



Consumer Switching

Proposals to reform switching of mobile communications services

Consultation

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1 June 2016

About this document

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

This document sets out our view on the harm which consumers currently experience when they switch or consider switching mobile provider. It sets out detailed reform options to address this harm, taking account of responses to our July 2015 mobile switching consultation, and additional evidence we have gathered since then.

We invite comments on our proposals from all interested parties.

Contents

Section		Page
1	Summary	4
2	Introduction and legal framework	9
3	Current mobile switching processes	15
4	Switching processes and consumer harm	19
5	Options for reform	29
6	Option assessment	46
Annex		Page
1	Responding to this consultation	67
2	Ofcom's consultation principles	69
3	Consultation response cover sheet	70
4	Consultation questions	72
5	Glossary and abbreviations	73

Section 1

Summary

Introduction

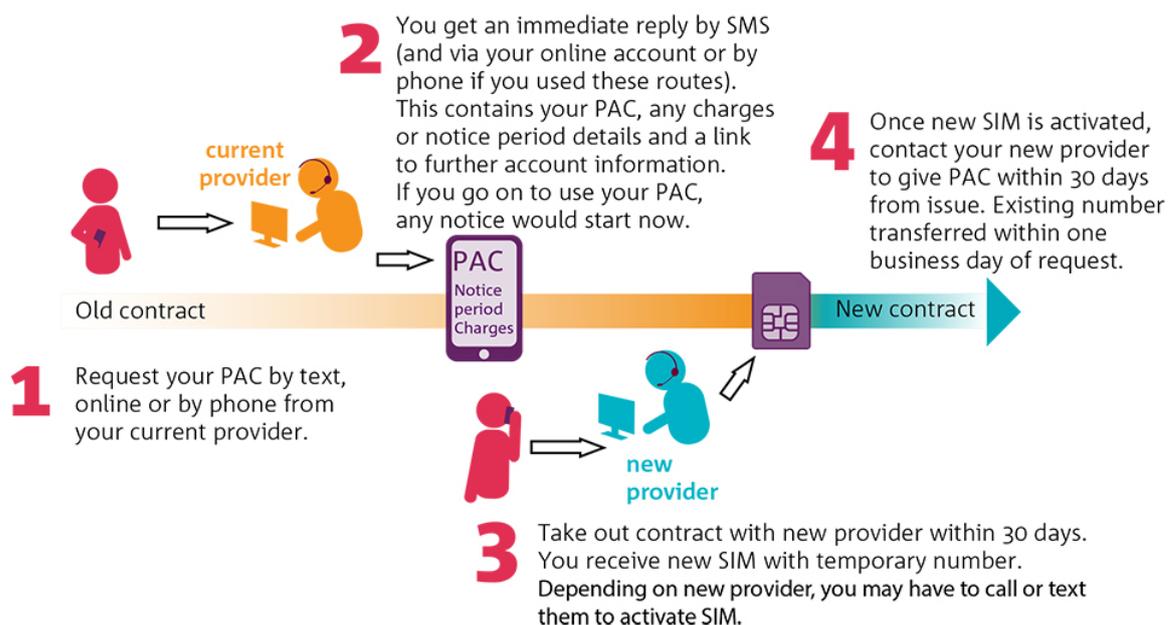
- 1.1 It is important that consumers can switch provider quickly and easily to help them exercise choice and take advantage of competition in the communications sector. Smooth switching processes in turn encourage competition for the provision of good value, high quality and innovative services.
- 1.2 We think that while consumers considering a switch should be free to talk to their current provider (the 'losing provider'), this should not be a requirement for the switch to proceed. We think switching tends to work best when it is led by the provider that the customer wishes to join ('gaining provider led' switching - 'GPL'). Gaining providers generally have incentives to ensure that the switch goes smoothly.
- 1.3 Currently, consumers who wish to switch and keep ('port') their mobile phone number must request a Porting Authorisation Code ('PAC') from the losing provider and give this to the gaining provider, who then arranges the port. This is the last losing provider led ('LPL') switching process in the UK communications sector. Most other countries employ GPL switching for mobile services.
- 1.4 Consumers who want to switch but don't want to port their number must contact the losing provider to cancel their old service, and arrange the start of the new service with the gaining provider. We call this a 'cease and re-provide' ('C&R') process.
- 1.5 When asked whether the PAC and C&R processes were easy, the initial response of 78% of consumers who changed their provider in the past 18 months was that they were. However, when prompted, 38% (2.5m people over 18 months) said they experienced at least one major difficulty, while 70% (4.6m people) cited a minor difficulty. Specifically:
 - Twenty-two per cent (1.4 million people) cited difficulties related to the need to speak to their current provider, including difficulties contacting the provider, cancelling the previous service, keeping a phone number or getting the required information.
 - Other difficulties related to coordination. Getting the switch to happen on the date they wanted was a major issue for 8% (0.5 million people), while around 20% (1.3m people) experienced some loss of service during the switch under both the PAC and C&R processes.
 - Process concerns were major reasons not to switch for 37% (0.7 million people) of those who had been actively considering a switch. These included perceptions that the process is too time consuming, concerns about loss of service and difficulties relating to the need to speak to the losing provider.
 - In addition, 15% of inactive consumers (around 5.9m people) said that process concerns were the main reason they didn't switch or consider switching.

- 1.6 We have provisionally concluded that the existing PAC and C&R processes give rise to harm for a sizeable minority of mobile switchers and deter some people from switching. This harm can be grouped into three categories:
- 1.6.1 Time and hassle to progress the switch, in particular as a result of the need to contact the existing provider to request a PAC and/or cancel;
 - 1.6.2 Risks of loss of service while switching provider, because the consumer must coordinate the switch and/or because technical difficulties arise; and
 - 1.6.3 Risks of 'double paying' while switching provider, including owing to operators' requirements for consumers to serve notice periods when cancelling a mobile service.

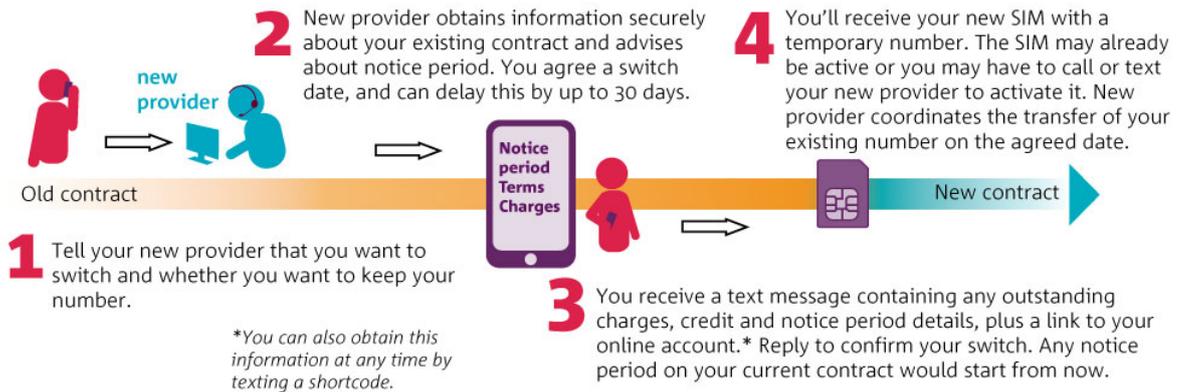
Options for making mobile switching quicker and easier

- 1.7 In light of the above, we think reform is necessary to protect consumers by addressing the harms we have identified and to create a better experience for switchers and would-be switchers. In doing so, it is important to ensure that barriers to switching are minimised, in order to help drive competition.
- 1.8 This document sets out two core proposals for improving the mobile switching process. We provide detail in section 5, but in summary the proposals are:

Option 1: Automated PAC process. Under this proposal, consumers can request a PAC by SMS (text message), or through their online account with their provider, or over the phone. They no longer need to speak to the losing provider, but can if they wish. They receive the PAC by return SMS (and via their online account or phone, if they requested it using these routes). At the same time, they receive information relevant to their switching decision, such as early termination charges and notice periods. The consumer then passes the PAC to their new provider, who arranges the switch with their old provider. This process is illustrated below.



Option 2: Gaining Provider Led ('GPL') process. Under this proposal, consumers contact the provider they want to join. The gaining provider arranges for them to be sent an SMS containing information relevant to their switching decision, such as early termination charges and notice periods. The consumer gives their consent to go ahead with the switch by replying to this SMS. Once this has happened, the gaining provider coordinates the switch and provides a new SIM card. This arrangement entirely removes the need for contact with the losing provider. This process is illustrated below.



1.9 Under the current processes, because some providers require a notice period of up to 30 days¹ when a consumer cancels a service, some consumers experience a period of contract overlap, where they pay for the old and the new service simultaneously. We have designed our proposals in a way which seeks to ensure they do not exacerbate this problem: indeed we expect they will help reduce the current level of such 'double payments'.

(1) Option 1: We propose requiring that notice is backdated to start from the point where the consumer requested the PAC, in line with the current industry guidelines². This will help consumers whose operators currently start the notice period from the date the PAC is used.

(2) Option 2: We propose requiring that the gaining provider informs consumers of their notice period, and helps them manage this by offering to defer the switch by up to 30 days if they do not wish to "double pay".

1.10 We believe that Option 1 and Option 2 both deliver significant benefits to consumers. They are simple processes, which remove barriers to switching by reducing the hassle involved and the time spent talking to losing providers to progress the switch. They also help consumers reduce payments for contract overlap. Taken together these benefits should help switchers, and should encourage would-be switchers. By helping consumers choose the service most appropriate for them, the processes are likely to drive better competitive outcomes.

¹ In some instances operators may require time in addition to the notice period, typically up to two days, to process a consumer's request to end their contract.

² This backdating procedure is set out in the industry 'Mobile Number Portability Porting Process Manual' http://www.mnpsog.org.uk/Main_Documents/MNP2%20Manual%20issue%201-27.pdf However, not all operators follow this process.

- 1.11 It is difficult to quantify some of these benefits. We have, however, estimated the benefits which arise from reduced time spent talking to providers to arrange the switch, and reduced double payments for contract overlap. We estimate that each option will deliver benefits of around £22m over ten years in terms of time savings. We estimate that Option 1 could reduce double payments by around £8m, and Option 2 by £24m over the same time frame.
- 1.12 Both of our proposed options require relatively low set-up and operational costs. We estimate set-up costs of around £13m for Option 1 and £14.3m for Option 2, with annual operational costs of £3.5m and £3.3m respectively. Since our proposals should mean fewer consumers will need to call their current provider, operators should benefit from reduced calls to call centres. We estimate a total net cost to industry, taking these savings into account, of £10.9m over ten years for Option 1 under our base case, and £12.4m under Option 2.
- 1.13 Taking into account the significant benefits, both qualitative and quantitative, we consider the implementation costs for both options to be proportionate to the issues they seek to address.
- 1.14 Of the two options, we have a marginal preference for Option 2. This is because we believe it would be simpler for consumers than Option 1, as it would not require them to obtain a PAC and give this to the GP. In addition, Option 2 would require GPs to actively help consumers manage notice periods, and hence should deliver greater reductions in double payments than Option 1. Although Option 2 costs £1.5m more over ten years for providers to implement and operate, we consider the difference between the two options to be small in the context of the additional consumer benefits of Option 2.

Further proposals to address loss of service, coordination of the switch, and consumer understanding

- 1.15 Under current switching processes we estimate that up to a fifth of consumers experience a period with no mobile service when they switch provider. Some C&R switchers double pay to avoid this. We are concerned that this potential loss of service also affects some consumers' (including small businesses') willingness to engage in the switching process.
- 1.16 We think this issue could be addressed by requiring 'end-to-end' management of the switch, including that losing providers must not deactivate a SIM until the gaining provider has activated the new SIM (we refer to this process as 'make before break').
- 1.17 We consider that such 'end-to-end' management should ensure a smoother switching process than now, and should help alleviate concerns among inactive consumers, and those who have thought about switching but decided not to, that something might go wrong. It should also help those who wish to change provider but don't want to port their number to coordinate the timing of their old and new service. These people currently have no option but to arrange the transfer themselves through C&R. We think that the availability of a single process for use by those who don't port, in addition to those who do, would make switching simpler.
- 1.18 We recognise that implementing 'end-to-end' management of the switch would entail a further cost to operators, which we estimate at between £13m and £29m over ten years, depending on the extent of back office staff savings. Given the benefits arising from smoother switching, and the delivery of a single unified service which works for

porters and non-porters, we consider that this proposal is justified and proportionate. We welcome stakeholders' views on this.

- 1.19 Finally, we also propose to improve consumer understanding by requiring providers to give clear information about the switching process. We consider that the costs of updating operator websites to ensure that consumers are provided with a clear description of the switching process are likely to be relatively minor, and could bring significant benefits in greater levels of consumer understanding and awareness.

Notice periods and double payments

- 1.20 We estimate that consumers who switch could currently be 'double-paying' by as much as £46m per annum, as many begin their service with their new provider before the end of their notice period with their old provider. As set out above, our core process proposals have been designed with double payments in mind, and would be likely to reduce these to some extent.
- 1.21 However, we believe there may be better ways to address double payments. We will discuss with operators options for addressing the interaction of notice periods with the switching process in parallel with this consultation. If we believe that process reforms or operator initiatives are insufficient in addressing the consumer harm which arises from double payments, we will consult on ways to remedy this.

Next steps

- 1.22 We seek views from all interested parties on the matters set out in this consultation by **1 June 2016**.
- 1.23 We will assess all the available evidence and take into account all consultation responses before deciding how to proceed. We expect to complete this work and publish a statement in autumn 2016. Alongside this consultation, we will continue dialogue with industry and other stakeholders on ways to improve the consumer experience of switching.
- 1.24 We are also continuing our work on switching of triple-play services (fixed voice, broadband and pay TV). We expect to publish next steps on this, including proposals for change if we believe they are necessary, in summer this year.

Section 2

Introduction and legal framework

Background

- 2.1 In July 2015 we published a consultation on switching mobile services (referred to, in this document, as the July consultation). This summarised our research on consumers' experiences of switching mobile provider, and consulted on high level process reforms. We noted that, irrespective of the switching process followed, around half of mobile switchers recalled difficulties. A number of these appeared to relate to the 'Losing Provider Led' ('LPL') number porting process, including difficulties contacting the losing provider to request a Porting Authorisation Code ('PAC').
- 2.2 We consulted on two potential reforms to mobile switching:
- (i) Simplifying the process for obtaining the PAC 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.
 - (ii) Putting in place a GPL process.
- 2.3 We said that we would commission further consumer research, and would publish the findings in spring 2016. We said that if evidence indicated that current mobile switching processes created harm, we would publish a further consultation on detailed proposals.

Scope of this document

- 2.4 This consultation focuses on consumer switching issues in the mobile sector. It sets out our view that existing switching processes lead to unnecessary harm, identifies detailed reform options which we consider are appropriate and proportionate, and asks for stakeholder views on these.
- 2.5 We have considered switching issues which can affect residential consumers and small businesses, but have not reviewed arrangements for bulk switching (which we consider to be where more than 25 numbers or services are switched).
- 2.6 We are not considering call routing³ as part of this work. In addition, we are not seeking views on providers' ability to carry out retention activity with consumers who signal their intention to switch, or on consumers' ability to contact their providers for a better deal.
- 2.7 This document is focused on switching processes. Ofcom is also committed to identifying and addressing non-process barriers to switching. These include impediments to engagement when consumers first decide to review their choice of

³ Where a consumer ports their number to a new provider, this refers to the routing or forwarding of their calls from the mobile network to which the number was originally allocated to the new provider.

provider, through their assessment of options, and issues which deter them from switching such as locked handsets. We have initiatives in place looking into consumers' awareness of their contract end date and the implications of this, initiatives to help them navigate the market, such as our work on accrediting price comparison websites, and an enforcement programme covering consumer difficulties arising from current arrangements for cancelling and terminating communications service contracts. These non-process switching barriers are not within the scope of this document.

Legal framework

- 2.8 Ofcom regulates the communications sector under, and in accordance with, the framework established by the Communications Act 2003 (the Act) and the European common regulatory framework for electronic communications services (the Framework). The Framework comprises a number of Directives, the relevant parts of which for these purposes have been implemented in the UK in the Act.

Ofcom's general duties

- 2.9 Section 3(1) of the Act states: 'it shall be the principal duty of Ofcom, in carrying out their functions: to further the interests of citizens in relation to communication matters and the interests of consumers⁴ in relevant markets, where appropriate by promoting competition'.
- 2.10 Ofcom is required, when carrying out its functions, among other things, to secure the availability throughout the UK of a wide range of electronic communications services (section 3(2)); and to have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed as well as any other principles appearing to Ofcom to represent best regulatory practice (section 3(3)).
- 2.11 In performing its duties, Ofcom must also have regard to a number of matters as appear to be relevant in the circumstances including: the desirability of promoting competition, the opinions of consumers in relevant markets and of members of the public generally and the needs of the elderly, persons with disabilities and those on low incomes (section 3(4)). In doing this, it must also have regard to the extent to which, in the circumstances of the case, the furthering or securing of the matters mentioned in sections 3(1) and 3(2) is reasonably practicable.
- 2.12 In addition, when performing its duty to further the interests of consumers, Ofcom must have regard, in particular, to the interests of those consumers in respect of choice, price, quality of service and value for money.

