



## Consumer switching

Consumer experience of switching mobile communications services and options for process reforms

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Consultation

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## About this document

It is important for consumers to be able to exercise their choice and switch providers easily in order to take advantage of competition in the communications sector.

This document sets out and invites comments on our current position on the consumer experience of switching mobile communications service providers, and on some high level, initial options for mobile process reforms, taking into account stakeholder discussions to date.

It also includes a summary of stakeholder responses to Ofcom's July 2014 Call for Inputs on consumer switching. That document sought views on the impact on the consumer experience of switching and on competition of the processes currently used to switch providers of bundled voice, broadband and subscription pay TV services, and mobile voice and data services.

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## Section 1

# Summary

- 1.1 Ensuring that communications services and markets work well for consumers and citizens is Ofcom's central objective. Enabling consumers to make good, well-informed choices and to act on them is a key part of this.
- 1.2 Good switching processes are very important to the consumer experience of switching, and to healthy competition. If people cannot switch easily between providers, or are put off even attempting to do so, their ability to choose the most appropriate service is effectively reduced, and so too is competition.
- 1.3 In our 2010 Strategic Review of Consumer Switching<sup>1</sup>, we set out our preference, in principle, for switching processes to be led by the provider to whom the customer is moving (the 'gaining provider'), since they have a greater incentive to make the switching process work well. We refer to such processes as 'Gaining Provider Led' ('GPL'). In our 2010 Review, we said we would seek to achieve this where appropriate, taking account of the costs and benefits of changes in any given case.
- 1.4 Following implementation of a single GPL process for switching voice and broadband services between providers on the Openreach and KCOM copper networks, we turned our attention to switching processes on other networks and services. Last year we issued a Call for Inputs ('CFI')<sup>2</sup> to seek stakeholder views on switching between mobile providers, and providers of 'triple play' (fixed voice, broadband and pay TV) services.
- 1.5 Having considered the responses we received (which are available on our website<sup>3</sup> and are summarised in Annex 5), and the other evidence currently available to us, we consider that there is a case for investigating further whether the consumer experience of switching mobile and triple play services can be improved.
- 1.6 The main focus of this consultation document is mobile switching. We are consulting on proposals for reforms to processes which we think could make switching easier for mobile consumers, and ensure that barriers to switching do not impede competition.
- 1.7 Our proposals at this stage do not include granular details of process design and costing. Rather, they provide a relatively high level indicative assessment of how some potential process reforms could reduce consumer harm, and cost estimates of implementation and operation. We are seeking early views on this from all stakeholders to inform our work going forward. If we decide to pursue regulatory reforms we will consult on them at the time, having taken account of responses to this consultation and the further evidence we are currently collecting.

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<sup>1</sup> See: <http://stakeholders.ofcom.org.uk/consultations/consumer-switching/>

<sup>2</sup> See: Consumer switching, Next steps and call for inputs, July 2014: [http://stakeholders.ofcom.org.uk/binaries/consultations/consumer-switching-cfi/summary/Consumer\\_switching\\_cfi.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/consumer-switching-cfi/summary/Consumer_switching_cfi.pdf)

<sup>3</sup> See responses <http://stakeholders.ofcom.org.uk/consultations/consumer-switching-cfi/?showResponses=true>

- 1.8 In addition to summarising the responses we received to the CFI, we briefly explain the work we have started on switching of triple play services. The CFI responses have formed a useful input to help us decide how to progress this matter. This document does not seek to provide our position on all the responses we received. Nevertheless, where appropriate to the issues covered in this document, we refer to some responses in our assessment of the consumer experience of mobile switching.

## Current problems with switching mobile services

- 1.9 The proportions of communications consumers a) considering a switch, b) comparing provider, and c) actually going on to switch, have all declined recently. In the 12 months to July 2014, 13% switched at least one communications service, down from around a fifth in both 2013 (20%) and 2012 (19%). Switching rates for mobile fell from 9% to 6%<sup>4</sup> between 2013 and 2014. The reasons for these falls are unclear, and this is something we will continue to monitor moving forward.
- 1.10 A key part of our work is to ensure that switching processes work well for consumers. Our starting point is that mobile switching processes should be quick, easy, convenient and error-free. As explained above, other things being equal, we prefer switching processes to be GPL, since gaining providers are naturally incentivised to make switching work well.
- 1.11 The process that a consumer must currently follow in order to switch their mobile service provider depends on whether or not they wish to retain, or 'port', their current mobile phone number. A switch which includes a number port requires the customer to obtain a Porting Authorisation Code ('PAC') from their current provider and give this to their new provider, who initiates the transfer. A switch without a port requires the customer to organise the stop and start of the old and new service themselves.
- 1.12 Based on the evidence we have to date, we consider there are indications that current mobile switching arrangements are likely to generate unnecessary harm for customers, whether or not the switch involves a number port (where the consumer wishes to keep their mobile number). Our research suggests that, while most consumers who have switched their provider consider mobile switching to be easy<sup>5</sup>, when questioned further, around half of them recall issues with the process. Concerns that a switch may be difficult may also play a part in deterring some consumers who have not switched from engaging in the process.
- 1.13 These issues tend to group under the following broad headings:
- **Consumer difficulty and unnecessary switching costs:** Some switching processes involve greater difficulty for the consumer and take longer than others. For example, if the process requires the consumer to contact their existing provider, in addition to their new provider, this can take considerable time and can cause hassle. The provider in this instance may have an incentive to frustrate the process. This can deter consumers from switching;

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<sup>4</sup> Fieldwork for these data were conducted around the time a new iPhone model was being released, which may have led some consumers to delay their purchase decision. Source: Ofcom Switching Tracker 2014:

[http://stakeholders.ofcom.org.uk/binaries/research/statistics/Switching\\_Tracker\\_2014.pdf](http://stakeholders.ofcom.org.uk/binaries/research/statistics/Switching_Tracker_2014.pdf)

<sup>5</sup> The Consumer Experience of 2014, Figure 167, Consumer opinions about ease of switching supplier: [http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-14/TCE14\\_research\\_report.pdf](http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-14/TCE14_research_report.pdf)

- **Multiple switching processes:** The existence of multiple processes for switching the same service can cause confusion;
- **Continuity of service:** Mobile switching processes require consumers to coordinate the cessation of their service with their old provider with the start of their service with their new provider. Difficulties can be compounded where the consumer must also account for any notice period required for terminating their current contract. In order to avoid the risk of losing service some consumers may deliberately choose to subscribe to two services simultaneously, and so double-pay, to avoid service discontinuity<sup>6</sup>;
- **Awareness of the implications of switching:** Consumers may suffer harm if they are unaware of, or have insufficient information about the implications of switching, including any liability for Early Termination Charges ('ETCs') which can arise from ending a contract before the end of a minimum contract period;
- **Slamming:** This occurs where consumers are switched to another provider without their consent; and
- **Erroneous transfers:** These arise where the wrong asset (e.g. mobile phone number) is inadvertently switched.

1.14 We are currently engaged with mobile providers on reforms that may help address these issues. We want, in this consultation, to broaden the discussion to ensure that all stakeholders have an opportunity to contribute views and evidence. At this stage we have identified two potential reforms on which we would welcome views from stakeholders. They are:

- **Simplifying the process for obtaining a PAC.** This could reduce switching costs by removing the need for a customer who wishes to port their number to have direct contact, either verbally, online or by letter, with their current provider. It is possible that it could also be adapted for those who do not wish to port their number, although we have not set out details on this in this document. Simplification could be achieved, for example, by allowing customers to request the PAC by SMS (text message), or by making a call to a number with Interactive Voice Response (IVR) menu options. Key information about the implications of the decision to switch, such as outstanding contract duration and ETCs payable, could be provided to the consumer at the same time. Both facilities could be offered either by mobile providers or by a central porting system. Both require safeguards to verify the identity of the customer.
- **Putting in place a Gaining Provider Led ('GPL') process.** This would mean that consumers would not need to contact their existing provider unless they wished to, regardless of whether they wished to port their number. This helps address the costs of multiple touch points, and the concern for some consumers about unwanted attempts at retention by losing providers as part of the switching process. The GP would coordinate the switch, helping to facilitate a more seamless transfer of service and minimising breaks in service and double paying.

1.15 We think that improvements to switching processes work best where industry takes a leading role in their design, and the options we have identified at this stage build on existing processes, which should help minimise their costs. We are currently

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<sup>6</sup> Double-paying can also arise from long notice periods for consumers wishing to cancel a service.

discussing the technical aspects of switching processes with mobile operators. If there is general consensus on how to proceed we may go on to establish a working group to generate, assess and implement new or amended processes. In that case we would expect agreement on process change before the end of 2015, with implementation to follow. In any event, we will continue to work on the case for regulatory change to improve mobile switching processes to ensure that these are not delayed if they are needed.

- 1.16 Some stakeholders have suggested that the existing evidence of consumer satisfaction suggests that there is no need for further work in this area. We do not agree, for the reasons set out in this document. As we set out, alongside our on-going work and this consultation we are gathering further evidence on the consumer experience of mobile switching and how this is influenced by existing switching processes. This includes a quantitative consumer survey as well as diary research following the experiences of people who are considering a switch, including the interactions they have with mobile providers. We are also undertaking further work to consider options and likely costs of reform, as well as implementation challenges.
- 1.17 We will publish a further document setting out findings from this research in spring 2016. If the evidence indicates harm resulting from current mobile switching processes, and proportionate interventions are available to address this harm, we will publish a further consultation on detailed proposals unless voluntary reforms have been agreed to address it.
- 1.18 Ofcom has also initiated a project to review consumers' experiences of switching triple play services. We will update stakeholders on this work as it proceeds. If this results in proposals for improvements, we expect to consult in early 2016.
- 1.19 In our work on switching across both mobile and triple play services we will ensure we give due weight to possible future market developments, e.g. mass market take-up of 'quad-play' bundles of fixed voice, broadband, pay TV and mobile communications services, and the desirability for switching processes to accommodate this.
- 1.20 Ofcom is also engaged in a number of other projects to facilitate consumer switching and to improve the switching journey. These include seeking to ensure that consumers are aware of when their contract ends and the implications of this, initiatives to help consumers navigate the market, and an enforcement programme covering the current arrangements for cancelling and terminating communications service contracts. These projects are described further in Section 6.

## Section 2

# Introduction

- 2.1 In 2013, Ofcom decided to harmonise the two processes used to switch fixed voice and broadband services between providers operating on the Openreach copper network. A similar decision was taken in relation to switches on the KCOM copper network in early 2015. Consumers wishing to change provider now need only contact their new (gaining) provider, who coordinates the switch with the old (losing) provider on their behalf. We added consumer protection measures to enhance the process. We believe that these reforms will enable consumers to arrange a switch more easily and quickly, and with more confidence. The new process was implemented on 20 June 2015.
- 2.2 In July 2014 we published a Call for Inputs ('CFI'). This set out our intention to consider processes for switching triple-play (voice, broadband and pay TV) service bundles to, from or between the Virgin cable, Sky satellite and Openreach copper networks, as well as processes for switching voice and data services between mobile operators using the UK's four main networks. We have now moved to a further phase of our work on consumer switching.

## Scope of this document

- 2.3 This consultation document focuses on consumer switching issues in the mobile sector. It sets out our current view, based on the evidence we have seen to date, that a significant proportion of those who have switched mobile provider continue to experience process-related difficulties arising from switching costs, multiple processes, difficulties co-ordinating the switch and continuity of service.
- 2.4 We therefore suggest potential reforms which we consider could address the issues we have identified by introducing a process which gives consumers easy access to the information they need in order to switch and which does not require them to speak to their existing provider. In this document, we describe at a high level two potential options for achieving this objective.
- 2.5 We are not considering, as part of this document, call routing procedures for circumstances when a consumer ports their number. In addition, we are not seeking views on providers' ability to carry out retention activity with consumers who signal their intention to switch, or consumers' ability to contact their providers for a better deal.
- 2.6 We are also engaged in identifying and addressing any non-process issues to facilitate consumer switching and to improving the switching journey. These include seeking to ensure that consumers are aware of when their contract ends and the implications of this, initiatives to help consumers navigate the market, and an enforcement programme covering the current arrangements for cancelling and terminating communications service contracts. These are described further in Section 6, but are not within the scope of this document.

## Legal framework

- 2.7 Ofcom regulates the communications sector under, and in accordance with, the framework established by the Communications Act 2003 (the Act) and European

Community requirements for regulation (the European Framework). The European Framework and its associated Directives provide a common framework for the regulation of electronic communications networks and services in the EU.

- 2.8 We have set out below a summary of the relevant legal framework that sets out our powers and duties in the context of our work on switching.

### **Ofcom's general duties**

- 2.9 Ofcom's general duties, which implement duties set out in the EU Framework, are set out in sections 3 and 4 of the Act. Ofcom's principal duty in carrying out its functions is to further the interests of citizens in relation to communication matters; and to further the interests of consumers in relevant markets, where appropriate by promoting competition. Among other things, in performing our duties, we must also have regard to a number of further matters as appear to be relevant in the circumstances including, for example, the interests of consumers in respect of choice, price, quality of service and value for money.
- 2.10 The EU Framework provides, as part of the general authorisation to provide electronic communications networks or services, for the imposition of regulatory conditions containing 'consumer protection rules specific to the electronic communications sector, including conditions in conformity with Directive 2002/22/EC ('Universal Service Directive')'.<sup>7</sup> Ofcom's power to set conditions relating to consumer protection is not limited to the measures set out in that directive.
- 2.11 In that context, relevant considerations are contained in Article 30 of the Universal Service Directive.<sup>8</sup> Article 30 includes provisions dealing with the porting of numbers as well as about switching, including provisions that<sup>9</sup>:
- i) national authorities shall take into account, where necessary, measures ensuring that subscribers are protected throughout the switching process and are not switched to another provider against their will; and
  - ii) without prejudice to any minimum contractual period, that conditions and procedures for contract termination do not act as a disincentive against changing service provider.
- 2.12 Article 8 of the Framework Directive requires national authorities to ensure that when they carry out the regulatory tasks specified in the European Framework, they take all reasonable measures which are aimed at achieving a set of objectives set out in paragraphs 2, 3, and 4, and requires that the measures shall be proportionate to those objectives.
- 2.13 The objectives contained in paragraph 2 of Article 8 include that the National Regulatory Authorities ('NRAs') shall promote competition in the provision of electronic communications networks, electronic communications services, and associated facilities and services by (among others):

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<sup>7</sup> Directive 2002/20/EC of the European Parliament and of the Council (as amended by Directive 2009/140/EC), paragraph 8 of Annex A.

<sup>8</sup> Directive 2002/22/EC of the European Parliament and of the Council (as amended by Directive 2009/136/EC), 7 March 2002. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0051:0051:EN:PDF>

<sup>9</sup> See also recital 47 to the 2009 Amending Universal Service Directive. Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0136&from=EN>

- i) ensuring that users, including disabled users, elderly users, and users with special social needs derive maximum benefit in terms of choice, price and quality; and
  - ii) ensuring that there is no distortion or restriction of competition in the electronic communications sector, including the transmission of content.
- 2.14 The objectives contained in paragraph 4 of Article 8 also require NRAs to promote the interests of the citizens of the EU by (among others):
- i) ensuring a high level of protection for consumers in their dealings with suppliers, in particular by ensuring the availability of dispute resolution procedures;
  - ii) promoting the provision of clear information, in particular requiring transparency of tariffs and conditions for using publicly available electronic communications services; and
  - iii) addressing the needs of specific social groups, in particular disabled users, elderly users, and users with special social needs.

### **Powers and duties in relation to General Conditions (GCs)**

- 2.15 Ofcom has powers under the Act to set GCs to apply to all CPs in the category specified in that GC. The Act sets out the range of provisions that may be included in a GC, which in accordance with section 51(1)(a), include such provision as we consider appropriate for the purpose of protecting the interests of end-users of public electronic communications services. Under Section 51(2) this power includes the power to set conditions for that purpose which:
- i) ensure that conditions and procedures for the termination of a contract do not act as a disincentive to an end-user changing CP;
  - ii) relate to the supply, provision or making available of goods, services or facilities in association with the provision of public electronic communications services;
  - iii) give effect to Community obligations to provide protection for such end-users in relation to the supply, provision, or making available of those goods, services or facilities;
  - iv) require the provision, free of charge, of specified information, or information of a specified kind, to end-users.
- 2.16 Ofcom's power to set conditions in order to protect end-users is not limited to the list of purposes set out in 51(2).
- 2.17 In accordance with section 47(2) of the Act, the provisions of any GC must be:
- (a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
  - (b) not such as to discriminate unduly against particular persons or against a particular description of persons;
  - (c) proportionate to what the condition or modification is intended to achieve; and

(d) in relation to what it is intended to achieve, transparent.

### **Application of the legal framework to switching processes**

- 2.18 Ofcom's principal duty, in carrying out our functions, is to further the interests of citizens in communications matters, and consumers in relevant markets, where appropriate by promoting competition.
- 2.19 In the current context, our primary objective is to further the interests of consumers by protecting their interests as end-users of mobile services. We also consider that certain interventions we might make to protect users' interests in this regard may also have additional benefits in promoting effective competition in the provision of mobile electronic communications services.

## Section 3

# Mobile switching processes

## Introduction

- 3.1 Currently the process a consumer follows to switch their mobile provider depends on whether or not they wish to keep, or 'port', their mobile phone number.
- A switch which includes a number port requires the customer to obtain a Porting Authorisation Code ('PAC') from their current provider (the Losing Provider 'LP') and give this to their new provider (the Gaining Provider 'GP'), who initiates the transfer. We call this a 'losing provider led' ('LPL') process, sometimes also known as 'donor led'.
  - A switch without a port requires the customer to organise the stop and start of the old and new service themselves. We refer to this as a 'Cease and Re-provide' ('C&R') arrangement.
- 3.2 We describe both arrangements in greater detail below.

