response to First Consultation, pages 2-3.

⁴⁶ Organisation Withheld 1, page 3; Magrathea, page 2; GCI, page 2; ITSPA, page 2; FCS, page 2; Lexgreen, page 1; Name Withheld 1, page 2; Name Withheld 2, pages 2-3; Name Withheld 4, page 2; FTC, page 9; [§<] [a confidential respondent]; and [§<] [a confidential respondent], in their responses to the First Consultation.

⁴⁷ BT, page 8, Vodafone, pages 3-5; and Telecom2, pages 2-3, in their responses to the First Consultation.

- 3.27 Some highlighted concerns that there may be a potential for confusion amongst phone users caused by an inconsistent removal of local dialling.⁴⁸
- 3.28 Respondents⁴⁹ in favour of Ofcom removing the requirement to provide local dialling (and thereby allowing telecoms providers to make a judgement about when is the most efficient time to remove local dialling and communicate the closure to a customer) gave the following reasons:
- Vodafone said that there was considerable technical merit in allowing telecoms providers to choose whether to withdraw local dialling since their ability to support it would vary depending on the type of technology they use.⁵⁰
 - Telecom2 said that this approach allows telecoms providers the flexibility to consider what would best suit their individual network and commercial offering.⁵¹
 - BT said that since a programme of direct communication with customers will be necessary for the move to IP, it is likely to be most efficient to communicate the closure of local dialling when each customer's service is migrated.⁵²
 - BT also highlighted that this flexible approach would avoid closing local dialling in areas which have not yet been migrated to IP (which would require the reconfiguration of legacy PSTN systems) and would avoid telecoms providers having to implement local dialling for new VoIP services in areas which have been migrated (which BT considered would also be costly and of no long-term benefit).⁵³

Views on area by area closures to address number scarcity

- 3.29 Some respondents agreed that Ofcom should continue to mandate the closure of local dialling in specific area codes as the preferred option for addressing number scarcity.⁵⁴ The FCS suggested that it may be time to consider more widespread closure and provide a clear end date for local dialling to avoid confusion.⁵⁵

Options for local dialling

- 3.30 Taking into account the views put forward in response to our First Consultation, we considered the following options for local dialling:
- Option 1, our preferred option: **Remove the obligation to provide local dialling.** This would allow providers to make an individual decision whether to continue to provide local dialling,⁵⁶ considering demand from customers and the cost and complexity of

⁴⁸ DWP, page 3; ITPSA, page 2; and Lexgreen, page 1, in their responses to the First Consultation.

⁴⁹ BT, page 8; Vodafone, pages 3-5; and Telecom2, pages 2-3, in their responses to the First Consultation.

⁵⁰ Vodafone response to First Consultation, page 4.

⁵¹ Telecom2 response to First Consultation, page 2.

⁵² BT response to First Consultation, paragraph 3.9.

⁵³ BT response to First Consultation, paragraphs 3.8 and 3.12.

⁵⁴ TalkTalk, page 2; BT, page 9; and Name Withheld 2, page 2, in their responses to the First Consultation.

⁵⁵ FCS response to First Consultation, page 2.

⁵⁶ Except in areas where we have required the closure of local dialling to address number scarcity.

maintaining the facility. We would continue to require the closure of local dialling in particular area codes where issues of number scarcity arise.

- Option 2: **The status quo**, i.e. maintaining the current obligation for telecoms providers to provide a local dialling facility (and continuing to require the closure of local dialling in particular area codes where issues of number scarcity arise).
- Option 3: **Require the closure of local dialling in all area codes** at one time.

Option 1: Remove the obligation to provide local dialling

3.31 Option 1 is our preferred approach for the following reasons, which we develop further below:

- The migration to IP is changing the way telephone networks are organised. The requirement for local dialling adds some additional technical complexity to the provision and maintenance of IP voice services which may increase costs for telecoms providers and be a barrier to the development of innovative new services.
- The significance and use of local dialling are in decline and we consider that consumers are unlikely to experience significant inconvenience if telecoms providers are permitted to withdraw local dialling.
- Our proposal is consistent with our objectives to secure efficient use of numbers and support innovation in telephony. It gives telecoms providers the choice of whether to provide the facility and may promote competition by allowing scope for more differentiation of voice services.

Technical challenges of continued provision of local dialling

3.32 Although some respondents have questioned whether the technical challenges presented are overstated, several telecoms providers have indicated that, though not impossible to provide local dialling, maintaining this facility following IP migration adds complexity and an additional maintenance burden. This could be a barrier for the development of new innovative voice services and, in particular, make it more difficult to support customers who move home and want to keep their existing number.

3.33 It would not be consistent with our objectives in reviewing the Numbering Plan for our rules to discriminate between different types of technology and therefore it would not be appropriate to have separate rules for services provided over PSTN and those over IP.

The impact of closure on consumers

3.34 We have carefully considered respondents' concerns about the impact of allowing local dialling to be withdrawn on groups of older or vulnerable telephone users who are accustomed to using it. However, our research indicated that landline phone users do not find it significantly inconvenient to adjust to this change and do not view local dialling as essential.

- 3.35 In our Future of Numbering research⁵⁷ we asked consumers and micro-businesses in Aberdeen (where we closed local dialling in October 2014) for views on the withdrawal of local dialling. None of those surveyed expressed any serious concerns about the change. Some were not even aware that it had taken place. Among those who could recall the change, a few described it as initially a little inconvenient, after which they became quickly accustomed to it. Some reported that the way that the change was communicated helped to reduce any potential for annoyance or confusion.
- 3.36 These views on local dialling echo the findings of our earlier 2011 research⁵⁸ which noted that local dialling “is largely taken for granted and seen as ‘nice to have’, not a necessity. Very few consumers or businesses had concerns if it was to disappear”.
- 3.37 The increasing proportion of calls being made from mobile phones means that phone users are becoming more used to making calls without local dialling. We do not expect telephone users to experience significant inconvenience or confusion if it is withdrawn, provided that the change is communicated clearly to them by their telecoms provider.
- 3.38 If we adopt our proposal, we would continue to monitor telecoms providers’ migration plans and engage with industry groups to ensure that appropriate communications are provided to customers on any changes to the provision of local dialling as part of the migration to IP.

Additional considerations

- 3.39 Our proposal is consistent with our objectives to secure efficient use of numbers and support innovation in telephony. Allowing telecoms providers to make their own decisions about the provision of local dialling would allow them to respond to customer demand in differentiating their services, reduce the costs and complexity of developing new services, and make it easier for consumers to keep their landline number when moving home. We consider the reduction in complexity and increased ability to differentiate services are consistent with promoting competition among providers.
- 3.40 IP migration represents a major evolution in the provision of voice services and customers will have to adjust to some differences in the use of phones. We consider that if communications with customers are handled appropriately, the proposed removal of local dialling as part of this change is unlikely to prove a significant barrier to acceptance of IP.

Option 2: The status quo

- 3.41 We consider provisionally that maintaining the obligation to provide local dialling in the Numbering Plan (Option 2) is not appropriate for the following reasons:

⁵⁷ Future of Numbering research, Section 5.6.

⁵⁸ Ofcom, 2011. [Geographic Numbering: Summary report of findings](#).

- the use and understanding of local dialling is declining significantly and our research shows that closure should not represent a significant inconvenience to consumers, and
- the continued provision of local dialling would represent an additional complexity and maintenance burden for telecoms providers which is not justified by its diminishing value to landline phone users.

Option 3: Requiring the closure of local dialling in all area codes

3.42 Some respondents to our First Consultation favoured closing local dialling in all areas at one time (Option 3). This option would allow Ofcom to co-ordinate a national campaign to raise consumer awareness and prepare for a single time of change everywhere. However, we consider provisionally that there are a number of reasons why this would not be justified:

- For technical reasons: the closure of local dialling in all areas at one time would require additional cost and effort to implement. The switch to IP will not happen in all areas at the same time and different telecoms providers will decide individually the right time to migrate each customer. Legacy telephone systems will take longer to be replaced in some areas and a coordinated nationwide closure of local dialling would require these legacy systems to be reconfigured to remove the facility.
- For efficiency: telecoms providers already plan to communicate with customers individually at the point of migration about the changes to their telephone service. We consider that it would be more efficient for providers to explain the removal of local dialling in these individual communications, rather than pursue a separate national campaign which would entail significant additional cost. We consider that providers are well placed to target their messaging to the needs of individual customers and our experience of previous closures highlighted the value and sufficiency of communications directly from providers.
- For the benefit of consumers: this option would unnecessarily remove the ability for telecoms providers to continue to provide the local dialling facility if they consider that it remains of value to their customers.

3.43 Some respondents said that closing local dialling in all area codes would remove the potential confusion over whether it is offered or not.⁵⁹ However, we consider that the chances of confusion arising from different provider approaches would be limited. If a phone user's telecoms provider offers the local dialling facility, it would still work to call any local number regardless of whether the called person has that facility. Also, as individual consumers are unlikely to use more than two or three landline providers at most to make calls (e.g. at home, work, visiting etc.), they would become accustomed to the necessary dialling patterns for each.

⁵⁹ DWP, paragraph 3.3; TalkTalk, page 3; FCS, page 2; Lexgreen, page 1; and [redacted] [a confidential respondent], in their responses to the First Consultation.

- 3.44 Option 3 may have been the most efficient approach if we had needed to close local dialling in a significant number of area codes to manage number scarcity. We have looked at the forecast for areas likely to run out of numbers for us to allocate by 2025 if we did not intervene.⁶⁰ We anticipate that fewer than ten area codes would require local dialling to be closed before 2025, which means there would be only around 16 out of 610 area codes where the provision of the local dialling facility was prohibited.
- 3.45 As well as freeing up local numbers beginning with the digits 0 and 1, the closure of local dialling in all areas would also allow the use of short digit numbers starting with the digits 2 to 9 for other services, as these would no longer signal a locally dialled geographic number. However, we consider that these benefits do not justify the additional costs and disruption of requiring the closure of local dialling in all area codes at one time, given the limited degree of number scarcity that we have forecast.

Our proposal on local dialling

- 3.46 **For the reasons set out above we are proposing to remove the obligation to provide local dialling from the Numbering Plan (Option 1).** If we do this, we understand from responses to our First Consultation and our discussions with industry that many telecoms providers are likely to withdraw local dialling as part of their migration to IP because of their assessment of limited demand from customers and the costs involved in ongoing provision.
- 3.47 Our experience of previous local dialling closures indicates that telecoms providers were able to manage the changes effectively in multiple areas and provide clear messaging to customers. Ofcom had direct involvement in leading the programme of communication with consumers for the first closure in 2012 in Bournemouth. However, for the five area codes closed in 2014, the focus moved to telecoms providers' contact with their customers, and this took the form of written communications as well as, importantly, the provision of a misdial announcement played if a number is dialled incorrectly without the area code. If we adopt this proposal, we would therefore continue to work with telecoms providers and industry working groups to ensure that there is appropriate communication with customers about any future withdrawal of the local dialling facility. We would:
- monitor telecoms providers' IP migration plans to determine whether they include a change to local dialling and if they have received any feedback from customers;
 - engage with the relevant stakeholder groups on technical and communications aspects of withdrawing local dialling; and
 - issue guidelines to ensure telecoms providers provide sufficient information to customers about any change to local dialling.

⁶⁰ We have used 2025 as the benchmark as this is around the time when we expect providers' migration to IP networks to be completed. IP networks do not have the same technical constraints as traditional networks, which require allocation of numbers in large blocks. This is the main driver for geographic number scarcity.

- 3.48 We recognise from responses to our First Consultation and our own research that landline phones are used more often by older and vulnerable consumers, and thus some consumers sharing particular protected characteristics (such as age or disability) may be more likely to be impacted by any withdrawal of local dialling.⁶¹ Although we are mindful of the potential for confusion among some customers, our research which surveyed consumers across a number of age ranges indicated that no group sees local dialling as an essential facility and even older phone users did not experience significant inconvenience from its withdrawal.⁶² We consider that any potential harm or confusion for consumers can be mitigated by appropriate communications targeted at relevant customers before any withdrawal of local dialling.
- 3.49 We will continue to require the closure of local dialling in those area codes where necessary to address number shortages.

Proposed modifications to the Numbering Plan in relation to local dialling

- 3.50 To implement our proposals in relation to local dialling, we propose to delete paragraph B3.1.2 of the Numbering Plan, the text of which is shown in paragraph 3.14 of this section.⁶³

Legal tests

- 3.51 It is our duty, when proposing a modification to the Numbering Plan, to show how we consider that the proposal complies with our legal tests and duties in the Act (see Annex 4 for further information on the legal framework).
- 3.52 We consider that our proposal to modify the Numbering Plan by removing the requirement to provide local dialling meets the tests set out in section 60(2) of the Act being:
- **objectively justifiable**, because the value of local dialling to consumers is in decline - it is not regarded as an essential facility - and this modification will ensure that our regulation reflects the technical evolution of voice services in the migration to IP. It will remove a barrier to future innovation in voice and allow telecoms providers to make a commercial decision about the future provision of the facility that takes into account the level of demand from customers and the ongoing maintenance burden.
 - **not unduly discriminatory**,
 - from the perspective of consumers, although we recognise that the local dialling facility may be used by some groups of consumers more frequently and we are mindful of the potential for confusion for vulnerable groups, our research indicates

⁶¹ See background on Equality Impact Assessments in paragraphs 2.32 to 2.34.

⁶² The Future of Numbering research focus groups included consumers from each of the following groups: young, single (c. 16-21); pre-family (c. 22-34); family (c. 32-44); empty-nesters (c. 45-64); and retirees (65+).

⁶³ We propose for the subsequent paragraphs in Part B3.1 of the Numbering Plan to be renumbered.

that in areas where local dialling has been closed in the past no groups of consumers experienced significant inconvenience.

- from the perspective of telecoms providers, the proposed change applies to all regardless of whether utilising traditional PSTN copper networks or more modern IP technologies. It removes an obligation that may be more onerous for some networks than others.
- **proportionate**, in that the proposed modification to the Numbering Plan is the minimum necessary to ensure that regulation does not present a barrier to innovation and an inefficient maintenance burden which is not justified by consumer needs. The impact on those who may be more affected by the removal of local dialling can be mitigated by clear communications from their telecoms provider.
- **transparent**, in that our reasoning for making the proposed modifications is set out in this document and the Notification proposing the modifications to the Numbering Plan is included in Annex 5.

3.53 We consider that we are fulfilling our general duty as to telephone numbering functions set out in section 63 of the Act by:

- **securing the best use of appropriate numbers**, in that the proposed modification, while not impacting directly on the use of numbers, would allow the decline of local dialling which may simplify future closures to alleviate number scarcity in area codes.
- **encouraging efficiency and innovation for that purpose**, in that the proposed modification would remove a requirement which represents an increasing burden on the providers of voice services and a potential barrier to the development of new innovative services and flexibility in number use.

3.54 We consider that our proposal to modify the Numbering Plan is consistent with our general duties in carrying out our functions as set out in section 3 of the Act. The proposed modification furthers the interests of citizens in relation to communication matters and consumers in relevant markets by ensuring that our regulation does not oblige providers to maintain a facility that is no longer valued by many consumers (who ultimately bear the cost of its provision) and by removing a potential barrier to the development of new innovative services which may offer greater value to consumers in the long term. Giving telecoms providers more choice about the services they provide may contribute to competition by allowing them to differentiate their services from those of competitors. Our research indicates that in areas where local dialling has already been withdrawn consumers did not experience significant inconvenience.

3.55 In proposing the modifications, we have also considered the duties set out in section 4 of the Act, particularly the first requirement to promote competition in the provision of electronic communications networks, services and associated facilities, as well as the requirement to promote the interests of all members of the public in the UK and to be technology neutral. The proposed modifications would facilitate such promotion as

removing the requirement to provide local dialling would remove a potential barrier to developing innovative voice services and service differentiation.

Notification of proposed modifications to the Numbering Plan

- 3.56 The draft notification of proposed modifications to the Numbering Plan is set out in Annex 5.
- 3.57 If, subject to this consultation, we decide to proceed with the proposed modifications, we intend the removal of the requirement to provide local dialling to enter into force immediately on publication of our final statement.

Consultation question

Question 3.1: Do you agree with our proposal to remove the obligation for telecoms providers to provide the local dialling facility? Please provide reasons for your response.