European Community requirements for regulation

- 2.13 As set out in section 4 of the Act, Ofcom must also act in accordance with the six European Community requirements set out in the Framework, which include: promoting competition in the provision of electronic communications networks and

⁴ Consumer is defined in Section 405(5) of the Act and includes people acting in their personal capacity or for the purposes of, or in connection with, a business.

services, and the interests of all EU citizens, whilst being technologically neutral. In doing so, it must read these requirements in accordance with the requirements of Article 8 of the Framework Directive⁵ which sets out the policy objectives of the Framework.

2.14 Article 6 of the Authorisation Directive allows Ofcom to set conditions containing 'consumer protection rules specific to the electronic communications sector, including conditions in conformity with Directive 2002/22/EC ('Universal Service Directive').'⁶ Ofcom's power to set conditions relating to consumer protection is not limited to the measures set out in that directive.

2.15 In this context, relevant considerations are contained in Article 30 of the Universal Services Directive.⁷ Recital 47 to the 2009 Amending Universal Service Directive⁸ states:

'In order to take full advantage of the competitive environment, consumers should be able to make informed choices and to change providers when it is in their interests. It is essential to ensure that they can do so without being hindered by legal, technical or practical obstacles, including contractual conditions, procedures, charges and so on. This does not preclude the imposition of reasonable minimum contractual periods in consumer contracts. Number portability is a key facilitator of consumer choice and effective competition in competitive markets for electronic communications and should be implemented with the minimum delay, so that the number is functionally activated within one working day and the user does not experience a loss of service lasting longer than one working day. Competent national authorities may prescribe the global process of the porting of numbers, taking into account national provisions on contracts and technological developments. **Experience in certain Member States has shown that there is a risk of consumers being switched to another provider without having given their consent. While that is a matter that should primarily be addressed by law enforcement authorities, Member States should be able to impose such minimum proportionate measures regarding the switching process, including appropriate sanctions, as are necessary to minimise such risks, and to ensure that consumers are protected throughout the switching process without making the switching process less attractive for them.'**
(emphasis added)

2.16 Article 30 of the Universal Service Directive was consequently amended to include new provisions dealing with the porting of numbers. It also requires National Regulatory Authorities ('NRAs') to 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 that Member States ensure (without prejudice to any minimum contractual period), that conditions and

⁵ Directive 2002/20/EC of the European Parliament and of the Council (as amended by Directive 2009/140/EC), 7 March 2002. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0033:0033:EN:PDF>

⁶ Directive 2002/20/EC of the European Parliament and of the Council (as amended by Directive 2009/140/EC), paragraph 8 of Annex A

⁷ 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>

⁸ Directive 2009/136/EC of the European Parliament and of the Council, available at <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32009L0136&from=EN>

procedures for contract termination do not act as a disincentive against changing service provider.

- 2.17 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 specific set of objectives⁹ and requires that the measures shall be proportionate to those objectives.
- 2.18 The objectives include the promotion of competition in the provision of electronic communications networks, electronic communications services, and associated facilities and services by (among other things) 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 that there is no distortion or restriction of competition in the electronic communications sector, including the transmission of content (Art 8 (2)).
- 2.19 In addition, the objectives require NRAs to promote the interests of the citizens of the EU by (among other things) ensuring a high level of protection for consumers in their dealings with suppliers, promoting the provision of clear information (in particular requiring transparency of tariffs and conditions for using publicly available electronic communications services); and addressing the needs of specific social groups, in particular disabled users, elderly users, and users with special social needs (Art 8 (4)).
- 2.20 Article 6 of the Framework Directive requires NRAs to give interested parties a reasonable period to comment on any draft of measures they intend to take in accordance with the European Framework which have a significant impact on the relevant market.

Powers and duties in relation to General Conditions

- 2.21 Ofcom sets General Conditions (GCs) to which all CPs in the category specified in that GC (e.g. providers of publicly available telephone services) must comply, although the specific requirements will depend on the nature of the service and the type of customer.
- 2.22 Section 45 of the Act gives Ofcom the power to set GCs which can only contain provisions authorised or required by one or more of Sections 51, 52, 57, 58 or 64 of the Act. Section 47(2) governs the circumstances in which Ofcom can set or modify a GC. It states that a condition can be modified where that is: objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates; is not such as to discriminate unduly against particular persons or against a particular description of persons; and is proportionate and transparent in relation to what the condition or modification is intended to achieve.
- 2.23 Under Section 51(1)(a) of the Act, Ofcom can set GCs which make 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 (but is not limited to) the power to set conditions for that purpose which ensure that conditions and procedures for the termination of a contract do not act as a disincentive to an end-user changing CP; relate to the supply, provision or making

⁹ Set out in Article 8, paragraphs 2, 3 and 4 of the Framework Directive.

available of goods, services or facilities associated with the provision of public electronic communications services; 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; and require the provision, free of charge, of specified information, or information of a specified kind, to end-users.

Application of the legal framework to switching processes

- 2.24 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.
- 2.25 In the current context, our primary objective is to further the interests of consumers by protecting their interests as end-users of mobile products delivered over mobile networks in the UK. This document is primarily concerned with how Ofcom should seek to protect those interests where a consumer wishes to switch mobile supplier.
- 2.26 We therefore consider the consumer's experience under current switching processes. We note in particular that under Section 4(5) of the Act Ofcom is under a duty to act in accordance with the Community requirement to promote the interests of citizens by ensuring a high level of protection for consumers in their dealings with suppliers. Pursuant to Sections 51 and 52 of the Act, we may set conditions for the protection of consumers, in particular:
- i) to ensure that the procedures for contract termination do not act as a disincentive against changing service provider;
 - ii) to require the provision, free of charge, of specified information, or information of a specified kind, to end-users; and
 - iii) to give effect to Community obligations to provide protection for consumers in relation to the supply, provision or making available of public electronic communications services. Such obligations include those contained in Article 30 of the Universal Services Directive (as amended), which require Member States to:
 - a) protect consumers throughout the switching process; and
 - b) ensure that consumers are not switched to another CP against their will.
- 2.27 We would expect to implement the proposals set out in this consultation by setting or modifying general conditions in accordance with the powers set out above.

Impact Assessment

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

to impact assessments, see the guidelines, “Better policy-making: Ofcom's approach to impact assessment”, which are on our website.¹⁰

Equality Impact Assessment

- 2.29 Ofcom is also required to assess the potential impact of all our functions, policies, projects and practices on the equality of individuals to whom those policies will apply. Equality impact assessments ('EIAs') assist us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- 2.30 We have given careful consideration to whether or not the proposals contained in this document will have a particular impact on race, age, disability, gender, pregnancy and maternity, religion or sex equality. We do not envisage however, that our proposals would have a detrimental impact on any particular group of people.

¹⁰ http://stakeholders.ofcom.org.uk/binaries/consultations/better-policy-making/Better_Policy_Making.pdf

Section 3

Current 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 then initiates the transfer. We consider this to be a 'losing provider led' ('LPL') process, sometimes also known as 'donor led'.
 - A switch without a number 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

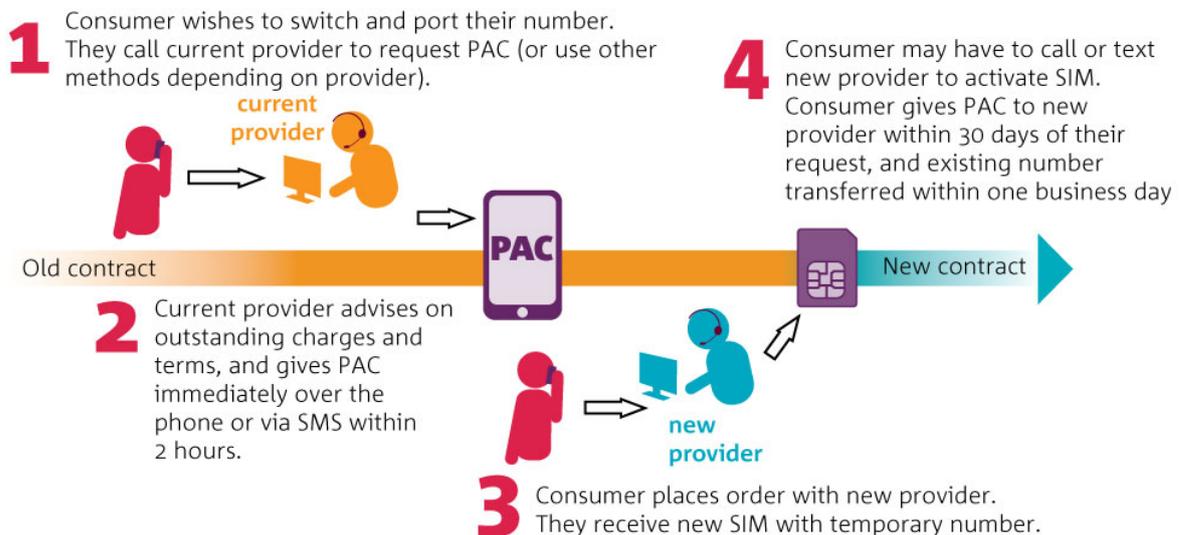
- 3.3 Mobile number portability ('MNP') typically involves the transfer of one or more telephone numbers from one provider to another. Multiple ports involve a set of numbers linked to a single account; this might arise in a business or a family context.¹¹
- 3.4 The UK MNP process requires the consumer to contact the provider they want to leave (the LP) to request a PAC. An online system, which we refer to in this document as the 'Central Porting System' ('CPS'), 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.
- 3.5 Number porting activities which are completed by the different parties include service activation on the new network, service deactivation on the old network and call routing changes. These activities currently take place between 11am and 3pm, and no porting currently takes place at weekends or on public holidays.
- 3.6 Ofcom regulations (General Condition 18) require that the LP allows consumers to request a PAC code over the phone. The LP 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

¹¹ Transfers of up to 25 numbers are regulated under General Condition 18 (GC18) of the General Conditions of Entitlement, which covers 'number portability', and can be found here: 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, although these are not covered by GC18. This consultation concerns switching by consumers and small businesses, and not bulk transfers.

over the phone where possible, or by SMS text message within two hours of the request.

- 3.7 When the customer takes out a new contract with the GP, the GP provides them with a temporary number and a new SIM, and starts billing them. In some instances the SIM comes pre-activated, or activates automatically when inserted into a handset and locked on to a new network; in others the customer will need to contact their new provider by phone or text to activate the SIM. Once activated, the customer can contact their GP to give them their PAC and to request a port.
- 3.8 Ofcom regulations require that the GP ports and activates the mobile number within one business day of the consumer's porting request. The GP initiates the request via the CPS, 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 CPS. The temporary number supplied to the consumer will be replaced with the ported number when 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 operator¹² to change the routing of the customer's number to the GP's network. The LPL PAC process is illustrated in Figure 1 below.
- 3.9 When the switch happens (between 11am and 3pm on the business day after the customer has provided the PAC to the GP), the consumer may experience lack of service on their temporary number and on the number to be ported during the number deactivation / activation process.

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



- 3.10 In addition, many mobile providers require consumers to give notice to terminate their contract, whether or not they are in a minimum contract period ('MCP'). The length of this notice period varies by operator; for example some require 30 days, while others terminate once the current billing cycle ends (i.e. the period until the next bill is issued). Under the MNP process, the point from which the notice period starts also varies; some operators begin notice when the PAC is requested (if it is subsequently

¹² 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.

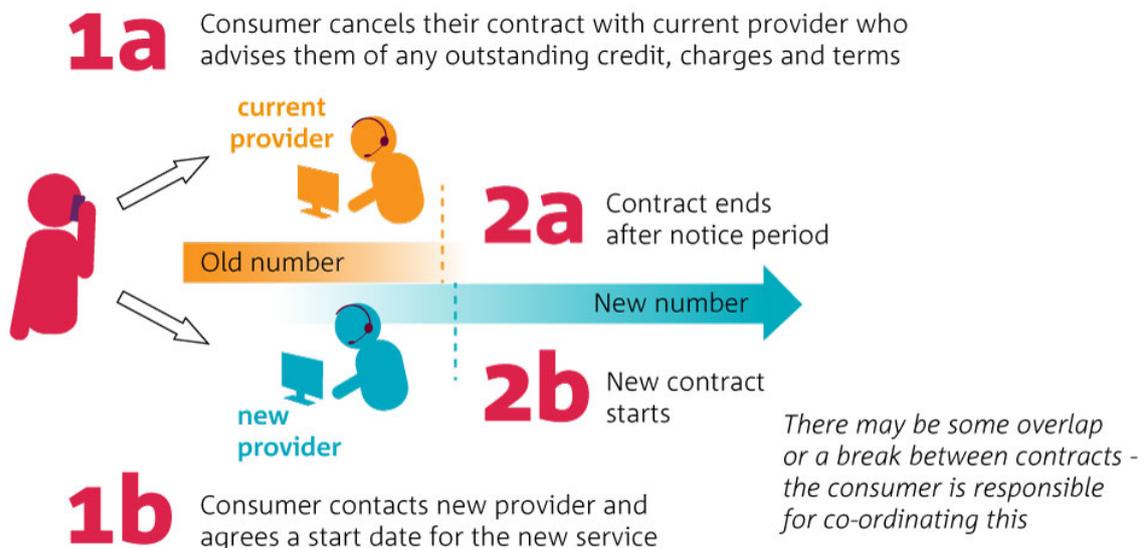
used), others begin when the PAC is 'redeemed' (i.e. given by the consumer to the GP, and used by the GP to initiate the port).

- 3.11 Depending on how the consumer coordinates the notice of termination and the start of their new contract, they may pay for both the old and the new service simultaneously until their notice period expires ('double paying').

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

- 3.12 Where the consumer does not wish to port their mobile number, no regulated process exists to help them switch to an alternative provider. Instead, the consumer must give notice to their current provider that they wish to terminate their contract and service. Separately, the consumer organises the new service and contract with their new provider. We call this arrangement 'cease and re-provide' ('C&R') and it is illustrated in Figure 2, below. Under this approach, the consumer is responsible for coordinating the cessation of the old service and the commencement of the new service.

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



Notice periods

- 3.13 As stated above, most mobile operators currently require a notice period, typically up to 30 days (or payment in lieu), for terminating a service. This usually applies whether or not the consumer is still in their minimum contract period.
- 3.14 The industry-agreed Mobile Number Portability Porting Process Manual¹³ states that the notice period should start from the point when the PAC is requested (if it is subsequently used). However, some operators instead start notice from when the PAC is used to initiate the port. O2 is a notable exception; when customers switch outside their minimum contract period, O2 deactivates their account during the one business day it takes to complete the port.

¹³ http://www.mnposg.org.uk/Main_Documents/MNP2%20Manual%20issue%201-27.pdf

3.15 We stated in the July consultation our concern about the impact that notice periods may have on mobile consumers' ability to ensure that they experience a smooth transfer, without losing service.¹⁴ We expand on our analysis of the impact of current processes and notice periods on the consumer switching experience in section 4.

¹⁴ See paragraph 4.43 of the July consultation.

Section 4

Switching processes and consumer harm

Introduction

- 4.1 This section sets out our provisional view on how current mobile switching processes lead to consumer harm. In arriving at this view we have taken into account responses to our July 2015 consultation document and our further consumer research undertaken over the summer of 2015.
- 4.2 In our July consultation, we assessed the two methods¹⁵ currently used to switch mobile provider (PAC and C&R). We explained our view that both were likely to generate difficulties and hence unnecessary harm for consumers, whether or not the switch involved a number port.¹⁶
- 4.3 We said we thought difficulties under current switching processes could be grouped under the following headings:
- a) **Consumer difficulty and unnecessary switching costs** - i.e. difficulties arising from the time and effort required to progress the switch.
 - b) **Multiple switching processes** - i.e. the existence of multiple processes for switching the same service can cause confusion.
 - c) **Continuity of service** - i.e. difficulties and/or costs associated with co-ordinating stopping the old service with starting the new one, and the risks of a break in service, or double paying to avoid this.¹⁷
 - d) **Awareness of the implications of switching** - i.e. where consumers are insufficiently informed about the implications of switching, including any liability for Early Termination Charges (ETCs).
 - e) **Insufficient customer consent** - i.e. where a consumer is switched to another provider without their explicit knowledge or consent ('slamming').
 - f) **Erroneous transfers** - i.e. harm suffered by consumers who are inadvertently switched, and by consumers wishing to switch but where the wrong number or service is erroneously transferred.
- 4.4 We received a number of responses to our consultation. A summary of responses and our views on them is at Annex 9.

¹⁵ In the remainder of this section we refer to these methods as 'processes', albeit we acknowledge that C&R is neither a formal industry nor regulated 'process.'

¹⁶ This view was informed principally by our research into the experiences of consumers who had switched or considered switching mobile provider. This found, for example, that most mobile switchers said that the process was easy. But, when prompted, around half (44%) recalled difficulties. (Source: Consumer Experience 2014 <http://stakeholders.ofcom.org.uk/market-data-research/market-data/consumer-experience-reports/consumer-experience-14/>).

¹⁷ 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.

- 4.5 Since our July 2015 consultation we have undertaken substantially more detailed consumer research and collected further data to assess consumers' experiences of current mobile switching processes. Annex 10 sets out the key findings from this research, and the full reports are also available on the Ofcom website.¹⁸
- 4.6 We have taken account of all the evidence we have in developing the provisional conclusions and proposals set out in this document. The remainder of this section explains our assessment of the consumer harm arising from current switching processes.