## Losing Provider Led (LPL) PAC process

- 3.3 Consumer mobile number porting ('MNP') typically involves the porting of one or more telephone numbers from one provider to another. Multiple ports involve a set of numbers linked to a single account, which might arise in a business or a family context.<sup>10</sup>
- 3.4 In the UK, the MNP process is led by the LP and is therefore an LPL process.<sup>11</sup> This is illustrated in Figure 1. This means that if a consumer wishes to change operator, but retain their existing phone number, they must first speak to the provider they are seeking to leave (the LP) and request a PAC.
- 3.5 A web-based Central Porting System ('CPS') currently exists to facilitate this process. It authorises, allocates and manages PACs, and allows the exchange of porting data between operators. It is currently operated by Syniverse on behalf of all mobile operators.
- 3.6 Ofcom regulations<sup>12</sup> require that the LP allows consumers to request a PAC over the phone. The LP then carries out an authorisation check to confirm that the request has been made by the legitimate account holder, and informs them of any charges payable under a minimum contract term. The rules require that where a phone request is made, the LP provides the PAC immediately over the phone or by SMS

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<sup>10</sup> Transfers of up to 25 numbers are regulated under General Condition 18 (GC18) of the General Conditions of Entitlement, which can be found here: [http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/CONSOLIDATED\\_VERSION\\_OF\\_GENERAL\\_CONDITIONS\\_AS\\_AT\\_28\\_MAY\\_2015.pdf](http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/CONSOLIDATED_VERSION_OF_GENERAL_CONDITIONS_AS_AT_28_MAY_2015.pdf). Bulk transfers of more than 25 numbers are also possible, for example where a large business has multiple mobile phones. This consultation however is confined to switching by consumers and small businesses, as opposed to bulk transfers.

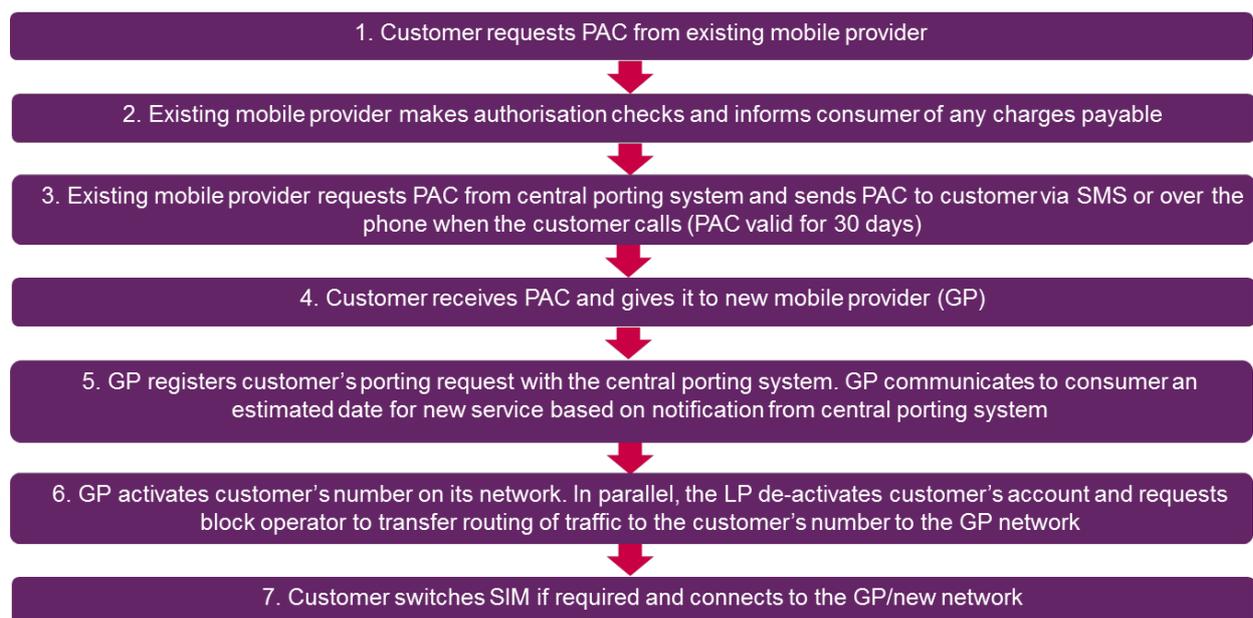
<sup>11</sup> In the mobile industry, the term 'donor-led' is also used to describe a losing provider led process. In this document we use the term LPL, to include the meaning 'donor-led'.

<sup>12</sup> The relevant regulation is GC18, which covers "Number Portability".

(text) within two hours of the request. They also require the GP to port and activate the mobile number within one business day of the consumer's request to port.

- 3.7 The PAC is valid for 30 days. If the consumer decides to proceed with the switch, they must supply the PAC to their new provider (the 'gaining provider', 'GP') within this window. The PAC acts as a mechanism to verify that the customer is the legitimate account holder, as well as providing a unique identifier which helps the LP and GP co-ordinate the porting of the customer's number.
- 3.8 The GP initiates the porting request via the central porting system, which notifies the LP of the consumer's intent to switch their number to the GP and terminate their account with the LP. The LP and GP confirm the date for the port or switch to occur via the central porting system. The GP activates the number on its network, and the CPS notifies the LP to deactivate the customer's account. The LP also instructs the block operator<sup>13</sup> to change the routing of the customer's number to the GP's network.
- 3.9 In addition, many mobile providers also require that the consumer gives notice, typically 30 days, of termination of the old mobile service. Depending on how the consumer coordinates the notice of termination and start of new contract, the notice period and associated payment from the old service may overlap with the new service.

**Figure 1: Consumer steps in LPL PAC process for mobile number porting**



## Cease and re-provide ('C&R')

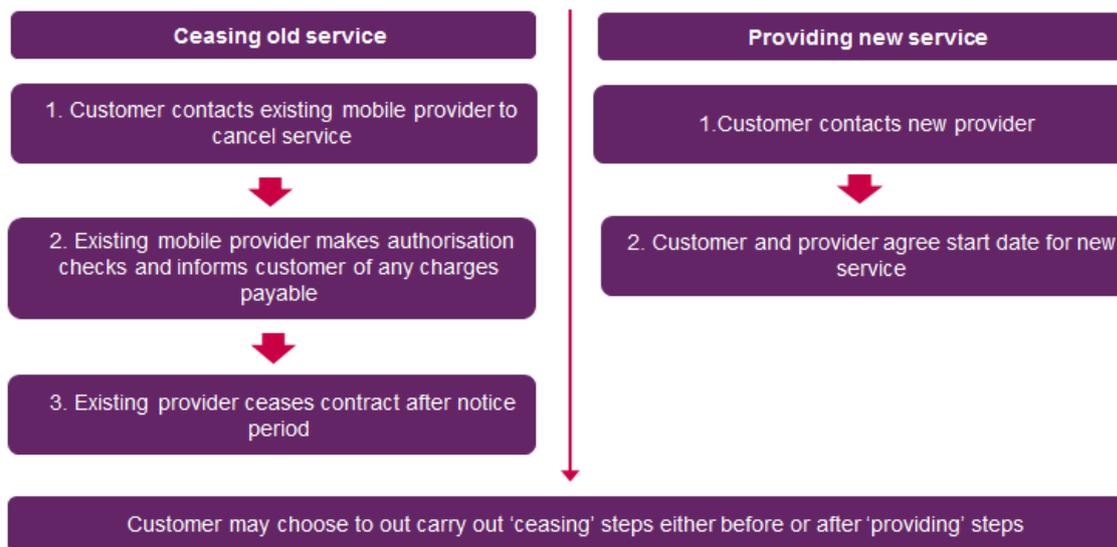
- 3.10 Where the consumer does not wish to port their mobile number, no formal process exists in order to switch to an alternative provider. Instead, the consumer ceases the contract and service with their current (losing) provider, including giving any relevant notice of termination of their contract. The consumer also separately organises the

<sup>13</sup> The operator who was originally allocated a block of telephone numbers and who has the responsibility to enable onwards routing for all numbers which have been ported from the block.

new service and contract with their preferred new provider. We call this arrangement ‘cease and re-provide’ (‘C&R’), and it is illustrated in Figure 2.

- 3.11 Under this approach, the consumer is responsible for coordinating the cessation of one service and the commencement of another service. This includes any need or desire to minimise periods of overlap of, and double paying for, services, or any break between the old and new services.

**Figure 2: Consumer steps for mobile switching via Cease and Re-provide**



## Alternative processes

- 3.12 LPL and C&R are not the only possible switching arrangements. There are a wide range of possible alternative processes. One option worthy of consideration would build on existing proven processes in operation on the Openreach network for switching of fixed voice, and more recently broadband.
- 3.13 Consumers switching broadband and fixed voice services between providers who use the Openreach telecoms network and KCOM in Hull, follow what is known as the Notification of Transfer (NoT) process, a ‘one-touch’ GPL process.<sup>14</sup> Under this process, in order to switch, the consumer only needs to contact the GP. The GP then coordinates all aspects of the switch for the consumer, including:
- Contacting the LP on behalf of the consumer to cancel their service;
  - Coordinating the switch so that the services stop and start on the same day, minimising any risk of loss of service;
  - Co-ordinating the transfer of any assets e.g. local exchange lines or telephone number from one provider to another;

<sup>14</sup> The NoT process has been in operation for all switches on the Openreach network since 20 June 2015, and was previously used for the majority of switches alongside the now obsolete Migration Authorisation Code (MAC) process.

- Collecting details from the consumer so that the correct assets to be switched are identified.
- 3.14 In addition, the LP sends a notification to the consumer, confirming the switch and informing the consumer of any contractual implications, including early termination charges. Notably, however, the consumer is not obliged to speak to the LP in order for the switch to proceed.
- 3.15 The GPL process as implemented on the Openreach network does not apply to mobile services. Nonetheless, it provides an illustration of how switching processes could differ from those currently in place. Indeed, we note that the UK is unusual in having an LPL process for mobile switching; most other countries that offer mobile number portability use a process led by the gaining provider.

## Section 4

# Switching processes and potential consumer harm

## Introduction

4.1 This section sets out our considerations on how current mobile switching processes may lead to consumer harm. We first highlight the importance of switching for consumers and competition. We then describe the issues which consumers can experience when they switch. Finally, we assess current switching processes in terms of these harms, in light of our current evidence.

## Rates of consumer switching

4.2 Over the last few years we have undertaken substantial market research and collected other sources of evidence related to the consumer experience for both switchers and those who have considered switching but not done so (considerers). These sources include:

- The Consumer Experience of 2014 - Research Report;<sup>15</sup>
- Customer Retention and Interoperability Research Report ('the CRI research') - conducted 2012, published 2013;<sup>16</sup>
- Consumer Switching Experience, Diary study 2014;<sup>17</sup> and
- Ofcom complaint records.

4.3 We have commissioned further consumer research to update the evidence described in this consultation document. This will cover the general consumer experience of switching mobile services and, more specifically, try to understand the extent to which consumers are likely to suffer harm under the current switching processes. The results of this research, which we expect to be completed in the autumn, will be published and will inform any proposals we decide to make on mobile switching.

## Fewer consumers are switching and considering switching

4.4 The proportions of consumers a) considering a switch, b) comparing provider, and c) actually going on to switch have fallen recently. In the 12 months to July 2014, 13% switched at least one communications service, down from around a fifth in both 2013

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<sup>15</sup> See: [http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-14/TCE14\\_research\\_report.pdf](http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-14/TCE14_research_report.pdf)

<sup>16</sup> See: [http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/customer-retention/CRI\\_Report\\_Final.pdf](http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/customer-retention/CRI_Report_Final.pdf). This study consisted of consumers who had switched or considered switching communications services, including pay-monthly (contract) mobile customers. It focused on their reasons for switching (or not), and their experiences of switching. It asked consumers about a number of issues that can arise as a result of switching mobile provider, including some associated with the switching process itself.

<sup>17</sup> See: [http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/Ofcom\\_Switching\\_Comms\\_Provider\\_Research\\_Futuresight.pdf](http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/Ofcom_Switching_Comms_Provider_Research_Futuresight.pdf)

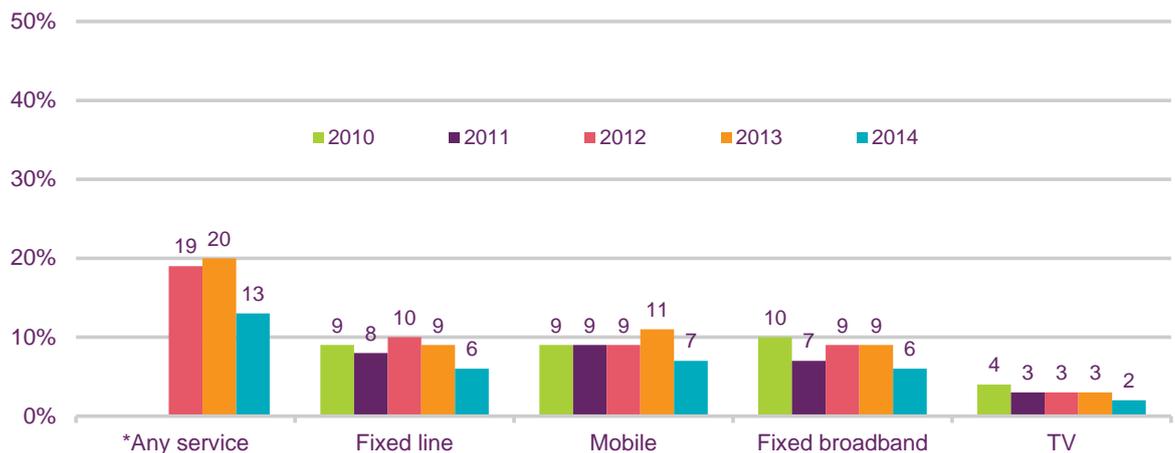
(20%) and 2012 (19%). Switching rates fell for three communications services individually; fixed-line telephony, fixed broadband and mobile.<sup>18</sup> These trends are illustrated in Figures 3 and 4.

**Figure 3: 'Engagement activity' in communications markets in the 12 months to July/Aug 2014**



Source: Figure 156 Consumer Experience Report 2014, Ofcom<sup>19</sup>

**Figure 4: Switching rates in communications markets in the 12 months to July/August 2014<sup>20</sup>**



Source: Figure 157, Consumer Experience Report 2014, Ofcom

<sup>18</sup> The apparent fall in digital TV from 3% to 2% is not statistically significant.

<sup>19</sup> \* Low base size for mobile bundle, treat as indicative only.

<sup>20</sup> \* Change in survey structure in 2012, this analysis is not available for 2010-2011.

- 4.5 The reasons for these falls are unclear. One possible factor is a move to longer contracts, as consumers have increasingly taken up bundled fibre broadband services and longer mobile contracts. For mobile services, fieldwork for the research was conducted around the time a new iPhone model was released, which may have led some consumers to delay purchases. We will continue to monitor these trends through further consumer research.

## Switching costs and consumer harm

- 4.6 The ability to switch supplier seamlessly is fundamental to the exercise of customer choice and to the operation of a competitive market. When consumers face complex (e.g. time-consuming, difficult or onerous) switching processes, this can be thought of as a switching cost. We consider that consumers benefit in three main ways when switching is as frictionless as possible.
- 4.7 First, smooth processes allow consumers to switch to the service that best suits their needs in a short timeframe. If switching processes are complicated, time-consuming and considered likely to fail, this may deter consumers from switching. The result may be that they remain with a provider or package which does not effectively meet their needs.
- 4.8 Second, for consumers who switch, a complex process means more time spent trying to switch, more hassle, and potentially problems which may be costly and time-consuming to resolve. Even if more complex switching processes do not deter switching, consumers may suffer harm if they incur unnecessary switching costs.
- 4.9 Third, seamless switching processes can help promote competition. If switching is easy, providers face strong incentives to provide good value, high quality services. They may also compete to offer innovative services with the aim of winning customers from competitors. Such dynamic aspects of simpler switching processes can be difficult to quantify, although we consider they are important.
- 4.10 We examined in detail the economic literature on the impact of switching costs on competition in our Strategic Review of Consumer Switching 2010 Consultation<sup>21</sup>, and updated it in the subsequent February 2012 Consultation<sup>22</sup> and our August 2013 Statement regarding the processes for switching fixed voice and broadband providers on the Openreach copper network (the ‘2013 Switching Statement’).<sup>23</sup> Although the literature suggests that outcomes depend on assumptions, we concluded that:

*“In summary, overall the academic literature’s position on switching costs is that “on balance switching costs seem more likely to increase prices” which would tend to reduce consumer welfare. Furthermore, “switching costs can segment an otherwise undifferentiated market as firms focus on their established customers and do not compete aggressively for their rivals’ existing customers, letting oligopolists extract*

<sup>21</sup> See Ofcom, Strategic Review of Switching - A Consultation, September 2010, Section 5 and Annex 6: <http://stakeholders.ofcom.org.uk/binaries/consultations/consumer-switching/summary/switching.pdf>.

<sup>22</sup> See Ofcom, Consumer Switching: Consultation on proposals to change the processes for switching fixed voice and broadband providers on the Openreach copper network, February 2012 <http://stakeholders.ofcom.org.uk/binaries/consultations/switching-fixed-voice-broadband/summary/condoc.pdf>

<sup>23</sup> See Ofcom, Consumer Switching: A statement and consultation on the processes for switching fixed voice and broadband providers on the Openreach copper network, August 2013: <http://stakeholders.ofcom.org.uk/consultations/consumer-switching-review/>

*positive profits". This conclusion takes into account not only the theoretical literature, but also the empirical literature that often lends support to the view that switching costs dampen competition."*

- 4.11 We are not aware of any new authoritative research which challenges the broad conclusions above.

