

making communications work for everyone

# **Consumer switching**

Proposals to reform switching of 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 easily in order to exercise choice and take advantage of competition in the communications sector.

This document sets out our proposals to reform the process for switching mobile provider, and to remove requirements on consumers to pay for their old service during a notice period once they have switched provider. Our proposals aim to address unnecessary difficulties that many consumers experience when they switch or consider switching mobile provider. In setting out our proposals we have taken account of responses to our March and July 2016 mobile switching consultations, as well as evidence and research we have gathered since then.

We invite comments on our proposals from all interested parties.

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# Section 1

# Summary

# Making mobile switching quicker and easier

- 1.1 We want to ensure that consumers can exercise choice and take advantage of competition in communications markets by being able to switch provider easily and without unnecessary difficulties.
- 1.2 We have previously proposed making the mobile switching process easier, and after considering the responses we received, we have revised these proposals. We have also asked consumers about their experiences of switching mobile services, and how likely they are to use a new switching process. This has led us to update our proposed reforms to existing processes.
- 1.3 In this consultation, we are proposing a mobile switching process which would remove the need for consumers to speak to their old provider. It would enable consumers to request the unique code they need to switch mobile providers, via text or online, whether they keep their mobile number or not, rather than having to call their provider.<sup>1</sup> We are also proposing a requirement to ensure consumers only need to contact their new/gaining provider once in order to port their existing number or cancel their old service. We call this new process the "Auto-Switch" process.
- 1.4 We are also proposing that mobile operators should not be able to charge consumers to pay for a notice period once the consumer has switched mobile provider. This will avoid consumers paying for a service they no longer receive after the switch date, and will make it easier to switch without worrying about notice periods.
- 1.5 We are proposing that this simpler switching process is available to all mobile customers regardless of:
  - whether they wish to transfer (port) their existing mobile number to their new provider or not;
  - whether they are seeking to port a single number, or multiple numbers (or switch a single account or multiple accounts in cases where they do not want to port their number);<sup>2</sup> and
  - whether they are residential or business customers.
- 1.6 Alongside these proposals mobile providers will be required to provide consumers with clear information, for example on their websites, about how the switching and number porting process works.
- 1.7 We consider our proposals will substantially benefit consumers by addressing the unnecessary difficulties they face when switching. They would also address one of

<sup>&</sup>lt;sup>1</sup> At present a consumer wanting to port his or her number would need to request a PAC (Porting Authorisation Code) from their current provider to switch their mobile service. Most providers require that consumers call in and speak to a service agent to request this

<sup>&</sup>lt;sup>2</sup> Up to 24 numbers.

the most significant sources of harm for consumers – double payment – which we estimate could save switchers around £10 million per year.

1.8 Government has made clear its commitment to improving switching and this is reflected in the Digital Economy Act. Our proposals support this commitment.

# We believe that switching mobile services is unnecessarily difficult

- 1.9 Our research has found a quarter of those consumers who switch mobile provider equivalent to around 1.7 million - had experienced major difficulties with the process. These difficulties also affected 37% of consumers who had actively considered switching but did not do so. We recognise that most consumers who have switched mobile providers found the process easy. However, we are concerned that there is a significant minority of consumers who either find the process difficult or are deterred from switching.
- 1.10 We have identified three sources of concern for consumers:
  - First, some consumers found that the existing switching process takes too long. Some experienced unnecessary difficulties when requesting a PAC or when trying to cancel their old service, for example dealing with a provider's attempts to persuade them to stay.
  - Second, many mobile switchers found themselves paying out for notice period charges weeks after their old service has ended.
  - Third, consumers experienced short-term service loss when switching.

#### Previous consultations on reforms to mobile switching processes

- 1.11 We previously consulted on the case for reforming the mobile switching process, most recently in March and July 2016.
- 1.12 We consulted on two options designed to address the unnecessary time and difficulties experienced by consumers when looking to switch. The first option proposed to maintain the current PAC process but introduced several key enhancements to make it easier and faster for consumers (which we termed Auto-PAC).<sup>3</sup> The second option was a process led by the consumer's new/gaining provider (i.e. 'Gaining Provider Led' or GPL). Our initial analysis led us to a marginal preference for the second option. We considered GPL was simpler for consumers as it would not require them to obtain a PAC and give this to their new provider.
- 1.13 In addition to these reforms, we consulted on addressing double payments. Our preferred approach was to prohibit providers from charging notice beyond the consumer's switch date.
- 1.14 We also proposed addressing loss of service by introducing new processes to manage switching and porting, which were aimed at ensuring a fully co-ordinated End-to-end management of switches by mobile providers.

<sup>&</sup>lt;sup>3</sup> Our Auto-Switch proposal builds on the Auto-PAC option we previously consulted on.

#### **Our latest analysis**

- 1.15 Since our previous consultations we have carried out further detailed research of consumers' experiences of switching mobile provider, including views about the merits, and their likely take-up, of our proposed reforms. Following this we have revised our view of the likely benefits of our proposed reforms. We have also updated our estimates of the costs to mobile providers of implementing each reform.
- 1.16 Our updated analysis suggests that consumers place significant value on the likely reduction in time and difficulties offered by both the Auto-Switch and GPL options. In particular, both options enable consumers to avoid having to speak with their previous provider the key factor behind the time spent and difficulties experienced by consumers under the current process.
- 1.17 Our estimates of the costs of implementing these reforms have risen however, and significantly in the case of GPL. We are now of the view that Auto-Switch is a more proportionate remedy to address the problems we have identified. It would meet our policy objectives but at a lower cost than GPL. We estimate that avoiding the need for consumers to contact their existing provider by telephone could generate benefits of between £16 to £43m over 10 years by way of avoiding unnecessary time and difficulties when switching. These are meaningful savings to consumers from a quicker and easier switching process and should also encourage more consumers to switch and get a better deal.
- 1.18 We also estimate that prohibiting charging for notice periods beyond the switching date is likely to save switchers around £10 million per year (or £87 million over 10 years in net present value terms), whether they are switching and transferring their number, or just switching providers.
- 1.19 In relation to loss of service, industry has made commitments to develop and implement measures to address this on a voluntary basis. We no longer consider it is proportionate to require reform in this regard but we will monitor the effectiveness of these commitments and look at this in the future if we consider they do not meet our objectives.

# An effective and proportionate package of mobile switching reforms

- 1.20 Our regulatory policy objective is to ensure that switching processes do not create unnecessary difficulties or deterrents for consumers when switching mobile provider. Our proposals should allow for a switching process that is quick, simple and convenient to use.
- 1.21 Based on our latest evidence and analysis, we are proposing a package of reforms to mobile switching processes which is effective, proportionate and will deliver real change.

# Package of reforms

- 1. Introduction of Auto-Switch: consumers will be able to request and automatically receive a PAC or cancellation code by text, or through their online account. This will remove the need for consumers to speak to their old provider. They will also only need to contact their new provider once in order to progress the switch.
- 2. Prohibiting charging for notice after the switching date: consumers will no longer have to pay for their old and new service at the same time.
- 3. Providing transparency to consumers: mobile providers will be required to provide consumers with clear information, for example on their websites, about the switching and porting process, to ensure consumers are better informed.

# Next steps

- 1.22 We seek views from all interested parties on our proposals in this consultation including the proposed new General Condition and modifications to the existing General Condition that deals with number portability by 30 June 2017.
- 1.23 We expect to publish a policy statement in the autumn of 2017.

# Section 2

# Introduction

- 2.1 In March and July 2016<sup>4</sup> we consulted on proposals to reform the process for switching mobile services. In January 2017, we also published an update concerning our estimates of the likely costs to industry of implementing our proposals and invited comment on these.<sup>5</sup>
- 2.2 This consultation sets out revised proposals for reform of the current PAC switching process and to address the issue of notice period requirements when switching. We are also consulting on proposed modifications to the General Conditions that would give effect to our proposals.

# **Background to mobile switching**

2.3 Consumers seeking to switch mobile provider currently must follow either the 'PAC' process, or use the default 'Cease & Re-provide' ('C&R') approach. Our March and July 2016 consultations described in detail these processes for switching and how, under the PAC process, consumers are able to transfer over their mobile number to their new provider.<sup>6,7</sup> They also described how, in a switching context, loss of service might occur, as well as how double paying as a result of notice period requirements might arise. We describe the PAC and C&R processes below.

# **PAC process**

- 2.4 The 'PAC' process must be used by consumers who wish to switch their provider and keep, or 'port' their number. Under the PAC process a consumer wishing to switch and port must contact their existing (losing) provider<sup>8</sup> to request and obtain a PAC code. Where the consumer contacts their losing provider by phone, Ofcom regulations require that the losing provider gives the PAC immediately over the phone or within two hours by text.<sup>9</sup> The PAC is valid for 30 days.
- 2.5 When the consumer signs up to a new service with their new (gaining) provider,<sup>10</sup> the consumer will normally receive a new SIM card from the gaining provider, which they will be able to use to make and receive calls and texts using a temporary number, prior to the port of their existing number.<sup>11</sup> The consumer ports their existing mobile number over to their new service by giving the PAC to their gaining provider. Ofcom

https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0023/83453/Consumer-Switching-Further-proposalsto-reform-switching-of-mobile-services-July-2016.pdf

<sup>&</sup>lt;sup>4</sup> See: <u>https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0025/82636/consumer-switching-mobile-consultation.pdf</u> and

We refer in this document to the 'March 2016 consultation' and the 'July 2016 consultation'. <sup>5</sup> See: <u>https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0033/97179/Consumer-switching-Proposals-to-reform-switching-of-mobile-communications-services-Revised-cost-estimates.pdf</u>. We refer in this document to the 'January 2017 cost update.'

<sup>&</sup>lt;sup>6</sup> March 2016 consultation Section 3

<sup>&</sup>lt;sup>7</sup> July 2016 consultation §3.4 - §3.6, and §3.18 - §3.19

<sup>&</sup>lt;sup>8</sup> We referred to the losing provider as 'LP' in previous consultations.

<sup>&</sup>lt;sup>9</sup> By 'text' we refer to SMS text throughout this document.

<sup>&</sup>lt;sup>10</sup> We referred to a consumer's new provider or the provider they are joining as the 'Gaining Provider' ('GP') in previous consultations.

<sup>&</sup>lt;sup>11</sup> The consumer is billed by the gaining provider from the date of SIM activation.

regulations require that providers port the mobile number within one business day of the consumer's request. Following completion of the port, the temporary number on the consumer's new service will be replaced by the ported number and the old service will be automatically deactivated.

- 2.6 On the day of port, the consumer may experience a loss of service in that they may be unable to make or receive calls or texts on their existing number during the porting process. They may also experience difficulties with their temporary number (for example, sometimes the temporary number is de-activated too early) resulting in an inability to receive calls or texts at all.
- 2.7 In principle, loss of service can arise because of the way the switch is co-ordinated by the consumer. It is possible that a consumer intending to switch and port could suffer a break in service.<sup>12</sup> This could happen, for example, when a consumer requests a PAC and cancels the old service but does not manage to enter into a new agreement with a new mobile service provider before their losing provider deactivates the old service.
- 2.8 On the provider side, industry protocols and back office processes<sup>13</sup> for mobile number porting are structured so that providers effect a mobile number port on the business day following a consumer's port request.<sup>14</sup>
- 2.9 Furthermore, the industry process is structured such that, on the day the consumer's mobile number is transferred from the losing provider to the gaining provider, the duration of any loss of service while the number is transferred should be limited to four hours at most, i.e. to between 11am and 3pm on the next working day after the consumer requests the number to be ported.<sup>15</sup>
- 2.10 In addition, many mobile providers require consumers switching or cancelling their service, outside of the minimum contract period, to serve a notice period which is typically 30 days.<sup>16,17</sup> Depending on the particular notice period policy the losing

<sup>&</sup>lt;sup>12</sup> Between the deactivation of the current service with the losing provider and activation of the new service with a new provider

<sup>&</sup>lt;sup>13</sup> Including as set out in the industry agreed Mobile Number Porting manual

<sup>&</sup>lt;sup>14</sup> Ofcom regulations (General Condition 18.3) require that providers execute a number port within one business day of a request to port by the consumer. Where providers fail to meet this requirement, consumers are entitled to reasonable compensation.

<sup>&</sup>lt;sup>15</sup> We note mobile operators, acting through the industry mobile number porting forum the Operator Steering Group ('OSG') have recently initiated revisions to this porting window intended to create additional capacity to handle a greater volume of ports. Mobile operators have committed to taking forward a number of initiatives designed to improve the mobile number porting process. We turn to this topic in greater detail in §4.96 to §4.99.

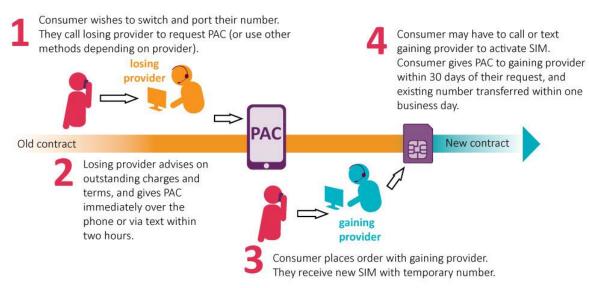
<sup>&</sup>lt;sup>16</sup> Requirements to serve and pay out notice generally apply where a consumer is beyond the minimum contract period (MCP) and so is free to switch provider without incurring other contract related charges such as an Early Termination Charge ('ETC'). Notice period requirements may also apply where the remaining time to reach the MCP is less than the notice period requirement. For example, a consumer with a 12 month mobile contract, subject to a 30 day notice period requirement, who seeks to switch 11½ months into the contract may be subject to an Early Termination Charge relating to cancelling 15 days early, plus 15 days notice payment in respect of the expiry of notice which would occur 15 days beyond the MCP.

<sup>&</sup>lt;sup>17</sup> Our July 2016 consultation (Figure 1) summarised the main providers' policies and practices regarding notice periods, in circumstances in which the consumer is outside any minimum contract period and switches and ports via the PAC process. In summary, O2 and Vodafone only bill to the date that the number is ported out. EE and Three take the PAC request date as the start date for the notice period.

provider operates, and on how a consumer coordinates the notice of termination and the start of their new contract, they may end up paying for both the old and the new service simultaneously until the notice period expires ('double paying').

2.11 Figure 1 summarises the steps a consumer must follow when switching and porting using the current PAC process.

# Figure 1: Consumer steps for mobile switching and porting under the current PAC process



# Cease & Re-provide (C&R) process

- 2.12 Where the consumer wants to switch provider but not port their number, currently no formal process exists to achieve the switch. Instead the consumer must follow a default process involving the consumer contacting their losing provider to cancel their old service, including giving any required notice. The consumer must separately contact their gaining provider to take out a new service.
- 2.13 Under this approach the consumer is responsible for coordinating the cessation of the old and the commencement of the new service. Where notice periods apply, a consumer wishing to avoid overlapping services and 'double paying' must coordinate the expiration of notice with the start date of the new service. This might involve the consumer deferring the start of the new service until any notice they have given to their losing provider has expired.
- 2.14 Loss of service can also occur where the consumer switches via C&R arrangements. This is because the consumer either has not coordinated, or has not been able to coordinate, the new service to start before the old service ceases. Difficulties in such coordination may be compounded by any need to manage notice period requirements, as we discuss later in this section.
- 2.15 Figure 2 summarises the steps a consumer takes when switching through the C&R method.



# **Previous consultations**

#### March and July 2016 consultations

- 2.16 Our March and July 2016 consultations set out our provisional view that consumers are experiencing harm as a result of the current switching processes and notice period requirements. These can affect both consumers who switch and those who consider switching but do not do so because of concerns about the switching process. We set out three potential sources of harm:
  - time and difficulties progressing the switch;
  - 'double paying' while switching provider; and
  - loss of service while switching provider
- 2.17 To address these harms, our consultations set out two options for reforming the core switching process:
  - Auto PAC under this proposal, consumers would be able to request a PAC and have it delivered by text, or through their online account with their provider, in addition to the current method of requesting and receiving it over the phone. The message containing the PAC would also contain information relevant to their switching decision, e.g. any early termination charges (ETCs).
  - **Gaining Provider Led (GPL)** process. Under this proposal, consumers would only need to contact the provider they want to switch their service to i.e. there would be no need for them to contact their losing provider should they not want to. The gaining provider would arrange for them to be sent a text message containing information relevant to their switching decision e.g. any ETCs.
- 2.18 Our consultations also set out proposals for two accompanying measures aimed at improving consumers' switching experience:

- Requirement on providers not to charge notice beyond the date on which a consumer switches.
- End-to-end management we proposed that the process for switching should be centrally coordinated, which would ensure that the consumer's new service is activated prior to the deactivation of their old service. This was aimed at minimising loss of service that can occur when consumers switch mobile operator and port their number.
- 2.19 We also suggested that it may be helpful to place a requirement on providers to give consumers clear guidance on the switching and porting process. Such guidance should help ensure consumers are better informed about the steps involved in switching and porting. We suggested that, should any such requirement be put in place, industry would be best placed to develop the necessary detailed guidance, in discussion with Ofcom and other interested parties.
- 2.20 Our consultations set out our assessment of the likely costs to the mobile industry of implementing our package of reforms, and the likely consumer benefits. We provisionally concluded that our proposals would be proportionate in addressing the risks of consumer harms we had identified. With specific reference to the core switching process, we also set out a marginal preference for the GPL option. This was on the basis that we considered GPL to be simpler for consumers as it would not require them to obtain a PAC. We were also of the view that the higher costs of implementation were outweighed by additional consumer benefits.

## January 2017 cost update

- 2.21 Following publication of our March and July consultations, and in the light of responses to them, we undertook further work to understand and revise our estimates of the likely costs to industry of implementing our options for reform.
- 2.22 In January 2017, we published an update on our estimate of the likely gross implementation costs of our proposed options for reform and invited stakeholders and interested parties to comment.<sup>18</sup>

# Our regulatory policy objectives

- 2.23 Consumers will be able to exercise choice and take advantage of competition in communications markets best where they can switch providers easily and without unnecessary difficulties. The ability for consumers to switch easily to their preferred provider, or away from their provider if they are dissatisfied ensures better outcomes for consumers and is also a key enabler for effective competition. Effective competition underpins the provision of good value, high quality products and drives innovation.
- 2.24 We therefore consider that consumer interests will be best served by ensuring that consumers do not encounter unnecessary difficulties and are not deterred from exercising choice, because of the switching process.
- 2.25 Around 3.8 million consumers currently switch mobile provider each year, and of these, around 2.4 million also carry over their existing mobile number to their new

<sup>&</sup>lt;sup>18</sup> See: <u>https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0033/97179/Consumer-switching-Proposals-to-reform-switching-of-mobile-communications-services-Revised-cost-estimates.pdf</u>

provider.<sup>19</sup> Our consumer research suggests that the majority of mobile switchers consider that the switching process is easy.<sup>20</sup> However, a significant minority of consumers who switch have encountered difficulties, with 25% (equivalent to around 1.7 million mobile consumers) reporting experiencing major difficulties related to the switching process. Moreover, 37% of consumers who actively considered switching appeared to have been deterred from switching due to concerns about the switching process.

- 2.26 We are concerned that the interests of this significant minority of consumers who are experiencing difficulties switching, or are deterred from switching in the first place, are not sufficiently protected, and that they are suffering harm as a result.
- 2.27 Our regulatory policy objective, derived from our functions and consistent with our duties,<sup>21</sup> is to ensure that switching processes do not create unnecessary difficulties or deterrents for consumers when switching mobile provider. We consider that removing unnecessary difficulties or deterrents that give rise to consumer harm should allow for a switching process that is quick, simple, convenient to use and easily understood.
- 2.28 In the rest of this document we consider the specific difficulties and deterrents to switching that we have identified and our proposed reforms to address these that we consider will achieve our policy aim.
- 2.29 We note that the Government has made clear its commitment to improving switching by introducing legislation in the Digital Economy Act to make explicit Ofcom's powers in relation to switching.

# Legal framework

2.30 Our regulatory policy objectives are based on a number of provisions of the Communications Act 2003 ("Act") and on the European common regulatory framework for electronic communications services ("Framework") which comprises a number of specific Directives and which is implemented by the Act.

## Ofcom's general duties

2.31 Section 3(1) of the Act states:

"It shall be the principal duty of Ofcom, in carrying out their functions:

- (a) to further the interests of citizens in relation to communication matters; and
- (b) to further the interests of consumers<sup>22</sup> in relevant markets, where appropriate by promoting competition."

<sup>&</sup>lt;sup>19</sup> Based on Switching Tracker 2016

<sup>&</sup>lt;sup>20</sup> 78% of switchers who had switched in the last 18 months rated the process as 'easy'. March 2016 consultation §4.7

<sup>&</sup>lt;sup>21</sup> See Legal framework below.

<sup>&</sup>lt;sup>22</sup> Consumer is defined in Section 405(5) of the Act and includes people acting in their personal capacity or for the purposes of, or in connection with, a business.

- 2.32 Section 3(2) then goes on to set out things which the duty in section 3(1) requires us to secure when carrying out our functions. These include securing the availability throughout the UK of a wide range of electronic communications services (section 3(2)(b)). We are also required to have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, as well as any other principles appearing to Ofcom to represent best regulatory practice (section 3(3)).
- 2.33 Section 3(4) meanwhile says we must have regard, in performing our duties, to a number of matters<sup>23</sup> including:
  - the desirability of promoting competition;
  - the opinions of consumers in relevant markets and of members of the public generally; and
  - the extent to which the furthering or securing of the matters mentioned in sections 3(1) and 3(2) is reasonably practicable.
- 2.34 In addition, section 3(5) requires that, when performing our duty to further the interests of consumers, Ofcom must have regard, in particular, to the interests of those consumers in respect of choice, price, quality of service and value for money.

# European requirements for regulation

- 2.35 As set out in section 4 of the Act, when exercising certain functions<sup>24</sup> Ofcom must also act in accordance with the six European Community requirements described there. These include promoting competition in the provision of electronic communications networks and services, and the interests of all EU citizens, while being technologically neutral.
- 2.36 The requirements of section 4 are read in light of Article 8 of the Framework Directive<sup>25</sup> which sets out the policy objectives of the Framework. It says national regulatory authorities shall ensure that, when they carry out the regulatory tasks set out in the Framework, they take all reasonable and proportionate measures aimed at achieving specific objectives.<sup>26</sup> Those objectives include:
  - the promotion of competition in the provision of electronic communications services<sup>27</sup> by ensuring that:
    - o users derive maximum benefit in terms of choice, price and quality; and
    - there is no distortion or restriction of competition in the electronic communications sector, including the transmission of content.<sup>28</sup>
  - to promote the interests of EU citizens by ensuring:

<sup>&</sup>lt;sup>23</sup> As they appear to us to be relevant in the circumstances.

<sup>&</sup>lt;sup>24</sup> Including those whose exercise we propose in this document.

<sup>&</sup>lt;sup>25</sup> Directive 2002/20/EC of the European Parliament and of the Council (as amended by Directive 2009/140/EC), 7 March 2002. Available at: <u>http://eur-</u>

lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0033:0033:EN:PDF

<sup>&</sup>lt;sup>26</sup> Set out in paragraphs 2, 3 and 4 of Article 8.

<sup>&</sup>lt;sup>27</sup> As well as electronic communications networks and associated facilities and services.

<sup>&</sup>lt;sup>28</sup> Articles 8(2)(a) and (b).

- o a high level of protection for consumers in their dealings with suppliers; and
- promoting the provision of clear information (in particular, requiring transparency of tariffs and conditions for using publicly available electronic communications services).<sup>29</sup>

#### Powers and duties under the Framework in relation to general conditions

- 2.37 We intend to implement our proposal to make switching mobile providers easier by introducing consumer protection rules in the form of general conditions ("GCs").
- 2.38 Alongside the Framework Directive, the Authorisation Directive<sup>30</sup> provides for national regulatory authorities to set conditions of general authorisation for communications providers. Under Article 6 of, and paragraph 8 of the Annex, these include conditions containing ".... consumer protection rules specific to the electronic communications sector, including<sup>31</sup> conditions in conformity with Directive 2002/22/EC" ("Universal Service Directive")."
- 2.39 The Universal Service Directive concerns the provision of electronic communications networks and services to end-users and, amongst other things, establishes the rights of end-users and the corresponding obligations of providers of publicly available electronic communications services and networks.<sup>32</sup> In this context, Article 30 of the Universal Services Directive<sup>33</sup> and Recital 47 to the 2009 Directive which amended it are particularly relevant.<sup>34</sup> The latter states:

"In order to take full advantage of the competitive environment, consumers should be able to make informed choices and to change providers when it is in their interests. It is essential to ensure that they can do so without being hindered by legal, technical or practical obstacles, including contractual conditions, procedures, charges and so on. This does not preclude the imposition of reasonable minimum contractual periods in consumer contracts...... Experience in certain Member States has shown that there is a risk of consumers being switched to another provider without having given their consent. While that is a matter that should primarily be addressed by law enforcement authorities. Member States should be able to impose such minimum proportionate measures regarding the switching process, including appropriate sanctions, as are necessary to minimise such risks, and to ensure that consumers are protected throughout the switching process without making the switching process less attractive for them."

lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0051:0051:EN:PDF

<sup>34</sup> Directive 2009/136/EC of the European Parliament and of the Council, available at <u>http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32009L0136&from=EN</u>

<sup>&</sup>lt;sup>29</sup> Articles 8(4)(b) and (d).

<sup>&</sup>lt;sup>30</sup> Directive 2002/20/EC of the European Parliament and of the Council (as amended by Directive 2009/140/EC), paragraph 8 of Annex A

<sup>&</sup>lt;sup>31</sup> And therefore not limited to.

<sup>&</sup>lt;sup>32</sup> See Articles 1(1) and (2).

<sup>&</sup>lt;sup>33</sup> Directive 2002/22/EC of the European Parliament and of the Council (as amended by Directive 2009/136/EC), 7 March 2002. Available at: <u>http://eur-</u>

- 2.40 Article 30 of the Universal Service Directive includes provisions dealing with the porting of numbers and the switching of providers. It says national regulatory authorities should take into account, where necessary, measures ensuring that:
  - subscribers are protected throughout the switching process; and
  - subscribers are not switched to another provider against their will.
- 2.41 It also states that, "[w]*ithout prejudice to any minimum contractual period, Member States shall ensure that conditions and procedures for contract termination do not act as a disincentive against changing provider*".

# Powers to set General Conditions under the Act

- 2.42 Section 45 of the Act says we may set General Conditions which contain provisions authorised or required by one or more of sections 51, 52, 57, 58 or 64. Section 47(2) governs the circumstances in which Ofcom can set or modify a General Condition. It states that a condition can be made or modified where doing so is:
  - objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;<sup>35</sup>
  - not such as to discriminate unduly against particular persons or against a particular description of persons;
  - proportionate to what the condition or modification is intended to achieve; and
  - transparent in relation to what it is intended to achieve.
- 2.43 Under Section 51(1)(a) the General Conditions we may make include conditions making such provision as we consider appropriate for the purpose of protecting the interests of end-users of public electronic communications services. Section 51(2) says this power includes (but is not limited to) setting conditions for that purpose which:
  - relate to the supply, provision or making available of goods, services or facilities associated with the provision of public electronic communications services;
  - give effect to EU obligations to provide protection for such end-users in relation to the supply, provision or making available of those goods, services or facilities;
  - ensure that conditions and procedures for the termination of a contract do not act as a disincentive to an end-user changing communications provider;
  - require the provision, free of charge, of specified information, or information of a specified kind, to end-users; and
  - specify requirements in relation to arrangements that enable an end-user to change communications provider on request.<sup>36</sup>

<sup>&</sup>lt;sup>35</sup> Section 47(3) says this does not apply to the setting of a condition. We are likely, however, to take it into account as part of our assessment of whether any condition is proportionate.

2.44 We set out in this consultation how our proposals accord with our powers and duties, including meeting the relevant tests.

# Impact Assessment

- 2.45 Ofcom is generally required to undertake impact assessments under Section 7 of the Communications Act, 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.<sup>37</sup>
- 2.46 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. The analysis presented in this document constitutes an impact assessment as defined in section 7 of the Act.

# Equality impact assessment

- 2.47 Ofcom is also required to assess the potential impact of all our functions, policies, projects and practices on the equality of individuals to whom these policies will apply. Equality impact assessments ('EIAs') assist us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity,
- 2.48 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.

# This document

- 2.49 The remainder of this document is structured as follows:
  - Section 3 sets out our updated views on consumer harm arising under current switching processes;
  - Section 4 sets out our options for reform;
  - Section 5 sets out the impacts from introducing our options for reform; and
  - Section 6 sets out our updated conclusions on the options for reform.
- 2.50 In addition, annexes 1 4, contained in this document, are structured as follows:
  - Annex 1 sets out how to respond to this consultation;
  - Annex 2 sets out Ofcom's consultation principles;

<sup>&</sup>lt;sup>36</sup> Inserted by Section 2 of the Digital Economy Act 2017, which has received Royal Assent but is not yet in force.

<sup>&</sup>lt;sup>37</sup> For further information about our approach to impact assessments, see the guidelines, "Better policy-making: Ofcom's approach to impact assessment"

<sup>(</sup>https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0026/57194/better\_policy\_making.pdf)

- Annex 3 sets out our consultation questions; and
- Annex 4 contains a glossary of terms.
- 2.51 Further annexes 5 14, are contained in separate accompanying documents, and are structured as follows:
  - Annex 5: Consumer research methodology
  - Annex 6: Use of research and updated findings
  - Annex 7: Detailed process diagrams
  - Annex 8: Option assessment: Costs
  - Annex 9: Calculation of reduction in double paying
  - Annex 10: Calculation of time savings
  - Annex 11: Calculation of consumer Willingness to Pay
  - Annex 12: Impact on would be switchers
- 2.52 We also set out and consult on proposed modifications to General Conditions to Entitlement in a second accompanying document structured as follows:
  - Annex 13: Proposed modifications to General Conditions
  - Annex 14: Notification of General Condition modifications

# Section 3

# Consumer harm under current switching processes

- 3.1 This section sets out the evidence and our view of the harms consumers currently experience from the existing switching process.
- 3.2 We continue to believe that, irrespective of which mobile switching route a consumer follows (PAC or C&R), consumers including small businesses can experience difficulties, service interruptions or incur costs when switching.
- 3.3 Taken together these difficulties can lead to a sizeable number of mobile switchers being harmed when switching and some consumers being deterred from switching altogether.
- 3.4 This section is structured as follows. We:
  - summarise the concerns we set out in our March 2016 and July 2016 consultations;
  - summarise stakeholder views received;
  - discuss the further research and evidence we have gathered since; and
  - we then set out our updated view of the harms consumers experience.

