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Consumer Switching: Further proposals to reform switching of mobile services

Proposals to address the impact of minimum notice periods when switching mobile communications services

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Consultation

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About this document

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

This document sets out our view on the difficulties and costs that consumers face when they switch mobile services where they need to give notice to terminate their existing service. The effect of notice periods within the switching process is that many consumers end up paying for two services at the same time, even though they may not want this. Our intention in this document is to enhance the mobile switching process reforms we proposed in our March 2016 consultation with an additional proposal to address this issue.

We invite comments on our proposals from all interested parties.

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Section 1

Summary

Introduction

1.1 The ability to switch provider quickly and easily and without unnecessary difficulties enables consumers to exercise choice and take advantage of new offers or leave providers that are no longer meeting their needs. Active consumer choice promotes competition and the provision of good value, high quality and innovative services.

1.2 In the mobile sector, consumers wishing to switch provider must currently manage giving notice to terminate their existing service. This can lead to a number of difficulties and costs:

- Double payments, arising where they pay notice for their old service (even after it has been deactivated in the case of those who switch using the PAC process), while simultaneously paying for their new service.
- Difficulties co-ordinating the switch to minimise double payments. These include the time and effort needed to understand and manage the switch, and possibly accepting an unwanted deferral of the start of the new service.
- Concerns about these issues may also deter some consumers from switching.

1.3 In March 2016 we consulted on two key options to reform mobile switching processes. The first - *Automated PAC* - aims at simplifying the current PAC switching process. The second - *Gaining Provider Led (GPL)* - would simplify switching by enabling the new provider to co-ordinate the switch on behalf of the consumer. We included measures in both options to address or minimise the likelihood that consumers would incur double payments.

1.4 However, we also signalled that a more effective approach for addressing double payments might be to remove charges for notice beyond the date on which a customer switches and/or ports their mobile number to another provider.

1.5 We think such an approach can offer substantial benefits by reducing the extent of unwanted double paying and by simplifying the steps that a consumer must consider when switching their mobile service.

1.6 We are therefore setting out and consulting here on revising the reforms set out in our March 2016 consultation, to include an additional requirement on providers not to charge notice beyond the date a consumer switches and/or ports their mobile number. We estimate that consumers could save at least £13 million per year as a result of this requirement.

Section 2

Introduction and legal framework

2.1 In March 2016 we published a consultation on switching mobile services (referred to in this document as 'the March 2016 consultation'[1]). This followed on from our July 2015 consultation.[2]

2.2 The March 2016 consultation set out two core proposals for reforming the processes used by consumers to switch their mobile service from one provider to another. These proposals included measures to address the difficulties that can arise from the need for consumers to serve notice with their old provider when switching.

2.3 In this consultation we set out an additional proposal for addressing these difficulties under the two process reforms we set out in the March 2016 consultation.

Background

2.4 The March 2016 consultation set out our provisional view that the existing PAC and 'Cease and Re-provide' ('C&R') processes[3] for changing mobile provider give rise to difficulties for a sizeable minority of switchers, and deter some consumers from switching.[4] We grouped our concerns into three main categories:

- **Time and hassle to progress the switch**, in particular as a result of the need for the consumer to contact their existing provider to request a PAC and/or terminate their service;

- **Risks of loss of service while switching**, arising from either technical issues between the old provider (also known as the 'Donor' or 'Losing Provider' ('LP'), and the new provider also known as the 'Recipient' or 'Gaining Provider ('GP')), or from difficulties the consumer has co-ordinating the switch; and

- **Risks of 'double paying' while switching**, owing to providers' requirements for consumers to serve notice periods when terminating their service, which could result in consumers continuing to pay for their old service after they have switched. We noted that double payments can arise where consumers find it difficult to co-ordinate the timing of the switch alongside the need to give and serve notice, or where they seek a period of overlap to mitigate a perceived risk of losing service during the switching process.

    - We offered various estimates of the extent to which switchers double pay. Findings from our consumer research suggested that between a third (32%) and two-fifths (60%) of post-pay contract switchers (using either the PAC

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[1] http://stakeholders.ofcom.org.uk/consultations/consumer-switching-mobile/
[2] http://stakeholders.ofcom.org.uk/consultations/mobile-switching/
[3] C&R is not a formal switching process, but the default arrangement by which a consumer can change provider if they do not wish to use a formal process.
[4] See in particular paragraphs 4.7 to 4.44 of the March 2016 consultation.

process or C&R) double paid when switching.[5,6] On the basis of data provided by Syniverse, we estimated that total double payments could amount to around £46 million per year.

  - We also noted that just over one in six consumers (17%) who actively considered switching (equivalent to 0.3 million people) cited worries about having to pay two providers simultaneously during the switch as a major factor in their decision not to switch.[7] A similar number of inactive mobile customers cited similar worries as the main factor which deterred them from switching.

2.5 The March 2016 consultation set out two options for reform of the current PAC switching process, aimed at addressing these harms:

- Option 1: Automated PAC process
- Option 2: Gaining Provider Led ('GPL') process

2.6 We proposed making such processes available to switchers whether or not they wish to port their number, to ensure that all switchers could benefit from an easier process.

2.7 We proposed measures under both options to help consumers manage notice periods and reduce any period of double paying when switching. We noted, however, that there were likely to be other ways to help consumers achieve this. In particular, we suggested that aligning the notice period to the switching window (i.e. one business day),[8] such that consumers would no longer be required to pay the LP once their old service has been deactivated, might be an effective remedy.

2.8 We said we would discuss options for addressing the interaction of notice periods with the switching process with providers in parallel with the March 2016 consultation. We said that if we believed that process reforms or provider initiatives were insufficient in addressing the consumer harm which arises from double payments, we would consult on ways to remedy this.

2.9 We have now held preliminary discussions with the largest mobile providers about this issue and have not received assurances that they plan to act to address it. As we continue to have concerns about the consumer harm which is likely to arise from double payments, we have decided to consult on an additional proposal to address this issue.

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[5] March 2016 consultation paragraph A10.50 explains the basis for the upper end of our range here (i.e. 60%). The mean average double payment duration among those who reported a contract overlap was around 13 days (March 2016 consultation, paragraph 4.35).

[6] Since March 2016 we have obtained further data from operators on the proportion of post-pay PAC switchers serving notice periods beyond the porting date. This suggests that the true incidence of double paying is more likely to lie at the lower end of this range.

[7] This corrects our March 2016 consultation paragraph 4.36 in which we said "Just over one in six (17%) active considerers (0.3 million people)… cited worries about having to pay two providers simultaneously during the switch as the main factor in their decision not to switch."

[8] Industry rules require mobile operators to complete a switch and port of mobile number within one business day of the customer's request to switch. These rules are set out in the *General Conditions of Entitlement,* available here: http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/CONSOLIDATED_VERSION_OF_GENERAL_CONDITIONS_AS_AT_28_MAY_2015.pdf).

Scope of this document

2.10 This consultation relates to difficulties arising from the interaction of switching processes with charges imposed on mobile consumers pursuant to notice periods.

2.11 We refine and explain further the view of the harm caused by these difficulties that we set out in the March 2016 consultation. We go on to propose an additional requirement for addressing these issues under the process reforms we consulted on.

2.12 The difficulties we are concerned with here principally affect mobile consumers on contract or 'post-paid' terms and who are switching outside of their Minimum Contract Period ('MCP'). These issues can affect consumers who switch using either the PAC or the C&R process. By contrast we are not concerned here with consumers who take pre-pay or 'pay-as-you-go' mobile services, since these consumers are free to terminate their service and switch once they have made their pre-payment, without the need to serve notice.

Legal framework

2.13 Ofcom regulates the communications sector under the Communications Act 2003 ('the Act'). Its provisions derive from the European common regulatory framework for electronic communications services ('the Framework'). The Framework comprises a number of specific Directives. Full details of the relevant legal framework are set out in section 2 of the March 2016 consultation. The additional measures we propose in this consultion would be implemented through the setting of a general condition under the relevant provisions of sections 45 to 52 of the Act.

Application of the legal framework to switching processes

2.14 Our policy objective remains to further the interests of consumers by protecting their interests as end-users of services delivered over mobile networks in the UK, specifically where a consumer wishes to switch mobile supplier.[9]

2.15 In applying the legal framework to switching processes, on the one hand we recognise that there are sometimes ties between the consumer and their provider which may deter the consumer from switching, but which we nevertheless consider can be legitimate. The consumer should generally expect, for example, to be bound by fair contract terms and the obligations they create. These give the provider appropriate protection in respect of the contractual bargain.

2.16 On the other hand, however, the switching process itself should not be something that prevents or hinders an informed consumer from changing provider.[10] Neither should it create unnecessary difficulties for those that switch, such that they would be put off from doing so again. Instead, we consider that the switching process should be easy and reliable, allowing consumers to make informed choices about the services they wish to buy, and to exercise those choices.

2.17 We consider that a switching process which does not create unnecessary difficulties or deterrents for consumers, and is easy and reliable, is, therefore, a legitimate policy

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[9] See paragraphs 2.24 to 2.27 of the March 2016 consultation.

[10] Where they act with knowledge of, and are subject to, due obligations, such as to pay fair early contract termination charges.

aim consistent with our duties. In order to achieve that aim, we have sought to identify:

- the necessary steps involved, both on the part of the consumer wanting to switch and of the old and new providers, to effect the switch;

- which of those steps give rise to unnecessary difficulties and costs to consumers and which frustrate achievement of our aim; and

- what we consider to be the most proportionate measures to address those unnecessary difficulties and costs.

Impact Assessment

2.18 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.[11]

Equality Impact Assessment

2.19 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 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.

2.20 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.

Next steps

2.21 We intend to publish a statement on reforms to mobile switching processes, including the issue of how these interact with notice periods, around the end of 2016.

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

Section 3

Consumer experience of mobile notice periods and switching

Introduction

3.1 This section sets out how current notice period requirements impact the consumer experience when switching mobile services.

3.2 We consider that, in the context of switching mobile provider, current notice period requirements and the manner in which they are applied can result in difficulties and/or financial costs for consumers, through difficulties in double paying and co-ordinating switch dates.

3.3 We begin by setting out the steps involved for consumers in managing double payments and current provider policies on notice periods. We then set out our current view of the difficulties that can arise as a result of the imposition of notice periods. In doing so, we consider how these differ depending on whether the consumer switches using the PAC or C&R process. Finally, we address relevant stakeholder responses received in response to the March 2016 consultation.

Difficulties arising from the interaction of the switching process and notice periods

The current PAC switching process

3.4 A consumer wishing to switch mobile provider and retain ('port') their number must currently follow the PAC process. There are around 3.17 million PAC switches per year.[12] The PAC process requires the consumer to complete and co-ordinate the following activities:

- **Request and receive a PAC from the LP.** This is a unique code, valid for 30 days, which signifies the provider's consent to the port.

- **Give notice to the LP.** Some providers require customers to serve notice of up to 30 days before their contract is terminated, whether or not they are within their MCP.[13] The customer can do this before,[14] at the same time as, or after

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[12] Based on data from Syniverse on the number of ports, August 2014 to July 2015. This figure relates solely to non-bulk ports (i.e. ports involving fewer than 25 numbers) which we would expect to be affected by our proposed options. Syniverse currently manages the Central Porting Service (CPS) that supports mobile number portability in the UK.
[13] Figure A8.1 in Annex 8 sets out extracts from providers' published Terms and Conditions relating to termination of service and any associated notice period requirements.
[14] Some providers will re-start the notice period 'clock' to the date of the PAC request where the customer actively gives notice prior to requesting the PAC.

requesting the PAC.[15] If they do not actively serve notice, then some providers will deem it to be served at the point the PAC is requested (if it is subsequently used), while others will deem it to be served at the point the PAC is used i.e. when they receive a port request from the new provider. Figure 1 below summarises the main mobile providers' policy and practice regarding notice periods.

- **Sign up for a new service with the GP.** Some consumers will choose to do this before they get a PAC, for example to trial network coverage before deciding whether to switch. Others will approach the GP having already secured a PAC from, and potentially having actively given notice to, the LP. When they start the new contract, the GP gives them a SIM with a temporary number.

- **Give the PAC to the GP.** The new SIM must be activated before the consumer gives their PAC to the new provider; some providers require the consumer to contact them in order to do this. The PAC enables the transfer and activation of the old number to the new service, and the deactivation of the old service. It is a regulatory requirement that the number must be ported and activated within one business day of this request. This means that the customer will normally double pay for at least one day while the old number is ported to the new service.

3.5 A consumer wishing to avoid a period of double paying when switching and porting their number via the PAC process must co-ordinate these activities, taking into account the nature of the LP's notice period requirements and policy. We set out in more detail in Annex 7, three illustrative examples of the co-ordination required under different LP notice period requirements.

3.6 These scenarios highlight that, in order to minimise unwanted double paying under present arrangements, a consumer would need to have a good understanding of their current provider's notice period policy and/or normal practice to plan and co-ordinate carefully the timing of the switch. They also highlight how deferral of a switch to a new preferred service may be necessary in order to minimise the impact of double paying.