## Issues which can arise during the switching processes

- 4.12 In our review of switching on the Openreach network, we identified a number of potential problems which could arise in relation to switching. These included:<sup>24</sup>
- **Consumer difficulty and unnecessary switching costs:** Some switching processes involve greater difficulty for the consumer and take longer than others. For example, if the process requires the consumer to contact their existing provider, in addition to their new provider, this can take considerable time and cause hassle. The provider in this instance may have an incentive to frustrate the process. This can deter switching.
  - **Multiple switching processes:** The existence of multiple processes for switching the same service can cause confusion.
  - **Continuity of service:** Mobile switching processes require consumers to coordinate the cessation of their service with their old provider with the start of their service with their new provider. This involves physically changing the SIM card in their phone. Difficulties can be compounded where the consumer must also manage any notice period required for terminating their current contract. In order to avoid the risk of loss of service some consumers may deliberately choose to subscribe to two services simultaneously, and so 'double-pay' for their mobile service, in order to avoid service discontinuity.<sup>25</sup>
  - **Awareness of the Implications of Switching:** Consumers may suffer harm if they are unaware of, or have insufficient information about the implications of switching, including any liability for Early Termination Charges ('ETCs');
  - **Slamming:** This occurs where consumers are switched to another provider without their consent;
  - **Erroneous transfers:** These arise where the wrong asset (e.g. mobile phone number) is inadvertently switched.
- 4.13 The current mobile LPL and C&R arrangements perform relatively well on some of these measures, but relatively poorly on others. Below we consider in more detail the potential implications for consumers of current mobile switching processes.
- 4.14 We start with the ways in which current switching processes can create difficulty and unnecessary switching costs for consumers. We consider that this issue forms a critical part of the overall consumer experience of switching and the impact of

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<sup>24</sup> In addition, we identified issues in relation to platform neutrality (where processes differed between different wholesale services) and the issue of reactive save, which we considered risk dampening the competitive process. We do not propose to focus on these issues in the present consultation process.

<sup>25</sup> We note that double-paying can also arise due to long notice periods for consumers wishing to cancel a service.

switching processes on competition. In addition, we have identified it as the area where there is the greatest scope for improvement. We then consider the performance of the current mobile switching processes against some of the other issues.

## Consumer difficulty and unnecessary switching costs

4.15 We consider that in order for consumers to effectively exercise choice of supplier, switching processes should minimise friction. We now review the evidence on overall ease of switching mobile provider, before going on to assess more granular reasons why the consumer experience may differ depending on the switching process used.

### Overall ease of switching

4.16 The majority of consumers who have switched mobile communications provider rate the process as either 'very' or 'fairly' easy. Figure 5 shows that 91% of those who switched in the last two years (and hence have a more recent recollection of how easy it was to switch), stated that switching was very easy or fairly easy. This figure is marginally lower than the comparable experience for those who have switched fixed line (where 93% of those who switched in the last two years found it easy), but above that for broadband (88%) and digital TV (83%).

**Figure 5: Ease of switching mobile supplier, by when switched and never switched, 2014**



Source: Figure 167, Consumer Experience Report 2014, Ofcom

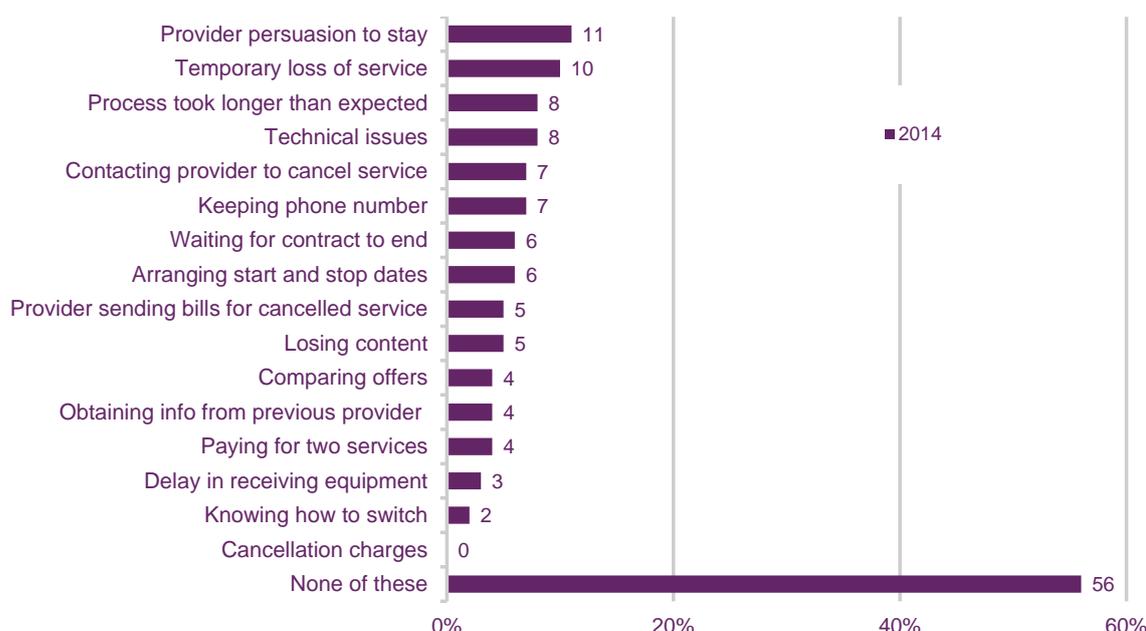
4.17 This statistic is encouraging. However, it must be seen in context. As set out in the next section, around one in ten mobile customers switched during the 12-month reference period, so these statistics relate to only a very small proportion of overall mobile subscribers, and tell us little about the reasons why other subscribers have not switched.

4.18 In any event, given the importance of switching to consumers and competition, even a high percentage does not mean that there is no scope for further improvement, if this can be achieved in a proportionate manner. We note that the majority of switchers found the process to be easy. However, we also note that around one in ten mobile consumers who had not switched did not find it easy, and a further 14% didn't know. A similar proportion (13%) of those who had considered switching but

decided not to, cited ‘hassle’ as a reason and it is possible that these consumers may not be able to exercise choice effectively.

4.19 Furthermore, when prompted, 44% of mobile switchers signalled that they experienced difficulties during the switching process, with these levels statistically unchanged since 2013<sup>26</sup>. Figure 6 summarises the nature and incidence of these issues.

**Figure 6: Experience of prompted difficulties among those who had switched mobile services, 2014**



Source: Figure 170, Consumer Experience Report 2014, Ofcom

4.20 For mobile switches, the most frequently reported difficulties were in relation to the provider persuading them to stay (11%), a temporary loss of service (10%), the process taking longer than expected (8%), technical issues (8%), difficulties in contacting the provider to cancel a service (7%) and keeping their phone number (7%)<sup>27</sup>. Moreover, elsewhere<sup>28</sup> the research shows that 13% of those who considered but didn't switch their mobile service cited (unprompted) ‘hassle’ as a reason.

### Comparison of ease of switching by process

4.21 As there is currently no GPL switching process for mobile services in the UK, we cannot directly compare how this affects consumers relative to the existing LPL PAC and C&R arrangements. However, we can make informed judgments, based on evidence from other networks. Key improvements under GPL include a reduction in the time taken to arrange the switch and the ability to avoid unwanted save activity.

<sup>26</sup> In 2013, 51% of mobile switchers said they encountered some difficulties – this is not statistically significantly different to the 44% noted above.

<sup>27</sup> The differences between these figures are not statistically different.

<sup>28</sup> Figure 165, The Consumer Experience of 2014 – Research Report, Ofcom: [http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-14/TCE14\\_research\\_report.pdf](http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-14/TCE14_research_report.pdf)

Evidence on issues by process

4.22 To inform our assessment, we have considered the available evidence on the performance of the GPL process for voice and broadband services on the Openreach network. The CRI research allows us to compare consumers' experiences of switching both by the services switched, and, crucially, by the process they followed.

4.23 Figure 7 suggests that GPL processes provided the best consumer switching experience. For example, 60% of GPL switchers rated the process as 'very easy', compared to around 32% to 41% of switchers under LPL and C&R, respectively. Among mobile switchers, 17% of those who used the LPL PAC process found it difficult, as did and 6% of those who followed a C&R arrangement.

**Figure 7: Stated ease of switching by process, in the 12 months to end 2012<sup>29</sup>**



Source: Ofcom CRI Research, 2012

4.24 The CRI research also asked detailed questions on issues that switchers encountered during the process. Figure 8 summarises the 'main' or 'major' issues, identified from a list, by switching process type. Switchers using GPL processes experienced a lower incidence of all switching issues than switchers using other processes. Of particular interest are switchers within Openreach who had experience of switching under GPL and LPL.

<sup>29</sup> \*Base for LPL excluding mobile is low, and data should be treated as indicative only.

**Figure 8: Experiences by switching process among switchers and factors impacting decisions for considerers<sup>30</sup>**

% expressing an issue associated with switching as 'major' or 'main'		Switchers					Considerers		
		Cable & Satellite* C&R (497)	Mobile C&R (227)	Openreach GPL (196)	Openreach LPL / MAC (94)	Mobile LPL / PAC (389)	DUAL (100)	TRIPLE (130)	MOBILE (monthly) (440)
Switching costs	Previous provider made it difficult for me	18%	14%	6%	18%	16%			
	Clarity of switching process	16%	10%	8%	16%	16%	14%	20%	13%
	Need to contact more than one provider	14%	10%	5%	15%	14%			
Continuity of service	Being without the service during switch	21%	16%	9%	19%	20%	44%	32%	22%
	Paying for both services at the same time	19%	22%	11%	14%	21%	22%	29%	29%
Arranging for service to stop/start at right time		19%	14%	13%	19%	22%			
Provider trying to persuade me to stay		17%	17%	9%	20%	13%	49%	50%	57%

Source: Figure 51, CRI Research, 2013

- 4.25 The research illustrates that, for Openreach switchers, consumers following the GPL process experienced fewer issues than those following the LPL process. In addition, this study found that the experience of LPL Openreach switchers was similar to that of LPL mobile switchers and C&R cable/satellite switchers. This is consistent with the proposition that a move to a GPL process for mobile may reduce the difficulty of switching for consumers compared to the LPL PAC process and C&R arrangement.
- 4.26 Figure 8 also shows responses among those who considered but did not end up switching. Thirteen per cent of mobile considerers said clarity of switching process was a major factor in their decision not to switch; 22% cited being without a service during the switch, 29% paying for two services at the same time, and 57% cited their provider trying to persuade them to stay.
- 4.27 While we recognise that GPL as implemented on the Openreach network may be different to GPL implementation on other networks, we consider it provides useful evidence on the comparative consumer experience of different switching processes. This can help us assess whether alternative switching processes for mobile services might be capable of providing a better consumer experience than is currently the case.

### Diary Study

- 4.28 Our view that GPL processes generally result in a better switching experience for consumers is also supported by qualitative research. In 2014, Ofcom commissioned and published qualitative research on consumers' experiences of switching communications services, including mobile.<sup>31</sup> This involved respondents keeping real time interactive 'diaries' of their decision to switch and, where relevant, their experience of the switching process itself.

<sup>30</sup> \*Includes some Openreach C&R switches.

<sup>31</sup> See: <http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/consumer-switching/>

- 4.29 The research indicated that those switching using GPL processes (i.e. for landline or broadband services) widely regarded this as a positive experience. Most who switched and retained their mobile number using an LPL process did not report any significant problems. However some complained that having to obtain a code from their current provider made the switch more difficult than they felt it should be, and, in some instances, caused delay and additional time and effort. It also showed that the majority of mobile switchers claimed to be satisfied with the switching process, whether or not this included a mobile number port. However, a minority (8% of the total mobile sample) reported difficulties obtaining a PAC, and cited the 'hassle' that this involved, including being subject to persuasion to stay by the LP.

#### Additional time associated with multiple touch points

- 4.30 GPL processes generally involve fewer touch-points for the consumer than C&R or LPL processes. All else being equal, the total time involved by the consumer may therefore be expected to be shorter under a GPL process. Under both the C&R arrangement and the LPL process, consumers need to contact both their current provider in order to cancel their contract or obtain a PAC, as well as the gaining provider in order to switch.<sup>32</sup> By contrast, a GPL process typically requires just a single contact with the gaining provider.
- 4.31 In the 2013 Switching Statement, Ofcom considered that the LPL process for switching broadband involved on average 12 additional minutes of the consumer's time spent on phone conversations with the LP, relative to a GPL process. As this did not include any time waiting to be connected to a customer service representative, it is likely to understate the true difference in time between processes.
- 4.32 We do not yet have the equivalent figures for the mobile PAC process. However, given the difference in the number of touch points involved, we expect mobile switchers currently spend more time interacting with the GP and LP under the LPL or C&R processes, than they would under a GPL process broadly similar to the one currently used for switching fixed voice and broadband services.

#### Provider making it difficult to cancel/unwanted save activity

- 4.33 Under the LPL or C&R switching processes, a consumer must contact their existing provider in order to switch their service (to obtain a PAC under LPL or to cancel their services under C&R). As switching results in loss of revenues for the LP, the LP has limited incentives to make this process easy for the consumer. While we recognise that the LP may be interested in creating a positive consumer switching experience in order to help attract a switcher back to their network in the future, we consider that the incentive to frustrate the switching process may be greater. In addition, the LP may use the customer contact as an opportunity to persuade the consumer not to switch. As also noted amongst the CFI responses, although many consumers welcome such activity, others, particularly those who have made up their mind to switch, may wish to avoid it.
- 4.34 In the CRI research quoted above, 24% of C&R mobile switchers quoted the provider trying to persuade them to stay, and 18% the provider making it difficult for them to switch, as a major or the main issue they faced when switching. This compares to

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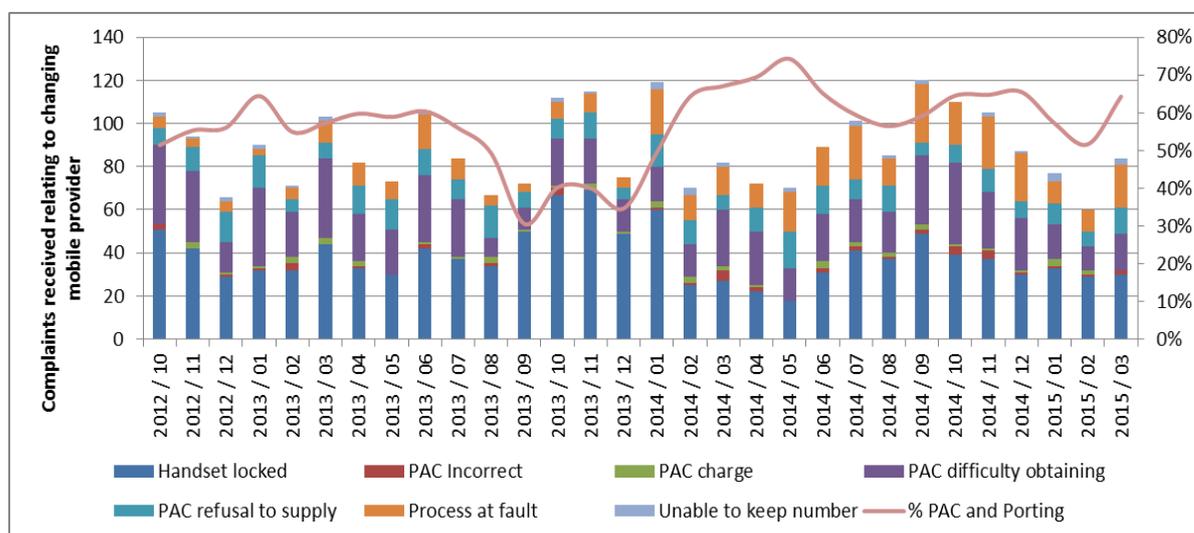
<sup>32</sup> Indeed, in many cases the LPL PAC process may involve three touch points, e.g. if the customer first contacted the GP, then the LP to obtain the PAC, then the GP again to give them the PAC.

figures of 14% and 8% respectively for GPL switches and is consistent with the notion that GPL processes lead to reductions in unwanted save activity.

## Complaints about mobile switching

4.35 Ofcom receives and records complaints across the markets it regulates. Since October 2012 we have received on average over 250 complaints per month on a broad range of issues relating to changing mobile provider. Thirty-four per cent of these relate to issues specific to the switching process. Over half of these concern problems with the PAC or with number porting, including the PAC being incorrect, a charge associated with the PAC, difficulties in obtaining a PAC, refusal by the provider in supplying a PAC, and ‘process at fault’ complaints (see Figure 9). In addition, many complainants suggested that the information provided on mobile operator’s websites would benefit from greater clarity on the length of time in which their number port will complete.

**Figure 9: Complaints received by Ofcom related to mobile switching**



Source: Ofcom Consumer Contact Team

## Preliminary conclusion on consumer difficulty

4.36 We note that research suggests that the majority of mobile switchers find the switching process to be easy. While this is encouraging, it is only part of the picture, as it only captures the views of a minority of mobile consumers who switch in the first place. Around 1 in 10 consumers who have considered but not switched, cited “hassle” as a reason. Among mobile considerers around a quarter (22%) said being without a service during the switch, or paying for two services at the same time (29%), were major factors in their decision not to switch, while over half (57%) cited their provider trying to persuade them to stay.

4.37 In any event, we see scope for improving the process further, if proportionate ways can be found to do this. In particular, we note that consumers encountered fewer issues under the GPL process for fixed services, than under other processes used on other networks, including those relating to the mobile market.

## Multiple switching processes

- 4.38 In addition to difficulties created by each process, the existence of two processes for switching mobile services (LPL and C&R) potentially creates confusion and a lack of clarity, which can deter some consumers from switching. It could also especially add complexity and increase difficulty for consumers who are switching bundles if elements of their bundle follow different switching process (e.g. GPL for fixed voice or broadband).
- 4.39 Our consumer experience research suggests that the large majority of switchers were clear about the processes for switching mobile telephony.<sup>33</sup> Nevertheless, it is possible that the complexity of having multiple switching processes deters some consumers from switching. We will continue to assess the consumer experience of this in our research this year and work on switching processes.