# Areas of concern set out in our March and July 2016 consultations

#### March 2016 consultation

- 3.5 Our March 2016 consultation set out our view that a sizeable minority of mobile switchers experience harm when switching under both the current PAC process and the C&R route as a consequence of unnecessary difficulties during the switching process.
- 3.6 In arriving at our view, we acknowledged that our consumer research suggested the majority of mobile switchers (78%) rated the process of switching as either 'very' or 'fairly' easy.<sup>38</sup> However, 38% of switchers (2.5 million consumers) said they had encountered at least one major difficulty, and 70% (4.6 million consumers) of switchers cited a minor difficulty.<sup>39</sup> Our analysis also suggested that a quarter of switchers (equivalent to around 1.7 million mobile consumers) had experienced a major difficulty related to the switching process.

<sup>&</sup>lt;sup>38</sup> BDRC 2015 consumer research – see:

https://www.ofcom.org.uk/ data/assets/pdf file/0025/91834/mobile switching quantitative research <u>feb16.pdf.</u> 78% of switchers who had switched in the last 18 months rated the process as 'easy'. March 2016 consultation §4.7

<sup>&</sup>lt;sup>39</sup> We consider it appropriate to consider both reported ease of switching and responses to prompted difficulties.

- 3.7 We also found that 37% of mobile consumers (around 0.7 million consumers) who had actively started looking for a new provider but not switched<sup>40</sup> identified at least one difficulty related to the switching process as a major factor in deciding not to switch, and so were potentially deterred from switching. We noted that, in addition, 15% of those who had not switched or considered switching<sup>41</sup> (equivalent to around 5.9 million consumers) said that process concerns were the main reason they didn't switch or consider switching.<sup>42</sup>
- 3.8 Our evidence and consumer research findings led us to our view that the principal difficulties, or sources of harm, fell under three main categories:
  - Unnecessary time and difficulties progressing the switch, in particular as a result of the need to contact the existing provider to request a PAC and/or cancel.
  - 'Double paying' while switching provider, either to avoid loss of service, or because of operators' requirements for consumers to pay out notice periods when cancelling a mobile service.
  - Loss of service while switching provider, for example because the consumer must coordinate the switch and/or because of service disruption during the porting process.<sup>43</sup>
- 3.9 We also set out our view that the risk of experiencing these difficulties was having the practical effect of deterring some consumers from switching altogether.

#### Unnecessary time and difficulties progressing the switch

- 3.10 Our 2015 research indicated that, for a significant number of both PAC and C&R switchers, navigating existing switching processes was an issue.
- 3.11 In particular, our consumer research found that around one in five (23%) switchers (around 1.4 million switchers per year) reported they had encountered a major difficulty when switching.<sup>44</sup> These difficulties, as evidenced in the BDRC 2015 research, related to:
  - keeping their phone number when switching;
  - the old provider persuading them to stay; and
  - contact with the old provider, and/or difficulties when cancelling their previous service.

<sup>&</sup>lt;sup>40</sup> We refer to such consumers as 'active considerers' in the remainder of this document

<sup>&</sup>lt;sup>41</sup> We refer to such consumers as 'inactive consumers' in the remainder of this document

<sup>&</sup>lt;sup>42</sup> Analysis of difficulties among this group is focused on 'main' only. As discussed in Annex 12 (Benefits for would-be switchers) we consider a conservative approach to analysis is appropriate for these respondents (which Annex 12 refers to as "inactive consumers"), as their lack of engagement in the market means they are unlikely to have responded on an informed basis.

<sup>&</sup>lt;sup>43</sup> We refer here and in the remainder of this document to *service disruption during the porting process*. That is, loss of or disruption to a consumer's mobile service while switching and porting, including interrupted ability to make or receive calls or texts, arising as a result of providers' processes for porting. In our March 2016 consultation, we referred to the same concept as 'technical difficulties'.

<sup>&</sup>lt;sup>44</sup> BDRC 2015 bespoke analysis.

- 3.12 In relation to **keeping phone numbers**, our research suggested that porting a mobile number and/or obtaining a PAC during a switch, and the time and difficulties involved in doing so, can cause problems for consumers:
  - While the majority (81%) of consumers who had requested a PAC said that they found it 'easy' to do so, around one in five (18%), or 0.3 million switchers, said they found it either 'fairly' or 'very' difficult.<sup>45</sup> Two thirds (66%) of those who found it difficult said that the "conversation to get the code took too long".<sup>46</sup> Data provided by operators indicates that where a consumer calls their provider to request a PAC, he or she spends on average 15 minutes on the call.
  - Difficulty obtaining a PAC was a major factor in the decision of around 10% of active considerers (around 0.2 million consumers) to stay with their current provider.<sup>47</sup>
- 3.13 Difficulties for some when switching can be exacerbated by **providers seeking to persuade** a consumer not to leave, particularly where consumers have to navigate this in order to progress a switch. We acknowledged that many consumers seek, and benefit from, contact with their old provider where this leads to a better deal. However, 7% of all switchers, or around half a million switchers, cited "your previous provider trying to persuade you to stay" as a major difficulty when switching. This proportion was 14% among those switchers who said they had actually experienced provider persuasion to stay when switching.<sup>48</sup>
- 3.14 In terms of **cancelling the old service** and/or **contacting the losing provider**, under both PAC and C&R processes, we noted:
  - On cancelling, 10% of switchers (c. 0.7 million consumers) cited 'cancelling their previous service' as a major difficulty when switching.<sup>49</sup>
  - On contacting the losing provider:
    - "Contacting your old provider" was mentioned by 11% of switchers (c. 0.7 million consumers) and "getting the information you needed from your previous provider" by 9% (c. 0.6 million consumers) as major difficulties when switching.<sup>50</sup>
    - Around one in ten (11%, c. 0.2 million consumers) active considerers, cited difficulties contacting their current provider as a major factor in their decision not to switch.<sup>51</sup>

#### Double paying

3.15 As we noted in March 2016, a significant number of consumers appear to pay both for the service they are terminating and their new service for some period of time when switching. One source of such double paying is the requirement by some

<sup>&</sup>lt;sup>45</sup> Based on BDRC 2015 slides 72 and 73

<sup>&</sup>lt;sup>46</sup> BDRC 2015 Slide 73

<sup>&</sup>lt;sup>47</sup> BDRC 2015 slide 92

<sup>&</sup>lt;sup>48</sup> BDRC 2015 slide 34

<sup>&</sup>lt;sup>49</sup> BDRC 2015 slide 34

<sup>&</sup>lt;sup>50</sup> BDRC 2015 slide 34

<sup>&</sup>lt;sup>51</sup> BDRC 2015 slide 92

providers for consumers to pay for the service they are terminating until the end of the notice period. Where such notice periods apply, they generally concern consumers who are 'out of contract' i.e. they are beyond any minimum contract period (MCP) that they may have signed up for with their provider.

- 3.16 We noted that our BDRC consumer research found that, when asked outright, around a third (32%) of mobile switchers recalled paying both providers for a period of time on average this period of double paying was around 13 days.<sup>52</sup>
- 3.17 Double paying also appeared to be a concern for those who had not switched. Over one in six (17%) active considerers (0.3 million consumers) cited concerns about having to pay two providers simultaneously during the switch as a major concern when switching.<sup>53</sup> A similar number of inactive consumers cited similar worries as the main factor in their decision not to switch.

#### Loss of service while switching provider

- 3.18 Consumers switching provider may suffer harm where there is a break in service during the switch, for example as a result of difficulties co-ordinating the end of the old service with the start of the new service.
- 3.19 Our research suggested that around one fifth (20%) of all switchers, or around 1.3 million switchers, experienced some loss of service when switching, and for PAC switchers the proportion was 22% or around 0.8 million. Among C&R switchers, 14%, or around 0.4 million consumers, reported some loss of service. 15% of all switchers reported that loss exceeded one day.<sup>54</sup>
- 3.20 Experience of loss of service may reflect difficulties with coordinating the switch. Our research found that around 8% of switchers, or around 0.5 million switchers, said "getting the switch to happen on date wanted" was a major difficulty when switching.<sup>55</sup>
- 3.21 Furthermore, concerns about loss of service when switching may also inhibit nonswitchers from doing so. Concerns "about having no service while switching to another provider" were cited by just over one in six (17%) of active considerers (i.e. around 0.3 million consumers)<sup>56</sup> and around one fifth (20%)<sup>57</sup> of inactive consumers cited this as a major concern in their decision not to switch.

## July 2016 consultation

3.22 In our July 2016 consultation<sup>58</sup> we provided further analysis on the effects notice period requirements can have on consumers when applied in a switching context. We set out separate analyses for PAC and C&R switching, but concluded that many consumers experience difficulties when switching, where notice period policies apply, regardless of the switching process.

<sup>&</sup>lt;sup>52</sup> BDRC 2015 slides 55 and 56

<sup>53</sup> Based on BDRC 2015 slide 91

<sup>&</sup>lt;sup>54</sup> Based on BDRC 2015 slide 49

<sup>&</sup>lt;sup>55</sup> BDRC 2015 slide 34

<sup>&</sup>lt;sup>56</sup> BDRC 2015 slide 91

<sup>&</sup>lt;sup>57</sup> BDRC 2015 slide 113

<sup>&</sup>lt;sup>58</sup> July 2016 consultation Section 3, in particular §3.7 to §3.28

3.23 We considered these difficulties caused harm to switchers and might deter some consumers from switching altogether. These difficulties included co-ordinating the switch to minimise double payments and unwanted double payments. We explain these in turn.

## Difficulties co-ordinating the switch to minimise double payments

- 3.24 Under either PAC or C&R, a consumer looking to coordinate the switch in order to minimise double payments needs to:
  - incur time and effort to a) understand the interplay between the switching/porting
    process and any notice period and b) discuss and actively manage the coordination of these components with providers. We noted this was likely to be
    even more challenging where information on notice period policies and how they
    interact with the PAC process is poor; and/or
  - defer the start date of his/her preferred new service (despite existing requirements to ensure that consumers should be able to switch within one business day), to minimise the outstanding notice period to be paid out. Consumers also risk loss of service between the old service terminating and the new service starting, if the coordination does not go according to plan.
- 3.25 Such co-ordination difficulties appear to be prevalent for both PAC and C&R switchers:<sup>59</sup>
  - 16% of PAC switchers (14% C&R) contacted their current provider before switching to find out if they needed to give notice to leave.
  - 17% of PAC switchers (16% C&R) called their provider to arrange the 'stop date' in order to avoid paying both providers at the same time.
  - 16% of PAC switchers (13% C&R) called their provider to arrange the 'stop date' in order to avoid a break in service.
- 3.26 Furthermore, our consumer research found that 8% of PAC switchers (7% C&R) said that getting the switch to happen on the date they wanted was a major difficulty when switching and 20% (17% C&R) said that this was a minor difficulty.

## Unwanted double payments

- 3.27 As also set in our March 2016 consultation, a consumer switching supplier before the notice period has elapsed may simultaneously pay for both the old and the new service. We noted that under these circumstances, PAC switchers continue to pay for their old service even after it has been deactivated, which removes any benefits that double paying could deliver beyond the point of port-out.
- 3.28 We highlighted that O2 and Vodafone do not charge consumers notice beyond the switch date, where the consumer switches and ports their number. Some operators, such as Three and EE, take the date on which a consumer requests a PAC date as the start of notice, where the consumer subsequently uses the PAC to switch and port. Other operators charge notice periods from the date on which the switch and port actually takes place, i.e. from the point at which the PAC is used.

<sup>&</sup>lt;sup>59</sup> BDRC 2015 slides 43 to 44

- 3.29 Using our consumer research and operator data, in our July 2016 consultation we set out updated estimates of the extent of double paying including that:
  - Around 28% of PAC switchers who were in a contract said they incurred a period of contract overlap, and so likely double paid.<sup>60</sup> On average these consumers said they experienced an overlap of 9.6 days.
  - We estimated that 97% of consumers who switch and port away from an operator (that charges notice beyond the switch date), incurred a period of double paying. The average duration of double paying for these consumers was around 21 days.<sup>61</sup>
- 3.30 Regarding C&R switchers, our consumer research found that around 40% of C&R switchers who were in a contract reported a period of contract overlap, and so were likely to have experienced a period of double paying.<sup>62</sup>
- 3.31 Reasons for contract overlap and double paying were similar for both PAC switchers and C&R switchers and reflect lack of awareness of notice period requirements, difficulties in coordinating start and stop dates, a desire to ensure continuity of service and an unwillingness to defer the start of the new service. Our consumer research found the following reasons for contract overlap, as set out in Figure 3.

#### Figure 3 – Cited reason for contract overlap

Cited reason for contract overlap by those who had an overlap <sup>63</sup>		C&R
Had signed up with their new provider and were unaware of the notice period required by their current provider	22%	18%
New provider gave them a date that was before the end of their previous contract		14%
To ensure continuous service	31%	25%
Unwilling to defer the start of the new service	41% <sup>64</sup>	55% <sup>65</sup>

3.32 Whilst C&R switchers who double-pay can use both the old and new services during the overlap period, only a minority of C&R switchers who double paid provided a reason which suggested they benefitted from contract overlap.<sup>66</sup>

<sup>&</sup>lt;sup>60</sup> BDRC slide 53. We recognise that this figure may include some respondents who switched within their MCP and incurred an Early Termination Charge (ETC)

<sup>&</sup>lt;sup>61</sup> Based on operator data. For further details, see July 2016 consultation §3.12, §A6.5 to §A6.6

<sup>&</sup>lt;sup>62</sup> BDRC 2015 slide 53.

<sup>&</sup>lt;sup>63</sup> BDRC 2015 slide 55 <sup>64</sup> Bespoke analysis of BDRC 2015 consum

<sup>&</sup>lt;sup>64</sup> Bespoke analysis of BDRC 2015 consumer research, based on: 18% said they wanted to get their handset as soon as possible; 15% wanted to sign up before a deal ran out; 19% wanted to switch to a better service immediately

<sup>&</sup>lt;sup>65</sup> Bespoke analysis of BDRC 2015 consumer research, based on: 32% said they wanted to get their handset as soon as possible; 28% wanted to sign up before a deal ran out; 19% wanted to switch to a better service immediately

<sup>&</sup>lt;sup>66</sup> Based on BDRC 2015 slide 55 - Analysis of the verbatim responses suggests that a minority of respondents who experienced a contract overlap provided a reason which suggested they benefitted from contract overlap (e.g. "to get used to a new phone"). This is included in "Other".

- 3.33 We also reported that concerns about double paying are an issue for non-switchers too. Just over one in six (17%) active considerers (0.3 million consumers) cited as a major factor in their decision not to switch, concerns about having to pay two providers simultaneously during the switch.<sup>67</sup>
- 3.34 Our July 2016 consultation estimated that double payments associated with contract overlap amounted to at least £13 million per year for PAC switchers<sup>68</sup> and around £9-15 million per year for C&R switchers.<sup>69</sup>

# **Stakeholder views**

- 3.35 We received just over 50 responses to our March and July 2016 consultations, as well as responses to our January 2017 cost update. Respondents included consumers' groups, communications providers and individuals. We have taken stakeholders' views into consideration in our updated view of the relevant harms.
- 3.36 Some of these stakeholders criticised some aspects of our consumer research methodology. These views are summarised, together with our considered response in Annex 6. We have considered these criticisms but our view is that the methodological approach underpinning our consumer research is sound.
- 3.37 We note that a number of mobile operators (BT/EE, Nine Group, O2, Virgin, [≫], [≫], [≫], argued that current mobile switching processes are working well or sufficiently well for consumers. BT/EE, O2, Virgin and [≫] also argued that their view was supported by Ofcom's own consumer research results on switching and engagement levels, ease of switching, satisfaction levels and the relatively low incidence of complaints.
- 3.38 Vodafone noted that ease of switching in the mobile market is further evidenced by low levels of consumer complaints. This was on the basis that Ofcom's Telecoms and Pay TV Complaints Report shows that the mobile market receives a significantly lower number of complaints in comparison to fixed line services, relative to customer base.
- 3.39 In addition, stakeholders also commented on the particular harms we identified, as set out below.

## Unnecessary time and difficulties in progressing a switch

3.40 Consumer facing organisations such as BGL,<sup>70</sup> CCP/ACOD,<sup>71</sup> Citizens Advice, Money Super Market, uSwitch, Which? as well as the providers SSE, Talk Talk, Three, Verastar and [≫] and a number of individual respondents substantially agreed with Ofcom's provisional conclusions that unnecessary time and difficulties can arise for consumers when switching mobile provider. CCP/ACOD also agreed that the actual or anticipated process of switching can deter consumers from switching.

<sup>67</sup> BDRC 2015 slide 91

<sup>&</sup>lt;sup>68</sup> July 2016 consultation §3.13

<sup>&</sup>lt;sup>69</sup> July 2016 consultation §3.25

<sup>&</sup>lt;sup>70</sup> BGL owns and operates Comparethemarket.com

<sup>&</sup>lt;sup>71</sup> The Communications Consumer Panel (CCP) and the Advisory Committee on Older and Disabled People (ACOD)

- 3.41 As we note above in paragraph 3.37, other respondents including BT/EE, Nine Group, O2, Virgin, [≫], [≫], and [≫] argued that current mobile switching processes are working well or sufficiently well for consumers and therefore disagreed with our view that consumers face unnecessary time and difficulties when switching.
- 3.42 [%] noted that its own data suggests that:
  - under the current PAC switching process, the average time between the point a customer's call was connected from the Interactive Voice Recognition
     (IVR)<sup>72</sup>system to an agent who can deal with the customer's PAC request was
     92.11 seconds; and
  - their systems generate a PAC code within 5 seconds of the customer's request.
- 3.43 [ $\gg$ ] suggested that this data should be seen in the context of other positive evidence concerning the current mobile switching process.

## Requirements to pay notice after the switch has taken place

- 3.44 Many respondents substantially agreed with Ofcom's provisional conclusions that consumers may suffer harm as a result of double paying due to notice period requirements when switching. These included BGL, CCP/ACOD, Citizens Advice, Ombudsman Services, Money Super Market, uSwitch, Which? as well as providers SSE, Talk Talk, and [≫] and a number of individual respondents.
- 3.45 Sky and Vodafone agreed that risks of consumer harm arising from double payments, as a result of notice period requirements, occur where there is a switch and port (i.e. via the PAC process). They noted that in these circumstances the consumer continues to pay for the old service which has been deactivated as a result of the formal port process.
- 3.46 Money Super Market, Talk Talk, Three and [≫] were of the view that information or policies about notice period charging is not always clear or that consumers are not always aware. Money Super Market, Ombudsman Services, Talk Talk and [≫] suggested that a clear policy of not charging for notice beyond the switch date would make the switching process and charges clearer to consumers.
- 3.47 Several respondents (Sky, Vodafone, Money Super Market, Ombudsman Services) disagreed with us in relation to the harms experienced by C&R switches. They said that consumer harm resulting from double paying did not arise for C&R switchers or was likely to be lower compared to that experienced by PAC switchers, for the following reasons:
  - A consumer may wish to incur a contract overlap and pay for, and/or be able to use both services under a C&R switch (Sky and Ombudsman Services).
  - C&R switchers can coordinate the termination of their existing service and notice period with the start date of their new service, while consumers who do not wish to do so still benefit from the provision of two services for the period of the contract overlap (Vodafone, Ombudsman Services).

<sup>&</sup>lt;sup>72</sup> This is an automated telephony system that picks up calls, interacts with callers and routes calls to a customer service agent.

- The C&R process involves a phone call between the consumer and the losing provider, thus reducing the possibility for consumer confusion about the existence or impact of notice periods. (Money Super Market).
- 3.48 BT/EE and Virgin substantially disagreed with our provisional conclusions that notice period requirements can cause consumer harm when switching, and with our proposal to prohibit charging for notice periods beyond the date on which a consumer switches. They argued that:
  - notice period requirements are fair/voluntarily entered into;
  - consumers can avoid double-paying by co-ordinating their switch to manage any notice period requirements; and
  - concerns around double paying do not deter switching.
- 3.49 Stakeholders put forward a further number of detailed points including views concerning the potential benefits of notice period requirements. We set out and discuss these in detail below in our updated view of the harm arising from the requirement to pay notice after the switch has taken place.

#### Loss of service while switching provider

- 3.50 Many respondents substantially agreed with our views on the risks of consumer harm arising from loss of service than can occur when consumers switch mobile provider. These included BGL, CCP/ACOD, Citizens Advice, Money Super Market, uSwitch, Which? as well as the providers SSE, Talk Talk, Three, Verastar, Nine Group and [≫] as well as a number of individual respondents.
- 3.51 Other respondents (BT/EE, O2, [≫]) acknowledged that loss of service could, in principle, occur when switching mobile provider but offered little commentary on the consumer harm that might be associated with this. They argued that the causes of loss of service when switching are separate to, and would not be resolved under Ofcom's proposals. On this basis, they queried the need for process reform on the grounds of loss of service.

# Further research and evidence

- 3.52 Since our March and July 2016 consultations, we have commissioned further research and gathered additional evidence concerning switchers' experiences of current switching processes as well as their views on the two reform options we have proposed.
- 3.53 In particular, we have:
  - Commissioned further quantitative consumer research on mobile switching aimed principally at better understanding the experience of PAC and C&R switchers in relation to PAC requests, cancellations and contact with their losing provider. We also wanted to understand attitudes towards our two reform options for switching

and porting. BDRC undertook this research, with fieldwork in January and February 2017.<sup>73</sup>

- Obtained further data from mobile operators about the time consumers spend requesting and obtaining PAC codes.<sup>74</sup>
- 3.54 We have also taken account of the following:
  - Ofcom's Switching Tracker 2016.75
  - Updated data on complaints received by Ofcom concerning changing mobile provider.
  - Further consumer research (using an 'omnibus' survey) results concerning loss of service experienced by consumers when they switch mobile provider.<sup>76</sup>
  - Data provided by operators on the incidence of number ports taking place within one business day to further inform our understanding to the extent that this is likely to result in loss of service.
  - Responses to the SME Tracker 2016<sup>77</sup> to better understand the degree to which SME customers face similar difficulties to residential consumers when switching mobile provider.
- 3.55 In our March 2016 consultation we explained that the scope of our mobile switching review covered both residential consumers and businesses, where they were switching fewer than 25 mobile numbers (i.e. excluding "bulk ports" which we defined to be 25 numbers or more). In our January cost update, we identified that the inclusion of switches (of fewer than sets of 25 numbers) by SME customers within the scope of any switching process reforms, would have an impact on the industry costs of implementing the reforms.
- 3.56 In light of this, and the fact that our March and July 2016 consultations focused on findings for residential consumers only, we have examined in more detail the experiences of SMEs when switching mobile provider.
- 3.57 Annex 6 sets out full details of the additional research and evidence listed above.

<sup>&</sup>lt;sup>73</sup> We refer to this research in this document as *BDRC 2017*. See BDRC 2017 report and results: <u>https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0026/101996/Mobile-Switching-Research-2017-Attitudes-towards-current-and-potential-alternative-processes.pdf</u>

 <sup>&</sup>lt;sup>74</sup> Data obtained under Ofcom's powers under section 135 of the Communications Act
 <sup>75</sup> <u>https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0025/95524/Switching-Tracker-2016-Data-tables.pdf</u>

<sup>&</sup>lt;sup>76</sup> Ofcom omnibus conducted by BDRC, 2016

https://www.ofcom.org.uk/ data/assets/pdf file/0025/101995/Mobile-Switching-Research-2017-Omnibus-data-tables.pdf

<sup>&</sup>lt;sup>77</sup> Consumer research on small and medium sized enterprises' ("SMEs") experiences of communications services. <u>https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0030/96348/Ofcom-SME-consumer-experience-research-2016-Report.pdf</u>

# Updated Ofcom view on consumer harm

- 3.58 This section sets out our updated view on the consumer harm likely to arise under current switching processes taking into account stakeholder views, our new and updated consumer research and additional sources of evidence.
- 3.59 Some respondents noted that Ofcom's consumer research on ease of switching suggests that, at a headline level, the majority of mobile consumers find switching either 'fairly' or 'very' easy. For example, our Switching Tracker 2016 found that 94% of mobile switchers said that switching was either 'fairly' or 'very' easy (not significantly different from 92% in 2015).
- 3.60 We believe that the consumer research we conducted in 2017 continues to support our view, as set out in our March and July consultations, that a significant number of switchers experience difficulties when switching. We are also of the view that others appear to be deterred from switching by concerns about the process.<sup>78</sup> In particular, our BDRC 2017 consumer research results suggest a significant minority (16%) were dissatisfied with their method of requesting a PAC (17% among those who requested this via the phone). A similar proportion, 14% (16% for those doing so via the phone) were dissatisfied with their method of cancellation.<sup>79</sup>
- 3.61 We believe these concerns for switchers remain material, irrespective of perceptions or views that levels of switching or engagement in the mobile market are sufficiently high. We note in addition that numerous factors influence switching and engagement levels and that we cannot conclude that current mobile switching or engagement levels by themselves demonstrate that switching processes work sufficiently well for consumers.
- 3.62 Some respondents suggested that ease of switching is evidenced by Ofcom's own complaints data. We note however that the average absolute number of complaints relating to mobile switching, at 80 per month is, taken in the context of the evidence of difficulties with switching we have identified, material. Furthermore, as we noted in March 2016, around 40% of complaints relating to changing mobile provider concerned difficulties in relation to requesting or obtaining the PAC. Figure A6.7 in Annex 6 provides further details.
- 3.63 Concerning comments from Money Super Market, Talk Talk, Three and [≫] that information or policies about notice period charging is not always clear, we believe that consumers will find the switching process either PAC or C&R quicker and easier to navigate where requirements and charges associated with switching away from the previous provider are made clear and are consistent between providers.
- 3.64 We continue to believe that a substantial minority of consumers can experience harm when switching, specifically:
  - Unnecessary time and difficulties progressing a switch;

<sup>&</sup>lt;sup>78</sup> Based on analysis of prompted data we found that, 25% of switchers had experienced at least one major difficulty related to the switching process, while 37% of active considerers identified at least one difficulty related to the switching process as a major factor in deciding not to proceed with the switch.
<sup>79</sup> BDRC 2017 slides 27, 32

- Double paying while switching provider, or delay and unnecessary effort arising from requirements to pay out notice periods that extend after the switch has taken place; and
- Loss of service while switching provider.
- 3.65 Annex 6 provides further details on the set of consumer research supporting our conclusions on these forms of harm, including in respect of SMEs. We discuss each in turn below.

#### Unnecessary time and difficulties progressing a switch

- 3.66 Having taken account of stakeholder responses and further evidence, we have not altered our provisional conclusions that current switching processes can create unnecessary time spent and difficulties for some consumers and deter consumers from switching. In particular, we continue to believe that:
  - Requesting and obtaining a PAC and porting a mobile number can be difficult and time consuming, including where the consumer encounters unwanted persuasion to remain;
  - Cancelling the old service and contacting the losing provider can be difficult for both PAC and C&R switchers, including where the consumer encounters unwanted persuasion to remain; and
  - Such difficulties can deter consumers from switching.
- 3.67 Our conclusions also apply to SMEs. This is for the following reasons:
  - The majority of SMEs purchase and use mobile services in ways that substantially resemble those of residential consumers.
  - We estimate that around 20% of SME switchers, equivalent to around 100 000 SMEs, each year experience at least one of the following difficulties when switching: Process took longer than expected; Existing provider persuasion to stay; Difficulty contacting provider to cancel service; and/or Difficulty getting a PAC from existing provider.<sup>80</sup>
- 3.68 Our updated evidence continues to suggest that some consumers remain dissatisfied with current switching methods and that consumers place significant value on the likely reduction in time and difficulties offered by our core process reforms.

#### Satisfaction levels with current switching methods

3.69 The BDRC 2017 consumer research indicates that around four in five switchers who requested a PAC and/or cancelled their service were either 'very' or 'fairly' satisfied with the method they had used to request the PAC and/or cancel. However, a

<sup>&</sup>lt;sup>80</sup> i.e. 20% relates to the net aggregate of cited reasons: Process took longer than expected; Existing provider persuasion to stay; Difficulty contacting provider to cancel service; Difficulty getting a PAC from existing provider

material proportion of switchers (one in six) were either 'very' or 'fairly' dissatisfied with the method used to request PAC and/or cancel.<sup>81</sup>

- 3.70 Our evidence and consumer research results suggest that a material proportion of switchers who contacted their losing provider by phone to request a PAC, or to cancel, faced difficulties.
- 3.71 In relation to **PAC requests** our BDRC 2017 research found that: 59% of switchers who requested a PAC contacted their losing provider by telephone to request a PAC, of whom 16%, equivalent to around 0.2 million switchers per year, reported that they were either 'very' or 'fairly' dissatisfied with this method of requesting a PAC.
- 3.72 Data from six mobile providers on the length of calls which resulted in a successful PAC request, indicated that the average call duration to request a PAC is around 7.7 minutes. This is substantially longer than the 97 seconds taken to navigate [≫] IVR and for its system to generate a PAC as set out in paragraph 3.42. We recognise that some of the calls related to switchers who actively wanted a save conversation with their losing provider, which would therefore be lengthier in nature. <sup>82</sup>
- 3.73 C&R switchers also expressed dissatisfaction with current switching methods. One in six C&R switchers (15%) said they 'really wanted to' or had a 'mild preference' for keeping or porting their mobile number, but ultimately did not.<sup>83, 84</sup> Reasons cited for not porting their number included concerns and difficulties with the PAC process used to switch and port.
- 3.74 In relation to **cancellations**, our updated research suggests that around 16% of switchers cancelling their old service by telephone (equivalent to 0.3 million switchers) were either 'very' or 'fairly' dissatisfied with this method.<sup>85</sup>
- 3.75 We think these findings are particularly significant in the context that telephone contact with the losing provider is the main method currently offered by providers and used by consumers to request a PAC. It is also the only route which providers are required to provide.<sup>86</sup> We remain concerned that around one in six mobile switchers who contact their provider by telephone, experience dissatisfaction with this method of contact to request a PAC (17%)<sup>87</sup> or to cancel (16%).<sup>88</sup>

#### Consumer views on proposed options for switching reform

3.76 In our further BDRC 2017 research we also explored consumers' views on our proposed core process reforms and the extent to which they would be likely to use a

<sup>&</sup>lt;sup>81</sup> BDRC 2017 slides 27 and 32

<sup>&</sup>lt;sup>82</sup> We further note in this context uSwitch's response to our March 2016 consultation, in which they quoted their own research findings that it takes an average of 25 minutes' worth of phone conversations to go through the switching process for mobile

<sup>&</sup>lt;sup>83</sup> BDRC slide 20

<sup>&</sup>lt;sup>84</sup> BDRC 2015 research also asked those switchers who had not ported their number whether they would have liked to. 14% of these said they "Ideally wanted to keep my number". Cited reasons for switching but not keeping their number included because of problems obtaining the PAC process. (BDRC 2015 slides 77 to 79). These findings are broadly consistent with the BDRC 2017 findings. <sup>85</sup> BDRC 2017 slide 32. Data points based on experiences in the last 18 months.