Areas of concern

- 4.7 Our assessment must be understood in the context that the majority of switchers rate the process of switching as either 'very' or 'fairly' easy. In particular, evidence from our 2015 mobile switching quantitative study (the 2015 BDRC study) suggests that 78% of switchers who had switched in the last 18 months rated the process as 'easy' (equivalent to 5.2 million consumers), while 18% said it was difficult (equivalent to 1.2 million consumers).¹⁹
- 4.8 However, when prompted²⁰, 38% of switchers said that they had encountered some difficulties. We also found that 37% of consumers who had considered switching but decided against it were sometimes put off by process related worries, and 15% of inactive consumers said that process concerns were the main reason they didn't switch or consider switching.
- 4.9 Given that around 6.6 million consumers switched mobile provider in the last 18 months, these findings suggest that around 2.5 million experienced some form of difficulty when switching in the last 18 months. The majority of these switchers (around 1.7 million) experience difficulties related to the switching process. These findings are summarised in Figure 3, below.

¹⁸ See quantitative research at http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/mobile_switching/quantitative/ (BDRC research). See qualitative research at: http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/mobile_switching/qualitative/

¹⁹ This is lower than the figure from our Switching Tracker (see Annex 10) which indicated that 92% who had switched in the previous 12 months recalled their experience as 'fairly' or 'very' easy. The difference is likely to be driven by methodology and sampling approach. Unlike the tracker, this quantitative study probed on consumers' switching experiences, before asking them to recall how easy their experience was overall. This was designed to aid recall of an event that may have occurred several months previously and reports a more considered response on 'ease of switching'.

²⁰ We place more weight on the prompted responses than the headline figures on ease of switching given evidence from our Diary Research that respondents who noted difficulties during the switch did not always reflect these when asked, after the event. To counter any concerns that issues may have been identified solely because they were prompted, we have taken the conservative approach of focusing principally on issues reported as 'major'. (Respondents were asked, on the basis of a list of possible difficulties or factors, which if any may have been 'major' or 'minor'.)

Figure 3: Mobile users who experienced process related switching difficulties

Sample groups (BDRC research)	Proportion experiencing process related difficulty/factor impacting decision	Estimated number of mobile switchers
Switched (in last 18 months)	25% (major)	1.7 million
Active considerer (in last 12 months)	37% (major)	0.7 million
Non switcher/non-active considerer (in last 12 months)	15% (main)	5.9 million

- 4.10 Our evidence overall suggests that consumer harm under current switching processes falls into three categories:
- 4.10.1 Time and hassle to progress the switch, in particular as a result of the need to contact the existing provider to request a PAC and/or cancel;
 - 4.10.2 Loss of service while switching provider, for example because the consumer must coordinate the switch and/or because technical difficulties arise; and
 - 4.10.3 'Double paying' while switching provider, sometimes in order to avoid loss of service, and sometimes because of operators' requirements for consumers to serve notice periods when cancelling a mobile service.
- 4.11 We also found that consumers do not always understand processes well and this can put them off.
- 4.12 Our proposals are hence focused on proportionate improvements to the consumer experience of switching in these areas.

Time and hassle

- 4.13 In our July 2015 consultation we expressed concern that consumers were experiencing harm as a result of difficulties arising from the time and effort required to switch.²¹ We suggested that this is because LPL processes require the consumer to contact their existing provider, which can involve unnecessary time and hassle.
- 4.14 We continue to believe this to be the case. Our evidence shows that time spent switching appears to be a difficulty or deterrent to switching for some consumers. We are also concerned that LPs do not have strong incentives to make switching quick and easy.

²¹ Those who progress the switch will incur the costs of lost time/hassle; considerers or non-switchers might be discouraged from switching (some might also incur part of the costs of lost time/hassle if they have progressed part way through the switching process)

- 4.15 We recognise that many consumers have positive experiences of contacting their LP. For example, in our research, 81% of switchers who recalled requesting a PAC said they found it ‘very’ or ‘fairly’ easy.^{22,23}
- 4.16 However, our research also suggests that obtaining a PAC and porting a number, and the time required for this, can be problems for some. For example:
- 4.16.1 Among those who found it difficult to obtain a PAC (18%), two thirds (66%) of switchers said that the “conversation to get the code took too long”;²⁴
- 4.16.2 10% of switchers said that ‘keeping your phone number’ was a major difficulty when switching;²⁵
- 4.16.3 switchers who would have liked to have kept their number but did not stated a number of reasons for not doing so, with reasons related to the difficulties or hassle of porting particularly prominent²⁶. For example:
- a) 32% said “it was easier to switch if I didn’t keep my number”;
- b) the same proportion said it “was faster to switch”; and
- c) 13% said it was because they needed to make extra calls to get a PAC.
- 4.17 Difficulty obtaining a PAC was also a major factor in the decision of around 10% of active considerers (around 0.2 million people) to stay with their current provider.²⁷
- 4.18 We believe that the LP is not naturally incentivised to expedite a switch and that current switching processes give the LP substantial influence over the switching experience and time taken to switch.²⁸ Our evidence supports this. We requested information²⁹ from providers on their policies and practices when seeking to retain their customers. From this we learned that a number of providers directly incentivise service agents to attempt to retain consumers who contact the LP to request a PAC. One consequence may be that consumers experience ‘unwanted save’ attempts when they request a PAC.

²² 81% of all switchers and 79% of active considerers who recalled requesting a PAC said it was either ‘very’ or ‘fairly’ easy, while 18% and 21% respectively said that it was either ‘fairly’ or ‘very’ difficult. Slides 72 and 107 of BDRC published slide pack.

²³ The Diary Research also found that, of the participants in the diary study who switched and ported their number via the PAC process, the majority said that obtaining the PAC was easier than they had expected.

²⁴ Slide 73 of BDRC published slide pack

²⁵ Slide 34 of BDRC published slide pack

²⁶ Slide 78 of BDRC published slide pack

²⁷ Slide 92 of BDRC published slide pack

²⁸ Some respondents to our July 2015 consultation including SSE, Three, Universal Utilities (UU) and some individual respondents remarked that the LP is not naturally incentivised to facilitate or expedite the switching process.

²⁹ We requested information from the mobile operators under our powers under section 135 of the Communications Act, to help us understand recent switching activity and consumer experiences of switching in the mobile market.

- 4.19 On the other hand, our research is clear that many consumers actively seek³⁰ and welcome save or retention offers from their existing provider, and that contact with the LP during a switch – including requesting a PAC – is one means by which consumers can get a good deal. Several respondents to our July consultation, including Sky, [X], Vodafone and some individual respondents, said that consumers can benefit from the ability to seek such save or retention offers, including directly through better deals and indirectly through enhanced competition.
- 4.20 We agree that some consumers may seek and benefit from contact with their existing provider where this leads to a better deal. Accordingly we have no concerns that such discussions take place and that ‘save’ offers are sought and made. Our concern is that such discussions should not be a required feature of the switching process that mean they are imposed on, rather than chosen by, consumers.
- 4.21 This is because our research also shows that save activity can be a problem where it is unwanted and where consumers have to navigate it in order to progress a switch. For example:
- 4.21.1 the BDRC research found that 7% of switchers cited ‘your previous provider trying to persuade you to stay’ as a major difficulty when switching, rising to 14% among switchers who experienced provider persuasions to stay³¹;
- 4.21.2 some respondents in the diary study reported a sense of awkwardness and hassle during cancellation and retention discussions, with some feeling daunted and obliged to defend their decision to leave.

Taken together this evidence suggests that unwanted save activity may be an explanatory factor behind the difficulties some consumers face navigating switching processes.

- 4.22 Furthermore we think that the PAC process may incentivise gaining providers to encourage prospective new customers to switch using C&R and hence not port their number. This is because of worries GPs may have about LPs using the PAC process as an opportunity for retention. SSE expressed concern about this possible effect in its response to the July consultation. In our research 10% of C&R switchers who had wanted to keep their number, noted that their new provider had told them they could not port their number³².
- 4.23 Data provided by the mobile operators, and complaints made to Ofcom regarding the mobile switching process, also support the view that some consumers experience difficulty or hassle as a result of needing to request and obtain a PAC. For example, where a consumer calls their provider to request a PAC, we estimate that he or she spends on average 15 minutes on the call. Furthermore, around two fifths of the 1,000 or so complaints made annually to Ofcom regarding change of mobile provider concern difficulties in requesting or obtaining the PAC³³.

³⁰ According to the BDRC research, around one third (32%) of considerers for example contacted their current provider to negotiate a better deal.

³¹ Slide 34 of BDRC published slide pack

³² Slide 78 of BDRC published slide pack

³³ Ofcom complaints data, see Annex 10

- 4.24 Additional sources of difficulty and ‘hassle’ in the current switching process for both PAC and C&R switchers concerned cancellation of the old service and contacting the previous provider.
- 4.25 On cancellation we note that the BDRC research found that 10% of switchers cited major difficulty “cancelling their previous service”³⁴.
- 4.26 On contacting the previous provider:
 - 4.26.1 11% of switchers cited “Contacting your old provider” and 9% “Getting the information you needed from your previous provider” as major difficulties when switching.³⁵
 - 4.26.2 Around one in ten (11%) active considerers cited difficulties contacting their current provider as a major factor in their decision not to switch³⁶.
- 4.27 For these reasons we are concerned that current processes result in unnecessary time and ‘hassle’ for some consumers when switching or attempting to switch mobile provider. These difficulties are often associated with conversations with the LP, and can be compounded to the extent that LPs use the PAC request process as a mechanism for unwanted retention activity.

Loss of service

- 4.28 In our July consultation we explained that consumers were potentially being harmed as a result of difficulties co-ordinating the end of the old service with the start of the new service, and that sometimes they experience a break in service.
- 4.29 Our consumer research suggests that under current switching processes many consumers suffer a loss of service when switching.
- 4.30 According to the BDRC research, 22% of PAC switchers (including 8% who said they were also provided with a temporary number) and 14% of C&R switchers reported some loss of service when switching.³⁷ Fifteen per cent of these experienced loss of service for more than one day³⁸.
- 4.31 The BDRC research also suggests that consumers find coordination of the switch difficult - 8% of switchers cited ‘getting the switch happen on date wanted’ as a major difficulty³⁹.
- 4.32 The diary research also highlighted that a minority of switchers had difficulty coordinating the cease of their service with notice periods to avoid gaps in service.
- 4.33 Concerns about loss of service are also an issue for non-switchers and may inhibit the decision to switch. Just over one in six (17%) active considerers (0.3 million

³⁴ Slide 34 of BDRC published slide pack

³⁵ Slide 34 of BDRC published slide pack

³⁶ Slide 92 of BDRC published slide pack

³⁷ Under the PAC mobile number porting arrangements, GPs often provide a temporary number to switchers in an effort to mitigate any period of loss of service. It is possible that respondents may have considered a temporary number does not equate a full service, hence the overlap here.

³⁸ Slide 49 of BDRC published slide pack

³⁹ Slide 34 of BDRC published slide pack

people) and a similar number of inactive mobile customers cited worries about not being able to use their mobile during the switch as the main factor in their decision not to switch.

- 4.34 In summary, our most recent consumer research suggests that current switching processes can create or exacerbate problems with loss of service. This can be a source of consumer harm for a substantial number of switchers, as well as a reason not to switch for those who consider doing so and are put off.

Double paying

- 4.35 We have sought to identify how many switchers incur additional expenses during switching through a period of contract overlap when they pay both the old and the new provider. Our research has provided data on this, and we have also obtained data from Syniverse (which currently operates the CPS) on the number of days between PACs being issued and subsequently used to port a number.
- 4.35.1 When asked outright (in the BDRC research) around a third (32%) of contract switchers recall paying both providers for a period of time when they switched, with the mean average period of double paying being around 13 days.^{40,41}
- This is consistent with observations from the diary study which reported a third of switchers with a period of double paying when switching.
- 4.35.2 An alternative piece of analysis, which focused on notice periods from the BDRC research suggests the proportion of contract switchers that double-paid *may* be higher (up to 60%)⁴².
- 4.35.3 The Syniverse data can be used to provide an indication of the incidence and duration of double-paying among switchers, on the assumption that they give notice no earlier than when they request the PAC. We find that around three-quarters (74.4%) of post-pay out-of-contract switchers redeem their PAC within 14 days of PAC issue, which implies that they incur more than two weeks' contract overlap between their (30-day) notice period, where one applies, and their new service.⁴³ The average double-paying duration for this group is 25.9 days (if they gave notice when requesting PAC) or 30 days (if they did not give notice). We explain this in more detail in paragraphs A.35 to A7.40, where we set out the basis for our quantified estimates of double-paying impacts.
- 4.36 Regardless of the upper bound of double paying among switchers, concerns about double paying are also an issue for non-switchers. Just over one in six (17%) active considerers (0.3 million people), and a similar number of inactive mobile customers cited worries about having to pay two providers simultaneously during the switch as the main factor in their decision not to switch.

⁴⁰ Slide 55 of BDRC published slide pack

⁴¹ The research showed a shorter period of double paying was experienced by PAC switchers (10 days) than C&R switchers (19 days).

⁴² See Annex 9 for further details of this analysis.

⁴³ Though we note this would be an overstatement of this proportion if switchers are giving notice in advance of their PAC being issued.

- 4.37 Some key drivers of double paying appear to be linked to coordination difficulties under current switching processes and the effect of notice periods. Among contract switchers (PAC and C&R) who recalled a period of double paying⁴⁴:
- Just over a quarter (28%) said this was to ensure continuous service. In other words some consumers choose to double pay in order to ensure that there is no break in service. This is consistent with the views of most participants in the diary study who noted a period of double paying.
 - A fifth (20%) said this was because they had signed up with their new provider and were unaware of the notice period required by their current provider.
 - Just under a fifth (18%) said they double paid because the new provider gave them a start date that was before the end of their previous contract.
- 4.38 A number of stakeholders expressed concern about double paying in their responses to the July consultation. BT, CCP/ACOD, SSE and others said that consumers may risk or suffer periods of double paying because they wish to avoid loss of service or because they have difficulty coordinating the switch to avoid double paying.⁴⁵ SSE also commented that since notice periods in the mobile sector generally exceed the period of time required to switch, double-paying arises for some consumers because of the notice period remaining following the switch.
- 4.39 Our evidence shows that consumers who switch their mobile service sometimes pay for two services at once for a period during and immediately after the switch. We believe this is a source of consumer harm for those who double pay, and for people who are put off switching by the prospect of double paying.

Confusion about switching processes

- 4.40 In our July consultation, we said that consumers may be confused by mobile switching processes, including the coexistence of PAC and C&R, and that this may put some people off switching.
- 4.41 In response to our consultation, Vodafone said that our analysis was driven by inappropriate reference to switching processes for fixed line and broadband services. Vodafone suggested that the mobile market has a number of significantly different features, including that all mobile providers use the same switching process, and that mobile consumers are supported by a strong physical presence of high street shops, where consumers can be guided through the switching process.
- 4.42 We agree with Vodafone that the mobile market has different features to the fixed line and broadband markets. We also accept that our more recent research doesn't directly investigate the extent to which consumers might feel confused by or unable to differentiate between the two different switching routes.

⁴⁴ Slide 55 of BDRC published slide pack

⁴⁵ For a switch with a number port, the consumer must understand they have a notice period and also coordinate the request and use of a PAC within the 30 day PAC validity window in order to minimise double paying

- 4.43 However, our evidence continues to suggest that consumers do not always understand processes and that this may result in them choosing not to switch or not to port their number.
- 4.43.1 12% of active considerers said “not knowing what to do to switch” was a major factor in their decision not to switch;⁴⁶
- 4.43.2 13% of C&R switchers who wanted to keep their number said they were unaware they could do so; and 10% said that their old provider had told them they could not port their number.⁴⁷
- 4.44 More generally there seems to be confusion about the PAC process:
- 4.44.1 Nearly two-fifths (38%) of active considerers reported that ‘not wanting to change their phone number’ was a major factor in their decision not to switch.⁴⁸
- 4.44.2 Just under one in ten (8%) non-switchers and non-considerers reported that ‘not wanting to lose their phone number’ was the main factor in their decision not to engage in the mobile market.⁴⁹

Our evidence suggests that mobile switching processes are not always well understood and that there may be scope to improve this through clearer processes and better information.

Provisional conclusions

- 4.45 Our evidence demonstrates that current switching processes are likely to result in harm for a substantial number of switchers and put others off from switching.
- 4.46 Consumer harm is principally related to:
- 4.46.1 Time and hassle to progress the switch, in particular as a result of the need to contact the existing provider to request PAC and/or cancel;
- 4.46.2 Loss of service while switching provider, because the consumer must coordinate the switch and/or because technical difficulties arise; and
- 4.46.3 'Double paying' while switching provider, including owing to operators' requirements for consumers to serve notice periods when cancelling a mobile service.
- 4.47 We also found concern related to each of these areas amongst active considerers and a lack of understanding, among both considerers and less engaged consumers, about how the switching process operates.
- 4.48 In Section 5 we consider how current processes might be revised in ways to minimise these harms to consumers. We have developed our proposed revisions to be proportionate to the nature and extent of harms we have set out here.