Location significance and out-of-area use of geographic numbers

- 3.58 In this section we explain the system of geographic numbering that links phone numbers to geographic areas, summarise responses to our First Consultation on this issue, and set out our proposal to maintain the existing rules relating to this in the Numbering Plan.
- 3.59 Area codes play an important role in the routing of calls in the traditional PSTN telephone network but in the context of IP migration the area code as a location identifier for routing becomes technically redundant.⁶⁴ Therefore, as we think about migration to IP networks, we need to consider whether we should retain area codes because of the location significance that they provide to consumers.

The geographic link with phone numbers continues to be of value

- 3.60 Our Future of Numbering research suggests that some consumers and businesses continue to strongly value the geographic link with phone number area codes:
- Older consumers regarded area code location identity highly, feeling it was helpful and generates trust in the owner of the number. By contrast, younger consumers were largely indifferent to location significance and tended not to trust or value geographic numbers.⁶⁵
 - Local small businesses tended to strongly value the link to local areas provided by location significance. This contrasted with those businesses who conduct most of their

⁶⁴ As noted in paragraph 3.7 above.

⁶⁵ Future of Numbering research, pages 26-27.

trade online or want to appeal to a wide geographic area for whom the link was less valued.⁶⁶

- There was concern that the loss of area codes could be confusing for older or vulnerable consumers given the strong association between physical location and area codes for certain groups of consumers.⁶⁷
- There was a concern that the loss of area codes could lead to a loss of information about the caller for consumers, making it more difficult to identify nuisance calls.⁶⁸

3.61 Some businesses and organisations choose to use out-of-area numbers to provide a locally recognised number for their customers to call, thus giving them a feeling of ‘localness’, while the calls may be routed or answered in a different area.

Location significance and out-of-area use in the Numbering Plan

3.62 Paragraph B3.1.1 of the Numbering Plan requires geographic numbers to be allocated to landline users with the correct area code for the location they are in. However, there is an exception permitting numbers to be used out-of-area, when they are initially assigned or subsequently, subject to two conditions:

- the party to whom the number is assigned has requested the relevant area code, and
- the cost of calling the number remains consistent with charges for calling other numbers with the same area code.

B3.1.1. “A Geographic Number shall be assigned only to a Subscriber whose Network Termination Point is physically located within the geographic area associated with that number (having regard to the relevant Geographic Area Code), unless:

- a) the Subscriber has requested a Geographic Number that includes the relevant Geographic Area Code; and
- b) charges for calls to that Geographic Number remain consistent with charges for calls to other Geographic Numbers that include the same Geographic Area Code.”

Consideration of location significance and out-of-area use in the First Consultation

3.63 In our First Consultation we stated our intention to look at location significance rules in the Numbering Plan. We considered that the flexibility in use of phone numbers offered by the

⁶⁶ Future of Numbering research, pages 29-30.

⁶⁷ Future of Numbering research, page 27.

⁶⁸ Future of Numbering research, page 28.

migration to IP is a significant development that would shape our review of the future of numbers.⁶⁹

Responses to our First Consultation concerning location significance

3.64 We received 23 responses to our First Consultation regarding the location significance of area codes.⁷⁰ These responses discussed the overall value of location significance of area codes, the impact of out-of-area use, and the definition of area codes.

Location significance in area codes

3.65 Some respondents recognised that changes in communication trends (such as the use of ‘saved’ numbers for dialling contacts from fixed and mobile devices and widespread communication by mobile phones) mean the use, awareness and significance of geographic numbers was declining and phone users’ views of location significance in telephone numbers was changing.⁷¹ Some respondents also raised out-of-area use of geographic numbers as a contributing factor in this decline.⁷²

3.66 Nonetheless, a substantial majority of respondents favoured retaining the link between location and area codes for the time being.⁷³ The reasons for this included:

- the numbers still help to determine a locality, with familiarity and trust for consumers who are calling or receiving calls from these numbers;⁷⁴
- geographic numbers give consumers confidence about how much a call will cost;⁷⁵
- it is good for businesses to be able to promote association with the location where they operate;⁷⁶ and
- routing and analysis of incoming calls can be based on location (for example, routing a call to a bank branch local to caller based on the incoming geographic number).⁷⁷

⁶⁹ First Consultation, paragraphs 3.7-3.11.

⁷⁰ DWP, FTC, BT, FCS, GCI, ITSPA, Lexgreen, Magrathea, Sky, TalkTalk, Telecom2, Telefonica, Virgin Media, Vodafone, A Martin, R Hinton, Organisation Withheld 1, Name Withheld 1, Name Withheld 2, Name Withheld 3, Name Withheld 4, [redacted] [a confidential respondent] and [redacted] [a confidential respondent].

⁷¹ Virgin Media, page 3; FCS, page 1; and ITSPA, page 4, in their responses to the First Consultation.

⁷² Sky, paragraph 1.2.1; and Name Withheld 1, page 4, in their responses to the First Consultation.

⁷³ DWP, page 4; FTC, page 10; Organisation Withheld 1, page 4; Magrathea, page 2; TalkTalk, page 3; FCS, page 3; ITSPA, page 4; Sky, page 2; Telecom2, pages 3-4; Vodafone, pages 5-6; BT, page 12; Lexgreen, page 2; Virgin media, pages 3-4; A Martin, page 4; R Hinton, page 3; Name Withheld 2, page 3; Name Withheld 3, page 3; Name Withheld 4 page 2; and [redacted] [a confidential respondent], in their responses to the First Consultation.

⁷⁴ DWP, page 3; FCS, page 3; GCI, page 3; ITSPA, page 3; Lexgreen, page 1; Magrathea, page 2; TalkTalk, page 3; Telecom2, page 3; Telefonica, paragraph 21; Virgin Media, page 4; Vodafone, page 5; A Martin, page 3; R Hinton, page 3; Organisation Withheld 1, page 3; Name Withheld 1, pages 2-3; Name Withheld 2, page 3; Name Withheld 3, page 3, Name Withheld 4, page 2; [redacted] [a confidential respondent]; and [redacted] [a confidential respondent], in their responses to the First Consultation.

⁷⁵ DWP, page 4; FTC, page 9; Organisation Withheld 1, page 3; Magrathea, page 2; TalkTalk, page 3; ITSPA, page 3; Telecom2, page 3; Vodafone, page 5; Lexgreen, page 1; Name Withheld 4, page 2; [redacted] [a confidential respondent]; and [redacted] [a confidential respondent], in their responses to the First Consultation.

⁷⁶ Magrathea, page 2; FCS, page 3; ITSPA, page 3; Virgin Media, page 4; and [redacted] [a confidential respondent] in their responses to the First Consultation.

⁷⁷ ITSPA, page 3; and [redacted] [a confidential respondent], in their responses to the First Consultation.

- 3.67 Some providers highlighted its on-going importance to particular groups of consumers (for example older consumers) as a reason location significance should be preserved and only removed when there is evidence of consumer support for removal.⁷⁸
- 3.68 Of the respondents who did not directly favour retaining the existing link:
- One provider argued that there was no need to designate cities or towns as geographical areas and a wider region would be sufficient. It suggested that further subdivision of area codes could be based on the type of user of the number (e.g. business/residential/government/charity/finance etc) as well as geographic area.⁷⁹
 - One individual respondent highlighted the common business practice of using out-of-area numbers and suggested that there was merit in considering the uncoupling of all area codes from geographic locations.⁸⁰

Out-of-area use of geographic numbers

- 3.69 BT and one individual noted potential negative effects from the use of geographic numbers in a location different from that suggested by the area code. These included that out-of-area use:
- could impact on number scarcity if lots of businesses chose to use the same area code;⁸¹
 - can present routing and billing issues while the PTSN is still in use since it is more difficult to accommodate out-of-area use properly on the legacy networks;⁸²
 - may erode location significance or trust in geographic numbers;⁸³ and
 - provides a mechanism for scammers to appear to be calling from a local area other than where they are located, thus increasing the likelihood of the call being answered.⁸⁴
- 3.70 However, three respondents, including BT, argued that out-of-area use should continue to be permitted and the convenience of having this option for businesses and consumers outweighs any negative effect (for example it enables landline phone users to keep their number when moving house to a different area).⁸⁵ Vodafone noted that the practice of businesses using geographic numbers out-of-area is not new and that phone users are aware that the area code does not necessarily indicate the actual location of the caller.⁸⁶

⁷⁸ DWP, page 2; FCS page 3; Sky page 2; TalkTalk, page 3; Vodafone, page 5; and [redacted] [a confidential respondent], in their responses to the First Consultation.

⁷⁹ [redacted] [a confidential respondent].

⁸⁰ Name Withheld 1 response to First Consultation, page 4.

⁸¹ BT response to First Consultation, page 12.

⁸² BT response to First Consultation, page 12.

⁸³ BT, page 3; and Name Withheld 3, page 3, in their responses to the First Consultation.

⁸⁴ Name Withheld 3 response to First Consultation, pages 2-3.

⁸⁵ FTC, page 10; BT, page 11; and Vodafone, page 6, in their responses to the First Consultation.

⁸⁶ Vodafone response to First Consultation, page 6.

Definition of area codes

- 3.71 Two providers suggested that there was potential for providers of IP voice services to define areas inconsistently and that Ofcom should develop a more detailed mapping of the boundaries of each area code with reference to postcode information.⁸⁷
- 3.72 Concerns were also highlighted about any future process for ending geographic numbering. ITSPA said that if there were to be a “big bang” renumbering away from local numbers, it could involve high costs in reprinting and re-advertising for businesses. Also, if Ofcom was to end further allocation of geographic numbers it could create “number disparity”, with businesses unable to get more numbers similar to those they already use and a potential perceived difference between businesses that have local numbers and those that do not.⁸⁸

Our proposals on location significance and out-of-area use

- 3.73 We have reached the provisional conclusion that it would be appropriate to retain location significance and to continue to allow phone users the option of using numbers out-of-area. We therefore propose to maintain the current rules in the Numbering Plan without modification.
- 3.74 We agree with the strong consensus among respondents that many phone users and businesses continue to value the link between geographic numbers and locations that area codes provide. In the absence of compelling reasons for change, we do not consider it appropriate to take steps to hasten the erosion of this link. For these reasons we think it is not the right time to deregulate use of area codes completely or merge area codes into larger areas (see paragraph 3.68).
- 3.75 However, we also agree with respondents that there is an overall decline in the value and understanding of location significance, particularly among younger phone users. In the future, as the migration of voice services to IP progresses, enabling significantly more use of numbers out-of-area, it may become appropriate to review the Numbering Plan provisions again.
- 3.76 Although we recognise the concerns raised in response to our First Consultation about out-of-area use, we consider that these are outweighed by the benefits to consumers and businesses from being able to use numbers out-of-area:
- We understand that it is very convenient for phone users to keep their landline number when moving home, even out-of-area, and we consider this an important reason to allow out-of-area use.

⁸⁷ BT, page 13; and TalkTalk, page 3, in their responses to the First Consultation.

⁸⁸ ITSPA response to First Consultation, page 4.

- We recognise the value to businesses of being able to develop trust and recognition among customers locally by using area codes linked to a local location, even when calls may be answered elsewhere.
- Banning out-of-area use would not prevent the inappropriate use of geographic numbers in scams since in many cases a spoofed CLI is used rather than a validly assigned geographic number.⁸⁹

Area code mapping

- 3.77 We have also considered the suggestion that Ofcom should develop a detailed mapping of area codes in the Numbering Plan (for example by postcode), but provisionally consider that industry is best placed to determine the appropriate allocation of area codes to individual premises based on the list of area codes in the Numbering Plan.
- 3.78 Telecoms providers have generally made their own decisions about the appropriate area code to assign when installing new fixed telephone lines, based on the list of area codes in the Numbering Plan and understanding of BT's network of telephone exchanges. We recognise that, with the migration to IP, the geographic boundaries for each area code may become less clearly defined over time, as the direct relationship between a telephone line and the local exchange would be lost. In the absence of such links there may be more ambiguity about which area code should be used, but we expect this would affect a relatively small proportion of premises. Taken in the context of expected long-term decline in the value of location significance, we do not consider it would be proportionate for Ofcom to undertake an exercise to define more precisely the boundaries for each area code.
- 3.79 We understand that some telecoms providers are starting to develop their own solutions to determine area code allocation for VoIP and we welcome further discussion with providers and industry groups to ensure that appropriate and proportionate measures are in place to maintain these boundaries in an all-IP environment.

Legal tests

- 3.80 Given the widely recognised value to phone users of maintaining the location significance of geographic numbers and allowing out-of-area use (subject to certain conditions in the Numbering Plan), we consider that it would not be objectively justifiable or proportionate within the terms of section 60(2) of the Act to amend the provisions of the Numbering Plan.
- 3.81 We consider the proposed maintenance of the current provisions fulfils our general duty as set out in section 63 of the Act to secure the best use of appropriate numbers and

⁸⁹ Phone scammers take advantage of the trust in geographic numbers by pretending to call from a location that telephone users would recognise. The Calling Line Identification (CLI) is modified to change the number presented to the called party.

encourage efficiency and innovation for that purpose. It maintains a use of geographic numbers that is valued by consumers and businesses alike while giving the flexibility of out-of-area use that will prevent barriers to innovation.

3.82 We also consider this proposal is consistent with our duties in sections 3 and 4 of the Act.

Consultation question

Question 3.2: Do you agree with our proposal to retain the provisions in the Numbering Plan which (i) allocate location significance to area codes and (ii) allow phone users to request out-of-area use of geographic numbers? Please provide reasons for your response.

4. Revenue sharing with calling parties

- 4.1 In this section, we turn to revenue share rules in the Numbering Plan. We need to ensure that these rules are functioning correctly, as the inappropriate sharing of revenue by some telecoms providers with their customers could lead to inefficiency and higher prices, putting call allowances at risk, leading to unexpected charges (known as ‘bill shock’) and undermining consumer confidence.

Summary of our proposals for consultation

- 4.2 Having considered the analysis set out in this section, we have reached the provisional conclusion that revenue sharing with calling parties can incentivise harmful behaviour and lead to consumer detriment. **We propose to prohibit the direct and indirect sharing of revenue with any calling party for all geographic and non-geographic numbers.** This would be implemented by introducing a ban on revenue sharing with calling parties in the Numbering Plan.
- 4.3 For the avoidance of doubt, we are not proposing any changes to the current rules on revenue sharing with called parties for any number ranges.

Background

What is revenue sharing?

- 4.4 Revenue sharing between the telecoms provider terminating a call and the party receiving the call is a recognised feature of how certain non-geographic number ranges function. It is a system of distributing a reward between relevant parties as a result of a number being called. For instance, the Service Charge associated with 084, 087, 09 and 118 numbers, which is paid by the caller and passed by the originating provider to the terminating provider, may be shared with the called party, i.e. the organisation providing the service on that number (for example, a ticket booking agency or mail order company). This can cover or contribute towards their costs of providing the service.
- 4.5 However, although sharing of revenue generated by a call is commonly thought of as being between the terminating telecoms provider and the called party, it can also occur between a telecoms provider and the person making the call.

- 4.6 In some number ranges (03, 056 and 070 numbers⁹⁰) revenue sharing with any end-users is prohibited in the Numbering Plan.⁹¹ This is to protect against fraud and misuse, and to promote consumers' confidence that they will be paying only for the call, and not for any additional services being provided.
- 4.7 In those number ranges where revenue sharing is permitted, the revenue may be in the form of money, a payment-in-kind or a benefit-in-kind. Examples include (but are not limited to):
- money;
 - the money's worth in vouchers, coupons or tokens (e.g. cash vouchers for purchases from an online retailer);
 - the money's worth in credits that can be redeemed for a future service (e.g. credits for international phone calls); and
 - a product or service with some inherent value (e.g. an electronic download).
- 4.8 The sharing of revenue with an end-user can be considered as 'direct' or 'indirect':⁹²
- direct revenue sharing occurs when a proportion of revenue received by a terminating telecoms provider is paid to the end-user, either in the form of money or money's worth, and where the value of such payment is proportionate to the duration of the call.
 - indirect revenue sharing occurs when a benefit-in-kind is made to an end-user. The benefit is not necessarily proportionate to the duration of the call.

