



# Changes to the Mobile Number Porting Process

Including notification of a proposed modification to  
General Condition 18

This is a non-confidential version.  
Redactions are indicated by “[X]”

Statement &  
Consultation

Publication date: 1 April 2010

Closing Date for Responses: 13 May 2010



# Contents

Section		Page
1	Executive Summary	1
2	Introduction & Background	4
3	Responses to the August consultation and Ofcom's comments	13
4	Revised impact assessment	38
5	Consultation on proposed modifications to General Condition 18 and the implementation period	64
<b>Annex</b>		<b>Page</b>
1	Responding to this consultation	69
2	Ofcom's consultation principles	71
3	Consultation response cover sheet	72
4	Consultation questions	74
5	Detailed stakeholder comments on our cost benefit analysis	75
6	Sensitivity analysis of Option D	82
7	Outline specification of Option D	85
8	Notification of proposed modification to General Condition 18	89

## Section 1

# Executive Summary

- 1.1 Mobile Number Portability (“MNP”) is the facility that enables consumers to keep their mobile telephone number whilst switching provider. It plays an essential part in fostering consumer choice by allowing consumers to switch service provider without the costs or inconvenience of changing their telephone number.
- 1.2 We published a consultation in August 2009 (“the August consultation”) which evaluated the MNP process for consumers.<sup>1</sup> We identified some problems with the current process and saw room for improvement. We also noted the implications of a new European Union Regulatory Framework for electronic communications (“the new EU Regulatory Framework”), which will require porting to be achieved within one working day across the EU. We consulted on options for changing the current MNP process and our initial view on the costs and benefits of those options.
- 1.3 This document sets out our decision on changes to the MNP process. We are also consulting on proposed modifications to the regulations relating to MNP in order to implement our chosen approach.

## Background

- 1.4 The current MNP process in the UK is donor-led. This means that a consumer who wishes to port asks their existing provider for a porting authorisation code (“PAC”) and, by passing the PAC to their new provider, starts the porting process. Porting is regulated by General Condition 18 (“GC18”), which requires that a port (involving less than 25 numbers) takes place within two working days from when the new provider requests it on behalf of the consumer, having been provided with the consumer’s PAC.
- 1.5 In the August consultation, we noted the evidence that the majority of consumers are satisfied with the current process, and that it works well for many people. Nevertheless, our consumer research also identified ways in which the current process causes difficulties for a significant minority of consumers.
- 1.6 We therefore presented four options for changing the MNP process. They included changing the existing donor-led process to a recipient-led process, to avoid the need for consumers to speak to their existing operator before they could transfer their number to a new operator. The four options were:
  - **Option A:** recipient-led process with porting completed within two hours;
  - **Option B:** donor-led process with porting completed within two hours;
  - **Option C:** recipient-led process with porting completed the next working day; and
  - **Option D:** donor-led process with porting completed the next working day.

---

<sup>1</sup> Available at: [www.ofcom.org.uk/consult/condocs/gc18\\_mnp/](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/). Consumer ports’ typically involve the porting of an individual number although it can also involve multiple ports of less than 25 numbers. Ports involving 25 or more numbers are called ‘bulk ports’.

- 1.7 We also proposed that if the overall process remained donor-led, the process by which consumers are given their PAC (“the PAC process”) should change to ensure consistency and shorten the time taken to issue PACs. We therefore recommended that under the donor-led options, PACs would have to be issued either immediately over the phone or by a text message (“SMS”) within two hours.

## Ofcom’s decision

- 1.8 We have decided to adopt Option D, which will retain the current donor-led arrangements but reduce the time taken to port numbers to one working day and require PACs to be issued either immediately over the phone or by SMS within two hours.
- 1.9 The range of stakeholder responses to the August consultation highlighted that there are a number of issues that need to be considered in relation to the MNP process, particularly in assessing whether a recipient- or donor-led process is more appropriate. We noted in the August consultation that we were undertaking a separate project on consumer switching, which would be looking at the current approach towards switching processes and, amongst other things the strengths and weaknesses of different switching processes in different sectors, including mobile. We agree with the view from respondents that there is a link between further assessment of the MNP process and our ongoing consumer switching project.<sup>2</sup>
- 1.10 Given this linkage, we have decided to suspend consideration of moving to a recipient-led MNP porting process pending the outcome of our consumer switching work, which we plan to consult on in summer this year. We have therefore not taken forward analysis of the two recipient-led options set out in the August consultation (Options A and C) whilst the consumer switching work is in progress.
- 1.11 Nevertheless, we note that stakeholders agreed that the changes proposed as part of Option D – that is, essentially improving the current MNP process by reducing the time taken for porting to one working day and requiring PACs to be issued immediately over the phone or by SMS in two hours – would be possible to implement without major changes to the existing process. All stakeholders indicated some level of support for Option D, ranging from supporting it outright to supporting it as an interim measure, or offering some form of qualified support. Implementing Option D will also ensure that the UK will be in line with the requirement for one day porting as part of the new EU Regulatory Framework, which Member States are required to implement by 25 May 2011.
- 1.12 Furthermore, our analysis suggests that, of the two options considered (Options B and D), Option D is the highest in terms of net present value (“NPV” - a measure of the trade-offs between costs and benefits) and has the shortest payback period.<sup>3</sup> Our analysis has not fully captured the benefits of changes to the PAC process, which we consider will be positive. In addition, there may be a number of other potential qualitative benefits of improving the porting process which we have not captured, such as:

---

<sup>2</sup> As highlighted in our Annual Plan, ensuring consumers can switch between communications providers by removing unnecessary barriers is one of Ofcom’s priorities for 2010/11.

[www.ofcom.org.uk/about/accoun/reports\\_plans/annual\\_plan1011/](http://www.ofcom.org.uk/about/accoun/reports_plans/annual_plan1011/)

<sup>3</sup> See Section 4 for further discussion of the NPV.

- benefits which may accrue to those calling a porting individual who would have switched but not ported under the current system. Such callers would not incur the costs of updating their records or calling the wrong number; and
  - any benefits to competition in the mobile market if improvements to the porting process result in greater switching.
- 1.13 We are not able to quantify these effects robustly but it is likely that improving the porting process will generate some qualitative benefits, which our quantified analysis has not captured.

## Consultation on proposed modifications to GC18 and the implementation period

- 1.14 We have outlined our proposed modifications of GC18 in order to implement Option D and have included a notification of the modification in Annex 8. We have also provided guidance on how Ofcom would expect the new requirements to be implemented in Annex 7. The proposed modifications are:
- require communications providers, at a minimum, to accept PAC requests over the phone;
  - where a consumer requests a PAC over the phone, require communications providers to issue the PAC either immediately over the phone or within a maximum of two hours by SMS (or by such other reasonable mechanism as may be specifically requested by the consumer); and
  - reduce the porting time from two business days to one business day.
- 1.15 In terms of the appropriate implementation time for these changes, we consider that a period of six months from the publication of our final statement is likely to be the most proportionate in balancing delivery of consumer benefits soonest while at the same time allowing mobile service providers to plan appropriately and minimise the costs of implementation. In particular, we consider that this is most easily implemented option for changes consulted upon and at least some industry responses suggest that a shorter lead time is reasonable. However, we have requested stakeholders' views on the appropriate implementation time (see Section 6).

## Next steps

- 1.16 We invite responses to this consultation on or before **5pm on 13 May 2010**.
- 1.17 We intend to issue a final statement to introduce the modifications to GC18 by summer 2010.

## Section 2

# Introduction & Background

## Introduction

- 2.1 An essential element in the health of the UK's mobile market is the ability of consumers to choose between competing providers and to switch between providers quickly and easily. When switching, consumers have the right, if they wish, to retain their mobile telephone number. The facility that enables consumers to retain their mobile telephone number whilst switching provider is called mobile number portability (or "MNP").
- 2.2 We published a consultation in August 2009<sup>4</sup> which evaluated the MNP process for consumers. We identified some problems within the current process and saw room for improvement. We consulted on options for changing the current MNP process and our initial view on the costs and benefits of those options. We also noted the implications of a proposed new EU Regulatory Framework for electronic communications, which would require the introduction of one working day porting across the EU. This new EU Regulatory Framework has now been confirmed and has to be implemented in the UK by 25 May 2011.
- 2.3 This document is a statement on our decision to implement changes to the MNP process. It sets out our comments on the responses to the August consultation and the reasons for our decision, having taken into account those responses. We are also consulting stakeholders on the required changes to GC18 to implement our selected option.
- 2.4 In this section we provide a brief summary of the background to this review of the MNP process and outline our decision. We also set out the legal framework including the new EU Regulatory Framework.

## Background & current UK MNP process

- 2.5 In the August consultation we provided a summary of the background and history of the MNP process in the UK.<sup>5</sup> In particular we noted that, following its introduction in January 1999, the process had evolved into a donor-led system. This means that a consumer has to ask their existing operator ('the donor operator') for a porting authorisation code ("PAC") and by passing the PAC to their new provider, starts the porting process.
- 2.6 Most other countries operate a 'recipient-led' process where the transfer of a mobile number to a new network is dealt with by the new provider. Under a 'recipient-led' process the customer does not have to contact their old provider in order to obtain a PAC, instead the validation of the request from the customer has to be dealt with through an alternative method of communication between the recipient and donor.

---

<sup>4</sup> Ofcom, *Mobile number portability; Review of the porting process*, 3 August 2009 ("The August consultation"). Available at: [www.ofcom.org.uk/consult/condocs/gc18\\_mnp/](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/).

<sup>5</sup> The August consultation, pp.6-7.

- 2.7 The current time taken to complete a port (from the point at which a consumer provides the PAC to their new operator) is two working days for ports involving less than 25 numbers. This was reduced from five days with effect from April 2008.<sup>6</sup>
- 2.8 The requirement for the porting process to be completed within two working days is set out in GC18.<sup>7</sup> We noted in the August consultation, however, that the fact that the process is donor-led can add to the total time taken to port, because of the extra time involved in obtaining a PAC from the consumer's existing provider.<sup>8</sup>

## Ofcom's current review and approach

- 2.9 We initiated the current review of the MNP process following a judgment by the Competition Appeals Tribunal ("CAT") which set aside our previous statement on MNP. On 29 November 2007, Ofcom published a statement entitled *Telephone number portability for consumers switching suppliers* ("the November 2007 Statement") which required, amongst other things, mobile providers to implement recipient-led porting and reduce the time to port mobile numbers from two business days to two hours by 1 September 2009.<sup>9</sup> Vodafone (subsequently supported by BT, T-Mobile, Orange and O2) appealed the November 2007 Statement in early 2008, and on 18 September 2008 it was set aside in its entirety by the CAT. The CAT remitted the matter back to Ofcom for reconsideration.
- 2.10 Following the November 2007 Statement being set aside, we initiated a fresh review of the MNP process. Of particular relevance to our review was the European Commission's proposal for one working day porting across the EU as part of the new EU Regulatory Framework (see paragraphs 2.45 to 2.48 below for further details).
- 2.11 During our review, we met with and listened to service providers (fixed and mobile), consumers' representatives and other stakeholders. We conducted quantitative and qualitative research, as well as a mystery shopping exercise into consumers' experiences of obtaining a PAC from their existing operators.<sup>10</sup> We also analysed complaints made by consumers to the Ofcom Advisory Team ("OAT") relating to the MNP process.
- 2.12 This review is confined to the mobile porting process for consumers. Fixed porting processes and the process for mobile 'bulk'<sup>11</sup> ports are being considered separately in light of the new EU Regulatory Framework. Alongside this review of the MNP process, we have also been reviewing the rules governing the routing of calls to ported numbers.<sup>12</sup> A statement on the outcome of that review has been published separately at: [www.ofcom.org.uk/consult/condocs/gc18\\_routing/statement](http://www.ofcom.org.uk/consult/condocs/gc18_routing/statement).

<sup>6</sup> Ofcom, *Arrangements for porting phone numbers when consumers switch supplier – a review of General Condition 18*, 17 July 2007. Available at:

[www.ofcom.org.uk/consult/condocs/gc18review/numberportability.pdf](http://www.ofcom.org.uk/consult/condocs/gc18review/numberportability.pdf)

<sup>7</sup> [www.ofcom.org.uk/telecoms/ioi/g\\_a\\_regime/gce/cvogc160909.pdf](http://www.ofcom.org.uk/telecoms/ioi/g_a_regime/gce/cvogc160909.pdf). There are currently no specific timing requirements in GC18 relating to ports involving more than 25 numbers.

<sup>8</sup> For example, see Figure 4, p.29 of the August consultation.

<sup>9</sup> [www.ofcom.org.uk/consult/condocs/gc18review/statement/statement.pdf](http://www.ofcom.org.uk/consult/condocs/gc18review/statement/statement.pdf)

<sup>10</sup> The results of all the research is available on our website at:

[www.ofcom.org.uk/consult/condocs/gc18\\_mnp/research/](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/research/)

<sup>11</sup> 'Bulk ports' involve porting 25 or more numbers and usually involve larger (business) customers. 'Consumer ports' typically involves the porting of an individual number although it can also involve multiple ports of less than 25 numbers.

<sup>12</sup> We also published a consultation in August 2009 on this review, which is available at: [www.ofcom.org.uk/consult/condocs/gc18\\_routing/](http://www.ofcom.org.uk/consult/condocs/gc18_routing/).



## The August consultation

- 2.13 On 3 August 2009, we published a consultation outlining the results of our review of the MNP process and set out proposals for making changes to improve the process. Our review was confined to the ‘consumer’ porting process as we noted we were not aware of any evidence of harm arising from the ‘bulk’ process, which primarily involves larger business ports.<sup>13</sup>
- 2.14 Our research found that the majority of consumers are satisfied with the current process and that it works well for many people. For example 80% of consumers who had ported their number said they were satisfied with the process.<sup>14</sup> Nevertheless, our consumer research also identified ways in which the current process causes difficulties for a significant minority of consumers. The areas of concern were:
- unwanted or excessive save activity<sup>15</sup> imposed on consumers by the donor operator at the point of PAC request;
  - refusal or failure to issue PACs to consumers, despite receipt of a valid request; and
  - unnecessary delays that extended the length of the end-to-end porting process; in particular the process by which mobile providers issued PACs to consumers.
- 2.15 We were concerned about the evidence of excessive save activity and the difficulties that some consumers faced when making a legitimate request for a PAC. We considered, however, that those two areas could potentially be dealt with under the existing GC18, which requires that all operators must provide porting as soon as reasonably practicable and on reasonable terms (see paragraphs 2.42 to 2.44 below). We launched an own initiative pre-enforcement programme to monitor compliance, which is still ongoing and we continue to monitor complaints on this issue.<sup>16</sup>
- 2.16 The delays and uncertainties that can be caused by the current PAC process did not, however, appear solvable under the current regulations. The length of time and the process involved in obtaining a PAC are not prescribed in the current wording of GC18 and the industry’s MNP process manual (the “Industry Manual”)<sup>17</sup> does not address this issue in enough detail to prevent the problems identified. This means it is left open for operators to adopt different processes, sometimes creating delays and inconvenience for consumers who want to port.
- 2.17 In order to address the issues identified above, the August consultation proposed a number of options to speed up the process and deliver a better consumer

---

<sup>13</sup> The August consultation, p, 16, paragraph 3.33. See footnote 11 above for the distinction between ‘consumer’ and ‘bulk’ ports. The Industry Manual specifies a separate (but similar) process involved with bulk ports, which is intended to recognise the additional work involved for the donor MNO to process ports involving more than 25 numbers.

<sup>14</sup> TNS, *Omnibus Survey*, December 2008, Q.9:

[www.ofcom.org.uk/consult/condocs/gc18\\_mnp/research/TNS\\_Omnibus\\_survey\\_data\\_Dec1.pdf](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/research/TNS_Omnibus_survey_data_Dec1.pdf)

<sup>15</sup> The current donor-led process provides the donor operator with an opportunity to try and retain or ‘save’ the consumer when contacting the operator to ask for a PAC. Operators typically try to retain the consumer by offering them cheaper call tariffs, new mobile handsets or some other incentives.

<sup>16</sup> [www.ofcom.org.uk/bulletins/comp\\_bull\\_index/comp\\_bull\\_ocases/open\\_all/cw\\_01018/](http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ocases/open_all/cw_01018/). See also paragraph 3.32 for further discussion of the pre-enforcement programme work.

<sup>17</sup> This is an industry established and maintained process manual which sets out the specific arrangements for porting processes. Available at: [www.mnposg.org.uk](http://www.mnposg.org.uk).

experience. The most obvious starting point was either reducing the porting time to one working day, taking note of the EU one working day requirement, or to seek to reduce it further to a near instant process of up to two hours, which would be in line with shorter porting times available in some other countries (e.g. Australia and Ireland). We also presented options which either maintained the donor-led nature of the current process or changed to a recipient-led model which is common in other markets.

2.18 We therefore presented the following four options and evaluated them compared to a 'do-nothing' counterfactual:

- **Option A:** recipient-led process with porting completed within two hours;
- **Option B:** donor-led process with porting completed within two hours;
- **Option C:** recipient-led process with porting completed the next working day; and
- **Option D:** donor-led process with porting completed the next working day.

2.19 We also proposed that if the process remained donor-led, the PAC process should change to ensure consistency and shorten the time taken to issue PACs. We recommended that under the donor-led options, PACs would have to be issued either immediately over the phone or by SMS within two hours. We noted that some operators already provided PACs in this way.

2.20 The August consultation set out our initial estimates of the costs of the four options presented. We also set out the evidence we had obtained about the benefits of each option, including the extent to which consumers said they would prefer a faster process. In addition, we highlighted some of the qualitative benefits that might arise from a move to recipient-led porting.

2.21 Our provisional assessment suggested that each of the options could have a positive NPV. We also set out how we intended to conduct further work to refine our estimates of the costs and benefits associated with each option with a view to making a more informed judgement about the preferred option.

## The responses and Ofcom's decision

2.22 We received 32 responses to the August consultation. All the non-confidential responses are available at:

[www.ofcom.org.uk/consult/condocs/gc18\\_mnp/responses/](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/responses/).

2.23 The responses indicated a range of differing views, particularly about issues surrounding recipient- versus donor-led processes. Several respondents considered that there was insufficient evidence of consumer harm arising from the current process to justify a major change, especially given the high level of consumer satisfaction with the existing process. These respondents argued strongly against moving to a recipient-led process, particularly because they considered that the costs of implementing such a process would be high and also involved significant risks, such as slamming and customers not being adequately informed of their contractual liabilities.