⁴⁶ Slide 92 of BDRC published slide pack

⁴⁷ Slide 78 of BDRC published slide pack

⁴⁸ Slide 90 of BDRC published slide pack

⁴⁹ Slide 112 of BDRC published slide pack

Consultation questions

Q1 Do you agree that current mobile switching processes create consumer harm in terms of difficulties and time spent contacting the current provider, requesting the PAC, and unwanted save activity, as well as loss of service and double paying when switching?

Q2 Do you agree that consumers would benefit from clearer switching processes and information about switching?

Q3 Do you have any other comments on the matters raised in Section 4?

Section 5

Options for reform

Introduction

5.1 In section 4 we assessed how well current switching processes fare in delivering a quick, easy and understandable mobile switching experience. We provisionally concluded that they lead to a degree of harm for both switchers and non-switchers. This section describes our proposals for reform of mobile switching processes to address these harms.

Consumer harm

5.2 Our research identified three broad areas of harm arising from current mobile switching processes. These potentially affect all mobile consumers, including those who port their number using the PAC process, and those who coordinate the switch themselves through a C&R arrangement. They also affect both those on monthly contracts and those on Pay As You Go.

5.3 The harms form the basis for a series of design principles which underpin our proposed reforms. Our aim is to arrive at switching processes which deliver a better experience for switchers by addressing the harms, while also reducing barriers among would-be switchers. In addition, reforms should support competition. These design principles are as follows:

- i) **Removing unnecessary time and hassle:** Switching processes should help reduce hassle, in particular by removing the need for the consumer to speak to the losing provider in order to switch. They should ensure that the time taken to request and execute a switch is minimised. They should be simple, convenient to use, easily understood, and be available to all mobile customers regardless of contract type, or whether they wish to transfer their number.
- ii) **Protecting against loss of service:** Processes should ensure that deactivation and activation of old and new services can be coordinated, and should limit loss of service arising from technical problems with the switch.
- iii) **Reducing risk of ‘double paying’:** Processes should help consumers manage any notice period imposed by their current provider during the switching process. They should offer scope to reduce (or at least not make worse) periods of contract overlap between old and new services, which can lead to ‘double paying’.

5.4 In addition, we propose to:

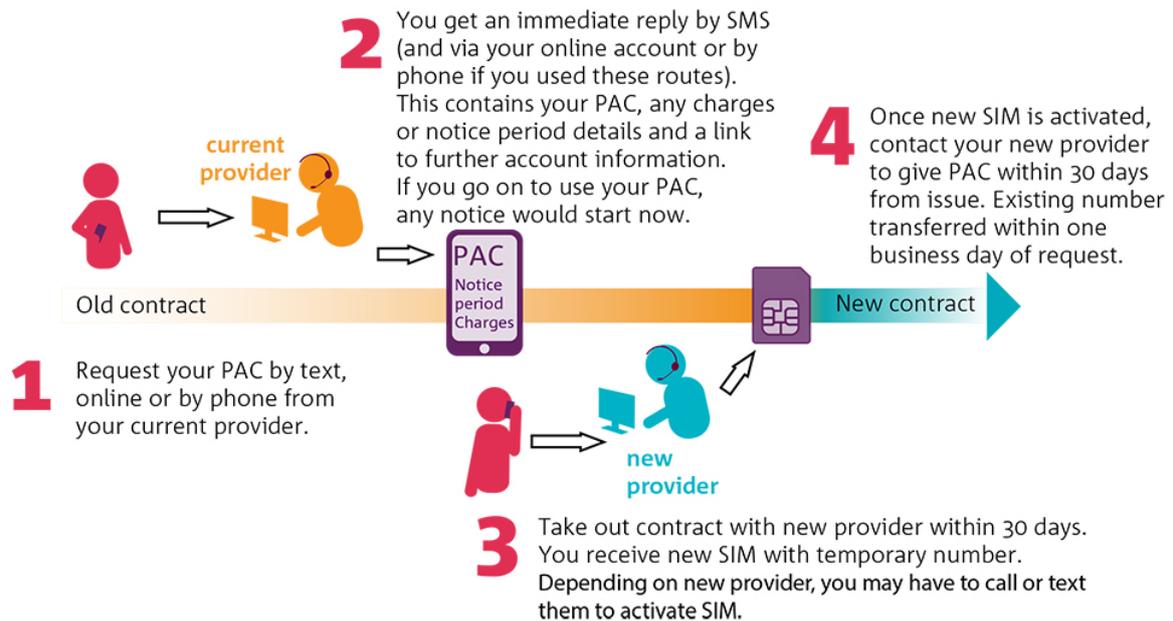
- iv) **Ensure consumers are well informed before switching:** Consumers should understand the switching process, and receive key information about the implications of switching prior to making their decision.
- v) **Protect consumers against unauthorised switching:** The process should ensure that only the authorised account holder can request a switch.

Proposals for reforming mobile switching processes

Summary of our proposals

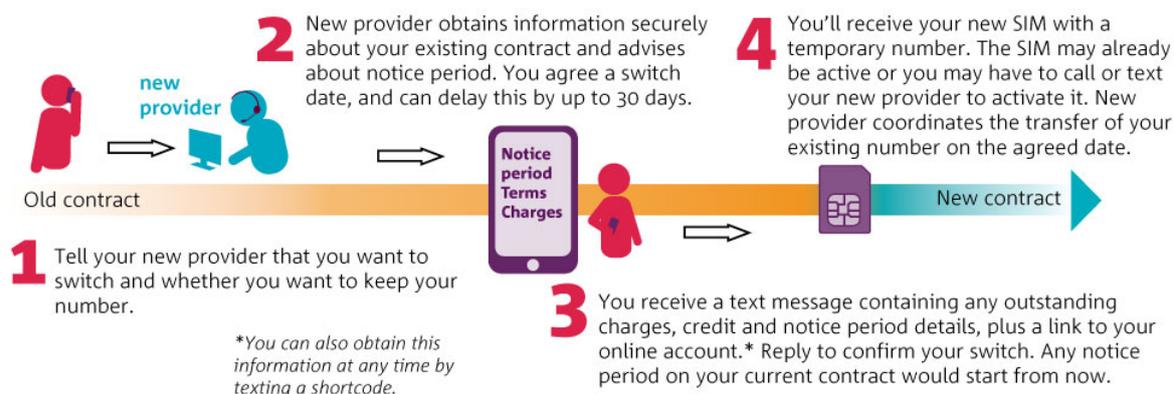
- 5.5 We summarise our proposals here at a high level, and explain them more fully later in this section.
- 5.6 Our two core proposals both reduce unnecessary time and hassle by removing the need for the consumer to speak to the losing provider in order to switch. They include mechanisms to ensure that consumers are well informed before switching and to help reduce the risk of double paying. Both processes can be adapted for use by those who wish to port and those who don't.
- 5.7 **Option 1: Automated PAC process.** Under this option, consumers can request a PAC by SMS text, or through their online account with their provider, or by phone. We propose requiring that operators must give equal prominence to these three routes; without this provision we are concerned they have an incentive to steer customers towards phone and webchat (where they have a retention opportunity).
- 5.8 Following their request, the consumer receives the PAC by return SMS (and also by online account or by phone if this is how they make their request), together with information relevant to their switching decision. This includes early termination charges payable, outstanding handset liability, outstanding credit balances (for PAYG customers), and information about any notice period required by their current provider.
- 5.9 The process would then proceed as under the current PAC process. The consumer receives a new SIM card and temporary number from their new provider. Once this is active, they give their PAC to their new provider, who arranges the switch with their old provider. This must occur within one business day. To help the consumer manage any period of contract overlap and 'double payment', we propose requiring that notice is backdated to the date on which the consumer requested the PAC. Our proposed Option 1 process is illustrated in Figure 4, below.

Figure 4: Option 1: Proposed automated PAC process



5.10 **Option 2: Gaining Provider Led ('GPL') process.** Under this option, consumers contact a new provider (the GP). The GP gets information from the old provider (the LP) via the CPS about the duration of the consumer's notice period. The GP informs the consumer of this notice period, tells them that they may be required to pay for this, and must offer to defer the start of the new service, and number port if required, by up to 30 days, to help the consumer eliminate (or at least reduce) any period of contract overlap and 'double payment'. The GP then arranges for the CPS to send an SMS to the consumer containing information relevant to their switching decision (ETC, handset charges, credit balances, notice period). The consumer gives their consent to switch by replying to this SMS. The GP provides the consumer with a new SIM and a temporary number, and coordinates the switch on the agreed date. Our proposed Option 2 process is illustrated in Figure 5, below.

Figure 5: Option 2: Proposed GPL process



5.11 We are making two further proposals to help consumers coordinate the deactivation and activation of their old and new services, which we consider should limit loss of service arising from technical problems with the switch. These proposals are not contingent on the adoption of either of the two options above; they could be adopted either in addition to these options, or independently.

5.11.1 First we propose requiring that the losing provider must not deactivate a SIM until the gaining provider has activated the new SIM, and, if the number is being ported, traffic has been routed to the gaining provider's network (known as 'make before break').

5.11.2 Second, we think that to achieve this effectively requires centralised 'end-to-end' coordination of the switch, to ensure that the LP and GP are in lockstep at each stage of the process.

5.12 Taken together, the 'make before break' and centralised switching proposals are the mechanisms by which the stop and start timings for the old and new service can be fully coordinated. This underpins the usefulness of either the automated PAC process or the GPL process to those who don't wish to port their number. We think that the availability of a single process for use by those who port and those who don't port should help make switching simpler.

5.13 Finally, we have two proposals for ensuring that consumers are well informed before they switch (in addition to our requirement that they should automatically receive key information relevant to the switch before they can proceed). These proposals are also not contingent on the adoption of either of the two core options.

5.13.1 First, we propose that the consumer should, at any time, be able to request and obtain by SMS or through their online account key information which might help them when considering a change of provider. We propose that this information should be the same as that provided under the automated PAC and GPL processes (ETC, handset charge, credit balance, notice period) but that it should be available independently of the switching process.

5.13.2 Second we propose to improve consumer understanding by requiring providers to give clear information about the switching process.

How our proposals address problems with current switching processes

- 5.14 In considering the likely impact of the above options and proposals, we have assessed the likely costs of implementing them. We set this out in the next section of this document.
- 5.15 For this purpose, we have identified 20 different elements that we anticipate would be involved under the two options. Six relate to our proposal to automate the current PAC process, six to the GPL process, and eight are common to both. These elements are set out in Figure 6, below.

Figure 6: Elements of the requirements for our proposals

Option 1: PAC Automation	Option 2: GPL
<ol style="list-style-type: none"> 1. Providers would have to allow consumers to request a PAC by the following routes: <ol style="list-style-type: none"> a) by SMS, sent from the MSISDN for which the switch was requested, and using SMS shortcodes accessible free of charge; one for 'switch with port' and one for 'switch without port'. All providers would need to use the same two codes; b) via their online account with their provider; c) by phone call to their provider. 2. Where the request related to more than one mobile number (i.e. 'bulk port'), operators would not need to accept the request by SMS. 3. Operators would need to give equal/due prominence to the availability of the three prescribed PAC request routes, alongside any others they adopted. 4. For all PAC request routes, the LP would need to ensure that the Central Porting System sent a single SMS text containing accurate switching information [see 4 below] and the PAC immediately to the MSISDN of the authorised end user. 5. Where the PAC is requested by online account or by phone, the LP would also need to provide accurate switching information and PAC immediately using the same means of communication by which the PAC was requested. 	<ol style="list-style-type: none"> 1. The LP would have to provide to the GP immediately on demand (via the CPS) information relating to the customer on the number of days' a) notice required and / or b) outstanding under their MCP. 2. The GP would then need to: <ol style="list-style-type: none"> a) inform the customer of their notice period / MCP remaining; b) Inform them that as a result, they are likely to incur airtime/outstanding handset charges for this period if they switched at that point; c) Offer to defer the start of the new service, and number port if required, by up to 30 days, such that any double payments and ETCs were reduced. 3. Following a request from the GP to port or switch without porting, the LP would have to ensure that the CPS sent a single SMS text containing accurate switching information [see 4 below] immediately to the MSISDN of the authorised user (where that was capable of receiving an SMS).⁵⁰ 4. The GP would then only be able to proceed with the switch once the CPS has confirmed the consent of the authorised user, which the user would have to give by replying within 24 hours (at no charge) to the CPS switching information text. 5. On an SMS request being made by the consumer to the CPS, the LP would have to ensure that the CPS immediately sent the consumer an SMS with accurate switching information [see 4 below], and requesting the consumer's authorisation to switch, irrespective

⁵⁰ For the switching of devices not capable of receiving SMS, the consumer would need to contact both the losing provider and gaining provider to manage the switch.

<p>6. Where the LP requires a notice period to terminate the contract, the consumer would be deemed to have given notice to their LP on the date on which they requested the PAC, if this was subsequently used.</p>	<p>of whether the consumer has approached any new supplier. The consumer would then need to send an SMS to the CPS to confirm their consent to switch (e.g. using “Reply 1 to proceed”). The confirmed authorisation would then be valid for 48 hours.</p> <p>6. The consumer would be deemed to have given notice to their LP once they had sent their consent via SMS.</p>
<p>Requirements common to both Options 1 and 2</p> <ol style="list-style-type: none"> 1. Providers would need to establish a Central Porting System (‘CPS’) to coordinate communications between LP, GP, and consumer. 2. The switching process would also have to be made available for use by consumers who wished to change their provider but not port their number, and for switches of up to 25 mobile numbers. 3. The switch would need to take place within one working day (unless the consumer agreed to defer) and providers would be required to pay reasonable compensation if this did not occur. 4. Switching information that is provided to consumers would need to include information relating to any Early Termination Charges (‘ETC’), any outstanding handset liability, and any outstanding PAYG credit balances. (These would need to be exact and accurate as at the date of the request and aggregated across all mobile numbers for which the request was made). In addition, information on notice period duration, and start date for the new service (where applicable) would have to be included. 5. LPs would need to allow the consumer to request switching information and any notice period details by SMS, online account and phone call, and then provide it immediately using the means by which it was requested. 6. If the LP rejected a PAC or switching information request, it would need to ensure that it made its reasons for doing so available to the CPS and the consumer. 	
<p>Requirements that may be applied to both Options 1 and 2</p> <ol style="list-style-type: none"> 1. LPs would need to ensure that the old SIM is not deactivated until the GP has activated the new SIM, and, if the number is being ported, that traffic is routed to the GP’s network (known as ‘make before break’). 2. Providers would need to give clear consumer guidance on the porting and switching process. 	

5.16 We now provide more detail on the rationale for each of these elements. We consider each element in turn, and explain in more detail how we envisage our proposals would work. We start with the different elements for our automated PAC proposal (Option 1), then for our GPL proposal (Option 2), before addressing those common to both options.

5.17 For further information, including the options we have considered but have not included in our proposed options, see Annexes 6 and 9. Annex 9 sets out how we have taken into account stakeholder responses to our July consultation in designing our proposals. Annex 6 gives more detailed process flow diagrams, showing each element from the perspective of the consumer, mobile providers, and the ‘Central

Porting Service'. In Annex 8 we give our estimate of the cost of implementing these processes.

Details of elements for Option 1 - Automated PAC

1. *Providers would have to allow consumers to request a PAC by the following routes: a) by SMS text, sent from the MSISDN for which the switch is requested, using SMS shortcodes accessible free of charge; one for 'switching with port' and one for 'switch without port'. All providers would use the same two codes; b) via their provider's online account; c) by phone call to their provider*
- 5.18 Under the current PAC process, regulations require that consumers must be able to request a PAC by phone, and must receive it by phone immediately, or by SMS within two hours (or by another reasonable mechanism if agreed to by both parties). Some providers also allow subscribers to request and receive the PAC through additional means, such as email, webchat, or via online account.
- 5.19 In principle, PAC request routes could include phone, online account, SMS text, IVR, email, letter, webchat or online form. We recognise that each of these offer a mix of potential advantages and disadvantages to both consumers and providers. Considerations include the extent to which each route enables the consumer to request a PAC quickly, the level of interaction required with the LP, the need to authenticate and verify that the consumer requesting the PAC is authorised to do so, the security and integrity of the delivery of the PAC to the requesting consumer, and the costs to providers of implementation and operation.
- 5.20 Figure 7, below, summarises the principal benefits and costs of our proposals to allow consumers to request PACs by three routes: SMS shortcode, via the customer's online account with their operator, and by phone. (For the avoidance of doubt, when we refer to a request via the consumer's online account with their provider, we mean an automated online request, without a need for the consumer to talk to the LP. We do not mean a link to a webchat facility from the online account). We believe that this mix of PAC request routes should enable consumers to control the level of contact they have with the LP, and will increase choice relative to the status quo. We also set out other possible routes which we have considered but which do not form part of our proposed options.
- 5.21 We believe that a requirement to accept SMS requests to a single shortcode applicable to all operators would necessitate management and onward forwarding by the Central Porting System, which would have to have an up-to-date database of MSISDNs by operator. See section 6 and Annex 8 for more details on this.