## Continuity of service

- 4.40 Loss of service in mobile switching arises mainly when consumers switch without porting their number. This requires them to use a C&R switching arrangement, whereby they must arrange the 'cease' of the existing subscription and the start of a new subscription. If they fail to coordinate this perfectly, a loss of service may occur. Consumers sometimes pay for services to overlap ('double-billing') with the aim of minimising the risk of any loss of service.
- 4.41 In theory, there should be no loss of service associated with the LPL PAC process. The coordination between the end and start of the old and new services is ensured by the GP and LP. The process should be relatively seamless, i.e. the period during which the technical porting process takes place should be short.
- 4.42 Although consumers may choose to double-pay to avoid losing service, this can also occur as a result of a contractual requirement to give notice for terminating a service to their current provider. If a consumer starts with their new provider before the end of their notice period with their current provider, they will experience double-billing. It can take significant organisation on the part of the consumer to give notice to their old provider and arrange for the new service with the new provider, including obtaining a PAC if they wish to port their number, in order to avoid either double-billing or loss of service.
- 4.43 We are concerned about the impact that notice periods may have on mobile consumers' ability to ensure that they experience a smooth transfer, without losing service. Loss of service under C&R could be minimised, or even eliminated, if a GPL process was used instead. This is because the GP could coordinate the end and start of the old and new services respectively. A GPL process could also address double-billing where this occurs as a result of a consumer wishing to minimise the risk of loss of service. It may not help, however, where double-billing arises because the consumer wishes to switch before the expiry of any applicable notice period.

## Evidence and preliminary conclusion on continuity of service

- 4.44 The 2013 CRI research found that around a fifth of those switching pay-monthly mobile services via the PAC process reported 'being without the service during the switch' and 'paying for both services at the same time' as a main or major issue

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<sup>33</sup> Figures 165 and 17, Consumer Experience Report 2014.

during switching. For those switching with no number port, 16% cited 'being without the service during the switch' and 22% 'paying for both services at the same time' as a main or major issue. The equivalent figures for consumers who had switched landline or broadband services using a GPL process were around 10%.

- 4.45 Loss of service and double-paying appear to be significant issues under both the LPL and C&R mobile switching processes. Under LPL PAC it is unclear the extent to which these issues arise because of the switching process, and therefore also unclear the extent to which a move to a GPL process would help address them. However, for C&R switches, the link between process and harm appears clearer, and hence the potential for a GPL process to address these issues appears greater.
- 4.46 Loss of mobile service can occur both under the LPL PAC process and the C&R process. In theory, the transfer process triggered by receipt of the PAC by the GP should be relatively seamless, i.e. the period during which the technical porting process takes place can theoretically be a matter of seconds.<sup>34</sup> Despite this, we understand that loss of service can still occur for a significant length of time under LPL PAC. This could result from a number of factors, including:
- customer uncertainty over the exact date/time porting takes place;
  - the customer not having their new SIM/handset with them when porting takes place;
  - the customer not realising that their existing handset is locked by the LP; or
  - delays between the deactivation of an old SIM and activation of the ported number on a new SIM. This is often partially mitigated by use of a temporary phone number. However, these can be inconvenient or frustrating for consumers and don't provide a full service (e.g. they can significantly reduce the ability to receive calls).

### **Lack of awareness of the implications of switching**

- 4.47 We consider that the implications of switching mobile provider for a consumer can include the following:
- paying an early termination charge (ETC) for terminating a contract early;
  - differences in the availability or quality of specific mobile services or features (such as coverage in a certain area); and
  - the loss of unused pre-paid credit, voicemails and SMS or any material loyalty benefits from remaining with a provider over a period of time.
- 4.48 LPL and C&R processes could carry lower risks of consumers incurring unexpected ETCs, relative to a GPL process. They could perform better because the consumer intending to switch will have to contact the LP, who is well positioned to inform them about ETCs and other contractual implications.

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<sup>34</sup> This excludes the period of service discontinuity if the old SIM needs to be replaced with a new one.

- 4.49 In the 2013 Switching Statement<sup>35</sup>, we acknowledged that the LP is better placed than the GP to inform the customer about some switching implications, as they will know the key details of the customers' services, their contractual terms, and potential financial implications of switching one or several services. However, we also noted that, in contrast to the GP, the LP might not be in a position to provide the consumer with complete information about the benefits of switching. Also, because of the high incentives to ensure that the customer does not switch and instead remains with them, there is a risk of the LP providing vague or confusing information on ETCs, which could put the consumer off switching.
- 4.50 The evidence we collected for the 2013 Switching Statement (in relation to fixed voice and broadband services) suggested that only 3% of GPL NoT switchers found out they were liable for ETCs after they had committed to a new provider, and that this figure was not significantly different to that for the whole market (i.e. across all switching processes). Furthermore, only 5% of those 3% were not happy with their subsequent decision to switch. We do not have comparable evidence for mobile switches, but we will consider the experience of fixed service switchers in understanding the implications of their decision as we progress our work.

### Insufficient customer consent

- 4.51 Slamming occurs where a consumer is switched to another provider without their explicit knowledge and/or consent. In the 2013 Switching Statement, we identified slamming as a possible concern with GPL processes because they may not give the LP an opportunity to speak to the consumer to ensure that they requested the switch.
- 4.52 Evidence from other countries with a GPL mobile switching process suggests that slamming is unlikely for mobile services.<sup>36</sup> This could be because a consumer must put a new SIM card into their handset in order to receive a service from a new provider. This means it is difficult for them to be unaware of the slam; the consumer effectively has to 'co-operate' (by inserting the SIM into their handset and activating it) for this to happen.

### Erroneous transfers

- 4.53 An erroneous transfer occurs when the wrong mobile telephone number is inadvertently switched. The result of an erroneous transfer is that a third party, who has not requested a switch, has their service switched instead of the consumer who has requested the switch. Erroneous transfers were a significant issue when switching fixed telephone lines on the Openreach infrastructure because CPs' systems could not always reliably identify the correct line to switch.
- 4.54 We are not aware of erroneous transfers being a problem in mobile switching and a number of respondents to the CFI expressed this view. We consider that under a GPL process it is relatively straightforward to ensure that the old provider terminates the correct account, and that the correct number is ported if required. We therefore do not consider erroneous transfers are likely to become a significant issue under GPL.

<sup>35</sup> See pages 69 and 70 of August 2013 Switching Statement: [http://stakeholders.ofcom.org.uk/binaries/consultations/consumer-switching-review/summary/Consumer\\_Switching.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/consumer-switching-review/summary/Consumer_Switching.pdf).

<sup>36</sup> See Question 21 of survey questionnaire conducted by the CEPT/ECC, *Number Portability Implementation in Europe, based on a survey of CEPT Member Countries*, 14 March 2014.

## Preliminary conclusions

- 4.55 We consider that the discussion in this section suggests that that the current processes which consumers use to switch mobile provider are likely to generate a degree of consumer harm.
- 4.56 The evidence we currently have suggests that, although consumers generally at first recall positive experiences of switching mobile provider, a significant number of both switchers and considerers experience issues which appear to arise at least partly as a result of the switching processes. This suggests that there is room for improvement. For those who have not switched, the perception of a difficult process can inhibit their decision to engage or switch.
- 4.57 We note from the responses to our CFI that respondents' views vary on the extent to which current switching processes deliver a positive experience for consumers, protecting their interests, and contributing to a well-functioning competitive mobile market. Some respondents argued that present processes work better than hypothetical alternatives. Others stressed the advantages of GPL models.
- 4.58 As discussed in more detail in Section 5, any proposal to change the switching process for mobile services needs to consider both the extent to which this could improve the current consumer position, and the implementation and any running costs of alternative solutions. Overall we consider that it is worth investigating further whether GPL or alternative switching processes may deliver better outcomes for consumers. As noted above, we are currently gathering further evidence on these issues, and will publish findings in spring 2016.

## Consultation questions

*Q1 Do you agree that current mobile switching processes impair the consumer switching experience through increased switching costs, coordination difficulties, loss of service, uncertainty of porting status or risks of unwanted save activity? What benefits do current processes deliver which would be difficult to achieve through alternative processes?*

*Q2 What advantages and disadvantages could GPL switching processes offer, compared to current mobile switching processes? In particular, how important is it to make it easier for consumers to switch without being required to speak to their current provider?*

## Section 5

# Options for mobile process reforms

## Introduction

- 5.1 In section 4, we described how the process that a consumer must follow in order to switch their mobile service provider depends on whether or not they wish to retain, or 'port', their current mobile phone number.
- A switch which includes a number port requires the customer to obtain a PAC from their current provider (the LP) and give this to their new provider (the GP), who initiates the transfer. We call this a 'losing provider led' ('LPL') process, which is sometimes also known as 'donor led'.
  - A switch without a port requires the customer to organise the stop and start of the old and new service themselves. We refer to this as a 'Cease and Re-provide' ('C&R') arrangement.
- 5.2 We identified a number of issues which can affect consumers who switch. We expressed our provisional view that existing LPL PAC and C&R mobile switching processes create harm for consumers, particularly in terms of the difficulty of the process, unnecessary switching costs and discontinuity of service. We set out evidence which suggested that GPL processes tend to perform better on these issues and that they are better at supporting competition. In addition, we stated that slamming and erroneous transfers do not appear to be significant issues in mobile switching under either process. However, we also noted that, without mitigating protection measures, GPL can have downsides in terms of lower consumer awareness of switching implications.
- 5.3 In this section, we describe at a high level two possible approaches to improving existing mobile switching processes. These are:
- Simplifying / automating the process for obtaining a PAC.
  - Putting in place a GPL process.
- 5.4 We set out the reasons why we think these could perform better than the existing LPL PAC and C&R processes against the consumer harm factors and competition concerns identified above. We also set out the consumer protection challenges which must be considered when designing a functional specification for these processes.
- 5.5 We have not at this stage carried out detailed assessments of the relative costs and benefits of these options, as we are still at a relatively early stage of our analysis. We recognise that any process reforms we decide to pursue would need to be proportionate to the harm they are expected to address, and we propose to collect further evidence, in part through this consultation, to make such an assessment. In order to progress this, we have undertaken some initial thinking on the likely implementation and operational costs of adopting the two processes we have suggested. Our approach has been to build on existing systems and processes where possible, in order to minimise costs. We therefore expect our estimates to be at the lower end of costs for reforms.

- 5.6 We consider it useful to start a discussion now with stakeholders about the ability of these possible reforms to address the concerns we have identified with current processes, and with the likely required changes and costs of these alternatives. Given that the UK mobile operators all have a presence in other countries where GPL processes prevail, it is likely that they will have experience of supporting and operating alternative processes. We are also interested in others' views and evidence. This, together with the further evidence on the consumer experience of switching that we are collecting, will help us to decide whether in our view these options are proportionate. We expect to have completed our analysis on this at the start of 2016.
- 5.7 In addition we are continuing our discussions with mobile providers and other stakeholders on the possibility of voluntary reform. We will keep our project plans under review as these discussions progress.
- 5.8 We recognise that there may be other ways to improve current switching processes and address the issues we have identified. We welcome suggestions on these.

## Options for process reform

- 5.9 One approach to addressing the issues we have identified with the current LPL and C&R processes could be stronger enforcement of existing regulatory requirements. To this end, in June 2015 we opened a six-month monitoring and enforcement programme, covering CPs' arrangements for contract cancellation and termination. This will address, among other things, failure to supply a PAC under the terms of the relevant regulation (i.e. GC18).
- 5.10 However, it is difficult to rely on enforcement alone where the underlying incentives work against improving the consumer experience. We consider that this is likely to be the case currently in mobile switching, where the LP has an incentive to frustrate the switch. We therefore think that we should also consider policy options and process changes with the aim of helping to remove friction in the switching experience.
- 5.11 Below we set out, at a high level, two possible process reforms which we consider could help achieve this. We assess how they could address current problems with mobile switching, and how they compare against the current LPL PAC and C&R processes. Later in this section we consider possible costs of implementing and operating these options.

### Option 1: Simplifying the process for obtaining a PAC

- 5.12 Arrangements for cancelling a mobile service and obtaining a PAC vary by provider. Regulations require that providers must allow subscribers to request a PAC over the phone. However, some providers also allow requests by letter, email, webchat, or through an online account.
- 5.13 We think that consumers could benefit from the provision of further channels for requesting and receiving a PAC, which reduce the level of engagement required with the existing provider, in addition to those currently in place. This could be achieved, for example, through the provision of an Interactive Voice Response ('IVR') phone system, or an SMS text message facility.

- 5.14 There are a number of ways to implement this. Broadly we think that the following two approaches would build on the existing processes and capabilities of the LP, the GP and the central porting system (CPS).<sup>37</sup>

**Option 1a: PAC provision through customer request to LP via IVR**

1. Customer requests PAC from LP (by IVR).
2. LP requests PAC from the CPS.
3. LP gives PAC, along with ETCs payable and other relevant information, to customer by IVR or SMS.
4. If customer wishes to proceed with switch, they provide PAC to GP.
5. Switch proceeds as under current PAC process (i.e. GP initiates port through the CPS).

**Option 1b: Centralised PAC provision through customer request to CPS via SMS**

1. Customer requests PAC directly from the CPS.<sup>38</sup>
2. CPS alerts LP of the request.
3. LP sends information on ETC liability to CPS, which texts this, plus the PAC, to the customer. (Alternatively, LP texts the ETC and CPS texts the PAC).
4. If customer wishes to proceed with switch they provide PAC to GP.
5. Switch proceeds as under current PAC process.

- 5.15 In France, an approach similar to Option 1a is used. Consumers can make a free IVR call to their current provider to obtain a PAC equivalent. The provider then verifies the customer's details without the need to speak to them, and sends a PAC immediately via SMS. This includes information on when the customer's contract is due to expire. (The customer must still contact their provider if they wish to find out the amount of any ETC payable). The customer then passes the PAC to their new provider, which initiates the port.

- 5.16 Option 1 (both 1a and 1b) could improve switching for those who port their number. It is possible that it could also be adapted for those who do not wish to port a number, although we have not set out details on this in this document. In terms of the consumer harms we have identified, we consider that this option could have the following impact relative to the status quo:

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<sup>37</sup> As mentioned in Section 3, the Central Porting System (CPS) is the system currently used to facilitate mobile number portability. It authorises, allocates and manages PACs, and allows the exchange of porting data between each operator. It is currently operated by Syniverse on behalf of all mobile operators.

<sup>38</sup> Although the central porting system is currently invisible to the consumer, we understand that its existing functionality, with some modification, would be capable of supporting this direct consumer interface. We would welcome industry views on this.

- **Consumer difficulty and unnecessary switching costs.** This approach retains two touch points for the consumer - either LP and GP, or central porting system and GP. However, we expect that it would reduce harm by reducing the time taken to obtain a PAC. It should also remove the ability of the LP to slow down or make the process more difficult (although the incentives to do this would remain). It should help alleviate the concerns that some consumers have about speaking to their LP, and reduce the risk of unwanted save activity.
- **Multiple processes.** We consider that mobile switching is likely to work better for consumers where all switches are covered by one switching process, whether or not they involve a number port. (This does not mean removing the ability of non-porting consumers to rely on C&R if they prefer this to an operator-led formal switching process. However, we consider that this should be optional, not the default simply because the consumer does not wish to port their number). Under this approach of simplifying the process for obtaining the PAC, neither the number of mobile switching processes, nor any confusion arising from this, would reduce, because it would be necessary for consumers who do not port their number to continue to use C&R.
- **Continuity of service.** This option would not affect consumers' experience in terms of loss of service as it would only modify how consumers obtain the PAC, and not change the underlying switching process.
- **Implications of switching.** This approach would need to incorporate a mechanism for ensuring that the customer seeking to switch is aware of the implications of their decision. Currently consumers can discuss issues such as contract end date and liability for ETCs, or loss of unused pre-paid credit, when they contact their provider to cancel or secure a PAC. They can also discuss other benefits associated with the service. We think that the key information could be summarised during the IVR call, or in a text message sent at the same time as the PAC. However, the information might not be as comprehensive as that provided by the LP under the status quo.
- **Slamming.** Experience from abroad does not suggest that slamming is a concern under GPL processes. However, an effective mechanism for verifying the identity of the customer and ownership of the number to be ported should be incorporated. This approach retains the PAC as a means of allowing the LP to validate a port request received by a GP. It also requires a mechanism to ensure that consumer identity, ownership of the number to be ported, and eligibility to switch are suitably validated, in order to minimise risks that switches occur without a consumer's knowledge or consent. We believe that the combination of using the Calling Line Identification (CLI)<sup>39</sup> and the International Mobile Subscriber Identity (IMSI)<sup>40</sup> stored on the SIM would provide a suitable authentication model for porting/switching, and therefore this approach should be little different to the status quo (where slamming rarely occurs).
- **Erroneous transfers.** We understand that instances of erroneous transfer in mobile switching are low. Given the underlying PAC system that supports mobile switching, we do not consider that erroneous transfers would be any more of an issue under this approach than under the status quo.

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<sup>39</sup> The CLI is the telephone number of the consumer making the IVR call or sending the SMS.

<sup>40</sup> The IMSI is stored on a SIM. This code identifies the mobile network which provides services.

- 5.17 By making it easier for consumers to obtain a PAC this option could also promote competition. In general, the more complex and cumbersome the switching process, the higher the switching costs for the consumer, which can have a dampening effect on competition between providers. However, the competition benefits of this option may be limited in scope if it is not also adapted to include those who do not wish to port their number, and if it does not additionally address the termination notice period. Furthermore, the extent to which it could reduce switching costs will depend on ensuring that the consumer also receives useful information regarding the end of their contract and ETCs payable.