<sup>&</sup>lt;sup>86</sup> As required under General Condition 18.2

<sup>&</sup>lt;sup>87</sup> BDRC 2017 slide 27. Data point based on experiences in the last 18 months

<sup>&</sup>lt;sup>88</sup> BDRC 2017 slide 32. Data point based on experiences in the last 18 months

new switching process as opposed to current methods The research found that many mobile switchers were interested in using our proposed switching options:

- Around four in five (80%) switchers who had previously switched using the PAC process said they would either definitely or probably request a PAC by text or online, rather than the way they requested their PAC the last time they switched.<sup>89</sup>
- Three-quarters (73%) of switchers who had previously switched using C&R said they would either definitely or probably use a PAC-based core process reform<sup>90</sup> rather than switch the way they did last time.<sup>91</sup>
- Around 3 in 5 switchers (66% among previous PAC switchers and 58% among previous C&R) switchers said they would either definitely or probably use our proposed GPL process to switch rather than the way they switched last time.<sup>92</sup>
- 3.77 We recognise that these stated take-up figures are likely to over-state<sup>93</sup> the degree to which switchers would use these processes in practice, at least when these changes are first implemented.<sup>94</sup> Nevertheless the results suggest high levels of interest in a process that does not require a conversation with the losing provider. Indeed, when consumers were asked why they would take up these options, responses appear to be linked to consumers' perceptions that these methods would be easier, quicker and less difficult, compared to current methods. Figures 11 to 13 in Section 5 illustrate consumer responses on these points.
- 3.78 Further, many respondents said they were willing to pay to use these reformed processes. For example, one in five (19%) PAC switchers who said they would request a PAC by text said they would either definitely, or probably, pay £5 to use this method.<sup>95</sup> Such willingness to pay reflects a general desire among switchers to avoid the time and hassle associated with the existing process.

## Requirements to pay notice after the switch has taken place

- 3.79 Having taken into account stakeholder responses, we continue to be concerned that consumers face unnecessary difficulties and unnecessary costs when they switch under either PAC or C&R arrangements because they are required to pay notice after the switch has taken place.<sup>96</sup>
- 3.80 We set out in our July 2016 consultation that charging notice, after the switch has taken place, results in harm to consumers and our views are unchanged:

<sup>94</sup> We make an adjustment for this when estimating the impact of our proposals. Details of this adjustment are contained in the BDRC 2017 summary and technical report

https://www.ofcom.org.uk/ data/assets/pdf file/0008/102005/Mobile-Switching-Research-2017-Technical-report.pdf.

95 BDRC 2017 slide 51

<sup>89</sup> BDRC 2017 slide 13

<sup>&</sup>lt;sup>90</sup> In our BDRC 2017 research we asked consumers about our core process reforms based on the Auto-PAC and GPL proposals that we consulted on in March and July 2016.

<sup>&</sup>lt;sup>91</sup> BDRC 2017 slide 13

<sup>&</sup>lt;sup>92</sup> BDRC 2017 slides 61, 84

<sup>&</sup>lt;sup>93</sup> Market research standard practice recognises that stated take up of products tested through market research is not necessarily achieved in practice.

<sup>&</sup>lt;sup>96</sup> For the avoidance of doubt our concern does not extend to the effects of minimum contract terms or early termination charges.

- Some consumers double pay in that they must pay for their old service and their new service at the same time. PAC switchers continue to pay although their old service will have been deactivated. C&R switchers can still use their old service but there is little evidence that they wish to do so.
- Some consumers try to avoid or minimise double payments by deferring their switch (whether via PAC or C&R arrangements). However, this is difficult to do and it may result in an unnecessary delay of their switch date.
- Some consumers are deterred from switching because of their perception that there is a risk of double paying.
- 3.81 We have updated our estimates of the consumer harm likely arising in the form of double paying as a result of notice period requirements in the context of switching to be around £8 million per year for PAC switchers and around £5.6 million per year for C&R switchers.<sup>97</sup> We have not attempted to quantify additional harm arising from deferral or deterrent to switching, nor any potential impacts on competition.
- 3.82 We consider that there are insufficient grounds to explain why providers would need to charge notice, after the switch has taken place. In most instances, switchers cannot use, or do not want to use, their old service after the switch has taken place.<sup>98</sup> As we noted above, O2 and Vodafone already operate in this way and do not bill consumers following the date that the number has been ported.
- 3.83 Stakeholders raised several objections to our proposals on notice periods as briefly discussed in paragraphs 3.48 to 3.49 above. These included:
  - consumers can manage notice period requirements;
  - notice period requirements are fair and voluntarily entered into;
  - notice period requirements can deliver benefits to consumers; and
  - notice period requirements as a deterrent to switching.
- 3.84 We address each of these more detail below.

#### Consumers can manage notice period requirements

- 3.85 Virgin suggested that consumers can avoid double payments where they understand and coordinate the switch to take account of notice period requirements. Virgin also argued that the average consumer will, once informed about notice periods, understand the implications.
- 3.86 As we set out in our July 2016 consultation,<sup>99</sup> the steps necessary for a consumer to coordinate the switch and avoid notice period payments are not straightforward, take

<sup>&</sup>lt;sup>97</sup> Annex 9 sets out how this level of harm would be addressed by the proposals set out in this consultation.

<sup>&</sup>lt;sup>98</sup> In the case of switches via the PAC process the old service is deactivated. In the case of C&R switches, many switchers do not wish to use their old service after they have moved to a new provider.

<sup>&</sup>lt;sup>99</sup> July 2016 consultation Section 3

time and effort on the part of the switcher and can, where the switch is not sufficiently well coordinated, create risks such as loss of service.

- 3.87 In order for consumers to take such steps they would need to be aware of and understand, if and how, notice period requirements apply to them. We remain concerned that a lack of consistency among providers regarding their policies on notice makes it difficult for consumers to understand how notice periods apply. This contributes to a lack of awareness among consumers and to consumers' perceptions overall that notice period requirements represent a switching cost. We note in this context that, even though switchers have been given details of notice in their terms and conditions and should have been informed about the implications of switching by their old provider; our 2015 consumer research suggested that 22% of PAC switchers and 19% of C&R switchers double paid because they were unaware of notice periods.<sup>100</sup>
- 3.88 We also remain concerned that not all consumers, even where they are aware of such requirements, find it straightforward to coordinate the switch in ways that would manage or ameliorate notice period requirements. As we noted in paragraph 3.20 above, our BDRC 2015 consumer research for example found that 8% of switchers cited "getting the switch to happen on the date you wanted" as a major difficulty when switching.
- 3.89 Such steps would also require the consumer to defer a switch to a preferred new service with the effect of artificially extending the duration of the switching process beyond the time it would otherwise take.
- 3.90 Consequently, we remain concerned that notice period requirements in a switching context create difficulties for consumers in understanding what they need to do to manage or avoid paying out notice when switching, particularly given that operators' practice and policy varies significantly. We also remain concerned that some consumers also face difficulties coordinating the switch as a result of notice period requirements.
- 3.91 Hence we view notice period requirements in a switching context as unnecessary and a barrier to switching even where consumers manage to navigate switching processes in ways that avoid the need to pay out notice.

#### Notice period requirements are fair and voluntarily entered into

- 3.92 Virgin said we have provided no analysis on whether or why notice periods are "unfair" when considered against general consumer law, which leaves Ofcom with no ability to distinguish between interventions that are necessary and those which Ofcom regards as a good thing, without being necessary to secure a specific legal objective. Virgin argued that:
  - Ofcom has accepted that ETCs provide legitimate stability for CPs and contribute towards continued investment in the market, and said Ofcom has offered no compelling reason why notice periods fall outside the same logic.
  - There is express provision in the CRF and General Conditions for terms that set 'conditions for renewal and termination of services and of the contract, including ... (i) any minimum usage or duration required ... and (iii) any charges due on

<sup>100</sup> BDRC 2015 slide 55

termination of the contract', where those terms are disclosed appropriately to consumers.

- The burden of proof should not fall on operators to justify each and every term and condition willingly entered into by a consumer.
- 3.93 Virgin also said that we have not explained why double payments are "unwanted". It said the reality suggests that many consumers consciously and willingly double-pay to take advantage of a new offer or obtain a new handset immediately. It highlighted that consumers voluntarily enter into contractual agreements, with the implicit suggestion that any double payments under such agreements cannot be 'unwanted'.
- 3.94 We recognise that any regulatory obligations we impose may not duplicate general consumer protection laws. However, we note that the legal framework permits us to impose specific consumer protection measures that go beyond such laws, provided that extension is consistent with other EU and national laws<sup>101</sup> and the proposed regulatory intervention is appropriate in the specific circumstances to protect consumers against the identified harm(s).
- 3.95 This is consistent with other EU and national laws, in particular the Unfair Contract Terms Directive and the UK's Consumer Rights Act 2015 (the CRA). The Unfair Contract Terms Directive allows Member States to go further than the minimum requirements of that directive.<sup>102</sup>
- 3.96 The CRA, amongst other things, sets out the general rules about the fairness of contract terms and notices.<sup>103</sup> We do not consider our proposal duplicates the conditions in the CRA. In our view, our proposal would go further and would protect consumers' interests in these specific circumstances by preventing mobile providers from charging for the period of notice that extends beyond the switch date, thereby addressing the consumer harms that we consider currently arise from this practice, which we have set out above.
- 3.97 We are also not suggesting that notice periods constitute unfair terms per se, and we recognise that there are many instances in which notice periods are perfectly fair contractual terms. Our concerns here are specific to the circumstances of switching mobile provider and the consumer harms that can arise in that context, as a result of notice periods that have effect beyond the date that services have been switched. For the reasons set out in this document, we consider that those concerns warrant specific regulatory intervention.
- 3.98 As set out above, in the circumstances in which a consumer is seeking to switch provider and does not intend to use their old service after having switched (or in the case of PAC switchers, would not be able to use), our analysis:
  - has not identified reasons that would, in our view, explain why it would be appropriate or necessary to continue to charge the consumer for the ability to use their old service beyond the time it takes for the switch to take place, thus giving rise to unnecessary double payment; and

<sup>&</sup>lt;sup>101</sup> See, for example, Art 1(4) of the Universal Service Directive.

<sup>&</sup>lt;sup>102</sup> See Article 8.

 $<sup>^{103}</sup>$  See sections 62 to 69.

- has led us to the view that the effect of deferring the switch in order to avoid the costs of double payment should also be regarded as a harm.
- 3.99 We consider these unnecessary switching costs arise even where the consumer is aware of notice period requirements and where the consumer has voluntarily entered into contracts with such requirements:
  - Our research told us that, whilst at inception consumers were informed about the notice period, by the time they switch many are unaware of their notice period or were unaware that they could delay the start date of their new contract.
  - Others double paid to avoid the risk of a loss of service or to switch before their PAC ran out.
  - Finally, our qualitative research found that most of those switching using the PAC process and who experienced double paying, said they did not want this. Many also said they had problems coordinating the switch.<sup>104</sup>
- 3.100 Regarding the question of comparability of notice period requirements with ETCs, we believe the comparison is flawed. ETCs relate to, and are intended to recoup, costs likely incurred by the provider at the outset of the contract which would otherwise be recouped from the consumer over the whole course of the minimum contract period.
- 3.101 As we have set out above, we have found no compelling justification for providers to charge for notice after the switch has taken place.

#### Notice period requirements can deliver benefits to consumers

- 3.102 Some respondents argued that notice periods can benefit consumers as follows:
  - The notice period and overlap of services can enable consumers to decide on whether their new service suits their needs, and if not, to move back to their existing provider (Virgin, Vodafone).
  - Notice periods up to one month, for cases where there is not a simultaneous technological transfer of services (as under the PAC process), are reasonable – for example, to give customers a proper opportunity to receive, read and understand the implications of ending their contract (Sky). and
  - Notice requirements are reciprocal on the provider (e.g. regarding changes in terms) and consumer (e.g. requirements to give notice of cancellation) and offer reciprocal protections (Virgin).
- 3.103 Regarding the first two points, we consider that information on cancellation and any ability to switch back easily to the original provider could be delivered independently of notice period requirements that charge consumers beyond the date on which the switch takes place. Therefore, we do not consider these arguments support the need for notice periods in the context of switching.
- 3.104 Regarding the third point, we see the need for the provider to give notice to consumers of changes in terms, and the need for the consumer to give notice to their old provider when switching, as different issues and can see no benefit to consumers

<sup>&</sup>lt;sup>104</sup> July 2016 consultation §3.10 and §3.11.

intrinsic to a reciprocal approach to the length of notice in these two different situations. Obligations on providers to give notice of changes to terms to consumers are intended to protect consumers' interests, for example by enabling consumers to anticipate and where appropriate alter their usage of products or services where prices change.

3.105 For the reasons set out above, our analysis has not demonstrated why a requirement on consumers to pay for their old service after the switch has taken place when they have no intention of using their old service (or cannot do so in the case of a port), should be regarded as a necessary or appropriate protection for providers.

#### Notice period requirements as a deterrent to switching

- 3.106 Virgin disagreed that notice periods necessarily act as a deterrent to switching. Virgin said that Ofcom should gather more evidence concerning whether notice periods are a deterrent to switching, as Ofcom did for its analysis of Automatically Renewable Contracts ("ARCs"). Virgin argued for example that Ofcom had provided no evidence of consumer behaviour in the counterfactual case (i.e. with no notice periods) and that the only evidence we have is that one in six considerers cited double-paying as a major factor in their decision not to switch, and that we have neglected to obtain straightforward evidence to clarify this point (e.g. whether consumers are more likely to switch from operators who already do not charge for notice periods, as compared to those who do).
- 3.107 Ombudsman services said it believed that the risk of double paying due to notice periods is only a minor deterrent to switching.
- 3.108 In response to Virgin's point on deterrents to switching and the evidence for this, we believe our consumer research findings provide clear evidence that the prospect of double payments is a factor which inhibits some potential switchers. Absent a charge for notice periods beyond the date of the switch, this barrier is removed. We agree that it is difficult to predict the extent to which removing this barrier will affect consumer's propensity to switch in practice. We note that there are differences between operators in how they apply notice periods, however this also contributes to customer confusion about how and when notice periods apply. Given that fact and that there are many other factors (e.g. prices) that affect the rate of switching from a particular provider; it is not clear that useful conclusions could be drawn from a comparison of current or hypothetical switching rates between providers.
- 3.109 We also note that the harms we have identified include both the deterrent effect on potential switchers but also harm to existing switchers.

#### Loss of service while switching provider

- 3.110 Having taken into account stakeholder comments and updated evidence, we continue to believe that loss of service is an issue for a significant number of mobile switchers under both PAC and C&R switching routes. We are also of the view that concerns about loss of service may deter switching. We note that stakeholders did not expressly disagree with our view that consumer harm may arise where loss of service occurs when switching.
- 3.111 Our more recent 2016 omnibus research which collected data on the incidence and type of loss of service, and data from providers concerning ports, indicate that, amongst PAC switchers:

- A quarter (26%), representing c. 0.9 million consumers, experienced some loss of their mobile number when switching in the last 18 months.
- 25% of PAC switchers said that they were not aware that there might be a period of time during which they would be unable to make or receive calls or texts, using the mobile number being transferred.<sup>105</sup>
- Consistent with the consumer research, data from providers reported that around 2% of aggregate switches and ports did not complete by the next business day following consumers' requests to port.<sup>106</sup> For such consumers, this delay may have been experienced as a delay to the transfer of their mobile number to the new provider rather than as an interruption or loss of service per se.
- In respect of consumers who switched via a C&R route, we observe that around one in ten (11%) representing around 0.2 million consumers, experienced some loss of service when switching in the last 18 months.
- 3.112 Mobile services are highly valued by consumers and indeed our research suggests that consumers see mobile services as essential communications services. Two-thirds of adults agreed that their "household would struggle to function without it".<sup>107</sup> Interruptions to a mobile service are therefore likely to be a significant source of consumer harm.
- 3.113 We particularly regard any extended service interruptions of a day or more as likely to be especially harmful.<sup>108</sup>

# Updated conclusions concerning harm under current switching processes

- 3.114 The current mobile switching arrangements work well for many consumers, but not for all. Our evidence continues to demonstrate that current switching processes can cause harm to a substantial number of consumers in that they create unnecessary difficulties for those that do switch and discourage others from switching at all.
- 3.115 We continue to believe that harm arises because of:
  - unnecessary time and difficulties progressing a switch;
  - double paying while switching provider, or delay and unnecessary effort arising from requirements to pay out notice periods that extend after the switch has taken place; and

https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0030/98706/automatic-compensationconsultation.pdf

<sup>&</sup>lt;sup>105</sup> Such lack of awareness is likely to compound any issues that consumers may suffer from service interruptions because for example they are unlikely to have prepared for such a possibility when switching.

<sup>&</sup>lt;sup>106</sup> Information provided by mobile operators on mobile ports for the period July 2016 to December 2016, aggregate data for 'Port in' + 'Port out'.

<sup>&</sup>lt;sup>107</sup> <u>https://www.ofcom.org.uk/\_\_\_data/assets/pdf\_file/0026/98711/automatic-compensation-jigsaw-report.pdf</u>

<sup>&</sup>lt;sup>108</sup> This is consistent with our view on the period of loss of service that would be unreasonable arising from network faults in the context of automatic compensation. See:

- Loss of service while switching provider.
- 3.116 Our regulatory policy objective is to ensure that switching processes do not create unnecessary difficulties or deterrents for consumers when switching mobile provider. We consider that removing unnecessary difficulties or deterrents should allow for a switching process that is quick, simple, convenient to use and easily understood.
- 3.117 Section 4 sets out the options for addressing the sources of harm we have identified. We have further developed our proposals to take account of the nature and extent of harms and our policy objectives.

# **Consultation question**

Q1: Do you agree with our updated conclusions that current mobile switching processes create consumer harm in terms of:

- unnecessary time and difficulties progressing a switch, including contact with the losing provider to request a PAC or cancel a service;
- requirements to pay notice after the switch has taken place; and
- loss of service that can occur when switching?

## Section 4

# **Options for reform**

- 4.1 Our policy objective is to ensure that consumers can exercise choice and take advantage of competition in communications markets by being able to switch provider without unnecessary difficulties. In section 3, we set out our view of how current switching arrangements can cause harm to a substantial number of consumers when switching between providers and can also deter switching by consumers who might otherwise wish to do so.
- 4.2 This section sets out the options for reform, specifically designed to address the harms we have identified, namely:
  - unnecessary time and difficulties progressing a switch;
  - double paying while switching provider, or delay and unnecessary effort arising from requirements to pay out notice periods that extend after the switch has taken place; and
  - loss of service while switching provider.
- 4.3 In designing the options, we have also been mindful of the risk of unintended consequences. We have taken these into consideration in the design, particularly the need to ensure that:
  - Consumers are sufficiently informed before switching: Consumers should understand the switching process, and receive key information about the implications of switching <u>prior</u> to making their decision. They should be at least as informed under any new process as they are currently under existing processes; and
  - **Consumers are protected against unauthorised switching**: The process should ensure that only the authorised account holder can request a switch.

# **Previous consultations**

#### Remedies proposed in the March 2016 consultation

- 4.4 In March 2016, we consulted on an initial set of proposed remedies. These consisted of:
  - two alternative core process proposals which we termed Auto-PAC and GPL;
  - measures aimed at reducing consumers' exposure to double payments under each core process;
  - the introduction of the End-to-end management of switches. Losing providers would not be able to deactivate a SIM until the new provider had activated the new SIM (referred to as Make-before-break); and

- requirements that providers would need to give clear consumer guidance on the porting and switching to help avoid the risk of service loss but also more generally to understand the steps necessary to switch effectively.
- 4.5 The Auto-PAC proposal was a process that consumers would use to request their PAC and switching information<sup>109</sup> via text message and online account (as well as the current phone route).
- 4.6 Under Auto-PAC, we also proposed that information about a consumer's notice period would be provided as part of the switching information that was sent alongside the PAC. The start of any notice period would be routinely backdated to the date of PAC request, rather than when the PAC is used.
- 4.7 Under the GPL proposal, consumers would only have to contact their new provider to organise a switch. Additionally, we proposed that the consumer would be offered the opportunity, by the gaining provider, to defer the start of their new service until the end of any notice period with their losing provider.
- 4.8 For both these core processes, we also proposed that consumers could text to request switching information on their ETCs at any time, independent from the switching process.

#### Updated proposals in the July 2016 consultation on notice periods

- 4.9 In July 2016, we consulted further on reforms to address the issue of double payments. Specifically, we made some revisions to the core process proposals to reflect our views about charging for notice. We called these Enhanced Auto-PAC and Enhanced GPL<sup>110</sup> and proposed an additional requirement on providers not to charge notice beyond the date a consumer switches their mobile service.
- 4.10 Specifically, we proposed that double paying, and the need for those consumers seeking to avoid double paying to unnecessarily defer the switch longer than they would reasonably want, should be addressed by preventing charging for notice periods after the switching date. This would apply to any switch that uses a formal switching process, whether consumers port their number or not.
- 4.11 We stated that notice period reform would address the concerns we identified for mobile switchers:<sup>111</sup>
  - Consumers would not incur 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 two services).

<sup>&</sup>lt;sup>109</sup> Any Early Termination Charges ('ETC'), any outstanding handset liability, or any outstanding PAYG credit balances.

<sup>&</sup>lt;sup>110</sup> In the July 2016 consultation, we described the updated core processes as 'Enhanced Auto-PAC' and 'Enhanced GPL'. However, we do not feel it necessary to continue to use the 'enhanced' description going forward.

<sup>&</sup>lt;sup>111</sup> We also said 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 with the switching process, as they would no longer need to coordinate or defer a switch to avoid unwanted double paying

• They would no longer need to incur the time and effort or risks associated with managing contract overlap to avoid double paying, nor accept an unwanted deferral of the start of the new service.

# Ofcom's view

- 4.12 We have further considered our proposed remedies taking into account feedback from stakeholders. We provisionally conclude that:
  - Our newly titled Auto-Switch and GPL proposals (explained below) can be effective in addressing the unnecessary time and difficulties experienced by consumers wishing to switch provider.
  - Preventing providers from charging for notice periods beyond the day on which the switch occurs will address the costs and difficulties arising from double payments.
  - Loss of service issues can be addressed either through the introduction of an End-to-end management process or through voluntary commitments agreed by industry.
- 4.13 In the remainder of this section, we describe how each of the options for reforming existing switching processes would operate. Given the reform to notice period requirements is common to both and that the design of Auto-Switch and GPL is dependent on our proposal on notice periods, we discuss this first.

# Prohibiting charging for notice periods beyond the day of the switch

- 4.14 We remain of the view that prohibiting charging for notice after the switching date would deliver a significant reduction in double paying for switchers.
- 4.15 In reaching this position we have considered comments from stakeholders. Whilst several stakeholders<sup>112</sup> supported our proposal to prohibit charging for notice periods beyond the switching date, others disagreed with the reform, or certain aspects of it. In particular:
  - BT/EE said that information remedies would be sufficient to address the consumer harm, as fully informed consumers could manage the stop and start of their services to avoid double paying.
  - Virgin said that we should consider alternative ways of addressing the problem including measures aimed at improving awareness of notice period policies (e.g. publication of information by Ofcom), greater transparency by providers, or engaging with providers through guidance on General Condition 9.3.<sup>113</sup>

<sup>&</sup>lt;sup>113</sup> General Condition 9.3 contains provisions intended to prevent providers from adopting systems and processes that may disincentive consumers from switching elsewhere

- Sky and Vodafone said the proposed notice period reforms should not apply to out-of-contract C&R switchers, on the basis these consumers benefit from two services running simultaneously.
- 4.16 We acknowledge BT/EE and Virgin's argument that information remedies and greater price transparency could help consumers to manage alignment and avoid double paying. However, we are not persuaded that information remedies alone would be effective. Managing notice periods is complex for consumers, especially under PAC. This is even more when providers have different notice period terms and conditions and informal policies as discussed in Section 3. Even where consumers are well informed on the process, they would still need to accept an often-unwanted deferral to avoid making double payments. We consider that such deferrals represent a barrier to switching.
- 4.17 We acknowledge Sky and Vodafone's point that C&R switchers are distinct from PAC switchers in that they can make use of their old service throughout the period of contract overlap and therefore could derive benefits from continued use of the old service. PAC switchers on the other hand cannot continue to use this service as it is terminated when their number is ported to the gaining provider.
- 4.18 However, the evidence suggests that this contract overlap is unwanted for the majority of C&R switchers.<sup>114</sup> We therefore consider it appropriate to protect these consumers from unwanted contract overlap by including non-porters in the design of both core switching processes (discussed below) so they can benefit from a co-ordinated switch regardless of whether they wish to port their number or not. Under both proposed core switching processes, providers would be prohibited from charging for notice periods beyond the switching date.
- 4.19 We are not proposing that the prohibitions on noticed periods extend to scenarios where consumers who wish to cease and re-provide do so outside of the formal switching process.
- 4.20 We envisage that losing providers would calculate final bills on a pro-rata basis. That is, consumers would be charged for the period between day one of their monthly billing cycle to the day of the switch on a pro-rata basis, rather than being based on a consumer's usage of their inclusive monthly bundle at that point of the billing cycle.

# **Options for process reforms: Auto-Switch and GPL**

4.21 We provisionally conclude that our two process reform proposals (Auto-Switch and GPL) are effective options to improve the consumer experience of switching mobile provider. They have the potential to reduce the unnecessary time and difficulties when progressing a switch, particularly in terms of difficulty in requesting a PAC and/or cancelling the old service that can arise when speaking to the losing provider. These two options are detailed in the process diagrams found at Annex 7.

## **Auto-Switch**

4.22 We had previously described Auto-PAC as the process solution that would address switching difficulties discussed above. In short, we proposed that the introduction of

<sup>&</sup>lt;sup>114</sup> BDRC 2015 slide 54

additional request routes for PAC requests could remove a significant proportion of the difficulties that consumers faced when switching.

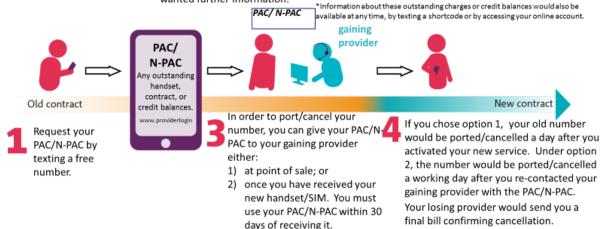
- 4.23 We have now introduced several further design improvements to this solution including:
  - The inclusion of non-porters into the formal switching process.
  - that the porting/ cancellation process can be requested at point of sale, and for this process to be triggered automatically when the new service is activated.
- 4.24 Under the Auto-Switch proposal, consumers would be able to request a unique code by text, or through their online account, in addition to speaking to their provider over the phone.
- 4.25 Following a text message or online request, the consumer would receive the unique code (PAC or N-PAC)<sup>115</sup> immediately by return text (and by online account if this is how they made their request), together with relevant switching information. Switching information would cover any ETCs payable, outstanding handset liability in circumstances in which these are tied to an airtime contract and, in the case of pay as you go consumers, outstanding credit balances.
- 4.26 The consumer can then give the code to the gaining provider when signing up to a new service. The consumer's port/ cancellation process can then be triggered once they receive and activate their new SIM. This means that the consumer does not have to contact the gaining provider again to provide them with the PAC/N-PAC.
- 4.27 Auto-Switch also differs from the status quo in the ways through which consumers can request their PAC and the types of contact they have with their losing provider.<sup>116</sup>
- 4.28 The status quo typically requires consumers to speak with their losing provider to request their PAC. As discussed in Section 3, our consumer research shows that many respondents experience unnecessary time and difficulties during this process.
- 4.29 Auto-Switch allows consumers to request their PAC by text or online (in addition to calling the losing provider should they wish to do so). Consumers can thus avoid having to speak to the losing provider directly. Given that provision of the PAC would be automated, consumers would have more control over obtaining a PAC and through a route of their choice.
- 4.30 Under this Auto-Switch, providers would need to give equal prominence to these three PAC request routes. Without this requirement, we are concerned that providers may have an incentive to steer consumers towards phone and webchat where they have a retention opportunity to persuade consumers not to switch to another provider.
- 4.31 Our Auto-Switch process is illustrated in Figure 4 below.

<sup>&</sup>lt;sup>115</sup> This is a PAC code for porters and an N-PAC (or non-porting authorisation code) for non-porters <sup>116</sup> Auto-PAC and the status quo have a common feature in that switching (when porting number) requiring consumers to request PAC from their losing provider, and to pass this on to their gaining provider.

#### Figure 4: Option 1 Proposed Auto-Switch process

The PAC/N-PAC would be texted back to you immediately.

- The text would include information from your current provider about any outstanding handset or contract charges remaining if you switched at that point.\*
- For pay as you go customers, it would include information on any credit balances you might lose.\*
- The text would also include a link to your online account if you have one, in case you wanted further information.



#### The new features of Auto-Switch

4.32 Our Auto-Switch proposal has several design improvements on the previous Auto-PAC proposal. The new design allows for non-number porting in the PAC process, so these switchers can now request a separate code to cancel their old service (an 'N-PAC' or non-porting authorisation code) and co-ordinate the start of their new one without porting their number. Consumers can request to port/ cancel their old service when they sign up for a new service and only have to contact the gaining provider once, instead of twice is as is currently the case. In addition, the new design now allows for consumers to make PAC/N-PAC requests directly with losing providers rather than the consumer making the request to the Central Porting Service (CPS).<sup>117</sup> The CPS is still required and involved in generating and providing the codes to the losing provider.