Figure 7 - Summary of benefits and issues of PAC request routes

PAC request routes proposed		
	Principal consumer benefits	Principal issues / costs
SMS text	<ul style="list-style-type: none"> • Easy to understand and use • Minimises hassle: no need to speak to LP • Fast • Secure - request for switch comes from SIM to be switched • Convenient, e.g. suited to availability for longer hours 	<ul style="list-style-type: none"> • Not all consumers willing/able to use SMS • Not suitable where SIM device has no SMS capability • Requires CPS to have capability to forward PAC requests to relevant LP • Cumbersome for multiple number switches
Online account	<ul style="list-style-type: none"> • Easy to understand and use • Minimises hassle: no need to speak to LP • Fast • Secure - online account is password protected • Convenient, e.g.: <ul style="list-style-type: none"> • for consumers researching services online • suited to availability for longer hours • when no mobile network coverage available • for multiple mobile number switches 	<ul style="list-style-type: none"> • Not all consumers willing / able to use online accounts
Phone	<ul style="list-style-type: none"> • Enables consumers, while requesting PAC, to talk to their provider, e.g.: <ul style="list-style-type: none"> • to discuss a better deal • to help understand the switching process • Backstop PAC request route for those unable / unwilling to use SMS or online routes, e.g. <ul style="list-style-type: none"> • switching SIM device with no SMS capability • switching multiple numbers / 'bulk porting' 	<ul style="list-style-type: none"> • Requires customer service agents to handle calls, so costs per PAC requested and delivered are more expensive than alternative automated routes

Other potential PAC request routes which do not form part of our proposals		
	Principal consumer benefits	Principal issues / costs
IVR	<ul style="list-style-type: none"> • Minimises hassle: no need to speak to LP • Fast • Secure – authentication checks built in 	<ul style="list-style-type: none"> • MSISDN recognition by IVR may be hampered by number withholding • Requires further development costs
Email	<ul style="list-style-type: none"> • Currently used by ≈10% of consumers • Scope to (semi-) automate response • Gives consumers permanent and demonstrable record of request (which may help in following up where a PAC request has failed) 	<ul style="list-style-type: none"> • May be slow • Scope for consumer input error (e.g. providing wrong number) • Difficulties verifying/authenticating request • Difficult to ensure that PAC is delivered securely to authorised owner of the number / account to be ported • Scope for LP to persuade consumer to call unnecessarily • Requires further development and cost
Letter	<ul style="list-style-type: none"> • Gives consumers permanent and demonstrable record of request (which may help in following up where a PAC request has failed) 	<ul style="list-style-type: none"> • Likely to be slow • Manual process: likely to be expensive for providers • Scope for consumer input error • Difficulties verifying / authenticating request • Difficult to ensure that PAC is delivered securely to authorised owner of the number / account to be ported • Scope for LP to persuade consumer to call unnecessarily
Webchat	<ul style="list-style-type: none"> • Enables consumers, while requesting PAC, to talk to their provider • Convenient for some consumers 	<ul style="list-style-type: none"> • Risk of hassle / slow response if LP uses webchat as a retention opportunity and consumer does not want this • Operators already have incentive to offer this
Online form	<ul style="list-style-type: none"> • Convenient for those willing / able to go online but who are unwilling / unable to access online account 	<ul style="list-style-type: none"> • Weaker request verification and authentication possibilities relative to online account

2. *Where the request relates to more than one mobile number (a 'bulk port'), operators would not need to accept the request by SMS.*

5.22 Current switching regulations require operators to allow consumers to request a PAC over the phone where the request is to port up to 24 numbers. We think that switching requests for multiple numbers, whether or not these numbers are ported, are likely to be more complex than requests relating to a single number. We therefore propose that operators would allow multiple number requests through the phone and online account routes specified above, but that they would not also need to accept requests by SMS. A consumer would nevertheless be free to send an individual SMS request for each mobile number to be switched.

3. *Operators would have to give equal/due prominence to the availability of the three prescribed PAC request routes, alongside any others they adopted.*
- 5.23 The way that consumers request and receive their PAC is a key factor in achieving a quick and hassle-free switching experience. We think it is important that consumers are well informed about the three PAC request routes we are proposing, and that operators should give equal and due prominence to their availability in marketing materials and in the switching and cancellation sections of their websites. Without this element, we are concerned that operators would have an incentive to steer customers towards PAC routes which required a live conversation and offered them a save opportunity - notably phone and webchat.
4. *For all PAC request routes, the LP would need to ensure that the Central Porting System sent a single SMS text containing accurate switching information and PAC immediately to the MSISDN of the authorised end user.*
5. *Where the PAC was requested by online account or by phone, the LP would also need to provide accurate switching information as well as the PAC immediately using the same means of communication by which it was requested.*
- 5.24 Under the current PAC process, consumers may be made aware of key information on the implications of switching when they contact their provider to cancel their service or request a PAC. We set out below, under proposal 4 of the requirements common to both options, our views on the information that we consider should be provided (to consumers) under our new processes (we refer to this henceforth as 'switching information').
- 5.25 Requiring that switching information and the PAC are sent together would ensure that the consumer could consider the implications of their switching decision before they proceed. We think the simplest and quickest way to provide this information is via the means by which the consumer requested their PAC. Therefore, we propose that where the request is made direct to the LP by phone or online account, the LP should give the switching information and PAC by the same route.
- 5.26 Regardless of the route by which the request was made, we think the switching information and PAC should additionally be sent by SMS. This provides an added safeguard against fraud for phone and online requests, because the message could only be received by the person in possession of the SIM which legitimately used the MSISDN. Therefore, if a fraudulent attempt to switch was made, the legitimate SIM owner should be alerted, and would thereby have an opportunity to contact their provider to seek help to prevent the switch. This requires that the provider can access an effective 'cancel other' mechanism; we believe the detail of this could be specified during implementation of any process reform.
- 5.27 We think that requiring the CPS to manage and send the SMS messages, minimises scope for the LP to frustrate the process.
- 5.28 The immediate provision of switching information and PAC would improve the current requirements for the LP to provide the PAC immediately by phone "where possible" or by SMS within two hours of the request. In the case of a request for a switch of multiple mobile services (for example within one contract with a provider), we would expect the account to have a nominated primary MSISDN, and the relevant information would be sent to this MSISDN only, to protect against unauthorised requests.

- 5.29 To ensure that the CPS was able to issue the switching information immediately, it would have to request and receive this information from the correct provider in real time, or store and retrieve records sent in advance by operators. We have assumed the former approach in our estimated costs.
6. *Where the LP requires a notice period to terminate the contract, the consumer would be deemed to have given notice to their LP on the date on which they requested the PAC, if this was subsequently used.*
- 5.30 This would ensure that the consumer had certainty about the point from which any notice period required by their provider would run. This improves on the current position, where operators have different policies as to when this should be; some operators treat the notice period as running from the point when the PAC is used. Backdating the notice period in this way should help consumers to manage their notice period. This approach aligns to current industry recommended practice as set out in the MNP Porting Process manual.

Details of elements for Option 2 – GPL

1. *The LP would have to provide to the GP immediately on demand (via the CPS) information relating to the customer on the number of days' a) notice required and / or b) outstanding under their Minimum Contract Period.*
- 5.31 This provision enables the GP to gather information about notice or minimum contract period to enable it to help the consumer manage contract overlap (proposal 2 below).
2. *The GP would have to: a) Inform the customer of their notice period / MCP remaining; b) Inform them that as a result of this, they were likely to incur airtime/outstanding handset charges for this period if they switched at that point; c) Offer to defer the switching date, and number port if required, by up to 30 days, such that double payments and ETCs were reduced.*
- 5.32 This element arises because the GPL process removes the need for consumers to contact their LP for a PAC. This conversation is currently one means by which some consumers become aware of their notice period. It is also an opportunity for some to give notice, with a view to minimising 'double paying' of old and new provider during any period of contract overlap.
- 5.33 We think this issue can be addressed under our GPL process by requiring the GP to highlight to any consumer requesting a switch the possible implications of any notice period, and to offer to help them manage any contract overlap by deferring the start of the new service, and number port if required. This ensures the consumer is fully informed about the possible implications of the notice period, and that they are given help to manage this if they wish. We would ensure that GPs are unable to push through the switch without giving the consumer options to manage contract overlap through clear and carefully monitored requirements on the GP. (In addition, we propose addressing the issue of notice periods and double payments by requiring that the consumer is deemed to have given notice to their LP once they have sent their consent SMS - see proposal 6 below).
3. *Following a request from the GP to switch (with or without porting), the LP would have to ensure that the CPS sent a single SMS text containing accurate switching information immediately to the MSISDN of the authorised user.*

- 5.34 Our GPL proposals allow for the consumer to approach a new provider, who is empowered to activate and complete a switch on their behalf. Alternatively the consumer can seek 'pre-authorisation' to switch, without the involvement of a GP - see proposal 5. We think that in either case the consumer will be sufficiently informed before making their decision where they receive accurate switching information (we discuss in proposal 4 below, in the elements common to both options, the switching information that we think the consumer should receive).
- 5.35 We think that this information is most conveniently supplied through an SMS, and that in most instances this could be supplied immediately. By requiring that it is the CPS that sends this text, forwarding data supplied by the LP, we believe that any scope for the LP to frustrate the process should be minimised. Despatch of information by SMS to the MSISDN of the consumer requesting the switch should help minimise fraud. (In cases where a switch is requested for multiple mobile services, we would expect the account to have a nominated primary MSISDN and that the relevant information would be sent to this MSISDN only).
4. *The GP would proceed with the switch only once the CPS had confirmed the consent of the authorised user, who would give this consent by replying within 24 hours (at no charge) to the CPS SMS text containing the switching information.*
- 5.36 By requiring that the consumer can only confirm their intention to switch following receipt of switching information, this proposal ensures that they make an informed decision. We think this route is likely to be quicker, easier and more convenient for the consumer than the current PAC switching process. The SMS sent by the CPS can capture whether a number port has been requested, since the GP informs the CPS of this. Use of SMS ensures that only the person in possession of the SIM to which the request relates can give their consent. We propose that the consumer should have 24 hours in which to give their consent. (Consumers who do not wish to proceed with the switch need do nothing; the consent option will then expire in 24 hours).
5. *On an SMS request being made by the consumer to the CPS, the LP would have to ensure that the CPS immediately sent the consumer an SMS with accurate switching information and requesting the consumer's authorisation to switch, irrespective of whether the consumer has approached any new supplier. The consumer would then need to send an SMS to the CPS to confirm their consent to switch (eg using "Reply 1 to proceed"). The confirmed authorisation would then be valid for 48 hours.*
- 5.37 It is possible that a consumer might decide to switch away from their current provider before having identified or approached a new provider. We think that consumers in this position will benefit from the ability to secure a 'pre-authorisation' to switch. This would open up a switching 'window' in which the consumer could approach a new supplier and switch, without the need to request that the GP triggers the confirmation text from the CPS. It would enable consumers to consider the implications of a switch before engaging in a discussion with a new provider. This approach requires a window of validity for the 'pre-authorisation'. Allowing a shorter time frame for this would have the benefit of ensuring that switching information details should not change significantly before the consumer approached a new provider, but would give the consumer less time to make this approach. We propose 48 hours.

6. *Consumer would be deemed to have given notice to their LP once they sent their consent SMS.*

5.38 This would ensure that the consumer has certainty about the point from which any notice period required by their provider will run. It improves the current position, where operators have different policies as to when notice should start running.

Details of elements common to both options

1. *Providers would need to establish a Central Porting System ('CPS') to coordinate communications between LP, GP, and the consumer.*

5.39 The current PAC process is underpinned by an online Central Porting System ('CPS'). It authorises, allocates and manages PACs, and allows the exchange of porting data between operators. We think that a CPS will be required to deliver the switching features needed under either Option 1 or Option 2. The CPS would identify requests for PAC and switching information, including notice period information, from either the GP or consumer. It would then route these to the LP, and receive and send information back to the requester. For Option 2 it would also need to send and receive consumer confirmation texts. (Note: Syniverse operates the current CPS for mobile operators, to facilitate switching).

2. *The switching process would also need to be made available for use by consumers who wished to change provider but not port their number, and for switches of up to 25 mobile numbers.*

5.40 We consider that process reforms should continue current regulatory requirements that a switching process is made available to enable porting of up to 25 phone numbers. However, we think that these requirements should be extended to include switches where no number is ported. This would help the third (34%) of switchers who currently use a default C&R arrangement, to coordinate stop/start times with their old/new provider. We think this requirement can apply to either Option 1 (PAC automation) or Option 2 (GPL).

3. *The switch would take place within one working day and providers would have to pay reasonable compensation if this did not occur.*

5.41 Under current requirements, the GP must request a port from the LP as soon as reasonably practicable after receiving the request from the consumer. The LP must port as soon as reasonably practicable upon receiving this request. If the port takes more than one working day, providers must pay reasonable compensation.

5.42 These requirements provide an important protection to consumers and help to incentivise and ensure fast switching. We think they should be extended to include switches where there is no number port. (This is not intended to compromise the ability of the GP to defer a switch where this is requested by the consumer).

4. *Switching information would include Early Termination Charges ('ETC'), any outstanding handset liability, and any outstanding PAYG credit balances. These must be exact and accurate on the date of request and aggregated across all mobile number for which the request is made. In addition, switching information would need to include information on notice period duration and service start date (if applicable).*

5.43 Under current arrangements, consumers are typically made aware of the implications of their decision to switch when they contact their provider to cancel or request a

PAC. This includes any liability for terminating a contract before the expiry of its minimum term - the ETC.

- 5.44 We think it is important that any process revisions ensure that consumers continue to be adequately informed about the key implications of their decision before they commit to switch. We recognise, however, that there is a trade-off between the provision of comprehensive information covering all aspects and implications of the switch, and the need to ensure a clear and simple message which can be sent quickly to the consumer.
- 5.45 There is a long list of information which could potentially be given to help inform consumers. In principle, we consider that when mandating the provision of information, we need to be sure it plays a key role in the consumer's decision making process, and that the LP can retrieve it relatively easily. At the same time, we need to bear in mind that the extent of the information will be constrained by what can reasonably be included in an SMS text message.
- 5.46 We consider that any ETC, outstanding handset charge, and the amount of any outstanding credit (for PAYG customers) are likely to be the core potential costs of switching which consumers need to weigh up before deciding whether and when to switch. They are unlikely to want to pay these charges unless they perceive greater benefits from cost savings or other service features offered by a new provider. We would therefore propose these as information requirements, and think that the consumer is best placed where this information is accurate on the day of the request.
- 5.47 Where the consumer requested a switch relating to multiple MSISDNs, we think that the information is most easily understood where it is presented as three aggregate figures: one for all handsets, one for all ETCs, and one for all outstanding credit.
- 5.48 In addition, we think consumers are likely to benefit from information about any notice period imposed by their existing provider which may affect a switch. In particular, they need information about the form and duration of the notice period, to help them manage contract overlap and any "double paying". The information should help switchers decide whether to execute the switch immediately, or defer until the notice period with their old provider is completed.
- 5.49 Other information which could help consumers in their deliberations includes outstanding contract duration, handset unlocking status, loss of discounts where mobile is part of a communications service bundle, and loss of benefits such as priority access to tickets. We do not think that this information is 'core' to the switching decision for most consumers. It does not represent a direct cost of switching, in the way that outstanding airtime and handset charges, and credit balances do.
- 5.50 Nevertheless, we recognise that such information is useful to some consumers, and that they could benefit from accessing it without needing to speak to their provider. Much of this information can currently be found either at providers' websites, or through customers' online accounts with their provider. We would therefore propose requiring that the consumer is provided with a link to their online account in their PAC/switching information or confirmation text.
5. *LP would allow the consumer to request switching information and any notice period details by SMS, online account and phone call, and provide it immediately via the means by which it was requested.*

- 5.51 We also consider it important that consumers can access information relevant to switching independently of the switching process. This should help ensure they are well informed, if and when they decide to consider their choice of provider and service.
- 5.52 A number of providers already enable consumers to request some account information using SMS shortcodes. We think that it would be helpful for consumers to have consistent forms of access to the switching information set out in proposal 4 above. We suggest that providers offer consumers at least three routes for requesting switching information: by phone, SMS, and via the consumer's online account, so giving consumers choice over how to access their ETC and other data. Providers would be free to offer consumers access to other account information, in addition to the ETC, and via additional routes to the three we have specified.
6. *If the LP rejected a PAC or switching information request, it would need to ensure that it made available its reasons for doing so to the CPS and to the consumer.*
- 5.53 In some cases, an operator might refuse to issue a PAC or switching information request. The industry MNP porting process manual currently sets out five reasons why an operator may currently refuse to issue a PAC.⁵¹ Under our proposals, consumers who were refused either a PAC or a switching information text could not switch. Under our Option 1, this is because they cannot provide a valid PAC to the GP. Under Option 2 (GPL), this is because they cannot send a consent SMS to the CPS without first receiving a switching information text.
- 5.54 We think that where consumers can easily see the reasons why the LP has refused to allow them to proceed, this may help them rectify this issue with their provider. We therefore propose that if the LP rejects an ETC request it must ensure that the CPS clearly sets out the reasons for this in an SMS to the consumer.