Revenue sharing with calling parties

- 4.9 In this consultation we are looking at the practice of revenue sharing with calling parties and cash for calls schemes. Below we explain how these schemes function and why an examination of them is included in our Future of Numbering Review.

Cash for calls schemes

- 4.10 Telecoms providers routinely offer their subscribers call allowances with bundles of inclusive minutes. Such bundles – which normally include a certain amount of call minutes,

⁹⁰ The 03 range is used for non-geographic numbers charged at a geographic rate. The 056 range is designated for use for Location Independent Electronic Communications Services and the 070 range for Personal Numbers in Part A1 of the Numbering Plan.

⁹¹ End-user is defined for our purposes in Ofcom's [General Conditions of Entitlement](#) in the same terms as in section 151 of the Act. End-user, in relation to a public electronic communications service, means:

(a) a person who, otherwise than as a communications provider, is a customer of the provider of that service;

(b) a person who makes use of the service otherwise than as a communications provider; or

(c) a person who may be authorised, by a person falling within paragraph (a), so to make use of the service.

⁹² The way we are using 'direct' and 'indirect' is consistent with our decision in December 2014 on the 03 number range. Ofcom, 2014, [The 03 Number Range: Decision to clarify that revenue-sharing with callers is prohibited on the 03 number range](#) ('the 03 Revenue Sharing Statement'). See paragraphs 4.73 to 4.75 of that Statement.

text and data for which no incremental charge is applied – are a significant feature of the commercial package and an important component of retail competition. Telecoms providers often compete for customers by drawing attention to their latest bundles in their advertising and other promotional activities.

- 4.11 The ability to make ‘free’ calls at the point of use, through the inclusion of certain number ranges in inclusive call minute allowances, can incentivise schemes whereby telecoms providers terminating calls induce those who subscribe to their scheme to use spare minutes in their call allowance to call a range of numbers that they hold. The provider of the scheme then profits where termination rates exceed the associated cost of terminating that call. These are often referred to as ‘cash for calls schemes’.
- 4.12 Typically, the call is not used for any genuine communications service, in that it is not made with the primary intention of speaking to someone or making use of a communications-based service. Often calls are made to a radio broadcast or the caller leaves the phone off the hook once connected for the duration of the free call.
- 4.13 We have identified a number of cash for calls schemes where it appears the caller will have no inherent value from making a call and is induced to make the call by revenue sharing. These schemes commonly have the following features and promotional material:
- new numbers to call are constantly provided and the caller is encouraged to work their way through the list;
 - the caller is responsible for checking the terms of their call allowances and advised to make short test calls to avoid unexpected charges;
 - a threshold of minutes often needs to be reached before a payment is released;
 - payments are generally by bank transfer/PayPal, tokens, call credits, vouchers, gifts or donated to charity; and
 - payments to callers are dependent on the scheme provider receiving the outpayment from the originating provider for terminating the call.

Background

The 03 Number Range and our decision to clarify that revenue sharing with calling parties is prohibited

- 4.14 Ofcom acted in 2014 to clarify the rules in the Numbering Plan that revenue sharing with callers to 03 numbers was prohibited. The Numbering Plan requires calls to 03 numbers to be charged at a geographic rate and that telecoms providers treat calls in the same way as they do 01/02 geographic numbers in terms of inclusive minutes and discount structures.⁹³
- 4.15 We had observed the emergence of telephony services that offered customers financial or other benefits in return for calling their 03 numbers. In some cases, no genuine communications service was provided on such calls, and direct inducements were offered

⁹³ See Part A1 of the [Numbering Plan](#).

to callers (i.e. payment was proportional to the duration of the call made). We were particularly concerned that this was occurring on 03 numbers, as we were keen to secure the identity, reputation and trust of this range launched in 2007 as an important national, basic rate non-geographic number range offering a cheaper alternative to calling chargeable 08 numbers and on which revenue sharing was not permitted.

- 4.16 In the 03 Revenue Sharing Statement, we explained our policy intention that revenue sharing was prohibited with any end-users, including with the calling party. It was noted, however, that some confusion existed as in many circumstances the term ‘end-user’ was associated with the called party (i.e. the person or organisation at the terminating end of the call).
- 4.17 To provide greater clarity and certainty about the scope of the prohibition on revenue sharing on 03 numbers, we confirmed that it included any calling party. We also clarified that revenue sharing referred to the earning of cash payments or other benefits-in-kind, whether or not they were proportionate to the length of the call. We modified the restriction in the Numbering Plan to refer to both ‘any End-User’ and ‘any Calling Party’ as well as direct and indirect revenue sharing (see paragraph 4.19 below).
- 4.18 Ofcom’s focus on 03 numbers in 2014 resulted in the clarification on revenue share rules in the Numbering Plan being reflected in the restrictions on use of 03 numbers only. A similar clarification to the restrictions applicable to 056 and 070 numbers, where revenue sharing with end-users was (and still is) prohibited in the Numbering Plan, was not considered at that time.

Revenue share rules in the Numbering Plan

- 4.19 The following restrictions on revenue sharing applicable to the 03 number range, which includes the clarification made in 2014, are set out in Paragraph B3.2.1 of the Numbering Plan:

Those who Adopt or otherwise use Non-Geographic Numbers starting 03 shall not directly or indirectly share with any End-User or any Calling Party any revenue obtained from providing a service on those numbers.

- 4.20 Paragraphs B3.3.1 and B3.4.1 of the Numbering Plan set out the restrictions on revenue sharing applicable to the 056 and 070 number ranges respectively:

Those who Adopt or otherwise use Non-Geographic Numbers starting 056 shall not share with any End-User any revenue obtained from providing a service on those numbers.

Those Adopting Personal Numbers shall not share with any End-User any revenue obtained from providing a Personal Numbering Service.

Consideration of revenue share rules in the First Consultation

- 4.21 In our First Consultation we stated our intention to look at revenue share rules in the Numbering Plan. We considered that changes in call prices, including the operation of bundles and call allowances, were one of the developments in voice telephony that would shape our review of the future of numbers.⁹⁴

Responses to the First Consultation

- 4.22 BT supported our intention to look at the revenue share rules. It argued that we would need to prohibit cash for calls schemes in order to prevent artificial inflation of traffic (AIT),⁹⁵ to encourage telecoms providers to simplify their tariffs and include number ranges in inclusive call allowances.

- 4.23 BT said that such schemes were being offered on number ranges included in their call allowances with detrimental effect:

“BT includes 0845 and 0870 within its fixed line call bundles. Here we see the practice of AIT where companies encourage calls to these numbers by offering incentives such as cashback or vouchers. We estimate this costs us significant amounts each year, and requires significant work to identify and challenge AIT as it is not currently prohibited by regulation.”⁹⁶

- 4.24 BT further argued that as cash for calls schemes incentivised behaviour that leads to AIT, without a clear regulatory prohibition on such schemes operating, it was “*impractical to consider whether further number ranges could be added to bundles in order to present clarity to customers*”, adding that:

⁹⁴ See Paragraph 2.26 of the First Consultation.

⁹⁵ Telephony traffic which has no legitimate commercial purpose; where an activity causes calls to a service to be artificially generated or prolonged for financial benefit, and where the calling pattern would not have happened in the normal course of business.

⁹⁶ BT response to First Consultation, paragraph 4.33.

“Ofcom has regulated the termination rates on 070 from 1 October 2019 in order to provide clarity for consumers, but there is a threat of AIT that means there will be a risk in bundling calls to these numbers. Although Ofcom has specified that revenue may not be shared with “end-users”, in the case of 070 this refers to the party receiving the calls, not the one making the call”.

- 4.25 BT concluded that revenue sharing with calling parties should be banned for all number ranges and that Ofcom needed to ensure this regulation was enforced:

“We think that Ofcom should ban revenue sharing with callers (i.e. ‘cash for calls’) across all ranges. There is no justification for somebody to be paid to make a phone call. At best it incentivises extra network traffic that otherwise would not exist, and at worst it can defraud communications companies of millions of pounds.

They also need to enforce this regulation effectively to ensure that AIT doesn’t continue to exist even when revenue sharing with callers is banned.”

- 4.26 We welcome BT’s support for our review of the revenue share rules. We agree that the impact of cash for calls schemes on AIT, and the implications for inclusion of number types in call bundles, are issues that we should consider as part of the Future of Numbering Review. Furthermore, while it has always been our intention that the prohibition on revenue sharing with any end-users on 03, 056 and 070 numbers included calling parties, BT’s comment that *“in the case of 070 this refers to the party receiving the calls, not the one making the call”* demonstrates that further clarity is required.

What is the impact of revenue sharing with calling parties?

- 4.27 We have identified several detrimental impacts that may arise because of revenue sharing with calling parties and cash for calls schemes. Below, we set out our views on these harmful effects.

Revenue sharing with calling parties is inefficient and can result in higher bills for consumers

- 4.28 Revenue sharing with calling parties exploits the bundle tariff structure in a way that is inefficient and harmful for society. Subscribers to cash for calls schemes are induced to make additional calls because of the direct or indirect revenue that they receive as part of the scheme. However, those callers receive no inherent communications benefit from the call itself.
- 4.29 While the provider and the subscriber of the cash for calls scheme benefit, this will be offset by higher costs for the originating telecoms provider. The loss to society from these calls that have no inherent value is the resource costs involved in connecting them, in terms of both originating and terminating costs, and any impact on the networks.

- 4.30 As originating telecoms providers have higher costs as a result of these calls, this may feed through into higher prices for call bundles that they provide to their customers. This means that customers who do not take advantage of these schemes can be made worse off by them.
- 4.31 While it could be argued that telecoms providers can introduce their own fair-use policies and call-blocking in response to AIT, there are considerable administrative costs in monitoring the frequently changing lists of numbers that form part of cash for calls schemes and their efforts may not be comprehensive. BT told us in its response to the First Consultation that it requires significant work to identify and challenge AIT. It is also a burden on providers to take commercial action and implement AIT procedures, particularly if there is uncertainty over regulatory rules around revenue sharing with calling parties. These costs may also feed through to higher prices for consumers.

Revenue sharing with calling parties can result in numbers being excluded from bundles and increased risk of bill shock

- 4.32 As discussed above, cash for calls schemes may mean that telecoms providers set their customers higher monthly prices for bundles than they would otherwise. Another possible response is that telecoms providers may exclude certain types of numbers from bundles, as telecoms providers can decide whether or not to include chargeable numbers in their inclusive call allowances.⁹⁷
- 4.33 Inclusive call bundles are a common feature of retail tariffs. This suggests that consumers value the certainty that such bundles provide. When particular number ranges are excluded from bundles, customers may not realise this. This can result in callers suffering bill shock, that is, they are charged more than they expected to pay or charged when they expected the call to be free. This is harmful for the consumers affected. Revenue sharing with calling parties can lead telecoms providers to exclude numbers from bundles increasing this risk of bill shock. This is illustrated by the experience with 070 numbers summarised below.
- 4.34 In our First Consultation, we referenced our October 2018 Statement⁹⁸ requiring wholesale call termination charges for calls to 070 Personal Numbers to be the same as the regulated mobile termination rate from 1 October 2019. This was to avoid high termination rates for calls to 070 numbers, which before our interventions used to lead to harm through high prices, bill shock and scams on the 070 range. We set out our expectation that this would

⁹⁷ The exception to this is the following requirement in Part A1 of The Numbering Plan in relation to 03 numbers: “calls charged at up to the same rate the customer would pay to call a UK Geographic Number, with calls to 03 numbers counting towards inclusive call minutes if the customer has remaining inclusive minutes to UK Geographic Numbers, and included in any discount structures that apply to UK Geographic Numbers”.

⁹⁸ Ofcom, October 2018. [Personal numbering – Review of the 070 number range](#), Statement.

result in 070 calls being treated the same as calls to mobiles, including being part of call allowances, which would benefit consumers and reduce confusion over 070 call prices.

- 4.35 Since then, our Wholesale Voice Markets Review 2021-2026 statement⁹⁹ has confirmed that we will continue to cap the termination rate for calls to 070 numbers at the same level as the mobile termination rate. However, that statement confirmed that some providers remained reluctant to include 070 numbers in call allowances.¹⁰⁰ In addition, as set out in paragraph 4.24 of this consultation, we know from BT's response to the First Consultation that while the threat of AIT remains in the form of revenue sharing with calling parties, telecoms providers may find it impractical to consider adding further types of numbers to call allowance bundles.

Revenue sharing with calling parties can damage the reputation of number ranges, leading to a lack of trust and ultimately reduced confidence in voice telephony

- 4.36 The reputation of certain number ranges may depend on how those numbers are used and advertised. The association of numbers with schemes that exist purely for the generation of revenue and have no genuine communications value can damage the perceived validity of the range and lead to a lack of trust in other services provided on that type of number. Revenue sharing with calling parties may undermine our goal of giving consumers confidence that they understand the types of services that numbers are used for and what they are paying for when they make a call. This can ultimately reduce confidence in voice telephony.
- 4.37 There is also the potential that subscribers to cash for calls schemes may find that they do not receive payments as expected. A common element (see paragraph 4.13) includes non-payment by the telecoms provider running the scheme if they do not receive the outpayment from the originating provider for terminating the call. This can occur if the call traffic has been identified by the originating provider as fraudulent or meets the AIT profile. Callers may also find that numbers they believed to be free at the point of use are not part of their telecoms provider's call allowances, making the caller liable for unexpected call charges. These outcomes can contribute to mistrust of the numbers and confusion.

Our proposal

- 4.38 We have reached the provisional conclusion that revenue sharing with calling parties can incentivise harmful behaviour and lead to the detriment identified in paragraphs 4.28 to 4.37. We believe that a prohibition on the sharing of revenue with calling parties to end

⁹⁹ 2021 WVMR Statement.

¹⁰⁰ 2021 WVMR Statement, Figure 10.2 shows that BT, EE, Sky, TalkTalk, Three, Virgin Media and Vodafone do not include 070 numbers in call allowances, while Giffgaff, O2 and Plusnet Mobile do include 070 numbers in their call allowances.

cash for calls schemes would be the appropriate intervention to prevent this behaviour. This would be implemented by introducing a ban on revenue sharing with calling parties in the Numbering Plan.

- 4.39 We recognise that some confusion exists as to whether the calling party is caught by a prohibition on revenue sharing with the end-user. The definition of end-user¹⁰¹ is tied to the particular electronic communications service or services under consideration and, in some cases, but not necessarily all, a calling party will fall within the legal definition of an end-user: they are not mutually exclusive categories. However, there may be cases where it is arguable that a calling party is not an end-user in the context of a service.
- 4.40 We have also considered on which number ranges we should propose banning revenue sharing with calling parties. As explained in paragraphs 4.14 to 4.18, we have already clarified the rules in the Numbering Plan so that revenue sharing with callers to 03 numbers is explicitly prohibited. We recognise that the focus on 03 numbers in clarifying the revenue share rules in 2014 resulted in differently worded restrictions in the Numbering Plan for 03 numbers and 056/070 numbers.¹⁰² We also recognise that the different wording may have led to confusion for telecoms providers.
- 4.41 Furthermore, we have observed that the prohibition on revenue sharing on 03 numbers has led to a focus on other number ranges being included in cash for calls schemes. A number of these schemes are actively promoting the dialling of their featured 084 and 087 numbers, if those number ranges are included in the customer's call allowance.
- 4.42 Therefore, in addition to our concerns around telecoms providers exploiting or being confused by the difference between how the revenue share rules are specified for 03 and 056/070 numbers, we also have concerns in relation to number ranges where revenue sharing with end-users is currently permitted.
- 4.43 We consider that sharing of revenue with the calling party can provide the wrong incentives for making calls to any type of geographic or non-geographic number and can act to discourage telecoms providers' inclusion of number types in call allowances due to the risk of AIT. We are not aware of any genuine communications service that would be affected adversely if we were to implement our proposals to ban revenue sharing with the calling party on all number ranges.
- 4.44 We recognise that telecoms providers offering cash for calls schemes, and subscribers of those schemes, may be adversely affected by our proposals. However, their gains from these schemes¹⁰³ cause costs for other parties, with an overall loss for society and likely loss for consumers as a whole.

¹⁰¹ See footnote 91.

¹⁰² See paragraphs 4.19 and 4.20.

¹⁰³ See paragraphs 4.11.