[15] If the consumer finds it necessary to request a PAC a second time, for example because he or she has mislaid the original PAC, some providers re-start the notice period 'clock' to the date of the second PAC request.

Figure 1: Main mobile providers' policy and practice regarding notice periods

Provider	Provider's normal practice, where consumer is beyond MCP and switches via PAC
O2	No notice charged (customer only billed up to the date that the number is ported)
Three	30-day notice period begins when PAC is requested (if subsequently used)
EE[16]	30-day notice period begins when PAC is requested (if subsequently used)
Vodafone[17]	No notice charged (customer only billed up to date that the number is ported)
Others[18]	Varies by provider. Notice period sometimes begins when PAC is requested, sometimes when PAC is used

Difficulties or deterrents arising from notice periods and the PAC switching process

3.7 The evidence we have suggests that consumers who switch via the PAC switching process, experience the following difficulties where notice periods apply:

- **Unwanted double payments.** Some consumers pay for both their old and new service and, in contrast to C&R switchers (see below), PAC switchers continue to pay notice for their original service even after it has been deactivated. This limits the degree to which double paying can deliver any benefits beyond the point of port-out.[19,20]

[16] Note: the notice period policy set out here differs from the policy we described in our March 2016 consultation. This follows updated information from EE on its policy.
[17] Note: the notice period policy set out here differs from the policy we described in our March 2016 consultation. This follows updated information from Vodafone on how it applies its policy in practice.
[18] Some providers, such as [✂], charge the switcher up to the end of their current monthly billing cycle following a port-out. This can mean that the switcher pays notice for fewer than 30 days.
[19] We note in this context BT/EE's argument that some consumers knowingly or do not mind double paying because there are benefits in return, such as earlier access to a new handset. We consider that the consumer is clearly worse off here than in a situation where there is no requirement to pay out notice after the switch. Consumers suffer harm in the form of unwarranted payments where they pay for a service that is deactivated at the point of switching, and which they can therefore no longer use, whether or not they do this knowingly.
[20] We note our BDRC 2015 consumer research which indicated that 38% of PAC switchers who recalled contract overlap reported that this was wanted (and 8% said they did not know). However, the same research indicated that the most common reasons why this group said they incurred contract overlap were as follows: to ensure a continuous mobile service; lack of awareness about the notice period; to switch before the PAC ran out; and the new provider gave a date that was before the end of the previous contract.

- **Difficulties co-ordinating the switch to minimise double payments**. Some consumers looking to minimise double payments by co-ordinating their switch incur the following difficulties:

  - time and effort to understand the timing and interplay between the switching / porting process and any notice period, and to discuss and actively manage the co-ordination of these components with providers. This is likely to be even more challenging where information on notice period policies and how they interact with the PAC process is poor;[21]

  - the need to defer the start date of the new service, despite requirements to ensure that consumers should be able to switch within one business day, in order to minimise the outstanding notice period to be paid out; and

  - risk of loss of service or the lapsing of the PAC if the co-ordination does not go according to plan.[22]

3.8 Concerns over unwanted double payments and difficulties co-ordinating the switch may also **deter some consumers from switching**.

3.9 We have reviewed our consumer research and other information sources[23] to illustrate the form and extent of these difficulties and deterrents, in the sections below.

Unwanted double payments

3.10 Our research found that, of those PAC switchers who had switched in the last 18 months and reported a contract overlap:[24]

- 22% said they did so because they had signed up with their new provider and were unaware of the notice period required by their current provider;[25]

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[21] We agree with BT/EE's point that some consumers unwillingly double paid because they were unaware of the notice period or how it relates to the PAC validity window. Furthermore, we would add that even those consumers who are aware of notice periods may not understand how to manage and co-ordinate switching in ways that minimise double payments.

[22] We note in this context that a consumer planning a switch also needs to be aware that a notice period is usually 30 calendar days whereas a port to an alternative provider can only happen on a business day. This introduces the possibility that where a notice period ends on a weekend or bank holiday, the port must happen on the next occurring business day, with the result that the consumer may double pay for longer than intended depending on the day they serve their notice.

[23] For further details of the consumer research we undertook to understand consumers' experiences of switching mobile provider, see Annex 10 of our March 2016 consultation. We have, in particular in Section 3, referred to the quantitative consumer research undertaken during 2015 by BDRC – see published results at:
http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/mobile-switching/mobile_switching_quantitative_research_feb16.pdf and
http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/mobile_switching/quantitative/

[24] See BDRC 2015 research slide 55.

[25] We also note results from our 2015 consumer research about consumers' awareness of 'end of contract dates/terms' for communications services. This shows that 31% of mobile consumers were not aware that once their contract ends they needed to give 30 days' notice if they wished to leave

- 20% said it was because the new provider gave them a date that was before the end of their previous contract;

- 31% did so to ensure continuous service while 20% did so to ensure they switched before the PAC ran out; and

- 41% provided answers that indicated they were unwilling to defer the start of the new service (i.e. 18% said they wanted to get their handset as soon as possible; 15% wanted to sign up before a deal ran out; and 19% wanted to switch to a better service immediately).[26]

3.11 Our qualitative research found that most of those switching using the PAC process who experienced double paying, said they did not want this and that for the significant minority of switchers who described the PAC switching process as difficult and not satisfactory, problems included difficulties in co-ordinating the switch.

3.12 We have derived estimates of the proportion of switchers who double pay from consumer research and operator data:

- Our consumer research found that 28% of post-pay PAC switchers said they incurred a period of contract overlap (and consequently likely double paid).[27] On average these consumers said they experienced an overlap of 9.6 days.

- An alternative estimate, based on operator data,[28] suggests that 36% of post-pay PAC switchers incurred a period where they were double paying. However, this increases to 97% among switchers who are required to make notice period payments beyond service deactivation.[29] The average overlap duration for these consumers was around 21 days. (See Figure 2 for the distribution of contract overlap duration experienced by these consumers).

- The proportion who experienced contract overlap according to operator data is higher than in the consumer research, while the the average overlap duration is also significantly longer. This may be because some survey respondents underestimated their actual period of overlap and/or post-rationalised their ability to manage notice to minimise double paying. We consider that the operator data is likely to be more accurate.

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their provider (See http://stakeholders.ofcom.org.uk/market-data-research/other/cross-media/end-of-contract-notification)

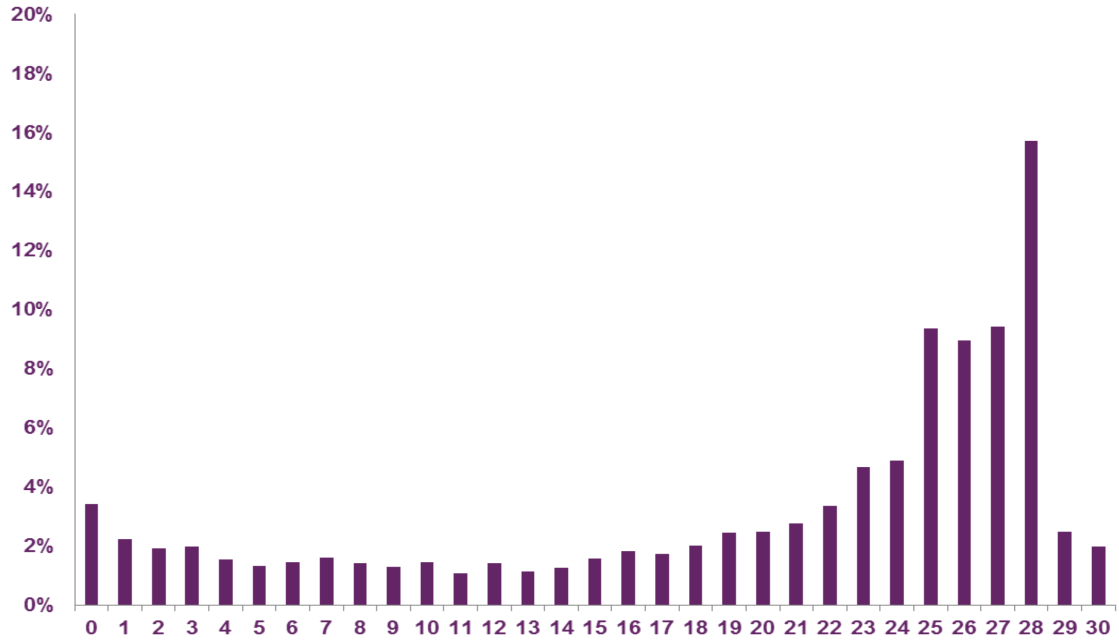
[26] Bespoke analysis of responses.

[27] We recognise that this figure may include some respondents who switched within their MCP and incurred an ETC.

[28] Information provided by operators under s.135 of the Communications Act. We discuss this data in more detail in paragraphs A6.5 - A6.6 of Annex 6.

[29] Namely post-pay PAC switchers who were outside of their MCP, and who were switching away from an operator other than O2 or Vodafone (who do not require or charge a notice period after they deactivate the service)

Figure 2: Number of days between port-out date and end of airtime contract with LP, for post-pay PAC switches outside of MCP (based on operator data, 11-17 April 2016)



3.13 On the basis of the operator data, we estimate that the double payments associated with contract overlap amount to around £13.3 million per year for PAC switchers,[30] equivalent to around £13 per PAC switcher who incurred an overlap. We set out the detail of this estimate in paragraphs A6.4 to A6.8 in Annex 6.

Deferral, time and effort and risks incurred in coordinating the switch in light of notice period requirements

3.14 As noted above, even consumers who were able to minimise double-payments may have incurred difficulties in doing so given this can take significant time and effort, may require an unwanted deferral of a new service and can risk loss of service or that the PAC expires. This is because, under the PAC process, if they want to minimise double paying effectively, they must be aware of notice period requirements, and carefully plan the timing of the switch such that they defer switching until late in the notice period but before any notice expires and the service is terminated or the PAC lapses.

3.15 In this context, we note the following:

- Sixteen per cent of PAC switchers called their LP before switching to find out if they needed to give them notice to leave; 17% called to arrange the 'stop date' in order to avoid paying both providers at the same time and 16% called to arrange the 'stop date' in order to avoid a break in service.[31]

[30] In the March 2016 consultation, we estimated that consumers could be double-paying by as much as £46m per year. The £13.3m estimate presented above is lower because it excludes C&R switchers, assumes that switchers leaving Vodafone do not double-pay, and because our estimate of the harm arising from double paying each day has fallen from 80p to roughly 64p (as set out in paragraph A6.7).

[31] BDRC 2015 slide 44.

- Our consumer research suggests that 8% of PAC switchers said that getting the switch to happen on the date they wanted was a major difficulty when switching and 20% said that this was a minor difficulty.[32]

Disincentives to switching

3.16 Notice periods can give rise to outcomes which could deter consumers from switching. They reduce gains from switching for those who switch and create perceptions among consumers that the switch could involve double paying or coordination difficulties.

3.17 On this latter point we note that our consumer research found that concerns about double paying are a factor for some in their decision not to switch. As noted above, the March 2016 consultation set out our findings that just over one in six (17%, or 0.3 million people) consumers who had actively considered switching cited worries about having to pay two providers simultaneously during the switch as a major factor in their decision not to switch.

The current C&R switching arrangements

3.18 Our consumer research indicates that around 45% of switchers (those who switched in the last 12 months) use a default C&R arrangement,[33] equivalent to around 2.59 million switches per year. This requires them to terminate their existing service and serve any notice period required by their current provider. Separately, they must organise the start of a new service with a new provider. It is not possible to port a number using C&R - consumers wishing to do so must instead use the PAC process for this. Equally, those who want to switch but not port must currently use the C&R process.

3.19 Consumers who wish to switch without paying for two services concurrently must carefully coordinate the termination of the existing service and any required notice period with the start date for the new service. For example, where 30-day notice periods apply, this requires that the GP starts the new service 30 days after notice has been served to the LP. This can be achieved by the consumer making a request to the GP for a deferred start date at around the same time as they give notice to the LP. Alternatively, the consumer can wait until 30 days after they have served notice to the LP, and then sign up with the GP for an immediate service. Both approaches entail deferring the start of the new service by 30 days.

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[32] BDRC 2015 QA15a (slide 34 of the published pack).

[33] Table 79, p. 212, Switching Tracker (data adjusted to exclude don't knows). [✂] argued that the sample size used to generate this proportion is very small and that it is not clear whether the proportion is statistically significant, particularly as our online panel survey consumer research suggests that 33% of switchers used a C&R arrangement. We remain of the view that 45% is a more accurate estimate of this proportion as it is obtained using a nationally representative sample via face-to-face questioning. In contrast, the proportion in our consumer survey is based on pre-identified groups and so is not representative of the different mobile switching groups (PAC or C&R) in the UK as a whole.