Details of elements that may be applied to both Options 1 and 2

1. *LPs would need to ensure that the old SIM is not deactivated until the GP has activated the new SIM, and, if the number is being ported, that traffic is routed to the GP's network (known as 'make before break').*
- 5.55 Loss of service may arise where the LP and GP do not activate and deactivate services in a coordinated way, or in ways which are predictable or controllable by the consumer. We believe that this issue can largely be addressed by requiring that 'losing providers' must not deactivate a SIM until the 'gaining provider' has activated the new SIM ('make before break'), and, if the number is being ported, that traffic is routed to the GP's network. We think that to achieve this effectively requires centralised 'end-to-end' coordination of the switch, to ensure that the LP and GP are in lockstep at each stage.
- 5.56 Adopting 'make before break' and centralised switching has the additional benefit that the process can be used to help those who don't wish to port their number coordinate the timing of their old and new service. These consumers currently have no option but to arrange the transfer themselves through C&R. We think that the

⁵¹ These are: the MSISDN is not held by a customer of the LP or has been terminated, the account holder is deceased, the LP has already issued a PAC that is still valid, or that the customer fails to provide adequate identification that he or she is the legitimate account holder

availability of a single process, for use by those who port and those who don't, will make switching simpler.

2. *Providers would need to give clear consumer guidance on the porting and switching process.*

- 5.57 Providers currently vary in the quality of information they provide to consumers on how to switch. Issues include a lack of, or unclear information on how to acquire a PAC and the steps involved in the porting process, and on customers' rights if the porting process goes wrong. We think that a requirement to provide clear guidance on the porting/switching process should help ensure that consumers are better informed. We consider that the process for switching accounts with multiple MSISDNs is likely to be particularly complex, and that consumers will benefit from advice on this.
- 5.58 We have considered specifying the detail to be included within the guidance, but think that industry is better placed to develop the necessary detail, in discussion with Ofcom and other interested parties.

How the proposals protect against unauthorised switching

- 5.59 We agree with stakeholders that any switching process will require effective mechanisms to ensure that any request for a switch is made by the person authorised to do so, in order to avoid slamming, erroneous transfers or more general fraudulent or mischievous attempts to switch service provider. Annex 9 provides stakeholder comments on this issue and our response. With this in mind we consider that our proposals deliver suitable protections as follows.
- 5.60 For PAC requests by phone and online account⁵², verification typically takes place by the operator checking customer personal security details or via the consumer's online account log-in details respectively.
- 5.61 For PAC requests by SMS, the SMS will be recognised as coming from the mobile number which is subject to the switching request, and the LP will check that this number is authorised to make changes to the account.
- 5.62 Under our Option 2 GPL approach, any request for a switch made to a GP would need to be routed to and validated by the LP.
- 5.63 Further security is given by the requirement that, for Option 1, the PAC is also sent by SMS to the SIM of the mobile number in question, or for Option 2, that the consumer receives a confirmation SMS text delivered to the SIM of the mobile number being switched. This response can only be accessed by the person in physical possession of the SIM which is legitimately associated with the mobile number. This person will therefore be alerted should a fraudulent switch request be made and could then contact their LP about this⁵³.

⁵² Note any request for switch of multiple mobile services or numbers (for example within one contract with a provider) will need to be by phone or online account or web portal.

⁵³ We acknowledge that in such circumstances the LP would need access to a mechanism for rejecting a request ('cancel other'), the detail of which we believe is best considered during implementation of any reforms.

- 5.64 For switches of multiple mobile services, we would expect the account to have a nominated primary MSISDN, and the relevant information would be sent to this MSISDN only, to protect against unauthorised requests.

Further notes on notice periods

- 5.65 We have included proposals to help consumers manage their notice period and reduce double payments during contract overlap when using both the automated PAC process and the GPL process. However, we note that there are likely to be other ways to achieve this.
- 5.66 One option could be to align any notice period requirement with the porting window (i.e. one business day). This alignment already exists for voice and broadband switches on the Openreach network (where the switching window is 5-10 days), and we understand it is common for mobile switching in other countries.
- 5.67 We will discuss options for managing notice periods and reducing double payments with industry in parallel with this consultation, together with any proposals they may individually make to address the issue. If we believe that the problem of double paying will cause consumer harm in the future which is not addressed or sufficiently mitigated through reforms we may make to the switching process or through stakeholders' own actions, we will consult on ways to remedy this.

Consultation questions

Q4 Do you agree that our Option 1 (PAC automation) and Option 2 (GPL) address the consumer harms we have identified as arising from current switching processes?

Q5 Do you agree that the three main methods for PAC request and receipt under Option 1 should be SMS, online account and phone?

Q6 To what extent do you think each of our options ensures that consumers are adequately verified, and protected from being switched without their consent?

Q7 Do you agree that our proposals ensure consumers are sufficiently informed before they switch?

Q8 Do you agree that both options should require providers to use a 'make before break' approach to switching in order to address the risk of service loss during the switch?

Q9 Do you agree with our proposal for providers to give clear consumer guidance on the porting and switching process?

Q10 Do you agree with the measures we have set out under both options to enable consumers to coordinate better their switch, including to manage the interaction between the switching time frame and any required notice periods?

Q11 Do you have any other comments on the matters raised in Section 5?

Section 6

Option assessment

Introduction

- 6.1 In Section 4 we explained the concerns we have with current switching processes, and the evidence of harm which we have used in our assessment of this.
- 6.2 In Section 5, we set out two proposed switching reform processes to improve the consumer experience of switching – Option 1 (Automated PAC) and Option 2 (GPL).
- 6.3 In this section, we consider the effectiveness of these proposals in addressing the specific concerns that we have identified with the current switching process. We also assess the scale of costs that we expect industry would incur to implement each of our proposals. The aim of this impact assessment is twofold:
- a) Firstly, it allows us to assess the overall appropriateness and proportionality of each option, having regard to the impact on the consumer harm we have identified as arising from current switching processes, and on industry costs; and
 - b) Secondly, in the event that we consider both options are objectively justifiable and proportionate interventions (as we do), it helps us to determine which of the options we prefer.

We believe that Option 1 and Option 2 deliver significant benefits to consumers

- 6.4 By providing alternative routes to obtain a PAC (SMS or online account), or eliminating the need for a PAC altogether, both Options 1 and 2 will reduce the time and hassle involved in switching.
- 6.5 Both proposed processes would provide routes for consumers to switch without having to speak to their losing provider (LP). We think this is important to address difficulties that some consumers have talking to their LP, including cases where LPs make it difficult to switch or put prospective switchers off. As explained in Section 4, we recognise that many consumers actively seek to speak to their current provider – either as part of the switching process or at other times – to check aspects of their service or contract, or to see if they can get a better deal rather than switch. However, we believe that conversations with LPs should be at the customer's initiative and not required in order to switch provider.
- 6.6 Both options also help consumers reduce payments for contract overlap.⁵⁴
- 6.7 We consider that these Options are likely to deliver three distinct benefits compared to the status quo:
- a) They will reduce the harm experienced by switchers;

⁵⁴ We would not expect our core proposals to address harm from loss of service; however we discuss this in the context of the additional reforms we are proposing - see paragraphs 6.57-6.59.

- b) They will lower barriers to switching for would-be switchers, some of whom may currently be deterred from switching to a service that they would prefer because of switching barriers; and
 - c) They should deliver benefits by supporting competition between operators.
- 6.8 It is difficult to quantify these benefits. We have, however, estimated a sub-set of these benefits, namely those which arise from reduced time spent talking to providers to arrange the switch, and reduced double payments for contract overlap. We estimate that both options will deliver benefits of around £22m over ten years in terms of time savings. We estimate that Option 1 could reduce double payments by around £8m, and Option 2 by £24m, over the same time frame.⁵⁵
- 6.9 We consider that these estimates are conservative and likely to significantly understate the actual benefits these proposals will deliver. That is because they do not capture the material benefits to switchers of removing the hassle associated with contacting the LP, over and above the time taken to do so. They also do not capture the benefits to would-be switchers and to competition of lowering switching costs.

The implementation costs of these proposals are modest

- 6.10 We have assessed the set up and operating costs that we expect industry would incur to implement each of our proposals. Set against these costs, operators are also expected to benefit from cost savings resulting from the switching process being partly automated. In principle, the net cost to operators can therefore be positive or negative.⁵⁶
- 6.11 We estimate that the one-off setup costs are around £13 million for Option 1 and around £14.3 million for Option 2. Taking into account additional operating costs, as well as cost savings, we estimate that the net industry cost of Options 1 and 2 would be £10.9 million and £12.4 million respectively (in NPV terms over ten years) under our base case.⁵⁷
- 6.12 We consider that these costs are relatively modest in the context of the size of the mobile industry and the likely consumer benefits that we would expect these reforms to deliver. We therefore believe that Options 1 and 2 would both be proportionate interventions.
- 6.13 On balance, we have a marginal preference for Option 2. This is because we believe it would be simpler for consumers than Option 1, as it would not require them to obtain a PAC and give this to the GP. In addition, Option 2 would require GPs to actively help consumers manage notice periods, and hence should deliver greater reductions in double payments than Option 1. Although Option 2 costs £1.5m more over ten years for providers to implement and operate, we consider the difference between the two options to be small in the context of the additional consumer benefits of Option 2.

⁵⁵ In Annex 7, we set out in full the modelling methodology and assumptions which underpin our quantitative estimates of the benefits related to time savings and double-paying. We only summarise the assumptions and results in this section.

⁵⁶ (i.e. operators may actually save money under one or both options)

⁵⁷ In Annex 8, we set out in full the modelling methodology and assumptions which underpin our estimates of the net cost to industry. We summarise the assumptions and results in this section.

We propose introducing additional reforms to deliver further consumer benefits

- 6.14 In light of the levels of loss of service experienced by some switchers under current processes, we propose requiring centralised ‘end-to-end’ management of the switch by the CPS, along with ‘Make-before-break’ SIM activation, over and above our core proposals. These reforms would also help those who wish to change provider but don’t want to port their number to coordinate the timing of their old and new service (these people currently have no option but to arrange the transfer themselves through C&R).
- 6.15 Accordingly, in this section we also consider the impact of these reforms as well as providing clear consumer guidance on the porting and switching process, to address lack of consumer understanding. (As these reforms can be considered incremental to the two core packages of proposals we have assessed them separately from our main impact assessment (in paragraphs 6.53 to 6.71)).
- 6.16 In both cases, we consider that the costs of these reforms are proportionate to the benefits they would deliver, and should therefore be included in our package of switching reforms.

Options 1 and 2: Assessment of reduction in consumer harm

- 6.17 By making the switching process faster, simpler and less likely to result in loss of service, we consider that our process reforms will benefit switchers; reduce barriers to switching and deliver competition benefits. We now discuss these benefits in turn.

Benefits to switchers from reducing costs of switching

Unnecessary time and hassle

- 6.18 We consider that our process reforms will make the switching process faster and simpler by reducing unnecessary time and hassle. By providing alternative routes to obtain a PAC (SMS or online account), or eliminating the need for a PAC altogether, our proposals address these problems because consumers will no longer have to call their LP if they don’t wish to.
- 6.19 We have sought to quantify this benefit by estimating the time consumers would save by using our proposed options to switch mobile provider. In doing so, we recognise that this quantification exercise does not capture the full benefits our proposals would deliver in this respect, as this approach does not capture reduced hassle. This means that our quantitative assessment will significantly underestimate the total reduction in harm to switchers.
- 6.20 We set out our assumptions about time savings in full in paragraphs A7.8 - A7.30. The main source of the time saving is the fact that, under both options, consumers no longer have to call their LP to request a PAC: Option 1 provides much quicker routes to obtaining a PAC (SMS or online account), while Option 2 removes the need to request a PAC at all – consumers simply contact the GP. We estimate that in both

cases this will reduce the time taken per switch by around 13.4 minutes (equivalent to £1.58).⁵⁸

6.21 In order to estimate the total time savings for each proposal, we multiply this time saving by the number of switchers who would derive this benefit by using our new processes (i.e. use automated PAC or GPL *and* no longer call their LP). To calculate this figure we assume under our base case that:

6.21.1 The total number of switchers⁵⁹ capable of deriving this benefit⁶⁰ comprise the 3.17 million existing PAC switchers per year, plus those C&R switchers (32%, equivalent to around 0.83 million switchers per year) who said they wanted to keep their number when switching, but ultimately opted to switch via C&R due to difficulties that they encountered or perceived relating to the PAC process.⁶¹

6.21.2 60% of these switchers will continue to contact their LP⁶², generating a figure of 40% who take full advantage of the new process and derive the time saving described above.

6.22 Under these assumptions, we estimate that Options 1 and 2 will both generate between £10.9m and £32.6m in consumer benefit related to time savings (NPV over ten-years), with a central case estimate of **£21.7m**.

6.23 While we have estimated that both Option 1 and Option 2 would perform similarly well in respect of making the switching process faster, we would expect Option 2 to be simpler than Option 1 because it removes the need for a PAC altogether.⁶³

6.24 Finally, by reducing the time and hassle associated with porting numbers we expect many switchers who are currently going through a C&R process to now use a switching process (around a third – see paragraph A7.6) and in doing so, be able to keep their number. We would expect the scale of this (unquantified) benefit to be substantial.

⁵⁸ Based on the value of consumers' non-working time (roughly £7 per hour), as set out in paragraph A7.10.

⁵⁹ That is, switchers using a porting process.

⁶⁰ Note that a reduction in time to switch (or the incidence of double-paying) reduces the costs in switching provider for all applicable switchers, not just those who cited these issues as a problem in our research.

⁶¹ 46% of C&R switchers said that they wanted/would have liked to keep their old number. 70% of this group cited at least one reason related to the PAC process as to why they did not keep their number. $46\% \times 70\% = 32\%$. See: Tables 188 and 189, p. 472-3, Mobile switching quantitative research, http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/mobile-switching-quantative-data/Ofcom_Mobile_Switching_tables_Dec2015.pdf

⁶² It is possible under both Automated PAC and GPL for switchers seeking to port their number to take up the process but continue to call their LP, for example to request a PAC (only relevant under Automated PAC), to obtain other information about their switch or to negotiate a better deal. Under these circumstances we would not award the switcher with any cost saving.

⁶³ Option 2 also involves one fewer "active" touch point compared to Option 1. Under Option 1, switchers must "actively" text a short code to receive a PAC. Under Option 2, switchers need to send a SMS to confirm the switch, but are prompted to do so.

Double-paying

- 6.25 Double-paying occurs when the consumer continues to pay the LP for a period of time (i.e. the duration of their notice period), even after having switched provider. For example, if a consumer has not given notice in advance, they may continue to pay their LP for 30 days after they have started service with their GP. The group of switchers for whom double-paying is a risk is largely confined to post-pay switchers who are outside of their minimum contract term.⁶⁴
- 6.26 Not all such switchers are at risk of double-paying⁶⁵ and our research suggests that some switchers actively seek to avoid double-paying by co-ordinating the end of their old contract with the start of their new one so as to minimise any overlap. (We refer to such switchers as ‘managers’, as they currently manage the contract overlap to some degree, whereas those switchers who incur material double-paying are termed ‘non-managers’).
- 6.27 As we have explained above, we have designed our proposals in a way which seeks to ensure they do not exacerbate the problem of double-paying; indeed we expect they will help reduce the current level of such ‘double payments’ incurred by mobile switchers.⁶⁶
- 6.28 Under **Option 1** we seek to reduce the incidence of double paying by our requirement that the consumer is deemed to have given notice to their LP at the point at which they request the PAC.⁶⁷
- a) This will benefit a subset of those PAC switchers who are not currently managing their notice period.⁶⁸ These switchers benefit because it reduces their notice period duration by the average delay between requesting and redeeming a PAC.⁶⁹
 - b) It is possible that some switchers (both PAC and C&R) may face an increased risk of double-paying under this proposal. This might arise if some consumers are currently being prompted to manage their notice period by the interaction they have with the LP when obtaining a PAC/cancelling).⁷⁰ Our requirement to

⁶⁴ Pre-pay consumers and post-pay consumers switching within contract do not have a notice period. We note that post-pay consumers in the last month of their contract may incur some notice period charges, but for simplicity we focus on switchers who are out of their minimum contract term.

⁶⁵ Post-pay PAC switchers leaving O2 are unlikely to incur double paying, as O2 only bills the consumers up to the point where the number is ported (i.e. there is effectively no notice period).

⁶⁶ In paragraphs A7.31-A7.51 we explain in detail the methodology underpinning our quantification of the net impact of our proposals on double-paying; we summarise the main assumptions and results here.

⁶⁷ if it is subsequently used. This is the policy currently used by H3G and recommended in the industry porting manual.

⁶⁸ Assumed to be 75% of out-of-contract post-pay PAC switchers - specifically, PAC switchers leaving MNOs other than H3G or O2 who do not give notice at the point of requesting PAC. We do not have data on the precise proportion of switchers who give notice when they request a PAC, so for our quantitative estimates we have assumed that 50% of switchers do so.

⁶⁹ Assumed to be 4.1 days on average for this group (i.e. 30 days minus the average duration of double-paying i.e. 25.9 days)

⁷⁰ Whilst this will contain information on notice periods, we recognise there is a risk that this information will not be quite as effective as an interaction with the LP in prompting switchers to manage notice periods. In our base case, we have captured this risk by assuming that 25% of

automate the PAC request process could therefore result in some of the switchers who were previously managing double paying no longer managing this as effectively.

- c) We have calculated the net impact of double-paying under Option 1, taking into account these opposing effects. We have estimated that the net impact of these effects under the assumptions we have used is a reduction in double-paying under Option 1 of between £5.1 million and £10.2 million, with a base case estimate of **£7.6 million (10 year NPV)**.