### **Option 2: GPL process: centralised customer validation by customer-initiated confirmation SMS**

- 5.18 We have previously set out our ‘greenfield’ preference<sup>41</sup> for switching processes that are led by the GP. Under this approach, the consumer need only contact the GP to achieve a switch and the GP is responsible for coordinating the termination of services with the old provider. The consumer can still contact their LP if they wish to, but this is not a requirement of the process.
- 5.19 There are many possible variations of GPL mobile switching processes. The example below applies where the customer wants to keep their telephone number, but it could also be adapted for use where the customer does not keep their number.
1. Customer contacts GP to request a port.
  2. GP validates customer identity and sends request to the CPS.
  3. CPS confirms request to LP.
  4. LP provides ETCs payable and other relevant information to CPS to forward to the customer (or alternatively could text this directly to the customer).
  5. Customer makes decision to switch and sends confirmation SMS to the CPS.
  6. CPS matches GP porting approval request with the CLI and other authentication information presented in the customer confirmation SMS.
  7. Provided it finds a match, CPS confirms the porting request as initiated and validated, and sends to LP for approval and confirmation of the porting date.
- 5.20 We consider that Option 2 would reduce consumer harm relative to the status quo and the PAC simplification option in the following ways.
- **Consumer difficulty and unnecessary switching costs.** As with the status quo, consumers are likely to have two ‘touch points’ under this option - i.e. initial contact with the GP, and the subsequent confirmation text to the CPS (although this should not take long). However, they would no longer need to contact the LP unless they wished to do so, and would not need to provide a PAC to the GP. This should reduce time and hassle compared to the requirement under existing

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<sup>41</sup> See, for example, section 6 of Ofcom’s “Strategic review of consumer switching” Consultation, September 2010 at: <http://stakeholders.ofcom.org.uk/binaries/consultations/consumer-switching/summary/switching.pdf>. A ‘greenfield’ preference is one which is based on assessment of options as if starting from scratch i.e. with no legacy switching processes in place.

processes to have a phone conversation / send a letter / or have an email / online exchange, either to cancel the service or to obtain a PAC. It should also reduce the risk of unwanted save activity. This option should perform better in these respects than simplified/automated PAC option, which requires the consumer to have received the PAC, and then pass this on the GP. Furthermore, some consumers who do not currently port their number might be encouraged to under an easier process, and CPs may be incentivised to encourage this.

- **Multiple processes.** This option could be used by all consumers, whether or not they wished to port their number. It would therefore remove the multiple switching processes that currently exist and customers could still organise the transfer themselves through a C&R arrangement, if they so wished. This option would therefore also be an improvement relative to the simplified/ automated PAC option.
- **Continuity of service.** For consumers who port their number we do not anticipate that GPL would significantly reduce issues associated with loss of service. However, we note that the GP has a stronger incentive than the LP to ensure that the switch goes smoothly and that the consumer joins quickly. Some consumers who currently don't port, and therefore use a C&R arrangement should benefit, given the difficulties that sometimes arise in trying to coordinate the stop and start of services. For the same reason, GPL should also perform better than a simplified/automated PAC option.
- **Implications of switching.** As with the PAC simplification option, GPL requires a mechanism to ensure that consumers are made aware of the key implications of their decision to switch, such as ETCs payable. The GP cannot (and has weaker incentives to) provide the consumer with this information. One option could be for the LP to send it via text message upon notification by the CPS of the customer's intention to switch. Alternatively, the LP could send information to the CPS to forward to the customer. (This process could include a mechanism for the customer to confirm their intention to continue with the switch by SMS to the CPS). Provided the GPL option includes an efficient means of conveying the relevant information to the customer, it should perform as well as the simplified/automated PAC provision option. However, the information might not be as comprehensive as that provided by the LP under the status quo.
- **Slamming.** Experience from other counties does not suggest that slamming is a concern under GPL processes. However, such processes must incorporate an effective mechanism for verifying the identity of the customer and ownership of the number to be ported. Where the customer visits the retail premises of their GP this can be achieved by presenting identification credentials or bank or credit card details (as is common practice currently). Alternatively, the customer's possession of the number might be sufficient for GP validation, and confirmed via a secure SMS-based approach.
- **Erroneous transfers.** This is not a significant issue in mobile switching currently. Provided adequate verification mechanisms are in place, erroneous transfers are unlikely to become so.

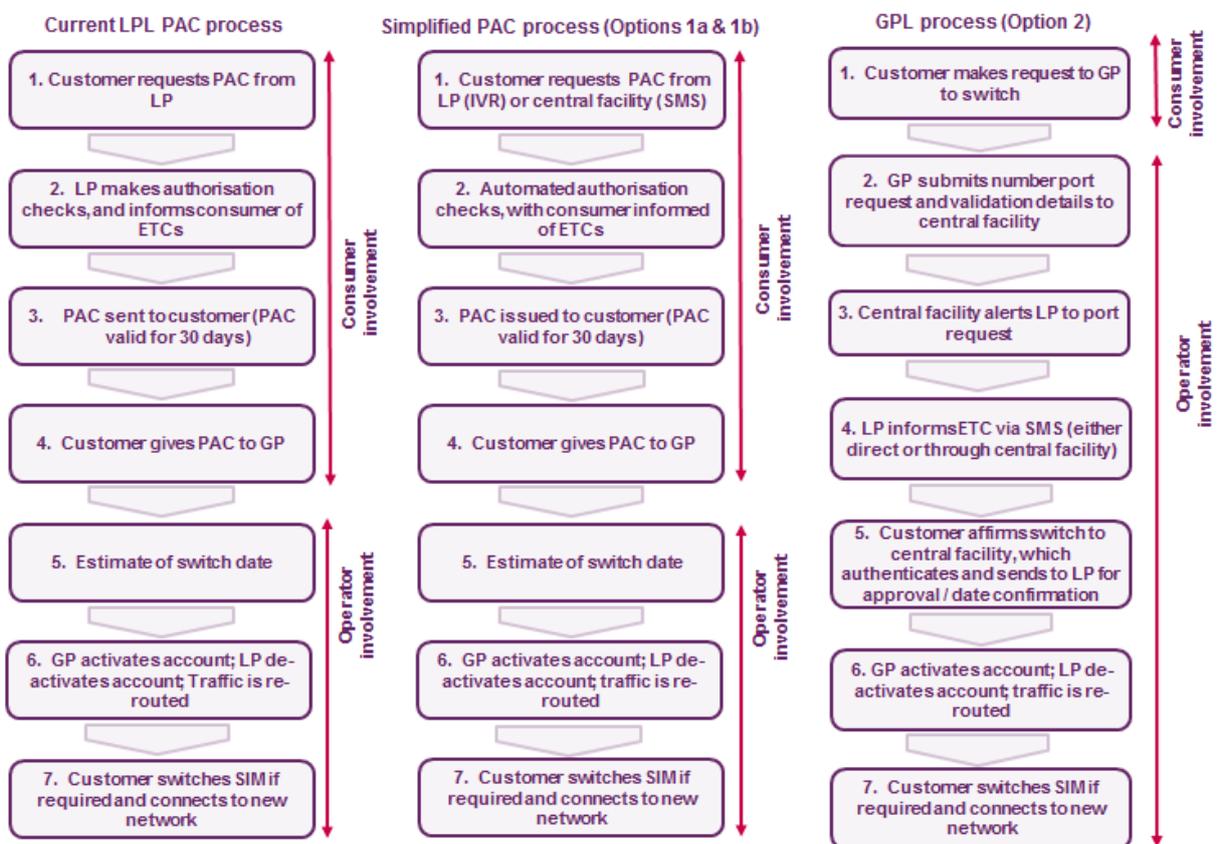
5.21 We consider that consumer switching costs would be lower under a GPL process than under current processes or a process which simplifies / automates PAC provision. All consumers who chose to use it would benefit from these lower costs. GPL could therefore also result in better competition outcomes than the simplified PAC provision option.

## Summary of the two options

5.22 Our assessment suggests that both options could reduce consumer harm and promote competition when compared to existing processes. The benefits, in terms of reduction in multiple processes, loss of service, consumers’ difficulties, unnecessary switching costs and promotion of competition, are likely to be greater under GPL than under PAC simplification. However, both options perform best with appropriate mechanisms to ensure consumers are aware of the implications of switching, and to mitigate against slamming. Furthermore, PAC simplification could turn out to be more proportionate if it addresses the majority of the harm at significantly lower cost.

5.23 Figure 10 sets out the broad features of these two options, against the current PAC process.

**Figure 10: Outline options for mobile PAC switching process**



5.24 Figure 11 summarises how the two options - simplified / automated PAC and GPL - compare against the status quo. This is a high level assessment whose purpose is to start a discussion with stakeholders on the relative merits of the options. Additional work is needed to create a more detailed specification for both options, and to understand their relative performance and the challenges they pose.

**Figure 11: Comparing current mobile switching process with Simplified PAC process (Options 1a and 1b) and GPL mobile switching process (Option 2)**

Option	Simplified PAC process (Options 1a and 1b)		GPL Process (Option 2)	
	Porting	Non-porting	Porting	Non-porting
<b>Consumer harm</b>				
<b>Multiple switching processes</b>	<b>No change</b> Multiple process would remain as consumers that do not need/wish to port must still rely on C&R.		<b>Performs better than LPL / Simplified PAC</b> GPL option allows all consumers to switch by contacting GP who organises the switch.	
<b>Consumer difficulty and unnecessary switching costs</b>	<b>Performs better than LPL</b> Would not eliminate need to contact LP but would reduce time and difficulties involved in having to speak to LP.	<b>No change</b>	<b>Performs better than LPL / Simplified PAC</b> Minimal contact required, saving time and hassle.	
<b>Continuity of service</b>	<b>No change</b>	<b>No change</b>	<b>No change</b> No change, although GP has incentive to ensure smooth switch.	<b>Better than LPL / Simplified PAC</b> Could reduce loss of service experienced under C&R.
<b>Awareness of the implications of switching</b>	<b>Little change from LPL</b> Must include mechanism to provide key information to consumer.	<b>No change</b>	<b>Little change from LPL</b> Must include mechanism to provide key information to consumer.	
<b>Slamming</b>	<b>No change</b> PAC used for verification.	<b>No change</b>	<b>No change</b> Requires GP to verify, but little evidence that slamming is material in other GPL countries. The confirmation SMS would mitigate this risk.	
<b>Promoting competition</b>				
<b>Level of switching costs</b>	<b>Performs better than LPL</b> Would reduce switching costs.	<b>No change</b>	<b>Performs better than LPL / Simplified PAC</b> Would reduce switching costs even further.	

## Potential costs of alternative options

- 5.25 We are at an early stage of considering process specifications for the alternative options considered in this section, and therefore also at an early stage in quantifying the likely costs of implementing and supporting these options. We are undertaking further assessment in this regard, including further analysis of how these options could be implemented in practice. As a result, the options we have identified have deliberately been defined only at a high level, pending multilateral engagement with the industry and responses to this consultation.
- 5.26 For each of the three options below, we have identified the key changes in the systems and operations that we consider could be needed, and associated common system and resourcing changes and cost or savings drivers that could arise.
- Option 1a: PAC provision through customer request to the LP via IVR
  - Option 1b: centralised PAC provision through customer request to CPS via SMS
  - Option 2: GPL mobile switching process: centralised customer validation using customer-initiated confirmation SMS
- 5.27 For the purpose of this initial assessment, we have assessed both incremental set-up and running costs for the CPS. We have also included a range of costs for mobile operators (the upper boundary in Figure 12, below, represents costs for a mobile network operator, and the lower boundary the costs for a larger virtual network operator). We have also suggested where the changes might lead to cost savings. For example, automation of PAC provision should lower the need for call centre operatives to deal with PAC requests.
- 5.28 We think that each of the centralised PAC/ authorisation options (Options 1b and 2) is likely to require some changes to the existing CPS in order to:
- receive PAC requests from customers by SMS (in the case of Option 1b);
  - streamline and enhance the porting process workflow and activity co-ordination between the GP and LP; and
  - communicate or update the customer on the status of their porting transaction.
- 5.29 We have assumed that all operators would configure a common short-code to enable customers to communicate/ engage with the CPS. We understand that this is common practice in other countries which use a central number porting system. Additionally, we have assumed that SMS/ IVR calls sent to or received from the CPS would be free of charge to customers but would not attract wholesale charges between the parties (i.e. the central porting short-code is designated a free number).
- 5.30 We have also assumed that the underlying CPS and interworking platforms of each individual operator would not require fundamental upgrading or replacing. Consequently, our cost assessment focuses on the incremental development/ set-up costs pertaining to the functional changes/ enhancements that each of the proposed options could deliver. We have also excluded any marketing and promotional costs involved in driving public awareness and education of the revised MNP process.

- 5.31 Our estimates are based on initial conversations with some operators. We have also taken particular account of Three’s submission to the CFI<sup>42</sup>, which included estimates for a range of potential costs involved in implementing improvements to the UK MNP process and service. Where appropriate, we have used these to validate and benchmark our own cost analysis and assessments.
- 5.32 For the operator-focused set-up and operational cost assessments, we have provided a range of potential costs which are intended to address the likely investments and operating costs that the main Mobile Network Operators (MNOs) and larger Mobile Virtual Network Operators (MVNOs) would be likely to incur.
- 5.33 We have identified a number of functional and process change elements needed to support the proposed MNP service options which we believe would be likely to result in either additional cost drivers (set-up and operation) or would generate cost savings.
- 5.34 These costs are summarised in Figure 12 and the underlying functional enhancements that drive them are detailed in Annex 6.

**Figure 12: Indicative summary of costs for options to reform mobile switching processes**

Type of reform	Option	Cost to Central Porting System		Cost to each operator		Cost Savings
		Set-Up costs	Incremental Operational Costs	Set-Up costs	Incremental Operational Costs	
Simplifying the process for obtaining the PAC	1a. PAC provision through customer request to LP via IVR	~£400K	<£100K per annum	Low - ~£500k High - ~£1500k	~£50k - £150k	~£5 per customer service PAC call
	1b. Centralised PAC provision through customer request to CPS via SMS	~£500k	<£100k per annum	Low - ~£400k High - ~£1200k	~ £50k - £130k	~£5 per customer service PAC call
Gaining Provider Led process	2. Centralised customer validation using a customer initiated confirmation SMS to CPS	~£600k	<£100k per annum	Low - ~£400k High - ~£1200k	~ £50k – £130k	~£5 per customer service PAC call

<sup>42</sup> Three’s non-confidential response to the CFI can be found here: <http://stakeholders.ofcom.org.uk/binaries/consultations/consumer-switching-cfi/responses/Three.pdf>

## Consultation questions

5.35 We are interested in the extent to which reforms, in terms of the two broad options we have set out here, might address consumer harms. We invite views on the following questions:

*Q3 To what extent do you think the two options we have identified address the drawbacks with current processes we initially identified? Are there other options we should consider?*

*Q4 What mechanisms could these processes use to ensure that consumers are adequately verified, and protected from being switched without their consent or knowledge? What mechanisms could be employed for ensuring that consumers are adequately informed about the implications of their decision to switch?*

*Q5 Do you have any comments on the indicative costs of the options we have considered in this document?*

*Q6 Do you have any other comments in relation to the matters set out in this consultation?*

## Section 6

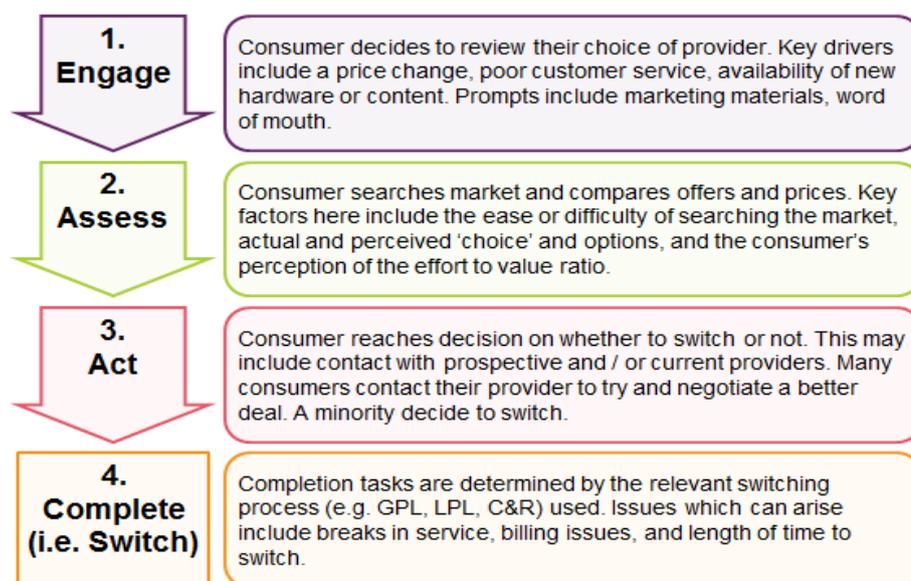
# Other switching work

## Introduction

### The consumer switching journey

- 6.1 A consumer's decision and ability to switch is influenced not only by the form and ease of the switching process but also by factors which lead them to consider their options, compare offerings, and execute a decision to switch. To help us identify, understand and assess these influences, we characterise this 'switching journey' in terms of four broad stages; i.e. 'engage', 'assess', 'act' and 'complete', as illustrated in Figure 13, below. This builds on a framework developed in conjunction with the UK Regulators Network<sup>43</sup>, and which derives from earlier work conducted by the Office of Fair Trading.<sup>44</sup>

Figure 13: The consumer switching journey



- 6.2 Section 4 discussed the impact that the switching process has on the mobile switching journey. This affects the 'act' stage, but knowledge or perceptions of switching processes may also affect consumers' willingness or ability to engage with the market and progress their switch.
- 6.3 This section focuses on other actions Ofcom is taking to improve the switching journey. In particular we are seeking to address the following issues:

<sup>43</sup> The UK Regulator's Network (UKRN) is a group that joins the UK's economic regulators to ensure effective cooperation between sectors. See: <http://www.ukrn.org.uk/wp-content/uploads/2014/12/Statement-Consumer-engagement-and-switching.pdf>

<sup>44</sup> See: [http://webarchive.nationalarchives.gov.uk/20140402142426/http://www.offt.gov.uk/shared\\_offt/economic\\_research/oft1224.pdf](http://webarchive.nationalarchives.gov.uk/20140402142426/http://www.offt.gov.uk/shared_offt/economic_research/oft1224.pdf)

- Engage: ensuring consumers are aware of when their contract ends and that they understand the implications this has.
- Assess: ensuring that consumers have access to accurate, complete and impartial data comparing provider offerings.
- Act: Ofcom has also initiated a project to review consumers' experiences of switching triple play services.
- Complete: ensuring that consumers can exit their communications contract quickly, conveniently, and without error.