#### Auto-Switch accommodates non-porters

- 4.33 In March 2016, we proposed that our previous Auto-PAC option should be made available to switchers who did not wish to take their number with them when they switch provider. However, we previously explained that this non-porting functionality relies on the introduction of the End-to-end management solution (explained below).
- 4.34 We now understand that achieving this non-porting functionality does not require the introduction of End-to-end management as we initially envisaged. Under our revised Auto-Switch proposal, consumers would request an N-PAC from their losing provider in the same way as they would request a PAC. However, they would need to use a different short code when texting their losing provider to request it. This process is detailed in the diagrams in Figures A7.3 and A7.4 in Annex 7.

<sup>&</sup>lt;sup>117</sup> The CPS is the central system used by providers to facilitate the process of switching when the customer wishes to retain (port) their telephone number.

- 4.35 In March 2016, we explained that under current requirements, the gaining provider must request a port from the losing provider as soon as reasonably practicable after receiving the request from the consumer. These requirements provide an important protection to consumers and help to incentivise and ensure fast switching. We think they should be extended to include switches where there is no number port. The losing provider must:
  - port as soon as reasonably practicable upon receiving this request; and
  - if the port takes more than one working day, providers must pay reasonable compensation.

#### SIM card activation triggers the switch process

- 4.36 We propose that a consumer can request to port/ cancel their old service when they sign up for a new service (at the point of sale), rather than after the new service has been activated. This means the consumer only has to contact the gaining provider once, instead of twice is as is currently the case.
- 4.37 At present, our understanding is that the consumer:
  - contacts the gaining provider to sign up to the new service; and
  - contacts them again, after their new service has been activated, to provide the PAC to initiate the port of the service.
- 4.38 Under Auto-Switch, the consumer would be able, at the point of signing up to their new service, give the PAC/ N-PAC to the gaining provider. Once the customer receives and activates the SIM on the network, the porting/cancellation process would be triggered automatically and progressed by the gaining provider. This will involve placing obligations on the gaining provider to ensure that consumers can follow this process at point of sale.
- 4.39 We recognise that some consumers may prefer to delay the port/cancellation for a period of time. For example, they may wish to test the signal quality of their gaining provider's network before porting/ cancelling their old service. Therefore, consumers should have the choice of providing the PAC/ N-PAC to the gaining provider when they sign up to a new service or providing the PAC or N-PAC to them at a later date, after their new service has been activated (as is the case now). This process is detailed in the diagrams in figures A7.1 and A7.3 in Annex 7.

#### The role of third party intermediaries (TPIs) in the Auto-Switch proposals

- 4.40 Our research indicates that most consumers contact a provider directly when they are switching. However, approximately 30% of consumers organise their switch via a TPI.<sup>118</sup>
- 4.41 Under Auto-Switch, we would expect TPIs to provide switching consumers with the option of redeeming their PAC/ N-PAC at the point when signing up to a new service. As explained above, this would allow the consumer to trigger the port process by simply activating their new SIM, rather than having to contact the new provider.

<sup>&</sup>lt;sup>118</sup> TPIs are retailers that sell mobile products and services on behalf of different providers.

4.42 We expect TPIs will offer consumers these same protections that apply to regulated providers. We consider that TPIs facilitate the sale of contracts between providers and consumers. Therefore, providers will need to put in place arrangements with TPIs acting on their behalf (as gaining providers) to ensure compliance with the requirements arising from the Auto-Switch process. Smaller retailers are unlikely to be affected by our proposals. The proposed measures only apply to scenarios where consumers are switching. Those smaller retailers not involved in switching will not be captured by these obligations.<sup>119</sup>

#### PAC/ N-PAC requests sent directly to the losing provider

- 4.43 In the March 2016 consultation, we set out our view that it would be useful for consumers to be able to text the same single short code to request their PAC regardless of their provider, since this would aid recall and provide intermediary promotion benefits.<sup>120</sup> We originally considered that this would require PAC requests to be directed to the CPS, which would forward the request to the appropriate losing provider. We said that this would require the CPS to have an up-to-date database of the mobile numbers held by each losing provider.
- 4.44 However, following engagement with stakeholders we now understand it is possible for a consumer to send a text directly to the losing provider and for each provider to adopt the same short code.<sup>121</sup> We consider that this variant will deliver the same consumer recall and intermediary promotion benefits as the CPS forwarding route outlined in the March 2016 consultation, but at a lower cost.<sup>122</sup>
- 4.45 We previously noted that a secondary benefit of requiring the CPS to send the text was that it provided no opportunity for the losing provider to frustrate the process of sending the PAC/ N-PAC to the consumer. However, we are confident there are enough safeguards in place to mitigate this risk. For example, the draft General Condition will include specific obligations on losing providers to respond to PAC/N-PAC requests immediately so any efforts to frustrate the specified process would represent a breach of the condition.

#### Methods for requesting PACs / N-PACs

- 4.46 In March 2016, we explained that there were several different methods for requesting PACs but proposed that only two additional routes should be mandated as part of the (previous) Auto-PAC reforms. Stakeholders provided feedback on the merits of the various routes that were discussed.
- 4.47 Several stakeholders agreed that consumers would benefit from requesting PACs through additional routes to the phone, particularly online. However, BT/EE suggested that the request routes should not be specified but that providers should have a choice of routes so long as they included one that required no human interaction at the losing provider end. SSE argued that for some types of consumer, the additional request routes may not be particularly useful. Elderly and/or vulnerable

<sup>&</sup>lt;sup>119</sup> For example, we note that small corner shops may sell SIM only deals with or without low cost feature phone handsets. These retailers do not facilitate switching.

<sup>&</sup>lt;sup>120</sup> Short codes are short digit sequences, significantly shorter than telephone numbers, that are used to address messages in MMS and SMS systems. Short codes are designed to be easier to read and remember than telephone numbers.

<sup>&</sup>lt;sup>121</sup> The direct losing provider request route also applies when requesting an N-PAC.

<sup>&</sup>lt;sup>122</sup> We set out our estimates of the gross implementation costs of both variants (Losing Providerbased and CPS-based) in Figure A8.6 of Annex 8.

consumers may not be comfortable with using online facilities or text messaging. These groups would still rely on speaking to the losing provider to request the PAC even where the alternative request routes were made available. Thus, difficulties requesting PACs would continue for these consumers.

- 4.48 After consideration, we propose that under Auto-Switch, there should be a minimum of three PAC/ N-PAC request routes:<sup>123</sup>
  - By text, using short codes accessible free of charge one for 'switching with port' and one for 'switch without port'. All providers would use the same two codes.
  - Via the online account with their provider.
  - By phone call to their provider.
- 4.49 In arriving at this view we have given careful thought to whether it is necessary to mandate both the online route and the text message route.
- 4.50 We consider that both routes are easy to use and understand, do not require spoken conversations with the losing provider and are fast, secure, and convenient to the extent that consumers can make the request at any time (day or night). Both these request routes appear popular with consumers. Our consumer research found that around four in five (80%) switchers who had previously switched under the PAC process, and 73% of switchers who had previous switched via C&R, said they would either 'definitely' or ''probably' use the text or online routes. Around half (49%) of PAC switchers said they had a preference for using the online route.
- 4.51 Switching requests for multiple numbers, whether or not these numbers are ported, are likely to be more complex than requests relating to a single number. We therefore propose that operators would allow multiple number requests through the phone and online account routes specified above, but that they would not also need to accept requests by text. A consumer would nevertheless be free to send an individual text request for each mobile number to be switched.
- 4.52 The online route has the additional benefits of being available to consumers where there is limited mobile reception and useful for consumers who are already conducting their switching activities online, such as researching mobile deals. Further, we consider the online route allows consumers to switch and port simultaneously two or more mobile numbers (which would not be possible using the text messaging route). Our current data suggests that around 6% of non-bulk port PAC switches involved two or more numbers.<sup>124</sup>
- 4.53 We acknowledge some consumers may be more likely than others to take advantage of the additional request routes. However, our objective here is to reduce difficulties for consumers rather than remove all potential harms for all consumer groups.
- 4.54 We are therefore of the view that these two additional PAC/ N-PAC request routes should be effective in reducing a large proportion of the unnecessary time and difficulties that consumers experience under the status quo.

<sup>&</sup>lt;sup>123</sup> These would also apply when requesting a N-PAC.

<sup>&</sup>lt;sup>124</sup> Data collected from Syniverse, October 2015 to September 2016.

4.55 We acknowledge that these additional request routes are divisible elements of process reform, and progress for consumers can be made without necessarily introducing both routes. However, our view is that together they represent the optimal solution. Our decision on whether to include both is subject to an assessment of the costs of benefits of each route that is discussed in Section 5.

#### Summary of detailed requirements for Auto-Switch

4.56 We have identified the detailed requirements that providers would need to follow under the Auto-Switch process. These requirements are set out in figure 5 below.

#### Figure 5 - Requirements for Auto-Switch

- Providers would need to be transparent about the porting and switching process.<sup>125</sup>
- Providers would allow consumers to request a PAC / N-PAC by the following routes:
  - by text message, and using text short codes accessible free of charge; one for PAC (to transfer the mobile number to the new service) and one for N-PAC (to switch without transferring a mobile number). All providers would need to use the same two short codes as agreed by the relevant industry forum and approved in writing by Ofcom;
  - o via their online account with their provider; and
  - by phone call to their provider.
- Losing providers will need to ensure that the protections currently provided for PAC switchers also apply to N-PAC switchers – specifically to:
  - cancel the service as soon as reasonably practicable upon receiving the request; and
  - if the cancellation takes more than one working day, providers must pay reasonable compensation.
- Losing providers would need to allow the consumer to request switching information independent from the switching process by text, online account and phone call, and then provide it immediately using the means by which it was requested. The losing provider must use a different text short code to provide this facility than it uses for the PAC and N-PAC requests, again as agreed by the relevant industry forum and approved in writing by Ofcom.
- Where the request relates to more than one but fewer than 25 mobile numbers, providers would not need to accept the request by text.<sup>126</sup>
- Providers would need to give equal/due prominence to the availability of the three prescribed code request routes, alongside any others they choose to offer.
- The losing provider would need to provide the PAC/N-PAC immediately using the

<sup>&</sup>lt;sup>125</sup> Consumer Guidance discussed below.

<sup>&</sup>lt;sup>126</sup> Ports of 25 numbers or more are currently not-regulated and are outside the scope of our review of mobile switching.

means of communication by which it was requested, and include accurate switching information alongside it.

- Gaining providers would need to offer consumers, at point of sale, the opportunity to redeem their PAC/N-PAC, rather than wait until after the new SIM card has been activated. The activation of the new SIM card would automatically trigger the porting/cancellation process.
- Switching information that is provided to consumers would need to include information relating to any ETC, any outstanding handset liability, or any outstanding pay as you go credit balances. These would need to be exact and accurate as at the date of the request and aggregated across all mobile numbers for which the request was made.
- If the losing provider rejected a PAC, N-PAC or switching information request, it would need to ensure that it made its reasons for doing so available to the consumer.

#### **Gaining Provider Led (GPL) process**

- 4.57 In our March 2016 consultation, we outlined in broad terms how a switching process would work when led by the gaining provider.
- 4.58 We can now describe in detail the sequence that the proposed GPL option would follow below:
  - The gaining provider would check with the consumer if they want to switch provider and, if so,<sup>127</sup> whether they want to port their number.
  - Where the consumer wishes to switch (porting or non-porting), the gaining
    provider would arrange for the CPS to send a verification text to the consumer
    containing information relevant to their switching decision (i.e. the ETC, handset
    charges, and any credit balances, as described for the Auto-Switch process
    above).
  - Where the consumer wishes to proceed, he/she would provide verification<sup>128</sup> for the switch by replying to this text. The gaining provider would then provide the consumer with a new SIM card and would coordinate the switch, and number port where required, at the point the new SIM card was activated.
- 4.59 Our proposed GPL process is illustrated in Figure 6 below and is, for the most part,<sup>129</sup> unchanged from the consumer perspective from that which we consulted on in March 2016.

<sup>&</sup>lt;sup>127</sup> And by implication cancel their old service with their old provider

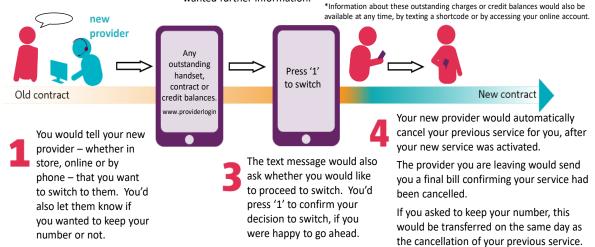
<sup>&</sup>lt;sup>128</sup> This verification step helps ensure that only the authorised account holder can request a switch. <sup>129</sup> Only the notice period information that providers need provide alongside switching information has changed, which is an inevitable consequence of our proposal to prevent charging for notice following the switching date as per the July 2016 consultation.

#### Figure 6 Option 2: Proposed GPL process

Your new provider would arrange for you to receive a text during the sales conversation. This would give you information from your current provider about any outstanding handset or contract charges remaining if you switched at that point.\*

For pay as you go customers, it would include information on any credit balances you might lose.\*

The text would also include a link to your online account if you have one, in case you wanted further information.



#### Clarifications in respect of the proposed GPL process

- 4.60 Since the March 2016 consultation, several stakeholders have requested that we provide further detail to these designs, to clarify how a GPL process would work in practice. Of note is the inclusion of non-porters within the GPL switching process. Like Auto-Switch, consumers not wanting to take their number with them, can switch to another gaining provider without having to speak to their losing provider to cancel.
- 4.61 We have set out the process clarifications below. We consider the whole process will take the form of three broad steps that include several sub-activities. This process is detailed in the diagram in Figure A7.5 in Annex 7.

# Figure 7 - Proposed steps during the GPL process

Step 1.	<ul> <li>The gaining provider checks with the consumer if they are planning to switch and, if so, whether the consumer also wishes</li> </ul>
Consumer contacts the	to port their existing number or not.130
gaining provider and verification text is sent to consumer	<ul> <li>If the consumer is switching, the gaining provider arranges for the CPS to send a verification text to the consumer. This would occur whether the consumer is porting their number or just switching to another provider without porting.</li> </ul>
	<ul> <li>In advance of sending the verification text, the CPS contacts the losing provider to check that the consumer is authorised to request a switch and request any relevant switching</li> </ul>

<sup>&</sup>lt;sup>130</sup> We are proposing that consumers have access to a switching process even when not wishing to port their number. They would just contact their gaining provider, who would arrange for their old service to be cancelled.

	information.	
	• The losing provider provides the CPS with switching information and confirms the consumer is authorised to request account changes.	
	The CPS then sends the verification text to the consumer.	
Steps 2. Consumer presses 1 to validate that they are the authorised user	The consumer receives the verification text message.	
	<ul> <li>The verification text will include switching information relating to outstanding handset or contract charges, or if relevant, any remaining credit balance.</li> </ul>	
	• The consumer will review the switching information, and if still happy to switch (porting or not), will then press 1 within 24 hours to validate that they are the authorised holder of the mobile number, and confirm they have received the switching information.	
	<ul> <li>The CPS will receive the consumer's response to the verification text and contact the gaining provider to confirm the consumer has authorised the port/non-port request.</li> </ul>	
	The gaining provider can then:	
	<ul> <li>conclude the contract in the shop, over the phone or online; or</li> </ul>	
	<ul> <li>if the consumer needs time to consider the switching information, get in touch with the consumer later to conclude the contract.</li> </ul>	
	<ul> <li>The gaining provider will then send the SIM and possibly handset to the consumer (if not provided in a shop scenario).</li> </ul>	
Step 3.	The consumer receives the new SIM card with temporary number.	
Consumer activates the port/ cancellation process	• The consumer then inserts the new SIM into the handset, and in doing so activates the port/cancellation process.	
	• The gaining provider then notifies the CPS of the port request (if porting) and the number is ported the next working day. If not porting, the gaining provider arranges for the old service to be ceased.	
	<ul> <li>The losing provider does not charge for services beyond the day of the switch.</li> </ul>	
4.62 The parag	raphs below explain these clarifications in more detail.	

ail.
•

#### The GPL option now accommodates non-porters

4.63 Similar to Auto-Switch, it is possible to extend GPL at minimal cost to consumers who wish to change provider but not port their number. Under our revised version of GPL, the gaining provider would be able to co-ordinate the start of the new service and the cancellation of the old service for those who did not want to port their number. Achieving this does not require the introduction of End-to--end management as we initially considered. This process is detailed in the diagrams in Figure A7.6 in Annex 7.

#### Gaining provider will need to ask if a new customer is switching

- 4.64 Before agreeing a new contract for mobile services with a consumer, gaining providers would need to check if the customer was switching and whether they were planning to port their existing number or not.
- 4.65 This question ensures that consumers cannot enter a new contract with a gaining provider without first being provided with switching information.

# Consumers can flex 'when' they conclude the new contract agreement with the gaining provider

4.66 We anticipate that most consumers would receive and reply to the verification text while talking to the gaining provider by phone, in-store, or through their website. However, some consumers may prefer to pause before concluding the new contract, for example to consider the implications of switching.<sup>131</sup> The GPL process design would need to ensure that consumers have additional time to reflect on their options before replying to the verification text. The gaining provider can contact the consumer again after the consumer has responded to the verification text and conclude the contract.

#### The verification text is available for 24 hours

4.67 We consider that 24 hours should be sufficient time for most consumers to receive the verification text, consider the switching information it contains, and reply "1". Consumers who do not wish to proceed with the switch need do nothing; the consent option will then expire after 24 hours of being sent. Consumers who wish to proceed but do not act within 24 hours will need to contact their gaining provider to arrange for a further verification text to be sent.

#### SIM card activation triggers the switch process

- 4.68 We propose that the porting/ cancellation process starts once a consumer completes their contract agreement and activates their new SIM.
- 4.69 Under the current PAC process, our understanding is that most providers require that the SIM they give to a new customer is active before they will accept a PAC. Under the GPL option, SIM activation would automatically trigger the porting / cancellation process, where this had been requested. The consumer would not need to contact the gaining provider again to ask them to proceed with the switch.

<sup>&</sup>lt;sup>131</sup> The contract cannot be concluded before the consumer presses 1. This requirement ensures that the consumer has received the implications of switching before agreeing to the new deal.

4.70 Some consumers may wish to port a number for services they already have active e.g. have two active numbers with two providers and wish to cancel one whilst porting over their number to an existing account. The consumer would just need to contact the provider they wished to port their number to (the gaining provider). The consumer would then need to reply to the verification text sent to them from the CPS (requested by the gaining provider) to confirm they were the account holder. Once the CPS received the reply from the consumer, the porting /cancellation process would begin.

#### <u>A 'backstop' verification route is proposed for consumers who cannot receive text</u> <u>messages</u>

- 4.71 In some instances, consumers may not be able to receive the verification text. For example, they may not have mobile reception, may have a faulty handset or the handset may have been lost or stolen. In these circumstances, we propose that verification can be achieved via a backstop route.
- 4.72 The backstop verification route would operate as follows:
  - Consumer contacts the gaining provider and arranges to switch their number over to them. The gaining provider would send this request to the CPS and would 'await' verification.
  - The consumer would then, following advice/direction from the gaining provider, contact the losing provider by phone, and request that they provide verification to the CPS. The losing provider will only provide verification to the CPS after they have followed appropriate security procedures to ensure that the consumer is the authorised account holder.
  - Once the CPS has received verification from the losing provider, the switch process can continue as per the defined porting execution process e.g. comparable to the stage after the consumer presses 1 to verify they are the account holder in the normal process.
  - Since the backstop route is relevant to situations when the handset is faulty or reported stolen/ lost or there is no mobile coverage, the consumer would need to have access to another telephone, such as a landline, public call box or a different mobile phone in order to contact their losing provider. We consider that 24 hours should be sufficient time for the consumer to find alternative routes to contact the losing provider.
- 4.73 We expect that the vast majority of switchers will follow the path route of only having to contact their gaining provider when switching. However, we consider it is important that consumers still have the option of switching even if they are unable to provide verification themselves by pressing 1 in reply to a verification text.

#### The role of third party intermediaries (TPIs) in the gaining provider process

- 4.74 [≫] suggested that it would be helpful to understand how the GPL process could relate to systems used by independent retailers. Independent retailers would need to have access to the service to support the consumer when switching and offer advice when required.
- 4.75 As discussed earlier on the Auto-Switch process, consumers who do switch through a TPI will still be protected by the obligations that apply to providers. We consider

that TPIs facilitate the sale of contracts between providers and consumers. Therefore, providers will need to put in place arrangements with TPIs acting on their behalf to ensure compliance with the requirements arising from any reform of the switching process, where relevant.<sup>132</sup>

#### Data Protection concerns

- 4.76 Several stakeholders highlighted the importance of considering the Data Protection Act 1998 (DPA) and confidentiality implications of the proposals. The GPL option would require switching information about consumers (including financial information) to pass from the losing provider to the CPS.<sup>133</sup>
- 4.77 We acknowledge that, under the GPL option, there may be likely DPA impacts concerning the role/activities of the CPS. However, we do not consider there are any requirements of the proposed GPL reforms that would compromise providers' ability to comply with the requirements of the DPA.<sup>134</sup>

#### Summary of detailed requirements for GPL

4.78 We have identified the detailed requirements that providers would need to follow under the GPL process. These requirements are set out in figure 8 below.

<sup>&</sup>lt;sup>132</sup> As discussed earlier, smaller retailers are unlikely to be affected by our proposals. The proposed measures only apply to scenarios where consumers are switching. Those smaller retailers not involved in switching will not be captured by these obligations. For example, we note that small corner shops may sell SIMs only deals with or without low cost feature phone handsets. These retailers do not facilitate switching.

<sup>&</sup>lt;sup>133</sup> The current Auto-Switch proposal does not raise data protection issues in respect to the CPS. The customer makes a request directly with the losing provider, and this can be provided without involving any third parties.

<sup>&</sup>lt;sup>134</sup> There is a further data protection concern regarding information flows between the MNO/MVNE and small MVNOs noted below under the switching information section.

#### Figure 8 - Requirements for GPL

- Providers would provide clear consumer guidance on the porting and switching process.<sup>135</sup>
- Before agreeing a new contract for mobile services with a consumer, and where a consumer already under contract requests a switch, gaining providers would need to ask if the consumer wishes to switch provider (and hence cancel their old service) and if so whether they also wished to port their old number.
- The gaining provider would then ask whether the consumer could receive text messages to the mobile number they wish to switch:
  - If yes, the gaining provider would request that the CPS send a 'verification' text to the consumer's mobile number. To do this, the CPS would identify the consumer's losing provider from the mobile number, ask the losing provider to confirm that it belongs to the consumer as an authorised account holder, and, if so, to immediately provide accurate switching information relating to the consumer's account. The CPS would then send a verification text including the switching information to the consumer, and ask the consumer to reply "1" to confirm ownership. (The text would highlight whether the request related to a cancellation or a port). Provided the consumer provided verification to the CPS within 24 hours, the CPS would confirm within 24 hours, they would need to recontact the gaining provider to ask them to initiate the verification text again.
  - If no, the gaining provider would ask the CPS to request the losing provider to validate consumer ownership of the mobile number. To achieve this, the consumer would need to contact the losing provider, pass security measures associated with making account changes, and ask the losing provider to verify ownership to the CPS. The consumer must contact the losing provider within 24 hours. The losing provider would need to give relevant switching information to the consumer during this process. The losing provider would then provide verification to the CPS, which would forward this to the gaining provider.
  - Switching information that is provided to consumers would need to include information relating to any ETCs, any outstanding handset liability, or any outstanding pay as you go credit balances. These would need to be exact and accurate as at the date of the request and aggregated across all mobile numbers for which the request was made.
- Upon verification being received from the CPS, the gaining provider would complete the mobile agreement with the consumer (assuming they were not already under contract). The contract cannot be agreed before the consumer presses 1 or the losing provider provides verification in the backstop route.
- Where the gaining provider issues a new SIM to a consumer who has agreed a new contract, its activation would automatically trigger the porting/cancellation process. For consumers already under contract with the gaining provider, the porting/cancellation process would start automatically upon receipt of confirmation from the CPS that the consumer's positive confirmation text response has been

<sup>&</sup>lt;sup>135</sup> Consumer guidance is considered below

received.

- The losing provider must cease the consumer's service on the same day that the gaining provider activates their new service.
- Under the current PAC process, where a switch leads to a routing change, the routing provider updates the database of ported numbers held by the CPS. However, because this GPL process requires the CPS to have a complete, accurate and up-to-date database to enable it to correctly identify providers from a mobile number, the routing provider must also update this database where a ported number is repatriated to the losing provider (which we understand does not currently occur automatically).
- Losing providers would need to allow the consumer to request switching information independent of a switching process by text, online account and phone call, and then provide it immediately using the means by which it was requested.
- If the losing provider rejected a switching information request, it would need to ensure that it made its reasons for doing so available to the consumer.
- The switching process would also have to be made available for use by consumers who wish to change their provider but not port their number, and for switches of up to 24 mobile numbers.<sup>136</sup>

#### Stakeholder comments on the relative merits of the two switching proposals

- 4.79 We recognise that several respondents to the March 2016 consultation (BGL, Citizens Advice, CCP, [≫], Money Supermarket, Recombu, SSE, TalkTalk, uSwitch, Which?, Verastar, Three and the Ombudsmen services) considered Auto-Switch would not go far enough in addressing our identified harms and accordingly supported our preference at that time for GPL:<sup>137</sup>
  - Several respondents submitted that switchers using Auto-Switch would still need to contact the losing provider to trigger the switching process and then hand over a PAC to their gaining provider, which constitutes much of the time, hassle and confusion that currently exists.
  - SSE said that for some customer types particularly elderly and/or vulnerable customers – the phone remains the most practicable route to obtain the PAC. Under Auto-Switch these customers would continue to experience difficulties in obtaining a PAC.

<sup>&</sup>lt;sup>136</sup> The GPL process could be used for bulk ports (i.e. 25 or more numbers) but since bulk porting is not regulated by Ofcom, this would be a voluntary decision by providers.

<sup>&</sup>lt;sup>137</sup> O2, Virgin Media and [>] on the other hand said that we had not presented clear or compelling evidence to warrant a shift to GPL. Vodafone said that correcting errors in our cost-benefit analysis showed the impact of introducing GPL would be strongly negative and highly uncertain in size. Vodafone considered that GPL would be very unlikely to be of real benefit of consumers, where the current switching process is proving to be effective, and would force operators to incur unknown and not properly costed expenditure (Page 30, Vodafone response to March 2016 consultation). Vodafone also said we had not factored in the cost to consumers of lost retention offers (Page 10, Vodafone response to January 2017 cost update).

- Several respondents said that the requirement to contact the losing provider under Auto-Switch would also preserve the risk of unwanted save activity.
- Several respondents also said that the gaining provider would not be able to assist the customer in understanding information or providing reassurance about the process, one of GPL's key benefits.
- SSE also said that under Auto-Switch there would still be a degree of confusion, for some customers, on how switching processes work for communications products as it would perpetuate a different approach for mobile services compared with harmonisation elsewhere on GPL processes.
- BT/EE and [≫] said that our focus should be on implementing a future proofed switching process capable of seamlessly handling all elements of bundled services (i.e. quad-play) on a GPL basis. Such a process would minimise consumer confusion and eradicate competitive distortion where different elements of a bundled package of services are subject to different switching processes.

#### Ofcom's current view on the proposed switching options

- 4.80 Our position on the merits of either option is as follows. We recognise that GPL has the potential to deliver some additional benefits over Auto-Switch insofar as:
  - it removes the need for a PAC altogether, which might be simpler for switchers;
  - it might make things less confusing for switchers and would-be switchers by providing a similar process for switching mobile and certain landline and broadband services;<sup>138</sup> and
  - it may protect against unwanted ETCs more effectively.
- 4.81 On the other hand, it is not certain that these potential benefits over Auto-Switch would necessarily be realised. For example, amongst the respondents in the 2017 BDRC research, 44% of C&R switchers stated a preference for Auto-Switch over GPL (fewer in comparison stated a preference for GPL 33%) and 47% of PAC switchers stated a preference for Auto-Switch over GPL (fewer in comparison stated a preference for GPL 33%) and 47% of PAC switchers stated a preference for GPL 39%).
- 4.82 We acknowledge that switchers would still need to contact their losing provider to get a PAC under Auto-Switch. However, this is likely to be significantly faster and easier compared with the status quo as it no longer necessarily involves dialogue with the losing provider. We also expect that our proposal in respect of notice periods is likely to further simplify the PAC process (by removing the need for switchers to coordinate the point at which they redeem their PAC if they wish to minimise contract overlap). We also expect gaining providers may be more willing than now to encourage and support switchers to use the PAC/N-PAC process as it does not automatically create an opportunity for retention by the losing provider.<sup>139</sup> As a result, we believe that there would be less confusion about the PAC process, following our reforms.

<sup>&</sup>lt;sup>138</sup> There is already a GPL process for those switching landline and/or broadband services between providers operating on the Openreach network.

<sup>&</sup>lt;sup>139</sup> We discussed this in §4.22 of the March 2016 consultation.

- 4.83 We further note that, even under our GPL process, consumers must also receive and reply to the verification text which authorises the switch. This means that under our GPL process, those consumers who are unfamiliar with texting would still have to contact their losing provider (via the "backstop" method). For other GPL switchers, they would need to go through a similar number of touch points with the losing provider as Auto-Switch.
- 4.84 Our consumer research suggests that, despite the continued requirement to request a PAC, take up rates for Auto-Switch were, if anything, slightly higher than for GPL (comparative take up of Auto-Switch versus GPL is considered at paragraph 5.31). We recognise that one possible reason for higher take-up of Auto-Switch might be because respondents found the description of the Auto-Switch process more familiar than GPL, a difference which we would expect to disappear over time. However, the research does not support the view that GPL is significantly more appealing to switchers than Auto-Switch.<sup>140</sup>
- 4.85 We recognise that it might make things less confusing for switchers and would-be switchers if there were a similar process for switching mobile and landline and broadband services, particularly where consumers are purchasing these products as part of a quad play bundle. However, it is not clear that requiring a GPL process for mobile switching would achieve this as:
  - Firstly, a GPL type of switching is currently only available in respect of landline, broadband and pay TV services delivered on Openreach's platform and is not currently available for the switching of these services between different platforms.<sup>141</sup>
  - Secondly, we note that quad play take-up has been relatively limited to date.
  - Thirdly, we believe that an Auto-Switch process for mobile switching could work successfully alongside a type of GPL process for switching landline, broadband and pay TV services. This is because a PAC requested and automatically obtained by text or online could be easily incorporated as part of the process of signing up to a new contract for other services.