Difficulties or deterrents arising from notice periods and C&R switching arrangements

3.20 In light of the above, and similar to our analysis in relation to the PAC process, we focus on two areas of concern:

- **Unwanted double payments.** Some consumers double pay for both their old and new service. They might do this because they do not understand they have a notice period or how to manage it, or to avoid loss of service, or in order to take advantage of an airtime offer or a new handset. Unlike PAC switchers, C&R switchers who double pay can use both the old and new services during the overlap period. However, 68% of post-pay C&R switchers who experienced contract overlap said they did not want this.[34]

- **Difficulties co-ordinating the switch to minimise double payments.** Consumers looking to minimise double payments and co-ordinate their switch may incur the following difficulties:

  - time and effort to understand, discuss and actively manage the co-ordination. We consider that this is likely to be simpler under C&R than under the PAC process, because under the PAC process, the consumer must consider notice periods alongside the PAC validity window, the one-working-day porting window, and the fact that they will no longer be able to use the old service after the switch;

  - the need to accept an unwanted deferral of the start date of the new service; and

  - risk of loss of service if co-ordination does not go according to plan.

3.21 Concerns over unwanted double payments and difficulties co-ordinating the switch may also **deter some consumers from switching**.

3.22 We have reviewed our consumer research and other information sources to illustrate the form and extent of these difficulties and deterrents, as follows:

Unwanted double payments

3.23 Our research[35] found that, of those C&R switchers who had switched in the last 18 months and reported a contract overlap:

- a fifth (18%) said this was because they had signed up with their new provider and were unaware of the notice period required by their current provider;[36]

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[34] Moreover, among the 24% of C&R switchers who said they wanted contract overlap, the most popular reason was to ensure a continuous mobile service, rather than to run two services concurrently. However, a minority of respondents did provide a reason which suggested they benefited from contract overlap (e.g. "to get used to a new phone", which is included in "Other" in slide 55 of the BDRC research).

[35] See BDRC 2015 research slide 55.

[36] As we noted above in footnote 25, results from our 2015 research into consumers' awareness of 'end of contract dates/terms' indicate that 31% of mobile consumers were not aware that once their

- 14% said it was because the new provider gave them a date that was before the end of their previous contract;
- 25% did so to ensure continuous service; and
- 55% provided answers that indicated they were unwilling to defer the start of the new service (32% said they wanted to get their handset as soon as possible; 28% wanted to sign up before a deal ran out; and 19% wanted to switch to a better service immediately).[37]

3.24 Our consumer research found that 40% of post-pay C&R switchers reported a period of contract overlap (and consequently were likely to have experienced double paying).[38] Amongst those who reported a period of contract overlap, the average overlap duration was around 19 days, with around two-thirds experiencing two weeks or more (and one third one week or less).[39]

3.25 On the basis of this research, we estimate that the double payments associated with contract overlap amounts to around £9 million per year for C&R switchers.[40] However we note that our consumer research underestimated the incidence and duration of double paying for PAC switchers, relative to operator data. If we assume that C&R switchers incur the same amount of double paying as PAC switchers who are subject to notice period payments beyond the port-out date, (i.e. an average of 20.3 days), the estimated total double paying for C&R switchers would be £15 million per year.[41]

Deferral, time and effort and risks incurred in co-ordinating the switch in light of notice period requirements

3.26 Our research suggests that some consumers who have switched via C&R arrangements have experienced difficulties in co-ordinating the switch in the context of notice period requirements:

- Of those who switched in the last 18 months, 7% said that getting the switch to happen on the date they wanted was a major difficulty and 17% said this was a minor difficulty.[42]

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contract ends they needed to give 30 days' notice if they wished to leave their provider. http://stakeholders.ofcom.org.uk/market-data-research/other/cross-media/end-of-contract-notification

[37] Bespoke analysis of responses.

[38] The proportion of post-pay C&R switchers stating that they had experienced contract overlap (40%) is statistically significantly higher that the proportion of post-pay PAC switchers (28%). Again, we recognise that this figure may include some respondents who switched within their MCP and incurred an ETC. The average days figure is based on weighted averages calculated from mean value of the scales. It is only an approximation and so not an exact value.

[39] We cannot use operator data to estimate the average contract overlap duration for C&R switchers, since operators do not hold information on whether a consumer who leaves is switching to another provider, and, if so, when the new service begins. (This contrasts with the PAC switching data where we know that the new service must have started on or before the date the PAC was redeemed).

[40] Our research suggests that there are around 2.59 million C&R switches per year, of which around 73% (1.89 million) are post-pay switches. As set out in paragraph A6.7, we estimate the cost associated with double-paying is around 64p per day. If 40% of these switches involved a period of contract overlap of 19 days on average, this is equivalent to around 750,000 switchers incurring around £12 in double-paying, or around £9.2 million in total per year.

[41] We set out the basis for this calculation in paragraph A6.9.

[42] BDRC 2015 research Question QA15a (slide 34 of the published pack).

- 14% of C&R switchers contacted their current provider first, in order to find out if it was necessary to give notice to leave; 16% called to arrange the 'stop date' in order to avoid paying both providers at the same time, and 13% called to arrange the 'stop date' in order to avoid a break in service.[43]

3.27 We also note here that in response to our March 2016 consultation stakeholders representing consumer interests highlighted that the complexities of navigating switching processes alongside notice period requirements could result in consumers unwillingly or unknowingly double paying.

Disincentives to switching

3.28 We consider that, as with PAC switchers, notice periods can give rise to outcomes for C&R switchers which could deter consumers from switching.

Further stakeholder views

3.29 A number of respondents to our March 2016 consultation expressed views about our assessment of the difficulties or deterrents arising from notice periods in a switching context, and the issue of double paying.

3.30 Their views can be grouped into the following three themes:

- that providers already employ measures to ensure that consumers experience neither loss of service nor double paying when switching;
- that notice periods deliver benefits to consumers; and
- that notice periods are common-place and are a source of revenues for providers.

Provider measures to mitigate against loss of service and double paying

Respondents' views

3.31 [✂] argued that it already employs measures to ensure that consumers experience neither loss of service nor double paying when switching, including:

- training of customer service agents (CSAs) to inform customers how to manage the end of their contractual notice period and the provision of their PAC to the new provider to avoid double paying; and
- providing consumers with easily accessible information on cancelling, porting out and managing notice periods.

Ofcom's view

3.32 We welcome measures to improve consumer awareness of notice periods and to help them manage these to minimise double paying. However, we are concerned

[43] BDRC 2015 research Question QD4 (slide 45 of the published pack).

that the evidence suggests that a significant minority of consumers are incurring double payments notwithstanding information measures that may be in place.

Consumer benefits of notice periods

Respondents' views

3.33 Virgin argued that consumers may benefit in two ways from the operation of notice periods when terminating a service and switching:

- a consumer contacting their current provider to cancel their service will be fully informed by their provider on how the cancellation will proceed, and will receive information on timings of payments and their final bill; and
- the notice period creates a time window within which the consumer may test their new service before the old service is terminated, and within which the consumer may cancel the switch and revert easily to their original provider if they so wish.

3.34 By contrast, other respondents suggested that double paying can arise because current switching processes are complex or difficult to co-ordinate, because mistakes are made by the provider, or because notice periods are too long.

Ofcom's view

3.35 We do not agree that requirements for a notice period when switching are necessary to deliver the benefits that Virgin has claimed for them. In particular, we consider that the consumer is clearly worse off here than in a situation where there is no requirement to pay out notice after the switch, particularly where this means the consumer continues to pay for a deactivated service. Furthermore, we consider that the ability to switch back easily to the original provider could be delivered independently of any need for consumers to pay out notice beyond their switch date.

Notice periods are common-place and a revenue source for providers

Respondents' views

3.36 Three said that 30-day notice periods are a legal convention which are common to other services, as well as mobile, and noted that it gives its customers 30 days' notice of changes in terms.

3.37 [✂] noted that any reduction in double-paying by consumers is mirrored by a matching revenue loss by the operator, such that the overall change is zero-sum. It said that "it is not immediately clear therefore that it is appropriate to claim any such reduction as an unequivocal benefit". Virgin argued that any proposal to remove the notice period would significantly affect revenues accruing from mobile services and so would need to be agreed outside the switching process.

3.38 The Communications Consumer Panel and Advisory Committee on Older and Disabled People (CCP/ACOD), by contrast, argued that there should be no notice period where consumers who are beyond their MCP switch, because no costs accrue to the mobile operators in these circumstances.

Ofcom's view

3.39 We are not seeking to prohibit the application of notice period charges in all circumstances in the mobile industry. We are considering notice periods specifically in the context of switching between mobile providers. In particular, we have considered whether they create unnecessary difficulties and/or deter switching, whether they produce customer benefits, and whether regulatory intervention is necessary to secure switching processes that are easier and more reliable for consumers.

3.40 We consider respondents' views that it may not be appropriate to claim a reduction in double paying as a benefit, given it is mirrored by a matching revenue loss by the provider, misunderstand our policy aim and how we are seeking to achieve it:

- As set out in Section 2, among other things, we have sought to identify which of the steps involved in the switching process gives rise to unnecessary difficulties and costs and which frustrate achievement of our policy aim. As our analysis in this section shows, charging consumers pursuant to notice period requirements, gives rise to increased switching costs and co-ordination difficulties. These are likely to deter switching, under both the PAC process and the C&R process.

- Furthermore, where PAC switchers are required to pay out notice on their old service after they have switched, they effectively pay for a service that they no longer receive. Additionally, providers do not appear to incur any costs in administering the switch that otherwise they would only be able to recover by charging for notice beyond the switch date.[44] Consequently, the fact that notice periods represent a source of revenue for providers appears not to be supported on cost recovery grounds for administering the switch and moreover does not make their effect on switching costs and co-ordination difficulties any less;

- Consequently, we do not consider that revenue generated from unwanted double-paying by switchers should be regarded as a cost associated with any intervention to reduce the harm from charging consumers pursuant to notice period requirements in switching contexts. This is because we consider that it derives from a consumer harm which we consider warrants our proposed regulatory intervention.

- As to any suggestion that operators might seek to recover any loss of revenue through higher headline prices for mobile services, we question whether higher headline prices would inevitably arise, particularly given that O2 and Vodafone already do not enforce notice period charges beyond the switching date.[45] In addition, we note that, even under these circumstances, consumer benefits would be delivered in the form of reducing the deterrent to switching. To the extent that there is any revenue rebalancing towards headline prices, we consider this is likely to be outweighed by the consumer benefit arising from removing switching costs associated with notice periods.[46]

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[44] We note in this context the argument put forward by the CCP/ACOD that there should be no notice period where consumers who are beyond their minimum contract term switch, because no costs accrue to the mobile operators in these circumstances.
[45] This means that any operator which did raise prices may weaken its competitive position.
[46] We set out our view of the proportionality of our proposals in section 4.

3.41 As a result, we consider that it is appropriate to explore ways to address what we consider to be the detrimental impact of notice periods on switchers, and would-be switchers.

Consultation questions

Q1 Do you agree that notice period requirements can give rise to difficulties and deterrents where consumers seek to switch? In particular do you agree that these are likely to include: unwanted double payments; difficulties coordinating the switch; and a deterrent to consumers who might otherwise have chosen to switch?

Q2 What is your view regarding the extent to which consumer harm might differ for consumers using the PAC process or C&R arrangements to switch?

Section 4

Additional proposed requirement for switching reform

Introduction

4.1 Section 3 described the form and extent of difficulties and deterrents that we consider arise from the imposition of notice periods when consumers seek to switch mobile services. This section re-caps the proposals we consulted on in March 2016, summarises stakeholder responses in relation to double paying and notice periods, and sets out relevant new information received since we published our March 2016 consultation. We then set out an additional reform proposal aimed at addressing the consumer difficulties we have highlighted in section 3. Finally, we explain how this relates to the options for switching reform that we set out in our March 2016 consultation.

4.2 We note that we have not as yet made any decisions following the March 2016 consultation and our consideration to date of the responses we received. To the extent we express views here on our current thinking, those views are subject to our consideration of any responses we receive to this consultation.

The March 2016 consultation proposals, respondents' views and new information

4.3 The options for reform of current mobile switching processes that we set out in our March 2016 consultation contained measures to address the effects of the interaction between switching and notice period requirements. In particular:

- Under Option 1 (Automated PAC) we proposed requiring that notice was backdated to start from the point when the consumer requested the PAC, in line with the current industry guidelines. We said this would help consumers whose operators currently start the notice period from the date the PAC is used.

- Under Option 2 (Gaining Provider-Led switching - 'GPL') we proposed requiring that the gaining provider ('GP') informs consumers of their notice period and helps them manage 'double payments' by offering to defer the switch by up to 30 days.

4.4 We recognised that these measures could lead to some consumers incurring greater double payments.[47] Against this background we said we believed there may be better ways to address double-paying.[48] We noted that one option could be to align notice

[47] For example, because some consumers under current PAC arrangements may be prompted to manage their notice period by the interaction that they have with their LP (when they contact the LP to obtain a PAC and/or give notice). Under our proposals these consumers may no longer have this interaction and so are not prompted to manage their notice period. (March 2016 Consultation paragraph A7.42b).
[48] March 2016 consultation, Paragraph 1.21.

periods with the porting window (i.e. one business day), such that consumers were no longer charged notice by their old provider after their old service had been deactivated. This approach could apply under either Option 1 (Automated PAC) or Option 2 (GPL).

Stakeholder responses to our March 2016 consultation

4.5 Several stakeholders commented on the proposals set out in our March 2016 consultation for addressing double paying and notice period issues. We summarise their responses here, according to the three broad approaches we set out to address double paying.