6.29 Under **Option 2**, we have proposed placing an obligation on the GP to inform the customer of his or her notice period and its implications and offer to defer the switch date by up to 30 days.

- a) We consider that this obligation will increase the ability for many switchers to manage their notice period to avoid double-paying.⁷¹ In particular, it will help some existing switchers currently managing their notice period to manage their notice period more effectively. Moreover, we consider that it will encourage some existing switchers not currently managing their notice period to do so. This is because the GP's offer to defer the switch makes it easier for consumers to manage their notice period than under the status quo, where the LP merely informs them about their notice period.
- b) It is difficult to estimate quite how many non-managers will defer their switch; in our base case, we assume that 10% of non-managers agree to defer their switch by 30 days, and reduce double-paying by between 25.9 and 30 days as a result.⁷² We consider that this figure is highly conservative, and that in reality a much higher figure would do so. Nonetheless, in our base case we have chosen to be conservative to show that even if only a very small percentage of non-managers deferred their switch, then the benefits to consumers could be substantial.
- c) Under these (conservative) assumptions, we estimate the impact of Option 2 is a reduction in double paying of around **£24.3 million (10 year NPV)**. This is invariant to our assumption about the proportion of switchers who no longer call the LP.

6.30 We recognise that there is some uncertainty about the precise impact of our proposals on the net level of double-payments. We have therefore undertaken some

managers who exclusively use our new process do not find the SMS-based information sufficient to manage their notice period, and incur more double-paying than before.

⁷¹ It is possible that a group of switchers could face increased double-paying under Option 2 compared to the status quo. All non-O2 switchers not managing their notice period but giving notice when requesting their PAC (as well as H3G switchers regardless of whether or not they explicitly give notice) currently pay the difference between their 30 day notice period and the average delay in redeeming a PAC for non-managers (30 days - 4.1 days = 25.9 days). For any of these switchers who continue not to manage their notice period under GPL, they will now incur 30 days' notice. We include an estimate of this group in our base case.

⁷² With the different figures depending on whether they give notice at PAC request or not. All existing C&R switchers are, by definition, assumed to give notice under the status-quo, whether or not they are managing their notice period. Consequently, all C&R non-managers that use Option 2 and continue not managing their notice period experience the increase in double paying explained in footnote 71 above.

sensitivity analysis, shown in Figure 8. While we anticipate that Option 1 will reduce double-paying, we note that there are some scenarios in which this is not the case. We find that Option 2 will reduce double-paying under all plausible scenarios.

Figure 8: Sensitivity analysis: 10-year NPV estimates of reduction in consumer harm

Assumption	Impact on Option 1	Impact on Option 2
Text effectiveness	Net reduction in double paying in base case even if text is only 38% effective in enabling status-quo managers to remain managers under Option 1	N/A
GP conversation	N/A	Net reduction in double paying even if only 1% of non-managers opt to defer switch by 30 days For each additional 1% of non-managers that opt to defer switch, £2.6m reduction in double-paying
People giving notice	Net reduction in double paying in base case providing <80% of non-managers give notice	Net reduction in double-paying in base case even if 100% of non-managers give notice
Proportion of switchers managing notice period	Net reduction in double paying in base case providing <44% of out-of-contract switchers are 'managers'	Net reduction in double paying in base case even if no out-of-contract switchers are currently 'managers'

Summary of quantified harm estimates

- 6.31 Figure 9 presents our estimates of the total quantifiable reduction in consumer harm for Options 1 and 2, based on time savings and a reduction in double-paying. As discussed above, both of these benefits are affected by assumptions on the proportion of switchers who will exclusively use our new processes, for which we do not have a reliable point estimate. As a result, we have presented estimates across our plausible range (20% to 60%, with a central case of 40%).
- 6.32 Inevitably, the assumption as to how many switchers will use our process is subject to uncertainty as our proposed reforms are not in place. As explained in Annex 7, our central estimate of 40% is based on research on the share of Openreach switchers who do not call their LP under the current GPL switching process. However, we recognise the limitations in using analysis from another sector in that there are differences in behaviour across markets. We also consider there are other reasons why this figure might not be a good estimate of the benefits that accrue over time. Given the uncertainty around this figure, we consider that a plausible range for this parameter is between 20% ('low') and 60% ('high'), with a central case of 40%. This is equivalent to between around 0.8 million and 2.4 million switchers per year, with a central case of 1.6 million switchers per year.

Figure 9: 10-year NPV estimates of reduction in consumer harm

	Option 1			Option 2		
% that stop contacting LP	Time-savings	Double paying	Total	Time-savings	Double paying	Total
20%	£10.9m	£10.2m	£21.1m	£10.9m	£24.3m	£35.2m
40%	£21.7m	£7.6m	£29.3m	£21.7m	£24.3m	£46.0m
60%	£32.6m	£5.1m	£37.7m	£32.6m	£24.3m	£56.9m

Benefits to would be switchers from reducing barriers to switching

6.33 Under the current switching process, the switching costs identified in the previous section might deter some consumers from switching operator altogether.

6.34 According to our 2015 quantitative market research, amongst those who had considered switching providers in the past 12 months but ultimately dismissed it:⁷³

- a) 19% said a major factor was that it was too time-consuming to go through the process of switching from one provider to another (this was the main reason for 2%);
- b) 11% said a major factor was that that they experienced difficulty when contacting their current provider (a further 19% considered this to be a minor factor). Specific issues included being kept too long on the phone or dealing with retention activity by the LP. Additionally, 10% said that a major factor was difficulty in getting the PAC code from their current provider;
- c) 17% said a major factor was a worry that they would not be able to use their mobile during the switch; and
- d) 17% said a major factor was that that they were worried they might have to pay two providers at the same time.

6.35 We consider that, by introducing a faster switching process that does not require consumers to contact their LP directly, our process reforms are likely positively to help to address the consumer harms cited in 6.34(a) and 6.34(b) above. We also consider that our reforms will help to address the consumer harm related to double paying cited in 6.34(d) (by backdating the start of the notice period under Option 1, and by requiring the GP to offer to defer a consumer’s porting date until the end of their notice period under Option 2). By addressing these harms, therefore, we consider that our process reforms are likely to enable a proportion of considerers to

⁷³ Within our sample, 3% of respondents had considered switching providers in the past 12 months but ultimately dismissed it.

switch to the service they would prefer, and from which they receive greatest value. This would create additional benefits, over and above the benefits that accrue to people who already switch.⁷⁴

- 6.36 We have not included these benefits in our quantitative assessment of our proposals. Nevertheless, we note that, to the extent that there is a material group of people currently being deterred from switching to a preferred service, our assessment could substantially underestimate the total benefit to consumers.

Competition benefits

- 6.37 In paragraph 4.10 of the July 2015 consultation, we said that we had examined the economic literature on the impact of switching costs on competition in various consumer switching publications, such as the Strategic Review of Consumer Switching 2010 Consultation⁷⁵, and our August 2013 Statement switching processes on the Openreach network.⁷⁶ We noted our conclusion in the Strategic Review of Consumer Switching:

“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 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.”⁷⁷

- 6.38 We said we were not aware of any new authoritative research which challenges the broad conclusions above.
- 6.39 In response to the July 2015 consultation, stakeholders have not presented any new research or academic literature which challenges this conclusion. EE said that competition in the mobile market is thriving;⁷⁸ however, this does not preclude the possibility that lowering switching costs would increase competitive intensity between mobile providers even further. Other stakeholders, such as Sky, argued that “retention” activity is a key facet of competition among CPs, and is highly beneficial to consumers. Our switching reforms do not prevent consumers who welcome and engage with such offers from calling their LP to negotiate a better deal, if they so choose.
- 6.40 Overall, we continue to recognise the possibility that switching costs create strong incentives for aggressive introductory offers and low prices early on in a customer’s

⁷⁴ We also note considerers’ concerns related to loss of service in 6.34(c). We consider this as part of our impact assessment of End-to-end coordination in paragraphs 6.53 to 6.67.

⁷⁵ Ofcom, Strategic Review of Consumer Switching - A Consultation, September 2010, Section 5 and Annex 6: <http://stakeholders.ofcom.org.uk/binaries/consultations/consumer-switching/summary/switching.pdf>

⁷⁶ 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/>

⁷⁷ Paragraph 5.31, Ofcom, Strategic Review of Switching, September 2010

⁷⁸ EE response to July 2015 consultation, page 16

contract, and also for retention activity among engaged consumers. However, as set out in previous publications, we remain of the view that the net effect of switching costs will generally be to soften competition and increase prices between operators.

- 6.41 Accordingly, we consider that lower switching costs in the mobile sector are likely to increase competition between mobile operators, and that this would generally be expected to benefit consumers by way of lower prices, higher quality of service, and increased innovation.
- 6.42 We have not attempted to quantify the benefits flowing from an increase in competition, as these benefits are difficult to estimate with any degree of precision. However, we consider that in practice the competition impacts could be significantly larger than the reduction in harm to switchers as they navigate the switching process.
- 6.43 For illustrative purposes we note that a November 2012 report by Analysys Mason on the Impact of radio spectrum on the UK economy⁷⁹ estimated that consumer surplus from public mobile services (i.e. services offered by EE, H3G, O2 and Vodafone) was £24.2–28.2 billion in 2011. Applying Analysys Mason’s estimated compound annual growth rate (CAGR) of between 11% and 15% to the lower bound of this 2011 range indicates that consumer surplus is around £36.7 billion in 2015. If consumer surplus is indeed of this order of magnitude, even a moderate increase in competition could generate substantial consumer benefit; for example, a 1% increase in consumer surplus (resulting from lower prices) would be equivalent to £370 million over one year, and £1.7 billion (in net present value terms) over five years.⁸⁰
- 6.44 We also note the conclusions of the Monopolies and Merger Commission (MMC) in relation to introducing fixed number portability.⁸¹ The MMC said that “*while precise quantification is not possible, indirect benefits (Types 2 and 3) are significant in relation to the direct benefits (Type 1)*”.⁸² Type 2 benefits included efficiency improvements and associated price reductions resulting from increased competition in the telephony market due to the availability of number porting. We recognise that the impact of this process reform is not necessarily comparable to the options being considered in this consultation. Nevertheless, it provides an illustration of how the benefits from increased competition can be large relative to the benefits that we have sought to quantify in our impact assessment.
- 6.45 As a result, we consider that excluding these potential benefits from our quantitative impact assessment risks substantially underestimating the net benefit of each of our process reforms.

⁷⁹ *Impact of radio spectrum on the UK economy and factors influencing future spectrum demand*, Analysys Mason, November 2012, <https://www.gov.uk/government/publications/impact-of-radio-spectrum-on-the-uk-economy-and-factors-influencing-future-spectrum-demand>

⁸⁰ Based on the social time preference rate of 3.50%, as recommended by the HM Treasury Green Book, Chapter 5: http://www.hm-treasury.gov.uk/d/green_book_complete.pdf

⁸¹ MMC, “Telephone number portability: A report on a reference under section 13 of the Telecommunications Act 1984”, 1995, available at http://webarchive.nationalarchives.gov.uk/+http://www.competition-commission.org.uk/rep_pub/reports/1995/374telephone.htm.

⁸² MMC judgement, paragraph 2.155

Options 1 and 2: Assessment of implementation costs

- 6.46 Our detailed assessment of the industry cost for each option is presented in Annex 8. For each option, we consider that our proposed reforms will impose the following costs on operators:
- 6.46.1 Firstly, operators must fund the set-up costs for establishing a CPS with the capability to carry out the new switching processes. Most significantly, operators must make investments to ensure the CPS can receive an SMS from the consumer, acquire switching information from the LP, and send this information directly to the consumer via SMS.⁸³ This requires the CPS to update the central database listing current operators for all UK mobile numbers.
 - 6.46.2 Separately, the main MNOs and MVNOs would all be required to invest in one-off set-up costs to ensure that their own business systems have the required functionality to implement our proposals. This includes investment in their online account facilities to allow consumers to request a PAC (under Option 1) or switching information (Option 2).
- 6.47 On the other hand, operators would also enjoy some costs savings under each option. This is because the automation of the switching process means that fewer customers are likely to call them to ask for a PAC or terminate their contract, allowing LPs to reduce the current level of call centre staff. We recognise that MNOs may choose to continue making customer retention calls, which would limit the scope for cost savings. However, to the extent that this is a voluntary decision on the part of MNOs, we have not included such costs.
- 6.48 The net industry cost depends on the relative balance of set-up and operating costs, on one hand, and ongoing cost savings on the other hand.
- 6.49 Relevant to our calculation of net industry costs is the number of switchers who would take full advantage of our new process (we term this “S”), because it determines the extent of the offsetting cost savings that operators would make under our proposed options. As discussed above, when we set out our calculation of estimated time savings benefits, this assumption is subject to uncertainty. Consistent with our benefits estimate, we therefore calculate total net industry costs (TC) across a range of plausible proportions for this parameter (20-60%, with a central case of 40%). Additionally, we estimate the level of S that makes the total net industry costs equal to zero (i.e. the “break-even” level of S for each option, which we have termed S*).
- 6.50 Figure 10, below, presents our estimates of the net industry cost for each option along with the break-even level of S for each option. These estimates are based on the following assumptions:
- a) Total setup costs under Option 1 are £13.0m and £14.3m for Option 2 (as set out in Figure A8.3;

⁸³ Under Option 2, the CPS must also be able to forward notice period information to the GP in real time.

- b) Annual operating costs are £3.5m for Option 1 and £3.3m for Option 2 (as set out in Figure A8.3;
- c) Average customer service agent time saved per PAC request is 16.4 minutes for Option 1, and 15.4 minutes for Option 2 (as set out in paragraphs A8.42 – A8.48);⁸⁴
- d) Average customer service agent cost per hour is £11.38 (as set out in paragraphs A8.49 – A8.54);
- e) The time horizon is 10 years; and
- f) The discount rate is 3.50%

Figure 10: Net industry cost of Options 1 and 2 (10-year NPC estimate)⁸⁵

	Option 1			Option 2		
% that stop calling LP	Additional Costs (Setup + 10-year opex)	Cost savings (annual)	Net cost	Additional Costs (Setup + 10-year opex)	Cost savings (annual)	Net cost
20%	£47.8m	£1.9m	£26.9m	£47.1m	£1.7m	£27.5 m
40%	£47.8m	£3.7m	£10.9m	£47.1m	£3.5m	£12.4m
60%	£47.8m	£5.6m	-£5.1m	£47.1m	£5.2m	-£2.6m
Break-even %	54%			57%		

6.51 Figure 10 shows that on a like-for-like basis, Option 1 costs slightly less for operators than Option 2. This is because, although the additional costs of Option 1 are slightly higher (due to annual operating costs for online portal PAC request functionality), the cost savings are also higher. This means that, across our plausible range for the proportion of switchers no longer calling the LP, the overall net cost is lower under Option 1.

6.52 Under our central case assumption that 40% of switchers no longer call the LP, Option 1 imposes net costs of £10.9 million over ten years, and Option 2 imposes net costs of £12.4 million. The break-even point (S*) is 54% and 57% respectively.

⁸⁴ The reason why time savings for operators is lower under Option 2 is that the GP must relay the consumer's notice period information, and we estimate this additional interaction time at around one minute.

⁸⁵ A negative cost implies a cost saving.

Additional proposed reforms

Centralised end-to-end management by the CPS / Make-before-break

- 6.53 Centralised end-to-end management of the switching process by the CPS refers to extending the CPS' management of the porting process beyond its involvement in the initiation and validation phase (e.g. providing a PAC and / or switching information, and receiving consent to switch) into the porting execution and completion phase. Make-before-break SIM activation refers to the process whereby the switcher's old SIM is not deactivated until their new SIM is activated (and, if a number is being ported, the routing updates are completed). This should help to address loss of service by minimising the period for which consumers do not have access to a mobile service during the porting execution process.
- 6.54 We think that make-before-break SIM activation effectively requires end-to-end management by the CPS, to ensure that the LP and GP are in lockstep at each stage. As a result, we refer to end-to-end management as the combination of these reforms (i.e. including make-before-break).
- 6.55 Adopting end-to-end management has the additional benefit that the process can be used to help those who don't wish to port their number coordinate the timing of their old and new service. These consumers currently have no option but to arrange the transfer themselves through C&R. We think that the availability of a single process, for use by those who port and those who don't, will make switching simpler.
- 6.56 As set out below, we consider the impact of including this additional reform on an incremental basis, separately from our main impact assessment. This is because we consider our core set of process reforms are not contingent upon its inclusion, as they deliver a credible package of proposals on a standalone basis.

Loss of service

- 6.57 Our mobile survey evidence suggests that around 20% of switchers (around 1 million switchers per year) are currently affected by loss of service when switching.⁸⁶ Responses to our survey suggest that these switchers experience an average of 0.5 days loss of service.⁸⁷ We recognise that being without a mobile service causes serious disruption to consumers, even for a short period for of time (especially for the 15% of households that are now mobile-only). This is shown by the results of our research into consumer views on the importance of communications services, which shows that consumers consider mobile voice and text services to be at least as essential that fixed internet and voice or than having pay TV.⁸⁸
- 6.58 We have quantified the reduction in harm that would result from the introduction of end-to-end management, as set out in paragraphs A7.61 to A7.68. We estimate the

⁸⁶ Slide 49, Mobile survey, http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/mobile-switching/mobile_switching_quantitative_research_feb16.pdf

⁸⁷ When interpreting responses for the purposes of our quantitative calculation, we assume "a few minutes" is 10 minutes, "a few hours" is 3 hours, and we restrict "more than a day" to one day so as to be conservative.