- 4.45 When we consulted in 2014 on banning revenue sharing with calling parties for 03 numbers, some respondents mentioned that cash for calls schemes may be more popular with people who regularly call international numbers, as a common reward was credits towards paying for international calls. We concluded that the harmful impacts of revenue sharing on 03 numbers on telecoms consumers as a whole outweighed the benefits derived by a particular group of consumers from the use of cash for calls schemes.
- 4.46 In this consultation, we recognise the possibility that some customers of cash for calls schemes sharing particular protected characteristics (such as race and religion or belief)¹⁰⁴ may be receiving a disproportionately high benefit from such services in terms of receiving a contribution to the cost of international calls. However, cash for calls schemes are available to the population as a whole and are not reserved or intended for particular groups.
- 4.47 For the avoidance of doubt, our proposal to prohibit revenue sharing with calling parties does not affect international indirect access calls, whereby a two-stage call set-up uses an access number (which could be a chargeable 08 number) as the first stage and the destination number is dialled as the second stage.
- 4.48 In conclusion, we have considered the balance of impacts and consider that the inefficiencies and detriment to society overall that can result from revenue sharing with calling parties (as identified in paragraphs 4.28 to 4.37) outweighs the benefit of greater choice and effective cross-subsidy for the limited set of consumers who subscribe to cash for calls services.
- 4.49 We therefore propose to modify the Numbering Plan to introduce a restriction on the adoption and use of all geographic and non-geographic numbers to prohibit direct and indirect revenue sharing with any calling party.

Proposed modifications to the Numbering Plan in relation to revenue sharing¹⁰⁵

- 4.50 To implement our proposals in relation to revenue sharing, we propose to insert a new paragraph B3.1 in the Numbering Plan to include the following specific restriction on the adoption and use of numbers:

¹⁰⁴ See background on Equality Impact Assessments in paragraph 2.32 to 2.34.

¹⁰⁵ See paragraphs 2.14 for more information on the Numbering Plan and its Parts A and B.

B3: Specific restrictions on the Adoption and use of Telephone Numbers

B3.1 Those who Adopt or otherwise use any Telephone Number listed in Part A1 of the Plan shall not directly or indirectly share with any Calling Party any revenue obtained from providing a service on those numbers.

- 4.51 With reference to 03 numbers, we also propose to amend paragraph B3.2.1 to delete the specific reference to “or any Calling Party”, as a prohibition on revenue sharing with calling parties would be set out for all number ranges in the proposed new paragraph B3.1.
- 4.52 Finally, we propose to achieve consistent wording in the prohibition on revenue sharing with end-users for the 03, 056 and 070 number ranges by including an explicit reference to direct and indirect revenue sharing in B3.3.1 (056 numbers) and B3.4.1 (070 numbers), by deleting “shall not share with any End-User” and inserting “shall not directly or indirectly share with any End-User”.

Legal tests

- 4.53 We are satisfied that the proposed modifications to provisions of the Numbering Plan meet the tests set out in section 60(2) of the Act being:
- **objectively justifiable**, in that the proposed modifications would prohibit the sharing with calling parties of revenue received from calls and by so doing, would contribute to:
 - prohibiting an inefficient use of telecoms networks that can result in higher bills for consumers;
 - reducing barriers to the inclusion of numbers in bundles and lowering the risk of bill shock; and
 - increasing trust in telephone numbers and confidence in voice telephony services.
 - **not unduly discriminatory**, in that the proposed regulation would apply equally to all persons and the proposed modifications would apply to all telecoms providers who adopt or use telephone numbers;
 - **proportionate**, in that consumers as a whole are harmed by the practice and prohibiting the practice is the least intrusive means of preventing that harm; and
 - **transparent**, in that our reasoning for making the proposed modifications is set out in this document and the Notification proposing the modifications to the Numbering Plan is included in Annex 5.
- 4.54 We consider that our proposals to modify the Numbering Plan are consistent with our general duties in carrying out our functions as set out in sections 3 and 4 of the Act. In particular, we consider that the proposal would further the interests of citizens in relation to communications matters and consumers in relevant markets for the reasons set out above.

4.55 We consider that we are fulfilling our general duty as to telephone number functions as set out in section 63 of the Act by:

- **securing the best use of telephone numbers**, in that our proposed modifications would stop the sharing of revenue with the calling party and the practice of numbers being used in cash for calls schemes, which is not an effective or efficient use of the numbering resource as calls to the numbers are not made with the primary intention of speaking to someone or making use of a genuine communications service; and
- **encouraging efficiency and innovation**, in that our proposed modifications would help to ensure that numbers are used for appropriate and genuine communications services, helping to promote trust in numbers and confidence in voice telephony services.

Notification of proposed modifications to the Numbering Plan

4.56 The draft notification of the proposed modifications to the Numbering Plan is set out in Annex 5 of this consultation document.

4.57 If, subject to this consultation, we decide to proceed with the proposed modifications, we intend the new restrictions to enter into force immediately on publication of our final statement.

Consultation question

Question 4.1: Do you agree with our proposal to modify the Numbering Plan to prohibit direct and indirect revenue sharing with the calling party for calls to all geographic and non-geographic numbers? Please provide reasons for your response.

5. Non-Geographic numbering: 084 and 087 numbers review

- 5.1 Our Future of Numbering Review seeks to promote consumer confidence in voice telephony, and our research suggests that concerns about call costs, including uncertainty about those costs, for calls to 084 and 087 numbers may be a factor in reducing confidence. We are therefore looking at the future role of 084 and 087 numbers as part of this review.
- 5.2 In this section we set out our approach to reviewing 084 and 087 numbers, summarise the main themes raised in responses to the First Consultation and explain the next steps.

Our approach

- 5.3 We have taken a number of steps over the years to simplify the 08 and 09 number rules and improve transparency on the price consumers are paying.¹⁰⁶
- 5.4 One of the key changes was the introduction in July 2015 of a new tariff structure for revenue sharing ranges known as the ‘unbundled tariff’.¹⁰⁷ The two elements making up the unbundled tariff are:
- Access Charge paid to the telecoms provider who originates the call, with a single ‘pence-per-minute’ rate for calls to all unbundled tariff numbers.
 - Service Charge paid to the telecoms provider who terminates the call. The Service Charge may be shared with the called party. The Service Charge is linked to the number used. For 084 numbers, this is a maximum of 7 pence per minute or per call, and for 087 numbers, it is a maximum of 13 pence per minute or per call. Service providers are required to include the Service Charge in any advertising and promotion of calls to applicable numbers in order to provide transparency to consumers.¹⁰⁸
- 5.5 The results of our Future of Numbering research provided a strong indication that consumers have concerns about 084 and 087 numbers, and that confusion over call costs appeared to persist despite the introduction of the unbundled tariff. Lack of awareness of call costs can lead to consumer harms including bill shock or avoiding making calls due to uncertainty about the cost. There were also concerns expressed about the use of numbers as micropayment mechanisms for contacting certain services.

¹⁰⁶ For more detail see First Consultation, paragraphs 4.8 to 4.10.

¹⁰⁷ The unbundled tariff applies to the 084, 087, 09, and 118 number ranges. Ofcom, 2013. [Simplifying non-geographic numbers - Policy position on the introduction of the unbundled tariff and changes to 080 and 116 ranges.](#)

¹⁰⁸ Ofcom, 2013. [Numbering Condition binding non-providers.](#)

5.6 Given these findings, our First Consultation questioned whether 084 and 087 numbers still had value for consumers and/or service providers. We highlighted the following developments that had led us to consider the future use of 084 and 087 numbers:¹⁰⁹

- the introduction of 03 numbers as an alternative non-geographic range to 084/087, where call charges are linked to geographic number rates;
- the introduction of new rules by Government and other public bodies which restricted the charges that can be levied on consumers for calls to certain types of services;¹¹⁰
- the evolution in the way calls are paid for, with certain numbers included in call allowance packages (and the potential for bill shock when they are not) and the wider availability of alternative micropayment mechanisms to the phone bill;
- the decline in use of 084 and 087 numbers; and
- a general move towards simplifying the Numbering Plan.

5.7 Stakeholder responses to our First Consultation on 084/087 numbers highlighted the following key themes:

- the lack of transparency or awareness of the cost of calling 084 and 087 numbers. This uncertainty can lead to consumers incurring unexpectedly high charges or avoiding making calls to 084/087 numbers;
- Access Charges were seen as too high, particularly from mobiles, and disproportionately high relative to the Service Charge for 084 and 087 numbers;¹¹¹
- several different factors have led to a significant overall reduction in the number of calls made to the 084 and 087 ranges by consumers. These factors included the introduction of regulations which restricted the use of these ranges for certain calls made by consumers; the publication of guidance recommending that these ranges should not be used for government departments or other public bodies; and consumer campaigns which highlighted alternatives to calling these numbers and discouraged their use by businesses;
- even though the use of these ranges was in decline, they are nonetheless seen by some respondents as important to support the provision of services which they consider may not be viable otherwise. They are valued by some organisations to provide a UK-wide contact point for customers;
- a greater proportion of use is now for business to business calls, where there is better understanding of the charges involved;
- the use of non-geographic number ranges for Information, Connection and Signposting Services (ICSS)¹¹² was of significant concern for some respondents; and

¹⁰⁹ First Consultation, paragraphs 4.34 to 4.46.

¹¹⁰ This followed Article 21 of the Consumer Rights Directive which provided that calls to traders for post-contract enquiries should be charged at no more than basic rate. Directive 2011/83/EU [on consumer rights](#).

¹¹¹ FTC pages 4 and 12; Lexgreen, page 3; and Name Withheld 3, page 4, in their responses to the First Consultation.

¹¹² BT, page 17; DWP, paragraphs 4.1-4.2; and Name Withheld 3, page 4, in their responses to the First Consultation.

- more analysis and evidence was needed before a decision can be made as to what measures may be necessary to address any consumer harms, and more needs to be done to review the effectiveness and compliance with the non-geographic numbering rules introduced in 2015 before considering further regulatory changes.
- 5.8 Having considered the stakeholder responses,¹¹³ we recognise that, while there remains concern about the potential for consumer harm, there have been significant changes in the use of 084 and 087 numbers since we concluded the non-geographic call services review in 2013. Further evidence is needed to understand how the numbers are being used and their value to consumers.
- 5.9 We have gathered information from telecoms providers on the use of non-geographic numbers for our further analysis. The evidence will also assist our ongoing monitoring of compliance with the requirements on advertising the unbundled tariff.
- 5.10 Further, as set out in our 2021/22 Plan of Work, we are evaluating the regulatory changes to non-geographic numbering introduced in 2015, which included the unbundled tariff.¹¹⁴ We will publish the results of this evaluation shortly.

Next steps

- 5.11 The next step for our Future of Numbering Review is to consider the conclusions of our evaluation of the 2015 regulatory changes to non-geographic numbering, together with our analysis of the evidence gathered and responses to the First Consultation concerning 084 and 087 numbers.
- 5.12 If our review finds that regulatory changes are needed to promote consumer confidence and address our concerns regarding the future role of 084 and 087 numbers, we will publish a consultation on our proposals.

¹¹³ We set out more detail on the responses received on 084 and 087 numbers in Annex 3.

¹¹⁴ Ofcom, 2021. [Ofcom's plan of work 2021/22](#), Statement, pages 26 and 42.

A1. Developments in voice telephony that will shape our Future of Numbering Review

A1.1 In the First Consultation we asked the following question (Question 2.1):

We have set out developments in voice telephone services that are important in shaping our review of the future use of numbers to promote consumer confidence. Do you agree that these are the key considerations? Do you have any comments on our analysis of these developments? Are there any other developments or considerations that should be part of shaping this review, and if so, in what way?

Evolution of the UK's telephone networks

A1.2 The UK's telephone networks are undergoing substantial change as the companies that run them upgrade their technology and move their landline customers from traditional legacy networks to newer IP technology.

A1.3 This migration has some implications for numbering, most significantly geographic numbers. Geographic numbers are linked to local areas, with the first few digits of the number forming the area code. This location significance is a consequence of the way the traditional landline technology works, with the number being 'tied' to the local exchange. However, IP technology does not need area codes to tell it where to send a call. IP technology uses the whole phone number to determine how the call is routed whereas traditional 'switched' landline technology uses the leading digits to route calls to the destination exchange. This could change the way landline numbers are used and dialled and we therefore considered it appropriate to include geographic numbers in the review.

Stakeholder responses

A1.4 BT agreed that *"the Numbering Plan, and the rules within it, is determined by the network architecture of the Public Switched Telephone Network (PSTN). We have plans to modernise our network and switch off the PSTN migrating all our services to IP by 2025 [...] Other Communications Providers (CPs) are also progressing their plans. To do this well, we need a supportive regulatory framework. Updating the Numbering Plan to provide us with more flexibility as to how we allocate telephone numbers is central to this"*.¹¹⁵

A1.5 Virgin Media saw that evolution of the UK's telephone networks *"as possibly the most significant development when considering the future of telephone services. The migration to IP technology will result in improved customer experience and also the removal of technological and capacity-based restrictions, allowing improvements in how numbers are managed and allocated. We are also aware of how this migration potentially removes the*

¹¹⁵ BT response to First Consultation, paragraphs 2.2 and 2.3.

*reliance on geographic area codes and so it is right that such a significant change is considered”.*¹¹⁶

- A1.6 Virgin Media further commented that *“although there may not be a perceptible change to consumers, the migration to IP technology is a significant change in how providers operate and presents an opportunity to assess how fixed telephone services will evolve over time”*. Sky agreed that geographic numbers should be considered by Ofcom in this review.¹¹⁷
- A1.7 BT, Virgin Media and Fair Telecoms Campaign referred to a transition phase as networks migrated to IP, which needed to be supported by the Numbering Plan. BT stated that *“we must make sure that we consider the functioning of the PSTN until we have fully transitioned to IP and in the meantime need a plan that accommodates both”*.¹¹⁸ Virgin Media considered that *“whilst the networks are migrating to a more flexible technology (IP), the management systems used by providers may take time to evolve to reflect this. Therefore, we would encourage Ofcom to ensure this is taken into consideration when it is looking to shape its review of numbering”*.¹¹⁹ Fair Telecoms Campaign added that *“we also recognise that, as we move from the present situation to that which will ultimately pertain (i.e. when the constraints of the PSTN are fully removed), there may need to be transitional arrangements in place”*.¹²⁰
- A1.8 Organisation Withheld 1 noted that number management system solutions were available that could allocate numbers in any format, creating a more flexible numbering plan and allocation to all parties.¹²¹

Ofcom’s position

- A1.9 We welcome the strong support for reviewing the impact of IP migration on geographic numbers as part of this review. We set out our analysis and proposals on geographic numbers in Section 3.
- A1.10 We acknowledge that there will be a transition period as providers migrate their networks to IP in phases and according to different timescales. Telecoms companies have started their migration programmes and there will be several years of transition during which the Numbering Plan must support the evolving telecoms networks.
- A1.11 The Numbering Plan is based on the principle of technology neutrality. In accordance with section 4(6) of the Act, we carry out our functions in a manner which, so far as practicable, does not favour (a) one form of electronic communications network, electronic communications service or associated facility; or (b) one means of providing or making

¹¹⁶ Virgin Media response to First Consultation, page 2.

¹¹⁷ Sky response to First Consultation, page 2.

¹¹⁸ BT response to First Consultation, paragraph 2.10.

¹¹⁹ Virgin Media response to First Consultation, page 2.

¹²⁰ FTC response to First Consultation, page 7.

¹²¹ Organisation Withheld 1 response to First Consultation, page 2.

available such a network, service or facility, over another. We will therefore ensure that the Numbering Plan continues to support networks and remains workable for both the PSTN and IP networks while necessary.