Option 1: Automated PAC - backdating notice to the date of PAC request

4.6 A number of respondents ([✂], [✂] and a number of individual respondents) suggested that the PAC backdating proposal could help address difficulties for switchers arising from the imposition of notice periods or reduce double paying.

4.7 Other respondents argued that our measures contained weaknesses:

- BT/EE raised concerns that backdating notice could create confusion for customers and that it would require changes to the industry Mobile Number Porting manual. Verastar suggested that forecasting issues could arise for the LP.

- MoneySuperMarket suggested that few customers would be aware that the notice period starts when the PAC is requested, and that confusion could arise if a consumer requests a PAC for a second time.

- [✂] highlighted that an automated PAC process may not benefit consumers switching via a C&R arrangement, because they may find it harder to manage double paying as they no longer have a conversation with their LP.

- Citizens Advice said that Automated PAC leaves consumers at greater risk of double paying compared to our GPL option, because our GPL option creates a clearer line of accountability to the GP.

Option 2: GPL – GP offers to defer start date of the new service

4.8 Citizens Advice, Three, MoneySuperMarket, Recombu, SSE, Talk Talk, Verastar, Which?, [✂] and [✂] between them agreed that Option 2 contained effective measures or was significantly more effective than Option 1 in terms of addressing consumer harm arising from current switching processes, double paying and/or notice period issues.

4.9 Some mobile providers, by contrast, argued that there were drawbacks to Option 2.

- [✂] asked where the evidence was for our assumptions that an extra 10% of customers would choose to manage their contract notice period perfectly, and that all customers who we considered to currently manage their notice period will revise their behaviour so that the overlap becomes zero days.

- [✂] argued that it is perfectly reasonable to expect that under a GPL process there would either be no change in behaviour, or fewer customers will be willing to manage their notice period. This is because, under the status quo, customers can request a PAC and then discuss their needs at their leisure with different operators, before deciding which GP to switch to. This "post-PAC decision delay" would not occur under a GPL process as any such evaluation of alternatives would take place before the provisional port request. Instead, to the extent that the GPL process allows the customers to walk out of the GP's shop with a desired new handset and their old number in a manner easier than before, then any small cost of an overlapping contract will be increasingly disregarded. This will tend to increase, not decrease, notice period overlap under GPL. Similarly, BT/EE, O2 and Virgin argued that incentives on the GP may be incompatible with the aim of minimising double paying occurring as a result of notice periods. This is because the GP may be incentivised to switch the consumer quickly rather than making information concerning applicable notice periods sufficiently prominent to consumers.

- [✂] expressed concerns that consumers could purchase and obtain a new handset but defer the porting date. The consumer could then change their mind about joining their new provider before the port occurs, while being in possession of the new handset.This respondent also commented that Ofcom should factor in the cost of increasing reverse migrations due to this, inclusive of the potential handset loss for operators.

4.10 Citizens Advice and [✂] called for strengthened measures under GPL. These included that:

- Providers should be obliged to make the switching process as seamless as possible (Citizens Advice);
- The default switching date should be the earliest date on which the consumer may switch without incurring double payment (Citizens Advice);
- The GP should be liable for any double payments made as the result of any errors (Citizens Advice); and
- We should give further consideration to how independent retailers are informed about deferral of a start date to allow the effective management of the upgrade process [✂].

Comments applicable to both Option 1 and Option 2

4.11 Two respondents expressed concerns over whether Automated PAC or GPL would ensure consumers are sufficiently informed about notice period requirements. Virgin argued that it was not clear that consumers would read the SMS message containing information about any outstanding notice period, and Talk Talk highlighted that until the switch date is confirmed, any information about Early Termination Charges (ETCs) and notice periods would be estimates.

Removal of notice period charges beyond date of switching

4.12 Mobile operators O2 and Three suggested that providers would need to make significant changes to billing and other systems in order to implement the waiving of notice period charges where a consumer switches. Three suggested that such development costs could be significant. O2 noted that its current practice is not to charge service beyond the switch and port date and that accordingly it assumes that it would not be required to make changes.

4.13 Three argued that any removal of charges for notice beyond the point of switching would be costly and disproportionate, because the consumer harm associated with double billing could instead be cost-effectively dealt with through reform of the switching process. They also expressed concerns that if Ofcom sought to pursue such remedies in parallel with reforms to mobile switching, GPL reforms could be delayed.

4.14 Some respondents proposed alternative ways of addressing the harms we had identified. In particular, BT/EE argued that any harm arising could be addressed by ensuring consumers are better aware of notice period requirements and their effects.

4.15 Finally, several respondents made the point that consumer harm arising from notice period requirements could be addressed by considering notice periods separately and independently of any reform of switching processes.

Ofcom's response

4.16 Regarding Three's point about possible delays to GPL were we to pursue removal of notice period charges, our aim remains to publish a decision on mobile switching, including any proposals for process reform and any enhancements in terms of requirements to remove notice period charges beyond the date of switching, around the end of 2016.

4.17 We have taken into account the other comments above in our discussion below of our additional proposal that mobile providers should remove charges for notice periods after the switch date.

New information relevant to our March 2016 consultation

4.18 Since we published our March 2016 consultation, EE and Vodafone have provided new information about their application of notice periods for PAC switchers, as follows:

- While the official policy of Vodafone is to commence notice at the point the PAC is redeemed, its normal practice is not to enforce notice payments after the port has taken place and it has deactivated the number, where the customer is beyond the minimum contract period.

- EE's normal practice is to backdate notice to the date of PAC request.

4.19 This means that each of the four MNOs either do not charge for notice beyond the port date, or they backdate notice to the PAC request. Any benefits of adopting our proposal to backdate notice to PAC request would therefore be limited to customers of MVNOs and resellers who do not currently have a similar policy, and who do not already actively give notice.

Removal of charges for notice periods beyond the switching date

4.20 In what follows we set out:

- the form we expect this requirement would take;

- how we anticipate such a requirement would address the harm we have described in section 3; and

- what we understand the necessary steps would be to implement this option and what this implies for implementation costs.

4.21 Having done this we:

- set out in greater detail how we envisage this option could be incorporated into each of the reforms we consulted on in March 2016: to distinguish these new proposals from our March 2016 options, we label them "Enhanced Automated PAC" and "Enhanced GPL"; and

- our rationale for considering that removing notice period charges beyond the switching date represents a more effective and proportionate solution for addressing the harms we have identified than the measures we incorporated within our March 2016 proposals.

Proposed requirements on providers

4.22 We are now proposing that, where customers are outside their MCP, mobile providers would not be permitted to levy charges in respect of airtime or notice period, beyond the date on which the customer switches to a new provider. This applies to any switch that uses a formal switching process.[49,50]

Effect on difficulties and deterrents from switching

4.23 Removing notice period charges after the old provider has taken the necessary steps to facilitate the switch and deactivate the consumer's old service would mean that a consumer could not be billed for a deactivated service while also paying for a new service. This fully addresses the concerns we have identified for PAC switchers:

- They would not incur unwanted double payments (excluding any period between the consumer activating their new SIM and porting their old number, which is the minimum amount of time necessary to switch between the two services). We estimate that double paying incurred by PAC switchers would fall by around £13.3 million per year, or £114.4 million over ten years in Net Present Value ('NPV') terms as a result of adopting this proposal.[51]

- They would no longer need to incur the time and effort or risks associated with managing contract overlap to avoid double paying, nor accept unwanted deferral.

- It should help remove consumer confusion by ensuring that the notice period policies of all mobile providers are aligned. It may also, to some extent, reduce the need for consumers to be informed about the interaction of notice periods

[49] We note that, as several respondents highlighted, this reform could be implemented independently of any reform to switching processes.

[50] Under our March 2016 proposals for switching process reforms, consumers wishing to switch but not port their mobile number would be able to use a formal process to switch and so could benefit from our proposed requirements here concerning not charging beyond the switch date. Currently such switchers must use the default informal C&R arrangements to switch provider.

[51] We set out the detail of this estimate in paragraphs A6.4 to A6.8.

with the switching process, as they would no longer need to coordinate or defer a switch in order to avoid unwanted double paying.[52]

4.24 This proposed requirement would not address our concerns in relation to those switching using the current C&R arrangements. However, we expect that it will deliver benefits to this group of consumers in the context of our proposed March 2016 reforms. This is discussed in the sections below.

Implementation costs

4.25 Mandating the removal of notice period charges beyond the switch date would require providers to make a number of changes which carry cost implications. We consider that these changes fall into three main categories: billing systems changes; changes to customer communications materials; and training costs.

- **Billing systems changes**. Provider systems would need to distinguish between account closures resulting from switches (where we are proposing that no notice period charges would apply) and terminations (where a notice period may continue to apply). They would also need to automatically close the customer's account when the service is deactivated, and generate a final bill. This bill would need to take into account any unused portion of the monthly airtime charge, and credit this against final usage charges.[53]

- **Changes to customer communications materials**. This would involve reviewing and updating all customer-facing materials (such as Terms & Conditions, websites, and customer contract documents) which display operators' current notice period policies. We consider that this activity will involve operators' regulatory, legal, and marketing resources.

- **Training costs**. We consider that operators would be required to deliver some training to billing system support staff, billing team administrators, and CSAs, in order to support their understanding and operation of the new notice period policy.

4.26 We set out a full list of cost implications for these areas in Annex 6. We have assumed that O2 and Vodafone would not incur the majority of these implementation costs, as they already align notice periods with the switching window.[54,55] However, we note that, like O2 and Vodafone, it is possible that some smaller operators may also already align notice periods with the switching window. To the extent this is true, our cost estimate will overstate total industry cost.

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[52] This would also address concerns expressed by TalkTalk and Virgin that measures to inform consumers about notice periods, such as those included in our Automated PAC or GPL process reforms, may be ineffective or inaccurate, and concerns expressed by BT/EE that any harm arising from notice period requirements could be addressed by ensuring consumers are better informed.
[53] We have separated these activities into three distinct steps, each with an associated cost: i) an internal impact assessment of the proposed activity on billing / CRM systems; ii) developing the necessary system functionality; and iii) testing the new system functionality / handing over to live operations.
[54] This applies to billing systems and training costs – we assume they would still incur some costs related to changing customer communications materials.
[55] We note that this should provide reasonable reassurance to O2 that as its current practice is not to charge for service beyond the switch and port date, we do not expect that it would be required to make any significant changes.

4.27 Overall, we estimate that total industry implementation costs for this proposal will be between **£6.4 million and £7.2 million** (net present cost over ten years, with the range depending on whether a standard or a Spackman discounting approach is used), i.e. significantly less than the benefits such a reform would be expected to produce.[56]

Interaction with March 2016 consultation on mobile switching reforms

Enhanced Automated PAC

4.28 Under the Automated PAC option we consulted on in March 2016, we sought to reduce the incidence of double paying by including a requirement that PAC switchers are deemed to have given notice to their LP at the point at which they request the PAC. We considered that this would benefit PAC switchers who do not actively give notice when they request PAC,[57] by reducing their double paying duration by the delay between requesting and redeeming a PAC (an average of 4.1 days). We estimated the reduction in double paying caused by backdating PAC to be £12.7 million over ten years (in NPV terms).

4.29 However, we also noted that a subset of PAC switchers might face an increase in double paying under this option. This is because some consumers may currently be prompted to manage their notice period by the interaction they have with the LP (when they contact the LP to obtain a PAC and/or give notice). Those taking full advantage of our proposal would no longer have this interaction and so some may no longer manage their notice period and consequently double pay. Taking this effect into account, we estimated that the net reduction in double paying delivered by Option 1 would be £7.6 million over ten years (in NPV terms).[58]

4.30 Under our Enhanced Automated PAC option, mobile providers would not be permitted to levy charges in respect of air time or notice period beyond the date on which a customer switches to a new provider. This requirement would apply in two scenarios:

- **Following a request to port out a number from another provider.** Under this scenario the requirement would address double payment and coordination issues experienced by PAC switchers.

- **Following a request to switch from another provider using a formal switching process.** Our March 2016 consultation proposed extending the formal switching process to include switches without number ports.[59] These switches

[56] Consequently we consider concerns raised by O2 and Three that systems development costs associated with the removal of charges beyond the switch and port date would be significant and/or disproportionate, are unfounded.
[57] And who are leaving MNOs or MVNOs who do not already backdate notice to the date of the PAC request.
[58] Figure 9, March 2016 consultation (based on central case).
[59] Our March 2016 consultation included a proposal to help consumers co-ordinate the activation and deactivation of their old and new services, requiring a 'make before break' process and centralised end-to-end coordination of the switch, which could also help those who don't wish to port their number co-ordinate their switch. Hence our proposals included that a single switching process would be available for use by those who port and those who do not port. Therefore, we would expect some

currently go through the C&R process. Under this Automated PAC scenario, we consider the requirement would benefit some of the post-pay C&R switchers who reported unwanted double payments.[60]

4.31 As a consequence of addressing the harm from notice periods experienced by switchers, this option should remove a key switching deterrent.