# Addressing loss of service

- 4.86 In Section 3, we described the nature and scale of harms associated with service loss. We explained that extended service interruptions of a day or more as likely to be especially harmful.
- 4.87 We consider that the issues identified with loss of service can be addressed through either:
  - the introduction of a mandated End-to-end management process; or

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https://www.uswitch.com/media-centre/2017/02/britons-miss-out-on-5-8-billion-in-savings-due-to-
mobile-switching-confusion/
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<sup>141</sup> See Figure 3 of Ofcom's 2016 Triple play switching consultation
<u>https://www.ofcom.org.uk/__data/assets/pdf_file/0030/58845/making-switching-easier.pdf</u>
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<sup>&</sup>lt;sup>140</sup> We note that uSwitch conducted some consumer research in February 2017, which suggested that GPL is a more popular process than Auto-PAC. However, we place more weight on our consumer research because it contained a more accurate and detailed description of the Auto-PAC and GPL process reforms that consumers would need to follow in order to switch. See: https://www.uswitch.com/media-centre/2017/02/britons-miss-out-on-5-8-billion-in-savings-due-to-

• a set of voluntary commitments made by providers (discussed below).

#### The March 2016 consultation

- 4.88 In the March 2016 consultation, we suggested that there were measures that could be taken to address the problems associated with loss of service. We proposed requiring centralised End-to-end management of the switch by the CPS, along with Make-before-break SIM activation, over and above our core switching process proposals. We said this would achieve two benefits:
  - encouraging consumers that do not want to port their number to use our new process; and
  - reducing harm arising due to loss of service.

#### Centralised 'End-to-end' management and 'Make-before-break'

- 4.89 This option would involve the adoption of a process to coordinate the stop and start of a consumer's old and new services during the porting process. We consider this should limit loss of service arising from technical problems with the port of a number. These proposals are not contingent on the adoption of either of Auto-Switch or GPL. They could be adopted either in addition to these options, or independently. Under this option, the losing provider must not cease the old service until the gaining provider has activated the new one, and, traffic has been routed to the gaining provider's network (Make-before-break). It also requires the introduction of centralised 'end-to-end' coordination of the switch by the CPS, to ensure that the losing provider and gaining provider co-ordinate at each stage of the process.
- 4.90 Taken together, Make-before-break and centralised switching End-to-end management are the mechanisms by which the stop and start timings for the old and new service can be fully coordinated.
- 4.91 It is worth noting that we no longer consider that an End-to-end management solution is necessary to include non-porters into the proposed switching processes. We initially considered that a further benefit of introducing End-to-end management was that C&R switchers could be included within a formal process but that is no longer the case e.g. Auto-Switch is available for non-porters without End-to-end management. The sole benefit of end to need management is limited the sequencing of the number port avoid loss of service.
- 4.92 TalkTalk and SSE supported the introduction of a Make-before-break approach to address the risk of loss of service during a switch. SSE said that it should be established for all mobile service providers to use, not just the MNOs.<sup>142</sup>
- 4.93 A number of respondents said that Make-before-break would not tackle the major causes of loss of service during a switch:
  - BT/EE said that "the main reason for loss of service by consumers is due to issues with file transfers in the background between losing and gaining provider during a port;<sup>143</sup>

<sup>&</sup>lt;sup>142</sup> SSE response to March 2016 consultation, page 6

<sup>&</sup>lt;sup>143</sup> BT/EE response to March 2016 consultation, page 16

- Three said that "while this solution would be an improvement on current practice, it will not tackle the underlying cause of delay and disruption which is the ongoing dependence on the donor operator for routing calls to the recipient even after a number is ported".<sup>144</sup> Three suggested that direct call routing would improve the porting experience, and open the opportunity for instant porting rather than the current 'next-day' model;
- O2 said consumers will still lose service under Make-before-break, as their existing SIM will stop working and they'll need to insert the new one;<sup>145</sup> and
- In relation to consumers who currently experience a loss of service of more than a day, [≫] said that these must be people who have experienced a porting process failure, rather than an orderly execution of the current process.<sup>146</sup> [≫] said there is no guarantee that any alternative process will not also suffer a failure of this kind.
- 4.94 We have noted comments provided by stakeholders on the merits of the Makebefore-break proposal. Although we have noted the comments above, we do not consider that there are compelling reasons to revise the design specification particularly in light of our consideration of the option of industry commitments to address loss of service, as discussed below.
- 4.95 Notwithstanding the solutions outlined above to specifically tackle loss of service we consider that the introduction of notice period reform, discussed earlier, could lead to a reduction in certain types of service loss. We know some C&R consumers struggled with the task of co-ordinating a switch to avoid double payments and incurred service loss as a result. If notice periods were to be prohibited beyond the date of the switch, there would be less need for consumers to undertake co-ordination that risked loss of service.

#### Industry commitments to address loss of service

- 4.96 Industry stakeholders have committed to taking several steps collectively to address issues that may lead to service loss. The Operators' Steering Group (OSG)<sup>147</sup> has recently written to Ofcom to explain that operators are working voluntarily to:
  - Optimise individual system capacity so that port requests/activations can be managed effectively at peak times (which had accounted for port failures in the past). This will involve an extension to the porting window intended to create additional capacity to handle a greater volume of ports. This could lead to longer loss of service within the porting window but should ensure that more port requests occur within one working day. This optimisation process is due for completion by the start of June 2017, and the OSG will report to Ofcom on improvement rates.
  - Improve the processes that operators follow when responding to incidents of port failures. Their existing 'escalation plan' will be strengthened by sharing escalation

<sup>&</sup>lt;sup>144</sup> Three response to March 2016 consultation, page 13

<sup>&</sup>lt;sup>145</sup> O2 response to March 2016 consultation, footnote 38

<sup>&</sup>lt;sup>146</sup> [ $\times$ ] response to March 2016 consultation, page [ $\times$ ]

<sup>&</sup>lt;sup>147</sup> The OSG acts as a forum for mobile operators to meet and agree the arrangements necessary for mobile number porting.

data centrally within OSG, clarifying timelines within which incidents need to be resolved, and timelines within which the OSG will be notified.

- Review their approach to dealing with problems with single and multiple ports. The OSG will report back to Ofcom on their findings of this review which will include engaging with Syniverse to understand best practice approaches used overseas. They have committed to presenting this review to Ofcom in June 2017.
- Prepare a customer facing porting guide, including useful tips and information, to help consumers through the porting process.
- Review the OSG Constitution with regards to visibility of performance and incident levels. They suggest this will align how porting success is determined, and ultimately the experience of porting by consumers.
- 4.97 Industry envisages that these steps would negate the need for a mandated End-toend management solution to be introduced. As such, they could be treated as an alternative to a formal End-to-end management remedy imposed through formal regulation. Certainly, to the extent that these commitments could address service loss of a day or more which we consider to be more harmful.
- 4.98 Taken together, we consider that these commitments have the potential to minimise the risk that a consumer experiences a loss of service outside of the current one day porting window. The loss of service that occurs outside of the current porting window is the aspect that concerns us most i.e. loss of service for longer than one working day.
- 4.99 Our final view on these commitments will depend on the further information that the OSG will provide to us in June 2017.

## **Providing transparency to consumers**

- 4.100 In the March 2016 consultation, we explained that the quality of information provided to consumers on how to switch varied significantly across providers. Issues include a lack of, or unclear, information on how to acquire a PAC and the steps involved in the porting process, and on consumers' rights if the porting process goes wrong.
- 4.101 We proposed a requirement for providers to provide clear guidance on the switching process to help ensure that consumers are better informed. We also proposed that this guidance is made available to consumers but that the detail of this should be agreed by industry with input from Ofcom and other industry parties.
- 4.102 We maintain our view that providers should be required to provide transparency of switching and porting processes to consumers, which at a minimum should include guidance on their websites. We expect the guidance to be easy to access and given sufficient prominence, with each of the PAC/ N-PAC request methods being given equal prominence.

# The risks of unintended consequences associated with the proposed remedies

4.103 We are keen to ensure that the reforms that we have proposed do not introduce risks of unintended consequences. We have therefore considered what those risks might be, and where appropriate, proposed additional steps to mitigate those risks. For

example, we have ensured that consumers still receive switching information where they do not speak to their losing provider. We explain this further below.

#### Ensuring consumers are sufficiently informed before switching

- 4.104 We consider that moving away from a switching system where consumers must speak to their losing provider generates several benefits. However, in designing both Auto-Switch and GPL proposals, we were mindful that consumers may no longer be as informed about the implications of switching their service compared to the status quo. For example, consumers could potentially switch to a gaining provider without being made aware of any ETCs that may apply when switching before the end of the full term of their contract.
- 4.105 We explained in our March 2016 consultation that we consider that both options ensure consumers are well informed before switching. In the case of Auto-Switch, consumers will be provided with switching information (detailed below) by text or through their online account when they request their PAC/N-PAC.<sup>148</sup> Under GPL, consumers will be provided with switching information as part of the verification text that is sent to them before they complete their contractual agreement with the gaining provider.
- 4.106 Under both processes, consumers could also request switching information by text or through their online account on demand independent from the formal switching process. We further note that, providers are required to be transparent about the switching process in general which should include the availability of switching information.
- 4.107 Several stakeholders, including Citizens' Advice, BT/EE, O2, Vodafone and Virgin Media argued the switching information we are proposing via text is insufficient. They suggested that the current specification would fail to convey the true extent of switching implications that consumers would be interested in, for example, discounts from linked contracts.
- 4.108 We recognise that some consumers may find it helpful to be provided with information in addition to that we propose. However, we have had several considerations when developing our approach to what switching information should be included within the texts sent to consumers:
  - There is a limit on the extent of switching information that can be provided in a single text message.
  - We have prioritised the information we consider is most useful for the consumer's switching decision. We consider these to be the charges they would incur as result of switching as opposed to the reduction in any on-going discounts.
  - Further, we have focussed on the information that can be provided immediately such as ETCs. Additional information on discounts etc. could increase costs if they were to be required to be sent immediately.
- 4.109 We also consider that providers could design the text message to include links to additional information or implications of switching and indicate to the consumer how they can find out more, if they wish to do so.

<sup>&</sup>lt;sup>148</sup> Non-porters will also be provided with switching information when they request their N-PAC.

- 4.110 Therefore, our current view is that under our proposals, consumers will be provided with the most useful information that is relevant to their switching decision.
- 4.111 We have accounted for the costs of generating and delivering switching information to consumers. For costing purposes, we have assumed Mobile Network Operators (MNOs) and large / medium Mobile Virtual Network Operators (MVNOs) would undertake these activities for themselves. However, we expect (but not require) that smaller MVNOs would fulfil this requirement by contracting with their respective wholesale partner to automate and deliver this information on their behalf, and we have developed our cost estimates on this basis.<sup>149</sup>

#### Current position on the risks of unauthorised switching

- 4.112 We explained in the March 2016 consultation that any switching process would require effective mechanisms to ensure that a request for a switch is made by the person authorised to do so. This would be necessary to avoid slamming,<sup>150</sup> erroneous transfers or more general fraudulent or mischievous attempts to switch service provider. We noted that fraudsters are capable under the current system, of bypassing provider security to request PACs despite not being the authorised account holder.
- 4.113 Vodafone, O2, and BT/EE raised concerns about the risk of fraud arising from the introduction of either (previous) Auto-PAC or GPL. They suggested that providers cannot correctly verify authorised consumers' identity, purely based on possession of a handset. The implication being that either option could be exploited by fraudsters. Stakeholders considered this could lead to increases in frauds such as golden number theft and SIM swap fraud (these are discussed below).
- 4.114 At present, verification of PAC requests by phone and online account is achieved by the provider asking for consumers' personal details or by online passwords.
- 4.115 We understand that it is already possible for fraud to take place under these existing arrangements e.g. fraudsters can call in from any landline or mobile number and be provided with a PAC after answering account security questions. The PAC can be given to the consumer when speaking to their provider but not necessarily texted to their mobile number i.e. the authorised account holder. It is possible, at present, for a fraudster to request a PAC and give it to a gaining provider without the authorised account holder being aware of it until the number is ported out.
- 4.116 We are confident that our Auto-Switch proposal to require the losing provider to text the PAC/N-PAC to the authorised account holder when using the telephone route (as standard procedure) will help reduce the risk of this form of fraud. We consider this would help alert the authorised account holder of any fraudulent attempt to port their number. They could then contact their provider about this.

<sup>&</sup>lt;sup>149</sup> We recognise that this would require some information flows between MNO/MVNEs and small MVNOs. We note some stakeholders have expressed data protection concerns with this arrangement, however we consider that providers should be able to comply the relevant DPA requirements if they choose to implement the remedies this way. We discuss this in more detail in §A8.59 to §A8.60, §A8.66 and §A8.73 to §A8.74.

<sup>&</sup>lt;sup>150</sup> Slamming occurs where consumers are switched to another provider without their consent

#### SIM Swap Fraud

- 4.117 Under SIM Swap, the fraudster seeks to organise a switch of a consumer's number from their current SIM card to one possessed by a fraudster. The transfer of the number to a different SIM card is a means to an end for the fraudster. It could help them gain control of the consumer's bank account when security verification codes are sent to their mobile number.
- 4.118 We consider that Auto-Switch does not provide significant additional risk of SIM swap fraud. To port the consumer's number, the fraudster would need to already be in possession of the consumer's SIM card (through theft, burglary etc.). Given that the fraudster already has possession of the SIM (and thus receive the authorised user's incoming text messages), there does not appear to be a need for the fraudster to port the number to get codes sent by the bank. A fraudster would also need to wait at least a whole day before the number could be ported to a SIM in their possession. During which time, the SIM could be reported lost/stolen by the authorised account holder.
- 4.119 Likewise, we do not consider that there is an increased material risk with the GPL option for the same reasons as above. Further, the GPL backstop route (that requires that the losing provider provides verification to switch) would likely be subject to heightened security checks by the losing provider so this route is unlikely to increase the risk of fraud.

#### Unauthorised acquisition of mobile numbers or Golden number fraud

- 4.120 Here, the fraudster gains access to a SIM which has a number they want to take elsewhere without the permission of the authorised account holder. This could be because it is either 1) highly memorable, 'a golden number', which the fraudster hopes to sell or 2) known to valuable business consumers, e.g. might help a taxi driver leaving permanent employment to set up alone.
- 4.121 We do not consider the risk of unauthorised mobile number fraud materially increases under the Auto-Switch proposal. As is the case with SIM swap fraud, the fraudster would need to be in possession of the SIM to make the PAC request. Whilst this could be achieved through theft, the likelihood is that stolen/missing phones will be reported to the provider by the authorised account holder within a short time frame and that would allow the port to be investigated.
- 4.122 For the same reasons outlined above, we do not consider this risk materially increases under the GPL process. The GPL process requires a reply to the verification text sent to the SIM associated with the switch request made to the gaining provider. The reply can only be sent by the person in physical possession of the SIM.
- 4.123 We recognise that there could be a slightly increased risk of fraud through the GPL backstop route. As verification is achieved through contacting the losing provider, fraudsters could attempt to trigger verification if they can bypass normal levels of telephone security verification. However, providers could decide to increase level of account verification for backstop calls, e.g. asking additional identify questions.
- 4.124 Some providers suggested that unauthorised PAC requests could occur where there are multiple lines on a business account. For example, an employee may attempt to request a PAC (and port a number) from an account belonging to a business/organisation after that employee has left. We understand that most

providers, who offer multiple number accounts, will assign responsibility for account changes (including PAC requests) to one primary account holder. We consider that fraud risks will be limited if PAC requests continue to be restricted to these nominated account holder numbers.

# Our proposals include residential consumers and businesses

- 4.125 We made clear in the March 2016 consultation that the scope of the proposed mobile switching reforms would include both residential consumers *and* businesses, where the set of mobile numbers being switched and ported in any one transaction involved 24 or fewer mobile numbers.<sup>151</sup> As such, it would be expected that the requirements outlined above would apply to all providers, including those providing services to businesses porting up to 24 numbers.
- 4.126 We understand that the current PAC process is often used for ports of more than 24 numbers. This 'bulk' porting process is currently unregulated, and we do not plan to change this under our new requirements. We do not anticipate that automation of the PAC process under our Auto-Switch proposals will affect the ability of providers to use PACs for bulk ports if they wish. Providers may wish to consider using the Auto-Switch/GPL processes for bulk porting requests voluntarily.
- 4.127 There are mobile resellers active at the lower size end of the SME market. Several stakeholders have suggested that products and services taken by businesses are more complex than those taken by residential consumers. They argued that this complexity means that the switching information proposed under our plans:
  - would either be unhelpful or misleading because it would not capture the true implications of switching relevant to these types of business customers; and
  - cannot be generated by small resellers quickly without generating significant costs.
- 4.128 [≫] and Nine noted that ETC information can be extremely complex in the case of businesses. Indeed, [≫] suggest that, if information is to be provided, the definition of ETC should be:
  - the product of remaining months and the monthly rental for the entire estate of mobile services on the account in question; and
  - a separate obligation referenced in the ETC communication to provide a written statement on the wider implications of switching; and
  - provided within 2 working days of being requested.
- 4.129 Despite there being evidence of some differences in product offerings in certain parts of the business mobile market, we are not minded to propose separate arrangements for businesses.
- 4.130 As described at paragraph 3.67, our research on the difficulties of switching and the harms that arise suggests that these are common to both residential consumers and

<sup>&</sup>lt;sup>151</sup> This broad scope would be relevant to both GPL and Auto PAC proposals, and extend to consumers looking to switch up to 24 mobile numbers.

many SMEs. We consider that the benefits associated with the switching information obligations as specified below would improve the switching experience for both.

- 4.131 We acknowledge the further point made about the costs of providing switching information to businesses, and we consider this point in detail in Annex 8. In summary, we consider that small MVNOs offering business-only tariffs could reasonably comply with our proposed requirements to provide real-time ETC information, by contracting with their MVNE to automate and deliver this information on their behalf. This would mean that the major cost activities associated with generating real-time ETC information will be undertaken by the relevant wholesaler. We have developed our cost estimates on this basis.
- 4.132 Therefore, we remain of the view that our proposals should apply to both residential consumers and businesses where the set of mobile numbers being switched and ported in any one transaction involves 24 or fewer mobile numbers.
- 4.133 However, we acknowledge that it is possible to limit the scope of our reforms so they only apply to providers offering residential products. Our plans to tackle the difficulties identified above could be progressed without necessarily including businesses providers. Our decision on whether to include businesses is subject to the costs and benefits assessment that is discussed in Section 5.

# How the proposed remedies address the concerns identified

- 4.134 The proposals we have discussed should be introduced as a package of remedies to address all the issues that we have identified. It is possible that each one of these proposals could be introduced as a standalone solution to address each issue in isolation. We are however of the view that together they represent the most effective package.
- 4.135 Figure 9 below summarises how we consider the package of remedies address the harms we have identified.

Issue identified	GPL (alongside notice period reform and End-to-end management/ industry commitments)	Auto-Switch (alongside notice period reform and End-to-end management/ industry commitments)
Double paying while switching provider.	<ul> <li>The consumer would only have to pay for the old service(s) up until the date of the switch. Any double paying would be reduced to a single day (the switch date). The consumer would not need to defer the start of their new service(s) to avoid double payments.</li> <li>Notice period reform would benefit existing PAC switchers and those C&amp;R switchers who either, as a result of our package of reforms decide to port their number (i.e. become PAC switchers) or switch provider without porting the number but take advantage of the formal switching process.</li> </ul>	

#### Figure 9 - Summary of how the proposed remedies address the issues identified

Unnecessary time and difficulties when progressing a switch	<ul> <li>The consumer would only need to contact the gaining provider to switch.</li> <li>The gaining provider would be responsible for contacting the losing provider to cancel the old service(s) and co-ordinate the date for stopping them.</li> </ul>	<ul> <li>Consumers would have more options for requesting a PAC. There would now also be a N- PAC for consumers not wanting to port their number, so they didn't have to contact their losing provider. Consumers would have the option of using online account and text</li> </ul>	
	Difficulties contacting the losing provider to cancel would be removed.	messaging routes, without having to speak with their losing provider.	
		<ul> <li>Consumers would only need to contact the gaining provider once in order to progress the switch.</li> </ul>	
		<ul> <li>Providers would need to ensure that switching and porting processes are transparent to consumers, which at a minimum should include guidance on their websites. PAC/ N-PAC request methods must be given equal prominence in consumer communications (e.g. information on websites and in correspondence).</li> </ul>	
Protect against loss of service	Prohibiting charging for notice after the date of the switch will help reduce loss of service. We know some consumers struggled with th task of co-ordinating a switch to avoid double payments and incurre service loss as a result. <sup>152</sup>		
0		anagement solution should address and lead to a material reduction in	
	<ul> <li>The voluntary commitments outlined above, if successful, could minimise the risk of loss of service experienced by consumers outside of the current porting window.</li> </ul>		

# **Consultation questions**

Q2: Do you agree that our proposed package of reforms is likely to be effective in addressing the consumer harms we have identified?

<sup>&</sup>lt;sup>152</sup> These process reforms do not help technical loss of service.

Consumer switching - Proposals to reform switching of mobile communications services

Q3: Do you have any comments on the specific process design for the different elements of the proposed reform package?

## **Section 5**

# Impacts from introducing our options for reform

# Introduction

- 5.1 This section sets out our assessment of the likely impact of the options for reform that we have presented in Section 4. This helps us to inform our assessment of the proportionality of each option, which we consider further in Section 6.
- 5.2 As set out in Section 4, we have presented options designed to improve the customer experience of switching mobile provider, based around the Auto-Switch or GPL process reforms. We consider that these options have the potential to effectively reduce PAC and C&R switchers' experiences of:
  - unwanted double-paying;
  - unnecessary time and difficulties while progressing the switch; and
  - loss of service.
- 5.3 By reducing these combined barriers to switching, these reforms could also deliver benefits to would-be switchers and competition.
- 5.4 To understand the impact of each element of reform, we present our impact assessment in four stages:
  - First, we assess the impact that prohibiting charging for notice after the switching date would have, were it to be introduced on a stand-alone basis.<sup>153</sup>
  - Secondly, we assess the incremental impact of introducing a core process reform (Auto-Switch or GPL). In respect of Auto-Switch, we primarily assess the introduction of a text and online Auto-Switch process for both residential consumers and businesses, though we also discuss the incremental impact of including the online route (over and above the text route), and extending these routes to business tariffs (over and above residential tariffs). This is so that the incremental impacts are also clear.
  - Thirdly, we assess the incremental impact of introducing centralised End-to-end management.
  - Fourthly, we assess the incremental impact of requiring consumer guidance about the switching process to be clear and accessible.

<sup>&</sup>lt;sup>153</sup> We consider this proposal first because it is capable of affecting the design of our core process reforms i.e. Auto-Switch or GPL. That is because, if there was not a prohibition on charging notice beyond the switching date, we would design our Auto-Switch and GPL proposals differently, to mitigate the risk that some switchers incur more double-paying (as we did in our March 2016 consultation, §1.9).

- 5.5 Where possible, we have attempted to quantify these impacts in each of the four stages. There are some impacts that we consider important to the case for intervention which we have been unable to quantify. We take account of these non-quantified impacts in our overall assessment.
- 5.6 In respect of implementation costs, we have also commissioned an independent consulting company (InterConnect Communications, or ICC) to peer review our cost estimates. ICC considered the estimates to be a reasonable forecast of the likely costs, and that setup costs are likely to be accurate to within +/- 20%. We take account of this in our assessment.

# Prohibiting charging for notice after the switching date

#### July 2016 consultation

5.7 In the July 2016 consultation, we set out and consulted on a prohibition on providers charging for notice beyond the date that consumers switch or port out their mobile number. We estimated that, if this reform were applied to the current porting process, this could save PAC switchers around £13 million per year (£114 million over 10 years in NPV terms) in double-paying.<sup>154</sup> We estimated that it would cost industry between £6.4 million and £7.2 million to implement this reform, and on this basis, we proposed that this requirement was a proportionate remedy to meet our policy objectives.<sup>155</sup>

#### **Revised impact assessment**

#### **Benefits**

- 5.8 We have revised our assessment of the impact of prohibiting charging for notice after the switching date, in light of stakeholder comments, and new information.
- 5.9 We remain of the view that prohibiting charging for notice after the switching date would deliver a significant reduction in double-paying for PAC switchers. However, we have revised our estimate of the reduction in double-payments that the reform would deliver from £114 million to £69 million (NPV terms over 10 years), principally because we have revised downward our estimate of the daily harm experienced by switchers who double pay.<sup>156</sup> We set out the full details of this calculation in Annex 9.
- 5.10 This figure excludes any benefits that might accrue to existing C&R switchers. This is because our proposal to prohibit charging for notice beyond the switching date only applies in the context of a formal switching process, so switchers who continue to switch using a C&R arrangement are still subject to the risk of double-paying. However, the reform does have the potential to deliver additional benefits to these switchers if implemented in conjunction with our Auto-Switch or GPL reforms, both of which include provisions to simplify the existing PAC process and to extend the

<sup>&</sup>lt;sup>154</sup> We also said it would remove the time, effort and risks associated with managing contract overlap to avoid double-paying, as well as the need to defer the start of the new service to do so.
<sup>155</sup> July 2016 consultation §4.23 and §4.27

<sup>&</sup>lt;sup>156</sup> In July, we estimated that this was 64p, based on survey data on average post-pay daily expenditure on mobile services (down-weighted by 20% to exclude out-of-bundle charges). We have since obtained data from mobile providers on the average monthly in-bundle expenditure (i.e. expressly excluding any out-of-bundle charges) that is incurred by post-pay out-of-contract mobile subscribers. This implies a figure of 33p double-paying per day.

formal switching process to include switches without ports. Consistent with our impact assessment framework, as set out in paragraph 5.4, we have considered these benefits as an incremental impact of implementing our core process reforms. These benefits are discussed below.<sup>157</sup>

- 5.11 We remain of the view that our notice period reform would also address the time and effort that some switchers spend managing contract overlap to avoid double-paying, as well as their need to accept an unwanted deferral of the start of the new service to achieve this. We consider these non-quantified benefits to be important benefits of the reform. Furthermore, by reducing barriers to switching, this proposal seems likely to deliver benefits to would-be switchers and competition more generally.
- 5.12 In arriving at this view we have considered the points raised by stakeholders about the impact of this reform. These points can be summarised as follows:
  - We are in error by counting the prohibition on charging for notice as a benefit, as this is also a cost to providers and as such the net effect should be zero (Vodafone).<sup>158</sup>
  - We have dismissed the possibility that prohibiting charging for notice would result in CPs increasing the price of mobile services to recover lost revenues (this is known as a "waterbed effect"), without any sound economic basis (Virgin Media).
  - Prohibiting charging for notice after the switching date could make some contracts commercially unviable e.g. 30-day SIM-only and other short term contracts where the economics of the proposition rely on the consumer paying for the full month of usage. Providers could suffer financial harm if a consumer were to switch immediately after using all their allowance for the month, leaving the retailer unable to charge for the airtime already used (Virgin Media). and
  - There is a significant arbitrage risk of consumers seeking to port their number purely to avoid paying a legitimate notice period (Virgin Media).<sup>159</sup>
- 5.13 In respect of Vodafone's point, we continue to believe that it is appropriate to count the reduction in the extent of double-paying as a benefit. We acknowledge that the reduction in double-paying will be mirrored by a matching revenue loss by the provider, however we do not believe we should regard this as a cost of our proposal because the revenue derives from a consumer harm which we consider warrants intervention. Nor do we consider we should adjust the scale of our benefits calculation to account for any possibility that mobile providers would recover this lost revenue through higher headline prices for mobile services to address Virgin Media's view because, for the reasons explained in paragraphs A9.8 to A9.17, we do not consider this to be likely. As such, our estimate of the benefits of this proposal continues to take account of the full reduction in double-paying for PAC switchers.
- 5.14 We disagree that some contracts could become commercially unviable as a consequence of this reform. As set out in Section 3, notice period charges are very different to ETCs that relate to, and are intended to recoup, costs likely incurred by

<sup>&</sup>lt;sup>157</sup> We recognise that the order in which we assess each element of our reforms affects the element to which we attribute the benefits of reduced C&R double-paying, but it does not affect whether we take these benefits into account when assessing the overall package.

<sup>&</sup>lt;sup>158</sup> Vodafone response to January 2017 cost update, page 10

<sup>&</sup>lt;sup>159</sup> Virgin Media response to July 2016 consultation, page 3 and 21

the provider at the outset of the contract which would otherwise be recouped from the consumer over the whole course of the minimum contract period. Additionally, we consider it is unlikely that consumers will amend their usage patterns, in response to a prohibition on notice period charges, so as to use up their full allowance early on in their billing cycle before switching away. We are not aware that providers who currently do not enforce notice period charges suffer commercial harm from this risk.

- 5.15 Finally, as to the prospect that some consumers may now use a formal switching process specifically to avoid paying notice period charges, as also argued by Virgin Media, we make the following observations:
  - To the extent that consumers wish to switch their mobile service and use the formal switching process because it is easier and less expensive, including as a result of avoiding double-paying, we consider that this is in line with our policy objectives and consequently a benefit (rather than an unintended consequence) of our reform.
  - We acknowledge that some consumers who are simply terminating their service (without moving to a new service) could in theory set up and register a "throwaway" pre-pay account with a new provider, and redeem a PAC/N-PAC with this provider, to avoid notice period charges. However, we consider that this is unlikely to be a significant group of consumers. Commencing a new pre-pay service still involves some effort on the part of consumers.<sup>160</sup> Furthermore, it is much less clear that consumers simply terminating their service do not want to use their existing service during the notice period (in contrast to switchers, who are moving to a new service and will often have no interest or intention of using the old service during the notice period).