2.24 On the other hand, some respondents considered that the current donor-led system was inherently flawed, because it involved additional steps for the consumer that created hassle and acted as a barrier to porting. Several stakeholders also

suggested that 'save' activity generated as a result of the PAC request could create a barrier to switching.

- 2.25 There were, however, some areas of broad agreement emerging from the responses, which are discussed in more detail in the following paragraphs.

### **The consumer switching project**

- 2.26 The responses indicated a general agreement that there was a clear overlap between this review of MNP and the work being undertaken by Ofcom on switching more generally; this work aims to ensure there are no undue barriers to switching now or in the future.<sup>18</sup> Several stakeholders commented that it was important to consider switching and porting processes across a range of products and whatever was decided for MNP should not hinder a wider cross-product solution.
- 2.27 As part of the review of consumer switching, we are looking at the current approach towards switching processes and assessing whether or not the different switching processes give rise to concerns about the consumer experience of switching and/or the effect on the competitive process. We will be, amongst others things, analysing the strengths and weaknesses of different switching processes, with the aim of establishing a framework for assessing those processes. We intend to issue a consultation on this review in summer this year.
- 2.28 The range of responses highlight that there are a number of issues that need to be considered in relation to the MNP process, particularly in assessing whether a recipient- or a donor-led process is more appropriate. It is apparent that we would need to gather further evidence and these issues need to be considered in depth before completing an assessment on whether moving to a recipient-led process is justified. Given this, we agree with respondents that there is a link between the further assessment of the MNP process and our current consumer switching work.
- 2.29 Given this linkage, we have decided to suspend consideration of moving to a recipient-led MNP porting process pending the outcome of our consumer switching work. We are therefore not taking forward analysis of the two recipient-led options set out in the August consultation (Options A and C) whilst the consumer switching work is in progress.

### **Implementing 'Option D'**

- 2.30 Another broad area of agreement that came out of the responses was that the changes proposed as part of Option D - that is essentially improving the current MNP process by reducing the time taking for porting to one day and requiring PACs to be issued either immediately or by SMS in two hours - would be relatively straightforward to implement, because they would involve very few changes to the existing process. Virtually all respondents indicated some level of support for this option, either as the most appropriate in the long term or as an interim measure prior to further changes. Furthermore, as discussed below, Option D would be in line with the new EU Regulatory Framework, which requires the implementation of one day porting by 25 May 2011.
- 2.31 Therefore, although we are suspending consideration of any major changes to the MNP process to align with the consumer switching project, in the light of the

---

<sup>18</sup> This work was highlighted as one of Ofcom's priorities for 2010/11 in our Annual Plan, [www.ofcom.org.uk/about/accoun/reports\\_plans/annual\\_plan1011/](http://www.ofcom.org.uk/about/accoun/reports_plans/annual_plan1011/).

responses and new EU Regulatory Framework, we have decided to proceed with implementation of Option D now.

- 2.32 This document therefore confirms our decision to implement Option D, on which we have already consulted, and invites comments on the draft Notification setting out the proposed modifications to GC18 as well as the proposed implementation period for this approach.

## Legal Framework

- 2.33 Ofcom regulates the communications sector under the framework established by the Communications Act 2003 (“the Act”), which sets out our statutory duties.

### Ofcom’s general duties

- 2.34 Section 3(1) of the Act sets out our general duties and provides that our principal duties are:
- to further the interests of citizens in relation to communications matters; and
  - to further the interests of consumers in relevant markets, where appropriate by promoting competition.
- 2.35 Section 3(2)(b) of the Act requires that, in the carrying out of its functions Ofcom must secure, inter alia, the availability throughout the UK of a wide range of electronic communications services.
- 2.36 Section 3(3) of the Act provides that, in performing our principal duties, we must in all cases have regard to the principles of transparency, accountability, proportionality and consistency as well as ensure that our actions are targeted only at cases in which action is needed.
- 2.37 Section 3(4) of the Act requires us in performing our principal duties to have regard to a number of factors as appropriate, including the desirability of promoting competition, as well as encouraging investment and innovation in relevant markets.
- 2.38 Section 3(5) specifies that in performing our duty of furthering the interest of consumers we must have regard, in particular, to the interests of those consumers in respect of choice, price, quality of service and value for money.

### The Community requirements

- 2.39 In carrying out our functions, we also have to comply with the six Community requirements set out in section 4 of the Act.
- 2.40 We consider that the following Community requirements are particularly relevant in relation to the consumer process for achieving MNP:
- the requirement to promote competition;<sup>19</sup>
  - the requirement to secure that Ofcom’s activities contribute to the development of the European internal market;<sup>20</sup>

---

<sup>19</sup> This is the first Community requirement, set out in Section 4(3) of the Act.

- the requirement to promote the interests of all persons who are citizens of the European Union;<sup>21</sup> and
- the requirement to adopt a technologically neutral approach.<sup>22</sup>

## General Condition 18

2.41 Number portability is required by Article 30 of Directive 2002/22/EC (the “Universal Service Directive” or “USD”), which has been recently amended by Directive 2009/136/EC.

2.42 Ofcom has implemented the requirements of Article 30 USD in the UK, prior to its recent amendments, by setting GC18 pursuant to its general powers under section 45 and 48 of the Act.

2.43 The current text of GC18.1 provides that:

“The Communications Provider shall provide Number Portability as soon as it is reasonably practicable on reasonable terms, including charges, to any of its Subscribers who so requests”.

2.44 GC18.2 also specifies that

“The Communications Provider shall, pursuant to a request from another Communications Provider, provide Portability (other than Paging Portability) as soon as is reasonably practicable in relation to that request on reasonable terms. In the case of Mobile Portability, where the request is for porting a total of less than 25 Telephone Numbers, the total period for providing Portability in respect of those Telephone Numbers shall not exceed two business days”.

## New EU Regulatory Framework

2.45 We noted in the August consultation that the European Commission had made a proposal to update the EU Regulatory Framework for electronic communications, which included a requirement for one working day porting. This new EU Regulatory Framework has now been approved<sup>23</sup> and was published in the EU’s Official Journal in December 2009.<sup>24</sup> The whole package has to be implemented by 25 May 2011.

2.46 The new text of Article 30 USD, provides as follows:

“(1) Member States shall ensure that all subscribers with numbers from the national telephone numbering plan who so request can retain their number(s) independently of the undertaking providing the service in accordance with the provisions of Part C of Annex I.

(2) National regulatory authorities shall ensure that pricing between operators and/or service providers related to the provision of number

---

<sup>20</sup> This is the second Community requirement, set out in Section 4(4) of the Act.

<sup>21</sup> This is the third Community requirement, set out in Section 4(5) of the Act.

<sup>22</sup> This is the fourth Community requirement, set out in Section 4(6) of the Act.

<sup>23</sup> <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1800&format=HTML&aged=0&language=EN&guiLanguage=nl>

<sup>24</sup> Official Journal of the European Union, 18.12.2009, L 337, pages 11-36.

portability is cost-oriented, and that direct charges to subscribers, if any, do not act as a disincentive for subscribers against changing service provider.

(3) National regulatory authorities shall not impose retail tariffs for the porting of numbers in a manner that would distort competition, such as by setting specific or common retail tariffs.

**(4) Porting of numbers and their subsequent activation shall be carried out within the shortest possible time. In any case, subscribers who have concluded an agreement to port a number to a new undertaking shall have that number activated within one working day (emphasis added).**

Without prejudice to the first subparagraph, competent national authorities may establish the global process of porting of numbers, taking into account national provisions on contracts, technical feasibility and the need to maintain continuity of service to the subscriber. In any event, loss of service during the process of porting shall not exceed one working day. Competent national authorities shall also take into account, where necessary, measures ensuring that subscribers are protected throughout the switching process and are not switched to another provider against their will.

Member States shall ensure that appropriate sanctions on undertakings are provided for, including an obligation to compensate subscribers in case of delay in porting or abuse of porting by them or on their behalf.

(5) Member States shall ensure that contracts concluded between consumers and undertakings providing electronic communications services do not mandate an initial commitment period that exceeds 24 months. Member States shall also ensure that undertakings offer users the possibility to subscribe to a contract with a maximum duration of 12 months.

(6) Without 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 service provider”.

- 2.47 Our decision to implement Option D and reduce the porting time to one working day will mean that consumer mobile porting in the UK is likely to be in line with the requirements of the new EU Regulatory Framework.
- 2.48 We recognise that the new EU Regulatory Framework contains a number of other provisions which will need to be transposed. We will work with the Department of Business, Innovation and Skills (BIS) to assess what other changes need to be made and any necessary changes will be consulted upon in due course. For example, the implications of the one day requirement for fixed porting and the ‘bulk’ mobile porting process will need to be considered.

## Impact Assessment and Equality Impact Assessment

- 2.49 We presented an impact assessment of the four options presented in the August consultation, in particular in Section 5 of that consultation. We have now refined our impact assessment, and in particular the cost benefit analysis in Section 4 of this document. The analysis presented there, and throughout this document, is an impact assessment, as defined in section 7 of the Act.<sup>25</sup>
- 2.50 We also considered whether we were required to undertake a full Equality Impact Assessment for this review. On the basis of our Initial Equality Impact Assessment Screening we determined that this was not required, because any changes to the MNP process do not raise specific equality issues; they will affect consumers equally, regardless of race, gender or disability.

## Structure of this document

- 2.51 In the next section we provide a summary of comments from stakeholders on the August consultation and our response to those comments. We have also summarised some of the more detailed comments on our cost benefit analysis and our response to those comments in Annex 5.
- 2.52 Section 4 analyses the impact of our decision to implement Option D and the revisions we have made to our cost benefit analysis in the light of stakeholder comments.
- 2.53 Section 5 details the proposed modification to GC18 to implement Option D and how we consider those modifications meet the required legal tests. We also discuss the proposed implementation period for the changes. A draft notification of the modification to GC18 is set out in Annex 8.
- 2.54 We welcome stakeholder comments on our proposed changes to GC18. The deadline for responses to this consultation is **5pm on 13 May 2010**. The process for responding is set out in Annex 1.

---

<sup>25</sup> 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. For further information about our approach to impact assessments, see the guidelines, Better policy-making: Ofcom's approach to impact assessment, which are on our website: [http://www.ofcom.org.uk/consult/policy\\_making/guidelines.pdf](http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf).

## Section 3

# Responses to the August consultation and Ofcom's comments

## Introduction

- 3.1 In this section we provide an overview of the comments received in response to our August consultation and set out our response to those comments.
- 3.2 We received ten responses from individuals, 19 from industry stakeholders and three from other stakeholder groups.
- 3.3 Below, we have summarised the responses by issue and highlighted some of the questions we asked in the August consultation which are relevant to each issue. All the non-confidential responses are available on our website at: [www.ofcom.org.uk/consult/condocs/gc18\\_mnp/responses/](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/responses/).

## The consumer switching project

- 3.4 We noted in the August consultation that we were undertaking a separate project on consumer switching, which would be assessing switching processes across different services, and which would examine a broader set of issues around donor- and recipient-led (referred to more broadly across sectors as gaining and losing provider led) processes for switching in different sectors, including mobile.

## Stakeholder comments

- 3.5 Vodafone, T-Mobile and Cable & Wireless ("C&W") all questioned why MNP was being considered separately from the switching project and suggested it would be more logical and appropriate for MNP to be reviewed as part of that wider project. C&W queried why, at a time when there is an increase in the degree of bundling of services in the marketplace, it was appropriate to consider mobile in isolation to wider communications services. It noted that large mobile network operators ("MNOs") are now offering fixed voice and broadband services and fixed communications providers are increasingly becoming involved in the mobile sector.
- 3.6 Two MNOs particularly outlined concerns that, as a result of the switching project Ofcom could determine a policy that was different to the amendments made as a result of the MNP work.
- 3.7 Several responses, including BT, C&W, the Consumer Panel, DRD Communications, the Federation of Communication Services ("FCS") and Scottish and Southern Energy ("SSE") commented that Ofcom's objective should be a single end-user switching and porting process across a range of products, and whatever was developed now for MNP should not hinder a wider cross-product solution.

## Ofcom's response

- 3.8 We agree that it is important for any assessment of significant changes to the MNP process, in particular recipient-led processes, to be aligned with the work coming out



of the consumer switching project to ensure a consistent approach. We will therefore not be considering the recipient-led options, Option A and C, further in this document.

- 3.9 Given this decision, a number of the stakeholder comments received in response to our August consultation, and outlined below, will now be considered in the context of the consumer switching project.

## **Bulk porting**

- 3.10 In the August consultation we noted that the mobile industry operated two distinct MNP processes: 'consumer' ports and 'bulk' ports. The bulk process involves the porting of more than 25 mobile numbers and typically concerns larger businesses.
- 3.11 Our consultation was primarily about the arrangements for consumer ports, because we had not identified any evidence of harm arising from the bulk porting process. We also acknowledged that the bulk process was subject to different arrangements to reflect the particular needs of business consumers with a large number of mobile phones. We therefore asked the following question:

*Q3.1: Do you agree that the bulk porting process should not be included in this review and should be left to industry agreement?*

## **Stakeholder responses**

- 3.12 Several stakeholders agreed that bulk porting should not be included in the current review, because the process was more complex. Vodafone noted that businesses preferred to plan migrations well in advance and porting dates were often scheduled further ahead by mutual agreement. Hutchison 3G ("3UK") also agreed that bulk porting should not be included although it considered that the matter should be kept under review.
- 3.13 FCS, DRD Communications and SSE considered that bulk porting would need to be considered as part of a single industry framework for fixed, mobile and other forms of number porting, although they suggested that if Ofcom was seeking a short term solution for MNP then bulk porting could be excluded.
- 3.14 However, several other stakeholders, including O2, Syniverse, C&W and the Communications Management Association ("CMA") disagreed with our decision to exclude bulk ports. Several noted that although the bulk process incorporated different time periods the actual process was the same and having different processes for different types of ports would not be appropriate. They also noted that there were efficiencies to be made in having the same process for both consumer and bulk ports. Similarly, several stakeholders noted that introducing two substantially different processes would add to costs and complexities.

## **Ofcom's comments**

- 3.15 We acknowledge stakeholder comments about the possibility for additional costs and complexities if there were two different systems for consumer and bulk ports. However, given that we have now decided to implement Option D, this will not now involve the introduction of a significantly different process.
- 3.16 With the exception of comments about the potential for added complexity and costs from having two different processes, there appears to be broad agreement that Ofcom should not intervene in the bulk porting process at this stage. Therefore, our

proposed modification of GC18 to implement Option D will only apply to the consumer porting process, i.e. ports involving fewer than 25 numbers.

- 3.17 However, as noted in Section 2 we will be separately considering the implications of the one day porting requirement in the new EU Regulatory Framework in relation to the bulk mobile porting process.

## Evidence of consumer harm

- 3.18 In the August consultation we noted that a significant proportion of consumers were satisfied with the current MNP process and that it worked well for many people. For example our research found that 80% of consumers who had ported were satisfied with the process.<sup>26</sup> Nevertheless, our research also identified three particular areas where the current process was causing problems for a significant minority of consumers. Those were:

- unwanted or excessive save activity imposed on consumers by the donor network at the point of PAC request;
- refusal or failure to issue PACs to consumers, despite receipt of a valid request; and
- unnecessary delays that extended the length of the end-to-end porting process; in particular the process by which mobile providers issued PACs to consumers.

- 3.19 We also noted potential further issues raised by the areas of concern above, in particular awareness and frequency of porting. Although we concluded that there was limited evidence from our consumer research to demonstrate that the porting process in particular was acting as a barrier to switching, we noted that 35% of consumers were unaware of their right to keep their number and only 45% of consumers who switched had ported, despite 71% of consumers claiming their number was important to them. In addition we noted only 56% of all mobile consumers thought it was easy to port their number.<sup>27</sup>

- 3.20 We noted that the first two areas of consumer harm, the unwanted save activity and the refusal to issue PACs could potentially be dealt with through enforcement of the existing regulations and that we intended to monitor complaints of those type for any evidence of non-compliance.<sup>28</sup>

- 3.21 We therefore asked the following questions:

*Q 4.2: Do you agree with Ofcom's view that the current process does not work well for all mobile consumers?*

*Q4.3: Are there any other areas of consumer harm that have not been identified? Do you have any evidence to demonstrate other areas of consumer harm?*

*Q4.4: Do you agree that Ofcom should intervene to introduce changes to the current MNP process to address the harm identified?*

<sup>26</sup> TNS, *Omnibus Survey*, December 2008, Q.9.

<sup>27</sup> TNS, *Omnibus Survey*, December 2008, Q7, Q8, Q15 and Q4.