4.32 We consider that the inclusion of this requirement addresses the harm we have identified more effectively than the elements incorporated into our original Automated PAC proposal:[61]

- It removes the full extent of double-paying for consumers switching via a formal switching process, in contrast to the partial solution offered by backdating notice to PAC request.[62] As set out above, we estimated in the March 2016 consultation that this partial solution would reduce double paying by £7.6 million over ten years (central case), with a range of £5.1 million to £10.2 million. This is significantly lower than our estimate of the reduction in double payments arising from removing notice period charges (£114.4 million for PAC switchers and up to £78.8 million for C&R switchers); [63]

- it obviates the risks occurring under our Automated PAC option that some consumers incur a greater period of double paying;[64];

- it means the consumer need not defer the start of a new service in order to avoid double paying; and

- it obviates the consumer's need to coordinate the switch, which would remain under our Automated PAC option.

4.33 Introducing this requirement in the context of Automated PAC carries additional costs and we have set these out in paragraphs 4.25-4.27. We do not expect that introducing this requirement saves any costs that we had factored in to our March 2016 analysis.[65] Consequently we expect that the incremental implementation costs

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switchers who would have used the C&R process (because they did not want to port their number) to use this formal switching process instead.

[60] We consider that this would therefore address concerns raised by [✂] about C&R switchers.

[61] This also addresses the concerns expressed by Citizens Advice on the original Automated PAC option in relation to the option performing poorly, relative to our GPL option, in addressing double payments.

[62] It therefore addresss concerns expressed by BT/EE, MoneySuperMarket and Verastar about backdating notice to the PAC request date.

[63] We recognise that these estimates are based on different assumptions, as we have updated some assumptions in light of new information and stakeholder comments received since March 2016. (e.g. the fact that Vodafone and EE do not charge notice from the point the PAC is used, which means that, all other things equal, backdating notice to the date of PAC request would be even less effective than we estimated in March 2016). However we consider that our assessment above does not depend on the precise quantification of the reductions in double-paying, given i) the magnitude of the difference between the estimates and ii) the fact that backdating notice to PAC request inherently cannot deliver the same benefit as removing notice period charges, which fully addresses the harms identified for switchers using a formal switching process.

[64] As described in paragraph 4.29 above.

[65] Whilst it would not be necessary for operators to state outstanding notice period requirements as part of the SMS containing the PAC, we envisage that the PAC SMS would still need to explain that notice periods no longer apply after the date of port-out. Under Enhanced Automated PAC, operators

of including the removal of notice period charges will be similar to the estimated implementation cost of this proposed requirement on a standalone basis i.e. £6.4 - £7.2 million (10-year NPC).[66]

4.34 In light of the substantial incremental benefits we believe Enhanced Automated PAC would deliver over Automated PAC, and in light of the relatively small incremental costs, we believe this represents a more effective and proportionate solution for addressing the harms we have identified.

Enhanced GPL

4.35 Under the GPL option we consulted on in March 2016, we sought to address harm arising from notice periods by 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. We considered that this would help those already attempting to manage their notice period (by delaying redeeming their PAC) to do so more effectively. Moreover, we also considered that it would encourage some switchers not currently managing their notice period to do so.[67] In our base case we assumed that 10% of “non-managers” would now manage their notice period, saving between 25.1 and 30 days’ double paying.[68]

4.36 We also recognised that non-managers currently giving notice when requesting PAC, who do not accept the GP’s offer of deferral, would face an increase in double paying under this option. This is because they currently pay the difference between their 30 day notice period and the delay in redeeming a PAC (i.e. an average of 25.9 days), but would now incur a full 30 days’ notice. We reflected this in our quantitative estimates.

4.37 On the basis of these assumptions, we estimated that the net reduction in double paying delivered by Option 2 is £24.3 million.

4.38 Under our Enhanced GPL option, mobile providers would be subject to the same requirement not to levy charges in respect of air time or notice period.[69] As such, this would replace the 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. As with enhanced Automated PAC, this requirement would apply in two scenarios:

- **Following a request to port out a number from another provider**. Under this scenario the requirement would address double payment and coordination issues experienced by switchers.

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would also still be required to generate real-time ETC information and pass this to the consumer via the CPS. As such, removing the need to make available notice period information is unlikely to have a significant impact on overall setup and operating costs necessary to deliver Automated PAC.

[66] It is possible that this slightly over-states the incremental cost of the removal of notice period charges since it seems plausible that back-dating notice to PAC request would also involve some billing systems changes and changes to customer communications materials.

[67] 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.

[68] Paragraph 6.29 (b), March 2016 consultation.

[69] That is, they would not be permitted to make such charges beyond the date on which they deactivate a mobile service following a request to port out a number or switch over a customer account (where no number is ported) from another provider.

- **Following a request to switch from another provider using a formal switching process**. As set out above, our March 2016 consultation proposed extending the formal switching process to include switches without number ports, which applied to both the Automated PAC and GPL options. These switches currently go through the C&R process. Under a GPL scenario, we consider that the requirement would benefit some of those post-pay C&R switchers who reported unwanted double payments.

4.39 Again, we consider that inclusion of this requirement addresses the harm we have identified more effectively than the elements incorporated into our March 2016 proposal:[70]

- It removes the full extent of double-paying for consumers switching via a formal switching process, in contrast to the partial solution offered by the deferral option whose effectiveness seems likely to be significantly lower given (i) the large number of consumers who are unwilling to accept an unwanted delay (as set out in paragraph 3.10 and 3.23) and (ii) the implementation challenges that have been raised (some of which are set out in paragraph 4.9);

- it obviates the risks occurring under our GPL option that some consumers incur a greater period of double paying;[71]

- it means the consumer need not take time to discuss notice periods and the deferral option with their GP; and

- it means the consumer need not defer the start of a new service in order to avoid double paying.

4.40 We have explained that introducing this requirement carries additional costs (£6.4 - £7.2 million,10-year NPC) and we expect this to be the case if implemented under Enhanced GPL. We note however that since the removal of notice period charges beyond the switching date addresses directly the consumer costs and difficulties associated with switching, the explicit measures included within the GPL proposal in the March 2016 consultation to address notice period harm would not be needed. In particular:

- providers (or consumers) would not incur the operational/time costs of discussing notice periods with switchers. In the March 2016 consultation, and recognising that this is sensitive to the specific assumptions used, we estimated the total cost

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[70] We consider that, by removing the need for the GP to offer to defer the start of new services, this approach would also meet concerns raised by BT/EE, Citizens Advice, O2, Virgin, [✂] and [✂] that the GPL option is weak or needs strengthening.

[71] As set out in paragraph 4.36, we said that non-managers who currently give notice when requesting PAC (either explicitly or due to operator policies) would face an increase in double-paying under this option if they do not accept the GP's offer of deferral. [✂] argued in its response to the March 2016 consultation that this would be a common scenario because most switchers waiting to redeem their PAC may not be deliberately managing their notice period, but might instead be evaluating their alternatives before choosing a new mobile contract, in which case they would be unlikely to take up the GP offer to defer the start of their service.

of this additional GP interaction time to be around £0.23 million per year, or £1.96 million over ten years (in NPV terms).[72]

- providers would not need to incur the costs of adapting their IT systems to enable them to receive and interrogate real time information on the status and longevity of consumers' notice periods. While we did not include a specific cost for this in our March 2016 consultation, this would have been a cost that providers would have incurred.[73]

4.41 In light of the substantial incremental benefits we believe Enhanced GPL would deliver over GPL, and taking into account the relatively small incremental costs, we believe Enhanced GPL represents a more effective and proportionate solution for addressing the harms we have identified. Figure 3, below, summarises the interaction of our options set out in this consultation against our two March 2016 consultation proposals for switching process reforms.

[72] We note that this estimate is based on additional interaction time for the 40% of switchers who would exclusively use the new GPL process. [✂] said that it should be applied to 100% of switchers who will all face a shift to GPL, meaning it will tend to understate the actual cost.

[73] For instance, [✂] said in response to our March 2016 consultation that we had omitted the cost to the CPS of receiving a request from the prospective GP, validating it, and passing it on to the potential LP. It also said there was a cost to the GP of developing a system that is able to securely and responsibly request switching information from the CPS, having properly validated the prospective customer and receive the response.

Figure 3: Summary of interaction of Enhanced options for switching process reforms with March 2016 consultation proposals

	Enhanced Automated PAC vs Automated PAC	Enhanced GPL vs GPL
Impact on consumer harm, relative to March 2016 consultation proposals	Greater reduction in total amount of double-payments by switchers Ensures no-one experiences an increase in double-paying Removes need for switchers to defer redeeming PAC to avoid double-payments Removes need for switchers to spend time and effort coordinating PAC redemption to avoid double-payments	Greater reduction in total amount of double-payments by switchers Ensures no-one experiences an increase in double-paying Removes need for switchers to defer start of new service to avoid double-payments Removes need for switchers to spend time discussing notice periods and deferral with GP
Costs of implementation, relative to March 2016 consultation proposals	Additional costs associated with billing systems / customer comms changes / training costs	Additional costs associated with billing systems / customer comms changes / training costs But, costs associated with GP obtaining and discussing notice period information no longer incurred We consider incremental implementation costs for operators would be lower under Enhanced GPL than Enhanced Auto-PAC

4.42 Figure 4 below summarises our assessment of the quantified and non-quantified impacts of Enhanced Automated PAC and Enhanced GPL. The table includes estimates of the time saving delivered under Automated PAC and GPL, which are unchanged from the March 2016 consultation.[74] We have updated our estimates of the reduction in double-paying and the net implementation costs to take into account the additional proposal of removing notice period charges beyond the date that a customer switches, on the basis of our analysis set out above.

[74] We recognise that stakeholders have commented on assumptions presented in the March 2016 consultation, which we will continue to analyse as part of our analysis of both enhanced options for reform.

Figure 4: Summary of impacts of Enhanced Automated PAC and Enhanced GPL

		Enhanced Auto-PAC	Enhanced GPL	Notes
Quantified impacts (base case) **(10-year NPV estimates)**	Speed (time saving)	£21.7m	£21.7m	March 2016 consultation estimates
	Double-paying	£114.4m	£114.4m	PAC switchers only – excludes any benefit to C&R switchers using new process for number porters and is therefore conservative
	Cost to industry (net of cost savings)[75]	(£17.3m) – (£21.1m)	(£18.9m) – (£22.9m)	Costs derived by adding cost of implementing notice period reforms to cost estimates presented in March. This assumes no cost savings from amending Auto-PAC and GPL process designs to address double-paying as included in the March 2016 consultation.[76]
	Total net impact	**£115.0-£118.8m**	**£113.2-£117.2m**	Net impact is positive for both options
Non-quantified impacts	Easier more reliable process/reduced confusion	✓	✓✓	Enhanced GPL should be simpler for consumers 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 switching costs should deliver greater benefits for switchers, would-be switchers and competition.

4.43 The quantified estimates presented in Figure 4 are based on our reforms to the PAC switching process. Putting in place a formal process for non-porters would produce additional benefits by way of time savings for C&R switchers. It would also address some of the double-paying currently incurred by C&R switchers (estimated to be

[75] We have presented a range for the cost to industry based on standard and Spackman discounting approaches. The Spackman approach is explained in more detail in Annex 6.
[76] Whilst the March 2016 consultation estimates excluded some costs (see for example paragraph 4.40), these would not be necessary under the revised proposals.

around £78.8 million (10 year NPV) under the status quo), by eliminating double-paying for those who chose to switch via the formal switching process. We expect these benefits would be significant. However, introducing a formal process for non-porters would also impose additional costs on industry. In our March 2016 consultation we proposed that C&R switchers could be brought into a formal switching process by introducing centralised end-to-end management by the CPS, and we estimated this would cost between £13 million and £29 million (10-year NPC) under our base case.[77] We continue to consider that there is a case for extending the formal switching process to incorporate non-porters.

4.44 We recognise that one implication of re-casting our March 2016 options to include the removal of notice period charges after switching may be that, all else equal, the advantage GPL offered in terms of quantified benefits is reduced.[78] However, we consider that the non-quantified benefits described above are important to our assessment and we continue to believe that GPL is likely to deliver greater benefits in this respect. This is because it is likely to be an easier and more reliable process for consumers to navigate given that it does not rely on the consumer obtaining and passing on a PAC and that it works on similar principles to the broader GPL landscape that exists in relation to other communications services[79] and in other sectors.[80] We will give careful consideration to all these factors, in addition to the stakeholder comments we have received to the March 2016 consultation, in reaching our conclusions in the forthcoming statement on mobile switching processes.

Provisional conclusion

4.45 Our policy objectives are that the process for switching providers of mobile services should not create unnecessary difficulties or deterrents for consumers. Consumers should be able to make and act on informed choices about the services they want to buy through an easy and reliable process.

4.46 Having carefully considered the evidence, our provisional assessment is that consumers experience difficulties and costs associated with unwanted double payments, difficulties co-ordinating switching to minimise double payments, and that this is also likely to deter some consumers from switching.

4.47 We have considered an additional proposed requirement to ensure that providers do not charge for notice periods beyond the date that a consumer switches, and have considered this in the context of the switching reforms set out in the March 2016 consultation.