#### Implementation costs

- 5.16 We received limited comments on our estimate of the costs associated with implementing a prohibition on charging for notice periods after the switching date. Three said that our industry cost of £7.2 million over ten years appeared to be a reasonable estimate, but noted that without implementation detail it could not comment on this further.<sup>161</sup> Virgin Media said that we had substantially underestimated the costs involved. It estimated that it would cost them [≫] to implement just the billing changes, in contrast to the £51,233 that we estimated for a large MVNO.<sup>162</sup>
- 5.17 We have set out our revised view of the costs of prohibiting charging for notice after the switching date in Annex 8. Our estimate of the implementation cost has increased to around £9 million (over 10 years in NPC terms), to reflect our updated view about the number of providers who would be required to make changes, and the cost of development and support resources, as well as the information that Virgin Media has provided about its own implementation costs.

#### Summary of impact of prohibiting charging for notice after the switching date

5.18 Figure 10 summarises our assessment of the impact of prohibiting charging for notice after the switching date on existing PAC switchers and mobile providers.

<sup>&</sup>lt;sup>160</sup> And the purchase of any minimum credit balance, to the extent this applies.

<sup>&</sup>lt;sup>161</sup> Three response to July 2016 consultation, page 3

<sup>&</sup>lt;sup>162</sup> Virgin Media response to July 2016 consultation, pages 23-24

# Figure 10 - Summary of the impacts of prohibiting charging for notice periods after the switching date on existing PAC switchers, and mobile providers

Group	Quantified impacts	Non-quantified impacts
PAC switchers	Reduction in unwanted double-paying: £69 million	Reduction in time and effort needed to manage contract overlap Faster switching
Mobile providers	Implementation costs: £9 million	

- 5.19 Our analysis indicates that the quantified reduction in unwanted double-paying for PAC switchers significantly exceeds the implementation costs that mobile providers would incur, and this would be the case even if setup costs were 20% higher (i.e. around £10.5 million).<sup>163</sup> Additionally, we consider that prohibiting charging for notice would reduce the time, effort and unwanted deferral that some PAC switchers incur to manage contract overlap to avoid double-paying.
- 5.20 Finally, we have also assessed the impact on would-be switchers and on competition that could result from prohibiting notice charges beyond the switching date, in combination with the impact of introducing our core process reforms (i.e. Auto-Switch and GPL). We discuss these impacts in paragraphs 5.53 to 5.67, and in Annex 12.

## Core process reforms: Auto-Switch and GPL

#### March 2016 consultation

- 5.21 In our March 2016 consultation, we said that both Auto-PAC and GPL would be effective at addressing the harms we had identified. We assessed the costs of implementing either of these options and concluded that the expected benefits (even when focusing only on quantified benefits stemming from time savings) would exceed the costs. We were therefore satisfied that pursuing either option would be proportionate.
- 5.22 Based on the assessment conducted at that time, we expressed a marginal preference for GPL. This was because, although GPL cost slightly more (£12.4 million over ten years, compared to £10.9 million for Auto-PAC) and delivered similar time savings benefits (£21.7 million over ten years), we believed it would be simpler for consumers as it would not require them to obtain a PAC and give this to the gaining provider. We also said that, since GPL would require GPs to actively help consumers manage notice periods, this should deliver greater reductions in double payments (both the previous Auto-PAC and GPL process designs incorporated elements designed to address double-paying).<sup>164</sup>

 $<sup>^{163}</sup>$  As explained in §5.6, our independent peer reviewer (ICC) suggested that our setup cost estimates are likely to be accurate to within +/- 20%.

<sup>&</sup>lt;sup>164</sup> For the same reasons, we said that GPL would deliver greater benefits for would-be switchers and competition. See Figure 12, March 2016 consultation.

#### July 2016 consultation

5.23 In the July 2016 consultation, we explained our intention to enhance our package of reforms by including a provision to prohibit charging for notice periods beyond the date on which customers switch to another provider. We recognised that one implication of enhancing our package of reforms in this way was that, all else equal, the advantage that GPL offered relative to Auto-PAC was reduced. However, we continued to express a marginal preference for GPL on the basis that it was likely to deliver greater non-quantified benefits.<sup>165</sup>

#### **Revised impact assessment**

- 5.24 Since our March 2016 and July 2016 consultations, we have updated our assessment of the impact of our proposed reforms, to reflect stakeholder comments and the additional evidence we have collected (particularly the 2017 BDRC research).
- 5.25 One of the primary objectives of both reforms remains reducing the time and addressing the unnecessary difficulties involved in progressing the switch, in particular that caused by the need for PAC switchers to contact the losing provider to request a PAC before being able to switch.<sup>166</sup> We continue to believe that both options would be effective in this respect, given they both remove the need for consumers to speak with the losing provider (unless they wish to), either by providing alternative routes (text or online) to obtain a PAC (Auto-Switch), or by eliminating the need for a PAC altogether (GPL). They also allow PAC switchers switch and port their number by having a single interaction with the gaining provider. As such, we expect they would deliver a material benefit to PAC switchers, although we have revised the magnitude of the estimated benefit.
- 5.26 As set out in Section 4, since our March 2016 and July 2016 consultations we have established that both options could also be extended to non-porters, without requiring End-to-end management. This means that they could address the time and difficulties that non-porters currently experience caused by the need to speak to the losing provider terminate their service. By providing a process for non-porters to co-ordinate their switch, this could also help them to reduce loss of service and double-paying.<sup>167</sup> We have sought to quantify the impact of these benefits in our assessment of Auto-Switch and GPL.
- 5.27 Finally, by making switching easier and faster (and thus lowering barriers to switching), we believe that both options would deliver benefits to would-be switchers (some of whom may currently be deterred from switching to a service that they prefer), and benefits flowing from increased competition between providers. Whilst we have not quantified these benefits, we believe they are material impacts that are additional to the benefits we have quantified, and are important to our assessment.

<sup>&</sup>lt;sup>165</sup> July 2016 consultation §4.44. We said that GPL 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 and in other sectors.

<sup>&</sup>lt;sup>166</sup> We also consider that there is time and effort involved on managing contract overlap to avoid double-paying, but our proposal in respect of notice periods addresses this (see §5.19).

<sup>&</sup>lt;sup>167</sup> Moreover, a single unified switching process for porters and non-porters alike should reduce confusion on the part of (potential) switchers.

5.28 In what follows we set out our revised position in respect of the benefits we have identified. In turn, we present our assessment of benefits to switchers; benefits to would-be switchers; and competition benefits. We then set out our revised assessment of implementation costs, explaining why we now consider that GPL would cost significantly more to implement than Auto-Switch.

# Benefits of core process reforms: Auto-Switch and GPL

#### **Benefits to switchers**

- 5.29 We have identified three main benefits to switchers:
  - reduction in unnecessary time and difficulties progressing the switch;
  - reduction in double-paying amongst existing C&R switchers; and
  - reduction in loss of service amongst existing C&R switchers.

#### Reduction in unnecessary time and difficulties progressing the switch

- 5.30 We have explained above that both process reforms would allow switchers to avoid the need to contact the losing provider to request a PAC, either by providing alternative routes to obtain a PAC (text or online), or by eliminating the need for a PAC altogether. As such, they should both reduce the time and address (to a large extent) the unnecessary difficulties that customers experience in progressing their switch. We also explained that by extending the processes to non-porters, the reforms would offer similar benefits to non-porters as they would no longer have to contact the losing provider to cancel their contract when switching provider.
- 5.31 Evidence obtained via the 2017 BDRC research is consistent with the view that the reforms would deliver benefits of this nature to many PAC and C&R switchers. In this research, we directly asked a sample of consumers who previously switched via PAC or C&R whether they would use Auto-Switch to request their PAC and/or cancel their mobile service, if it was available for free, rather than the way that they did so last time.<sup>168</sup> We found that 80% of PAC switchers (73% of C&R switchers) said they would use Auto-Switch. We asked the same question in respect of GPL and found that 66% of PAC switchers (58% of C&R switchers) said they would use GPL.<sup>169</sup>
- 5.32 When asked why they would use Auto-Switch and/or GPL, respondents generally commented that the processes appeared quicker, easier and involved less hassle than the current switching process. In the case of both options, respondents specifically said that it would enable them to avoid the difficulties associated with having to call their losing provider, for example being put on hold; and experiencing pressure from the customer service agent to remain with their existing provider. The word clouds in Figures 11, 12 and 13 summarise the verbatim responses received by those who said they would take up Auto-Switch and GPL. The word clouds give greater prominence to words that appear more frequently in the answers given.

 <sup>&</sup>lt;sup>168</sup> We first presented respondents with a series of diagrams which set out the steps that would be necessary to switch via our Auto-Switch and GPL processes.
 <sup>169</sup> BDRC 2017 slide 13

Figure 11: Verbatim responses from those who said they would or might use free text message (PAC switchers)



QC2A - PAC switchers who would/might request PAC via a free text message, Base (1164)

Figure 12 - Verbatim responses from those who said they would or might use free text message or online account (C&R only)



QF2A - C&R switchers who would/might use SMS or through online account, Base (691)

Figure 13 - Verbatim responses from those who said they would or might use GPL (PAC and C&R)



QD2A – PAC switchers who would/might use GPL, Base (1100) QG2A – C&R switchers who would/might use GPL, Base (665)

- 5.33 In our March 2016 consultation, we attempted to quantify the time savings that we expected both reforms (at the time GPL and Auto-PAC) would generate as a consequence of removing the need to contact the losing provider to request a PAC and/or cancel (we refer to this as a "time savings" approach).<sup>170</sup> We estimated at the time that both options would deliver time saving benefits worth between £10.9 million and £32.6 million (NPV over ten-years), with a central case estimate of £21.7 million.
- 5.34 We have since revised these estimates to take account of stakeholder comments and new information, including revised take-up rates sourced from our 2017 BDRC research. In applying these take-up rates, we have recognised that some respondents who said they would use Auto-Switch or GPL may not actually do so in practice, so we have downward adjusted the stated take-up rates to reflect this.<sup>171</sup> A full set of revisions is set out in Annex 10.
- 5.35 Based on these adjustments, we now estimate that Auto-Switch would deliver around £6.9 million by way of time savings benefits (with a range of £5.8 to £8 million), while GPL would deliver around £4.7 million (with a range of £3.4 to £5.9 million).<sup>172</sup> The reason we now estimate that Auto-Switch would deliver greater benefits is because the 2017 BDRC research suggests that take-up of Auto-Switch would be greater than that of GPL.
- 5.36 However, as we made clear in our March 2016 consultation, the time savings approach does not capture the difficulties we expect consumers to avoid when using a new process to switch provider and the broader benefits of an easier switching process. Consequently, this approach cannot account for the full benefits we expect our reforms to deliver.
- 5.37 For this reason, our 2017 BDRC research specifically explored how much consumers who had previously switched using either PAC or C&R would be willing to pay to use Auto-Switch and GPL to switch.<sup>173</sup> We consider that this evidence provides a better estimate of the total reduction in harm to switchers that our reforms could deliver, because it relates specifically to the reforms we have proposed, and (in principle) fully captures the value of the difficulties that switchers would avoid when using a new process to switch. We recognise that this type of evidence must be interpreted carefully as there is uncertainty about whether respondents would actually pay the price they said they would, and we discuss this in more detail below.

<sup>&</sup>lt;sup>170</sup> This approach factors in the continued requirement for switchers to text the losing provider and then pass the PAC to their gaining provider, under Auto-Switch. Similarly, under GPL, it factors in the requirement for switchers to read and respond to their authentication text message.

<sup>&</sup>lt;sup>171</sup> In our base case, we assume that 42% of PAC switchers and 38% of C&R switchers would take up Auto-Switch, while 30% of PAC switchers and 24% of C&R switchers would take up GPL. See BDRC 2017 research, slide 14.

 $<sup>^{172}</sup>$  There are two main reasons why our revised estimates are lower; firstly, our estimate of the time taken to request a PAC and/or cancel under the status quo, that would be saved by the core process reforms, has fallen by around 60% from 13.4 minutes to between 5.4 and 5.7 minutes; and secondly, we quantify time savings using the DfT's value of non-working time, which has fallen from £7.05 per hour to £5.51 per hour.

<sup>&</sup>lt;sup>173</sup> Specifically, we asked any respondent who said they would use Auto-Switch or GPL if free, whether they would also pay a series of prices to use it. (We presented the following price points in random order: 50p; £1; £2; £5; and £10.) Respondents (grouped as PAC or C&R switchers depending on how they last switched) were asked whether they would pay each price, in turn, until they said they would probably or definitely not pay that price (or until they reached the maximum price of £10).

- 5.38 Figure 14 presents the simple averages of the price that switchers said they were *definitely* willing to pay (WTP), and the price they were *definitely* or *probably* willing to pay, to use Auto-Switch or GPL.<sup>174</sup> We have presented averages across two different samples:
  - The first two rows present averages calculated across switchers who said they would definitely or probably use the processes, if they were free. In all cases, switchers were willing to pay more for GPL than Auto-Switch.
  - The last two rows present averages calculated across all switchers. As such they reflect the fact that some switchers would not be prepared to pay anything for these processes because they would not take it up if free. Because more people said they would use Auto-Switch than GPL (as set out in paragraph 5.31 above), the differences between WTPs for GPL and Auto-Switch are narrower when based on all switchers. Indeed, in the case of all C&R switchers, average WTPs for Auto-Switch are higher than for GPL.

		Auto-Switch		GPL	
		Definitely pay	Probably pay	Definitely pay	Probably pay
Switchers who said they would use processes	PAC switchers	77p	£1.98	£1.04	£2.53
	C&R switchers	73p	£1.98	90p	£2.26
All switchers	PAC switchers	62p	£1.59	67p	£1.63
	C&R switchers	52p	£1.41	51p	£1.28

#### Figure 14 - Average stated WTP for both options<sup>175</sup>

5.39 The methodology we have used to estimate the aggregate reduction in unnecessary time and hassle, using these WTP estimates, is described in full in Annex 11. In summary, we have adjusted the WTP figures in Figure 14 downwards, to reflect the likelihood that some respondents who said they would use Auto-Switch or GPL may not actually do so and would therefore derive no value from the introduction of Auto-Switch or GPL, even if they have stated a positive WTP for it in our survey.<sup>176</sup> Having derived average WTP figures which are consistent with our adjusted take-up rates,

<sup>175</sup> BDRC 2017 slide 15.

<sup>&</sup>lt;sup>174</sup> I.e. the difference between the values represents the amounts that respondents would probably pay, over and above that which they would definitely pay.

<sup>&</sup>lt;sup>176</sup> In practice, this means applying a weighting to respondents' WTP values, based on how confident they were about taking up the process if it was free. Under our base case, we have taken 80% of the values stated by respondents who said they would definitely use the options when free, and 20% of the values stated by respondents who said they would probably use them. See §A11.11.

we then multiply these adjusted WTP figures (either "definitely pay" or "probably pay") by the number of switchers per year, to calculate the aggregate annual reduction in harm.

- 5.40 Figure 15 below sets out our estimates of the aggregate reduction in harm, under the following scenarios:
  - Our low case estimates are based on the lower bound of our take-up range, and use only what respondents told us they would *definitely* pay. We consider that this is a conservative estimate of the true reduction in harm.
  - For our base case, we have used our base case take-up assumption, but we have presented a range which is determined by the values that respondents told us they would *definitely* pay (at the lower end), and the highest value that respondents told us they would *definitely or probably* pay (at the upper end). We do not consider for our base case that we have an adequate basis to pick any specific figure (either the lower or higher end, or any value in between). However, in Section 6 we present the value within this range that would lead the quantified benefits to be equal to the net industry costs.
  - Our high case estimates are based on the upper bound of our take up range, and use the maximum value that respondents told us they would *definitely or probably* pay.

# Figure 15 - Aggregate reduction in time and unnecessary difficulties for switchers (WTP-based approach)

£ million (10-year NPV)	Auto-Switch (text route)	Auto-Switch (online route)	Auto-Switch (text + online)	GPL
Low case	14.6	1.8	16.4	16.6
Base case	15.3 – 32.7	2.3 – 4.3	17.5 – 37.0	18.1 – 34.9
High case	37.5	5.1	42.5	40.8

- 5.41 We consider that the most likely value as suggested by stated WTP survey data lies within the base case range. In general, we recognise that respondents might have overstated the value they would be willing to pay for our reforms.<sup>177</sup> However, as explained in Annex 11, we consider this is more of a risk in respect of the 'probably pay' values.
- 5.42 Furthermore, the aggregate WTP benefits for Auto-Switch (text + online), as well as the additional WTP benefits for the online route (over and above the text route), are likely to be significantly understated. This is because the Auto-Switch estimates set out in Figure 15 above only capture some of the value that switchers likely place on the online route. For the category of PAC switchers who would use the text route to request PAC but would prefer the online route, our survey was not able to obtain their

<sup>&</sup>lt;sup>177</sup> This is known as hypothetical bias, which refers to the tendency for survey respondents to overstate their actual WTP for a good or service when questioned about a hypothetical scenario.

additional value for the online route, over and above their WTP for the text route.<sup>178</sup> This affected around 55% of PAC switchers who said they would use the text route (equivalent to around 42% of all PAC switchers).<sup>179</sup> It means that the incremental value of the online route (over and above the text route) is based solely on the subgroup of PAC switchers who said they wouldn't use the text route, but would use the online route (equivalent to around 2% of all PAC switchers).<sup>180</sup>

- 5.43 In addition, there are several further reasons why these WTP figures might understate the benefits to switchers that both core process reforms would deliver. These are set out in more detail in paragraph A11.8. In summary:
  - Respondents may have been willing to pay more their stated value but were unable to express this because they could only react to a given set of price points, up to a maximum of £10.
  - Respondents' answers could have been influenced by what they consider reasonable to pay in a market context in which switching is generally free. Around two-thirds of the 27% (21%) of PAC switchers who said they would use Auto-Switch (GPL), but not be prepared to pay anything for it, said this was because they should not (as a point of principle) have to pay for a switching process. It is likely that at least some of these respondents place some positive value on our reforms, which our WTP estimates are not capturing.<sup>181</sup> We also consider it possible that respondents who gave a positive WTP nevertheless allowed their concept of what is reasonable to affect the values they gave.
  - Respondents are unlikely to have fully accounted for the indirect benefits of a new switching process, namely those benefits flowing from gaining providers having better incentives to help consumers understand and navigate the switching process. We consider this applies to both Auto-Switch and GPL, and that it is not clear that GPL provides gaining providers with better incentives in this respect than Auto-Switch.
  - Finally, respondents may have discounted their valuations if they were uncertain about how the process would operate in practice. We consider this is a more significant issue for GPL than for Auto-Switch.

<sup>&</sup>lt;sup>178</sup> The survey was designed with reliability and robustness of data front of mind. We were concerned that asking a respondent for their WTP for three separate options (Auto-Switch text route, Auto-Switch online route, and GPL route) would increase the complexity and length of the survey, which could create a risk of fatigue and lead to dropouts. As such, for a given respondent, the survey only explored their willingness to pay for up to two routes, prioritising Auto-Switch (text route) and GPL. <sup>179</sup> BDRC 2017 slide 53

<sup>&</sup>lt;sup>180</sup> A further implication of this is that we overestimate C&R switchers' WTP for the text-only route. This is because our survey did not directly ask C&R switchers their WTP values for a text-only process, so we cannot directly disaggregate the value that respondents derive from the text-only route, relative to the online route. Instead, we have derived an implied value using the ratio of our WTP estimates for the text-only route and the full Auto-Switch process from PAC switchers. Because this ratio is an understatement of the true ratio, applying this value to C&R switchers will produce an *overestimate* of the value of the text-only route.

<sup>&</sup>lt;sup>181</sup> BDRC 2017 slides 59 and 65. To understand the magnitude of this potential bias, our survey asked these respondents how much they would be willing to accept (WTA) to switch the same way they did last time, rather than through Auto-Switch or GPL. However, analysis of verbatim responses suggests respondents may not have sufficiently understood the question, and so we do not consider these results sufficiently reliable to accurately estimate the magnitude of the bias.

- 5.44 In the round, we think our estimates are more likely to understate than overstate the benefits of the reforms.
- 5.45 Overall, we consider that the WTP evidence supports the conclusion that both Auto-Switch and GPL would deliver significant benefits to switchers. The verbatim responses (see paragraph 5.32) indicate that these benefits principally derive from making the switching process quicker and easier. On the face of it, the WTP evidence suggests that Auto-Switch and GPL might produce a similar scale of benefits for switchers. As noted above, it is possible that uncertainty may have caused some consumers to discount their valuations, particularly in the case of GPL. However, we have no strong basis for concluding that this is a material issue and consequently that GPL would in practice deliver greater benefits to switchers compared with Auto-Switch.
- 5.46 Finally, as explained in paragraphs 4.125 to 4.133, we note that it is possible to limit the scope of an Auto-Switch reform to residential consumers only. Residential tariffs account for around 87% of all mobile connections.<sup>182</sup> This suggests that, if switching rates and WTP for the reforms were broadly comparable across business and residential switchers, our aggregate reduction in harm estimates could be around 13% lower for an Auto-Switch variant which only applied to residential tariffs (i.e. under our base case: between £13.3 million and £28.4 million for the text-only variant, and between £15.3 million and £32.2 million for the text and online variant).

#### Reduction in double-paying amongst C&R switchers

- 5.47 As set out above, the 2017 BDRC research shows that Auto-Switch and GPL would likely be used by a group of existing C&R switchers. This group includes:
  - C&R switchers who would use the process reforms to begin porting their number (i.e. they would become a PAC switcher); and
  - C&R switchers who would use the process reforms to switch without porting their number. This is possible because, as explained in Section 4, our Auto-Switch and GPL proposals create a formal switching process for non-porters, by allowing them to terminate their service with a N-PAC or via their gaining provider.<sup>183</sup>
- 5.48 One implication of introducing Auto-Switch and GPL in conjunction with a prohibition on notice period charges, is that these C&R switchers would be using a formal switching process and would therefore only be charged up to the point that their old service is deactivated by the losing provider. This would allow them to avoid double-payments where they currently incur them, as well as any time, effort and deferral involved in managing double-paying. We consider that these benefits are incremental to the core process reforms because they would not accrue to C&R switchers if we only prohibited notice period charges after the switching date. In other words, they are conditional on the notice period reform being implemented together with Auto-Switch or GPL.<sup>184</sup>

 <sup>&</sup>lt;sup>182</sup> Ofcom Communications Market Report, August 2016, page 159.
 <u>https://www.ofcom.org.uk/research-and-data/cmr/cmr16/the-communications-market-report-uk</u>
 <sup>183</sup> In the case of Auto-Switch this is achieved by handing over a N-PAC and in the case of GPL by

switchers authorising the gaining provider to do this on their behalf. <sup>184</sup> For the reasons set out in §5.4, we are assessing the incremental impact of introducing the

process reforms on top of a proposed prohibition on notice period charges after the date of the switch.

- 5.49 In Annex 9, we have estimated the total reduction in double-paying for C&R switchers who said they would use Auto-Switch or GPL to switch (across those who said they would port their number and those who said they wouldn't keep it). We have done this in broadly the same way as for PAC switchers, though unlike PAC switchers we cannot use actual data to estimate the average contract overlap duration specific to C&R switchers, so we assume that all C&R switchers incur the same average double-paying duration as PAC switchers. On this basis, we estimate that the reduction in double-payments for C&R switchers would be between £15 million and £22 million (10-year NPV) for Auto-Switch, with a base case of £18 million, and between £8 million and £15 million (10-year NPV) for GPL, with a base case of £12 million.<sup>185</sup>
- 5.50 As with our quantified estimates of the reduction in unnecessary time and hassle (see Figure 15), the aggregate reduction in double-paying that could be delivered by an Auto-Switch variant which only applied to residential consumers would be around 13% lower (i.e. between £12 million and £17 million for the text-only variant, with a base case of £15 million, and £13 million to £19 million for the text and online variant, with a base case of £16 million).
- 5.51 We recognise that, in contrast to existing PAC switchers, existing C&R switchers who currently double-pay for two services can use both services concurrently in the period for which they double-pay. However, as set out in Section 3, 68% of C&R switchers who are in contract and who experienced contract overlap, said they did not want it and the most popular reason among the 24% of C&R switchers who said they wanted contract overlap was to ensure a continuous mobile service, rather than being able to use two services concurrently.<sup>186</sup> As such, we have not adjusted our estimates to account for the possibility that some C&R switchers derive benefits from being able to use two services.

#### Reduction in loss of service amongst C&R switchers

5.52 A further implication of creating a formal switching process for non-porters is that their switch will automatically be co-ordinated (i.e. their old service will be deactivated at the point that they redeem their N-PAC, or at the point that their new SIM is activated). When applied in conjunction with notice period reforms, we expect that this would serve to reduce the loss of service that is currently experienced amongst C&R switchers. This is because non-porters will not need to actively coordinate the stop and start of their old and new services so as to avoid contract overlap (which can lead to a break between services). Instead, they can minimise double-paying by redeeming their N-PAC at or before the point that their new service is activated (under Auto-Switch), or by stating their intention to switch when signing with the gaining provider (under GPL).<sup>187</sup>

<sup>&</sup>lt;sup>185</sup> As with our estimates of the reduction in unnecessary time and hassle, the reason why Auto-Switch (text and online) delivers more benefit than Auto-Switch (text-only) and GPL is because more C&R respondents said they would use it (and so avoid double-paying).

<sup>&</sup>lt;sup>186</sup> July 2016 consultation §3.20. A few respondents did provide a reason which suggested they benefited from contract overlap (e.g. "to get used to a new phone", "to make sure I had usable signal") which are included under "Other" in slide 55 of the BDRC research and sum to around 1% of C&R switchers who experienced contract overlap.

<sup>&</sup>lt;sup>187</sup> Absent End-to-end management, C&R switchers who decide to port their number may still experience service disruption while their number is being ported.

#### Benefits to would-be switchers

- 5.53 We are of the view that by reducing barriers to switching, our reforms are likely to generate benefits to mobile users who do not switch under the current switching process if this group of users now *contemplate* switching provider, i.e. if they become would-be switchers as a result of our reforms.
- 5.54 Within the term would-be switchers we include two groups of consumers: active considerers, i.e. mobile users who considered changing provider and actively started looking for one but decided not to change provider in the last 12 months; and inactive consumers, i.e. mobile users who did not consider changing provider or who considered changing provider but did not start looking for one in the last 12 months.
- 5.55 We expect that our reforms will reduce barriers to switching by reducing the time it can take and the unnecessary difficulties that can be involved in switching as well as eliminating double-paying for PAC and some C&R switchers (as discussed in paragraphs 5.8 to 5.15).
- 5.56 In March 2016, we said that, what we then termed Auto-PAC and GPL could address the barriers that prevent some active considerers from switching, therefore creating additional benefits over and above the benefits to switchers.<sup>188</sup> In a similar way, we are now of the view that our reforms<sup>189</sup> are likely to generate benefits to would-be switchers (i.e. including both active considerers and inactive consumers).
- 5.57 Vodafone argued that Ofcom did not account for the cost of some consumers losing out on reactive save offers<sup>190</sup> as a consequence of removing the need to contact the losing provider as part of the switch.<sup>191</sup>
- 5.58 We have taken account of Vodafone's point and have conducted further analysis to understand how our reforms might affect would-be switchers in light of the impact the reforms may have on the incidence and magnitude of save offers. We have conducted this analysis for the package of reforms rather than conducting it on an incremental basis, but where possible we considered how the different reforms might contribute to the overall impact.
- 5.59 We have focused our analysis largely on active considerers because switching costs may have affected their decision to stay with their current provider instead of switching. Some of these consumers stay with their provider because the alternative provider's deal is not attractive enough, potentially due to high perceived switching costs. Others consider switching but accept a better deal from their current provider, and their decision to accept or reject this save offer may also depend on expected switching costs. In both cases, as we show in more detail below, consumers may benefit from a reduction in switching costs as a result of our reforms. The potential for our reforms to benefit inactive consumers (those who have neither switched, nor considered switching in the last 12 months) is discussed further below.

<sup>&</sup>lt;sup>188</sup> March 2016 consultation §6.35

<sup>&</sup>lt;sup>189</sup> By our reforms, we mean prohibiting charging for notice after the switching date plus Auto-Switch; and prohibiting charging for notice after the switching date plus GPL.

<sup>&</sup>lt;sup>190</sup> By the term reactive save offers, we mean circumstances where the losing provider is able to accurately identify customers intending to switch, as a result of information they receive as part of the formal switching process, and to make them a counteroffer not to switch. The term does not refer to counteroffers requested by a consumer who explicitly contacts the losing provider with the purpose of obtaining a better offer. The term "save offers" includes this latter category as well as reactive save. <sup>191</sup> Vodafone response to January 2017 cost update, page 10

- 5.60 <u>Active considerers</u>: There are about 1.9 million active considerers per year.<sup>192</sup> Annex 12 sets out in more detail our view of why material benefits from our package of reforms are likely and that this could apply to more than 1 million of these active considerers. In summary, our key findings are:
  - We continue to expect that a proportion of active considerers would likely benefit from our reforms by switching to a product they prefer, specifically some of those active considerers who have been put off switching because of the process difficulties our reforms aim to address, rather than other reasons.<sup>193</sup>
  - We also consider that a further group of active considerers is likely to benefit from our reforms by receiving a better save offer than the one they receive under the current switching process, without having to switch. We are of the view that providers are likely to improve their save offers because a reduction in switching costs would make a customer's threat of switching more credible and, in turn, increase rivalry between providers as they would have greater incentives to retain customers.<sup>194</sup>
  - We recognise the possibility that a proportion of active considerers could be better off or worse off by potentially missing out on reactive save activity if they switch using our process reforms. Our reforms could make this group of active considerers worse off if the deal they end up switching to (net of switching costs) is worse than the reactive save offer they could have received. On the other hand, they could be better off if they decide to switch and the gains from switching (net of switching costs) are larger than the gains they would have obtained had they spoken to their losing provider and received a reactive save offer.<sup>195,196</sup> Our analysis in Annex 12 suggests that even if this group was indeed made worse off by our reforms, this group is unlikely to be larger than the groups who benefit from the reforms by switching or from receiving a better save offer.
  - A proportion of active considerers is likely to be unaffected by our reforms. This refers to the group of active considerers who stay with their provider for reasons other than a save offer, which would unlikely be addressed by our reforms.<sup>197</sup>
- 5.61 <u>Inactive consumers</u>: Annex 12 also sets out in more detail our view of the potential benefits of the package of reforms to some of the 39 million inactive consumers per year.<sup>198</sup> We are of the view that a small proportion of inactive consumers would be likely to benefit from our reforms by becoming switchers (or actively considering

<sup>&</sup>lt;sup>192</sup> Ofcom Switching Tracker 2015 reported 4% of mobile consumers were classified as 'actively considered but did not switch' – this equates c. 1.9 million mobile consumers.