Alternatives to the phone bill as a micropayment mechanism for non-geographic call services

- A1.12 Non-geographic numbers beginning with 084, 087 and 09 (sometimes referred to as 'service numbers') are used by consumers to call a range of businesses and advice lines to get information and to make payments for services or products.
- A1.13 When non-geographic call services numbers were introduced in the 1980s and 1990s, they provided an innovative solution for service providers offering non-location specific services. With flexible call routing for ease of answering (e.g. in different call centres), the convenience of having one number for contacting many locations and/or call agents, and special charging arrangements to cover or contribute towards the cost of providing the service at a time when such costs were not insignificant, they offered many opportunities.
- A1.14 For consumers, the ability to make calls to such numbers and paying for the facility via their phone bill, with no other action required than ringing the number, offered a convenient payment mechanism.
- A1.15 However, the dynamics of service provision have changed since the introduction of these number types. The cost of providing a telephony service has reduced considerably and the innovative features are now commonplace. Furthermore, alternatives to using the phone bill as a micropayment mechanism for contacting service providers are more readily available, such as Apps, digital wallets and PayPal. Therefore, the payment of a 'premium' for what is often no more of a 'value-added' service than making contact by phone may be increasingly difficult to justify to consumers.
- A1.16 Our Future of Numbering Review seeks to promote consumer confidence in voice telephony, and our research suggests that concerns about call costs, including uncertainty about those costs, for calls to the 084 and 087 number ranges may be a factor in reducing confidence. Therefore, we considered it appropriate for us to look at the future role of 084 and 087 numbers in the review.
- A1.17 Our research suggested widespread acceptance of the use of 09 premium rate numbers. Therefore, we did not propose to include 09 numbers as part of this review.

Stakeholder responses

- A1.18 BT agreed that many services that used to be provided over the phone were now available over the internet, leading to a reduction in calls to 118, 084, 087 and 09 numbers and a

loss of awareness around the purpose of these numbers. It suggested that further research on consumers' experiences, particularly around premium rate numbers, might be useful.¹²²

- A1.19 Virgin Media agreed that *“there has been a significant increase in the number of remote payment mechanisms available to consumers. Where consumers may previously have made micro payments via their phone bill (e.g. via PRS calls or premium rate SMS), they now have a wide choice of alternative, internet-based payment mechanisms”*.¹²³
- A1.20 Sky agreed that 084 and 087 numbers should be considered by Ofcom in this review and that 09 numbers should be excluded.¹²⁴ Fair Telecoms Campaign felt that some Numbering Plan developments were ill-conceived or were now redundant, with no justification for their continued use in their present form, highlighting 084 and 087 numbers (as well as 070 and 076 numbers).¹²⁵ Organisation Withheld 1 agreed that there were better alternatives to using premium rate numbers as a micro-payment mechanism.¹²⁶ Magrathea considered that addressing bill shock as a result of extreme access charges for 084/087 numbers was a priority matter (along with mobile call charge differences).¹²⁷

Ofcom's position

- A1.21 We note the agreement in responses that alternatives to the phone bill as a micropayment mechanism have evolved over recent years. Since the publication of the First Consultation, we have undertaken an extensive information-gathering exercise to understand non-geographic call services in more detail. We will continue to review the future role for 084/087 numbers and explain more on this in Section 5.

Changes in call prices

- A1.22 Call prices for consumers have become much simpler over the past decade as the cost of generating and carrying calls has fallen. The price of a landline call used to depend on distance; calls to and from mobiles were typically much more expensive. Now most calls are included in call allowances, this being the common type of subscription package offered by telecoms providers. However, for customers who have become used to calls being 'free' at the point of use (by being included in call allowances), when calls are charged for, this can lead to them experiencing unexpected or unreasonable charges.
- A1.23 Anomalies in call charges can have a detrimental impact on customers, resulting in unexpected expense, lack of trust in numbers and ultimately reduced confidence in voice telephony.

¹²² BT response to First Consultation, paragraphs 2.19 and 2.20.

¹²³ Virgin Media response to First Consultation, page 2.

¹²⁴ Sky response to First Consultation, page 2.

¹²⁵ FTC response to First Consultation, page 4.

¹²⁶ Organisation Withheld 1 response to First Consultation, paragraph 2.17.

¹²⁷ Magrathea response to First Consultation, page 1.

- A1.24 An example of pricing anomalies is in the 07 number range. Most of these numbers are designated for mobile use, and there are significant irregularities in call prices.¹²⁸ Many providers set higher prices for calls to mobile numbers allocated to smaller providers and treat calls to mobile numbers allocated to providers in the Channel Islands and Isle of Man as international calls. However, consumers seeing these numbers would not be able to tell that one 07 mobile number would be treated differently from another by their telecoms provider, and would generally expect calls to be included in their call allowances. When calls to numbers that look similar are charged differently, there is a risk of consumer harm from bill shock or unreasonable charges.
- A1.25 We proposed that the Future of Numbering Review should identify anomalies in call prices that can result in unexpected or unreasonable charges. We would seek to address the causes of anomalies and would expect telecoms providers to consider appropriate action to protect their customers from irregular call charges.
- A1.26 We also proposed to look at revenue share rules in the Numbering Plan. Sharing revenue generated from calls to certain numbers (03, 056 and 070 numbers) with end users is prohibited in the Numbering Plan. This regulation is designed to protect telecoms providers from AIT and reduce incentives for other forms of misuse and fraud that may result from numbers being included in call allowances. The ability to make ‘free’ calls can incentivise schemes where calls are prolonged purely for financial benefit rather than a legitimate purpose. We need to ensure that the revenue share rules are functioning appropriately, which in turn would support the inclusion of number types in call allowances for the benefit of consumers.

Stakeholder responses

- A1.27 BT and Fair Telecoms Campaign agreed that consumers were accustomed to calling most numbers within their ‘free’ call allowances and could be unclear on call costs outside of bundles.¹²⁹
- A1.28 Telecom2 argued that the anomalies in call charges that can lead to bill shock and/or unreasonable charges were not so much due to termination rates but resulted mainly from the premiums charged for Access Charges¹³⁰ and the high rates for calling 07 numbers other than mobile numbers.¹³¹ It did not consider that this would change under the scope of this review and therefore bill shock and consumer harm would continue. Telecom2 also

¹²⁸ The exceptions being the 070 range, which is designated for Personal Numbering services, and 076 numbers, which are designated for Radiopaging services (apart from 07624, which is designated for mobile and paging services on the Isle of Man).

¹²⁹ BT, page 6; and FTC, page 5, in their responses to the First Consultation.

¹³⁰ The cost of calling 084, 087, 09 and 118 numbers consists of two parts: an Access Charge and a Service Charge. The Access Charge is a fixed, per-minute rate charged by the phone company originating the call. The Service Charge is the amount passed on to the telecoms provider terminating the call, who may share that revenue with the organisation being called.

¹³¹ Telecom2 response to First Consultation, page 2.

disagreed with our statement in the First Consultation that the choice of whether to make a call to or from a mobile or landline was no longer constrained by differences in call cost.¹³² Instead, it considered that people use mobiles in preference to fixed land lines because the bundles are more generous.

- A1.29 Organisation Withheld 1 said that unwanted and unclear call costs were always the main concern for customers. It considered that the challenges lay in the pricing for premium and “exotic” numbers, as mobile and fixed were usually subject to standard prices.¹³³
- A1.30 Fair Telecoms Campaign felt that some Numbering Plan developments were ill-conceived or were now redundant, with no justification for their continued use in their present form, highlighting 070 Personal Numbers and 076 Paging Numbers (as well as 084/087 numbers). It felt that regulatory intervention had been limited to termination rates for 070 and that, while it hoped it could be avoided, action on retail prices for 070 had to be considered. It agreed there was little evidence of 076 numbers being misused, despite them looking like normal mobile numbers.¹³⁴
- A1.31 Telefonica also considered that Ofcom should look at 070 numbers and 07 pricing anomalies. It argued that 070 numbers provided a platform for many scams which cause consumer harm and that the 070 range should be closed. While it welcomed the setting of wholesale termination rates for 070 numbers at the same level as for mobile numbers, Ofcom needed to ensure that the regulation was applied effectively and compliance monitored closely if 070 numbers were to be treated the same as mobile numbers in terms of inclusion in bundles.¹³⁵
- A1.32 Magrathea considered that addressing mobile call charge differences was a priority matter (along with extreme Access Charges for 084/087 numbers).¹³⁶
- A1.33 BT argued that complex and confusing pricing structures were often the result of providers having to take precautions to prevent misuse and abuse of their call packages and further steps needed to be taken to reduce consumer harm. These included the banning of all cash for calls services to prevent AIT and restricting the use of Information, Connection and Signposting Services (ICSS)¹³⁷ which can lead to bill shock. It said that Ofcom should also clarify that telecoms companies can limit excessive calls to premium rate numbers.¹³⁸
- A1.34 BT, Telefonica and Fair Telecoms Campaign referred to the mobile termination rates in the Channel Islands and the Isle of Man being set by their own communications regulators

¹³² First Consultation, paragraph 2.29.

¹³³ Organisation Withheld response to First Consultation, page 2.

¹³⁴ FTC response to First Consultation, pages 3 and 4.

¹³⁵ Telefonica response to First Consultation, paragraphs 10 to 14.

¹³⁶ Magrathea response to First Consultation, page 3.

¹³⁷ ICSS are defined by Phone-paid Services Association as: “Premium rate services, excluding full national directory enquiry services, that provide connection to specific organisations, businesses and/or services located or provided in the UK; and/or which provide information, advice, and/or assistance relating to such specific organisations, businesses and/or services.”

¹³⁸ BT response to First Consultation, page 3.

despite using numbers from the UK's Numbering Plan.¹³⁹ This resulted in termination rates being far higher than in the UK and therefore UK telecoms providers cannot afford to bundle calls to these numbers, causing confusion and bill shock when customers are charged for making calls to what look like UK mobile numbers. It was argued that Ofcom should continue to apply pressure and work with the regulators to bring the termination rate down towards that applied within the UK. If unsuccessful, BT said that we should consider allocating a separate, distinct number range so that it was clearer to customers that calls to these numbers fall outside their bundles and allowances. Telefonica said that we should consider ending the use of UK numbers in the Crown Dependencies.

Ofcom's position

- A1.35 We consider that clear call prices and avoidance of bill shock are important elements of this review and that this opinion has been supported in the responses to the First Consultation.
- A1.36 A number of reasons for the pricing anomalies that can lead to bill shock were raised in responses and we will continue to seek appropriate means of addressing these through this review and our Numbering Programme work.
- A1.37 Firstly, we are addressing cash for calls schemes¹⁴⁰ in this consultation. We explain more in Section 4 and we set out our proposals to stop such schemes by prohibiting revenue sharing with calling parties through a modification to the Numbering Plan.
- A1.38 We are continuing to review the future role of 084 and 087 numbers as outlined in Section 5.
- A1.39 Responses also highlighted issues with 070 Personal Numbers, including exclusion from bundles and being a platform for scams. Ofcom has intervened on 070 numbers by requiring wholesale call termination charges for calls to 070 numbers to be the same as the regulated mobile termination rate from 1 October 2019. We explain more on this in paragraphs 4.34 and 4.35. We will continue to monitor the application of the appropriate rates and the impact on call prices and inclusion in bundles. In Section 4 we also discuss proposals to prohibit revenue sharing with calling parties that can result in numbers (including 070 numbers) being excluded from bundles.
- A1.40 We are not including 076 Radiopaging numbers in this review. Radiopaging services are typically used by calling communities that are aware of the likely charges, and in some cases the called party pays for the calls. We have little evidence of harm being caused by

¹³⁹ BT, page 14; Telefonica, pages 3 and 4; and FTC page 3, in their responses to the First Consultation.

¹⁴⁰ Cash for calls schemes are the practice of terminating telecoms providers inducing customers to use their spare call allowance minutes to call a range of numbers that they hold in return for a share of the revenue generated. The provider of the scheme then profits where termination rates exceed the associated cost of terminating that call. Typically, the call is not used for any genuine communications service.

using numbers designated for radiopaging and do not consider any anomalies that exist in charges to be a priority for us to address.

- A1.41 We agree with BT, Telefonica and Fair Telecoms Campaign that the high termination rates applied to UK numbers used for services in the Crown Dependencies of the Channel Islands and the Isle of Man play a role in high or unexpected call charges to these numbers, causing confusion and bill shock when customers are charged for making calls to what look like UK mobile numbers that they would expect to be included in call allowances.
- A1.42 However, termination rates in the Crown Dependencies have fallen significantly in recent years. Changes introduced in the Wholesale Voice Market Review enable UK providers to use the threat of higher termination rates for calls to the UK to further encourage providers outside of the UK to offer termination rates at the same as UK levels.¹⁴¹ As the differences between UK and Crown Dependencies' termination rates narrow, we expect retail call charges to the Crown Dependencies to be treated increasingly the same as calls within the UK, as we have already seen with the treatment of calls to 070 numbers now that termination rates are aligned with mobile termination rates.

Convergence of fixed and mobile services

- A1.43 The Numbering Plan provides distinct number ranges for landline (numbers beginning with 01 and 02) and mobile services (numbers beginning with the digits 071-075 and 077-079). These separate number ranges were developed when the distinction between fixed and mobile networks and services were clear, with the use of different telecoms apparatus to make and receive calls.
- A1.44 The distinctions between what are perceived as mobile and landline services are becoming increasingly blurred. The traditional viewpoint that landline numbers contact a household or a person at home, whereas a mobile number contacts an individual who is 'out and about' no longer holds true. Services have been developed that allow for call forwarding and termination of calls to any number(s) on any device(s). More and more, consumers use mobile phones to make calls from home in the way they might have done from a fixed line previously. The blurring of the distinction between mobile and fixed services suggests that organising telephone numbers around mobile and landline services will gradually have reduced relevance and meaning for consumers.
- A1.45 However, in the First Consultation we did not consider it an appropriate time to review the distinction between fixed and mobile number ranges in the Numbering Plan. The continued difference in termination rates was a significant factor. While these differences remain, it could mean that the economics of providing what are similar services could be influenced by the choice of number and hence the termination rate that applies. For instance, if telecoms providers use mobile numbers (and thereby charge the higher mobile

¹⁴¹ 2021 WVMR Statement, Section 6.

termination rate) for non-mobile services, this could result in a distortion to competition, unreasonable charges and incentives to generate increased traffic to networks solely for financial gain. Introduction of any increased flexibility in the types of services that may use mobile numbers would need to be in parallel with a convergence of wholesale prices to avoid a distorted choice of numbers.

- A1.46 We proposed that if fixed and mobile services continue the trend towards convergence, the case for greater harmonisation of fixed and mobile termination rates in future market reviews will likely be strengthened, and we could then consider any impact on the Numbering Plan.

Stakeholder responses

- A1.47 One telecoms provider commented that while there was an undoubted drive towards truly converged solutions, that remained some way off, both in terms of the underlying technical developments and acceptance by society.¹⁴² It considered that opportunities for convergence were possible with the regulation as it stands today and urged Ofcom to allow that to continue before risking any unintended consequences of a more liberal approach.
- A1.48 Organisation Withheld 1 also agreed that the difference between fixed and mobile numbers remained relevant, considering that *“even now that the lines between fixed and mobile numbers are blurring still a lot of calls are based on either contacting an individual at a mobile number or a fixed number within a certain geographical location. Although technology makes it easier to redirect calls to a certain point of presence it is our opinion that the difference between the two is still relevant”*.¹⁴³
- A1.49 BT, on the other hand, considered that the review should include fixed mobile convergence. It argued that people were benefiting increasingly from multiple numbers attached to one device, or one number terminating on several devices, regardless of whether the device or number was mobile or landline. The Numbering Plan needed to support converged services with clear retail and wholesale tariffs and switching arrangements. This would be required until the harmonisation of termination and origination rates and the introduction of a single number portability process facilitated by a common numbering database. Although agreeing that it was not the right time to remove the distinction between mobile and fixed number ranges in the Numbering Plan, BT considered that Ofcom should take this opportunity to consult with industry on the distinction between mobile and fixed numbers, and how they should be treated in terms of tariffing and porting if they are used outside of their main function.¹⁴⁴

¹⁴² [redacted] [a confidential respondent].

¹⁴³ Organisation Withheld 1 response to First Consultation, page 3.

¹⁴⁴ BT response to First Consultation, paragraph 2.11.