<sup>28</sup> [www.ofcom.org.uk/bulletins/comp\\_bull\\_index/comp\\_bull\\_ocases/open\\_all/cw\\_01018/](http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ocases/open_all/cw_01018/)

## Stakeholder responses

- 3.22 Several respondents supported Ofcom's conclusions that the current MNP process was not operating as effectively as it could, leading to consumer harm in some areas. 3UK in particular argued that the nature of the donor-led porting system allowed each of the areas of consumer harm Ofcom identified to happen. It argued that Ofcom's research demonstrated there were serious flaws in the current system, which were operating against consumers' interests and hindering effective mobile porting and switching.
- 3.23 Some respondents, including 3UK, disagreed that there was limited evidence that the porting process was acting as a barrier to switching. For example, Tesco and 3UK believed that the existing processes caused confusion and could be a hindrance to customers wishing to change providers. Michael Connarty MP said forcing consumers to request a PAC from their existing operators and making them wait two days for the number to be ported limited the ability of consumers to exercise choice, diminished competition in the market and only benefited the larger incumbent operators.
- 3.24 3UK and SSE both argued that there was also qualitative consumer detriment in the current donor-led processes brought about by a reduction in the levels of competition in the market. They argued the requirement for customers to contact their existing operator to obtain a PAC provided a 'save' opportunity for the operator, which allowed them to provide targeted discounts and deals to the particular group of 'active' customers who had demonstrated that they would like to switch.
- 3.25 Other MNOs, however, argued that the balance of Ofcom's own evidence was overwhelmingly positive, particularly because of the reportedly high satisfaction and the relatively low level of complaints about the process received by Ofcom's Advisory Team ("OAT").<sup>29</sup> Vodafone noted Ofcom's acknowledgement that the process worked well for most customers but it considered that this finding deserved greater prominence and risked becoming obscured by Ofcom's focus on perceived problems. Vodafone believed the qualitative research showed that changes to the porting process were a low priority issue for customers.<sup>30</sup> T-Mobile similarly considered that the current process worked well, although it recognised that the process could be improved for a minority. It considered that there was an absence of any identification of serious consumer harm and that Ofcom had not drawn the right conclusions from the evidence it had presented.
- 3.26 Vodafone agreed that there was limited evidence to suggest the MNP process was acting as a barrier to switching and in particular believed there was a lack of evidence that port lead times acted as a barrier to switching or porting. [X<] also said it did not see any reason why Ofcom should be concerned at a low level of porting if it was not inhibiting switching. It suggested that there was little evidence to suggest that changing the porting process would increase switching. It also believed that the

---

<sup>29</sup> We noted in the August consultation that we received around 70 complaints a month relating to the PAC process. MNP does not therefore appear as one of the top six most complained about issues in Ofcom's Telecoms Complaints Data:

[http://www.ofcom.org.uk/telecoms/ioi/bulletins/complaints/complaints\\_oct09.pdf](http://www.ofcom.org.uk/telecoms/ioi/bulletins/complaints/complaints_oct09.pdf)

<sup>30</sup> Jigsaw Research, *Review of Number Porting; Expectations and Experience among residential and business customers*, a qualitative research report prepared for Ofcom ("Qualitative Research"), February 2009. Available at:

[www.ofcom.org.uk/consult/condocs/gc18\\_mnp/research/Jigsaw\\_qualitative\\_research1.pdf](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/research/Jigsaw_qualitative_research1.pdf). For example residential customers quoted 'easier to compare deals', 'better handsets' and 'better coverage' among others as areas which could be improved ahead of the MNP process (p.27).

consumer research showed that customers did not necessarily place as great an importance on keeping their number as Ofcom might expect and Ofcom could not therefore regulate for an increase in MNP if consumers were not interested.

- 3.27 Two MNOs considered that Ofcom's consultation question on the consumer harm was loaded or leading, given that the evidence made clear that the current process did work well for most people. T-Mobile was also concerned that the question implied no issue of cause or effect. [X] considered that in the absence of evidence that the existing process was failing to deliver for competition, it was difficult to see how Ofcom could justify intervention, and it was perplexing that a review of MNP remained a priority for Ofcom, particularly when the consumer switching project was taking a more strategic look at switching across all platforms.
- 3.28 The majority of respondents, including most of the MNOs and BT, agreed, however, that there were some poor customer service practices around the provision of PACs, which was an area in which Ofcom should intervene. Consumer Focus also agreed that consumer detriment from the current process arose mostly as a result of delays or obstructions caused by the PAC process.
- 3.29 Several respondents, including O2 and Virgin Media, believed that much, or all, of the consumer detriment could be addressed through proper enforcement of GC18. O2 stated that if its competitors were abusing the current process, Ofcom must act firmly and decisively and use its enforcement powers to ensure that consumer harm is eradicated. O2 said it was important that Ofcom recognised the existing compliance failures when formulating policy in this area.
- 3.30 In terms of other potential areas of consumer harm, BT argued that the loss of outstanding credit to pre-pay customers when a port processed was another potential barrier to porting which Ofcom had not considered. FCS, Mundio Mobile and DRD Communications commented that other, possibly more significant, areas of consumer harm were unrelated to porting, for example locked handsets, contract lengths and lack of ability to roam across networks. BT also highlighted that another area of potential harm was customers who wanted to port their numbers to new entrants but were not able to, because of the lack of porting agreements.

### Ofcom's comments

- 3.31 There appears to be a consensus from respondents that the delays created by the PAC process is leading to consumer harm in some cases and Ofcom's intervention in this area to bring about improvements would be welcomed.
- 3.32 We note the comments about the potential for much of the consumer harm identified to be dealt with through enforcement of GC18. Our pre-enforcement programme in this area is still ongoing and we have been closely monitoring complaints about the PAC process.<sup>31</sup> We have been discussing with some MNOs how to reduce the complaint numbers and address the issues raised in the complaints. As a result we have seen an improvement in complaint numbers but we have kept the programme open for a further six months so we can continue to monitor complaints and ensure that the downward trend is sustained. We will take appropriate enforcement action if we consider it necessary. However, as outlined in the August consultation, because the current wording of GC18 does not specifically address the PAC process and the timings around it, we consider it is necessary to introduce a specific requirement in

<sup>31</sup> [www.ofcom.org.uk/bulletins/comp\\_bull\\_index/comp\\_bull\\_ocases/open\\_all/cw\\_01018/](http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ocases/open_all/cw_01018/)

GC18 to this effect. Our proposed modifications are outlined in Section 5 and Annex 8.

- 3.33 Once the proposed amended GC18 has come into effect (subject to consultation – see Section 5), we will actively monitor mobile providers' compliance with the new requirements.
- 3.34 With regard to the comments about the consumer harm arising from the donor-led nature of the current process, the consumer switching project will be gathering further evidence on these issues, including the question of save/retention activity, the impact on competition and the potential for targeted discounts because of the 'save' opportunity afforded by the need for consumers to request PACs from their existing operators.
- 3.35 We note BT's comments about potential harm for consumers who are not able to port their numbers from or/to new entrants, because of the lack of porting agreements. We have been monitoring the progress of porting agreements between new entrants and established MNOs and note that several new entrants have now successfully concluded those arrangements and others are also now making progress.

### Consumer desire for a faster porting process

- 3.36 In terms of the current two day porting time, our research found that 78% of consumers who had ported said they were satisfied with the time it had taken.<sup>32</sup> However, we also noted there was some evidence that consumers would prefer a faster porting process. The qualitative research found that several participants felt the timing was unnecessarily long and the transition period while the number was being ported created a lot of anxiety and frustration amongst consumers.<sup>33</sup>
- 3.37 The PAC process in particular was highlighted as an area which could create delays and this was supported by our mystery shopping research, which found that PACs sent by post took an average of four days to arrive.<sup>34</sup>
- 3.38 In addition, we found that a number of consumers stated that they were willing to pay to speed up the process to either a one day or a near-instant process.<sup>35</sup>
- 3.39 We therefore asked the following question:

*Q 4.1: Do you agree with Ofcom's view that the evidence suggests consumers would prefer a faster porting process?*

### Stakeholder responses

- 3.40 Several responses agreed that consumers would prefer, and would benefit from a faster porting process. 3UK believed our research demonstrated that a quicker porting process was supported by consumers. It considered that perceived delays in the MNP system acted as both a barrier to porting and switching. Consumer Focus

---

<sup>32</sup> TNS, *Omnibus Survey*, December 2008, Q.9:

[www.ofcom.org.uk/consult/condocs/gc18\\_mnp/research/TNS\\_Omnibus\\_survey\\_data\\_Dec1.pdf](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/research/TNS_Omnibus_survey_data_Dec1.pdf)

<sup>33</sup> Jigsaw Research, *Review of Number Porting; Expectations and Experience among residential and business customers*, a qualitative research report prepared for Ofcom ("Qualitative Research"), February 2009:

[www.ofcom.org.uk/consult/condocs/gc18\\_mnp/research/Jigsaw\\_qualitative\\_research1.pdf](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/research/Jigsaw_qualitative_research1.pdf)

<sup>34</sup> Synovate, *PAC Mystery Shopping*, April 2009.

<sup>35</sup> TNS, *Omnibus Survey*, December 2008, Q.16.

said its own research found that 32% of consumers thought that moving to a two hour porting process was an important improvement. Tesco Mobile said feedback from their customers indicated that they would prefer a much quicker MNP system.

- 3.41 3UK suggested that a donor-led system would never be capable of being as fast as a recipient-led system, because it consisted of a two stage process. It said that because of this additional time involved for a customer to obtain a PAC from their existing operator, the maximum time limit for porting was often exceeded or misstated. 3UK also highlighted that in Ofcom's research, when customers who had switched without porting were prompted as to why they had not ported, 9% said it would have taken too long to arrange to keep their number.<sup>36</sup>
- 3.42 However, the vast majority of responses questioned whether there was real evidence of consumer desire for a faster process, particularly a two hour process. The majority of MNOs, along with FCS, C&W, BT and Virgin Media believed that certainty about when a port would take place and customer convenience were more important than speed. Several responses highlighted Ofcom's research as evidence of this, for example the high level of satisfaction with the time taken.<sup>37</sup> Other stakeholders noted that the qualitative research placed an emphasis on certainty and control over the process.<sup>38</sup>
- 3.43 Several respondents noted that the few comments raised by consumers with regards to porting timescales were mainly in relation to the time it takes for a consumer to receive a PAC. T-Mobile therefore suggested that it was not the porting process that required acceleration but the convenience of initiating the port. It also suggested that the inconvenience identified by consumers could be largely attributed to those operators that persisted in delivering PACs by post.
- 3.44 BT noted that Ofcom's research did not set out that faster porting could lead to more risks and that it was not therefore clear how customers would feel about such trade-offs. It also believed that consumers' perceptions of the process might be different if they realised they would retain outbound service throughout the porting period. Similarly C&W argued that although speed of porting was important, what might be more useful would be for customers to be informed precisely when ports were going to occur.

### Ofcom's comments

- 3.45 We acknowledge that the trade-off between speed and risks/certainty is a key consideration in assessing whether the porting process is working well for consumers. Again, the comments we have received will be considered in the context of the consumer switching project.
- 3.46 In the following section we have revised our cost benefit assessment to establish whether, in the context of the existing donor-led system (given that recipient-led options are not being considered further in this document), a two hour or a one day process is justified, i.e. either Option B or Option D. Our analysis indicates that Option D, the one day process, would have a higher NPV, which is in line with some of the stakeholder comments above.

<sup>36</sup> TNS, *Omnibus Survey*, December 2008, Q.10A/B.

<sup>37</sup> TNS, *Omnibus Survey*, December 2008.

<sup>38</sup> Jigsaw, *Qualitative Research*, February 2009.

- 3.47 There is also clear agreement that the delays involved in the provision of the PAC add to the time taken to port and that the timing of the process should be improved., which supports our decision to introduce a requirement for PACs to be issued quickly. This, as well as the reduction of the porting time to one working day, will address some of the delays caused by the current process and make the process more convenient for consumers.

### The 'do nothing' option / the counterfactual

- 3.48 In the August consultation we decided that the 'do nothing' option was not appropriate, given the consumer harm we had identified and the likely introduction of the new EU Regulatory Framework. We noted, however, that we would still evaluate that option because it would act as the counterfactual against which the costs and benefits of the other options were assessed.

- 3.49 We therefore asked the following question:

*Q5.1: Do you agree with Ofcom's view that the 'do nothing' option is unlikely to be appropriate in light of (i) evidence of consumer harm and (ii) noting the proposed one working day porting requirement under the New Telecoms Package? If not, please give reasons for your views.*

### Stakeholder comments

- 3.50 [X] disagreed that the 'do nothing' option should be disregarded given that the new EU Regulatory Framework had not been confirmed. Vodafone also said it did not entirely agree, because it did not yet think a case had been made that any of the four options presented would yield sufficient consumer benefits and it did not consider that the EU proposal would require any changes (see paragraph 3.133 below for further discussion of this point). However, the vast majority of respondents supported our view that the 'do nothing' option was not a suitable alternative going forward.
- 3.51 Several respondents argued, however, that the 'do nothing' option was not the correct counterfactual against which to assess the other options. In particular, FCS, T-Mobile and Horrocks Technology argued that the options for action by Ofcom should be assessed against the baseline of the European requirement for one-day porting.
- 3.52 Several MNOs also argued that the 'do nothing' option could only be objectively compared to the other options when the consumer harm identified had been tested with enforcement action. They noted that enforcement action could potentially eliminate two of the three harms identified and that was the basis from which the cost benefit analysis of the four proposed change options should be considered.
- 3.53 O2 argued that given the proposed timelines for the consultation, assessment and re-consultation, Ofcom had not allowed itself sufficient opportunity to carefully and objectively determine whether enforcement action had been effective or not. It noted that there is often a time-lag between enforcement action and the effect on complaints.

### Ofcom's response

- 3.54 At the time of our analysis, the new EU Regulatory Framework was only a proposal and it was not definite that it would be adopted. As already outlined, this has now

been confirmed and therefore it will be necessary for one working day porting to be implemented in the UK by 25 May 2011. We have, however, continued to measure the costs and benefits of the options relative to the current basis, as this was the basis used in our consumer survey.

- 3.55 We note the comments that one working day porting should be used as the counterfactual because of the EU requirement. However, in introducing any changes that are likely to be in line with that requirement, Ofcom is still required to ensure that the changes are introduced in a proportionate manner. The most important consideration is that the options are assessed consistently. Changing the counterfactual would impact on the NPV of Option B and D but in this case we would not expect it to change the ranking of these options.
- 3.56 The GC18 pre-enforcement programme is still open and complaints are being monitored (see also paragraph 3.32 above). The GC18 pre-enforcement programme focussed on issues relating to excessive retention activity, refusals to issue PACs and whether PACs were issued within a reasonable time. These issues did not form part of the quantified benefit assessment. However, in principle we would assess the benefits of speeding up the porting process against the counterfactual of compliance with GC18. The question in our consumer survey was framed to capture this i.e. it noted that the current porting process takes 2 to 3 days. It is possible that consumers' actual experience of the porting process (e.g. the experience of conduct which does not comply with GC18) conditioned their responses. However, it is not clear how material this source of error might be, or that alternative methods to try and capture the benefits of a faster porting process would be any more certain.

## The proposed options for changing the MNP process

- 3.57 Against today's two working day process, we considered both two hour and one working day porting. Combined with the option to move to a recipient-led process, we considered the following options and evaluated them compared to a 'do-nothing' counterfactual:
- **Option A:** recipient-led process with porting completed within two hours;
  - **Option B:** donor-led process with porting completed within two hours;
  - **Option C:** recipient-led process with porting completed the next working day; and
  - **Option D:** donor-led process with porting completed the next working day.
- 3.58 In terms of 'two hour' porting, we noted that, in practice this was the closest to a 'near-instant' process that was possible for MNP, because two hours allowed time for each operator to complete all the actions required whilst still allowing a small safety margin in case of any problems.
- 3.59 The August consultation also discussed, but did not assess, another option, which was a system similar to that used in France. This involves MNOs providing a separate freephone number that consumers use specifically to obtain a PAC. The process is automated; the donor operator is able to verify the customer without having to speak to them and the consumer receives the PAC immediately via SMS.<sup>39</sup>
- 3.60 We asked the following questions:

<sup>39</sup> The August consultation, pp. 19 & 33.



*Q.5.2: Do you agree with the range of potential options Ofcom has set out?*

*Q.5.3: Do you consider that there are additional options that Ofcom should have considered? If yes, please explain what option(s) should have been considered and why.*

## **Stakeholder comments**

- 3.61 Several stakeholders considered that the choice between recipient-led and donor-led was an over-simplification of the issues. T-Mobile, for example, suggested that each of the problems Ofcom presented with the current system could be addressed within a donor-led system. O2 similarly argued that Ofcom should produce evidence to show that a refined, tighter, donor-led process could not deliver all the benefits of a speedy, efficient porting process whilst retaining all the safety nets and protections for customers that would otherwise be sacrificed in a recipient-led process
- 3.62 Several respondents therefore considered that the options were not well targeted at the issues identified and rather than viewing the issues through the prism of recipient- versus donor-led, Ofcom should identify and prioritise the key features of any porting process and structure the options for change around those requirements. They considered that a simpler targeted approach should be adopted, which would allow the industry to retain the best of the existing donor-led processes.
- 3.63 T-Mobile and O2 were concerned that the donor-led options presented did nothing to address unwanted retention activity and therefore the consultation was biased in favour of the adoption of a recipient-led system. They both suggested that the problem of excessive or unwanted save activity could be resolved by segregating that activity from the PAC supply, for example through a separate phone line where save activity was prohibited. T-Mobile suggested that having an option on operators' customer service lines which was specifically for PAC requests could be established for as little as around £10k for each operator.<sup>40</sup> It noted this approach would address concerns about unwanted save activity whilst retaining the benefits demonstrated by customers who negotiated and successfully obtained a better deal. Some other responses also supported this approach, including FCS and DRD Communications. Horrocks Technology also suggested that questions from the donor operator about anything other than verifying their identity should be prohibited.
- 3.64 Some stakeholders, including the Consumer Panel, Consumer Focus and C&W suggested Ofcom should consider the French model in more detail. C&W said it would have liked Ofcom to have considered consumer research into this option. C&W also suggested that the ability to specify MNP activation to occur overnight should have been considered or an option whereby the porting customer was able to specify a precise time when their number was ported.

## **Ofcom's response**

- 3.65 The assessment of gaining versus losing provider led processes (or donor versus recipient) will be a key issue in the consumer switching project and the comments made in this respect will be considered as part of that assessment. The project will be considering evidence from other countries on their switching processes.
- 3.66 We have noted the comments about segregating save activity from the PAC request process. The question of save activity and its value to consumers will also be

---

<sup>40</sup> e.g. "press x to speak to someone about requesting your PAC".

considered as part of the consumer switching project. Nevertheless, we agree with O2 and T-Mobile that the PAC supply should not be dependent on the consumer listening to retention activity if they do not want to. Our view is that in order for a communications provider to provide MNP as “soon as reasonably practicable on reasonable terms” (as required by GC18)<sup>41</sup> consumers should not be subject to excessive or unwanted retention activity and this is the view we have taken as part of our pre-enforcement programme. We consider that a provider should not therefore make provision of the PAC conditional on the consumer listening to retention activity or the consumer responding to questions relating to anything other than the authorisation of the request, i.e. where a consumer makes clear that they are not interested in listening to retention offers and are only requesting their PAC the operator should not engage any further in that retention activity and should provide the PAC.