<sup>&</sup>lt;sup>193</sup> It is difficult to predict how many active considerers would switch as a consequence of our reforms; however, as noted in Figure A12.2, our indicative analysis suggests that this may be between about 3% and 13% of active considerers.

<sup>&</sup>lt;sup>194</sup> Whilst there are difficulties in predicting, as noted in A12.16, our indicative analysis estimates that around half of active considerers (54%) are likely to benefit from a better save offer.

<sup>&</sup>lt;sup>195</sup> With lower switching costs, the price offered by a gaining provider could be lower than the offer the losing provider would originally have made absent the reforms.

<sup>&</sup>lt;sup>196</sup> It is difficult to predict how many active considerers would be in this group; however, as noted in A12.16, in our base case scenario our indicative analysis suggests this group could be about 7% of active considerers.

<sup>&</sup>lt;sup>197</sup> It is difficult to predict how many active considerers would be in this group; however, as noted in A12.9, in our base case scenario our indicative analysis indicates this group could be about 36% of active considerers.

<sup>&</sup>lt;sup>198</sup> Ofcom Switching Tracker data 2015.

switching and then receiving a reactive save offer).<sup>199</sup> Although the proportion to benefit is small, because there are so many inactive consumers, this benefit could still apply to more than 1 million consumers per year.

5.62 On balance, and based on indicative analysis, we consider that our reforms are likely to deliver material benefits to would-be switchers. We have set out above our indicative estimates of the number of consumers that could benefit. However, given the inherent difficulties, we have not attempted to estimate the monetary size of this benefit.

#### **Competition benefits**

- 5.63 We continue to expect that our process reforms, by removing unnecessary difficulties and thus by making switching easier and faster, could deliver additional benefits flowing from increased rivalry between providers. We consider that this increased competition would benefit consumers by way of lower prices, higher quality of service and increased innovation.<sup>200</sup>
- 5.64 When switching is easier and can be done faster, smaller price differences can persuade more consumers to switch (or to consider switching). This can strengthen providers' incentives to compete on prices: new customers can be attracted by offering smaller price gains, while retaining customers requires setting prices closer to the best prices available in the market.
- 5.65 The same rationale applies to quality of service and innovation providers' incentives to compete on quality of service and innovation can be stronger when switching is easier and faster. Providers might anticipate that smaller differences in quality of service and innovation could have a greater impact offering good quality of service and innovation could make it easier to attract more new customers (to the extent that consumers are aware of quality of service information and select a provider on this basis), while the risk of losing existing customers due to poor quality of service and innovation could be greater.
- 5.66 We have not attempted to quantify dynamic benefits as these are difficult to estimate with any degree of precision, but we consider that these benefits could be of a material scale. This is because they relate to a large base and, as discussed above, we consider that the core process reforms would make switching easier and faster.
- 5.67 We have previously expressed the view that GPL, by making switching easier and faster, would deliver greater benefits to considerers and by way of competition than Auto-Switch. We continue to believe that GPL has some advantages in this respect, in particular by removing the need for a PAC altogether, which might make GPL simpler for switchers than Auto-Switch. However, as set out in paragraph 5.45, we do not consider that our latest evidence on switchers' take-up rates and WTP for the process reforms presents a strong basis for concluding that GPL would in practice deliver greater benefits to switchers compared with Auto-Switch.

<sup>&</sup>lt;sup>199</sup> It is more difficult to predict how many people would be in this group, because their lack of engagement in the market means they may not have responded to the consumer research on an informed basis. However, taking a conservative approach to the available evidence, as noted in A12.28-29, we estimate this group could refer to between 3-5% of inactive consumers. <sup>200</sup> March 2016 consultation, §6.37 to §6.45.

#### **Revised assessment of implementation costs**

#### Setup and ongoing costs

- 5.68 In March 2016, we estimated that the setup and ongoing costs that mobile providers would incur to implement our proposals (over ten years) was £47.8 million for Auto-PAC and £47.1 million for GPL.<sup>201</sup>
- 5.69 Since March 2016, we have refined our estimate of gross setup and operating costs. Over the autumn of 2016 we discussed our estimates of costs with the mobile industry. We then published a cost update in January 2017, setting out our revised view of costs.<sup>202</sup> Our latest view of the gross implementation costs takes stakeholder comments on this note into account.
- 5.70 We have set out the changes to our cost estimates, since March 2016, in detail in Annex 8. In summary:
  - Under both options, we now assume that a much larger number of small MVNOs will be covered by our proposals. All other things equal, this increases the total industry cost of implementing either option. However, we also assume that MNOs as well as Mobile Virtual Network Enablers (MVNEs) would undertake a significant amount of the development of new functionality, on behalf of their MVNOs, such that smaller providers do not need to significantly alter their own back-office IT systems to comply. This includes the generation of real-time switching information on ETCs and outstanding handset liabilities.
  - Both options include employee training costs. Most training costs relate to training customer service agents in how their role will be affected by the introduction of a new switching process.
  - As set out in Section 4, our Auto-Switch proposal no longer requires the CPS to make changes, or develop a complete central ported number database. This is because we now assume that switchers will text their losing provider directly for their PAC, rather than the CPS. We estimate that this saves around £23 million in costs (over ten years), relative to a CPS-based Auto-Switch variant, and also relative to GPL, which still requires this CPS functionality. This is the main reason for the difference in cost between the two reform options.
  - The cost of our GPL proposal has also increased to reflect the additional functionality required to: i) keep open an order while waiting for the consumer's CLI to be validated; and iii) develop a "backstop route" for consumers who are unable to make or receive texts from the CLI that they want to port. We have also added costs for mobile providers to decommission their existing PAC processes.
- 5.71 Having adjusted for these changes, we estimate that:
  - The estimated gross cost of implementing full Auto-Switch for residential and business tariffs (10-year NPC) is £62 million, with a range of £51 million to £72 million to reflect a change in estimated setup costs of +/- 20%.

<sup>&</sup>lt;sup>201</sup> March 2016 consultation, Figure 10

<sup>&</sup>lt;sup>202</sup> <u>https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0033/97179/Consumer-switching-Proposals-to-reform-switching-of-mobile-communications-services-Revised-cost-estimates.pdf</u>

- The estimated gross implementation cost of the text-only Auto-Switch variant for residential-only tariffs is around £23 million less, at £38 million (with a range of £32 million to £45 million). This is because providers do not need to incur the implementation costs of an online PAC request route, while business-only providers do not need to incur any implementation costs.<sup>203</sup> The gross implementation cost of full Auto-Switch for residential-only tariffs is around £54 million (with a range of £45 million to £63 million).
- The estimated gross cost of implementing GPL is £94 million (with a range of £79 million to £109 million).

#### Cost savings

- 5.72 In our March 2016 consultation, we assumed that providers would also enjoy some costs savings under each option. This was on the basis that automating the switching process means fewer of their customers wishing to switch are likely to contact them to ask for a PAC or terminate their contract, so losing providers require fewer customer service agents.<sup>204</sup>
- 5.73 O2 and Virgin Media disagreed that our options would result in any cost savings.
  - Virgin Media said that some customer service agents who currently support PAC requests may need to be redeployed in outbound and pro-active customer service roles, and that the number of staff required to offer an equivalent quality of service will need to rise, as agents spend more time attempting to contact customers rather than awaiting inbound calls.<sup>205</sup>
  - O2 said that, under GPL, providers would transfer current inbound retention agents to outbound retention and acquisition activity, and that the net impact would be an increase in resource requirements.<sup>206</sup>
- 5.74 We recognise that providers may choose to make more pro-active retention calls, either before consumers terminate their contract or after providers receive a PAC request / switching information request (or both), under Auto-Switch or GPL. However, we remain of the view that this is not a direct consequence of our reforms. To the extent that providers choose not to realise the savings that automatically flow from our reforms, then this is a commercial decision, not the necessary result of our reforms. In addition, we would expect providers to make such a commercial decision if they expect it to be incrementally profitable. As such, we would not expect it to represent a net cost to these providers.
- 5.75 As a result, we continue to take account of providers' cost savings in our estimates of net industry cost. Based on our assumptions about the number of avoided contacts per year, the time saved per call (which includes "wrap time"), and average customer service agent salaries,<sup>207</sup> we estimate that providers will save £18 million under Auto-

<sup>&</sup>lt;sup>203</sup> We assume there are 232 small MVNOs, of which 163 only offer business tariffs.

<sup>&</sup>lt;sup>204</sup> March 2016 consultation §6.47

<sup>&</sup>lt;sup>205</sup> Virgin Media response to March 2016 consultation, page 21

<sup>&</sup>lt;sup>206</sup> O2 response to March 2016 consultation, page 14

<sup>&</sup>lt;sup>207</sup> We set out these assumptions in Annex 8. "Wrap time" refers to the time spent by the customer service agent after the PAC request or termination call has finished, which would also be saved.

Switch (with a range of £15 million to £21 million),<sup>208</sup> and £7 million under GPL (with a range of £5 million to £9 million). The cost saving under GPL is lower because there are fewer calls saved, and also because the time saved per call by the losing provider is offset to some extent by additional interaction time on the gaining provider side.

#### Net implementation cost

- 5.76 The total impact of our process reforms on mobile providers is the total setup and ongoing cost, net of provider cost savings. Under the assumptions described above, we estimate the net cost of Auto-Switch to be around £44 million under our base case (with a range of between £30 million to £57 million).
- 5.77 The estimated net cost of the text-only Auto-Switch variant for residential tariffs is £24 million (with a range of £16 million to £33 million), and the net cost of the Auto-Switch text and online variant for residential tariffs is £39 million (with a range of £27 million to £50 million).
- 5.78 The net cost of GPL is estimated to be materially higher at £87 million under our base case (with a range of £70 million to £104 million).

#### Protection against unwanted ETCs

- 5.79 Several stakeholders, including Virgin Media, said that that we have not properly quantified the cost to consumers and providers of switchers not learning in good time about the implications of switching.<sup>209</sup> Stakeholders said this would lead to an increase in unwanted switches and/or cancelled orders under Auto-Switch and GPL.
- 5.80 We have explained in Section 4 that in designing both options we were mindful to ensure that switchers would receive sufficient information to take informed switching decisions. Here, we set out why we consider that Auto-Switch and GPL, by ensuring that sufficient ETC information is provided to consumers as part of the switching process, would unlikely lead to a worsening of protection against unwanted ETCs relative to the status quo.
- 5.81 Under Auto-Switch, providers would be obliged to provide ETC information when responding to PAC requests.<sup>210</sup> Furthermore, consumers would also have access to an online route to inform themselves of their ETCs at any point before or during the switching process.<sup>211</sup> This means that switchers would obtain the same ETC information, but via a different means, when requesting a PAC or N-PAC via text or online. We therefore expect Auto-Switch to offer similar protection against unwanted ETCs as the status quo.
- 5.82 Under GPL, gaining providers must arrange for consumers to be provided with ETC information before they can sign with them. Consumers must respond to confirm they

<sup>&</sup>lt;sup>208</sup> Cost savings would be slightly lower under the Auto-Switch text-only variant for residential tariffs (around £12 million, with a range of £14 million to £17 million) and the Auto-Switch text and online variant for residential tariffs (£15 million, with a range of £13 million to £18 million), as fewer calls to the losing provider would be saved.

<sup>&</sup>lt;sup>209</sup> Virgin Media response to March 2016 Consultation, page 14

<sup>&</sup>lt;sup>210</sup> While we understand that most operators provide ETC information in responses to PAC requests in the status quo, they are not under a formal obligation to do so.

<sup>&</sup>lt;sup>211</sup> See §4.52 for a discussion of the benefits associated with the online route of obtaining ETC information.

have received the text containing the ETC information. Consequently, we expect GPL would offer protection against unwanted ETCs that is at least as good as that under the status quo (and under Auto-Switch).

- 5.83 We recognise that GPL could offer better protection against unwanted ETCs for consumers who currently sign up with a gaining provider before requesting their PAC. In principle, this group of people are at greater risk of unwanted ETCs under Auto-Switch or the status quo because they do not necessarily receive ETC information before switching, whereas they would do so under GPL. On the other hand, survey evidence indicates that this group has similar levels of awareness as those that currently request their PAC before signing up with the gaining provider.<sup>212</sup>
- 5.84 As a result, while we recognise that GPL in principle could offer better protection against unwanted ETCs than Auto-Switch, there is limited evidence that any advantage that GPL may have over Auto-Switch in this regard is significant in practice. While we have not attempted to quantify this impact, we account for it in assessing which option would most proportionately address the harm identified.

### Summary of the benefits and costs of our core process reforms

5.85 Figure 16 summarises our revised assessment of the benefits and costs of Auto-Switch and GPL.

Group	Impact	Auto-Switch	GPL
time and	Reduction in unnecessary time and difficulties progressing the switch	Removes need to speak to losing provider to port / terminate C&R switchers who want to port number do so Worth between £16 million and £43 million over ten years (NPV, WTP-based estimate)	Removes need to speak to losing provider to port / terminate C&R switchers who want to port number do so Worth between £17 million and £41 million over ten years (NPV, WTP-based estimate)
Benefits to switchers	Reduction in double- paying by C&R switchers	Reduction of between £15 million and £22 million over ten years (NPV)	Reduction of between £8 million and £15 million over ten years (NPV)
	Reduction in loss of service for C&R switchers	Enables coordination of stop and start of old and new services without risk of contract overlap	

#### Figure 16 - Summary of the benefits and costs of Auto-Switch and GPL

<sup>&</sup>lt;sup>212</sup> Data from the BDRC 2017 research indicates that the proportion of PAC switchers giving notice within their minimum contract period (and potentially incurring an ETC) is very similar for those signing with their gaining provider first (27%), as for those requesting their PAC before signing with their gaining provider (28%) – though we do not know what proportion of these ETCs were unwanted.

Benefits to would-be switchers	Gains from switching Improved save offer	Gains from switching for considerers who have been put off switching because of process difficulties our reforms are likely to address Improved save offer for considerers who continue to stay with their provider because of a save offer Gains from switching or improved save offer for inactive consumers who are inactive because of process difficulties our reforms are likely to address		
Competition benefits	Benefits flowing from increased competition between mobile providers	Scope for such benefits could potentially be significant Scale of benefits increases with the extent to which our process reforms make switching easier and faster		
Costs to industry	Net Implementation costs	£44 million over ten years (NPC)	£87 million over ten years (NPC)	
Potential costs to switchers	Protection against unwanted ETCs	Similar protection as in the status quo	Better protection than status quo in theory, though survey evidence suggests this difference is unlikely material in reality	
Potential costs to would-be switchers	Foregone save offers	Potential cost for considers wi smaller gains than the gains for save offer		

# **End-to-end management**

#### Position in the March 2016 consultation

- 5.86 In our March 2016 consultation, we proposed requiring End-to-end management of the switch, including that losing providers must not deactivate a SIM until the gaining provider has activated the new SIM (i.e. a Make-before-break approach). We estimated that:
  - The net industry cost of this reform ranged from £13 million to £29 million (depending on the extent to which it would allow operators to make additional back-office staff cost savings).
  - The quantified benefit was between £6.9 million and £9.5 million if implemented with Auto-PAC, and £8.7 million to £12.0 million if implemented with GPL.<sup>213</sup> In both cases, a large part of the benefit (£5.5 million) related to reduced loss of service. The other portion of the quantified benefit reflected our view that implementing End-to-end management alongside Auto-PAC or GPL would enable people who do not want to port their number ('non-porters') to use a formal switching process, thereby deriving time saving and double-paying benefits.

<sup>&</sup>lt;sup>213</sup> March 2016 consultation, Figure 11

- 5.87 At the time, we said that End-to-end management would also deliver important nonquantified benefits for would-be switchers (for whom concerns about losing service is currently a key deterrent to switching), and, by delivering a single unified service which works for porters and non-porters alike, make it easier for everyone to understand the switching process.
- 5.88 We recognised that the costs of End-to-end management outweighed the quantified benefits. However, taking the quantified and non-quantified benefits together, our view was that End-to-end management was a proportionate reform.<sup>214</sup>

#### **Responses to the March 2016 consultation**

- 5.89 In relation to our impact assessment:
  - O2 said that Make-before-break appears to require a fundamental change to the inter-operator mechanism which currently operates on file transfers between operator systems. It said that it welcomed further discussions with Ofcom, but was concerned that this reform could have significant impacts on operational activity for operators, increasing complexity and cost.<sup>215</sup>
  - Vodafone argued that the cost of Make-before-break was disproportionate to the benefits it would deliver. Vodafone questioned our basis for the operator cost savings that could be delivered. It also questioned the reliability of the survey data upon which we derived our quantified estimate of the reduction in loss of service. Overall, Vodafone said that "there is a strong risk that the costs of implementation of the end-to-end process overlay have been understated, and good indications that the benefits, where they can be assessed at all have been overstated." Vodafone concluded there could be no possible grounds for Ofcom to continue to advance this proposed reform without significant further development, robust costing, and the obtaining of good evidence of likely benefits.<sup>216</sup>
- 5.90 Finally, both BT/EE and Vodafone highlighted that there is already a forum which exists to address operational and technical issues with the porting process (the Mobile Number Portability Operator Steering Group, or OSG). BT/EE proposed that the file transfer issues that cause loss of service should be addressed through the OSG with Ofcom's support, while Vodafone said that the coordination of the stop and start timings for the consumer's old and new service should be agreed by industry and not discussed as part of this consultation.<sup>217</sup>

#### **Revised assessment**

5.91 We have revisited our assessment of the overall impact of End-to-end management on consumers and mobile providers, in light of stakeholder responses and further refinements to our process specifications (i.e. we no longer consider End-to-end management as the way to create a formal switching process for non-porters). As set out in Section 4, we also note that there are industry initiatives to address loss of

<sup>&</sup>lt;sup>214</sup> March 2016 consultation §6.67

<sup>&</sup>lt;sup>215</sup> O2 response to March 2016 consultation, page 31

<sup>&</sup>lt;sup>216</sup> Vodafone response to March 2016 consultation, pages 66-74

<sup>&</sup>lt;sup>217</sup> BT/EE response to March 2016 consultation, page 16. Vodafone response to March 2016 consultation, page 23

service, but here we assess the impact of the regulatory proposal we are considering.

#### Benefits to switchers

- 5.92 In our March 2016 consultation, we said that this reform would have two major quantified benefits: (i) addressing loss of service amongst PAC and C&R switchers; and (ii) allowing us to introduce a formal switching process for non-porters that avoids the need to speak to the losing provider when cancelling. For the reasons explained in Section 4, we now consider that (ii) can be achieved as part of Auto-Switch and GPL without needing End-to-end management. As such the (quantified and non-quantified) benefits to non-porters of using a formal switching process are better captured as part of the benefits of introducing Auto-Switch / GPL.
- 5.93 In March 2016, we estimated that the total harm related to loss of service that would be addressed by End-to-end management is around **£5.5m** (10-year NPV). This was based on survey data showing that 22% of PAC switchers and 14% of C&R switchers experienced a loss of service, lasting an average of 0.45 and 0.58 days respectively; we assumed that End-to-end management would reduce this to zero. We recognised that we had relatively little information on the value that consumers place on loss of service,<sup>218</sup> so we assumed consumers would be willing to pay up to twice their daily expenditure on mobile services (which is 74p per day, so £1.48 in total).
- 5.94 We have since reassessed our estimate of the quantified reduction in harm that Endto-end management could deliver by way of reduced loss of service:
  - Firstly, we have obtained more recent survey data on the reported incidence of loss of service.<sup>219</sup> This data is broadly consistent with our previous research, as it shows that 26% of PAC switchers and 11% of C&R switchers reported experiencing a period of loss of service. On its own, this would imply a 7% increase in our March 2016 estimate to £5.9 million.
  - Secondly, our estimate captures benefits from addressing the loss of service experienced by C&R switchers. We now consider that End-to-end management is only capable of addressing loss of service amongst PAC switchers that relates to the porting process.<sup>220</sup> Excluding loss of service experienced by C&R switchers reduces the estimated reduction in harm to around £5.3 million.
  - Thirdly, we have reconsidered our estimate of the value of harm arising from loss
    of service during switching. We did not have direct estimates of this value for our
    March 2016 consultation, so we assumed that on average consumers value their
    mobile service at twice the current price. Updating this methodology using more
    accurate data from mobile providers on average daily mobile expenditure (64p

<sup>&</sup>lt;sup>218</sup> March 2016 consultation §A7.65

<sup>&</sup>lt;sup>219</sup> BDRC 2016 omnibus research.

<sup>&</sup>lt;sup>220</sup> As explained in §5.52, C&R switchers using the formal switching process but not porting their number should experience minimal loss of service without End-to-end management, as their old service would only be deactivated after their new SIM is activated. However, C&R switchers who become PAC switchers may benefit from reduced loss of service under End-to-end management, as their switch would involve a number port. We have incorporate this into our revised assessment of the reduction in harm, using data from the BDRC 2017 research on the proportion of C&R switchers that would take-up Auto-Switch / GPL and keep their number.

per day) implies a slightly lower value of harm per day of £1.28,<sup>221</sup> which would reduce the total estimated reduction in harm to around £4.6 million. However, we recognise that this methodology is a simplification and the true value could be higher or lower.<sup>222</sup>

5.95 Furthermore, as O2 have pointed out, we note that some loss of service would persist while the consumer switches their old and new SIMs over. While this is likely to be very short, it means that End-to-end management would not eliminate loss of service entirely.<sup>223</sup>

#### Implementation costs

- 5.96 We have also revised our estimate of the net industry cost of End-to-end management, to reflect our revised view of the mobile value chain, changes to assumptions about the cost of development and support, and a change to our discounting methodology.<sup>224</sup> Under our base case, the upper bound of our cost estimate (i.e. gross of any back-office cost savings) has increased from £29 million to £41 million.
- 5.97 While we have received limited additional information about the precise cost of this reform, discussions with one operator [ $\approx$ ] suggested that the process would require them to undertake fundamental systems changes, at a very high cost. This suggests that the gross cost could be higher still.

#### Summary and revised position

- 5.98 Overall, we consider that there is considerable uncertainty around the quantified consumer benefits and industry costs of introducing End-to-end management. Indicative estimates suggest the quantified benefit of this reform could be around £4.5 million, though this could overstate or significantly understate the true benefits. Furthermore, while we continue to believe that there would be non-quantified benefits from introducing End-to-end management, these are also likely to be smaller than we previously considered (particularly given that it is no longer necessary to deliver a single unified service which works for porters and non-porters alike). The gross implementation cost of End-to-end management is likely to be higher than we estimated in March 2016 (£41 million compared to £29 million), though we still consider there is potential scope for delivering back-office cost savings.
- 5.99 As explained in paragraph 5.91, we have not assessed the impact of industry commitments to address loss of service in the section. However, in Section 6, we consider the effectiveness of both industry commitments and End-to-end management (in light of the above assessment) as ways to address the issues identified with loss of service.

<sup>&</sup>lt;sup>221</sup> This is a subscriber-weighted average of the in-bundle spend for post-pay mobile customers inside and outside of their MCP, for Q2 2016.

<sup>&</sup>lt;sup>222</sup> We have since considered the harm arising from mobile loss of service as part of our Automatic Compensation project. While we did not carry out a full exercise to estimate average harm from loss of service, we considered that it is likely to be of a similar scale to our estimate for fixed loss of service (£10 per day). This could imply a higher value of the harm to switchers who experienced service disruption during the switch.

<sup>&</sup>lt;sup>223</sup> O2 response to March 2016 consultation, footnote 38

<sup>&</sup>lt;sup>224</sup> See §4.7 of the January 2017 cost update, and Annex 8 of this consultation (for discussion of our discounting methodology).

# **Transparency requirements**

- 5.100 In March 2016, we proposed a requirement on providers to provide consumers with clear guidance on the switching and porting process to help ensure that they are better informed. We received no major comments on this proposal in response to our consultation, and so it continues to form part of our package of reforms for consideration.
- 5.101 In March 2016, we estimated that the net industry cost of producing, maintain and updating the necessary marketing material to comply with this reform would be around £5.3 million over ten years. As set out in paragraphs A8.72 A8.75, we have revised our cost estimate to reflect our updated view about the number of providers who would be required to make changes. We also now assume that providers would only need to incur one-off costs to comply with this requirement, as we consider the incremental costs of maintaining this material (over and above the cost of existing updates and refreshes) would be negligible. Based on these changes, we estimate that the net cost would be around £0.9 million.
- 5.102 On the benefits side, we do not have a reliable quantifiable estimate of the reduction in harm related to improved consumer understanding. However, we continue to believe that one benefit of this reform is likely to be greater take-up of our proposals.

# **Overall Summary**

- 5.103 Based on the assessments set out in this section, we now estimate that:
  - The quantified benefits of prohibiting charging for notice periods beyond the switching date are around £69 million in reduced unwanted double-payments for PAC switchers, while the costs that industry would incur to implement this policy are around £9 million.
  - The quantified benefits of implementing full Auto-Switch for residential and business customers, by way of i) reduced unnecessary time and difficulties and ii) reduced double-paying for C&R switchers, are between £31 million and £64 million (though we consider that the quantified benefits of reduced unnecessary time and difficulties, as estimated using WTP evidence, are likely to understate the true benefits). The net cost to industry is between £30 million and £57 million, with a base case of £44 million.
  - The quantified benefits of implementing GPL, by way of i) reduced unnecessary time and difficulties and ii) reduced double-paying for C&R switchers, are between £25 million and £56 million (again, we consider that the quantified benefits of reduced unnecessary time and difficulties are likely to be understated). The net cost to industry is between £70 million and £104 million, with a base case of £87 million.
  - The quantified benefits of End-to-end management could be around £4.5 million, while the cost to industry (gross of any cost savings) is around £41 million, though we consider there is significant uncertainty about both these estimates.
  - The industry cost of improving consumer guidance about the switching process is around £0.9 million.

- 5.104 In addition to the benefits that we have been able to quantify, we consider that there are significant non-quantified benefits associated with implementing these reforms:
  - A reduction in loss of service for C&R switchers who can more easily coordinate the stop and start of their old and new services.
  - Benefits to would-be switchers by way of gains from switching, for those who would switch, and improved save offers for those who remain with their existing provider (though there is a risk that some would-be switchers may be made worse off by missing out on a save offer).
  - Benefits flowing from increased competition between mobile providers, by way of lower prices, higher quality of service, and increased innovation.
- 5.105 In the next section, we consider the implications of this assessment for our policy decision.

# **Consultation question**

Q4: Do you agree with our assessment of the likely impacts that we have presented of each of the options for reform:

- Prohibiting charging for notice after the switching date;
- Auto-Switch;
- GPL;
- End-to-end management; and
- Transparency requirements?

# **Section 6**

# Updated conclusions on the options for reform

- 6.1 In Section 5 we set out the impacts that each of our options for reform would have on switchers, consumers and industry. This section sets out our updated conclusions on our preferred options for reform.
- 6.2 In summary, our updated conclusions are that our preferred option for reform comprises a requirement to offer an Auto-Switch process, a prohibition on notice period charges beyond the switching date, and a requirement to provide transparent consumer guidance about the switching process. We consider that our objectives in respect of loss of service are best addressed at this time through voluntary industry improvements to the porting execution process, rather than through a requirement to introduce End-to-end management of the switch (although we will keep this under review). We consider that this proposed package of reforms would be effective in achieving our policy objectives, in the least onerous way, and that as such it is appropriate and proportionate.

# Assessing the proportionality of our proposals

- 6.3 Under our regulatory principles we operate with a bias against intervention, which is derived from our duty in section 3(3) of the Act to have regard to the principles under which regulatory activities should be (amongst other things) proportionate and targeted only at cases in which action is needed.
- 6.4 In assessing proportionality, we consider:
  - whether a potential measure is an effective means of achieving our policy objectives;
  - whether the potential measure is necessary to achieve those objectives, or whether those objectives could be achieved by a less onerous approach; and
  - whether the potential measure is, in the round, disproportionate (i.e. whether the burden imposed is disproportionate to the benefits secured).

#### Effective means of achieving our objectives

- 6.5 As set out in Section 2, our regulatory policy objective is to ensure that switching processes do not create unnecessary difficulties or deterrents for consumers when switching mobile provider. Removing difficulties or deterrents that give rise to consumer harm should allow for a switching process that is quick, simple, convenient to use and easily understood.
- 6.6 To achieve this, we are considering reforms to:
  - reduce the risk of 'double paying' as a consequence of any need to pay notice period charges when switching;

- reduce unnecessary time and difficulties involved in progressing a switch, in particular by removing the need for the consumer to speak to the losing provider before switching; and
- protect against the loss of service that can arise when switching and porting numbers.
- 6.7 In fulfilling our objectives, we are also aiming to ensure that consumers remain well informed about the implications of switching, and protected against unauthorised switching.
- 6.8 We think it is appropriate to seek to ensure that our reforms are available to all mobile consumers regardless of:
  - whether they wish to port their number or not;
  - whether they are seeking to port a single number, or multiple numbers (or switch a single account or multiple accounts in cases where they do not want to port their number);<sup>225</sup> and
  - whether they are residential or business customers.
- 6.9 Our updated assessment, as set out in Section 5, is that both Auto-Switch and GPL, combined with reform on notice periods and reform to address loss of service, would be effective in achieving the policy objectives described above for the groups of mobile consumers we are seeking to protect. Specifically:
  - Both Auto-Switch and GPL would allow consumers to switch their mobile service (whether they wish to transfer their number or not) without having to speak to their losing provider and allow for the switch to occur with a single contact with the gaining provider.
  - Both Auto-Switch and GPL provide for multiple ports/switches of less than 25 numbers.<sup>226</sup> They are also both available to residential and business customers.
  - When combined with our proposal to prohibit charging for notice after the switching date, both reforms would remove the risk of double-paying for switchers using these formal switching processes<sup>227</sup> and address loss of service that can arise due to co-ordination difficulties.<sup>228</sup>
  - Finally, when combined with End-to-end management or a set of voluntary commitments to address loss of service, both reforms could offer greater protection against the loss of service that can occur when number porting.
- 6.10 Furthermore, we believe that both reform packages would achieve these aims without leaving consumers less informed about the implications of switching (for the

<sup>&</sup>lt;sup>225</sup> For fewer than 25 ports or switches.