⁸⁸ <http://media.ofcom.org.uk/news/2014/essential-comms-services/>

total harm related to loss of service that would be addressed is around **£5.5m** (discounted over ten years).⁸⁹

- 6.59 This estimate does not capture the positive impact addressing loss of service should have on barriers to switching and consequently, competition. As set out in paragraph 6.34(c), 17% of considerers said a major reason for not switching was a worry that they would not be able to use their mobile during the switch consumers. We also note that 20% of inactive mobile consumers said a major reason why they did not consider a switch was “concern about having no service while switching to another provider” (and for 1% of inactive consumers this was the main reason). We consider that the prospect of loss of service will encourage some of these considerers and inactive consumers to switch to a service they would prefer, which, given the combine size of these groups, could create potentially substantial benefits in the process for these groups, and competition.

Allowing non-porters to use our processes

- 6.60 Introducing end-to-end management will also facilitate the use of our process by switchers who do not want to port their number (**non-porters**).⁹⁰ A CPS which centrally manages the order and timing of the porting execution process would be able to coordinate the ceasing of a switcher’s old service with the beginning of a new service. Under Option 1, switchers would use a different shortcode to request a “PAC” (i.e. a code which instructs the GP to cease the consumer’s old service but not port their number). Under Option 2, switchers would instruct the GP not to port their number. The CPS, in conjunction with the GP and LP, would then coordinate the ceasing of their old service at the same time as beginning their service.
- 6.61 Our consumer research suggests that C&R switchers (even those who do not wish to port their number) encounter similar problems with the current switching process, largely because, like PAC switchers, they have to call their LP to terminate their old contract - 31% of C&R switchers said they encountered major difficulty contacting their previous provider, compared to 34% of PAC switchers (Mobile survey, slide 32). We have therefore quantified the reduction in consumer harm for a group of around 0.61 million C&R switchers per year who we assume will use the process.⁹¹

⁸⁹ This estimate assumes that the reforms will address all incidences of loss of service as reported in our 2015 quantitative survey. Insofar as these figures include loss of service resulting from C&R switchers failing to coordinate the stop and start of their service (and assuming not all C&R switchers take up our new processes) it will somewhat over-estimate the total harm that our proposal will address.

⁹⁰ We recognise that switchers who do not want to port their number could in principle use Option 1 and Option 2 and derive benefits from this, without end-to-end management or make before break. However, we expect that introducing end-to-end management will make use of a formal switching process significantly more attractive for this group. We accordingly award the benefits this group derive from using a formal switching process and the costs involved in providing for this to these additional reforms. Even if these benefits were not included we would still consider that these reforms were proportionate in light of the significant non quantified benefits we expect them to deliver

⁹¹ According to our consumer research, 47% of C&R switchers did not want to port their number (or actively wanted a new number) (Mobile survey, slide 77). We recognise that our processes would not be used by all C&R switchers who do not wish to port their number, as some switchers may still wish to coordinate the stop and start of services themselves rather than leaving it to the CPS to manage centrally. We have assumed that 50% of this group use our processes – equivalent to around 0.61 million people per year.

- 6.62 We estimate that our processes would deliver around £3.3 million in additional time savings under our base case. We also consider that, under Option 2, they would derive a double paying benefit of around £1.5 million from being able to manage their notice period more easily. In contrast, the impact on double-paying is negative under Option 1 (around -£0.7m) because switchers who would otherwise have used C&R do not benefit from the backdating of their notice period to the date at which they requested their switching code,⁹² while some C&R switchers may find it harder to manage double paying as they no longer have a conversation with their LP.
- 6.63 Finally, these switchers would derive the same non-quantified benefits, outlined in this section, which apply to existing PAC switchers.

Quantified estimates of reduction in harm

- 6.64 Figure 11 summarises our estimates of the incremental reduction in consumer harm (over and above our core proposals) resulting from End-to-end management. This comprises: time savings to non-porters who use our processes; double paying impacts on non-porters who use our processes; and minimising loss of service to *all* consumers who use our processes.

Figure 11: 10 year NPV estimates of incremental reduction in consumer harm (over and above core proposals) due to End-to-end management

	Option 1 w/ end-to-end mgmt by CPS (incremental)				Option 2 w/ end-to-end mgmt by CPS (incremental)			
% that stop calling LP	Time-savings (non-porters)	Double paying (non-porters)	Loss of service (all)	Total	Time-savings	Double paying	Loss of service	Total
20%	£1.7m	-£0.3m	£5.5m	£6.9m	£1.7m	£1.5m	£5.5m	£8.7m
40%	£3.3m	-£0.7m	£5.5m	£8.1m	£3.3m	£1.5m	£5.5m	£10.3m
60%	£5.0m	-£1.0m	£5.5m	£9.5m	£5.0m	£1.5m	£5.5m	£12.0m

- 6.65 As set out in Figure A8.9 and paragraph A8.66, we estimate that the net industry cost of these reforms would range from around £13 million to around £29 million under our base case, depending on the extent to which it would allow operators to make additional back-office staff cost savings. Even if we assume that these cost savings are realised (i.e. the net cost is around £13 million), therefore, the net incremental cost outweighs the incremental quantified benefits.
- 6.66 However, as discussed in paragraphs 6.59 and 6.63, this ignores important non-quantified benefits which we would expect to arise for those would-be switchers for whom losing service is a key deterrent to switching. End-to-end management would

⁹² For the reasons explained in Annex 7.

also help to deliver a single unified service which works for porters and non-porters alike, which would make it easier for consumers to understand the switching process.

- 6.67 Overall, taking the quantifiable and non-quantified benefits together, our view is that end-to-end management is an objectively justified reform, which is proportionate to the aim of minimising periods of loss of service during the switching process as we consider it to be the least onerous means of achieving that aim. As such we consider they should be included in our proposed switching reforms.

Improving consumer guidance about the switching process

- 6.68 This is intended to address lack of consumer understanding. According to our 2015 quantitative survey, around 7% of switchers found understanding the relevant steps required to switch provider to be a major difficulty of the overall switching process as did 12% of considerers. As set out in paragraph 4.44.1, there also appears to be confusion about the PAC process, with nearly two-fifths (38%) of active considerers in our mobile survey reporting that 'not wanting to change their phone number' was a major factor in their decision not to switch.
- 6.69 We consider that a requirement to provide clear guidance on the switching and porting process should help ensure that consumers are better informed. We consider in the first instance that industry is best placed to develop the necessary detail, and we have not therefore specified a prescriptive set of required information that should be included as part of this requirement. We would be happy to work with industry to develop this detail if necessary.
- 6.70 As set out in paragraph A8.40, we have estimated that the net industry cost of producing, maintain and updating the necessary marketing material covered by this reform will be around £5.3 million over 10 years. This is based on an average annual operating cost of around £7,200 per operator (though we note that operators may well be able to fulfil this requirement on an ongoing basis at significantly lower cost).
- 6.71 On the benefits side, we do not have a reliable quantifiable estimate of the reduction in harm related to improved consumer understanding, as this is difficult to measure. However, we consider that one benefit of this reform is likely to be greater take-up of our proposals (i.e. the proportion of switchers no longer calling the LP will increase) by helping more consumers to understand that they can obtain their PAC via SMS or online account (Option 1), or switch entirely through GP contact (Option 2). We have calculated that this reform would deliver a positive net impact (taking into account consumer benefits and cost savings) if it increased the proportion of switchers no longer calling the LP by 4% under Option 1 or 3% under Option 2, which we consider is a reasonable assumption. As such, we consider that this is an objectively justifiable and proportionate incremental reform.

Summary of provisional views and Ofcom's preferred option

6.72 Figure 12 below summarises the expected benefits from our proposed switching reforms that we have quantified, and the benefits that we have not quantified.

Figure 12: Summary of impacts of Options 1 and 2 (quantified and non-quantified)

		Option 1 (Auto-PAC)	Option 2 (GPL)	Notes
Quantified impacts (base case) (10-year NPV estimates)	Speed (time saving)	£21.7m	£21.7m	13 minute saving per switch for Options 1 and 2
	Double-paying (net impact)	£7.6m	£24.3m	Scale of benefit for Option 2 is heavily dependent on assumption about effectiveness of the GP/consumer conversation
	Cost to industry (net of cost savings)	£10.9m	£12.4m	Option 2 does not require operators to offer different routes for obtaining a PAC
	Total net impact	£18.4m	£33.6m	Net impact is positive for both options
	Total net impact (excluding double paying)	£10.8m	£9.3m	Net impact is positive for both options
Non-quantified impacts	Simplicity / hassle	✓	✓✓	Option 2 should be simpler for consumers than Option 1, as it would not require them to obtain a PAC and give this to the GP. In addition to the quantified benefits above, the reduced 'hassle' and lower switching costs should deliver greater benefits for switchers, would-be switchers and competition.

6.73 We consider that:

- a) Under our base case assumption about the proportion of switchers who would no longer call the LP under our processes (40%), Option 1 and Option 2 both deliver a positive net impact. This is the case even if we exclude double paying benefits, and only focus on quantifiable benefits related to unnecessary time incurred (i.e. time savings);
- b) The quantified impact of Option 2 is higher than the impact of Option 1 if double-paying benefits are included, but lower if double paying benefits are excluded. This is because we estimate that the net reduction in double paying is larger

under Option 2, while the net cost to industry is slightly higher (due to the fact that there is a smaller cost saving per call made to the LP).

- c) We consider that the overall impact of both options on switchers would be substantially greater than our estimates of the quantified impact, due to the non-quantifiable reduction in hassle that our processes deliver. Also, switchers who were previously deterred from porting their number due to process issues may now port their number and benefit.
 - d) Finally, both options would deliver additional benefits by lowering barriers to switching which delivers benefits to would-be switchers and competition benefits. To the extent that Option 2 delivers greater reductions in consumer harm for existing switchers, we would also expect it to be more effective in lowering switching barriers, and enabling those previously deterred from switching / porting to exercise their choice.
- 6.74 On balance, we have a marginal preference for Option 2. This is because we believe it would be simpler for consumers than Option 1 as it would not require them to obtain a PAC and give this to the GP. In addition, Option 2 would require GPs to actively help consumers manage notice periods, and hence should deliver greater reductions in double payments than Option 1. Although Option 2 costs £1.5m more over ten years for providers to implement and operate, we consider the difference between the two options to be small in the context of the additional consumer benefits of Option 2.
- 6.75 We also propose to introduce the following incremental reforms: End-to-end management by the CPS; and a requirement for mobile providers to provide clear guidance on the switching process. We consider that taking account of all of the costs and benefits we have set out above, these proposals are objectively justified and proportionate to the aims they are seeking to achieve.

Figure 13: Summary of quantified estimates of cost and benefits of consultation proposals

	Option 1			Option 2			Option 1 with end-to-end management			Option 2 with end-to-end management		
% that stop calling LP	Total benefit	Net cost to industry	Total net impact	Total benefit	Net cost to industry	Total net impact	Total benefit	Net cost to industry ⁹³	Total net impact	Total benefit	Net cost to industry	Total net impact
20%	£21.1m	£26.9m	-£5.8m	£35.2m	£27.5m	£7.7m	£28.0m	£58.0m	-£30.0m	£43.9m	£58.7m	-£14.8m
40%	£29.3m	£10.9m	£18.4m	£46.0m	£12.4m	£33.6m	£37.4m	£39.5m	-£2.1m	£56.3m	£41.4m	£14.9m
60%	£37.7m	-£5.1m	£42.8m	£56.9m	-£2.6m	£59.5m	£47.2m	£21.1m	£26.1m	£68.9m	£24.0m	£44.9m

⁹³ This is the net cost to industry excluding the potential for additional cost savings resulting from back-office staff cost savings.

Impact of aligning notice period and porting window

- 6.76 Our core process proposals have been designed with double payments in mind, and would be likely to reduce these to some extent. However, we recognise that there may be better ways to help consumers manage notice periods and reduce double-paying. One possible way of doing this would be to align notice periods with the porting period.⁹⁴
- 6.77 We have not conducted a full impact assessment of aligning notice periods with the porting period, as this does not form part of our consultation proposals at this stage. However, we note the following:
- a) We estimate that consumers who switch could currently be 'double-paying' by as much as £46m per annum;
 - b) We have designed our GPL process to mitigate the impact on double-paying of a possible move to GPL. This has necessitated a number of process changes. For instance, the GP must explain to consumers notice periods and their implications for the start-date of the new contract. They must also obtain notice period information from the LP, via the CPS (if the consumer has not already done this). The consumer must then confirm that they consent to the switch. We recognise that some of these processes are necessary to mitigate lack of awareness about ETCs, among consumers who are within their minimum contract term, and so would remain in place even if the notice period and porting window were aligned. However, for switchers outside of their minimum contract term, these processes significantly lengthen and complicate the switching process.
- 6.78 We consider that there could be substantial benefits to consumers from aligning notice periods with the porting window and this would remove the need for a process solution of the type we have proposed. We will discuss with operators options for addressing the interaction of notice periods with the switching process in parallel with this consultation. If we believe that process reforms or operator initiatives are insufficient in addressing the consumer harm which arises from double payments, we will consult on ways to remedy this

Consultation questions

Q12 Do you agree with our assessment of the consumer benefits of our proposals?

Q13 Do you agree with our assessment of the likely costs of our proposals?

Q14 Do you agree with our preference for GPL?

Q15 Do you have any other comments on the matters raised in Section 6?

⁹⁴ By this we mean that the notice period should not extend beyond the date that a number is ported (or, in the case of non-porters switching via our process, the date that the LP deactivates the SIM).

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 1 June 2016**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at <http://stakeholders.ofcom.org.uk/consultations/consumer-switching-mobile/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 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
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact on you.

Further information

- A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Jasminder Oberoi on 020 7981 3423

Confidentiality

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

all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.

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

Next steps

- A1.11 Following the end of the consultation period, Ofcom intends to publish a statement in autumn 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 . 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

Annex 2

Ofcom's consultation principles

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

Before the consultation

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

During the consultation

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

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

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

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

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

After the consultation

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

Annex 3

Consultation response cover sheet

- A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.
- A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at <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

Name/contact details/job title

Whole response

Organisation

Part of the response

If there is no separate annex, which parts?

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

DECLARATION

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

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

Name

Signed (if hard copy)

Annex 4

Consultation questions

This Annex lists the questions that we are consulting on.

Q1 Do you agree that current mobile switching processes create consumer harm in terms of difficulties and time spent contacting the current provider, requesting the PAC, and unwanted save activity, as well as loss of service and double paying when switching?

Q2 Do you agree that consumers would benefit from clearer switching processes and information about switching?

Q3 Do you have any other comments on the matters raised in section 4?

Q4 Do you agree that our Option 1 (PAC automation) and Option 2 (GPL) address the consumer harms we have identified as arising from current switching processes?

Q5 Do you agree that the three main methods for PAC request and receipt under Option 1 should be SMS, online account and phone?

Q6 To what extent do you think each of our options ensures that consumers are adequately verified, and protected from being switched without their consent?

Q7 Do you agree that our proposals ensure consumers are sufficiently informed before they switch?

Q8 Do you agree that both options should require providers to use a 'make before break' approach to switching in order to address the risk of service loss during the switch?

Q9 Do you agree with our proposal for providers to give clear consumer guidance on the porting and switching process?

Q10 Do you agree with the measures we have set out under both options to enable consumers to coordinate better their switch, including to manage the interaction between the switching time frame and any required notice periods?

Q11 Do you have any other comments on the matters raised in Section 5?

Q12 Do you agree with our assessment of the consumer benefits of our proposals?

Q13 Do you agree with our assessment of the likely costs of our proposals?

Q14 Do you agree with our preference for GPL?

Q15 Do you have any other comments on the matters raised in this Section 6?

Q16 Do you have any other comments on our proposals?

Annex 5

Glossary and abbreviations

Act - The Communications Act 2003.

Active Considerer: a consumer who actively started looking for a new provider in the last 12 months, but did not switch.

Block Operator (or Original Number Operator (ONO)): 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 arrangement 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 12 months 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).

"End-to-end management": centralised coordination of the end to end process of the switch, to ensure that the LP and GP are in lockstep at each stage of the process.

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.

Inactive consumer: defined as those who have neither switched, nor considered switching in the last 12 months.

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.

"Make Before Break:" where the losing provider does not deactivate a SIM until the gaining provider has activated the new SIM, and, if the number is being ported, that traffic has been routed to the gaining provider's network.

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 Station International Subscriber Directory Number (MSISDN): the telephone number attached to the SIM card in a mobile phone. The MSISDN together with IMSI (see above) are two important numbers used for identifying a mobile subscriber. The MSISDN is defined in the ITU's E.164 numbering plan.

Mobile Virtual Network Operator (MVNO): an MVNO provides mobile 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 microchip 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.

Short Messaging Service (SMS): this is also known as a text message.

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

Unstructured Supplementary Service Data (USSD): is a system used by most mobile phones to communicate with the service provider's computers and allows information to be displayed in a simple format on the user's mobile phone. One common example of USSD is that it can be used by customers on a prepaid (Pay as you go) account to query the available balance on their account.