- 3.67 This does not of course prohibit operators from engaging in legitimate retention activity, for example where it enables customers to make an informed choice. However, it limits that retention activity to what is reasonable and acceptable to the consumer. This is the position that we take when monitoring complaints about provision of the PAC and assessing whether providers are complying with GC18. We will consider whether a further mystery shopping exercise is necessary in the future to assess whether the issue of excessive or unreasonable save activity is still causing problems for consumers.
- 3.68 Furthermore, as highlighted above, once the proposed amendments to GC18 have come into effect (subject to consultation) we will actively monitor providers’ compliance with the new requirements, as well as compliance with the requirement to provide PACs in a way that is ‘reasonable’ as described above (for example, in terms of not engaging in excessive retention activity).

## Improvements to the PAC process

- 3.69 One of the areas of potential consumer harm we identified was the potential for delays in the way in which PACs were issued. We therefore considered that if the porting process were to remain donor-led, the consistency and speed of providing PACs to consumers needed to improve significantly. We noted that while it was generally possible to provide a PAC immediately, providers did not have commercial incentives to do so and in some cases consumers only received a PAC four days or more after their request.<sup>42</sup>
- 3.70 As such, we proposed that under any future donor-led process, MNOs would be required to provide PACs immediately over the phone where possible, or at a minimum, by SMS within a maximum of two hours after receiving a PAC request.
- 3.71 In reference to this point we asked the specific question:

*Q5.4: Do you agree that a two hour timeframe in which to issue the PACs for Options B and D is appropriate? If not, please give reasons for your views.*

<sup>41</sup> [www.ofcom.org.uk/telecoms/ioi/g\\_a\\_regime/gce/cvogc160909.pdf](http://www.ofcom.org.uk/telecoms/ioi/g_a_regime/gce/cvogc160909.pdf).

<sup>42</sup> Synovate, *PAC Mystery Shopping*, April 2009. The average time taken to receive a PAC via post was four days and 22% of the sample received PACs in this way.

## Stakeholder comments

- 3.72 The vast majority of responses indicated strong support for the proposal for PACs to be issued within two hours. Several stakeholders commented that making this small change to the PAC process would immediately bring about improvements to the end to end porting process and reduce overall delays. For example, Vodafone considered that improvements to the PAC process were the clearest candidate for improvement by some measure and it stood to deliver tangible near term benefits at reasonable cost. Virgin Media noted that it provided PACs immediately over the phone and would therefore meet the two hour deadline. It suggested there was no reason why other operators should not also be able to meet that timeframe.
- 3.73 Consumer Focus noted that their research showed that one in eight respondents said the PAC was not easy to obtain and 30% of consumers who were not satisfied with the switching process cited the time taken to obtain their PAC as an area for improvement in the MNP system.
- 3.74 3UK urged Ofcom to introduce a short PAC provision timeframe without waiting for the final outcome of the consultation process. It believed it would be a useful interim measure and that there would be considerable customer benefit in having certainty as to how and when PACs would be issued. It noted that this should only be an interim measure, because it was unlikely to reduce aggressive save activity or PAC avoidance caused by misinformation or confusion of customers.
- 3.75 T-Mobile noted that SMS is not 100% reliable, because it requires the subscriber to have their handset switched on, being in coverage and their SMS inbox not being full. In addition, delivery to individual subscribers is not recorded (only the overall success rate) and therefore an operator would not know if a particular SMS had failed. T-Mobile therefore, along with 3UK, considered that there was no reason why the PAC should not be provided immediately at the time of the request. Some responses from individuals suggested that MNOs should also consider using web interfaces for the process, e.g. supplying a PAC online via their websites.
- 3.76 [X] argued, however, that a two hour deadline for the PAC could add operational complexity, giving them less flexibility to implement the best and most cost effective solution. It considered that a requirement for a SMS to be sent within 24 hours was more reasonable to give operators leeway to deal with any resultant technical issues. FCS was concerned that new entrants might be faced with a barrier to market entry if the timing of issuing a PAC was too short and suggested that the exact timing should be agreed between operators. Mundio similarly stated that issuing PACs by SMS in two hours might be appropriate for established MNOs but the costs would be greater on smaller operators who would have to invest further resources on internal systems in order to comply with the requirements.
- 3.77 [X] argued that issuing a PAC by letter allowed for further details to be provided and a reference point for porting customers. It therefore considered that even if PACs were issued by SMS, operators might still need to send letters to customers (at an additional cost) in order to make sure the customers were fully informed about the process and its implications. On the other hand Virgin Media considered that sending PACs by post was inappropriate and outdated. Vodafone noted that the Industry Manual required operators to send the PAC by post, even if other methods were not precluded and it asked Ofcom to clarify that letters were not required where PACs were notified by SMS.

- 3.78 O2 said it might be helpful for Ofcom to consider in more detail how it might work with the Operator Steering Group (“OSG”) to improve the existing process. It suggested that it would have been possible to encourage near-instant PAC delivery though that avenue.

### Ofcom’s comments

- 3.79 There is a clear consensus that improvements to the PAC process would be welcomed. There also seems general agreement that two hours is an appropriate time limit.
- 3.80 We note the comments by 3UK and T-Mobile that it should be possible for the PAC to be issued immediately. However, we understand that some MNOs do not have automated processes that allow real-time access to the Syniverse<sup>43</sup> system to obtain the PAC. We therefore consider that two hours is an appropriate timeframe for those operators that need to use semi-manual processes, which should not create substantial costs. We have, nevertheless, made clear in the proposed wording of GC18 that this is a maximum timeframe and that providers should provide the PAC immediately over the phone where possible. We also encourage operators to consider other methods of allowing subscribers to request the PAC, for example online systems. Indeed, we understand that some operators are already considering plans to implement such systems.
- 3.81 We acknowledge the comments by Mundio about costs being potentially higher for new entrants, and the suggestion that the two hour timeframe should only apply to the incumbent operators. However, we consider it is important to ensure that there is consistency across all mobile service providers. This will help make the process easier for consumers, who will know that if they want to request a PAC they will be able to obtain it in two hours, regardless of which operator they are with. We have included costs for new entrants in our overall assessment (see paragraphs 4.19 to 4.25 in the next section), which indicates that the changes are justified under a cost benefit analysis.
- 3.82 We acknowledge that there may be marginal errors in terms of the consumer’s receipt of the PAC (e.g. for the reasons suggested by T-Mobile) but these should not prevent the operator being able to send out the PAC within the two hour period. In response to [3<]’s comment, we also of course accept that in exceptional circumstances, for example if there were a technical failure, then the two hour deadline might not be met. However, we are not setting the deadline on the basis of a worst case scenario in the event of a technical failure. The two hour deadline represents a realistic timeframe for the operators to complete the necessary administration for obtaining the PAC from Syniverse and providing it to the customer and we would expect the two hour timeframe to represent the operator’s minimum service level for issuing PACs to consumers. We note that all other responses from MNOs, and mobile virtual network operators (“MVNOs”), supported the two hour timeframe and we therefore consider that this is an appropriate approach.
- 3.83 We also note the comments about a letter providing an opportunity for further information to be provided and Vodafone’s comment that this is required in the Industry Manual. We accept that operators need to provide certain information to the customer alongside the PAC including, for example, information about any early

---

<sup>43</sup> PACs are allocated and managed by a web based system operated by Syniverse on behalf of all the mobile providers. The providers also use this system to exchange porting data between each other and to authorise ports: [www.syniverse.com/content/home](http://www.syniverse.com/content/home)

termination charges and the validity period of the PAC. However, as we noted in the August consultation, we consider that providers have an opportunity to provide this information over the phone when the PAC is requested, and can include at least some of it in an SMS if they chose to. Therefore we do not propose to make it mandatory to issue additionally a PAC by letter. However this does not prevent providers additionally issuing the PAC by letter, or in any other formats, if they see fit.

- 3.84 We consider it appropriate to introduce the requirement for PACs to be issued in a maximum of two hours through amendments to GC18. This will ensure that all mobile service providers provide the same minimum level of PAC provision and will allow Ofcom to take appropriate enforcement action against any providers who fail to meet this requirement.

## Views on the options

- 3.85 We set out our initial findings on the costs and benefits of the options in the August consultation and asked for stakeholders views. Specifically we asked:

*Q5.11: Please explain whether you agree with Ofcom's assessment of the pros and cons of each option and if not, why not.*

## Stakeholder comments

### Recipient-led versus donor-led

- 3.86 3UK and SSE said they would have expected more comment on the benefits of a recipient-led process. They both believed that the dynamics of a market where suppliers have to review the competitiveness of all their offerings, because any customer can easily switch and does not have to speak to their losing provider first, are more beneficial to the general body of consumers than one where a supplier can be sure of a 'save' opportunity. They also argued that that a recipient-led process provided a more amenable proposition for new entrants who depended on being able to entice customers away from existing suppliers. Consumer Focus also commented that a negative consequence of customer retention activity was that prices and deals offered to customers who had indicated that they wanted to switch were often better than those offered to new or existing customers.
- 3.87 O2 and Vodafone, however, disagreed that operators targeted discounts to certain groups of consumers as a result of the 'save' opportunity provided by the PAC request. They considered that there was no evidence to support this. O2 also did not see how a recipient-led process would resolve that concern, because it believed operators would continue to reward customers for loyalty. Similarly two MNOs noted that operators often reviewed customers' packages on an ongoing basis rather than waiting for customers to contact them and often made a point of contacting customers who were approaching the end of their contracts to advertise current offers and seek recommitment. Therefore they argued it was not the case that only 'active' customers benefited from retention offers.
- 3.88 3UK also highlighted that the current donor-led system operated on a bilateral basis, rather than using a centralised porting hub system, which meant that any new entrant operators had to engage commercially and technically with all existing operators that currently support MNP. It argued that those complexities meant higher costs of entry and delays to launching new entrants porting capability. It also highlighted that there were significant costs for existing operators too, because they had to engage with each new entrant that requested portability and negotiate individual MNP

agreements. It noted that a centralised hub solution would mean new entrant operators would only be required to have contractual arrangements with the hub providers.

- 3.89 All the other MNOs considered Ofcom had underestimated the risks of a recipient-led process particularly around ensuring correct customer authentication and that the customer was aware of their contractual liabilities. Vodafone argued that a recipient-led system without proper safeguards would put customers at risk but that a recipient-led process with safeguards would quickly start to become cumbersome, calling into question the claimed convenience benefits. It said the actual operation of those safeguards had not been given sufficient attention by Ofcom. O2 and Vodafone suggested that the experience in fixed line services (which has a recipient-led switching process) provided a salutary lesson. They noted that the sector has been plagued by increasingly high numbers of complaints and instances of 'slamming'.<sup>44</sup>
- 3.90 Consumer Focus and the Communications Consumer Panel also highlighted the importance of ensuring that there was no increase in the risk of slamming in a recipient-led approach. On the other hand, 3UK argued that mobile slamming and mis-selling had much more to do with the sales process than with the porting process and therefore mobile slamming or fraud was no greater a risk under a recipient-led system than under a donor-led system. Tesco considered that with appropriate regulatory enforcement the risk of slamming could be mitigated. 3UK also argued that the link to contractual liabilities was incorrectly perceived because porting was incidental to the decision to switch and did not create or add to the contractual liabilities owed to an old supplier.
- 3.91 However, several other respondents indicated particular concern about customers not being made aware of outstanding contractual liabilities under a recipient-led process. [X] considered a recipient-led process could risk increasing the number of customers who switched and ported mid contract and suffered from bill shock as a result of not being reminded of those outstanding liabilities. Virgin Media commented that fully informing customers of their contractual commitments was best achieved under a donor-led process and to do otherwise risked the scenario of a number of ports having to be reversed at a cost to both the industry and to consumers generally.
- 3.92 T-Mobile commented that there was no overall comparison of the strengths and weaknesses of a donor or recipient-led process. Instead, it considered Ofcom had focussed on the weaknesses of the current donor-led process. Similarly Vodafone noted that Ofcom risked overlooking the strengths of a donor-led process, such as the high degree of security and customer control. Virgin Media said Ofcom had failed to acknowledge that a properly administered donor-led process could mirror the speed and certainty of a recipient-led process.
- 3.93 O2 was concerned that a recipient-led process removed the opportunity for the customer to change their mind. It noted that 35% of consumers who requested a PAC did not use it and in a recipient-led world the equivalent effect would be 35% of customers trying to reverse a process that had already begun. O2 therefore questioned whether that would fulfil Ofcom's duty to have proper regard for consumer choice and value for money. Vodafone and T-Mobile noted that many customers

---

<sup>44</sup> For example, Vodafone highlighted that fixed-line misselling/slamming has been the top of the list of the most common consumer complaints to Ofcom for some time:  
[www.ofcom.org.uk/telecoms/ioi/bulletins/complaints/complaints\\_oct09.pdf](http://www.ofcom.org.uk/telecoms/ioi/bulletins/complaints/complaints_oct09.pdf)

appreciated the retention offers they received as part of the PAC request. Vodafone said that the PAC was often used as a bargaining chip among savvy consumers.

- 3.94 Two MNOs disagreed with Ofcom's suggestion that awareness of porting could be increased under a recipient-led process. They both commented that porting was already widely promoted under the current donor-led process.
- 3.95 C&W suggested that more consideration needed to be given to the issue of contracts. It noted that currently consumers often had two contracts in parallel but this might not be improved under a recipient-led process and the customer might still need to contact the donor to cancel their contract in any case. It also noted there was a risk that a consumer's contract could be cancelled before the number port was completed.

### One day versus two hours

- 3.96 T-Mobile, O2, C&W, and FCS believed there was no research to demonstrate that a two hour process was required or would be proportionate. Virgin Media suggested there was no need to 'gold-plate' the EU requirement. T-Mobile argued that the decision to switch operators was not an impulse decision that required immediate fulfilment. Vodafone argued that the case for compressing port lead times at all had not yet been clearly made.
- 3.97 T-Mobile considered that the focus on one day or two hour porting was misleading, because it overlooked the requirement to initiate the porting process itself, which was a question of the speed and ease of authentication. It considered that Ofcom had not properly identified that while authentication and the number porting process were separate, they were part of an overall customer experience. It noted, however, that a one day porting process could be achieved without the requirement to introduce a completely new system or design a new process.
- 3.98 Several responses suggested that given the complexity and age of the MNOs systems a two hour process was likely to be very costly and time-consuming to implement. Syniverse also noted that a single-day porting process could be accomplished with a relatively minor modification of the current UK MNP system and therefore that incremental improvement could cost significantly less than a system that could complete ports in a few hours. Mundio Mobile noted that the faster the process the more likely that new entrant MNOs would have to bear a disproportionate cost.
- 3.99 Some responses highlighted the risks of a two hour process (including O2, BT, T-Mobile and the CMA). For example, T-Mobile argued that a two hour system would substantially reduce the scope of robust consumer protection measures such as anti-slamming precautions and the provision of information on early termination charges. It noted that two hour porting left little room for errors to be identified and corrected.
- 3.100 O2 highlighted that the two hour options could only operate between fixed working hours and therefore for many consumers it would not be as 'instant' as the title suggested in Ofcom's consumer research. It therefore considered that in reality the two hour process might not have a significant marginal benefit to customers. Vodafone similarly noted that customer authentication under a recipient-led process might add significantly to the time taken, and therefore it was questionable whether the process would be 'near-instant'. In addition, O2 and T-Mobile highlighted that consumers are increasingly making their purchasing decision using telesales channels, where the provision of their new SIM or handset would require at least 24

hours to provision and deliver, and the handset could also require overnight charging. Therefore they considered that a two hour process would not necessarily be appropriate.

### Ofcom's response

- 3.101 The issues raised in these comments around recipient- versus donor-led processes will be considered further in the context of the consumer switching project. That project will especially be considering the role of save/retention activity in switching processes and the potential for targeted discounts as a result of the 'save' opportunity created by the PAC request. Issues around potential for slamming and ensuring consumers are well informed of the implications of switching, including about contractual liabilities, will also be key factors to be considered. The issue of speed will also be relevant to the assessment, in particular consumers' views on the trade off between certainty and speed, which was highlighted in many stakeholders' comments on this issue.
- 3.102 We also note stakeholders' comments about the merits of a two hour process compared to a one day process. In the following Section we have assessed the relative costs and benefits of the two donor-led options, Options B and D. Our assessment indicates that Option D, the one day process, would have a higher NPV. Our assessment is supported by the comments from stakeholders that this is the lowest cost option as the existing systems could be amended to implement one day porting.
- 3.103 In addition, as part of Option D, the requirement to issue PACs within two hours will improve the overall customer experience of porting, by ensuring that customers can rely on receiving their PACs within the specified timeframe of two hours.

### Preferred option

- 3.104 We did not express a particular preference for any of the four options in the August consultation but we noted that under our initial cost benefit analysis each might be positive on an NPV assessment given the information we had available at the time. We asked stakeholders for their views on the options and which option they preferred. Specifically we asked:

*Q5.12: Please state which option(s) you favour and why?*

### Stakeholder comments

- 3.105 3UK, Tesco, SSE and responses from two MPs supported a recipient-led approach, and favoured Option A in particular. 3UK argued there were serious flaws in the current donor-led system and any attempts to 'fix' it would not work, because it considered donor operators had little incentive to make the porting process work. 3UK also therefore argued that Option A was especially attractive because it could be self-regulating and would remove a substantial policing burden from Ofcom.
- 3.106 Consumer Focus said its view was that a recipient-led process would be more appropriate to meet the needs of consumers, because it was simple and involved fewer consumer-prompted interactions with mobile providers. It noted that its own research indicated that 79 per cent of consumers would prefer the switching process to be handled by their new mobile provider, rather than arranging the process with their new and old providers themselves. John Robertson MP said the donor-led



system forced consumers to 'negotiate' their right to transfer their number and that was not a consumer friendly system. He therefore supported Option A.

- 3.107 Other respondents, including the CMA, C&W and Mundio Mobile, also favoured a recipient-led process, however, they favoured Option C on the basis that a change to near-instant porting was unlikely to be justified and was too costly or risky. FCS and DRD also supported a move to Option C in the long term.
- 3.108 The majority of other respondents, however, favoured a donor-led process. O2 considered that the donor-led process was best for customers, because it provided a consistent familiar process. O2 also considered that one day porting was the best option to deliver certainty to customers, whilst being the more cost-effective. It was surprised that Ofcom had placed such emphasis on the two hour porting process. T-Mobile also believed that there was no research to demonstrate that a two hour process was required or would be proportionate. T-Mobile, O2, BT and Virgin Media all therefore favoured Option D. Option D was also supported by FCS and DRD Communications as a short term fix, prior to moving to Option C in the long term.
- 3.109 Vodafone and [X] commented that there was no clear case for any of the options as they stood and they therefore supported the 'do nothing' option. However, [X] also indicated that, "if pressed", it could favour Option D and Vodafone said it believed PAC reform should proceed as soon as possible.