<sup>&</sup>lt;sup>226</sup> In the case of Auto-Switch, this is achieved through the inclusion of an online route.

 <sup>&</sup>lt;sup>227</sup> 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.
 <sup>228</sup> Prohibiting charging for notice after the date of switch will help reduce loss of service. We know

some C&R switchers struggled with the task of co-ordinating a switch to avoid double payments and incurred service loss as a result. We note this will not address technical service loss.

reasons explained in paragraphs 5.79 to 5.84) or leaving them exposed to a materially greater risk of unauthorised switching (for the reasons explained in paragraphs 4.112 to 4.124).

- 6.11 It would be possible to implement Auto-Switch or GPL without notice period reform, or indeed to implement just notice period reform, and that the same applies to reform designed to address loss of service. Our analysis suggests that to achieve our objectives effectively, a combination of process reform (Auto-Switch or GPL), notice period reform and reform to address loss of service is necessary. The likely benefits and costs of each of the reforms alone are set out in Section 5.
- 6.12 Having provisionally concluded that these reforms could effectively achieve our objectives, we go on to consider which are the least onerous options.

#### Which of Auto-Switch and GPL is the least onerous way of achieving our objectives?

- 6.13 As set out above, we remain of the view that Auto-Switch and GPL would both be effective at addressing the harm we have identified that arises from the unnecessary time and difficulties consumers experience when progressing a switch. This is because both options remove the need to speak to the losing provider to switch provider. When combined with our notice period reforms, they are also both effective at addressing the risk of double-paying for switchers using these formal switching processes.
- 6.14 Set against this, however, our latest cost estimates suggest that Auto-Switch would be around £43 million cheaper to implement in net terms over ten years, compared to GPL. We recognise that quantifying the cost difference is subject to a degree of uncertainty, however we are confident that GPL will be more expensive because it is a fundamentally more extensive change to the switching process requiring more changes to existing processes than Auto-Switch.
- 6.15 We therefore consider that Auto-Switch is likely to be a more proportionate means of achieving our objectives than GPL on the basis that it is capable of addressing the harms we have identified in respect of unnecessary time and difficulties progressing a switch, but at a significantly lower cost. It is in our view therefore, the least onerous option that is effective to achieve our objectives in this regard.
- 6.16 In arriving at this view, we acknowledge that many stakeholders who supported reform also prefer GPL. However, the evidence suggests Auto-Switch may perform as well or almost as well as GPL in respect of addressing the harms we have identified, and at significantly lower cost. Importantly, in effect it also moves the process away from a losing provider led process because switchers would have control over receiving an automatically provided PAC/N-PAC via a simple text or through their online account, without needing to discuss the switch with their losing provider.

#### Assessment of individual elements of proposed Auto-Switch reform

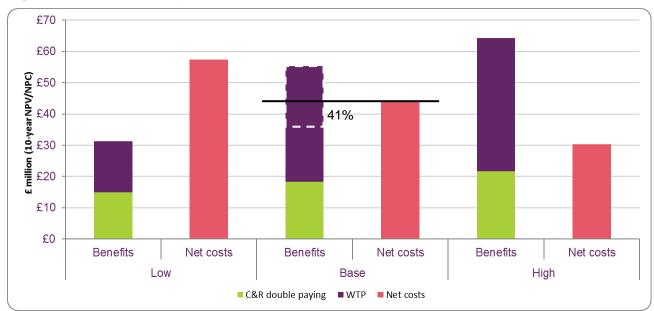
6.17 Having concluded that Auto-Switch is the least onerous of our two proposed process reforms, we have set out below a summary of our consideration of the main individual elements of the Auto-Switch proposals. This is based on our assessment in Section 5, and ensures that they are each a necessary and proportionate means of achieving our objectives.

- 6.18 We have first assessed Auto-Switch in full, i.e. including all the elements described in Section 4. We have then considered the individual elements of Auto-Switch, taking into account how our policy objectives would be achieved by each of the individual elements for the respective types of switchers, namely:
  - Mandating the introduction of a text route via which residential consumers can request a PAC (for those porting their number) or an N-PAC (for those not porting). This provides for single number switchers to switch (whether or not they want to port their number) without needing to speak with the losing provider.
  - Mandating the introduction of an online route via which residential consumers can request a PAC or an N-PAC. This provides for multiple number switchers to switch (and if they want to, port) without needing to speak with the losing provider. It also provides an additional route for single number switchers to use to request PAC.
  - Extending the Auto-Switch (text and online) requirement to business customers.
- 6.19 We then go on to consider Auto-Switch and notice period reforms together.

#### Auto-Switch

- 6.20 Figure 17 summarises our quantified assessment of the impacts of implementing Auto-Switch (drawing on the assessments of WTP evidence, double-paying for C&R switchers, and net implementation costs that we set out in Section 5).
- 6.21 As explained in paragraph 5.40, under our base case we have presented a range for the WTP-based benefits that could be delivered by Auto-Switch. This range is determined by the values that respondents in the 2017 BDRC research told us they would *definitely* pay (at the lower end), and the values they said they would *definitely* or probably pay (at the upper end). As set out in Figure A11.5, the average value that PAC and C&R switchers would definitely pay (adjusted to reflect our best view of likely take-up of Auto-Switch) is 40p, while the average price that PAC and C&R switchers would definitely pay is 84p. In other words, including the price that switchers would probably pay for Auto-switch increases the average adjusted WTP by 44p.
- 6.22 Under our base case, the net costs fall within our plausible range of quantified benefits. We do not consider for our base case that we have an adequate basis to pick any specific figure for the quantified benefits (either the lower or higher end, or any value in between). As a result, we have considered the value within this range that would lead the quantified benefits to be equal to the net industry costs, along with the implied proportion of respondents' "probably" values that this value is based upon. This is shown in Figure 17 below.
- 6.23 We have considered whether the benefits are likely to exceed the net costs. In our view this is likely, given that:
  - taking account only of quantified benefits, the average WTP value per switcher that would be necessary for this to occur (i.e. 58p per switcher) corresponds to only 41% of the "probably" pay amount (on top of the "definitely" pay amount);
  - the WTP evidence is itself likely to understate benefits (for the reasons given in paragraphs 5.42 to 5.43); and

- in our view, Auto-Switch would also deliver many important and significant nonquantified benefits, particularly to would-be switchers and consumers more generally, as explained in Section 5.
- 6.24 We note that, if the gross setup costs were 20% higher than our base case estimate, the net costs would still lie within our base case range for quantified benefits, though around 96% of the value that switchers would "probably pay" would be needed (on top of the "definitely pay" amount) for quantified benefits to exceed net costs. In addition, the second and third points above about likely understatement of quantified benefits and important non-quantified benefits would still apply.
- 6.25 Under our low case (which is based on the upper bound of our gross setup cost range, the lower bound of our take-up range, and only takes account of respondents' definitely WTP values), the total quantified benefits are around £26 million lower than the implementation costs. However, this does not take into account the likely understatement of quantified benefits, or the non-quantified benefits which we have identified.
- 6.26 Under our high case (which is based on the lower bound of our gross setup cost range, the upper bound of our take-up range, and takes full account of respondents' probably WTP values), the total quantified benefits are around £34 million higher than the implementation costs.



#### Figure 17 - Incremental quantified benefits and costs of Auto-Switch

The dotted white box in the base case net benefits column represents the range for our WTP benefits, as explained in paragraph 6.21.

Auto-Switch: Text route only for residential consumers

6.27 As noted above, by mandating the text route for residential consumers to request a PAC or N-PAC, we are able to provide a mechanism via which single number switchers can switch (and if they want to, port) without needing to speak with the losing provider.

- 6.28 We have set out the basis on which we estimated the benefits associated with a textonly Auto-Switch process in Section 5. In our base case, we have estimated the quantified benefits of this process for residential consumers are between £13 million and £28 million by way of reduced unnecessary time and hassle, plus a further £15 million in C&R double paying benefits.<sup>229</sup> These benefits are lower than the full Auto-Switch process because we estimate that the omission of an online route and business customers means that fewer people will use it. The net cost of implementing this reform is also lower, at £24 million under our base case, primarily because mobile providers don't have to develop the functionality to offer an online PAC / N-PAC request route (the costs of which we discuss in more detail below).
- 6.29 Under the low case, we estimate that this process would deliver around £13 million in the way of reduced unnecessary time and hassle, and a further £12 million in reduced double-paying for C&R switchers, while the net cost to industry would be around £33 million.
- 6.30 On this basis, and considering the important and significant non-quantified benefits flowing from this reform, we consider that the text route for requesting a PAC would be necessary and proportionate to achieve our policy objectives.

#### Auto-Switch: additional online route

- 6.31 We have considered whether the Auto-Switch process should include an online route for requesting and obtaining a PAC, in addition to the text route.
- 6.32 The online PAC request route requires mobile providers to i) modify their existing online accounts to include the functionality for subscribers to request and view their PAC online; ii) develop the links to provide real-time ETC information along with their PAC; and iii) redesign their online accounts to present this information in the clear and prescribed format. Mobile providers who do not already provide online account functionality would need to develop this.<sup>230</sup> We have estimated that the incremental net cost of this development, for residential consumers, is around £14 million (over 10 years in NPC terms).
- 6.33 On the benefits side, the following categories of switchers would benefit from the inclusion of an online PAC request route, over and above the text route:
  - Switchers who want to switch / port multiple accounts. For the reasons set out in Section 4, this can only be done via the online PAC request route. We estimate that around 6% of current non-bulk PAC switches were part of a multiple number switch, implying that the online route makes Auto-Switch available to around 0.3 million more switches per year.<sup>231</sup>
  - Switchers who would simply prefer to request a PAC through their online account. Around half of PAC switchers in the 2017 BDRC research said they

 <sup>&</sup>lt;sup>229</sup> See §5.46 and §5.50. This is our estimated value of the Auto-Switch text-only process, but aggregated only across the 87% of total switches that we estimate relate to residential tariffs.
 <sup>230</sup> We assume that MVNEs would develop basic online account management portals on behalf of their small MVNOs, to offer their customers.

<sup>&</sup>lt;sup>231</sup> We assume a similar proportion of C&R switches relate to multiple numbers. In making this adjustment, we are assuming that survey respondents believed they could switch multiple numbers using the Auto-Switch text-only process. If this was not the case, then our take-up rates and incremental WTP estimates would already reflect this advantage of the online route and we would not need to make an adjustment to the total number of switches per year.

would prefer the online Auto-Switch route, while around 7% said they would only use the online Auto-Switch route to request PAC. In the case of the latter group, these switchers would only save the time and avoid the difficulty associated with the existing process if the online route was available (and C&R switchers would also be able to avoid the risk of double-paying).

- 6.34 For these reasons, we consider that more people would use the Auto-Switch process if it included an online route.
- 6.35 We have looked at the quantified benefits due to the online route implied by the 2017 BDRC research (arising from WTP estimates for the online route and additional reductions in double-paying for C&R switchers using the online route). However, as explained in paragraph 5.42, we only have WTP estimates from a small proportion of the respondents who said they would not use the text route but would use online whereas 49% of all PAC switchers preferred the online route, only 2% were asked their WTP for that route.<sup>232</sup> Therefore, in our view the quantified figures from the 2017 BDRC research for incremental benefits of the online route (i.e. over and above the text-only route) of between £3.3 million and £5.1 million<sup>233</sup> clearly understate the full benefits of the online route. We consider that, if we had WTP estimates from all switchers who preferred online, these figures could be substantially higher.<sup>234</sup>
- 6.36 Furthermore, if there is future growth in the number of consumers wanting multiple switches (e.g. family SIM bundles), and / or primarily conducting their switching activities online (e.g. by researching mobile deals), the availability of an online route would be more valuable still.
- 6.37 In addition, there are also material non-quantified benefits from the online route that should be taken into account.
- 6.38 In our view, providing the online PAC request route is necessary to achieve our policy objectives in respect of multiple porters and consumers switching multiple accounts, as this is the only practical way for these consumers to request a PAC or N-PAC. Mandating the online route also provides another route for single number porters to use to obtain a PAC. For these reasons, we consider that the inclusion of the online PAC request route in our proposed Auto-Switch reform package is necessary and proportionate to achieving our policy objectives in respect of switchers who switch/port multiple accounts. We also consider this functionality is important to achieve our policy objectives in respect of business customers, which we discuss below.

#### Auto-Switch: Businesses

6.39 Finally, we have assessed whether our proposed Auto-Switch reform should cover business tariffs.

 <sup>&</sup>lt;sup>232</sup> BDRC 2017 slide 53. 5% said that they might use the text route and would use online.
 <sup>233</sup> This comprises around £2 million to £3.7 million in additional WTP benefits, and £1.3 million in additional reductions in double-paying for C&R switchers using the online route.

<sup>&</sup>lt;sup>234</sup> For illustration, the quantified incremental benefits of the online route would be at least as large as the incremental costs if the group from whom we do not have WTP estimates in the 2017 BDRC research valued the online route, over and above the text route, at 90p to £1.08 (and this is before taking into account future growth in the number of multiple switches and non-quantified benefits).

- 6.40 There are two main cost impacts of extending Auto-Switch to cover business tariffs.<sup>235</sup>
  - On the one hand, we understand there are a large number of small MVNOs who only serve business customers, and would therefore have to incur implementation costs if we extend to business tariffs.
  - On the other hand, including business tariffs would mean that all other mobile providers (which offer both residential and business tariffs) would no longer need to incur additional costs to ensure the necessary functionality to distinguish between those consumers on business and residential products, and to reject PAC requests which arise from business accounts. This to some extent mitigates the additional cost generating by including business-only small MVNOs in the requirements.
- 6.41 Overall, we estimate that the net cost of Auto-Switch increases by around £5 million (in NPC terms over ten years) if it is extended to apply to business tariffs.
- 6.42 This incremental cost is set against the benefits of extending Auto-Switch to cover business tariffs. It is difficult to estimate this precisely; however, as set out in paragraph 5.46, we have estimated that around 13% of switches per year relate to business tariffs. Accordingly, if we assume that business customers are as likely to use the Auto-Switch process as residential consumers (and are also willing to pay similar values for this process), this means that the quantified benefit of extending Auto-Switch to business tariffs could be between £4.7 million and £7.2 million.<sup>236</sup> As discussed in Section 5, we also consider that there are important and significant non-quantified benefits associated with our reforms, which we would expect to be larger if business tariffs were included in the scope of our requirements.
- 6.43 On this basis, we consider the inclusion of business customers in our proposed Auto-Switch reform package is necessary and proportionate to achieving our policy objectives to ensure that business consumers can benefit from our reforms.

#### Assessment of both Auto-Switch and notice period reform

- 6.44 Having set out our analysis that Auto-Switch is the least onerous of our two proposed process reforms, and considered each of the individual elements of the Auto-Switch proposals, we now set out our proportionality assessment of Auto-Switch and notice period reform together, in light of the analysis of benefits and costs in Section 5.
- 6.45 Implementing Auto-Switch and notice period reform would require mobile providers to incur costs to amend their existing switching processes and notice period policies, and develop the necessary functionality to offer a text and an online PAC request routes. We have set out the estimated net industry cost of both reform elements in Section 5. The total net cost of implementing Auto-Switch in conjunction with notice period reform (i.e. the implementation costs, net of operator cost savings) would be around £53 million in our base case (with a range of £38 million to £68 million).<sup>237</sup>

<sup>&</sup>lt;sup>235</sup> See §A8.71.

<sup>&</sup>lt;sup>236</sup> This comprises between £2.3 million and £4.8 million in additional WTP benefits, and £2.4 million in additional reductions in double-paying for C&R switchers.

<sup>&</sup>lt;sup>237</sup> This is the sum of the cost of notice period reform (£9 million) and Auto-Switch (£44 million).

- 6.46 Set against this, we consider that Auto-Switch and notice period reform would deliver significant benefits to: switchers; would-be switchers; and consumers more generally. We have attempted to quantify the benefits to switchers. In our base case, we estimate that switchers would save around £87 million in unwanted double-payments (of which PAC switchers would save £69 million and C&R switchers would save £18 million),<sup>238</sup> and a further £17.5 million to £37.0 million in WTP benefits by way of avoiding unnecessary time and difficulties when switching (10-year NPVs).
- 6.47 Figure 18 summarises our quantified assessment of the impacts of implementing notice period reform plus Auto-Switch. This compares our estimates of the quantified benefits against the net costs for our base case, and also for low and high cases. The differences in the estimates of quantified benefits between the three cases derive from variation in the estimates of take-up, as well as the extent of the estimates of WTP which we include.<sup>239</sup> The variation in take-up is also one of the reasons why the estimates of net cost are different between the three cases (because the scale of operator cost savings varies with take-up). The other reason is adding or subtracting 20% compared to our base case estimate of gross setup cost.
- 6.48 Under our base case, the quantified benefits exceed the net costs by between £52 million and £71 million. We note that, even under our low case (which is based on the lower bound of our take-up range, and the upper bound of our gross implementation cost range), the total quantified benefits exceed the implementation costs.

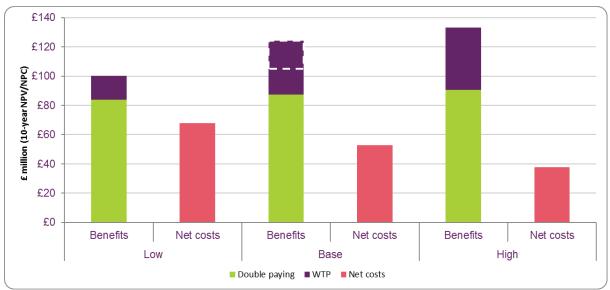


Figure 18 - Quantified benefits and costs of Auto-Switch and notice period reform

The dotted white box in the base case net benefits column represents the range for our WTP benefits, as explained in paragraph 6.21.

6.49 Furthermore, we consider that the package of reforms would deliver many important non-quantified benefits including reductions in the incidence of loss of service for C&R switchers; benefits for would-be switchers, by way of improved save offers and gains from switching; and benefits to consumers more generally, through increased rivalry between providers stemming from lower switching costs. We have explained these in more detail in Section 5.

<sup>&</sup>lt;sup>238</sup> This is equivalent to around £8 million per year for PAC switchers and £2.1 million per year for C&R switchers, so £10.1 million per year overall.

<sup>&</sup>lt;sup>239</sup> I.e. whether we include values that respondents told us they would *probably* pay.

6.50 Given the scale of the quantified benefits as compared to the implementation costs, and the presence of important and significant non-quantified benefits, our updated conclusion is that this package of reforms would be appropriate and proportionate to achieve our policy objectives.

#### Providing transparency to consumers

6.51 Finally, we consider that for this package of reforms to be effective it should include a requirement to provide transparency of switching processes to help ensure that consumers are better informed. While we have not quantified the benefits of this requirement, we consider that, when combined with the process reforms outlined above, greater transparency will improve consumers' understanding of the necessary steps involved in the switching process. We also consider that it could increase awareness and take-up of the Auto-Switch process. We have not included the cost to industry of amending consumer guidance to meet this requirement in Figure 18, but we estimate that it would cost around an additional £0.9 million.

#### Loss of Service

- 6.52 As set out in Section 4, in parallel with the proposals that we have set out in this consultation to address loss of service, we have also informally engaged with the mobile industry about making improvements to the porting execution process. The OSG has provided Ofcom with a set of commitments that industry has agreed to undertake voluntarily to address loss of service.
- 6.53 We consider that these commitments have the potential to minimise the risk that a consumer experiences a loss of service *outside* of the current porting window of one day. As set out in Section 3, we are most concerned about this type of loss of service.
- 6.54 We will continue to monitor progress made by industry on loss of service. If successful, these commitments could confine the potential benefits of the End-to-end management solution to addressing the remaining period of loss of service that can occur *during* the designated one-day porting window.
- 6.55 Moreover, by addressing the worst instances of loss of service and thereby increasing confidence in the porting process, we consider that industry commitments could tackle, in part, the deterrent effect from loss of service for would-be switchers. This is one of the main non-quantified benefits that we said End-to-end management would deliver in our March 2016 consultation.<sup>240</sup>
- 6.56 In this context, and considering the significant costs that it would impose on industry, we no longer consider it would be appropriate to introduce reforms to require End-toend management through regulation at this time. However, our final view on the industry commitments, and whether they sufficiently deliver against our policy objectives, will depend on the further information that the OSG will provide to us in June 2017.

<sup>&</sup>lt;sup>240</sup> The other main non-quantified benefit was helping to deliver a single unified service which works for porters and non-porters alike. As explained in §5.92, we no longer believe that this benefit relies on End-to-end management.

6.57 On the basis that they do, we believe that, as things currently stand, it would be better to monitor the progress that industry makes in delivering an improved porting execution process with fewer instances of loss of service extending beyond the porting window.

# Consideration of whether our proposed reforms might produce adverse effects which are disproportionate to the aims we are seeking to achieve

- 6.58 We have considered whether our proposed Auto-Switch and notice period reforms, together with increased transparency requirements, would be likely to produce adverse effects which would be disproportionate to the aims we are seeking to achieve. In answering this question, we take into account the policy objectives we are pursuing, in light of our statutory duties.
- 6.59 As described in Section 2, one of our principal duties is to further the interests of consumers and our view is that consumers' interests will be best served by ensuring that they do not encounter unnecessary difficulties or are not deterred from exercising choice, because of the switching process.<sup>241</sup> We set out in Section 3, the specific difficulties that consumers currently encounter when switching their mobile service.
- 6.60 We consider that the objectives we are pursuing, and benefits that we consider would be secured by our proposed reforms, are important and legitimate in light of our statutory duties. Indeed, we consider achieving this outcome is a priority in our work on protecting consumers.
- 6.61 We propose that the difficulties and deterrents that we have identified in switching mobile provider should be addressed by the introduction of our Auto-Switch, notice period and transparency reforms, in order that the switching process is quick, simple, convenient to use and easily understood. Consumers' ability to exercise choice is a key enabler of competition ensuring better outcomes for consumers in terms of price, quality and innovative services.
- 6.62 We have carefully considered whether our proposals are the least onerous available to us effectively to achieve our objectives, and for the reasons set out in this consultation we consider that they are. In making that assessment, we have considered the likely costs and impacts of implementing those proposals, which we have also set out in this document. The estimated net costs in our base case of around £53 million over ten years, as well as being lower than the benefits to switchers that we have been able to quantify, are also small in relation to the size of the overall UK mobile market.
- 6.63 Against that background, we do not consider that our proposed reforms would give rise to effects which in the round are disproportionate to the aims, set out above, which we are seeking to achieve.

<sup>&</sup>lt;sup>241</sup> As set out in Section 2, Government has also made clear its commitment to improving switching across different sectors and introduced legislation in the Digital Economy Act 2017 to make explicit Ofcom's powers in relation to switching.

# Updated conclusions

- 6.64 On the basis of the above assessment, we update our conclusion that it would be effective and proportionate to meet our objectives to introduce:
  - a requirement to offer a text-based route and an online route to obtaining a PAC (the Auto-Switch process);
  - a requirement to prohibit charging for notice after the switching date; and
  - a requirement to provide transparency of switching processes to help ensure that consumers are better informed.
- 6.65 These requirements would apply equally to residential and business customers.
- 6.66 We consider that our objectives in respect of loss of service are best addressed at this time through voluntary industry improvements to the porting execution process.

### Implementation of proposed reforms

- 6.67 Following the end of the consultation period, Ofcom intends to publish a statement in the autumn of 2017.
- 6.68 We received several responses to our March 2016 and July 2016 consultations stating that the implementation of switching reforms would require a high level of industry cooperation and Ofcom attention, and that this would need a suitable implementation period. We proposed to have an implementation period of 18 months to reflect this. Only one provider commented that this was too short, suggesting a 24-month period instead. Other providers agreed with an 18-month implementation period.
- 6.69 On balance, should we decide to introduce reforms having taken account of all responses to this consultation, we remain of the view that an 18-month period following the publication of the statement would be sufficient to implement the reforms we are proposing in this consultation.

### **Consultation questions**

Q5: Do you agree with our preferred option for reform i.e. a requirement to offer an Auto-Switch process, a requirement to prohibit charging for notice beyond the switching date, and a requirement to provide transparency of switching processes?

Q6: Do you agree with our proposal for an 18-month long implementation period for our preferred reform option?

### Annex 1

# Responding to this consultation

#### How to respond

- A1.1 Of com would like to receive views and comments on the issues raised in this document, **by 5pm on Friday 30 June**.
- A1.2 We strongly prefer to receive responses via the online form at <u>https://www.ofcom.org.uk/consultations-and-statements/category-2/consumer-</u> <u>switching-proposals-to-reform-switching-of-mobile-communications-services</u>. We also provide a cover sheet <u>https://www.ofcom.org.uk/consultations-and-</u> <u>statements/consultation-response-coversheet</u>) for responses sent by email or post; please fill this in, as it helps us to maintain your confidentiality, and speeds up our work You do not need to do this if you respond using the online form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to <u>consumer.switching@ofcom.org.uk</u>, as an attachment in Microsoft Word format, together with the cover sheet (<u>https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet</u>). This email address is for this consultation only, and will not be valid after 30 June 2017.
- A1.4 Responses may alternatively be posted to the address below, marked with the title of the consultation.

Grace Shaw Ofcom Riverside House 2A Southwark Bridge Road London SE1 9HA

- A1.5 If you would like to submit your response in an alternative format (e.g. a video or audio file), please contact Grace Shaw on 020 7783 4259, or email grace.shaw@ofcom.org.uk.
- A1.6 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.
- A1.7 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A1.8 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 3. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A1.9 If you want to discuss the issues and questions raised in this consultation, please contact Grace Shaw on 020 7783 4259, or email <u>grace.shaw@ofcom.org.uk</u>.

# Confidentiality

- A1.10 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish all responses on our website, <u>www.ofcom.org.uk</u>, as soon as we receive them.
- A1.11 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A1.12 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.13 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further at <a href="https://www.ofcom.org.uk/about-ofcom/website/terms-of-use">https://www.ofcom.org.uk/about-ofcom/website/terms-of-use</a>.

### **Next steps**

- A1.14 Following this consultation period, Ofcom plans to publish a statement in autumn 2017.
- A1.15 If you wish, you can register to receive mail updates alerting you to new Ofcom publications; for more details please see <u>https://www.ofcom.org.uk/about-ofcom/latest/email-updates</u>

#### **Ofcom's consultation processes**

- A1.16 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 2.
- A1.17 If you have any comments or suggestions on how we manage our consultations, please call our consultation helpdesk on 020 7981 3003 or email us at <u>consult@ofcom.org.uk</u>. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.18 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact Steve Gettings, Ofcom's consultation champion:

Steve Gettings Ofcom Riverside House 2a Southwark Bridge Road London SE1 9HA Tel: 020 7981 3601 Email <u>steve.gettings@ofcom.org.uk</u>

### Annex 2

# Ofcom's consultation principles

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

#### Before the consultation

A2.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

#### During the consultation

- A2.2 We will be clear about whom we are consulting, why, on what questions and for how long.
- A2.3 We will make the consultation document as short and simple as possible, with a summary of no more than two pages. We will try to make it as easy as possible for people to give us a written response. If the consultation is complicated, we may provide a short Plain English / Cymraeg Clir guide, to help smaller organisations or individuals who would not otherwise be able to spare the time to share their views.
- A2.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.
- A2.5 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.
- A2.6 If we are not able to follow any of these seven principles, we will explain why.

#### After the consultation

A2.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish all the responses on our website as soon as we receive them. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

# 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 3

# **Consultation questions**

A3.1 This annex lists the questions that we are consulting on.

Q1: Do you agree with our updated conclusions that current mobile switching processes create consumer harm in terms of:

- unnecessary time and difficulties progressing a switch, including contact with the losing provider to request a PAC or cancel a service;
- requirements to pay notice after the switch has taken place; and
- loss of service that can occur when switching?

Q2: Do you agree that our proposed package of reforms is likely to be effective in addressing the consumer harms we have identified?

Q3: Do you have any comments on the specific process design for the different elements of the proposed reform package?

Q4: Do you agree with our assessment of the likely impacts that we have presented of each of the options for reform:

- Prohibiting charging for notice after the switching date;
- Auto-Switch;
- GPL;
- End-to-end management; and
- Transparency requirements?

Q5: Do you agree with our preferred option for reform i.e. a requirement to offer an Auto-Switch process, a requirement to prohibit charging for notice beyond the switching date, and a requirement to provide transparency of switching processes?

Q6: Do you agree with our proposal for an 18-month long implementation period for our preferred reform option?

### Annex 4

# Glossary

Act: The Communications Act 2003.

**Auto-PAC:** a mobile switching reform option put forward in our March 2016 and July 2016 consultations, and January 2017 cost update. Under this proposal consumers wishing to switch and keep their mobile number would be able to request and receive a PAC, via text, online or by phone, if they wanted to switch and keep their mobile number. We set out that this process should also be available to consumers wishing to switch but not keep their mobile number. We have updated and re-labelled this reform option *Auto-Switch*, set out and proposed in this consultation.

**Auto-Switch:** our preferred proposal for reform put forward in this consultation. Consumers wishing to switch would be able to request a PAC (consumers wishing to switch and keep their mobile number) or N-PAC (consumers wishing to switch without keeping their mobile number), via text or online or by phone.

**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):** the default 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 losing provider and separately organises the new service and contract with their gaining provider.

**Central Porting System (CPS):** a central system to facilitate the process of switching when the consumer wishes to switch and keep (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.

**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 losing and gaining provider 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 :** the Provider to whom the consumer is transferring (i.e. the consumer's new provider). Also known as the Recipient Operator/Provider.

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

**Interactive Voice Response (IVR):** a technology that allows a computer to interact with a human's voice. This is used in automated telephony systems that pick up calls, interact with callers and route calls to a customer service agent

**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:** the provider that the consumer is switching away from, i.e. the consumer'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) 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.

**Non-Porting Authorisation Code (N-PAC):** a proposed unique code under our Auto-Switch proposal that the consumer would obtain from their current (losing) provider to switch their mobile service without keeping their mobile number, if the consumer wants to switch using Auto-switch process. The N-PAC signifies among other things that the Losing Provider is satisfied that the consumer is entitled to switch to another mobile provider.

**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 consumer needs to obtain from their current (losing) provider to switch their mobile service and port their number. The PAC signifies among other things that the Losing Provider is satisfied that the consumer is entitled to switch and port their mobile number to another mobile provider.

**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.

**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 consumers on a prepaid (pay as you go) account to query the available balance on their account.