6.4 We have included updates on our work in these areas in order to provide a more comprehensive account of our work to ensure that the consumer switching journey works well. However, these issues are not the subject of this current consultation. We will consult on them if appropriate at a later date.

### **Engage: awareness of contract end date**

6.5 Common reasons for consumers deciding to consider their choice of communications provider include a price rise, a home move, and poor customer service. However, a key trigger point for many consumers deciding to engage with the market happens when their contract comes up for renewal. For mobile services, awareness of the contract end date is higher than other sectors,<sup>45</sup> driven by handset upgrade opportunities. Nevertheless, a sizeable minority of mobile subscribers (1 in 10) do not know when their contract is up for renewal. Furthermore, it is possible that some consumers are not aware of the implications of continuing on a contract after the end of a fixed term. These can include continuing to pay for a handset unnecessarily.

6.6 We are examining options for improving consumer awareness of contract end and the implications of this. This might involve encouraging better use of existing tools, such as online accounts. Alternatively it might entail a requirement on CPs to notify consumers when the end of their contract period is approaching, which happens, for example, in the energy sector and for some insurance products.

6.7 We are currently undertaking consumer research to understand better the level of consumer awareness of the end date of their contract and the implications this can have. We are also examining consumer preferences for ways in which they could be alerted as to when their contract is ending.

6.8 We will analyse the results of this research before considering options for reform, and whether a regulatory intervention might be appropriate.

### **Assess: initiatives to help consumers navigate the market**

6.9 Ofcom is working on a number of initiatives to help consumers navigate the market. Mobile providers are already required to publish key information on their websites, including prices and key terms and conditions. We also regularly publish consumer

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<sup>45</sup> In the mobile market, 89% of customers say they know when their contract ends. By contrast, a lower proportion (approximately 75%) of consumers who take service bundles are aware of when their contract ends. Source: Ofcom Switching Tracker 2014:

[http://stakeholders.ofcom.org.uk/binaries/research/statistics/Switching\\_Tracker\\_2014.pdf](http://stakeholders.ofcom.org.uk/binaries/research/statistics/Switching_Tracker_2014.pdf)

guides on a range of topics, such as changing providers, managing communications costs or what to consider when thinking of signing up to a new deal.<sup>46</sup>

- 6.10 In addition, in order to help consumers make effective choices in the communications markets, in 2006 Ofcom established an accreditation scheme for price comparison websites (PCWs) that aims to provide assurance that the price comparison calculations offered by accredited companies on fixed-line, mobile, broadband and television services are accessible, accurate, up to date, transparent and comprehensive. We regularly audit accredited members to ensure that they follow our guidance, and have recently welcomed a new member, which is providing mobile price comparison services.<sup>47</sup> We also plan to engage with UKRN on work being done on online intermediaries as part of its engagement and switching project.

### **Act: review of triple play switching**

- 6.11 Ofcom has commenced a project to review consumers' experiences of switching triple play services<sup>48</sup> including landline, broadband and pay TV bundles. To inform our analysis, we have commissioned research to examine the relative nature and scale of any consumer harms. We will also explore where there are process reform options to help address any consumer difficulties identified in a proportionate way. We expect to consult on any potential improvements by early 2016.

### **Complete: arrangements for contract cancellation and termination**

- 6.12 Where GPL processes are not available, consumers who wish to switch must first contact their current provider to exit their contract. It is important that they can do this quickly, conveniently and without error.
- 6.13 Ofcom receives a large number of complaints about the difficulties experienced by consumers trying to exit their communications service contract. Taken together, these suggest that some CPs may systematically be making it difficult for customers to exit their contract. We consider that, if true, this is extremely serious, and, if sustained, may result in significant consumer harm in the market for UK communications goods and services.
- 6.14 To address these concerns, in June 2015 we opened a six-month monitoring and enforcement programme, covering CPs' arrangements for contract cancellation and termination. All regulated communications services are included within the scope of this work, which will cover, but not be limited to:
- customer service concerns, for example experiencing long call centre waiting times while trying to cancel a service;
  - difficulties in securing mobile PACs;
  - billing continuing after a contract has ended; and
  - problems unlocking handsets post-contract.

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<sup>46</sup> For instance see: <http://consumers.ofcom.org.uk/phone/mobile-phones/changing-provider/> and <http://consumers.ofcom.org.uk/phone/finding-the-right-deal/new-phone-or-broadband-contract-checklist/>

<sup>47</sup> See: <http://consumers.ofcom.org.uk/tv-radio/price-comparison/>

<sup>48</sup> This also includes dual play services switched between cable and Openreach networks.

- 6.15 Within this programme, Ofcom may initiate separate investigations of named providers. Where we do so, these will be announced via our Competition and Consumer Enforcement Bulletin.<sup>49</sup> Alternatively, we may gather evidence under this programme and take enforcement action where we have reasonable grounds for believing that a CP is contravening provisions related to contract cancellation and termination arrangements.

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<sup>49</sup> See: [http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw\\_01158/](http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01158/)

## Annex 1

# Responding to this consultation

## How to respond

- A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 6 October 2015**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at <http://stakeholders.ofcom.org.uk/consultations/mobile-switching/howtorespond/form>, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 For larger consultation responses - particularly those with supporting charts, tables or other data - please email [Consumer.Switching@ofcom.org.uk](mailto:Consumer.Switching@ofcom.org.uk) attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.
- Jasminder Oberoi  
Floor 2  
Consumer Affairs  
Riverside House  
2A Southwark Bridge Road  
London SE1 9HA
- Fax: 020 7981 3061
- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact you.

## Further information

- A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact [Consumer.Switching@ofcom.org.uk](mailto:Consumer.Switching@ofcom.org.uk).

## Confidentiality

- A1.8 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, [www.ofcom.org.uk](http://www.ofcom.org.uk), ideally on receipt. If you think your

response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.

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

## Next steps

- A1.11 Following the end of the consultation period, Ofcom intends to publish a statement in spring 2016.
- A1.12 Please note that you can register to receive free mail updates alerting you to the publications of relevant Ofcom documents. For more details please see: <http://www.ofcom.org.uk/email-updates/>

## Ofcom's consultation processes

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

Graham Howell  
Ofcom  
Riverside House  
2a Southwark Bridge Road  
London SE1 9HA

Tel: 020 7981 3601

Email [Graham.Howell@ofcom.org.uk](mailto:Graham.Howell@ofcom.org.uk)

## Annex 2

# Ofcom's consultation principles

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

### Before the consultation

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

### During the consultation

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

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

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

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

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

### After the consultation

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

## Annex 3

# Consultation response cover sheet

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

## Cover sheet for response to an Ofcom consultation

### BASIC DETAILS

Consultation title:

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	<input type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input type="checkbox"/>	If there is no separate annex, which parts?	

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

### DECLARATION

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

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

Name

Signed (if hard copy)

## Annex 4

# Consultation questions

*Q1: Do you agree that current mobile switching processes impair the consumer switching experience through increased switching costs, coordination difficulties, loss of service, uncertainty of porting status or risks of unwanted save activity? What benefits do current processes deliver which would be difficult to achieve through alternative processes?*

*Q2: What advantages and disadvantages could GPL switching processes offer, compared to current mobile switching processes? In particular, how important is it to make it easier for consumers to switch without being required to speak to their current provider?*

*Q3: To what extent do you think the two options we have identified address the drawbacks with current processes we initially identified? Are there other options we should consider?*

*Q4: What mechanisms could these processes use to ensure that consumers are adequately verified, and protected from being switched without their consent or knowledge? What mechanisms could be employed for ensuring that consumers are adequately informed about the implications of their decision to switch?*

*Q5: Do you have any comments on the indicative costs of the options we have considered in this document?*

*Q6: Do you have any other comments in relation to the matters set out in this consultation?*

## Annex 5

# Responses to Call for Inputs

- A5.1 In July 2014 Ofcom published a Call for Inputs (CFI) on consumer switching. That publication sought views from stakeholders on the impact of the processes to switch providers of bundled voice, broadband and subscription pay TV services, and mobile voice and data services, on the consumer experience of switching and competition.
- A5.2 Our CFI closed on 30 September 2014. We received 16 responses from CPs and other interested organisations, and 67 responses from individuals<sup>50</sup> regarding their experiences of switching communications services. Consumer organisation MoneySavingExpert highlighted our CFI in their campaign for the week in the first half of September 2014, which prompted many of the individual responses.
- A5.3 This annex summarises respondents' views. We begin with general comments about:
- process and legal issues;
  - switching mobile and bundled communication services; and
  - a single process for all communications services.
- A5.4 We then summarise responses to each of the four questions we asked:
- Q.1 Do you agree with our characterisation of the switching processes and practices for the networks and services in scope for this phase of work? Are there aspects of such processes that you consider have significant consequences for consumers' experiences of switching or the functioning of markets?
  - Q.2 Do you consider that the eight issues that we identified in section 4 in relation to switches on the Openreach network are relevant for the networks and services in scope for this phase of work? If so, to what extent are they relevant and why? Are there other issues we should also consider?
  - Q.3 Could the current switching processes for the networks and services in scope be modified to result in a better experience for or protection of consumers, and/or more effective competition? If so, why and how should they be modified? Are any modifications in your view available that might be implemented relatively quickly and easily? What risks and costs might be associated with these revisions or modifications?
  - Q.4 Is there anything that you consider is relevant to the switching of networks and services in scope for this phase of work that we have not set out in this document?
- A5.5 We have taken account of the responses we received in our preliminary assessment of how well current mobile processes work and our suggestions for

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<sup>50</sup> Non-confidential responses are available at:

<http://stakeholders.ofcom.org.uk/consultations/consumer-switching-cfi/?showResponses=true>

possible reforms. This consultation document does not seek to provide our definitive position on all the responses received. Nevertheless, where appropriate to the scope of issues covered in this document, we refer to some responses in sections 2 - 5. Where appropriate, we will address responses in light of new evidence following completion of consumer research.

## Process and legal issues

- A5.6 A few respondents [Virgin Media, Sky, Vodafone, EE] questioned the legal locus for Ofcom to assess present switching processes or propose revisions, arguing that it needs to distinguish between direct consumer harm and competition effects. They also noted that any intervention must be proportionate, and that the nature of any market failure, the evidence, and the evidence hurdle must be clear.
- A5.7 Some respondents [EE, Vodafone] suggested it would be preferable for Ofcom to prioritise its switching work by setting out criteria for or defining well-functioning switching processes, against which any proposals for reform would be assessed.

## Switching mobile services

- A5.8 Mobile operators (other than Three) and some other respondents [Virgin Media, Ombudsman Services] said that they generally see mobile markets and current switching processes meeting consumer expectations and enabling competition. Vodafone suggested that Ofcom's previous mobile switching reforms are now beginning to deliver consumer benefits, and that further reform is premature. EE argued that mobile switching processes should be a lower priority for Ofcom, as the requirement to use the PAC process creates a level playing field, in contrast to fixed and bundled services.
- A5.9 Some respondents [Virgin Media, EE, Vodafone] raised concerns that revising mobile switching processes could be costly and risk disrupting current effective processes. Vodafone argued that where concerns exist over specific components of the mobile switching process, targeted interventions would be more proportionate.
- A5.10 Conversely, Three and some other respondents [BT, SSE, Which?, CCP, [S<], uSwitch] argued that at least some aspects of existing mobile switching processes fail to deliver for consumers and require reform. Three said that current processes increase hassle and risk of loss of service, and that mobile number porting creates opportunities for reactive save.

## Switching bundled communication services

- A5.11 Some respondents [Sky, Virgin Media, Vodafone] argued that fixed markets (cable, pay TV) already function well in competitive terms and that switching processes are adequate. They suggested that current C&R processes have some advantages relative to a GPL alternative, such as helping to clarify the implications of a decision to switch to the consumer.
- A5.12 Some respondents cautioned that over-emphasis on switching process harmonisation could distort choice or even create barriers to switching [Virgin Media, Vodafone, Sky, EE]. Sky, for example, noted that the pay TV market is rapidly evolving and claimed that harmonised processes that apply only to the 'traditional' pay TV operators, but not to OTT ('over-the-top') providers risk distorting competition.

A5.13 Conversely, current operators on the Openreach network [BT, TalkTalk, SSE] and some consumer and other organisations [CCP, Which?, MoneySuperMarket, uSwitch, ESRC] saw a stronger case for extending GPL switching processes to cable, pay TV, and/or for bundles. Reasons included that GPL processes may be better in minimising service loss or double billing. These respondents suggested that possible drawbacks of GPL relative to other processes (informing consumers about the implications of switching, increased risks of slamming and erroneous transfers) can be addressed through targeted measures or process modifications.

## **A single switching process for all communications services**

A5.14 Some respondents [BT, SSE, CCP, Which?, Hviid, MoneySuperMarket, Ombudsman Services, uSwitch] said they saw advantages for consumers and competition in adopting a single switching process across all communications services and service bundles. Many [CCP, Which?, uSwitch] noted that a consistent process could provide a seamless switching experience and reduce consumer confusion. Some [Which?] noted these advantages in the context of the growth, or potential growth, of 'quad-play' bundles of fixed voice, broadband, pay TV and mobile services.

A5.15 Respondents who favoured a single or consistent process typically saw advantages to this being led by the gaining provider, as this means the consumer does not need to coordinate the switch with different CPs.

A5.16 However, one respondent [Vodafone] argued that harmonising switching arrangements across markets and bundles could distort consumer choice, for example by channelling them into a bundled aggregate switching process as a default.

## **Question 1: Characterisation of switching processes and practices**

A5.17 Four respondents [EE, BT, SSE, Three] explicitly noted their broad agreement with the way we characterised communications service switching processes in our Call for Inputs. Other respondents raised points of clarity or views related to our characterisation, which we set out below.

### **Classification of switching processes**

A5.18 Two respondents [Virgin Media, Sky] argued that it was important to distinguish processes for switching providers which use a single platform, such as Openreach, where service provision requires a physical switch between providers, from switching between competitive platforms. Some respondents [EE, Virgin] suggested that Ofcom's classification of switching processes into 'GPL', 'LPL' and 'Cease and Re-provide' overlooks distinctions between platforms and the fact that switching processes vary in detail.

### **Mobile services**

A5.19 Several respondents [Three, SSE, Which?, CCP, uSwitch] noted that the need to get their handsets unlocked can represent an unnecessary switching cost for consumers.

## Fixed services and bundles

- A5.20 BT said that Ofcom's description of fixed number porting arrangements between the Openreach and Virgin network as "an informal switching process" was inaccurate, given that fixed number porting is a formally agreed and documented process.
- A5.21 SSE argued that a lack of standard interfaces to enable competitors to offer services on the KCOM network results in diminished competition, and that switching processes for wholesale products on KCOM's network should be harmonised with those in place for the Openreach network.

## Question 2: Relevance to other networks of Openreach switching issues

- A5.22 Some respondents [Sky, [X]] suggested that Ofcom should identify afresh whether problems exist with current switching processes, rather than referring to previously identified issues in respect of Openreach.

### 1) Multiple processes for switching the same service / bundle of services

- A5.23 Several respondents [BT, SSE, TalkTalk, ESRC, MoneySuperMarket, uSwitch, Which?, CCP, Three] suggested that multiple switching processes or 'touch points' across different services and networks can create consumer confusion and lead to additional switching costs. Some [SSE, EE] noted that competitive distortions can arise where the same service or service bundle is subject to different switching regimes. Some [BT, uSwitch] suggested that increased adoption of quad-play bundles may compound the problem.
- A5.24 Others [Virgin, Sky] disagreed, and suggested that the existence of different processes for switching different communications services do not appear to constitute a problem for consumers.

### 2) Consumer difficulty and unnecessary switching costs

- A5.25 Several respondents [BT, SSE, ESRC, CCP, Which?, MoneySuperMarket, uSwitch] suggested that existing LPL and C&R switching processes can lead to hassle and difficulty compared to possible GPL processes. Some respondents [uSwitch, CCP] highlighted consumer problems with mobile switching using the PAC process for number porting.
- A5.26 Other respondents [Virgin Media, EE] argued that, for LPL and C&R processes, the impact on competition of additional contact with the LP is untested, and that it is necessary to consider the potential problems of a GPL approach.

### 3) Lack of consumer awareness of the implications of switching

- A5.27 Respondents broadly agreed that it is important for consumers to be informed about the implications of switching and that LPL and C&R processes, because they require the consumer to contact the LP, are likely perform better on this than GPL processes. Some [ESRC, Which? BT] called for new mechanisms or interventions to address this. BT, for example, suggested requiring the LP to issue a notification letter for switches to / from Virgin's cable network. The ESRC proposed placing the onus on the GP to ensure consumers are informed.

A5.28 Some respondents [Virgin Media, Vodafone] highlighted that contact with both the LP and the GP can help reinforce the implications of switching for the consumer and/or that in competitive markets, incentives exist for CPs to ensure that this happens.

#### **4) Insufficient customer consent and the problem of ‘slamming’**

A5.29 Some respondents [Sky, BT, ESRC] noted that GPL processes may create a greater risk of slamming than LPL or C&R, because the latter generally require some form of authentication or verification process. Virgin Media argued that slamming does not happen when the consumer leads the switching process, and both Sky and Virgin claimed that risks of slamming are low under current switching processes or technologies.

A5.30 Some respondents [BT, SSE, ESRC, CCP] therefore argued for any new GPL processes to build in additional safeguards against slamming. Two [ESRC and CCP] favoured placing incentives on the GP not to slam, e.g. requiring them to pay compensation to the consumer where a slam occurs.

A5.31 Some respondents [Three, Vodafone] noted that instances of slamming in mobile switching are currently rare, with some [Vodafone, BT] cautioning that this could change if GPL were introduced. BT noted that the issue of adequately verifying and authenticating consumer identity during a mobile switch has been addressed in other countries through use of an independent third party.