### Ofcom's response

- 3.110 Although the responses indicated a range of different views and positions on the options, virtually all respondents indicated some level of support for the changes proposed as part of Option D. This ranged from favouring this option outright, favouring it as an interim option prior to further changes, or some level of qualified support. This supports our decision to implement Option D now.
- 3.111 We will consider the issue of further changes to the MNP process, in particular moving to a recipient-led in the light of the findings from the consumer switching work. We acknowledge, however, that there was greater support for a one day process over a two hour process and that a two hour process in particular could create additional costs, and therefore the benefits from that shorter process would need to be sufficiently large to outweigh those costs. Indeed, in the context of the donor-led options, our assessment of Option B and Option D in the following section indicates that Option D would have the highest NPV.

### Cost benefit analysis

- 3.112 We estimated the likely cost of implementing the four options based on the best information we had available at the time. We asked stakeholders for any additional information about the likely costs and benefits of all four options.
- 3.113 We asked a number of questions in relation to our cost benefit analysis ("CBA"), including:

*Q5.7: Do you agree with Ofcom's analysis of costs for each cost category? If not, please explain why. Please also state whether you are able to provide Ofcom with a more accurate view of costs and if so, please submit your assessment, together with supporting evidence with your response to this consultation.*

*Q5.9: Do you agree with Ofcom's analysis of benefits for each option? If not, please explain why.*

*Q5.10: Please state whether you consider that Ofcom should take any additional benefits into account and explain how. To the extent possible, please provide any estimates of these benefits and the supporting evidence.*

- 3.114 We have set out more detailed comments from stakeholders about the CBA, and our response to those comments, in Section 4 and Annex 5.

### **Stakeholder comments**

- 3.115 The majority of respondents agreed that Ofcom had captured the appropriate cost categories and there was also general agreement that the ranking of the costs between the options was appropriate (i.e. costs for Option D were substantially lower than Option A).
- 3.116 C&W, however, did not accept that a recipient-led process was inherently more operationally expensive than a donor-led process, at least not to the extent suggested by Ofcom's analysis. It considered that this could be due to the cost savings of not having to operate the current process being ignored. 3UK and Tesco also highlighted that these potential cost savings had not been taken into account.
- 3.117 Vodafone and O2, however, considered Ofcom had significantly underestimated the costs of Option A. Several MNOs considered that there would be additional costs under the recipient-led options (for authentication and protection against slamming) and that Ofcom had failed to take these into account. Vodafone also considered that in cost terms, incremental changes to the current donor-led process were likely to be significantly less expensive and less risky than a wholesale switch to a recipient-led model requiring completely new infrastructure. Vodafone said that the incremental changes involved with Option D produced the best possible surplus of benefit over costs and therefore the best return on capital investment.
- 3.118 [X] argued that until it was clear what the process would look like, any attempt to cost the changes was meaningless, if not impossible. It considered that Ofcom should ask MNOs to agree the specification before attempting to cost it. [X] also argued that Ofcom's analysis failed to consider the opportunity cost of implementing a change to the porting process.
- 3.119 In terms of benefits, 3UK highlighted that the current assessment of benefits for the recipient-led options (Options A and C) was a 'worst case scenario' because consumer preferences for recipient-led porting had not been fed into the CBA.
- 3.120 3UK and SSE also commented that it was critical for Ofcom to identify the Type 2 benefits (e.g. economy wide efficiency benefits from greater competition, lower barriers to entry etc) and assess how those might vary under the different options; they considered that those benefits would directly and significantly impact the cost benefit analysis. Similarly Tesco argued that the primary benefit from Option A would be the increased level of competition in the market, the benefits of which would accrue to all customers (not just those who ported their number when they switched provider).
- 3.121 C&W and 3UK noted that if a new message hub was put in place then there was a further benefit from the opportunity to review the inter-operator processes around

service establishment for MNP, making it easier for new entrants to establish MNP and ensuring that any customer will be able to port to any MNO.

- 3.122 O2 considered that Ofcom had failed to take into account the full extent of the benefits available to customers from a donor-led system, for example that it is free to customers, the protection from slamming, greater understanding of contractual liabilities. It was also concerned that the consumer research did not make clear that a donor-led process could easily be amended to address some of the existing problems in the process.

### **Ofcom's response**

- 3.123 We have taken on board a number of the more detailed comments on our CBA and factored these into our revised assessment of Options B and D. See the following Section and Annex 5 for more details. As already indicated, our assessment reveals that Option D would have the highest NPV, which supports our decision to pursue this option.
- 3.124 The cost estimates set out in our CBA in the August consultation were provisional and we made it clear that we would need to do further work to refine those estimates. In our CBA of Options B and D in Section 4 we have refined the cost estimates in light of stakeholder comments. Stakeholders' comments in respect of recipient-versus donor-led processes will be considered again in the light of the findings of the consumer switching project, if necessary.
- 3.125 We also noted in the August consultation that our assessment had not necessarily captured all the benefits of changes to the MNP process. We have also highlighted the potential additional qualitative benefits in our conclusions in Section 5. The evidence gathering we are conducting as part of the consumer switching project should help contribute towards our understanding of any benefits from both recipient and donor-led processes which had not previously been fully considered or factored into our assessment.

### **Implementation period**

- 3.126 Our provisional cost benefit analysis assumed that, if we decided to proceed, the implementation of a change to the MNP process would be completed 12 months from the final decision date. We asked the following question:

*Q5.13: What do you consider to be a reasonable implementation period for each of the options and why?*

### **Stakeholder comments**

- 3.127 Views on the implementation period for each of the options were varied. 3UK believed that Option A could be adopted within a relatively short timescale if an off-the-shelf, near instant recipient-led solution was implemented. It argued that quicker implementation would minimise consumer exposure to the shortcomings of the existing system. However, several other responses considered that Options A, B and C would take significantly longer to implement than Option D, and would take longer than 12 months. T-Mobile estimated those options would take up to three years to implement. [3] said a period of at least 24 months would be required. T-Mobile, Vodafone and O2 all commented that it was very difficult to estimate the exact time required until there were more details available about the design of the solution.

- 3.128 The majority of respondents said, however, that Option D could be implemented reasonably quickly because it would require minimum changes to existing processes. Syniverse suggested a period of three to six months would be sufficient. T-Mobile said Option D could be implemented in 12 to 18 months. [X] also stated that 12 months would be needed.
- 3.129 T-Mobile said it was dismayed that Ofcom appeared not to have learnt from the UKPorting process<sup>45</sup>, which it considered illustrated the difficulties and dangers of a regulator guessing timelines. It said Ofcom had to avoid setting semi-arbitrary deadlines and that any deadlines imposed by Ofcom would have a direct impact on cost. O2 also said that there would be a significant opportunity cost if Ofcom required Options A, B or C to be implemented in less than one year.

### Ofcom's response

- 3.130 We note the comments about the implementation time required for significant changes to the process, particularly Option A, Option B or Option C. We are not considering Option A and C further at this stage, but following the outcome of the consumer switching project, if necessary, we will revisit the issue of the appropriate implementation period for any further changes.
- 3.131 With regard to the implementation time for Option D, there appears to be a clear consensus that it could be implemented relatively quickly, because it requires very few changes to the existing system. Nonetheless, we note that some stakeholders have still argued that 12 months or longer will be required to implement those changes. We have considered the question of the implementation period required for Option D in more detail in Section 5 and have proposed a six month implementation from the date of publication of our final statement.

### New EU Regulatory Framework

- 3.132 In the August consultation, we noted that the EU proposal to require porting to be completed within one working day was a relevant factor to our assessment. We considered that the four options we presented were likely to be in line with those proposals. As noted in Section 2, the new EU Regulatory Framework has now been confirmed and has to be implemented by 25 May 2011.

### Stakeholder comments

- 3.133 Vodafone argued that the text of the EU proposal linked the 'one working day' requirement specifically to the need to minimise service interruption, because it stated "in any event, loss of service during the process of porting shall not exceed one working day".<sup>46</sup> Vodafone therefore considered that the existing process was already compliant with the text, because there is only a limited loss of service between 11am and 3pm on the day of a port. Vodafone and [X] questioned why we had used the EU requirement to propose changes to mobile whereas much more significant changes would be needed for fixed porting and Ofcom had not articulated how that process would be shortened.

<sup>45</sup> In response to the November 2007 Statement, fixed and mobile network operators set up the 'UKPorting' group ([www.ukporting.org.uk](http://www.ukporting.org.uk)), which sought to deliver a porting solution in accordance with Ofcom's decision. This group was disbanded in September 2008 when the CAT set aside Ofcom's November 2007 Statement.

<sup>46</sup> See paragraph 2.46 above for the full text of the revised Article 30 USD.

- 3.134 3UK and C&W queried whether Option D would actually meet the requirement to port within one working day. 3UK felt that Option D might be vulnerable to challenge because it still consisted of a two-day process (i.e., the PAC would be obtained on the first day and the port completed on the second) and the end to end timings were likely to exceed the total porting time proposed by the EU. C&W believed that the only way to make Option D consistent with the EU requirement was to mandate that porting requests were accepted, and processed, after working hours and those costs would need to be factored into that option.
- 3.135 3UK suggested that only Option A would be compliant with the new EU Regulatory Framework, because it required number portability to be completed “in the shortest possible time” and 3UK considered that that could only be achieved under a recipient-led process.

### Ofcom’s response

- 3.136 As noted in Section 2, we are separately considering the implications of the one working day requirement for the fixed porting process. We consider that the requirement may reasonably be interpreted as meaning that subscribers who have concluded an agreement to port a number to a new operator shall be provided (by the new operator) with the service of receiving and making calls by means of that number within one working day. Under the current donor-led process, it is therefore reasonable to assume that the ‘one working day’ starts when subscribers provide their PAC to the recipient, since the provision of the PAC to the recipient is a necessary pre-condition for porting to take place. In our view, this is likely to be in line with the new EU requirements for porting to occur within one working day from the time the “*agreement to port a number to a new undertaking*” is made. These requirements must be implemented by Member States by 25 May 2011. Within the UK the Government will be responsible for transposition of the USD into national law.
- 3.137 We consider that Option D would be in line with the USD requirements because it must be a pre-condition or an essential condition (whether express or implied) for agreements to port to the mobile services of a new provider that the subscriber provides the recipient with a PAC which he has obtained from the donor. Without the PAC, the new provider would be unable to complete the transfer and provide any services to the transferring customer. In our view, it would not be appropriate to view Article 30 USD as meaning in the UK that an operator must provide services to a transferring subscriber on his ported number, even where that operator does not yet have the subscriber’s PAC. Such a narrow interpretation would be absurd in the context of the UK (donor-led) porting system because the operator could not as a matter of fact provide a service to the subscriber without first having the PAC. This could not have been the intended purpose of the USD. When ascertaining the meaning of the wording of EU legal obligations it may be appropriate to consider the purpose that the provisions are aiming to achieve.
- 3.138 We note that such an interpretation could only arise if the words “*concluded an agreement*” in Article 30 USD were taken so literally as to mean that the relevant time for the purposes of the Directive was when the contract entered into (signed, for example) by a subscriber even where it is subject to the subsequent provision of the PAC as an essential condition. Such a literal interpretation is not appropriate in this case because the wording is contained within an EU Directive.
- 3.139 Therefore, we consider that Option D would be in line with Article 30 USD, because once subscribers have provided the PAC, their number would be ported by the end of

the next working day. Our proposed amendments to GC18 also ensure that PACs will be available to subscribers very quickly in any event.

- 3.140 We note Vodafone's comments about the reference to loss of service in the text of Article 30 USD. However, we consider that the minimum requirement is that the 'activation of the number' shall not take longer than one working day once the subscriber has entered into an agreement to port the number. We consider that the reference to loss of service is an additional specification that is subordinate to the primary requirement to have the number activated within one working day of the agreement to port. Therefore, we consider that the current UK process would not be in line with the EU requirement, because it establishes a two business day porting requirement in GC18.
- 3.141 With regard to 3UK's comments, we note that the second subparagraph of Article 30(4) allows national authorities to establish "the global process of porting of numbers" and we consider this provides Ofcom with discretion to decide which process works best for the UK. We note the reference to the "shortest possible time" in the text. As discussed above, we consider that Option D would be in line with Article 30(4) USD because the subscriber would obtain his PAC within the shortest possible time (immediately over the phone, where possible, and in any case within 2 hours by SMS) and his number would be activated within one working day from when the subscriber provides his PAC to the recipient.

## Proposed next steps

- 3.142 In the August consultation we outlined a number of steps that we intended to follow in order to reach a conclusion to the review of MNP. We asked a number of questions about the approach we proposed, these included:

*Q6.1: Do you agree that it is appropriate for Ofcom to appoint a qualified independent consultant(s) to work with industry to develop cost estimates for different implementation options? If not, please state why.*

*Q6.6: Do you agree with Ofcom's proposed next steps following responses to this consultation? If not, how do you consider Ofcom should complete its cost-benefit analysis and proceed to an implementation of one of the four options?*

*Q6.7: Do you have any comments on the proposed timings for reaching a conclusion for this review?*

## Stakeholder comments

- 3.143 [X] said it doubted whether an external consultant would add much value. It considered that the consultant would not be able to derive any further cost information. O2 also reserved its view on whether a consultant was appropriate until it better understood how the costs that could be incurred would be sourced. Vodafone considered that it would be premature to move directly to refining specifications and costs without first re-examining the proposed benefits and that that should be the next step. Virgin Media said only Option D should be considered and therefore an independent consultant was not needed.
- 3.144 However, the majority of other responses, including T-Mobile, 3UK, BT and C&W, agreed that an independent third-party consultant would be appropriate. 3UK suggested, however, that the options considered by the consultant should be

reduced to Option A and Option D. On the other hand [X] believed the recipient-led options should not be included.

- 3.145 A number of responses suggested that a three month timescale for the consultant's work would be inadequate. BT and C&W suggested that six months would be more appropriate.
- 3.146 In terms of further research, 3UK suggested that a stated preference survey might shed more light on what the market as a whole would prefer from a porting process. It said a stated preference survey could explore each of the proposed options in more detail to get a better indication of market needs and the level of preference for a recipient-led process. O2 suggested that Ofcom should ask customers if they would prefer choice and control or less customer involvement. It also suggested that recipient-led options should be presented alongside donor-led options which included improvements to the PAC process.
- 3.147 [X] suggested that Ofcom should set up a series of workshops to discuss and define the requirements of a number portability process, which should be informed by insights from consumers.

### **Ofcom's response**

- 3.148 We no longer intend to pursue the approach outlined in the August consultation at the current stage. We will consider that the comments about the approach to further consumer research in the context of the consumer switching project. We will also take into account stakeholders' comments and reconsider, pending the outcome of the consumer switching work, whether appointing an independent consultant to assess costs is appropriate.

### **Ofcom's conclusions**

- 3.149 Having considered stakeholder responses, we consider it appropriate to implement Option D. As discussed above, virtually all stakeholders indicated some level of support for this option, whether favouring it outright as the preferred option, supporting it as an interim approach or offering some form of qualified support. Above all, changes to the PAC process, and in particular introducing a requirement for PACs to be sent within a maximum of two hours, had widespread support, because this was seen as an area of the process that was leading to consumer harm in certain cases. As discussed further in Section 5 (see paragraphs 5.17 to 5.20), we consider that the changes to the MNP process under Option D will further the interests of citizens and consumers by creating a faster and easier MNP process and reducing the scope for consumer harm.
- 3.150 The range of responses highlight that there are a number of complex issues that need to be considered in relation to the MNP process, particularly in assessing whether a recipient- or donor-led process is more appropriate, for example the role of retention, or 'save' activity, ensuring that a request for porting is properly validated in order to avoid slamming, and also ensuring that a customer is properly informed about their contractual liabilities when they switch. Similarly, in terms of the timing of the process, there are also a number of trade-offs to be considered, for example certainty versus speed.
- 3.151 We are therefore suspending consideration of moving to a recipient-led MNP porting process pending the outcome of our consumer switching work, which we plan to consult on in summer this year. As a result, we are not taking forward analysis of the

two recipient-led options set out in the August consultation (Options A and C) whilst the consumer switching work is in progress.

- 3.152 In the following section we have revised our cost benefit assessment of the donor-led options, Options B and D. We show that Option D is likely to yield a higher net benefit than Option B. In addition, our preference is to deliver consumer benefits in the most cost-effective and proportionate way, in line with our statutory duties and best regulatory practice. We note that Option D is the lowest cost option and the least intrusive given current porting arrangements.
- 3.153 We have also considered the NPV of Option D over a much shorter time period than expected in order to take into account the possibility of further changes to the MNP process as a result of the outcomes of the consumer switching project. While we expect our proposed changes under Option D to run for a number of years, our assessment nevertheless indicates that the changes are likely to be worthwhile even on the basis of a short-term solution (i.e. two years). As shown in Annex 6, while the quantified NPV for a short horizon is low, but positive, our CBA does not take into account all likely benefits from the changes introduced as part of Option D – which we consider are likely to be positive.
- 3.154 We have set out our proposed amendments to GC18, which will (subject to consultation) implement the changes required as part of Option D, in Section 5. We have also provided an outline specification for Option D in Annex 7.



## Section 4

# Revised impact assessment

## Introduction

- 4.1 This section sets out a revised impact assessment of our chosen approach, implementing Option D now. Below we have detailed how we have refined our CBA of Options B and D to take into account comments made in response to the August consultation.

## The citizen and/or consumer interest

- 4.2 Our decision to implement Option D will directly affect consumers. Ensuring that PACs are provided within a maximum of two hours, and reducing the port time to one working day, will improve consumer's experience of porting compared to the current process. It will make the process quicker and more convenient for consumers and will reduce any consumer harm arising from delays caused by the time taken to issue the PAC. As explained in Section 5 (see paragraphs 5.17 to 5.20), we therefore consider that our decision to implement Option D is consistent with our general duties in carrying out our functions as set out in sections 3 and 4 of the Act.