4.48 On the bases we have set out, we are minded to think that a General Condition which required providers to comply with this additional requirement would satisfy the requirements of the Act. It would be:

- objectively justifiable – it would reduce the difficulties and deterrents the evidence shows consumers currently experience and meet our policy objectives;

[77] Paragraph 6.65, March 2016 consultation. The benefits and costs for C&R switchers (including the costs of introducing centralised end-to-end management) are not captured in Figure 4.
[78] If take up by existing C&R switchers is different across these options, this may not be the case.
[79] There is GPL switching for services within the Openreach and KCOM platforms. We are also proposing GPL switching in our consultation on switching reforms of landline, broadband and pay TV switching between different platforms, 29 July 2016.
[80] There are GPL switching processes in the banking, gas and electricity sectors.

- proportionate – it would do no more than is necessary to achieve, and be the least onerous means of achieving, those ends;

- not unduly discriminatory – it would apply to all providers of networks and services of particular descriptions; and

- transparent – it would set out a clear requirement for addressing the concerns we have identified.

4.49 The adoption of that requirement would also be consistent with the Act's other requirements. For the reasons set out, it would for example, help to promote:

- citizens' interests by ensuring a high level of protection for consumers in their dealings with suppliers; and

- competition in the provision of electronic communications services by ensuring users get maximum benefit in terms of choice, price and quality.

Consultation questions

Q3 Do you agree that the removal of charges for notice beyond the switching and porting date is effective and proportionate in addressing the consumer difficulties and costs with switching we have identified?

Q4 Do you agree with our proposal to enhance the two proposed options for switching process reforms set out in the March 2016 consultation– i.e. Automated PAC and Gaining Provider Led - with proposals to remove charges for notice beyond the switching and porting date?

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 16 September 2016**.

A1.2 Ofcom strongly prefers to receive responses using the online web form at http://stakeholders.ofcom.org.uk/consultations/mobile-switching-jul16/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 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 around the end of 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 Steve Gettings, Secretary to the Corporation, who is Ofcom's consultation champion:

Steve Gettings
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA

Tel: 020 7981 3601

Email: steve.gettings@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 notice period requirements can give rise to difficulties and deterrents where consumers seek to switch? In particular, do you agree that these are likely to include: unwanted double payments; difficulties coordinating the switch; and a deterrent to consumers who might otherwise have chosen to switch?

Q2 What is your view regarding the extent to which consumer harm might differ for consumers using the PAC process or C&R arrangements to switch?

Q3 Do you agree that the removal of charges for notice beyond the switching and porting date is effective in addressing the consumer difficulties and costs with switching we have identified?

Q4 Do you agree with our proposal to enhance the two proposed options for switching process reforms set out in the March 2016 consultation – i.e. Automated PAC and Gaining Provider Led - with proposals to remove charges for notice beyond the switching and porting date?

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.

'Manager' / 'Non-manager': a 'Manager' is a consumer that actively makes an effort to reduce or eliminate the amount of double-paying that they incur, by coordinating the start of their new service so as to minimise any overlap with the notice period required by the LP. Conversely, a 'non-manager' does not deliberately or consciously seek to reduce the amount of double-paying that they incur.

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 (losing) 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.

Annex 6

Calculation of quantifiable benefits and costs

Introduction

A6.1 In Section 4 we set out our assessment of the impact of a requirement to remove notice period charges beyond the switching date. This included estimates of:

- The reduction in double-paying incurred by PAC switchers. We said this was around £114.4 million over ten years, in Net Present Value ('NPV') terms; and
- The cost of implementation to operators. We said this was between £6.4 million and £7.2 million over ten years, in Net Present Cost ('NPC') terms.

A6.2 This annex explains in detail the methodology and assumptions used to produce these estimates. For our double-paying estimates, we have followed broadly the same methodology that we set out in paragraphs A7.31 to A7.40 of our March 2016 consultation. However, in light of new information obtained from operators since then, we have updated a number of important assumptions.

A6.3 We note that, while we have based our estimates on actual data where possible, we have also had to make simplifying assumptions in places. As a result, there is inevitably a degree of uncertainty around our estimates.

Quantitative impact on double-paying

A6.4 As we explain in Section 4, removing notice period charges beyond the switching date means that PAC switchers using our switching process would only pay for their old service up to the point that their number is ported out. This is equivalent to eliminating double-paying for PAC switchers after the port out date.[81]

A6.5 To estimate the total reduction in double-paying for PAC switchers, we have first estimated the number of PAC switchers who are subject to notice period payments beyond the port out date. To derive this figure we have made the following assumptions:

- 3.17 million customer accounts are switched via the PAC process every year (based on the number of mobile phone services that were switched between

[81] Double-paying incurred during the period after the new SIM is activated but before the number is ported out is not addressed, but this is to a large extent in the control of the customer and this element of double paying is not in any case captured in our estimates of the total amount of double-paying currently incurred under the status quo.

August 2014 and July 2015 using the PAC process).[82] Of these, 87% or 2.76 million are *post-pay* PAC switches;[83]

- 66% of post-pay PAC switchers switch outside their minimum contract period (MCP) and are therefore at risk of notice period payments when they switch. This implies there are roughly 1.83 million post-pay PAC switches outside of the MCP each year; [84] and

- Based on Switching Tracker data, 56% or approximately 1.03 million switches per year are away from operators other than O2 or Vodafone (and therefore could involve double-paying after the port out date).[85]

A6.6 Next we have sought to estimate the degree of double paying for this group of switchers. To do this we have obtained a sample from operators of post-pay PAC switchers switching outside of their MCP. [86] Within this sample, the average number of days between the date of port-out and the date that their airtime contract was charged up to was 20.3 days.

A6.7 Finally we have assumed that the cost to switchers associated with double-paying is 64p per day. In March 2016 we estimated this to be £24.27 per month, or roughly £0.80 per day, based on survey data.[87] However [✂] argued that this figure will include spending on out-of-bundle charges, which are not relevant when calculating double paying.[88] It suggested that around 20% of total expenditure could relate to out-of-bundle charges and consequently we have adjusted our figure downward accordingly.

A6.8 Based on these assumptions, we estimate that the total reduction in double paying is £13.3 million per year, or **£114.4 million** (10-year NPV) on the basis of a discount rate of 3.50%.[89]

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[82] This is based on data from Syniverse, August 2014 to July 2015. This figure relates solely to non-bulk ports (i.e. ports involving fewer than 25 numbers) which we would expect to be affected by our proposed options.
[83] Ofcom Switching Tracker 2015, Table 79. Pre-pay PAC switchers are not affected by notice periods.
[84] This is based on data requested from operators on the proportion of PAC switchers giving notice between 11 and 17 April 2016 who were outside of their MCP when they gave notice. As set out in paragraph A7.32 of the March 2016 consultation, we previously assumed on the basis of consumer research that 66% of PAC switchers switched outside of their MCP. Both sources exclude switchers giving notice within the final month of their MCP, which creates a risk of understating the total amount of double-paying currently being experienced by PAC switchers and the benefits of this proposal.
[85] Ofcom Switching Tracker 2015, Table 80 (contract switchers, rebased to exclude "don't know"). As noted in Section 3, we now understand that Vodafone, like O2, does not charge notice beyond the port out date for PAC switchers.
[86] Data was requested from [✂] to enable us to calculate the amount of double-paying for each post-pay PAC switcher who switched outside of their minimum contract period and who gave notice (or for whom notice was deemed to have begun) between 11 and 17 April 2016. This data included more than 15,000 observations. We then took a simple average across these switchers.
[87] Paragraph A7.41 of the March 2016 consultation.
[88] [✂]
[89] This is the Social Time Preference Rate, see: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf

A6.9 We note that this is not the same as the total amount of double-paying that currently exists in the mobile industry, because it does not include double-paying incurred by C&R switchers.[90] As set out in Section 3, our research suggests that there are around 2.59 million C&R switches per year. Of these, approximately 73% are post-pay switches and approximately 63% of post-pay switchers are outside of the minimum contract period.[91] This is equivalent to around 1.19 million C&R switches that could involve double-paying.[92] We cannot use operator data to estimate the average contract overlap duration specifically for C&R switchers because operators do not hold information on whether a consumer who leaves is switching to another provider, and, if so, when the new service begins. However, if we assume that C&R switchers incur the same amount of double paying as PAC switchers who are subject to notice period payments beyond the port-out date, (i.e. an average of 20.3 days), total double paying for C&R switchers would be around £15 million per year.

A6.10 We note that an alternative estimate of the total double-paying incurred by C&R switchers, based on consumer research, is around £9 million per year, or £78.8 million (10-year NPV). This calculation is set out in paragraph 3.25.

Cost of implementation

A6.11 Requiring the removal of notice period charges beyond the switching date would require operators to make a number of changes which carry cost implications. Consistent with our March 2016 consultation[93], we have assumed that 68 operators would potentially be required to make investments to implement the proposed requirement, split in the following way: 4 MNOs, 15 large MVNOs, 16 medium MVNOs and 33 small MVNOs.

A6.12 We consider that there are three major cost categories associated with removing notice period charges beyond the switching date: billing systems changes; changes to customer communications material; and staff training costs.

Billing systems changes

A6.13 We consider that operators will need to undertake three major activities in respect of their billing systems:

- distinguish between account closures resulting from PAC switches (where no notice period charges would apply), and account closures which result from a contract termination (where a notice period may continue to apply);
- automatically close the customer’s account when their service is deactivated. Billing systems may need to be amended to use the deactivation of the consumer’s number (during the porting process) as the trigger point to close the customer’s account; and

[90] Or PAC switchers who sign up with a GP before porting their number, as explained in footnote 81.
[91] As set out in paragraph A7.32 of the March 2016 consultation
[92] We understand that all operators charge 30 days’ notice when a consumer is simply terminating their service rather than porting their number, so all post-pay out-of-contract C&R switches could involve double-paying.
[93] Paragraph A8.28, March 2016 consultation

- generate a final bill which calculates any unused portion of the monthly airtime charge, if this has been paid in advance, and credits this against final usage or roaming charges that have been incurred since the previous bill. Operators must also close down the collection arrangements with the customer once the final bill has been settled and collected.

A6.14 We have separated these activities into three distinct steps, each with an associated cost: i) an internal impact assessment of the proposed activity on billing / Customer Relationship Management (CRM) systems; ii) developing the necessary system functionality; and iii) testing the new system functionality / handing over to live operations. We have assumed that:

- all MNOs would be required to complete step (i) – an internal impact assessment – for each activity;

- no MNOs would be required to complete steps (ii) and (iii) for the first activity. This is because we consider that MNOs would already need to distinguish between account closures resulting from PAC switches or terminations, if they backdate notice to PAC request or waive notice period charges beyond the port-out date; and

- two out of four MNOs would be required to complete steps (ii) and (iii) for the second and third activities, because O2 and Vodafone already align notice periods with the switching window so would not need to develop new system functionality and test it.

A6.15 We consider that MNOs (to the extent necessary), large MVNOs and medium MVNOs will perform steps i) and iii) using internal IT expertise; for our cost estimates we have assumed they would be performed by an IT engineer earning £50,000 per year.[94] We consider that step ii), and all steps for small MVNOs, would require third party CRM vendor involvement, for which we have assumed a day rate of between £750 and £1300 (depending on operator size).

A6.16 We have assumed that operators will only be required to modify existing billing / CRM systems, and that no additional hardware or systems procurement is required. We assume that, as these are one-off changes, the only ongoing operating costs required will be additional support costs charged by third party vendors at a rate of 15% of capex per year.

A6.17 Finally, we note that some operators may wish to send consumers their final bill as soon as possible after they request to switch, which would necessitate immediate bill runs or moving the customer to the next daily bill run (i.e. outside of the normal billing cycle). However we have not included this functionality in our cost estimates because we consider that operators are free to continue to follow the switcher's existing bill cycle if they prefer.

A6.18 Figure A6.1 summarises the key billing systems activities, one-off costs, and associated operating costs, by operator type. A full set of assumptions about the number of development days required for each activity is set out in our cost calculations spreadsheet, published with this consultation.

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[94] Including a 60% loading factor to cover benefits and other overheads, this is equivalent to a day rate of around £333 (based on 240 working days).

Figure A6.1: Summary of billing systems changes and costs estimates, by operator

Activity	Operator	Capex (£,000)	Annual Opex (£,000)
Distinguish between account closure resulting from PAC switch / contract termination	MNO[95] Large MVNO Medium MVNO Small MVNO	0.7 7.9 6.4 4.5	0 1.0 0.8 0.7
Automatically close customer account when the number is deactivated	MNO[96] Large MVNO Medium MVNO Small MVNO	0.7 - 15.3 10.5 6.7 5.3	0 - 2.0 1.3 0.8 0.8
Generate final bill, calculating remaining unused portion of the monthly service charge collected in advance and crediting the unused portion against final usage charges	MNO Large MVNO Medium MVNO Small MVNO	2.7 - 40.2 32.8 22.3 17.3	0 - 4.9 4.1 2.7 2.6
Total	MNO Large MVNO Medium MVNO Small MVNO **All operators**	**4.0 - 56.2** **51.2** **35.5** **27.0** **2,347**	**0 - 6.8** **6.4** **4.3** **4.1** **313**

Changes to customer communications materials

A6.19 We have assumed that operators would be required to perform the following tasks in order to communicate their new notice period policy to consumers:

- review all customer facing materials (such as T&Cs, websites, and customer contract documents). We consider that this activity will involve operators' regulatory, legal, and marketing resources. The complexity of this task will be driven by the variety of different product offerings and the number of sales channels used (in particular, whether or not the operator uses retail stores);
- redraft the terms, text and content of relevant materials to clearly communicate the removal of notice period charges beyond the date of the switch. We have assumed this task will involve internal legal and marketing resources, though we have assumed small MVNOs will use external specialists; and
- update the impacted materials with the revised content and text.