Ofcom's position

- A1.50 Our recent statement on regulation of the wholesale markets that underpin landline and mobile telephone calls confirmed that we are continuing to cap termination rates for calls made and received in the UK based on the cost of connecting the call.¹⁴⁵ It set out that there remains a difference in the costs of connecting landline and mobile calls and, while the regulated termination rate for mobiles has reduced, it remains higher than for landlines.¹⁴⁶ While different termination costs and regulated rates remain, we consider it appropriate to maintain a distinction between numbers for landlines and mobiles in the Numbering Plan.
- A1.51 We believe the Numbering Plan is sufficiently flexible to support converged services and, aside from BT's response to the First Consultation, are not aware that telecoms providers are experiencing difficulties in understanding the appropriate retail and wholesale tariffs and porting arrangements to apply. We are therefore maintaining our position that it is not an appropriate time to review the distinction between fixed and mobile number ranges in the Numbering Plan

Developments we considered to be outside the scope of this review

- A1.52 In our First Consultation, we explained that this review was focused on promoting consumer confidence in voice telephony. We were therefore limiting its scope to the types of numbers that consumers use to make and receive calls.
- A1.53 There are important developments relating to demand for numbering resources for non-interpersonal communications, such as M2M services, and for network functioning, such as Mobile Network Codes. We will consider separately whether a review of these types of numbering resources is required.
- A1.54 Our Numbering Programme will continue to manage the more technical aspects of the Numbering Plan and any reviews of specific rules and regulations on an ad hoc basis.

Stakeholder responses

- A1.55 BT did not agree that demand for numbers for M2M and Internet of Things (IoT) services should be considered in total isolation from the Future of Numbering Review. Some of these services may include a voice element and therefore have an impact on consumers.

¹⁴⁵ 2021 WVMR Statement.

¹⁴⁶ The caps apply to termination charges for landline and mobile calls that are made within the UK. The cap for mobile call termination has been reduced to reflect the lower costs faced by mobile operators. In the first year of the market review period, 2021/22, the cap will be 0.379 pence per minute. For landline call termination, the price cap is maintained at its current level of 0.0292 pence per minute in real terms. 2021 WVMR Statement, Overview.

Industry needed to work with Ofcom to determine which resources should be used to manage demand.¹⁴⁷

Ofcom's position

- A1.56 We agree with BT's comment that M2M services can include a voice element. However, it is very unlikely that people will see or physically dial any numbers used for M2M services, with 'click to call' or being the recipient of the call the more likely scenario. The chances of confusion over call costs, bill shock and resulting loss of confidence in voice telephony are therefore negligible. We retain our position that M2M/IoT is outside the scope of this review.
- A1.57 We do, however, consider M2M/IoT services as being important developments that we will study further to understand the likely impact on numbering. This will be carried out alongside our consideration of demands for numbering generally and not in isolation. For instance, we will look at voice and non-interpersonal communication requirements for mobile numbers at the same time.

Other issues raised in responses

- A1.58 Some stakeholders raised additional issues in their responses for consideration either as part of the Future of Numbers Review or more generally in our administration of the Numbering Plan.

General observations on geographic numbers

- A1.59 The use of 'virtual' geographic numbers was raised in the response from Name Withheld 3. By this, the respondent referred to the use of geographic numbers as a translation service for delivery to another number or application, such as to mobile numbers or Facebook, with no relation to the location significance that the number conveys. They argued that virtual geographic numbers were widely misused by fraudsters for scams and that we should address this in our review.¹⁴⁸
- A1.60 Name Withheld 4 felt that the Direct Dial In (DDI) facility should be made available to smaller companies as this could increase call handling. However, the Numbering Plan may have difficulties in coping with increased demand for DDI and they suggested expanding numbers to 12 or more dialled digits (from the existing 11 dialled digit format). They also mentioned the increase in telecom providers in a local area having an impact on number availability.¹⁴⁹

¹⁴⁷ BT response to First Consultation, paragraphs 2.12 and 2.13.

¹⁴⁸ Name Withheld 3, response to First Consultation, page 2.

¹⁴⁹ Name Withheld 4, response to First Consultation, page 1.

- A1.61 Mr R Hinton considered that more 02X area codes should be used and then 03 numbers.¹⁵⁰ Mr A Martin raised several anomalies relating to area code, local number format and naming conventions in the Numbering Plan.¹⁵¹
- A1.62 Ofcom concluded an extensive review of geographic numbers in 2012, in which we looked at how numbers were used and set our policy for managing number demand and scarcity in some area codes.¹⁵²
- A1.63 As part of that review, we considered the definition of Geographic Numbers in the Numbering Plan, which has two key elements – location significance and tariff transparency. In terms of how numbers may be used, the definition does not specify or restrict the type of service. Most commonly, geographic numbers provide the primary means of landline telephone access for residential customers, and many businesses also use geographic numbers as their contact points, including using the numbers for DDI purposes. Essentially any type of service may be provided on a geographic number as long as its use is in accordance with the definition in the Numbering Plan and other relevant regulation. Geographic numbers may also be used outside their area code if certain provisos in the Numbering Plan are met. We believe that overall, flexibility in how geographic numbers are used is beneficial for consumers and businesses. We explain more about this in paragraph 3.76.
- A1.64 In line with our policy principle that ‘the numbers consumers currently use are not changed if this is avoidable’, our approach to managing scarcity is to increase number supply through closing local dialling and then introducing overlay codes if necessary.¹⁵³ We decided not to continue with number changes in the form of moving to wider 02X area codes as this would be a more costly and disruptive intervention. We have also ruled out extending digit length, as this can cause disruption and confusion and the potential for unintended consequences, such as routing problems. We do not intend to revisit these positions.
- A1.65 BT raised charging for numbers in its response, arguing that Ofcom should reconsider its scheme for charging telecoms providers for certain geographic numbers, which was put in place to help manage number scarcity. BT noted that once migration to IP is completed, the main cause of number scarcity issues, namely the requirement to allocate numbers in large blocks, would be removed and number scarcity was expected to end. BT asked Ofcom to review the area codes at greatest risk of exhaustion and work with industry to use alternative and more effective means than charging to manage geographic numbers until 2025.¹⁵⁴

¹⁵⁰ R Hinton response to First Consultation, page 2.

¹⁵¹ A Martin response to First Consultation, pages 3 and 4.

¹⁵² See footnote to paragraph 2.10.

¹⁵³ See paragraph 3.13 for more information.

¹⁵⁴ BT response to First Consultation, page 10.

A1.66 One measure that we introduced in 2013 to help manage demand for geographic numbers was to charge telecoms providers for geographic numbers in the 30 area codes with the fewest number blocks remaining available for us to allocate.¹⁵⁵ This measure was designed to increase the incentives for providers to use numbers efficiently, and thereby delay the associated cost and disruption of increasing the number supply. We believe that charging for numbers has had an impact on the efficient management of numbers. However, we will consider the future of the charging scheme further as part of our work (including discussions with telecoms providers) on managing the availability of geographic numbers between now and 2025.

03 non-geographic numbers charged at a geographic rate

A1.67 BT asked that we remove any ambiguity around the use of 03 numbers from the Numbering Plan.¹⁵⁶ It considered it was unclear as to what 033 numbers should be used for (as opposed to 030/034/037 where it is specified). The industry practice was to use them for IP services where the end user does not wish to have a geographic number. This also raised issues of whether the 033 range had sufficient numbers to meet the increasing demand for IP services, or whether 01 and 02 numbers would be used. This had implications for porting arrangements, as non-geographic and geographic numbers currently use different porting processes (and 03 cannot port onto the PSTN for example). Customers with 03 numbers may well expect switching and porting arrangements to be in line with those for 01 and 02 numbers.

A1.68 We can clarify that 03 numbers (while all sharing the same tariff principles and maximum prices linked to geographic numbers in the Numbering Plan) have different designations for each sub-range: 030 numbers are for use by public sector bodies and not-for-profit bodies; 034 and 037 are for migrating numbers from matching 084 and 087 numbers respectively, while the 033 range has no prescribed use. Therefore, 033 numbers may be used for any service that does not meet with the designations set for 030/034/037 numbers.

A1.69 03 numbers were introduced in 2007. It is therefore understandable that a significant proportion of 033 numbers are used to support 'newer' IP telephony services. 033 numbers are a useful option for service providers who do not want the location significance of a geographic number, but want the cost for customers to call them to be fixed at geographic rates. There is also a plentiful supply of 03 numbers, with additional 03X sub-ranges available for designation if required, and their use for IP services can take the pressure off geographic number demand. Aside from BT's response to the First Consultation, we are not aware of any uncertainty over how 033 numbers may be used or customer confusion over switching and porting when using 03 and geographic numbers for similar services.

¹⁵⁵ Ofcom, 2012, [Promoting efficient use of geographic telephone numbers](#), Statement, Section 3.

¹⁵⁶ BT response to First Consultation, paragraph 4.8.

- A1.70 Name Withheld 4 commented that companies were increasingly using 03 numbers, which had a UK-wide presence, and that this was frustrating when you wished to contact a local bank or service centre, or have a local campaign. Using 03 numbers introduced delays in forwarding the call, resulting in additional call charges to the customer.¹⁵⁷
- A1.71 The position put forward by this respondent demonstrates the value that location significance still offers to people. However, some companies prefer to have a unified numbering scheme across their locations using non-geographic numbers such as 03 and to demonstrate a national rather than local presence. That is their choice and the 03 range exists to facilitate that option. Any delay due to call routing would be imperceptible to the caller. However, what the respondent may have experienced is call queuing due to over-demand at centralised call centres. Extended call waiting times also demonstrate the need for clear call prices and eradication of charging anomalies so that bill shock does not occur.
- A1.72 Telefónica urged Ofcom to review the price cap on 03 numbers, which is currently higher than mobile termination rates and significantly higher than fixed termination rates.¹⁵⁸ It argued that the current 03 price cap was high enough to facilitate misuse and support cash for calls schemes. Reducing the price cap would result in these practices being reduced or eliminated.
- A1.73 Ofcom has previously considered termination rates for 03 numbers when we resolved a dispute in 2011 ('the 03 Termination Charges Statement').¹⁵⁹ The analysis we carried out in determining that dispute was based largely on that used in the resolution of a dispute in 2009 regarding 0870 termination rates, where we concluded that the retail price of an 0870 call should be the same as that of a geographic call. In the subsequent 03 termination rate dispute we decided that the principles and analytical framework set out in the 0870 dispute determination were also applicable to the 03 range and that the termination rate for calls to 03 numbers should be aligned with those for calls to 0870 numbers. In February 2015, we determined two further disputes regarding 03 numbers.¹⁶⁰ We concluded that there was already regulation in place to enable us to act against the specific types of arbitrage¹⁶¹ that involve AIT or revenue sharing as a result of the 03 Termination Charges Statement and decided not to take action to determine the termination rate for 03 numbers.
- A1.74 Telefonica's response suggests that we should revisit our position, as over time there has been a reduction in the underlying costs of providing termination for 03 numbers, with the result that the termination rates that may be charged are too high. Telefonica argued that this incentives misuse with subscribers to schemes getting credits for making large volumes

¹⁵⁷ Name Withheld 4 response to First Consultation, page 1.

¹⁵⁸ Telefonica response to First Consultation, paragraphs 8 and 9.

¹⁵⁹ Ofcom, 2011, [*Determination to resolve a Dispute between Everything Everywhere and BT about BT's termination charges for 03 calls*](#), Statement ('the 03 Termination Charges Statement').

¹⁶⁰ Ofcom, 2015, [*Dispute between BT and each of EE and Three regarding BT's charges for terminating 03 numbers*](#), Final Determination.

¹⁶¹ The practice of taking advantage of a price differential.

of 03 calls. While we acknowledge such intervention could reduce incentives for misuse, this review is not the appropriate route to consider whether the market for 03 numbers is negatively impacted by high wholesale charges.

- A1.75 With reference to any existing practices of revenue sharing on 03 numbers, which is prohibited in the Numbering Plans, Ofcom has powers to enforce telecoms providers' compliance with these restrictions. We will exercise those powers where we consider it appropriate and proportionate to do so.

055 Corporate Numbers and 056 Location Independent Electronic Communications Services

- A1.76 055 and 056 numbers are non-geographic ranges developed to meet certain service needs. 055 numbers are for Corporate Services and 056 numbers were introduced as a non-geographic number alternative for VoIP services, particularly nomadic services.
- A1.77 Fair Telecoms Campaign noted that no reference had been made to 055 and 056 numbers in the First Consultation. In the absence of detailed information about their current and intended future usage, it was difficult to offer informed comment. However, it considered that the principle of predictable call cost must apply.¹⁶² Mr R Hinton commented that numbers for IP services were supposed to start with 05 or 06 and have a regional code.¹⁶³
- A1.78 As stated in paragraph 2.20, this is not a comprehensive review of the Numbering Plan and numbering in general. It is a strategic look at developments in voice telephony and how they might affect how numbers are used. We therefore need to prioritise what we cover in this review.
- A1.79 Take-up of 055 and 056 remains low and the numbers are rarely seen, being used often behind the scenes for a range of different purposes, including call translation. We will continue to monitor the use of 055 and 056 numbers, but we do not see a need currently to address any issues associated with these number ranges. In response to Mr Hinton's comment, it should be noted that IP services are not confined to a particular number range.

Advertising the unbundled tariff

- A1.80 The non-provider Numbering Condition¹⁶⁴ requires a service using a 084, 087, 09 or 118 'unbundled tariff' number to include the applicable service charge in any advertising or promotion of that number. The service charge must be displayed prominently and in close proximity to the advertised number. The telecoms provider allocated the numbers being used also has a responsibility to ensure that the service charge is published appropriately

¹⁶² FTC response to First Consultation, page 7.

¹⁶³ R Hinton response to First Consultation, page 2.

¹⁶⁴ Ofcom, December 2013, [Numbering Condition Binding Non-Providers: Unofficial Consolidated Version](#)

through its requirement to ensure its customers comply with the non-provider numbering condition.¹⁶⁵

- A1.81 Several respondents referred to the need to ensure compliance with the rules on advertising the unbundled tariff.¹⁶⁶ ITSPA commented that *“Ofcom appear to suggest in the Consultation that the rules on advertising 084/7 are not being enforced; we would respectfully suggest that Ofcom and the ASA undertake a program of work in this area prior to making any radical decisions”*. Mrs S Griffiths commented that *“companies using 084 and 087 numbers seem to routinely ignore the requirement to display costs or be ignorant of the need to do so”*. Some examples of advertising without the correct call charges displayed were provided by respondents.
- A1.82 We consider that the publication of the service charge by the service provider is important for tariff transparency and reducing bill shock. We are keen to see that this requirement is met and we have a programme to promote compliance. Any examples we find of the unbundled tariff not being advertised correctly are brought to the attention of the telecoms provider holding the number allocation. We expect all reasonable steps to be taken to ensure that the advertising rules are complied with by their customers and action is generally taken quickly to rectify the situation. We thank respondents for the examples of non-compliance provided. Any further examples may be brought to our attention for inclusion in the compliance programme.¹⁶⁷

Calling Line Identification (CLI), nuisance and scam calls

- A1.83 A phone number is the ‘address’ that identifies both the called party (the dialled number) and calling party (the Calling Line Identification or CLI). Fair Telecoms Campaign argued that the form or content (i.e. the CLI) of an unrecognised number was not of any real value when deciding whether to answer a call. It therefore questioned our suggestion that the Numbering Plan and the Future of Numbering Review could help to promote confidence in phone numbers and services by tackling nuisance and scam calls. There were other means of providing consumer protection when trying to identify the caller ahead of answering, including voice call screening. Organisation Withheld 1 mentioned that nuisance calls were a topic of interest in several other Ofcom documents and that an opt-out register could prevent nuisance calls altogether.
- A1.84 Protecting consumers from nuisance calls and scams is an important issue for Ofcom. In our plan of work for the coming year, we confirmed that *“we will continue our work with communications providers to disrupt and prevent nuisance calls and scams. We will also*

¹⁶⁵ General Condition B1.8 states that *“the Communications Provider shall take all reasonably practicable steps to secure that its Customers, in using Telephone Numbers, comply (where applicable) with the provisions of this Condition, the provisions of the National Telephone Numbering Plan and the Non-provider Numbering Condition”*.

¹⁶⁶ ITSPA, page 5; TalkTalk, pages 4 and 5; A Martin, pages 4 to 6; and [S Griffiths](#), page 2, in their responses to the First Consultation.

¹⁶⁷ Examples of non-compliance with the non-provider numbering condition may be sent to futureofnumberingteam@ofcom.org.uk.