## Ofcom's policy objective

- 4.3 Our overall policy objective in pursuing the changes proposed as part of Option D is to make the MNP process easier for consumers and limit consumer harm. This reflects our principal duty in section 3(1) of the Act to further the interests of citizens and consumers in relation to communication matters.
- 4.4 We are also mindful that, by 25 May 2011, the UK will need to be compliant with the new EU Regulatory Framework, which requires the introduction of one working day porting.

## Approach taken in the August consultation

- 4.5 We previously presented four options, as illustrated in the table below:

**Table 1: Options proposed in the August consultation**

		MODE OF TRANSFER	
		Recipient-led	Donor-led
TIME FOR PORTING PROCESS	2 hours	<p><b>Option A</b></p> <p>2 hour porting</p>	<p><b>Option B</b></p> <p>2 hour PAC supply + 2 hour porting</p>
	1 day	<p><b>Option C</b></p> <p>1 working day porting</p>	<p><b>Option D</b></p> <p>2 hour PAC supply + 1 working day porting</p>

- 4.6 We provisionally evaluated the costs and benefits of these four options. The costs were assessed by considering the changes that would be required to implement each option relative to the current processes (see paragraphs 5.25 to 5.102 of the August consultation).<sup>47</sup> The cost estimates included the one-off / capital costs associated with each option and the annual operating costs. We asked stakeholders for feedback on the cost estimates.
- 4.7 In order to assess the benefits of a faster porting process we used data from our consumer research to establish consumers' willingness to pay.<sup>48</sup> We asked how much consumers would be willing to pay for:
- an immediate/near instant porting process; and
  - a one day porting process.
- 4.8 We used the results of our research, along with an estimate of the number of people porting per year, to derive a demand curve which estimated the total annual benefit of moving to i) a near instant process and ii) a one day porting process (the approach is described in detail in paragraphs 5.108 et seq. of the August consultation). We calculated the NPV of each option over an 11 year horizon based on the projected stream of costs and benefits, discounted at the social discount rate of 3.5%.

## Options considered

- 4.9 Because the issues around recipient versus donor-led switching processes for MNP will be reconsidered in the context of the outcome of the consumer switching project, we are not presenting any further analysis of the recipient-led options (i.e. Options A and C) here.
- 4.10 In this section we have therefore set out our assessment of the impact of Options B and D.

<sup>47</sup> [www.ofcom.org.uk/consult/condocs/gc18\\_mnp/](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/)

<sup>48</sup> TNS, *Omnibus Survey*, December 2008, Q16.

## The 'do nothing' option

- 4.11 In assessing policy options we usually consider an option that would maintain the status quo. In the August consultation we set out why we did not consider the 'do nothing' option was appropriate at that stage (see also paragraphs 3.48 to 3.56 above). Given the decision to align further consideration of recipient-led versus donor-led processes with the outcome of the consumer switching project, the 'do nothing' option in this case would mean the existing MNP process would be retained pending the outcome of that work.
- 4.12 Based on the consumer detriment we have identified under the current process, particularly with regard to the inconsistent arrangements for PACs to be issued to consumers, we consider that the 'do nothing' option is not appropriate. Furthermore, the modifications we are proposing are likely to be relatively low cost and will not involve major changes.
- 4.13 In addition, we note that Option D is likely to be in line with the new EU Regulatory Framework, which Member States are required to implement by 25 May 2011.

## Responses to the August consultation and our revised CBA

- 4.14 Below we outline the changes we have made to the CBA since the August consultation was published. We discuss comments which have been reflected in the modelling assumptions, comments on the approach adopted, and the revised base case NPVs.
- 4.15 A summary of the other comments on the CBA are included in Annex 5. This includes specific comments on issues which will now be considered in the context of the consumer switching project, in particular comments on recipient-led processes and comparisons between recipient- and donor-led porting processes. Table A5.2 of Annex 5 covers other comments in the CBA (not covered the first section of Annex 5 or this Section).
- 4.16 In the following paragraphs we have separated the discussion into three areas:
- i) discussion of stakeholder comments on costs which have been reflected in the revised base case;
  - ii) discussion of stakeholder comments on benefits and the modelling approach (also refer to Annex 5); and
  - iii) summary of changes to the CBA assumptions and revised base case NPVs.

## Discussion of stakeholder comments reflected in the revised base case

### Costs of implementation<sup>49</sup>

- 4.17 In the August consultation we set out estimates for the MNO<sup>50</sup> operator specific and porting hub capital expenditure for each option, along with estimates for the ongoing

---

<sup>49</sup> Comments on costs which relate to recipient-led processes or a comparison of recipient- versus donor-led processes are noted in Annex 5.

<sup>50</sup> The costs related to the five largest MNOs.

operating expenditure. We invited stakeholders to provide comments and/or further information on the estimated costs of implementing Options A-D.

### Stakeholder comments on operator specific capital costs

#### 4.18 Established MNOs (the five largest MNOs)<sup>51</sup>:

- **Costs of shortening the porting process from two days to one day**  
Based on the specification provided in the August consultation three MNOs provided their own (confidential) estimates of the operator specific capital costs for Option D and two MNOs provided estimates for Option B. For Option D we estimated that the average capital cost per MNO for shortening the porting process would be [X]. The three MNOs providing information gave differing estimates for the capital costs as follows: [X]<sup>52</sup>, [X] and [X]. For Option B we estimated that the average cost per MNO for shortening the porting process would be [X]. The two MNOs providing information estimated that the costs would be [X]<sup>53</sup> and [X] to [X]<sup>54</sup>;
- **Costs of providing PACs by SMS within two hours**  
In relation to PAC issuance, we consider that providing PACs immediately over the phone when requested or within two hours by SMS are acceptable outcomes for consumers. We have estimated the costs of providing PACs by SMS within two hours. However, to the extent that some operators are able to provide PACs immediately over the telephone at lower cost this suggests that the SMS based estimates may represent an upper bound to the actual costs.

We noted in the August consultation that some operators already provide PACs by SMS, although this was not guaranteed to be within two hours of the request in all cases. Our current understanding in relation to the MNOs' current PAC processes is as follows:

- two MNOs currently provided PACs by SMS within two hours of the request; these MNOs will not incur any additional costs as a result of our proposals;
- one MNO provides PACs by SMS in the vast majority of cases within two hours (97%); This MNO has indicated that the cost of delivering PACs 'instantly' is [X];
- [X]<sup>55</sup> and
- [X]<sup>56</sup>

#### 4.19 MVNOs, new entrant MNOs and other mobile service providers (MSPs)<sup>57</sup>:

<sup>51</sup> Orange, 3UK, Vodafone, T-Mobile and O2.

<sup>52</sup> This estimate reflected the IT costs. It was not clear whether other types of costs would be incurred. We have assumed that [X] would be adequate to cover all costs.

<sup>53</sup> This estimate reflected the IT costs. For the purposes of revising our costs estimates in the absence of further information we have assumed that [X] corresponds to a value of [X].

<sup>54</sup> This included the operator's contribution to shared costs (i.e. required development of the Syniverse system).

<sup>55</sup> [X]

<sup>56</sup> [X]

<sup>57</sup> For simplicity, "new entrant MNO and other mobile service providers" refers to any mobile operator other than the five largest MNOs (Vodafone, Orange, O2, T-Mobile and 3UK).

- FCS and Mundio Mobile commented that new entrant operators are likely to face a disproportionate cost compared to the established MNOs as a faster process would lead to higher costs.
- Mundio Mobile further commented that a two hour timeframe (for provision of PACs under Options B and D) was appropriate for the established mobile network operators. However, it noted that as this option relies heavily on issuing PACs by SMS, the impact of implementing this would be greater on the smaller operators who would have to invest further resources for internal systems in order to comply with the requirements. They thought this might be an additional barrier to establishing porting at the wholesale level.
- No MVNOs made specific comments on costs.

### Ofcom's response

#### *Shortening the porting process from two days to one day*

- 4.20 For Option D and Option B we have incorporated actual costs estimated (where provided) into our assessment by replacing the portion of costs attributable to each MNO in the original estimate with their actual estimate. Where the MNO provided a range for the cost estimate the midpoint of the range has been used. For the MNOs who did not provide any cost estimates we have assumed the costs are as set out in the August consultation for shortening the porting process. MNOs have generally indicated that the costs of shortening the porting process to one day (i.e. Option D) are not likely to be significant.

#### *Issuing PACs by SMS within two hours*

- 4.21 Two MNOs already comply with this requirement. One MNO is [X]. One MNO commented that the cost of issuing PACs instantly by SMS is [X]. Clearly this goes beyond our two hour requirement. This MNO already issues PACs by SMS with a four hour service level agreement and in the vast majority of cases within two hours. For this MNO we have assumed that around [X] would be incurred to issue PACs within two hours. The final MNO is [X]. This MNO has not provided any cost estimates. We have assumed that the incremental cost for this MNO of complying with our proposals is [X].

#### *Total operator specific costs for MNOs*

- 4.22 In the August consultation we estimated that the capital expenditure for the five largest MNOs to implement Option D was £1.3m (this comprised [X] for shortening the porting process to one day and [X] for issuing PACs by SMS within two hours). Incorporating the revisions set out above results in a revised capital expenditure estimate of £1.7m (this comprises [X] for speeding up the porting process and [X] for issuing PACs in two hours by SMS).
- 4.23 For Option B we estimated the capital expenditure for the five largest MNOs at £7.8m in the August consultation ([X] for speeding up the porting process to two hours and [X] for issuing PACs by SMS within two hours). Incorporating the revisions set out above results in a revised capital expenditure estimate of £8.9m (this comprises [X] for speeding up the porting process and [X] for issuing PACs in two hours by SMS).

#### *MVNOs, new entrant MNOs and other MSPs*

- 4.24 We consider that new entrant MNOs, MVNOs and MSPs should be required to offer the same porting process as the established MNOs (assuming that they offer the facility to port) to avoid customer confusion. It is important that the process is consistent across all operators so consumers know what to expect, and consistency will help the recipient operator to provide accurate guidance to help consumers through the process. We note Mundio Mobile's comment that issuing PACs by SMS in two hours might have a greater impact on smaller operators. However, as discussed above, we are not necessarily requiring PACs to be issued by SMS. It is also acceptable to provide the PAC immediately over the phone. We believe this may provide a lower cost solution for smaller operators. We did not include costs for MVNO's, new entrant MNOs and MSPs (i.e. beyond the five larger MNOs) in the August consultation but invited feedback on possible costs through the consultation responses.
- 4.25 We did not receive any quantitative cost estimates in the responses. However, as noted above, some respondents indicated these smaller operators would incur some costs. In light of the lack of actual cost estimates for these operators we have assumed that costs are proportional to the share of subscribers, and have thus estimated the costs for MVNOs, MSPs and new entrant MNOs based on the cost estimate outlined above for the larger MNOs. Our information suggests that the five large MNOs have a share of subscribers of around 87% and the MVNOs, MSPs and new entrant MNOs have a share of 13%.<sup>58</sup> Therefore for Option D the total industry cost is estimated at £2m (i.e. £1.7m/87%) and for Option B the total industry cost is estimated at £10.2m. This might overestimate the costs because new entrant MNOs/MVNOs/MSPs will have a lower number of ports per day and could possibly accommodate the changes within existing manual processes rather than implementing automated processes (with consequential higher upfront costs). On the other hand, it could underestimate costs if the cost of complying with the requirements is largely fixed regardless of the number of subscribers (i.e. a smaller operator would incur similar costs to a larger operator). We have conducted sensitivity analysis to capture the impact of variation in costs on the NPV (Annex 6).

## Porting hub capital expenditure

### Stakeholder comments

- 4.26 C&W commented that the costs obtained by UKPorting for operating a message hub<sup>59</sup> were specific to that time and place. At the time the hub was being procured the working groups had not completed their activity on what the detailed process would look like, hence driving up the quoted costs as the vendors faced uncertainty and short delivery timescales. It commented that it might be plausible to use an 'off the shelf' solution, and that the message hub was being procured alongside a common numbering database. C&W believed that the cost figures quoted in the August consultation were not necessarily unreasonable but said they should be treated with scepticism.

<sup>58</sup> For example, see slides 93-94 here: [www.ofcom.org.uk/research/cm/icmr09/stats.pdf](http://www.ofcom.org.uk/research/cm/icmr09/stats.pdf)

<sup>59</sup> The message hub is relevant for Option B because it requires a centralised database to support near instant porting. For Option D we envisage the need for an upgrade to the current porting database, but it would not be necessary to create a centralised porting hub.

- 4.27 3UK also commented that the UKPorting solution was based on an NICC<sup>60</sup> specification which was complex and intricate, with much of the complexity a result of trying to meet the needs and concerns of the fixed industry. It also noted that 'off the shelf' porting solutions were available and could be significantly lower in cost and complexity.

#### Ofcom's response

- 4.28 No respondents provided alternative quantitative cost estimates for porting hub capital expenditure. In the absence of better information we have retained the August consultation estimates in the updated CBA (£0.5m for Option D and £4.2m for Option B). [X] .

#### **Operating costs**

- 4.29 We included three types of operator- specific operating cost in the August consultation:
- **Additional labour cost:** reflecting the anticipated need for new staff for initial implementation of the new processes and for ongoing monitoring and compliance. The total incremental cost, averaged across the period under evaluation, was estimated at £0.25m per MNO per year (see paragraph 5.72 of the August consultation).
  - **MNO operating costs:** this was estimated using a ratio of operating to capital costs for relevant assets in the 2007 mobile call termination model as a proxy in the absence of better information (see paragraphs 5.73 to 5.78 of the August consultation for a detailed description of methodology). The ratio was 13%.
  - **Porting hub operating costs:** these were based on the estimated annual charges supplied by UKPorting and converted into a ratio (with respect to the capital costs). The ratio was 28%, and was used to calculate operating costs for each option.

#### Stakeholder comments

- 4.30 Only one MNO provided information on operating costs. This MNO estimated the operating costs at [X] per year for Option D and [X] per year for Option B. These estimates appear to include both system operating costs and additional labour costs. The MNO [X].

#### Ofcom's response

- 4.31 We have continued to assume additional labour costs of £0.25m per MNO and estimate other operating costs using the ratios for capital to operating costs. We have updated the MNO operating cost ratio to reflect the new mobile call termination model which has been developed over recent months as part of the review of wholesale mobile call termination charges from 2011-2015.<sup>61</sup> The updated ratio remains at 13% when rounded to the nearest percentage point. We have decided to

---

<sup>60</sup> NICC (the Network Interoperability Consultative Committee) is a technical forum for the UK communications sector that develops interoperability standards for public communications networks and services in the UK: [www.niccstandards.org.uk](http://www.niccstandards.org.uk).

<sup>61</sup> Our latest consultation on the review of wholesale mobile call termination charges is available here: [www.ofcom.org.uk/consult/condocs/wmctr/](http://www.ofcom.org.uk/consult/condocs/wmctr/)

retain the ratios to calculate MNO and porting hub operating costs because we still lack the information to do a bottom up assessment. For the MNO discussed above this does result in a lower value for total operating costs than the estimate provided. However, we note that:

- [the operating cost estimates provided by [X]] were rough assumptions and were, in any case, derived using the operating to capital cost ratios set out in the August consultation [X]; and
- the additional costs for PAC provision reflect immediate issuance which goes beyond our two hour requirement and the respondent already delivers PACs within two hours in the vast majority of cases. Therefore it is likely that the PAC provision costs are overstated relative to our requirements.

4.32 As MVNOs, new entrant MNOs and MSPs are now included within the capital costs they will automatically be reflected in the 'MNO operational expenditure' costs. We have adjusted the additional labour costs to reflect the costs incurred by MVNOs, new entrant MNOs and MSPs by pro rating the figure based on market share (assuming that the five largest MNOs have a subscriber share of 87%). This means the total additional labour requirement across the industry is estimated at £1.4m for Option B and Option D.

## Labour costs

### Stakeholder comments

4.33 C&W commented that the 'additional labour' cost category was somewhat arbitrary, implying three to four incremental staff were required per MNO whichever option was chosen. It also disagreed that the operating expenditure would be a fixed percentage of capital expenditure and thought that that favoured Option D. It considered it would be better to work on a 'bottom up' basis to calculate operating expenditure e.g. based on headcount required and maintenance costs rather than using simplified assumptions.

### Ofcom's response

4.34 The rationale for the additional labour operating expenditure is as follows:

- **2 hour PAC options (Options B and D):** We assumed that:
  - additional labour was required by some operators to manually transcribe/transfer the data between internal systems and the Syniverse system; and
  - where the transcription of the PAC into an SMS is not fully automated there is typically a back office function that generates and dispatches the SMSs. In this case this function may require additional labour in order to meet the two hour deadline (i.e. to reduce the average queuing time).
- **One day porting (Options D and C):** Additional labour was required for two reasons:
  - out of hours (overnight) working would be required for some processes that are currently undertaken on the intermediate day within the current porting



process (i.e. the day between the porting request being received and the port being activated); and

- because of the increased time constraints to achieve one day porting certain activities that are currently done sequentially would now require parallel working.
  - **2 hour porting (Options A and B):** Although implementation of two hour porting would mostly require full automation, it was assumed that additional labour would be required in particular for problem resolution in a shorter timescale than is required under the current two business day porting regime.
- 4.35 We noted in the August consultation that operators were not able to provide sufficient information to allow us to estimate the operator specific operating costs on a bottom up basis. We did not receive further detail on labour costs in the consultation responses so we have continued to use the estimate for labour costs set out in the August consultation.
- 4.36 Because Option D is closest to the current process it is highly probable that it will have the lowest incremental costs. As we are not designing the porting process from scratch there will generally be a lower cost associated with changes which build on the current system (i.e. a donor-led process) as opposed to options which take a different approach. This is a legitimate consideration within the CBA as each option is assessed based on the estimated costs and benefits relative to the counterfactual of the current system.

### Summary of costs

- 4.37 The following table presents a summary of the costs of Options B and D. As outlined above, the recipient-led options (Options A and C) are not considered further in this analysis, because the issues around recipient- versus donor-led switching processes for MNP will be reconsidered in the context of the outcomes of the consumer switching project.