A6.20 Here we have assumed that all four MNOs would incur costs, as we understand that Vodafone and O2 only align the notice period with the switching window in practice, rather than it being their official policy.

[95] As set out above, we assume that all MNOs would only need to complete an internal impact assessment for this activity.
[96] Range for MNOs based on whether MNO backdates notice to PAC request (EE and Three) or already waives notice period charges beyond switching date (O2 and Vodafone).

A6.21 We have estimated that these tasks would cost around £19,800 per MNO and an average of £8,200 per MVNO. The total industry cost would be £0.6 million. We have also received information from an operator[97] on the costs of updating customer communications materials, which was slightly higher than this estimate. However, as operators are likely to make ongoing "business-as-usual" changes to their customer communications material at regular intervals, independent of the proposed requirement set out in this consultation, we consider that the incremental cost of this requirement for some operators could be lower than our estimate.

Staff training costs

A6.22 Finally, we have estimated the cost of staff training that we consider would be necessary for operators to implement the necessary changes. We assume that each operator may be required to complete the following staff training to support their understanding and operation of the new notice period policy (excluding O2 and Vodafone, whose staff already operate this policy):

- billing / CRM system support staff (IT engineers and system administrators): Develop understanding of changes to CRM / billing system. We have assumed that this task would take 7 days per person;
- billing team administrators: Update their understanding of porting-related changes to the final bill generation. We have assumed this takes half a day's training per administrator; and
- customer service agents (CSAs): Update their understanding of changes to the notice period policy to deal with incoming customer porting queries and provide correct customer information. We have assumed this takes one hour's training per agent.

A6.23 We assume that each training activity requires: i) an impact assessment; ii) preparation of training materials required for enabling effective training sessions; and iii) the actual delivery of training to staff. For the training delivery to billing team administrators and CSAs, we assume that a training team will be required to help them understand the changes.

A6.24 We set out a full set of assumptions about the number of staff needed to be trained, and the salaries for different staff types, in our cost calculations spreadsheet.[98] Based on these assumptions, we have estimated that the total training cost incurred per MNO would be around £22,200, and the total training cost incurred per MVNO would be around £11,200. The total industry cost would be around £0.76 million. As our proposal is a one-off change to current systems and policies, which would then become standard, we do not consider that it would create any additional training costs on an ongoing basis.

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[97] [✂]

[98] We assume that MNOs and large MVNOs would need to train 440 and 367 CSAs respectively. This is based on an average across operators on the number of agents dealing with PAC requests / terminations for the 2014/15 FY (from data obtained under information request in December 2015). For medium MVNOs and small MVNOs, we have assumed that 100 and 50 CSAs respectively would need to receive training.

Summary of costs

A6.25 Based on our assessment above, we estimate that the total industry capex required to remove notice period charges beyond the switching date would be around £3.7 million, while annual operating costs would be around £0.3 million per year.

A6.26 The total implementation cost is **£6.4 million** over ten years in NPC terms, using a standard discounting methodology. This rises to **£7.2 million** over ten years if we use the Spackman discounting approach.[99]

Summary of quantified benefits and costs

A6.27 Figure A6.2 below summarises the estimated impact of removing notice period charges beyond the switching date on double-paying incurred by PAC switchers, as well as the estimated implementation cost incurred by industry.

Figure A6.2: Summary of quantified benefits and costs

Reduction in double-paying for PAC switchers (£m, 10-year NPV)	Net cost to industry (£m, 10-year NPC)
114.4	6.4 - 7.2

[99] As set out in paragraph A8.67 of the March 2016 consultation, the Spackman approach involves discounting all costs (including financing costs as calculated based on a post-tax real WACC of 7%) and benefits at the STPR, rather than simply discounting all costs and benefits at the STPR (excluding financing costs). It can be used in circumstances where a firm finances the investment, but benefits accrue to consumers or the wider public.

Annex 7

Illustrative mobile switching journeys

A7.1 Section 3 set out potential harms to consumers which can result where consumers are subject to notice period requirements when switching. We noted that these harms can arise where a consumer switches and ports their number because a consumer must use the PAC process and co-ordinate this with any notice period requirements.

A7.2 This annex provides further detail on the potential co-ordination issues faced by consumers when they wish to minimise any period of double paying when switching via the PAC process and where there are notice period requirements. We set out the steps a consumer must take in order to manage double payments under three illustrative scenarios. These are where the Losing Provider:

i) deems notice to start on the day the PAC is requested (if it is subsequently redeemed);

ii) deems notice to start on the day the PAC is redeemed; and

iii) does not require or charge for a notice period.

(i) LP deems notice to start on date PAC is requested, where PAC is subsequently used to switch

A7.3 In this scenario, the LP considers that the PAC request itself constitutes giving notice, and backdates any notice period to the PAC request date if the consumer goes on to redeem the PAC within the 30-day PAC window.[100] This is the practice followed by EE and Three. In these circumstances:

- A consumer wishing to minimise double paying needs to time the switch so as to balance risks and needs. Switching late into the 30-day PAC window minimises the impact of the notice period on double paying, but increases risks that the consumer will fail to switch before the PAC expires. Where this happens the consumer would need to request a new PAC, in which case the notice period may restart.

- Scenario (i) in Figure A7.1 illustrates the case where the consumer switches 14 days after requesting a PAC. In this case the notice is deemed to be backdated to the date of PAC request, resulting in 15 days of double paying; ie. payment for the remaining notice period and payment for the new service.

- Where the consumer starts a new contract with a new provider, activates their new SIM card, and requests and redeems the PAC from the old provider all on

[100] According to the MNP porting manual, backdating notice to the PAC request will normally revoke any previous notice given, unless the consumer requests the previous notice to stand and the LP can accommodate such a request. See paragraph 24, page 24: http://www.mnposg.org.uk/Main_Documents/MNP2%20Manual%20issue%201-27.pdf

the same day, they will double pay for the duration of the notice period required by the LP.

- Alternatively, the consumer could give explicit notice to the LP either before or when they request their PAC.[101] Again the consumer would need to time the use of the PAC, and defer entering into a new service, late enough to minimise a long period of double paying but early enough to avoid the PAC expiring. Where the consumer gives explicit notice before requesting the PAC, he or she will need to explicitly request that the LP does not restart the notice running from the PAC request date.

- In practice many consumers want to enter into a new contract quickly and without prior planning, for example to take advantage of an airtime offer or a new handset, or where they are unaware that they will need to pay notice. Typically this will lead to them to request and redeem the PAC soon after contracting for a new service, so incurring greater double payments than if they had planned more carefully or chosen to defer the switch.

(ii) LP deems notice to start on date PAC is redeemed

A7.4 In this scenario, the LP starts notice on the date the PAC is redeemed unless the consumer actively gives notice before this. This is the practice followed by some MVNOs.[102] In these circumstances:

- A consumer who does not give explicit notice will be subject to a 30 day notice period requirement from the point he or she uses the PAC to switch provider, and this translates to a similar period of double paying. Under these circumstances there is no advantage or incentive for the consumer to defer the start of a new service.

- Scenario (ii) in Figure A7.1 illustrates the implications for double paying where a consumer uses their PAC to switch 14 days after they request the PAC. Here the consumer incurs double paying of 30 days. Of these 29 days relate to paying off notice after the old service is deactivated.

- A consumer seeking to minimise double payments would instead need to plan ahead and actively give notice around 30 days before their planned switch, or give notice and defer their switch to the end of the notice period. Typically they might give notice at the same time as requesting a PAC.

- Where the consumer activates their new SIM card, and requests and redeems the PAC all on the same day, they will double pay for the duration of the notice period required by the LP. If they enter into a new contract before redeeming their PAC (which is commonly done to take advantage of an airtime offer or a new handset) they will double pay for longer than their notice period.

[101] They could do it earlier, but the provider may restart notice when the PAC is requested unless the customer explicitly requests otherwise.
[102] Mobile Virtual Network Operators.

(iii) LP does not charge for notice after they deactivate the service

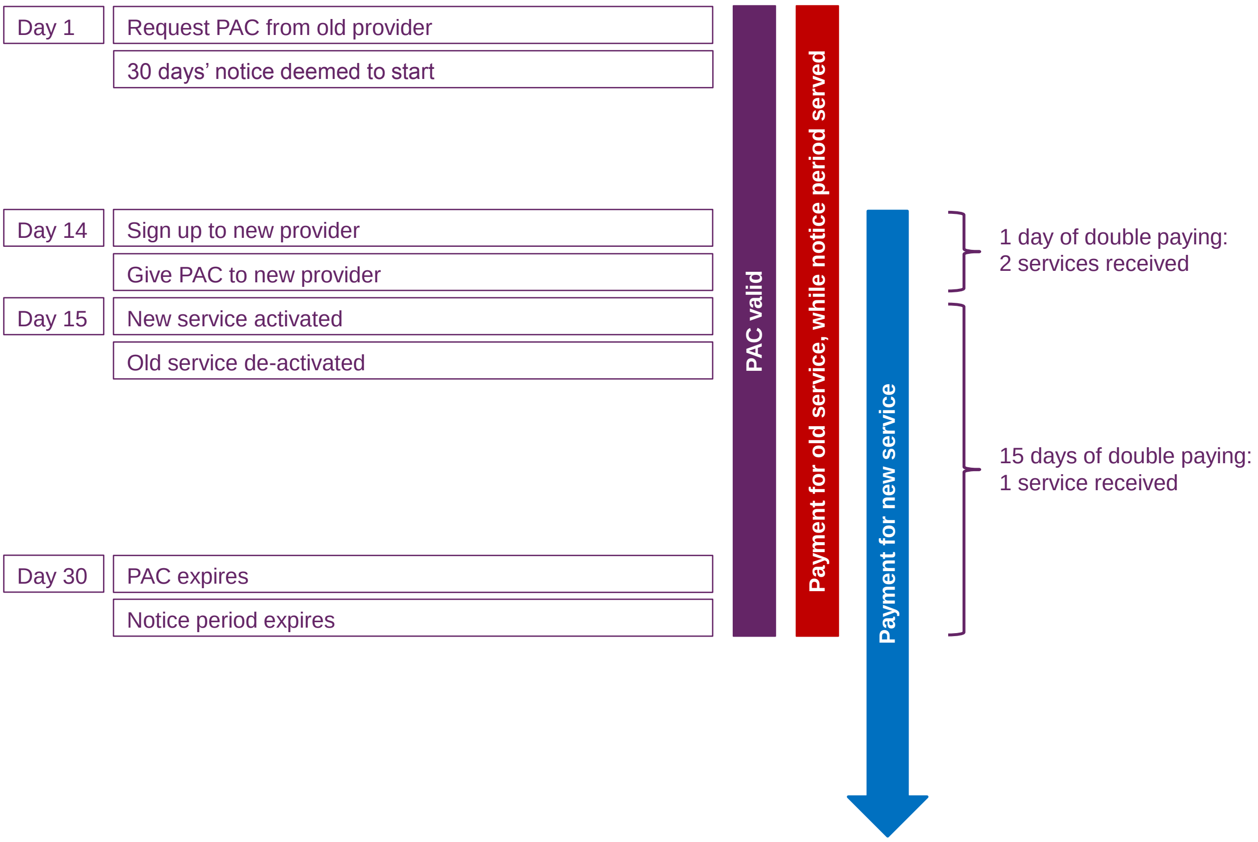
A7.5 In this scenario, the consumer need not take into account notice period requirements when organising their switch. This is the practice followed by O2 and Vodafone.[103] In these circumstances:

- The consumer need not plan ahead or defer their switch in order to avoid a period of double paying.
- Consumers may for example take out a new contract with a GP, and subsequently request and use their PAC to switch and port their number. They will pay for, and have use of two services until they port, but will pay for only one service after this point. In this scenario no double payment arises as a result of notice requirements. In addition, as the LP does not deactivate the service unless the PAC is used, the risk of losing service is minimised.
- Scenario (iii) of Figure A7.1 illustrates a switch where no notice period is payable in respect of the period after the old service is switched and deactivated. Here double paying is limited to the period of time between entering a new contract and switching and porting the mobile number, which as illustrated can be as short as one business day.