#### **5) Erroneous transfers**

A5.32 Several respondents [BT, SSE, ESRC, MoneySuperMarket, Ombudsman Services] noted that erroneous transfers could be an issue under GPL, and that measures would be required to ensure that the customer and service being transferred were correctly identified [BT], for example through the use of an independent external address reference [SSE].

A5.33 Some [Sky, Virgin, BT, MoneySuperMarket] suggested that concerns about erroneous transfers may be less relevant or significant beyond the Openreach network. Virgin, for example, argued that the current switching process for services to / from cable already protect consumer interests in this regard. Similarly, a number of respondents [EE, BT, Three] noted that ETs rarely occur under current switching processes for mobile, and two [Vodafone, Three] remarked that if they did occur the consequences for consumers would be serious.

A5.34 One respondent [EE] noted that, erroneous transfers remain a significant issue for switches on the Openreach network, Ofcom should update its research on the extent to which they currently exist in the fixed market. The associated level of harm should then be compared to the levels of other harms considered, in order to inform Ofcom’s overall switching priorities.

#### **6) Loss of service**

A5.35 Several respondents [BT, SSE, MoneySuperMarket, uSwitch, CCP, Ombudsman Services, Three] raised concerns about loss of service or double billing occurring as a result of current switching processes for both fixed and mobile services. They noted, for example, the difficulty for consumers of coordinating the cessation of the old service with the start of the new. One respondent [MoneySuperMarket] added that the fear of a loss in service might deter some consumers from switching.

- A5.36 Two respondents [ESRC, Ombudsman Services] favoured placing incentives on the GP to reduce or eliminate any loss of service where it is within the control of the GP.
- A5.37 Vodafone argued that loss of service is not a significant issue for switching in the mobile market. Two respondents [Sky, Virgin Media] said that the consumer can control start and cease times of cable and/or pay TV services, and noted that consumers can and do take multiple cable and/or pay TV services from different providers simultaneously.

## 7) Lack of platform neutrality

- A5.38 Some respondents [EE, BT, SSE, TalkTalk] suggested that differences in switching processes for the same service or bundles of services, or between platforms, give some providers a competitive advantage over others.
- A5.39 Another respondent [Virgin Media] argued that different switching processes do not necessarily create or result in a lack of competitive neutrality between platforms, but simply reflect the different underlying technologies or networks. Two [EE, BT] commented that since all mobile operators use the same process, the scope for competitive distortions was low.
- A5.40 However, two respondents [SSE, Three] said that because the PAC number porting process enables the losing provider to attempt customer retention activity, gaining providers are incentivised to encourage consumers to pursue a C&R process rather than port their mobile number. This way the GP typically gets to sign up the customer before they contact the LP to cancel. This means that a competitive distortion arises from the co-existence of two mobile switching processes.

## 8) Reactive save

- A5.41 A number of respondents [BT, Virgin Media, Sky, Vodafone] set out their overarching view that Ofcom's analyses and conclusions on the effects of reactive save on the Openreach network were flawed, adding that it would be inappropriate to draw on these conclusions for the switching processes now in scope, and/or that Ofcom needs to reconsider the issue.
- A5.42 Several respondents [EE, Sky, MoneySuperMarket, MoneySavingExpert, ESRC] argued that some consumers seek or want save deals from their existing provider, and therefore benefit directly from reactive save activity. Some [Sky, MoneySavingExpert] argued that it is important to distinguish between 'wanted' and 'unwanted' save activity, suggesting that measures can be introduced to ameliorate the effects of unwanted save activity, or that GPL processes risk removing wanted save activity.
- A5.43 Several respondents [Sky, Virgin Media, BT, MoneySavingExpert, Vodafone] doubted that reactive save would significantly impact competitive intensity or reduce overall consumer welfare. Sky and Vodafone suggested that reactive save can be an integral part of the competitive process, and that prohibiting it risked reducing competitive intensity, for example because this may dampen consumers' incentives to seek better offers. Sky also argued that the view that reactive save enables incumbent firms to retain existing customers more easily and cheaply, thereby increasing entry costs and dampening competition, was not observable in the market.

- A5.44 Some respondents [Sky, Virgin Media] suggested that Ofcom had not provided clear evidence of harm to consumers or to competition as a result of reactive save, and that we should do so.
- A5.45 Others [MoneySuperMarket, uSwitch, Which?] argued the best deals should not only be available to more active and knowledgeable consumers, as was likely where reactive save is allowed. They noted that some consumers may not welcome reactive save activity and that this could discourage vulnerable consumers from switching. Which? argued that such deals are effectively subsidised by all other consumers.
- A5.46 A number of respondents [MoneySuperMarket, Three, ESRC, SSE, uSwitch] argued that reactive save activity impedes competitive intensity. Some, for example [ESRC, Three, MoneySuperMarket], said that by allowing LPs to make targeted offers to consumers signalling their intention to switch, it raises acquisition and entry costs for other CPs and/or reduces price transparency across the market, so dampening competition..
- A5.47 Some respondents [BT, TalkTalk, Three, SSE, Vodafone] noted that asymmetries in opportunities for reactive save arising from different switching processes for the same service or service bundles can result in competitive distortions.
- A5.48 Some of these respondents [BT, TalkTalk, SSE] suggested that an asymmetric reactive save opportunity can arise for switching triple play bundles. This is because, for example, a customer switching from BT or TalkTalk to Sky follows a GPL process to switch the voice and broadband elements, and the pay TV part automatically falls away with the broadband. By contrast, a consumer switching from Sky to BT or to TalkTalk must contact Sky to cancel. Sky, however, suggested that any asymmetries arise as a result of BT and TalkTalk choosing to link their pay TV offer to their broadband offer.
- A5.49 Similarly respondents [BT and TalkTalk] noted asymmetries in relation to switching dual- and triple-play bundles between Virgin Media and CPs on Openreach's network. For example, for switches of fixed voice and broadband services from Virgin Media to BT, the Virgin Media fixed voice service is ceased when the number is ported, however the consumer must contact Virgin Media in order to cease their broadband service, which is not dependent on the fixed voice service, and the same applies for Virgin's TV service.
- A5.50 Some CPs [SSE, Three, BT, TalkTalk] argued or presented evidence that reactive save activity under present LPL or C&R switching processes reduces consumers' propensity to switch.

### **Question 3: Potential modifications of current switching processes**

#### **Overarching views**

- A5.51 Many respondents favoured some reform of current switching processes. However, some [Virgin, Vodafone] cautioned against considering change before demonstrating harm arising from existing processes or potential benefits from revised processes.
- A5.52 One respondent [SSE] called for industry-wide coordination and governance arrangements to help establish coherent switching processes across communications services, regardless of the underlying technology or network. They

described a hub/database model that they considered would allow industry to effect such switching processes and address the consumer harms Ofcom had identified.

- A5.53 Another respondent [BT] emphasised the need to be pragmatic and minimise the costs of any regulatory intervention. They suggested that an assessment of how a GPL process could be established is urgently required. They considered that a centralised industry database model may be disproportionately complex or costly.

### Mobile services

- A5.54 Two respondents [BT, Three] described how the present LPL PAC process for switching mobile provider and porting a number might be adapted to give a GPL consumer experience. They included descriptions of how drawbacks of GPL processes might be addressed (principally slamming and ensuring the consumer is aware of the implications of switching). Three suggested that the changes could be achieved “in 12-18 months, at a cost of around £1.2m (one-off) to the industry and an annual operational cost of c£325k to be shared between all industry participants.”
- A5.55 One respondent [SSE] favoured making elements of mobile services more readily separable. SSE suggested that this would help consumers mix and match services such as handsets, calls, texts, data, and the mobile number associated with the service.

### Bundled products

- A5.56 One respondent [BT] noted that further consideration would be needed for the introduction of GPL-like processes for broadband or triple play switches to or from Virgin or Sky. MoneySuperMarket suggested that switching between Virgin cable and Openreach networks might be facilitated by pooling these networks’ engineers and allowing all CPs to access this single pool, hence enabling a single engineer visit for switching.

## Question 4: other points considered relevant to the switching of networks and services in scope for Ofcom’s next stage of switching work

- A5.57 Three argued that the current PAC process for mobile number porting inhibits competition for wholesale consumers, as MVNOs are not able to port their customers’ numbers in bulk between providers. However, another respondent [3] suggested that present number porting arrangements facilitate migrations of MVNO customer bases.
- A5.58 Vodafone noted that there are no smooth regulated migration solutions available to business consumers, who presently have a number of practical difficulties transferring communications product sets between providers. It called on Ofcom to review these issues with a view to promoting effective competition in this market sector. The CCP highlighted its research that microbusinesses may be inhibited from switching because of inflexible contracts or fears of disruptions to service.
- A5.59 A number of respondents [SSE, Ombudsman Services] favoured further discussion or analysis of the extent, cause and effects on consumers of erroneous transfers occurring for switches on the Openreach network. One respondent [SSE] called for

further assessment of the work being undertaken on the accuracy of the Openreach database and the recently introduced MPF helpline.

- A5.60 Some respondents [SSE, uSwitch, Which?] suggested that Fibre-to-the-Premises (FTTP) services should be within the scope of Ofcom's next stage of switching work, while Which? suggested including wireless broadband services.
- A5.61 A number of respondents representing consumer interests [MoneySavingExpert, MoneySuperMarket, Which?, CCP] suggested that Ofcom should consider switching issues beyond those associated purely with switching processes, including:
- initiatives to help consumers make better switching decisions, for example improved information standards on price comparison websites;
  - CPs notifying consumers when contracts expire, to facilitate engagement;
  - action on the veracity of broadband speed advertising and promotion;
  - customer services improvements, e.g. to help consumers cancel contracts; and
  - measures to facilitate email address portability.
- A5.62 SSE suggested that Ofcom's further stage of work on switching processes should take into account issues arising during our implementation of harmonised GPL NoT switching processes on the Openreach network. They highlighted the question of 'Reseller Identification Codes' (RIDs) as an example.

### **Individual responses**

- A5.63 Most of the 67 responses received from individuals concerned fixed voice, broadband and pay TV services delivered over the Openreach network. Some related to switches of fixed voice, broadband and/or pay TV to or from Virgin's cable network or to or from Sky for pay TV or pay TV bundles. In almost half of these accounts, respondents had experienced poor customer service when trying to exit their contract, switch, or remedy other problems. Double billing and loss of service were also frequently mentioned. Six individuals, all of whom had switched a dual play voice and broadband bundle, mentioned that it had gone well.

## Annex 6

# Estimated costs

A6.1 We recognise that all providers have invested in their various business processes, IT systems, training, and have funded the Central Porting System (currently managed by Syniverse) to provide the functionality to support the current LPL PAC process. As such, we have set out in this document alternative ways for the consumer switching experience to be enhanced, which build on those existing processes, with the aim of minimising major new investment requirements.

A6.2 To recap, the options considered in Section 5 are:

- Option 1a: PAC provision through customer request to LP via IVR – a customer requests a PAC from their LP using an IVR system.
- Option 1b: Centralised PAC provision through customer request to CPS via SMS – a customer requests a PAC from the CPS by sending an SMS.
- Option 2: GPL process: centralised customer validation using customer's confirmation SMS. The GP initiates a porting request to the CPS and customer sends SMS confirming their intention to switch to the CPS - which it uses to validate the customer.

A6.3 These options would require a level of change to existing business processes and their associated systems. In this annex, for each option we provide an illustration of the steps in the process, set out where we see process and system changes being required, and provide an estimate of the cost elements and potential cost savings. These estimates will be further expanded and refined as we move forward with the process, having received feedback from stakeholders.

A6.4 The parties involved in the processes are:

- Customer
- Gaining Provider (GP)
- Losing Provider (LP)
- Central Porting System (CPS)
- Block Operator<sup>51</sup>
- Short Messaging Service Centre (SMSC)<sup>52</sup>

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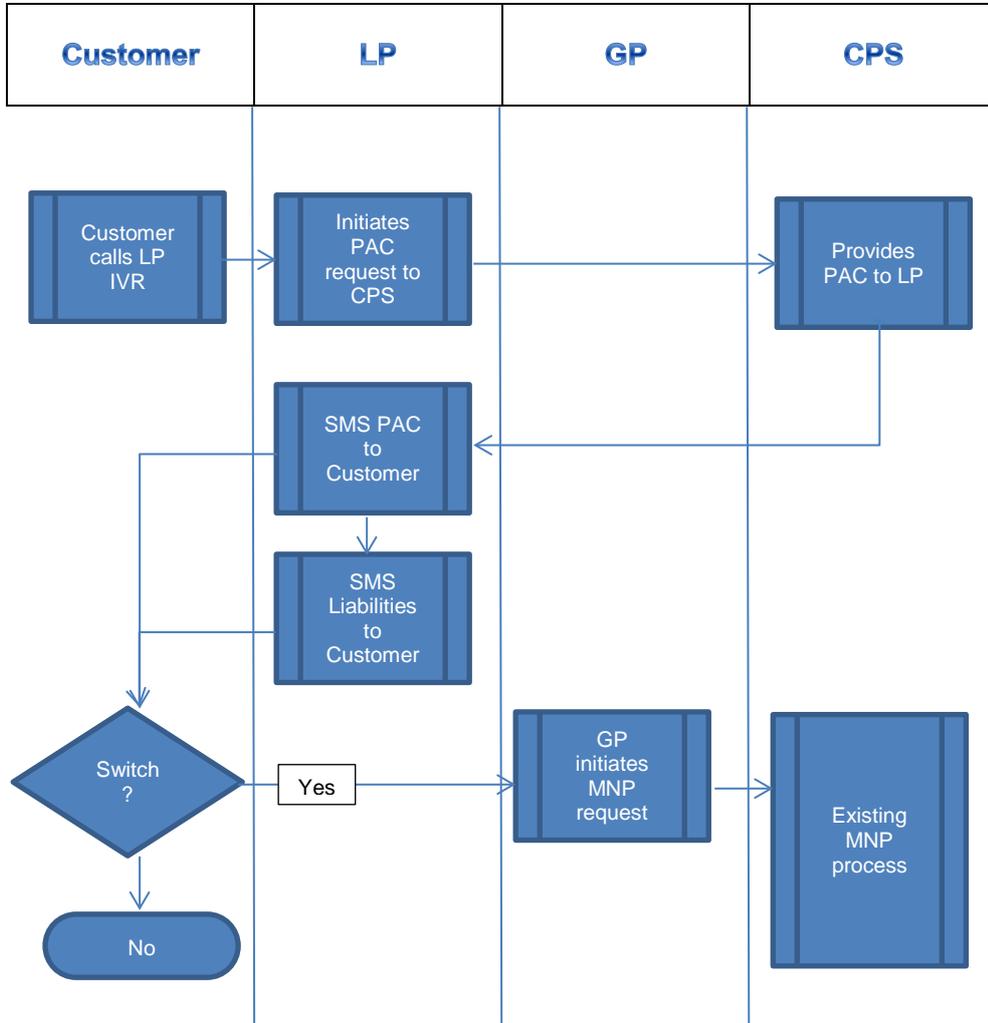
<sup>51</sup> The operator who was originally allocated a block of telephone numbers and who is responsible for enabling onwards routing for all numbers which have been ported from the block.

<sup>52</sup> SMSC is the mobile network functionality to manage all SMSs received by a particular network operator.

## Option 1a: PAC provision through customer request to LP via IVR

Figure 14 illustrates how Option 1a could work.

Figure14: Option 1a - customer requests PAC from LP via IVR



### **Suggested process step changes required for Option 1a - requesting a PAC via IVR**

1. Customer calls the LP's IVR and requests a PAC (providing key details for authentication/validation process);
2. Validation of the IVR call made by the customer to the LP;
3. LP to automatically generate a request to CPS for a PAC;
4. CPS generates a unique PAC back to the LP;
5. LP sends an SMS containing the PAC to the customer;
6. LP also generates and delivers an SMS to the customer advising them of any liabilities, etc. that will be incurred by terminating their contract; and
7. When the GP is provided with the customer PAC, the automated processing and co-ordination of the porting process between the GP and LP - CPS & GP/LP/ Block Operator is as current procedures.

### **Estimated cost elements and savings for Option 1a - requesting a PAC via IVR**

#### **Costs for the CPS**

##### *Set-up Cost Elements*

1. Software development to automatically generate PAC on receipt of automated request from LP.
2. Set-up and integrate SMSC to send PAC to customer.
3. Software development to streamline and automate the co-ordination of the porting process between GP and LP:
  - i. Sending of porting approval request to LP;
  - ii. Issuing of number activation request to GP;
  - iii. Issuing of number activation request to LP;
  - iv. Issuing of routing update change to Block Operator;
  - v. Receipt of porting process response messages from GP, LP and Block Operator; and
  - vi. Enhancement to reporting and service management functions.

Estimated Total Set-Up Costs = ~£400k

##### *Incremental Operating Cost Elements*

1. Updated support costs for the integrated SMSC infrastructure
2. Updated support costs for streamlined automated co-ordination of the porting process).

Estimated Incremental Operating Costs = <~£100k/annum

##### *Cost Savings*

None

## Costs for Operator's MNP systems

These set-up changes would need to be carried out by all providers as portability impacts each of them as an LP, a GP and possibly a Block Operator.

### *Set-up Cost Elements*

1. Develop and deploy automated IVR platform capability.
2. Develop integrated functionality to automatically generate final bill or statement showing the customer liability and deliver to the customer via SMS.
3. CRM system software development to automate the key porting process activities in response to streamlined and centralised requests from the CPS. We have assumed all operators will be required to invest in supporting automated MNP process activities:
  - i. Validating porting out requests and sending porting approval responses;
  - ii. Activating ported in numbers and sending number activation response;
  - iii. De-activating ported out numbers and sending number de-activation response; and
  - iv. Changing call routing parameters from LP to GP and finally issuing a routing update completed message – Block Operator.