*explore further actions that we and communications providers can take to help tackle scam calls and texts.”*¹⁶⁸ As part of this work programme, the Information Commissioner’s Office (ICO) and Ofcom publish an annually-updated joint action plan on tackling the harm caused by nuisance calls and messages.¹⁶⁹ This includes reviewing solutions made available to customers by their providers.

- A1.85 Ofcom is also continuing its work on promoting trust in telephone numbers and CLIs. General Condition C6 and our guidelines on CLI facilities¹⁷⁰ set out the rules for telecoms companies to follow so that customers can identify the person calling them, choose whether or not to accept the call and reduce the incidence of nuisance calls.
- A1.86 Name Withheld 3 commented that it was far easier to change the CLI in IP telephony than it was in traditional networks.¹⁷¹ This flexibility was generally detrimental for the public as it facilitated scams and nuisance calls. Name Withheld 3 argued that we should include the issue of trust in CLIs in this review.
- A1.87 We agree that using IP, service providers (and some callers) can more easily manage and manipulate the CLI data provided with a call, and, consequently, the CLI data that is provided may not be as accurate as it used to be, deliberately or otherwise. This development can be misused, most obviously by ‘spoofing’ the identity of a caller to mislead the recipient of that call. As well as direct harm from scams, the misuse or spoofing of CLI data can also reduce trust as the CLI is no longer effective as an identifier of the source of the call. Without this trust, there is a further risk of harm as consumers may be reluctant to accept calls, undermining the general value of the phone service. We looked at these issues in our First Consultation on promoting trust in telephone numbers.¹⁷²
- A1.88 Given Ofcom’s ongoing work on nuisance and scam calls, the Future of Numbering Review will continue to work alongside our other Ofcom projects and programmes to progress our work in this area and to achieve our strategic aims of helping to promote confidence in phone numbers and services by tackling nuisance and scam calls.

¹⁶⁸ Ofcom, 2021, [Ofcom’s plan of work 2021-2022: making communications work for everyone](#), Statement, paragraph 3.18.

¹⁶⁹ ICO/Ofcom, 2021, [Nuisance calls and messages: Update to ICO/Ofcom joint action plan](#).

¹⁷⁰ Ofcom, 2018, [Guidelines for Calling Line Identification Facilities](#), Statement.

¹⁷¹ Name Withheld 3 response to First Consultation, page 2.

¹⁷² Ofcom, 2019, [Promoting trust in telephone numbers](#), First Consultation.

A2. Closing local dialling to free up geographic numbers

- A2.1 In this annex we explain how the closure of local dialling for individual area codes can make more geographic numbers available and thus alleviate any forecast number shortages in that area.
- A2.2 In areas where local dialling is provided it is not possible to use any local numbers beginning with the digits 0 or 1. This is because if the area code is not included while dialling, networks cannot determine whether a six-digit number starting with '0' is intending to call a local landline number or, for example, a mobile number (e.g. '07XXXX' could either be a local number or the first digits of a mobile number). Similarly, if the area code is not dialled before a local number beginning with '1', telephone networks could interpret the first few digits as either a local number or a call to a telecoms service such as '100' or '150', a network service such as '1471' call return or a service number such as '118XXX' directory enquiry number.
- A2.3 Closing local dialling (and thus requiring callers always to include the area code when dialling) ensures that telephone networks do not confuse the new supply of local numbers (those beginning with 0 or 1) with other number types and can determine how to route the call correctly. For example, in the Aberdeen (01224) area code, closing local dialling in 2014 meant numbers in the format '01224 0XXXXX' and '01224 1XXXXX' became available for use.
- A2.4 In 2012 we closed local dialling in the Bournemouth (01202) area code, and in 2014, in five additional area codes with forecast number shortages: Aberdeen (01224), Bradford (01274), Brighton (01273), Middlesbrough (01642) and Milton Keynes (01908). Therefore, in all six areas the ability to dial local numbers without the area code from landlines is no longer available.

A3. Responses to our First Consultation concerning the 084 and 087 non-geographic number ranges

A3.1 There were 26 responses to our first consultation which included views on the non-geographic 084 and 087 number ranges.¹⁷³

The value and use of 084 and 087 numbers

A3.2 Some respondents said there has been a significant decline in the use of these numbers,¹⁷⁴ although some also said that a substantial amount of call traffic remains on these ranges, particularly for business to business calls.¹⁷⁵ Responses highlighted factors in the decline in use such as:

- a) the Consumer Contracts Regulations which effectively prohibited the use of 084 and 087 numbers for certain calls by consumers,¹⁷⁶
- b) guidance published for government departments and public bodies in 2015 which recommended the use of geographic numbers or 03 numbers instead of 084 or 087 numbers,¹⁷⁷ and
- c) consumer campaigns which highlighted alternatives to using 084 and 087 numbers for consumers and discouraged their use by businesses.¹⁷⁸

A3.3 Some respondents indicated that the ranges play an important role, including to support services for consumers which could not otherwise be funded.¹⁷⁹

A3.4 Key benefits and uses of these ranges were noted by respondents as:

¹⁷³ Responses on this subject were received from DWP, FTC, Organisation Withheld 1, Magrathea, Aimm, TalkTalk, FCS, GCI, ITSPA, CSL, Sky, Telecom2, Vodafone, BT, Lexgreen, Telefonica, Virgin Media, A Martin, S Griffiths, M Kurrein, R Hinton, [§<] [a confidential respondent], and [§<] [a confidential respondent].

¹⁷⁴ FTC page 4; FCS, page 3; and BT, paragraph 4.12, in their responses to the First Consultation

¹⁷⁵ ITSPA, page 4; and [§<] [a confidential respondent], in their responses to the First Consultation

¹⁷⁶ Regulation 41 of the Consumer Contracts (Information, Cancellation and Additional Charges) Regulations 2013 (SI 2013/3134), which requires post-contract calls to be charged at no more than the basic rate. This was also reflected in Ofgem's guidance for Energy Suppliers. Ofgem, 2015. [Telephone services – our expectations of suppliers operating in the domestic energy market](#) [Accessed 19 April 2021]

¹⁷⁷ HMG, 2015. [HMG Guidance: Customer Service Telephone Lines](#).

¹⁷⁸ One such campaign resulted in the development of the 'say no to 0870' website. <https://www.saynoto0870.com/> [Accessed 12 April 2021].

¹⁷⁹ [Aimm](#) (some members) page 5; Magrathea, page 3; TalkTalk, page 4; FCS, page 4; Vodafone, page 7; Virgin Media, page 5; Lexgreen, page 2; BT, pages 15 and 16; Telecom2, page 3; and [§<] [a confidential respondent], in their responses to the First Consultation.

- a) The ranges provide an efficient microtransaction payment method,¹⁸⁰ or revenue share.¹⁸¹
- b) They are valued by some organisations to provide a UK-wide contact point for customers,¹⁸² or to provide an alternative to using an international number for calls answered outside of the UK.¹⁸³
- c) Other examples given of use of these numbers include mail order sales, call forwarding and conference call services.¹⁸⁴

Concerns about the use of 084 and 087 numbers

- A3.5 Some highlighted concerns about consumers' lack of awareness about call cost which can lead to finding higher than expected charges when they receive their bill.¹⁸⁵
- A3.6 Some considered that the Access Charge rates are too high, particularly for mobiles, and that these rates may be disproportionately high relative to the capped rates of Service Charge for the 084 and 087 number ranges.¹⁸⁶ Some suggested that any problems arise mainly because of the level of Access Charge and this should be addressed.¹⁸⁷
- A3.7 Some highlighted concerns about the use of these number ranges for Information, Connection and Signposting Services (ICSS).¹⁸⁸ The DWP noted that it encountered problems with consumers being misled into using ICSS when trying to contact the DWP and not understanding the potential for incurring high charges.¹⁸⁹ BT said that ICSS use is one of the biggest issues for the 084 and 087 number ranges and needs to be regulated more effectively.¹⁹⁰ CSL put forward a differing view and said that consumers make informed choices about using ICSS and that there is already comprehensive regulation of such services by the PSA.¹⁹¹
- A3.8 One respondent suggested that the inclusion of some numbers in inclusive call bundles is making it harder for consumers to understand the unbundled tariff.¹⁹²

¹⁸⁰ ITSPA response to First Consultation, page 5.

¹⁸¹ GCI response to First Consultation, page 4.

¹⁸² FCS response to First Consultation, page 3.

¹⁸³ GCI response to First Consultation, page 3.

¹⁸⁴ Telecom2, page 3; and [redacted] [a confidential respondent], in their responses to the First Consultation.

¹⁸⁵ DWP paragraph 4.1; GCI, page 3; FTC pages 4 and 12; and Organisation Withheld 1, paragraphs 4.1-4.4, in their responses to the First Consultation.

¹⁸⁶ FTC pages 4 and 12; Lexgreen, page 3; Lexgreen, page 3; one Name Withheld 3, page 4, in their responses to the First Consultation.

¹⁸⁷ TalkTalk, page 4; FCS, page 4; ITSPA, page 5; Lexgreen, page 4; Telecom2, page 3; and [redacted] [a confidential respondent] in their responses to the First Consultation.

¹⁸⁸ BT, page 17; DWP, paragraphs 4.1-4.2; and Name Withheld 3, page 4, in their responses to the First Consultation.

¹⁸⁹ DWP response to First Consultation, paragraphs 4.1-4.2.

¹⁹⁰ BT response to First Consultation, page 17.

¹⁹¹ CSL response to First Consultation, paragraphs 2.2-2.5.

¹⁹² FTC response to First Consultation, page 5.

Views on the future of the 084 and 087 number ranges

- A3.9 Some suggested measures to inform users of call charges such as by providing in-call messages when calling these ranges¹⁹³ or suggested that a broader campaign of communications is needed to promote awareness of charges.¹⁹⁴
- A3.10 Some considered that it was desirable to make changes to the Numbering Plan:
- a) Four respondents suggested simplification of the charging structure to create more predictable and clearer pricing.¹⁹⁵
 - b) Some considered that the ranges were not needed and should be withdrawn,¹⁹⁶ or noted that better alternatives for micropayment mechanism now exist.¹⁹⁷
 - c) Some suggested applying a cap to either the Access Charge element or the whole call charge to the level of geographic calls.¹⁹⁸
 - d) Two respondents suggested that 09 is a more appropriate range for premium rate services.¹⁹⁹
- A3.11 Some respondents however felt that withdrawing or changing the use of the 084 and 087 ranges was not justified at this time:
- a) Vodafone said that change was not needed and there was no clear evidence of significant harm.²⁰⁰
 - b) FCS said that if these ranges were withdrawn then any dishonest services would move to the 09 range where call charges can be set at a higher level and so may expose consumers to greater potential harm.²⁰¹
 - c) Others suggested that if moved to the 09 range, services currently using the 084 and 087 number ranges could be caught by premium rate call barring or would undermine confidence and understanding in the 09 range.²⁰²

¹⁹³ DWP paragraph 4.1; and Organisation Withheld 1, paragraph 2.23, in their responses to the First Consultation.

¹⁹⁴ Telecom2, page 3; GCI, page 4; Virgin Media, page 5; and Name Withheld 3, page 5, in their responses to the First Consultation.

¹⁹⁵ BT, page 14; Lexgreen, page 4; A Martin, pages 4-5; and [redacted] [a confidential respondent] in their responses to the First Consultation.

¹⁹⁶ Aimm page 4; FTC page 12; A Martin, page 4 to 6; S Griffiths, page 2; and Name Withheld 3, page 4, in their responses to the First Consultation.

¹⁹⁷ FTC page 4; Organisation Withheld 1, paragraph 2.17; and Name Withheld 2, page 4, in their responses to the First Consultation.

¹⁹⁸ Lexgreen, page 4; Organisation Withheld 1, paragraph 2.7; Name Withheld 1, pages 4 and 5; and Name Withheld 2, page 4, in their responses to the First Consultation.

¹⁹⁹ FTC page 4; and Name Withheld 2, page 4, in their responses to the First Consultation.

²⁰⁰ Vodafone response to First Consultation, page 8.

²⁰¹ FCS response to First Consultation, page 4.

²⁰² Aimm page 5; BT, page 16; Virgin Media, page 9; and [redacted] [a confidential respondent], in their responses to the First Consultation.

- d) Two respondents said that it was too early after 2015 to make changes.²⁰³
- e) Some considered that lack of awareness²⁰⁴ and better enforcement of the existing rules²⁰⁵ should be tackled before considering changes to regulation.
- f) Two respondents said that further analysis and research is needed before proposing any changes.²⁰⁶

Next steps on 084 and 087 numbers

A3.12 We are continuing to review the future role of 084 and 087 numbers as outlined in Section 5.

²⁰³ TalkTalk page 4; and Virgin Media, page 4, in their responses to the First Consultation.

²⁰⁴ Aimm, pages 5 and 6; and ITSPA, page 5, in their responses to the First Consultation.

²⁰⁵ TalkTalk, page 4; FCS, page 4; ITSPA, page 5; and [redacted] [a confidential respondent] in their responses to the First Consultation.

²⁰⁶ BT, pages 15 and 16; and Telefonica, paragraphs 3 to 5 and 25 to 28, in their responses to the First Consultation.

A4. Legal Framework

A4.1 The Communications Act 2003 (the Act) sets out Ofcom’s powers and duties in relation to telephone numbering. Among other things, under section 56 of the Act, Ofcom is required to publish, and from time to time review, the Numbering Plan. The Numbering Plan sets out:

- the numbers that Ofcom have determined to be available for allocation by Ofcom as telephone numbers;
- such restrictions as Ofcom consider appropriate on the adoption of numbers available for allocation in accordance with the Numbering Plan;
- such requirements as Ofcom consider appropriate, for the purpose of protecting consumers, in relation to the tariff principles and maximum prices applicable to numbers so adopted or available for allocation; and
- such restrictions as Ofcom consider appropriate on the other uses to which numbers available for allocation in accordance with the Numbering Plan may be put.

A4.2 Section 60 of the Act provides for the modifications of provisions in the Numbering Plan and explains the procedures for doing so. Section 60(2) 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.”

A4.3 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.”

A4.4 Ofcom also has a general duty under section 63(1) of the Act in carrying out its telephone numbering functions:

- “(a) to secure that what appears to them to be the best use is made of the numbers that are appropriate for use as telephone numbers; and
- (b) to encourage efficiency and innovation for that purpose.”

Ofcom's duties under sections 3 and 4 of the Act

Section 3 of the Act – Ofcom's general duties

- A4.5 Under the Act, our principal duty in carrying out our functions is to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition.
- A4.6 In doing so, we are required to secure a number of specific objectives and to have regard to a number of matters set out in section 3 of the Act.
- A4.7 In performing our duties, we are also required to have regard to a range of other considerations, as appear to us to be relevant in the circumstances. For the purpose of this review, we consider in particular that a number of such considerations are relevant, including:
- the desirability of promoting competition in relevant markets;
 - the desirability of encouraging investment and innovation in relevant markets; and
 - the needs of persons with disabilities, of the elderly and of those on low incomes.
- A4.8 We are also required to have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed, as well as to the interest of consumers in respect of choice, price, quality of service and value for money.
- A4.9 However, we have a wide measure of discretion in balancing our statutory duties and objectives. In doing so, we take account of all relevant considerations, including responses received during our consultation process, in reaching our conclusions.

Section 4 of the Act – duties for the purposes of fulfilling obligations

- A4.10 Section 4 of the Act requires us, when carrying out our numbering functions, to act in accordance with six requirements for regulation which are in summary:
- a) to promote competition in the provision of electronic communications networks and services, associated facilities and the supply of directories;
 - b) to promote the interests of all members of the public in the United Kingdom;
 - c) to take account of the desirability of Ofcom's carrying out of its functions in a manner which, so far as practicable, does not favour one form of or means of providing electronic communications networks, services or associated facilities over another (i.e. to be technology neutral);
 - d) to encourage the provision of network access and service interoperability, to such extent as Ofcom considers appropriate for the purpose of securing: efficiency and sustainable competition; efficient investment and innovation; and the maximum

benefit for customers of telecoms providers and of persons who make associated facilities available;

- e) to encourage compliance with certain standards in order to facilitate service interoperability, end-to-end connectivity, and secure freedom of choice for the customers of telecoms providers; and
- f) to promote connectivity and access to very high capacity networks by members of the public and businesses in the United Kingdom.