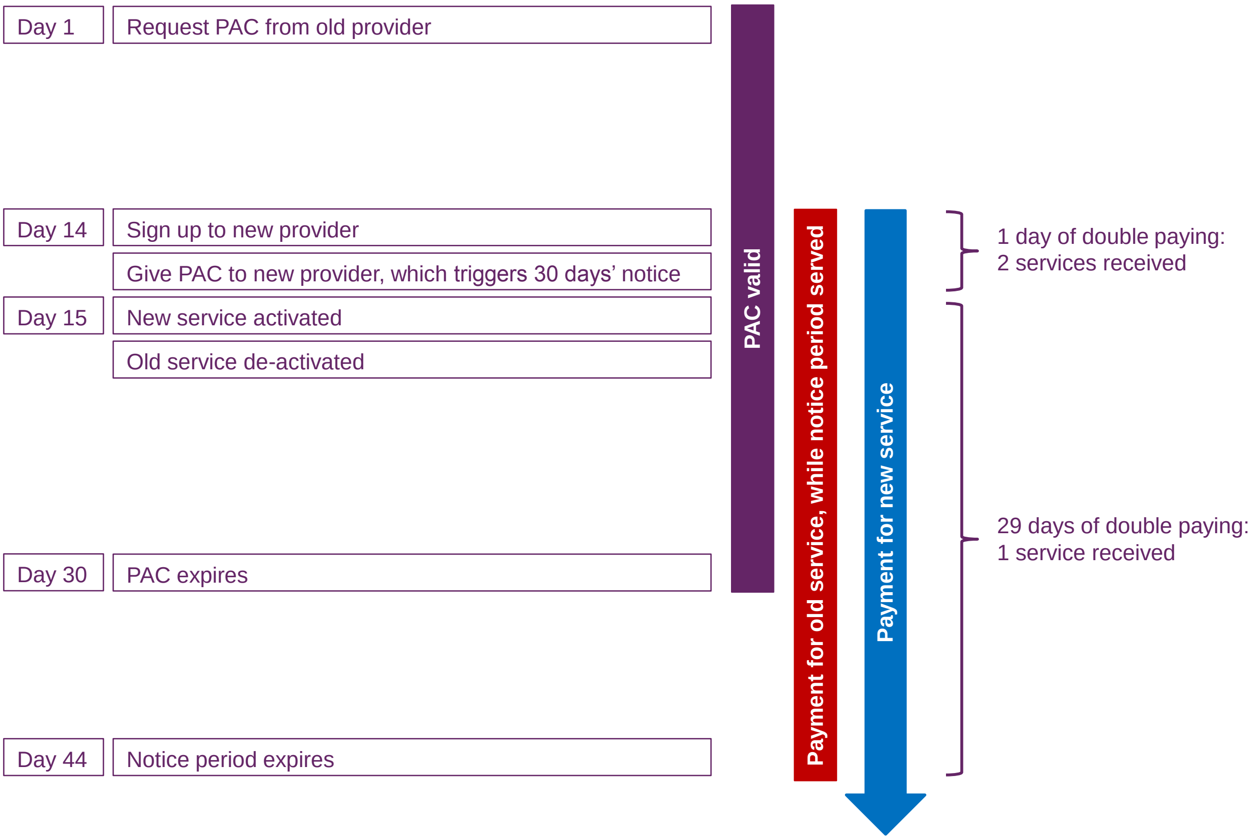
[103] O2 and Vodafone's policy as set out in their Terms and Conditions require customers to give 30 days' notice to terminate an agreement for service. However their current practice is to not enforce these terms for customers switching and porting their number to another provider via the PAC switching process, for consumers beyond their MCP.

Figure A7.1 – Illustrative PAC switching scenarios

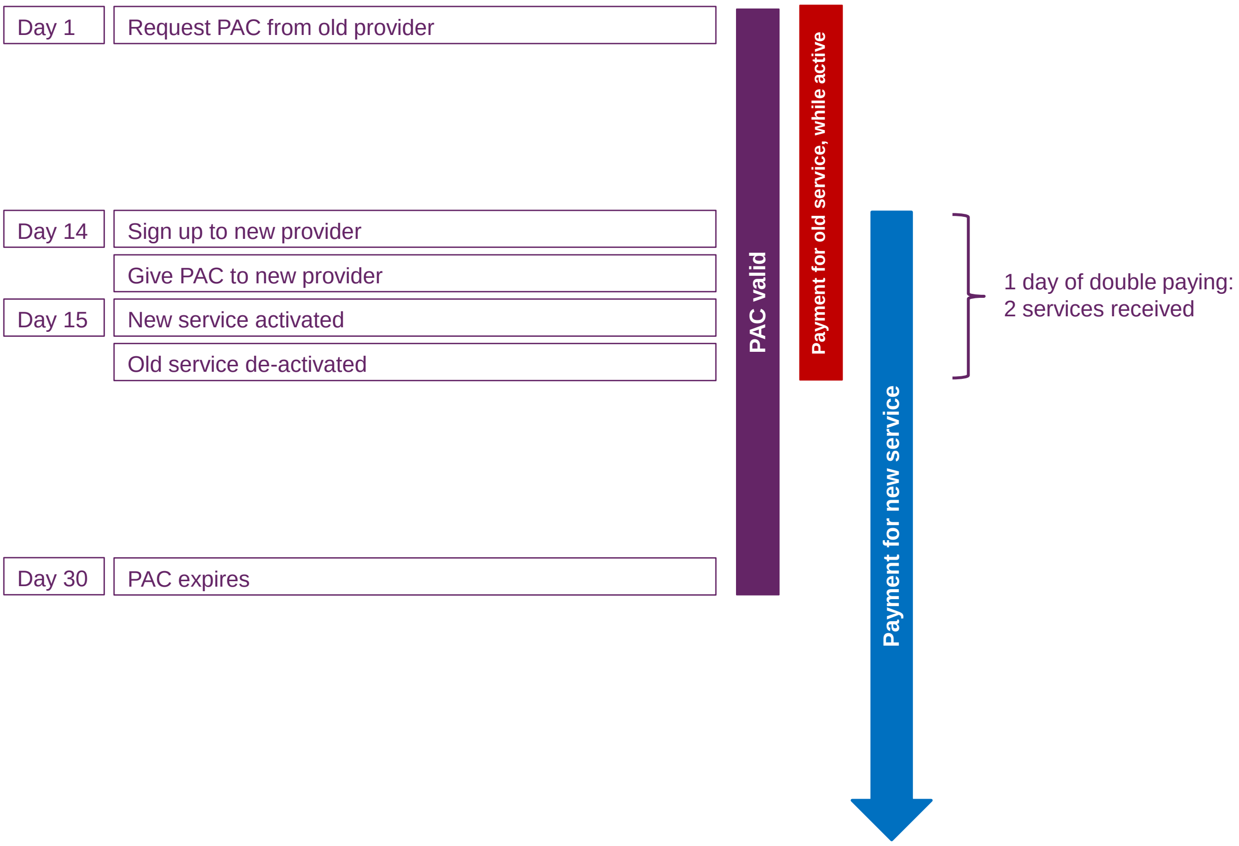
(i) LP deems notice to start on date PAC is requested, where PAC is subsequently used to switch. No explicit notice given.



(ii) LP deems notice to start on date PAC is redeemed. No explicit notice given.



(iii) LP does not require or charge a notice period after they deactivate the old service. No explicit notice given.



Annex 8

Mobile providers' terms and conditions concerning notice periods

A8.1 Most mobile service providers set out in their terms and conditions for a mobile service that customers must give 30 days' notice to terminate their mobile service contract, and so switch provider.

A8.2 The circumstances in which a customer may give notice, such as whether he or she needs to be outside the minimum contract period, and the format for giving notice varies. We note that not all mobile providers set out fully the circumstances in which notice must be given or the format for giving notice.

A8.3 For illustrative purposes, Figure A8.1 summarises the terms and conditions prevailing in July 2016 for a range of providers.

Figure A8.1 – Provider Terms and Conditions relating to termination rights and notice periods, as at July 2016

Mobile provider	Link to T&Cs	Relevant terms for cancellation outside minimum period, including any requirements for notice
Co-operative Mobile	https://www.thephone.coop/support/tcs/residential-terms-and-conditions/	7.2.5 Changing Mobile provider or discontinuing Your Wireless Service You must give Us 30 days' notice to end Your Mobile Service. …..Charges continue to be payable by You until 30 days after You have given to Us a Termination Notice…
EE	http://ee.co.uk/content/dam/ee-help/Help-PDFs/EE-PAYM-Network-Terms-v02.pdf	**7. Ending this Agreement.** You can phone Us and give 30 days' notice to end this entire Agreement with effect from the end of (or after) the Minimum Term. **7.2. Your termination rights** 7.2.1 You can give Us notice to terminate this Agreement, to take effect on or after the end of the Minimum Term. 7.2.2 You can only give Us notice to terminate this Agreement or the Additional Commitment Service by calling customer services. Subject to point 7.2.1, Your Agreement or the Additional Commitment Service will terminate 30 days from when We receive Your call

Mobile provider	Link to T&Cs	Relevant terms for cancellation outside minimum period, including any requirements for notice
O2	http://www.o2.co.uk/termsandconditions/mobile/our-latest-pay-monthly-mobile-agreement	3. Your Minimum Period – Your Pay Monthly Mobile Agreement has a minimum term called a Minimum Period. After that Minimum Period, you can end the Agreement by giving us 30 days' Notice and you will have to pay Charges during this notice period. 8. Ending the Agreement 8.2 This Agreement can be ended by either you or by us giving at least 30 days' Notice…… you must pay us any outstanding Charges, including the Charges for this notice period.
Talk Mobile	http://talkmobile.co.uk/current-tsandcs/	8.5. If you wish to terminate this Agreement, please go to talkmobile.co.uk and chat online to one of our Help Team or call 0333 304 8064 and we'll advise you of what you have to do. Alternatively, write to us at the address set out in Clause 14.7 of this Agreement. In all instances, you must state your name, address, mobile phone number and account number and sign and date your termination letter. Your notice period to terminate your Agreement will begin 30 days from the date Talkmobile receives your termination letter.
Tesco	http://www.tescomobile.com/about-us/terms-and-conditions/pay-monthly/pay-monthly-service-terms-conditions	5. Ending this Service Agreement 5.1 After the Cooling-off Period, you may cancel your Service Agreement at any time by contacting Tesco Mobile Customer Care. 5.2 If you have committed to a Minimum Contract Period of one month, your cancellation will take effect on your next Billing Date. However, it takes up to 48 hours for us to process your cancellation, meaning you need to cancel at least 48 hours before your next Billing Date to ensure a further month of Minimum Contract Period does not start. If a new Minimum Contract Period does start, your cancellation will automatically take effect on the following Billing Date. 5.3. If your contract has a Minimum Contract Period of more than one month, you may cancel your Service Agreement at any time. If you cancel after the Cooling-off Period but before the end of your Minimum Contract Period, you may incur an Early Termination Charge. This charge will never be more than your monthly subscription price multiplied by the number of months remaining on your contract and we will not receive any benefit over and above the contracted obligation. The amount of the charge will be notified to you before you cancel. If you've purchased your mobile handset under a credit agreement, there are separate terms in your credit agreement about your right to repay early and ending your credit agreement.

<table>
<tr><th>Mobile provider</th><th>Link to T&Cs</th><th>Relevant terms for cancellation outside minimum period, including any requirements for notice</th></tr>
<tr><td>Three</td><td>http://www.three.co.uk/cs/Satellite?blobkey=id&blobnocache=false&blobwhere=1400792250497&blobheader=application%2Fpdf&blobcol=urldata&blobtable=MungoBlobs</td><td>E. Ending this Agreement: How you can end your agreement depends on whether you're in your Minimum Term or not, and whether we've made any changes to you agreement that are likely to affect you. Please see the below table for a summary of how and when you can end your agreement.

…

<table>
<tr><th>When you wish to end your agreement</th><th>Notice Period</th><th>What to do?</th><th>Charges payable</th></tr>
<tr><td>Outside of your Minimum Term/ if you have no Minimum Term</td><td>30 days</td><td>Contact Three Customer Services</td><td>All outstanding Charges payable</td></tr>
</table></td></tr>
<tr><td>Virgin</td><td>http://store.virginmedia.com/the-legal-stuff/our-service.html#5</td><td>10. When our agreement ends

10.1 Cancellation for any reason: Either you or we may cancel this Agreement at any time for any reason by giving the other one months written notice.

10.5 Payment on cancellation: If this Agreement is cancelled you will need to pay us on cancellation all unpaid call and other usage or administration Charges on your account. Unless you have cancelled this Agreement under clause 10.2 or we have cancelled this Agreement under clause 10.3 (d) then you must also pay on cancellation the monthly (or other periodic) Charges owed for each month of your Contract Allowance through to the end of your Minimum Term.</td></tr>
<tr><td>Vodafone</td><td>http://www.vodafone.co.uk/cs/groups/public/documents/contentdocuments/vftst052330.pdf</td><td>B, This agreement is for the minimum period shown on the order form or in the welcome note. It starts when Vodafone connects my SIM card to the bundle shown and I may end it by giving Vodafone 30 days' written notice.

11 Ending this agreement
a. Either you or we may end this agreement by giving the other 30 days' notice in writing. Your notice must include your mobile number and your signature or appropriate security details. You must pay the charges during the notice period.</td></tr>
</table>