**Table 2: Costs of implementing Option B and Option D**

Cost type	Option B		Option D	
	Original estimate £m	Revised estimate £m	Original estimate £m	Revised estimate £m
Operator specific capital expenditure <sup>62</sup>	7.8	10.2	1.3	2.0
Porting hub capital expenditure	4.2	4.2	0.5	0.5
<b>Total capital expenditure</b>	<b>12.0</b>	<b>14.4</b>	<b>1.8</b>	<b>2.5</b>
	<b>£m per year</b>	<b>£m per year</b>	<b>£m per year</b>	<b>£m per year</b>
Operator specific operating expenditure <sup>62</sup>	1.0	1.3	0.2	0.2
Porting hub operating expenditure	1.2	1.2	0.1	0.1
Additional labour expenditure <sup>62</sup>	1.3	1.4	1.3	1.4
<b>Total operating expenditure</b>	<b>3.5</b>	<b>3.9</b>	<b>1.6</b>	<b>1.8</b>

### Calculation of the number of people porting each year

4.38 In the August consultation we used consumer survey information on the number of people who port their number when they switch to estimate the number of ports occurring each year (see paragraph 5.133 of the August consultation for details).<sup>63</sup>

### Stakeholder comments

4.39 Vodafone made a number of comments on the methodology used to calculate the number of ports per year. It said:

- Ofcom should use actual information on the number of ports per year e.g. information on PACs ported provided in response to the information requests issued by Ofcom in December 2008 pursuant to s.135 of the Act or the real volume of ports per year which could be provided by Syniverse;
- bulk/multiline ports should be excluded from the calculation because these ports were excluded from the proposals for a faster process; and
- certain sales channels make it less likely that consumers will benefit from near instant or one day porting e.g. purchases from independent retailers, telesales and online sales (where there is a natural delay due to delivery timescales) and therefore ports which took place from these sales channels should not be included in the calculation. T-Mobile and O2 also made similar comments.

4.40 3UK commented that changes to the porting process (both speediness and the switch from a donor to a recipient-led process) could lead to an increase in porting over time which was not captured in the assessment. Conversely, [X] considered that porting was already widely recognised and moving to a recipient-led process would not increase porting awareness.

<sup>62</sup> In the August consultation this category only included the five largest MNOs, the revised estimates also include smaller MNOs and MVNOs

<sup>63</sup> The calculation was as follows: Number porting per year = Number of adult mobile consumers in GB \* percentage who switch \* percentage of switchers who port

## Ofcom's response

### *Use of 'actual' ports*

- 4.41 We had previously requested information on the number of PACs ported from MNOs. However, this was not an accurate estimate of the number of ports because it included bulk ports which have one PAC for more than 25 numbers. We did not know the number of PACs which related to bulk ports. For this reason we decided to use consumer survey information on switching and porting to estimate the number of ports per year.
- 4.42 In response to stakeholder comments, we have now requested information on actual ports from Syniverse. This information shows that from December 2008 to November 2009 the total number of ports completed was 2.4m. Of these ports 200,000 were bulk ports and 2.2m were consumer (i.e. not bulk) ports. This is lower than the estimate used in the August consultation (2.6m ports per year). We have incorporated the number of actual ports provided by Syniverse into our revised base case.

### *Bulk porting*

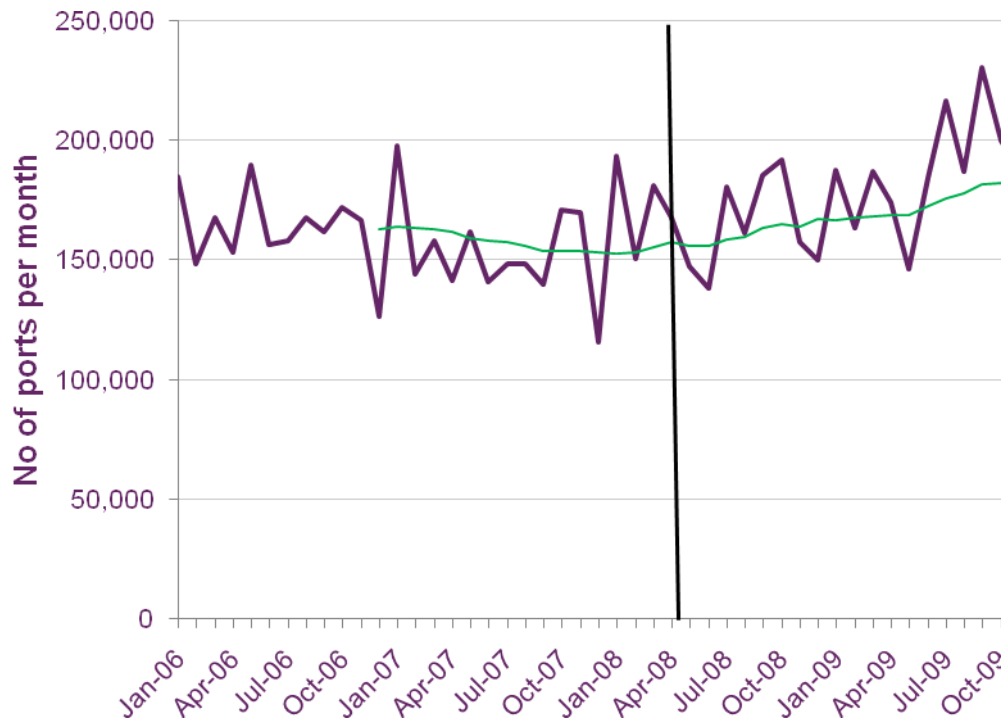
- 4.43 The changes to GC18 on which we are consulting do not include bulk ports. The survey which we completed to assess the willingness to pay for a faster porting process focused on individual consumers and did not cover business users. This means we are not currently able to assess the benefits of a shorter porting process for those using the bulk porting process. As noted in the August consultation, we are not aware of evidence of problems specific to the bulk porting process and our discussions with MNOs and business industry representatives suggest that businesses will usually choose to opt for a longer porting period.<sup>64</sup> Therefore it is possible that the willingness to pay for a shorter process would be lower for bulk porters. Consequently we have excluded bulk porters from the benefit calculations.

### *Speed of porting process and impact on number of people porting*

- 4.44 The information on actual ports from Syniverse has also allowed us to assess changes in porting over time and how this corresponds to changes in the porting process. With effect from April 2008 the time allowed for the porting process was reduced from five days to two business days. If 3UK is correct then a faster process should result in more ports, and we would expect the number of ports to increase after this date. The number of actual ports per month as provided by Syniverse is presented in the chart below along with the 12 month moving average:

---

<sup>64</sup> The August consultation, p. 16, para 3.3

**Figure 3: Number of Ports per month (excluding bulk ports)**

Source: Syniverse data

- 4.45 The chart shows that the number of ports does appear to have increased since April 2008 when the porting process was reduced to two business days. However, there could be a number of factors causing this, including increasing advertising by MNOs of the ability to ‘keep your number’. Based on the limited number of data points available it is difficult to use this information to attempt a robust quantification of the impact of a decrease in the porting time from two days to one day.
- 4.46 Nevertheless, we recognise that a reduction in porting time might increase the number of ports per year and this would be consistent with the data shown in the chart above. We have accounted for this possible increase in the number of ports in our sensitivity analysis (see Annex 6). We also note that an increase in porting may increase the number of minutes which are onward routed resulting in additional conveyance and transmission costs for mobile operators.<sup>65</sup> Any benefits arising from an increase in the number of people porting would need to be offset against the additional costs of onward routing to arrive at a net benefit associated with increased porting.<sup>66</sup> We have not attempted to capture either the benefits or costs of increased porting in our cost benefit analysis below.

<sup>65</sup> Calls to ported numbers are first routed to the provider which originally held the number, and that provider forwards (or *onward routes*) the call to the provider currently serving the subscriber. This is a more complex routing path than calls to non ported numbers, with correspondingly higher conveyance and transmission costs.

<sup>66</sup> For example, if the number of consumers porting per year increased by 5% in 2011 (from 2.2m to around 2.3m porters per year, and remained constant from this point onwards) we estimate that the cost to operators might be around £2m over a ten year period from 2012 to 2021 (present value in 2009 prices, discounted at the mobile industry cost of capital of 7.6% pre-tax real – taken from the 2010 wholesale mobile voice call termination review, [www.ofcom.org.uk/consult/condocs/wmctr/](http://www.ofcom.org.uk/consult/condocs/wmctr/)). Using the same approach, if the number of consumers porting per year increased by 10% in 2011 (i.e.

- 4.47 We disagree with the comment that porting is already fully recognised by consumers. Even though awareness of porting stands at over 60%, the consumer research on porting showed that 22% of those who changed their number when they switched said the reason was because they did not know they could keep their number.<sup>67</sup>

### *Sales channels*

- 4.48 Certain methods of sales acquisition (online, telesales) mean that there is a delay between the consumer purchasing a phone/contract and actually receiving the phone to use. Vodafone and O2 argued that a faster porting time might have unintended consequences because where a port is initiated when the customer is acquired, the number may be ported before the customer receives their phone resulting in service interruption. This also could clearly be a problem under the current two business day porting process. Currently a subscriber can negotiate a mutually acceptable port date and the recipient MNO can manage the process e.g. timing the port to coincide with delivery of the handset. We envisage that this flexibility will be maintained so that a consumer can choose to opt out of one day porting if a longer time is more convenient for them. We would not want to create a process that prevented such flexibility.
- 4.49 We also note only one MNO requires customers to provide a PAC at the time of signing up to a new service. This means the customer could start the porting process prior to receiving the phone or handset, for example if they had completed their order online or over the phone. All other operators initiate the port after the sale is completed i.e. the customer is issued with a 'temporary' phone number for the new handset/SIM and customers can then submit the PAC at a later stage. So in the majority of cases the ability to achieve a faster port once the handset has been received is still valuable.

### **Discount rate**

#### Stakeholder comments

- 4.50 T-Mobile and Vodafone commented that it was inappropriate to use the social discount rate of 3.5% in the cost benefit analysis, and that it was more appropriate to use a higher industry based WACC (weighted average cost of capital). T-Mobile argued that the costs would be borne by industry and the benefits accrue at the technical and risk profile level, rather than financially. It thought that few benefits would accrue directly to consumers due to the high level of satisfaction with the current process. It also thought that the discount rate was inconsistent with that used in the evaluation of direct routing in August 2009 (11.5%) and in the November 2007 Statement (12%).
- 4.51 Vodafone commented that any process changes would be funded by industry and not the government, and the risk associated with the project would not be diversified among other government projects but had the same risk profile as investment generally in mobile networks. Vodafone stated that:

---

to around 2.4m per year) we estimate that the cost to operators might be around £4m over a ten year period from 2012 to 2021 (present value in 2009 prices, discounted at the mobile industry cost of capital of 7.6% pre-tax real).

<sup>67</sup> TNS, *Omnibus Survey*, December 2008, Q.7 and Q10A

[www.ofcom.org.uk/consult/condocs/gc18\\_mnp/research/TNS\\_Omnibus\\_survey\\_data\\_Dec1.pdf](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/research/TNS_Omnibus_survey_data_Dec1.pdf)

“It can be reasonably assumed that any costs that the operators incur, and any resulting implied annual deficit, will be passed on to consumers in general, for example through retail charges. But given that the costs will be a mixture of initial and ongoing cash outflows, the way the operators will interpret this will be in effect converting the total outflows they experience into an annual impact at their rate of capital. To value therefore the benefit to one particular segment of consumers i.e. those few who indicated willingness to pay for a revised porting process at one cost of capital, whilst assessing the cost to the consumer base in general, who will actually be paying for the benefit of the few, at another cost of capital, would seem perverse.”

- 4.52 C&W noted that the social discount rate is aimed at public sector programmes and it was not correct that MNOs who face a higher cost of capital were assessed as if they could finance developments at such low cost. C&W did not believe that using the MNO WACC would be appropriate either, because this represented the overall cost of borrowing, balancing risky commercial developments versus initiatives that were much less so (such as this). It favoured a discount rate which is slightly lower than the MNO WACC.

#### Ofcom's response

- 4.53 We remain of the view that where the benefits of our intervention accrue directly to consumers (as is the case in this instance) then the appropriate discount rate to use is the social discount rate. This is consistent with the approach to appraisals advocated in the Treasury Green Book.<sup>68</sup> We disagree with T-Mobile that the benefits accrue primarily at the technical and risk profile level. Making it easier and faster to port results in a direct consumer benefit. This is supported by our quantitative consumer research which indicated that some consumers would value a faster porting process and our qualitative research which indicated that difficulty getting a PAC could act as a barrier to porting for some consumers.
- 4.54 In the evaluation of routing for calls to ported numbers<sup>69</sup> the WACC was used as the discount rate because the costs and benefits of implementing direct routing both accrue directly to mobile operators in the first instance. This is clearly different from the assessment in this document regarding the MNP process where benefits fall directly to consumers.
- 4.55 In the November 2007 Statement, changes to the porting process were considered alongside changes to the routing process for ported numbers (subsequently the routing process for ported numbers has been consulted on separately).<sup>70</sup> We conducted a cost benefit assessment for the routing proposals (i.e. implementing direct routing) by calculating the net present value of intervention with a 12%<sup>71</sup> discount rate. The cost benefit assessment for changing the porting process was different because it considered the one off costs of implementing near instant recipient porting against the estimated annual benefits. Having determined that the one off costs were less than the annual benefits we were of the view that the

<sup>68</sup> [www.hm-treasury.gov.uk/data\\_greenbook\\_guidance.htm](http://www.hm-treasury.gov.uk/data_greenbook_guidance.htm).

<sup>69</sup> See [www.ofcom.org.uk/consult/condocs/gc18\\_routing/routing.pdf](http://www.ofcom.org.uk/consult/condocs/gc18_routing/routing.pdf)

<sup>70</sup> See [www.ofcom.org.uk/consult/condocs/gc18review/statement/](http://www.ofcom.org.uk/consult/condocs/gc18review/statement/)

<sup>71</sup> Note that this was a pre tax **nominal** rate (we have used a real discount rate in the analysis for this project). Further the discount rate used in the assessment in the November 2007 Statement was a blended rate for both fixed and mobile operators.

additional cost of modifying processes and systems to enable near-instant recipient-led mobile porting in an all call query/central database scenario was likely to be proportionate relative to the benefits to consumers. We did not use a discount rate in this analysis. We do not consider that our current approach is inconsistent with the November 2007 Statement because the discount rate used was for the call routing aspect of the proposals.

- 4.56 We note the point made by Vodafone and C&W that operators will have to finance any costs incurred from changing the porting process, but this does not change the fact that the benefits will accrue directly to consumers. Even under the conservative assumption that both the costs and benefits are discounted at the WACC (rather than the social discount rate) the NPV for Option D remains positive (this is discussed further in the sensitivity analysis in Annex 6).

## Time period

### Stakeholder comment

- 4.57 In the August consultation we calculated the NPV for each option over ten years of operation i.e. assuming that ten years of benefits are accrued. This was based on the anticipated life time for the operator specific investments required to implement the porting process.<sup>72</sup> Vodafone commented that the time horizon should be seven years which corresponds to the anticipated life time for the common capital assets i.e. the porting hub required to implement faster porting. They further commented that internal projects are appraised over a shorter time period and at a higher hurdle (discount) rate, so there was a strong risk that the case for a change to the porting process had been justified on a less stringent basis and would take scarce funds away from superior projects.
- 4.58 T-Mobile and [X] noted there was a separate Ofcom project underway on the processes for consumer switching more generally, and if that work determined a policy for porting that was different to changes made to GC18 in this consultation then the payback period over which the costs and benefits are assessed would need to be amended.

### Ofcom's response

- 4.59 We have presented the NPV for Options B and D over both seven and ten years in the revised base cases below. We have also presented the NPV over seven years because this is the anticipated life time for the porting hub which is required to implement changes to Option B. We note that Option D has the highest range for the NPV over both time periods. We have also presented the NPV of Option D over a much shorter time period (two years<sup>73</sup>) as a sensitivity scenario. This reflects the possibility (although clearly currently uncertain) that the outcome of the consumer switching project requires further changes to the MNP process and a subsequent cost benefit assessment determines that further changes are justified.

---

<sup>72</sup> Note: there was a typographical error in the August consultation in paragraph 5.152c which stated that, "the decision to use this time horizon is based on the anticipated life time of the assets required to implement *direct routing*". This should have read "the anticipated life time of the assets required to implement the *porting process*".

<sup>73</sup> This assumes that implementation costs are incurred at the end of 2010 and benefits/ongoing costs accrue in 2011 and 2012.

- 4.60 Over a short (two year) time period Option D has an NPV range of £0 to £6m. While this range suggests that the NPV over a shorter time period could be low, it relies on estimates of benefits from stated preferences of willingness to pay for a one day porting process and does not therefore take into account other likely benefits. In particular, the NPVs do not fully capture any benefits from changes to the PAC process, which we consider will be positive, as highlighted in virtually all stakeholders' responses to the August consultation. Furthermore, we note that Option D is likely to be in line with the new EU Regulatory Framework, which Member States are required to implement by 25 May 2011.

### **Implementation date**

- 4.61 In the August consultation we calculated the NPV of each option assuming that capital costs were incurred in 2011, and benefits and operating costs occurred from 2012 onwards. In line with our preferred option for implementation (i.e. implementation within six months of publication of the final statement – see paragraphs 5.8 to 5.13) we have revised this assumption so that capital costs are incurred at the end of 2010<sup>74</sup>, with operating costs and benefits arising from the end of 2011 onwards. This reflects the fact that the donor-led options considered in this assessment (B and D) require less change to the current process than the recipient-led options set out in the August consultation, and should be able to be implemented over a shorter timeframe. We recognise that the implementation time might affect the costs of implementation. In the sensitivity analysis we have considered a scenario where costs are 20% higher than the base case and we consider that this is adequate to reflect any increase in costs due to a shorter implementation period. We are inviting stakeholder feedback on the timeframe for implementation (see Section 5).

## **Discussion of stakeholder comments on benefits and the modelling approach**

### Construction of the demand curve/estimation of benefits

- 4.62 In order to obtain an indication of the value of the benefits to individuals of moving to a shorter porting process, we used data from our consumer research to establish consumer willingness to pay. Consumers were asked how much they would be willing to pay (50p, £5, £10 and £20) for i) an immediate process and ii) a one day process.<sup>75</sup> We used the results to estimate the willingness to pay for faster porting (the willingness to pay data is discussed further below).
- 4.63 We noted that this method of estimating the benefits did not distinguish between recipient-led or donor-led processes and did not take account of any consumer preferences for one method of porting over another. We also noted there were potentially a number of other benefits which we had not captured in our assessment.<sup>76</sup>

### Stakeholder comments

- 4.64 T-Mobile commented that the willingness to pay price points used in the survey were not granular enough.