Estimated Total Set-Up Costs = ~£500k to ~£1500K

### *Incremental Operating Cost Elements:*

1. Additional support costs of IVR validation platform;
2. Updated support costs for the integrated SMSC infrastructure and customer notification functionality; and
3. Updated support costs for streamlined automated co-ordination of the porting process.

Estimated Incremental Operating Costs = <~£50k/annum to ~£150K/annum

### *Estimated Cost Savings*

Elimination of responding to PAC request calls from customers, including validation of customer identification, their/ number ownership, and requesting the PAC from the CPS and subsequently sending the PAC to the customer by SMS, letter or email.

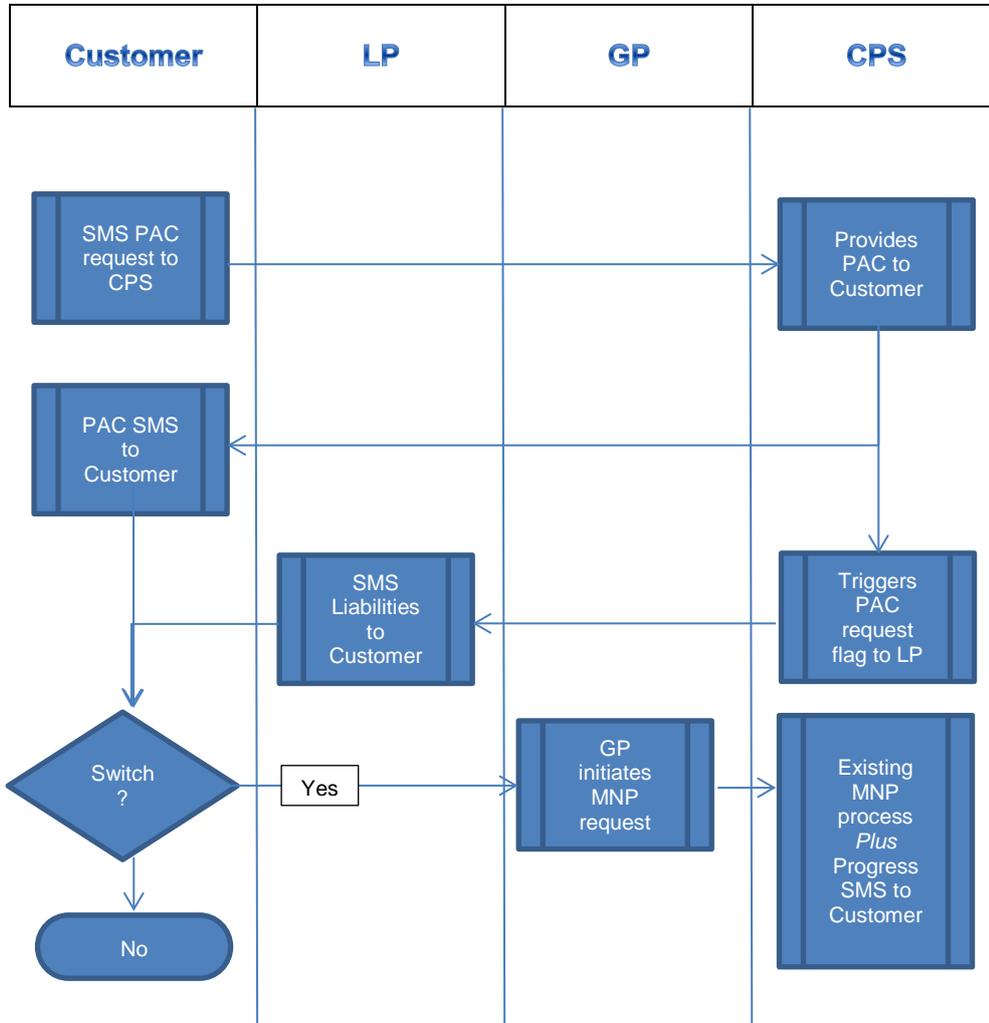
### *Assumptions*

- Each PAC request call requires 15 minutes customer service agent resource to process.
- Average customer service agent cost per hour = £20.
- Estimated average customer service agent cost per PAC request = £5.

## Option 1b: Centralised PAC provision through customer request to Central Porting System via SMS

Figure 15 illustrates how Option 1b could work.

Figure 15: Option 1b - customer requests PAC from CPS via SMS



### **Suggested process step changes for Option 1b - requesting a PAC via SMS**

1. Customer sends PAC request (includes current provider details) via SMS to CPS;
2. CPS automatically generates the PAC;
3. CPS delivers the PAC by SMS to the customer using CLI;
4. PAC request triggers message from CPS to LP;
5. LP then automatically generates an SMS advising liabilities to the customer;
6. CPS is enabled to send customer an SMS containing a progress update; and
7. Once the GP initiates the port request, the current automated processing and co-ordination of the porting process between the GP and LP – CPS & GP/LP/ Block Operator is carried out.

### **Estimated cost elements and savings for Option 1b - requesting a PAC via SMS**

#### **Costs for the CPS**

##### *Set-up Cost Elements*

1. Software development to automatically generate PAC on receipt of automated request from LP;
2. Set-up and integrate SMSC to send PAC and progress updates to customer; and
3. Software development to streamline and automate the co-ordination of the porting process between GP and LP.
  - i. Sending of porting approval request to LP;
  - ii. Issuing of number activation request to GP;
  - iii. Issuing of number activation request to LP;
  - iv. Issuing of routing update change to Block Operator;
  - v. Receipt of porting process response messages from GP, LP and Block Operator; and
  - vi. Enhancement to reporting and service management functions.

Estimated Total Set-Up Costs = ~£500k

##### *Estimated incremental Operating Cost Elements*

1. Updated support costs for the integrated SMSC infrastructure; and
2. Updated support costs for streamlined automated co-ordination of the porting process.

Estimated Incremental Operating Costs = <~£100k/annum

##### *Cost Savings*

None

## Costs for operator MNP systems

### *Set-up Costs*

1. Develop automated, integrated, real-time final bill/ liability assessment and deliver to customer via SMS; and
2. CRM system software development to automate the key porting process activities in response from streamlined and centralised requests from the CPS. We have assumed all operators will be required to invest in supporting automated MNP process activities:
  - i. Validating porting out requests and sending porting approval responses;
  - ii. Activating ported in numbers and sending number activation response;
  - iii. De-activating ported out numbers and sending number de-activation response; and
  - iv. Changing routing parameters to GP and issuing a routing update completed message.

Estimated Total Set-Up Costs = ~£400k to ~£1200K

### *Incremental Operating Cost Elements*

1. Updated support costs for the integrated SMSC infrastructure and customer notification functionality – LP role; and
2. Updated support costs for streamlined automated co-ordination of the porting process.

Estimated Incremental Operating Costs = <~£50k/annum to ~£150K/annum

### *Estimated Cost Savings*

Elimination of responding to PAC request calls from customers including validation of customer identification, their/ number ownership, and requesting the PAC from the CPS and subsequently sending the PAC to the customer by SMS, letter or email.

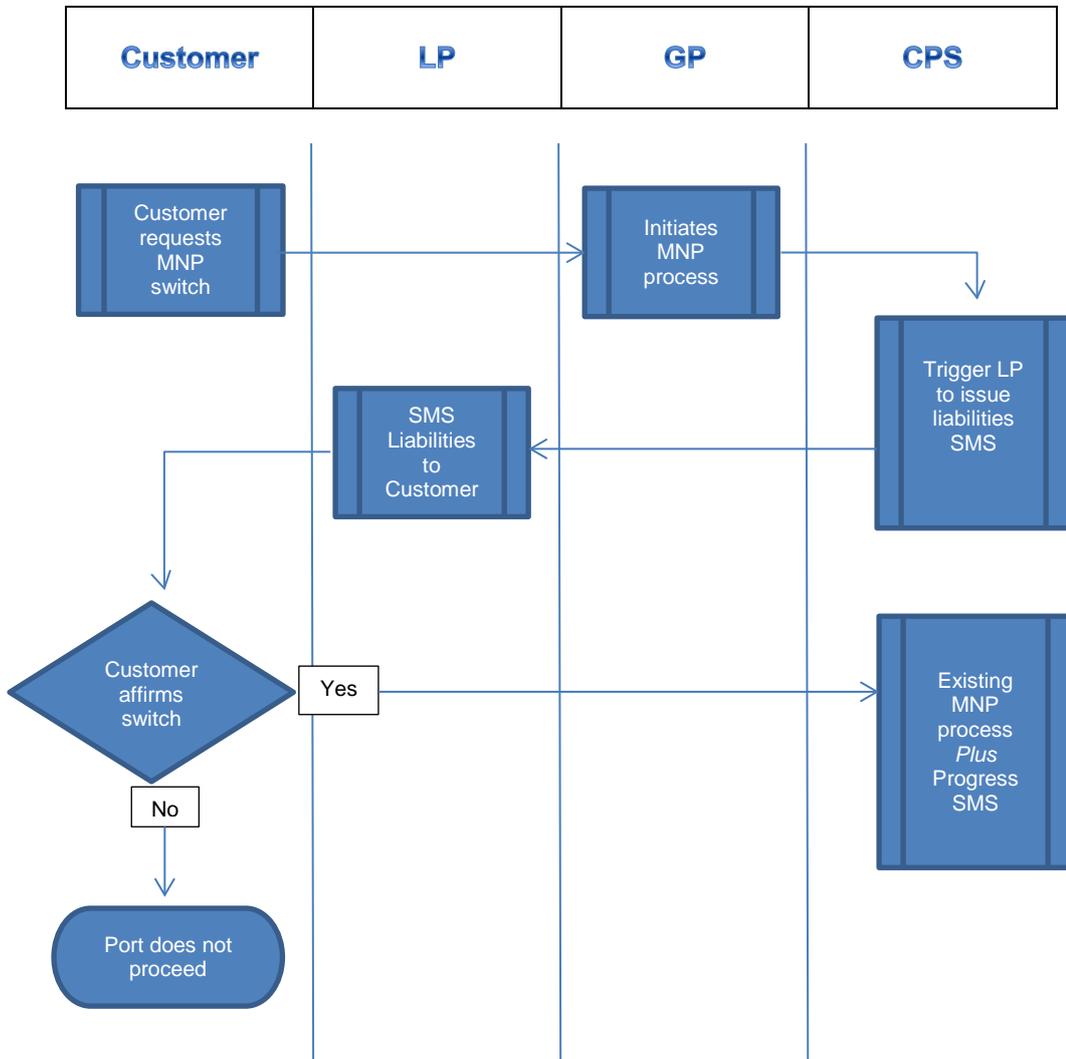
### *Assumptions*

- Each PAC request call requires 15 minutes customer service agent resource to process.
- Average customer service agent cost per hour = £20.
- Estimated average customer service agent cost per PAC request = £5.

## Option 2: GPL mobile switching process: centralised customer validation using customer-initiated confirmation SMS

Figure 16 illustrates how Option 2 could work.

Figure 16: Option 2: GPL process - CPS validates customer by their confirmation SMS



### **Suggested process step changes for Option 2: GPL mobile switching process**

1. Customer contacts GP to commence port request;
2. Customer sends SMS directly to the CPS confirming that they wish to switch;
3. GP initiates the porting request to the CPS;
4. CPS automatically validates the GP porting request against the customer confirmation SMS;
5. CPS automatically triggers a message to the LP;
6. LP automatically delivers a SMS to customer advising them of liabilities/ETCs;
7. CPS delivers progress update by SMS to customer; and
8. Current automated processing and co-ordination of porting process between the GP and LP – CPS & GP/LP/ Block Operator takes place:
  - i. Receipt of porting approval request from the LP;
  - ii. Issuing of number activation request to GP;
  - iii. Issuing of number activation request to LP;
  - iv. Issuing of routing update change to Block Operator; and
  - v. Receipt of porting process response messages from GP, LP and Block Operator.

### **Estimated cost elements and savings for Option 2: GPL mobile switching process**

#### **Costs for CPS**

##### *Set-up Cost Elements*

1. Set-Up & integrate SMSC to receive customer validation SMS and progress updates to customer; and
2. Software development to streamline and automate the co-ordination of the porting process between GP and LP.
  - i. Matching and validation of customer SMS with GP porting requests;
  - ii. Sending of porting approval request to LP;
  - iii. Issuing of number activation request to GP;
  - iv. Issuing of number activation request to LP;
  - v. Issuing of routing update change to Block Operator;
  - vi. Receipt of porting process response messages from GP, LP and Block Operator; and
  - vii. Enhancement to reporting and service management functions.

Estimated Total Set-Up Costs = £600k

##### *Incremental Operating Cost Elements*

1. Updated support costs for the integrated SMSC infrastructure; and
2. Updated support costs for streamlined automated co-ordination of the porting process.

Estimated Incremental Operating Costs = <~£100k/annum

##### *Cost Savings*

None

## Costs for operator MNP interworking systems

### *Set-up Cost Elements*

1. Develop automated integrated real-time final bill/ liability assessment and deliver to customer via SMS; and
2. CRM system software development to automate the key porting process activities in response from streamlined and centralised requests from the central porting system.  
Note: We have assumed all operators will be required to invest in supporting automated MNP process activities, either acting in the GP or LP role.
  - i. Validating porting out requests and sending of porting approval responses;
  - ii. Activating ported in numbers and sending of number activation response;
  - iii. De-activating ported out numbers and sending of number de-activation response; and
  - iv. Changing routing parameters from LP to GP and issuing of routing update completed message.

Estimated Total Set-Up Costs = ~£400k to ~£1200K

### *Incremental Operating Cost Elements*

1. Updated support costs for the integrated SMSC infrastructure and customer notification functionality – LP role; and
2. Updated support costs for streamlined automated co-ordination of the porting process.

Estimated Incremental Operating Costs = <~£50k/annum to ~£130K/annum

### *Estimated Cost Savings*

Elimination of responding to PAC request calls from customers - validation of customer identification/ number ownership, requesting PAC and sending PAC by SMS to the customer.

### *Assumptions*

- Each PAC request call requires 15 minutes customer service agent resource to process.
- Average customer service agent cost per hour = £20.
- Estimated average customer service agent cost per PAC request = £5.

## Annex 7

# Glossary

**Act** - The Communications Act 2003.

**Block Operator:** The operator who was originally allocated a block of telephone numbers and who has the responsibility to enable the onwards routing of calls for all numbers which have been ported from the block.

**Calling Line Identification (CLI):** The information passed from the telephone number of the user making a call to the person receiving the call. It is sometimes referred to as the 'Caller ID'.

**Cease and Re-provide (C&R):** A switching process in circumstances where the consumer does not wish to port their mobile number. Under C&R, the consumer ceases the contract and service with their LP and separately organises the new service and contract with their GP.

**Central Porting System (CPS):** a central system to facilitate the process of switching when the customer wishes to retain (port) their telephone number.

**Communications Provider (CP):** A person who provides an Electronic Communications Network or provides an Electronic Communications Service, as defined in the Communications Act 2003. The terms 'communications provider' and 'provider' are used interchangeably throughout this document.

**Considerer:** A consumer who has considered switching their provider in the last year but subsequently decided not to.

**Donor Operator/Provider:** the operator/provider that the customer is switching away from, i.e. the customer's current provider, also known as the Losing Provider (LP).

**Early Termination Charge (ETC):** A charge that may be payable by a consumer for the termination of a contract before the end of any minimum contract period (or subsequent minimum contract period).

**Erroneous Transfers:** These arise where the wrong asset (e.g. mobile phone number) is inadvertently switched.

**Gaining provider (GP):** the Provider to whom the customer is transferring (i.e. the customer's new provider). Also known as the Recipient Operator/Provider.

**Gaining provider Led (GPL) Process:** where the customer contacts their (new) Gaining Provider to switch. The Gaining Provider informs the (current) Losing Provider on behalf of the customer in order to organise the transfer.

**Gaining Provider Led Notification of Transfer (GPL NoT) process:** A GPL process where the GP informs the LP on behalf of the consumer in order to organise the transfer. The consumer receives letters from both Providers confirming the planned switch before it happens. This provides an opportunity for the consumer to stop the order going ahead where they change their mind, or in cases where they have no knowledge or have not given their consent to the attempted switch.

**Interactive Voice Response (IVR):** a technology that allows a computer to interact with a human's voice.

**International Mobile Subscriber Identity (IMSI):** the unique identification stored on a SIM that identifies the mobile network providing mobile services to the user of the SIM.

**Losing Provider (LP):** the provider that the customer is switching away from, i.e. the customer's current provider, also known as the Donor Operator or Donor Provider.

**Losing Provider Led (LPL) Process:** where the consumer contacts their losing provider (i.e. their current provider) in order to switch. Also known as a 'donor-led' process.

**Mobile Network Operator (MNO):** a provider which owns a cellular mobile network.

**Mobile Number Portability (MNP):** the process that allows a mobile phone user to retain their mobile telephone number when they switch mobile communications provider.

**Mobile Virtual Network Operator (MVNO):** An MVNO provides services using the infrastructure of an MNO.

**Onwards routing:** the routing of a call to another mobile network where the telephone number, originally allocated to the Block Operator, has been ported.

**Openreach:** BT's access services division.

**Porting:** where a consumer keeps their telephone number when they switch providers.

**Porting Authorisation Code (PAC):** a unique code that the customer needs to obtain from their current provider in order to switch their mobile service. The PAC signifies that the Losing Provider is satisfied that the customer is entitled to port their mobile number to another mobile provider.

**Recipient Operator/Provider:** the operator/provider to whom the customer is transferring, also known as the Gaining Provider (GP).

**Slamming:** This occurs where consumers are switched to another provider without their consent.

**Subscriber Identity Module (SIM):** a special integrated circuit stored on a circuit card and inserted into a mobile handset. The SIM card contains a unique serial number, the IMSI for the issuing mobile network operator and other network specific information. The subscriber number is linked to the SIM card at the operator's network. The SIM card is also designed to hold other data such as customer's personal directory, SMS (text) messages, etc.

**Switcher:** A consumer who has switched their provider in the last year.