A4.11 We consider that the first, second, and third of those requirements are of particular relevance to the matters under review and that no conflict arises in this regard with any of our general duties in section 3 of the Act.

A5. Notification of proposed modifications to the provisions of the Numbering Plan under section 60(3) of the Act

- A5.1 In accordance with section 60 of the Act, Ofcom proposes to modify the provisions of the Numbering Plan, the current version of which is available [here](#).²⁰⁷ The draft modifications to the Numbering Plan are set out in the Schedule to this Notification.
- A5.2 Ofcom's reasons for making these proposals, and the effect of the proposed modifications, are set out in the document accompanying this Notification.
- A5.3 Ofcom considers that the proposed modifications comply with the requirements of section 60(2) of the Act.
- A5.4 In making these proposals, Ofcom has considered and acted in accordance with its general duty as to telephone numbering functions under section 63 of the Act and its duties under sections 3 and 4 of the Act.
- A5.5 Ofcom has also had regard to the Statement of Strategic Priorities in making the proposals referred to in this Notification.
- A5.6 Representations may be made to Ofcom about the proposed modifications until 5pm on **2 July 2021**.
- A5.7 If implemented, the proposed modifications set out in the Schedule shall enter into force on the date specified in the final Notification relating to these proposals.
- A5.8 In this Notification:
- a) "the Act" means the Communications Act 2003;
 - b) "Ofcom" means the Office of Communications;
 - c) "Numbering Plan" means the National Telephone Numbering Plan published by Ofcom pursuant to section 56(1) of the Act and amended from time to time; and
 - d) "Statement of Strategic Priorities" means the Statement of Strategic Priorities for telecommunications, the management of radio spectrum, and postal services designated by the Secretary of State for Digital, Culture, Media and Sport for the purposes of section 2A of the Communications Act 2003 on 29 October 2019.
- A5.9 Words or expressions shall have the meaning assigned to them in this Notification, and otherwise any word or expression shall have the same meaning as it has in the Act.

²⁰⁷ [The National Telephone Numbering Plan \(ofcom.org.uk\)](#). Modifications to certain definitions used in the Numbering Plan will take effect from 17 December 2021 further to Ofcom's [Notification](#) dated 17 December 2020. Our current proposals do not affect and are not affected by these modifications.

A5.10 For the purposes of interpreting this Notification: (i) headings and titles shall be disregarded; and (ii) the Interpretation Act 1978 shall apply as if this Notification were an Act of Parliament.

A5.11 The Schedule to this Notification shall form part of this Notification.

Signed by

A handwritten signature in black ink, appearing to read 'B. Potterill', with a long horizontal flourish extending to the right.

Brian Potterill

Director of Mobile Network Strategy

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

Date of publication: 23 April 2021

Schedule: Proposed modifications to the National Telephone Numbering Plan

The modifications that Ofcom proposes to make to the Numbering Plan are set out below.

PART 1 - Removal of the requirement to provide local dialling

Paragraph B3.1.2 of Part B of the Numbering Plan will be deleted, as marked in strikethrough below:

~~B3.1.2 Geographic Numbers shall not be Adopted or otherwise used other than where Calling Parties with Geographic Numbers with the same Geographic Area Code as the Called Party are able to dial using only the Local Number except where:~~

- ~~a. those numbers are National Dialling Only Numbers — see B3.1.5 below; or~~
- ~~b. Calling Parties are dialling from Geographic Numbers with a Geographic Area Code in respect of which Local Dialling has been closed — see B3.1.3 below.~~

PART 2 - Prohibition of revenue sharing with the calling party

In Part B of the Numbering Plan, a new paragraph will be inserted under the heading “B3: Specific Restrictions on the Adoption and use of Telephone Numbers”, as shown in underlined text below:

B3.1 Those who Adopt or otherwise use any Telephone Number listed in Part A1 of the Plan shall not directly or indirectly share with any Calling Party any revenue obtained from providing a service on those numbers.

In paragraph B3.2.1, the text in strikethrough below will be deleted:

~~B3.2.1 Those who Adopt or otherwise use Non-Geographic Numbers starting 03 shall not directly or indirectly share with any End-User or any Calling Party any revenue obtained from providing a service on those numbers.~~

In paragraph B3.3.1, the text underlined below will be added:

B3.3.1 Those who Adopt or otherwise use Non-Geographic Numbers starting 056 shall not directly or indirectly share with any End-User any revenue obtained from providing a service on those numbers.

In paragraph B3.4.1, the text underlined below will be added:

B3.4.1 Those Adopting Personal Numbers shall not directly or indirectly share with any End-User any revenue obtained from providing a Personal Numbering Service.

PART 3 - Renumbering of paragraphs

As a result of the proposed changes in PART 1 and PART 2 above, the existing paragraphs in the Numbering Plan will be renumbered as follows and any references to these paragraphs will be updated accordingly:

Existing paragraph number	New paragraph number	Paragraphs added or removed
-	B3.1	New paragraph per PART 2
B3.1.1	B3.2.1	
B3.1.2	-	Paragraph removed per PART 1
B3.1.3	B3.2.2	
B3.1.4	B3.2.3	
B3.1.5	B3.2.4	
B3.1.6	B3.2.5	
B3.1.7	B3.2.6	
B3.1.8	B3.2.7	
B3.1.9	B3.2.8	
B3.2	B3.3	
B3.3	B3.4	
B3.4	B3.5	
B3.5	B3.6	
B3.6	B3.7	
B3.7	B3.8	

A6. Consultation questions

A6.1 We have included three consultation questions in Sections 3 and 4. We would like you to consider these when responding. We have set these questions out below for ease of reference. We also welcome general comments.

Question 3.1: Do you agree with our proposal to remove the obligation for telecoms providers to provide the local dialling facility? Please provide reasons for your response.

Question 3.2: Do you agree with our proposal to retain the provisions in the Numbering Plan which (i) allocate location significance to area codes and (ii) allow phone users to request out-of-area use of geographic numbers? Please provide reasons for your response.

Question 4.1: Do you agree with our proposal to modify the Numbering Plan to prohibit direct and indirect revenue sharing with the calling party for calls to all geographic and non-geographic numbers? Please provide reasons for your response.

A7. Responding to this consultation

How to respond

- A7.1 Ofcom would like to receive views and comments on the issues raised in this document, **by 5pm on 2 July 2021**.
- A7.2 You can download a response form from <https://www.ofcom.org.uk/consultations-and-statements/category-1/future-of-telephone-numbers>. You can return this by email to the address provided in the response form.
- A7.3 If your response is a large file, or has supporting charts, tables or other data, please email it to futureofnumberingteam@ofcom.org.uk, as an attachment in Microsoft Word format, together with the [cover sheet](#).
- A7.4 We welcome responses in formats other than print, for example an audio recording or a British Sign Language video. To respond in BSL:
- Send us a recording of you signing your response. This should be no longer than 5 minutes. Suitable file formats are DVDs, wmv or QuickTime files. Or
 - Upload a video of you signing your response directly to YouTube (or another hosting site) and send us the link.
- A7.5 We will publish a transcript of any audio or video responses we receive (unless your response is confidential)
- A7.6 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.
- A7.7 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A7.8 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 6. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A7.9 If you want to discuss the issues and questions raised in this consultation, please contact Paul Reville on 0131 247 5536, or by email to futureofnumberingteam@ofcom.org.uk.

Confidentiality

- A7.10 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that

everyone who is interested in an issue can see other respondents' views, we usually publish all responses on [the Ofcom website](#) as soon as we receive them.

- A7.11 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A7.12 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A7.13 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further in our [Terms of Use](#).

Next steps

- A7.14 Following this consultation period, Ofcom plans to publish a statement in autumn 2021.
- A7.15 If you wish, you can [register to receive mail updates](#) alerting you to new Ofcom publications.

Ofcom's consultation processes

- A7.16 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 8.
- A7.17 If you have any comments or suggestions on how we manage our consultations, please email us at consult@ofcom.org.uk. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.
- A7.18 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact the corporation secretary:
Email: corporationsecretary@ofcom.org.uk

A8. Ofcom's consultation principles

Ofcom has seven principles that it follows for every public written consultation:

Before the consultation

- A8.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

During the consultation

- A8.2 We will be clear about whom we are consulting, why, on what questions and for how long.
- A8.3 We will make the consultation document as short and simple as possible, with a summary of no more than two pages. We will try to make it as easy as possible for people to give us a written response. If the consultation is complicated, we may provide a short Plain English / Cymraeg Clir guide, to help smaller organisations or individuals who would not otherwise be able to spare the time to share their views.
- A8.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.
- A8.5 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.
- A8.6 If we are not able to follow any of these seven principles, we will explain why.

After the consultation

- A8.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish all the responses on our website as soon as we receive them. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

A9. Consultation coversheet

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

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

Nothing

Name/contact details/job title

Whole response

Organisation

Part of the response

If there is no separate annex, which parts? _____

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

DECLARATION

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

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

Name

Signed (if hard copy)

A10. List of sources

- A10.1 We have noted throughout this consultation the external evidence we have collected to inform our analysis and how we have relied upon that evidence. This annex provides a list of the main sources of external evidence used and, where possible, the web links to where that information is published online.
- A10.2 While this annex lists the main evidence we have relied upon, the list is for convenience only and is not intended to be exhaustive.

Consultation responses

- A10.3 On 11 April 2019, we published the First Consultation, outlining our proposed approach to reviewing the Numbering Plan and seeking stakeholders' views.
- A10.4 27 stakeholders provided written responses to this consultation:
- Aimm
 - A Martin
 - BT
 - CSL
 - Department of Work and Pensions (DWP)
 - FCS
 - Fair Telecoms Campaign
 - GCI
 - ITSPA
 - Lexgreen Services
 - Magrathea
 - M Kurrein
 - R Hinton
 - S Griffiths
 - Sky
 - TalkTalk
 - Telecom2
 - Telefonica
 - Virgin Media
 - Vodafone
 - Seven respondents requested their names be withheld.
- A10.5 Where available, we have published non-confidential versions of the responses from the stakeholders listed above. These can be found on [our website](#).

Regulation and guidance

- a) Ofcom, 2021. [National Telephone Numbering Plan](#) and the [National Numbering Scheme](#). Modifications to certain definitions used in the Numbering Plan will take effect from 17 December 2021 further to Ofcom's [Notification](#) dated 17 December 2020. Our current proposals do not affect and are not affected by these modifications.
- b) Ofcom, 2021. [Consolidated General Conditions of Entitlement](#).
- c) DCMS, 2019. [Statement of Strategic Priorities for telecommunications, the management of radio spectrum, and postal services](#) [Accessed 20 April 2021].
- d) Directive 2011/83/EU [on consumer rights](#).
- e) HMG, 2015. [HMG Guidance: Customer Service Telephone Lines](#) [Accessed 20 April 2021].
- f) Ofgem, 2015. [Telephone services – our expectations of suppliers operating in the domestic energy market](#) [Accessed 20 April 2021].

Consultations and statements

- a) Ofcom, 2021. [Wholesale Voice Markets Review 2021-2026](#), Statement (2021 WVMR Statement).
- b) Ofcom, 2021. [Ofcom's plan of work 2021/22](#), Statement.
- c) ICO/Ofcom, 2021. [Nuisance calls and messages: Update to ICO/Ofcom joint action plan](#)
- d) Ofcom, 2020. [Wholesale Voice Markets Review 2021-26](#), Consultation.
- e) Ofcom, 2019. [Promoting trust in telephone numbers](#), First Consultation.
- f) Ofcom, 2019. [First consultation: Future of telephone numbers](#) (First Consultation).
- g) Ofcom, 2018. [Guidelines for Calling Line Identification Facilities](#), Statement.
- h) Ofcom, 2018. [Personal numbering – Review of the 070 number range](#) Statement.
- i) Ofcom, 2015. [Dispute between BT and each of EE and Three regarding BT's charges for terminating 03 numbers](#), Final Determination.
- j) Ofcom, 2014. [03 Number Range: Decision to clarify that revenue-sharing with callers is prohibited on the 03 number range](#), Statement (03 Revenue Sharing Statement).
- k) Ofcom, 2013. [Numbering Condition binding non-providers](#).
- l) Ofcom, 2013. [Simplifying non-geographic numbers - Policy position on the introduction of the unbundled tariff and changes to 080 and 116 ranges](#).
- m) Ofcom, 2013. [Changes to making local calls in five area codes](#), Consultation.
- n) Ofcom, 2012. [Promoting efficient use of geographic telephone numbers](#), Statement.

- o) Ofcom, 2012. [Changes to making local calls in the 01202 area code for Bournemouth, Christchurch and Poole](#), Statement.
- p) Ofcom, 2011. [Determination to resolve a Dispute between Everything Everywhere and BT about BT's termination charges for 03 calls](#), Statement ('the 03 Termination Charges Statement').
- q) Ofcom, 2011. [Geographic telephone numbers: safeguarding the future of geographic numbers](#), Statement.
- r) Ofcom, 2010-2012. [Geographic telephone numbers: Safeguarding the future of geographic numbers](#): three documents published on 25 November 2010, 7 September 2011 and 20 March 2012.

Research and reports

- a) Ofcom, 2020. [Online Nation – 2020 Report](#).
- b) Ofcom, 2020. [Communications Market Report 2020](#).
- c) Ofcom, 2020. [Declining calls and changing behaviour: a qualitative research study](#).
- d) Ofcom, 2019. [The Future of Telephone Numbering: a qualitative research study](#) (Future of Numbering research).
- e) Ofcom, 2011. [Geographic Numbering: Summary report of findings](#).
- f) BICS, 2020. [Fraudulent calls using UK numbers plummet in wake of Ofcom regulation, BICS' data shows](#) [Accessed 20 April 2021].

Other sources

- a) <https://www.saynoto0870.com/> [Accessed 12 April 2021].

A11. Glossary

Term	Description
084 number	A telephone number beginning with the digits 084 which is a non-geographic service number. The service charge for these numbers is a maximum of 7 pence per minute.
087 number	A telephone number beginning with the digits 087 which is a non-geographic service number. The service charge for these numbers is a maximum of 13 pence per minute.
Area codes	The area code is that part of the telephone number that specifies the local telephone exchange to which a subscriber is attached. Telephone numbering plans assign area codes to local exchanges to enable the routing of calls between subscribers attached to different local exchanges.
CLI, Calling Line Identification	An identifier that allows a subscriber to determine the telephone number of the party who has called or is currently calling them. The CLI is sent from the calling subscriber to the called subscriber during call initiation.
CLI Spoofing	The practice of nuisance callers and criminals deliberately changing the CLI when making calls to hide their identity or mimic the number of a real company, person or location.
Geographic numbers	A telephone number from the 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 number has been assigned.
ICSS, Information, Connection and Signposting Services	ICSS are a form of premium rate service that (1) provide advice or information about how to access or use public or commercial services; and/or (2) connect or direct consumers to specific contact numbers or helplines that they are seeking, usually at a higher charge than calling direct.
IOT, Internet of things	The interconnection via the internet of computing devices in everyday objects, enabling them to send and receive data.
IP, Internet Protocol	A packet data protocol used for the routing and carriage of data packets across the internet and similar data networks
Local dialling	The facility which allows landline phone users to dial phone numbers omitting the Area Code (where the called number has the same Area Code as the number they are calling from).

National Telephone Numbering Plan, the Numbering Plan	A document published by Ofcom from time to time pursuant to section 56 of the Act.
Non-Geographic numbers	A telephone number from a range of numbers in the Numbering Plan designated for assignment to end-users, the digit structure of which contains no geographic significance for routing calls.
OTT, Over-the-Top	Communication apps and platforms (voice, instant messaging and video) that are delivered via an internet connection rather than through a traditional telephony network.
PSTN, Public Switched Telephone Network	The traditional type of telephony network used to provide telephone calls using (or emulating) circuit-switching and using telephone numbers to identify subscribers or called locations, allowing all customers connected to the network to call all other customers.
The Act	The Communications Act 2003
Service provider	A provider of voice or data services to third parties using non-geographic numbers.
Telecoms provider	A person who provides an Electronic Communications Network or an Electronic Communications Service.
VoIP, Voice-over-IP	A method of carrying voice calls on fixed and mobile networks by converting speech into data packets (and back) and carrying it using IP.