<sup>74</sup> This is on the basis that a final statement is issued by end June 2010.

<sup>75</sup> TNS, *Omnibus Survey*, December 2008, Q16.

<sup>76</sup> The August consultation p. 65, paragraphs 5.156 and 5.158.



- 4.65 Vodafone thought it inappropriate to extrapolate and interpolate the survey results to form a demand curve in the manner adopted by Ofcom. Vodafone specifically commented that any extrapolation of the results above and below the high and low price points from the survey was not warranted. It suggested that the demand curve should be bounded at a maximum of £20 and a minimum of 50p. It also suggested that the shape between the price points should be a curve rather than a straight line. Vodafone suggested that under its alternative assumptions (using a curved demand function and truncating the curve at £20 and 50p) the average (definite) willingness to pay would be £1.10 for one day porting.

### Ofcom's response

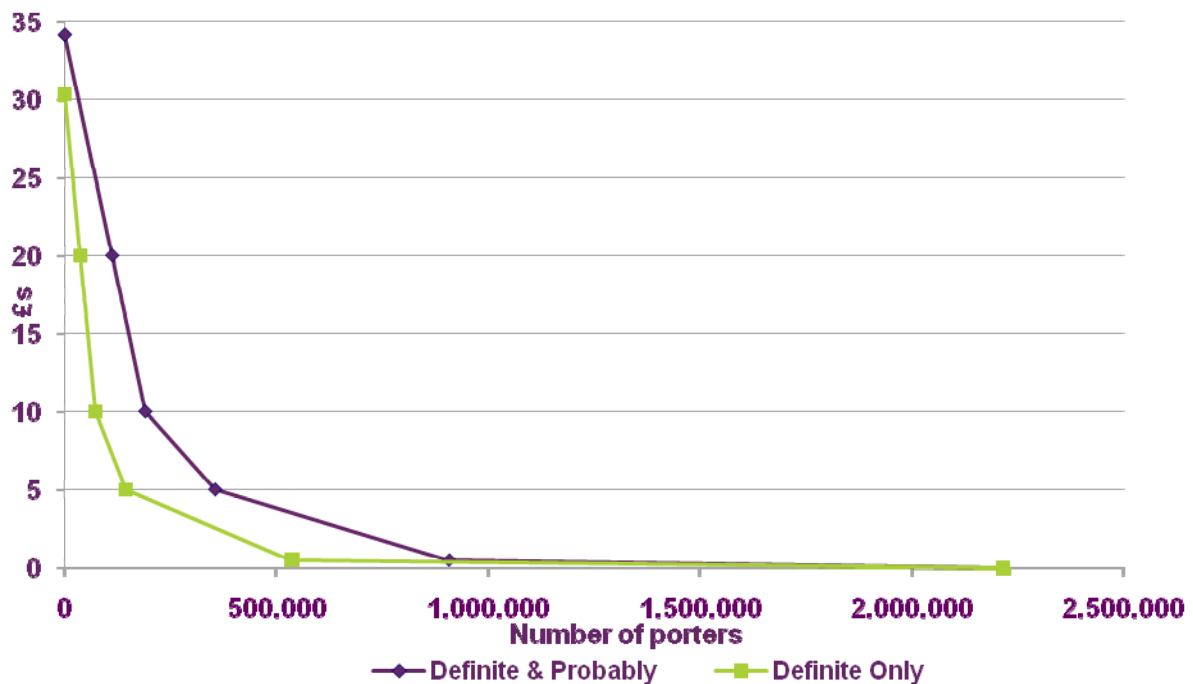
#### *Granularity of price points*

- 4.66 In the consumer survey we needed to balance the conflicting objectives of being sufficiently concise so that respondents complete the survey and sufficiently detailed so that the results were meaningful. We consider that we picked sensible price points ex ante. Ultimately we did not ask for stated preferences based on a wider range of price points (even though this would have been desirable) because this would have made the survey unduly cumbersome and potentially affected the quality of responses or the level of participation.

#### *Shape of the demand function*

- 4.67 We only have limited information available from the survey results (four price points) with which to construct a demand function. Based on this limited information it is difficult to determine the shape of the demand function, particularly outside the sample range.
- 4.68 The approach we took in the August consultation is reproduced in the Figure below for the one day porting process. The value of the consumer benefit from a faster porting process was derived by calculating the area under the lines which join the price points.

Figure 4: Consumer willingness to pay for a one day process



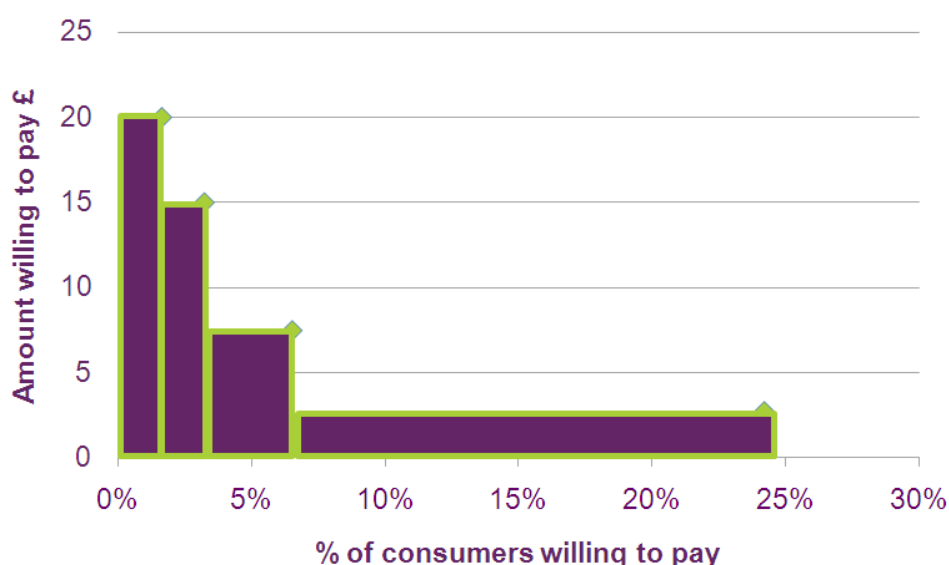
Source: TNS Omnibus Survey, December 2008

- 4.69 Vodafone contend that we should only derive value from the ‘in sample’ price points and that a non linear function was a better fit for the data points. While it is possible that a curve is a more accurate representation of the shape of the demand function, the approach put forward by Vodafone is inconsistent because if one believes that a continuous curve is the best representation of the data then a truncation at the end of the ‘in sample’ points<sup>77</sup> is inconsistent with the likely underlying consumer preferences. At the very least Vodafone’s approach would be unduly biased downwards. Therefore, we consider that Vodafone’s willingness to pay estimate of £1.10 is too low.<sup>78</sup>
- 4.70 In light of the issues raised by Vodafone we have reviewed our approach and used a more conservative numerical method to estimate the consumer surplus – effectively truncating the willingness to pay for values above £20 and truncating the percentage of consumers at the last reported data point (i.e. a willingness to pay of 50p). This differs from Vodafone’s approach in that we consider it appropriate to extrapolate beyond the sample at least to the vertical axis. This approach is illustrated in the Figure below for the consumers who stated they were definitely willing to pay for a one day porting process.

<sup>77</sup> i.e. the range of prices we used to assess willingness to pay in the survey.

<sup>78</sup> We also note that even using this conservative value of willingness to pay, and measuring the benefits only using those who indicated they are definitely willing to pay for faster porting, the NPV for Option D is still positive over ten years at £2m.

**Figure 5: Approach used to calculate willingness to pay (one day porting)**



Source: TNS Omnibus Survey, December 2008

4.71 The willingness to pay is calculated by summing the area shown by the rectangles in the chart. Using this alternative approach the average ‘definite’ willingness to pay for one day porting is £1.30 compared to £1.57 used in the August consultation. We believe this is likely to be a plausible low value for the average willingness to pay because:

- a) the demand function is bounded at the maximum reported willingness to pay of £20 and the maximum proportion of consumers reporting a positive willingness to pay in the sample (i.e. those with a willingness to pay of at least 50p). The rationale for bounding the demand curve in this way would be that no consumers were willing to pay above £20 for a faster process and no consumers were willing to pay between 0-49p. It is likely that at least some consumers would be willing to pay above £20 and below 50p for a faster porting process. However, as discussed above, we did not include a wider range of price points because this would have increased the length and complexity of the survey; and
- b) We have excluded people who would ‘probably’ be willing to pay for speeding up the porting process.

4.72 We have revised the estimates for ‘definitely’ and ‘definitely and probably’ willing to pay using the new methodology above.<sup>79</sup> The results are as follows:

<sup>79</sup> As a cross check we also looked at an alternative methodology which used the sample data to estimate a non linear (semi log) demand function of the form  $q = ae^{bp}$  (where  $q$  is the % of consumers,  $p$  is the price willing to pay and  $a$  and  $b$  are the regression coefficients. We ran this regression for those “definitely” and those both “definitely” and “probably” willing to pay for one day porting. We recognise that any regression analysis with such a limited sample size will not be robust, but absent better data, we consider it a reasonable approach to cross-check the results obtained under the method of rectangles shown above. From this regression method it is possible to integrate under the entire demand curve to obtain the willingness to pay. The average willingness to pay was estimated at £1.31 for those definitely willing to pay and £3.14 for those definitely and probably willing to pay. The result for those definitely willing to pay is very close to the value under the method of rectangles approach which supports our judgment that this is a reasonable estimate. For those definitely and

**Table 6: Average willingness to pay for one day and immediate porting**

	One day porting		Immediate porting	
	Original value	Revised value	Original value	Revised value
Definitely willing to pay	£1.57	£1.30	£2.25	£1.88
Definitely and probably willing to pay	£3.28	£2.78	£3.87	£3.40

4.73 We have incorporated the above revised values for the willingness to pay into our base case NPV's for Option D and Option B.

## The case for faster porting

### Stakeholder comments

- 4.74 A number of stakeholders commented that the case for faster porting had not been demonstrated and there was a lack of evidence that consumer harm arose from the speed of the porting process (also see paragraphs 3.18 to 3.35). It was noted that:
- the Omnibus survey carried out for Ofcom found that 78% of mobile consumers who had switched and kept their mobile number were satisfied with the time it had taken<sup>80</sup>;
  - OAT complaints on the porting process were relatively low;
  - consumers were more concerned with the certainty of the timing of the port than the speed;
  - in some cases, acquiring the PAC might be more of a problem for consumers than the speed of the port process;
  - switching levels are higher in the UK than in the Republic of Ireland (which has a recipient-led near instant porting process);
  - most consumers were not prepared to pay for speeding up the process; and
  - one stakeholder also commented that the benefits and costs should only be focussed on the 20% of mobile users who were not satisfied with the timing of the porting process.

### Ofcom's response

4.75 We calculated the benefits of a faster porting process from the Omnibus survey which asked the willingness to pay for faster porting process than is currently the case. Therefore the benefits derived are based on the amount by which mobile consumers value a faster process over and above the current process. Consumers may be broadly satisfied with the current process but that does not rule out the possibility that they would value enhancements.

---

probably willing to pay the regression approach results in a higher estimate for average willingness to pay, so it is possible that the rectangles approach leads to a conservative estimate in this case.

<sup>80</sup> TNS, *Omnibus Survey*, December 2008, Q.9.

- 4.76 Furthermore, we note that shortening the porting process from two business days to one business/working day (as proposed in Option D) is likely to be in line with the new EU Regulatory Framework.

### **Consumer willingness to pay for a faster process**

- 4.77 As indicated above, in order to obtain an indication of the value of the benefits to individuals of moving to a shorter porting process we used data from our consumer research to establish consumer willingness to pay. They were asked how much they were willing to pay for an immediate (or near-instant) process; and a one day process. Consumers were asked to indicate for each value (50p, £5, £10 and £20) whether they:

- i) would definitely pay;
- ii) would probably pay;
- iii) may or may not pay;
- iv) would probably not pay; or
- v) would definitely not pay.

### Stakeholder comment

- 4.78 Vodafone commented that it was difficult to transfer hypothetical situations to real life, and we should look at the actual consumer reaction to the reduction in the porting period from five days to two business days in April 2008. Vodafone also suggested that consumers might have been valuing number portability itself within the willingness to pay, rather than just making the porting process quicker.
- 4.79 Vodafone also commented that there was no suggestion that the consumer would ever actually be asked to pay for porting and that raised distributional issues. The additional costs associated with number portability would be passed on to consumers in other ways (e.g. higher subscription charges), and that would apply to all consumers, not just those that are willing to pay for a faster process. Vodafone suggested that the survey should have sought a response on the relative valuation e.g. would you be willing to pay for a reduction in the porting process period if it led to higher call costs? It further commented that a willingness to pay only 50p constituted a derisory sum that might be more a product of being asked a question on change rather than a real commitment to pay or a positive valuation of that change.

### Ofcom's response

- 4.80 Data on actual porting over time have been presented and discussed above (see Figure 3). It appears that the reduction in the porting time from five to two business days has increased the volume of ports. This suggests that the benefits of speeding up the porting process may be understated, although, as noted above, there may be other reasons for the increase in porting over time.

- 4.81 We disagree with the comment that consumers might be valuing number portability itself within the willingness to pay. The relevant survey question was as follows:

“If you change your mobile phone network and decide to keep your phone number, it currently takes about 2-3 days for your new mobile

network to change your number over. Would you be willing to pay to make the process quicker?

How likely would you be on the scale here to pay a one-off fee to do this if the price was [...]... and the process was:

(a) immediate

(b) One day

If you didn't accept the payment you would be able to change mobile phone network and keep your existing phone number, but it would take 2-3 days [emphasis added]"

- 4.82 The question is about the willingness to pay for a faster process, and clearly states that if a consumer is not willing to pay then they would still be able to port their number. Therefore we consider that the question was clear and consumers are unlikely to have valued number portability itself within the willingness to pay.
- 4.83 We have no reason to doubt the validity of consumers responding that they are willing to pay 50p for faster porting. Even if individual consumers are only willing to pay a small amount for faster porting this can add up to a significant value when applied across all ports.
- 4.84 It is difficult to assess the extent to which costs arising from speeding up the number portability process will be passed through to consumers. Porting costs arise on a per porting subscriber basis rather than a per minute or per megabyte basis. In theory this might make it more likely that porting costs will be recovered through fixed charges/monthly subscriptions rather than call charges. Either way, as Vodafone notes, there is no specific charge for porting which means the cost is likely to be recovered over the entire subscriber base. Based on the cost estimates outlined above, and assuming 73m mobile subscribers (excluding mobile broadband subscribers), the cost per subscriber per year for implementing Option D is less than 3p. Given that the average subscriber spend on mobile services was £201<sup>81</sup> per year in 2008 we believe this will not have a significant influence on purchasing decisions, even if the costs are passed through to consumers.

## Summary of changes to the CBA assumptions and revised NPV's

- 4.85 The following table summarises the changes to our modelling assumptions for Options B and D as discussed above.

---

<sup>81</sup> 2008 prices.

**Table 7: Changes to assumptions**

	<b>Original assumption</b>	<b>Revised assumption</b>
<b>Ports per year</b>	Based on estimates of switching and porting from the omnibus consumer survey carried out in December 2008 Estimated ports per year = 2.6m	Based on actual ports taken directly from Syniverse (excluding bulk ports) from December 2008 to November 2009. Estimated ports per year = 2.2m
<b>Costs</b>	See Table 2 above	See Table 2 above.
<b>Time horizon</b>	10 years	10 years and 7 years.
<b>Implementation date</b>	Capital costs are incurred at the end of 2011, with operating costs and benefits arising from the end of 2012 onwards	Capital costs are incurred at the end of 2010, with operating costs and benefits arising from the end of 2011 onwards.
<b>Willingness to pay for a faster process</b>	See Table 6 above.	See Table 6 above.

**Revised base case**

- 4.86 We have incorporated the revised assumptions listed in the table above into a revised base case for Options B and D.
- 4.87 Our CBA assesses the benefit of a faster porting process – which was framed as the time taken for the new mobile network to change the number over (i.e. the process which starts when the PAC is submitted to the recipient operator). The benefits derived from the willingness to pay survey therefore may not have picked up the willingness to pay for speeding up the PAC provision process (as set out in Options B and D). However, our qualitative research revealed that some consumers were suffering harm due to delays/difficulties in obtaining a PAC which could act as a barrier to porting and switching (see paragraphs 4.7 to 4.39 of the August consultation). This evidence suggests that there is a positive benefit in harmonising and speeding up the PAC process.
- 4.88 The costs of Options B and D include both speeding up the PAC provision process and shortening the porting process from two to one business day. We have estimated the costs of speeding up the porting process based on operators issuing the PAC by SMS within two hours. However, it is also reasonable to issue the PAC immediately over the phone which might represent a lower cost option for some operators. For this reason the costs may be overstated. Because we quantified the costs but not the full benefits of issuing PACs by SMS in two hours it is probable that the NPVs for Options B and D are understated.
- 4.89 We consider that the requirement to speed up PAC provision is justified on the basis that it presents a significant improvement for consumers and imposes low costs on operators. As noted above, there appears to be a consensus from respondents that the delays created by the PAC process are leading to consumer harm in some cases and Ofcom’s intervention in this area to bring about improvements would be welcomed. Moreover, several MNOs already issue PACs by SMS within two hours which indicates that this is a cost effective mechanism for PAC delivery. [X].
- 4.90 As we did for the August consultation, we have calculated the NPV based on two measures of quantified benefits;

- i) on the basis that only survey respondents who indicated that they are *definitely willing to pay* for a faster process are included in the benefits calculation; and
- ii) on the basis that survey respondents that are both *definitely or probably willing to pay* for a faster process are included in the benefits calculation.

The base case NPV is presented as a range where the lower quantified bound represents the benefits for those definitely willing to pay.<sup>82</sup> The upper quantified bound represents the benefits for those definitely and probably willing to pay.

- 4.91 The inputs and assumptions not mentioned in the table above remain at the base case value for the August consultation. The NPV for the revised base case is presented in the table below (alongside the NPV calculated in the August consultation).

**Table 8: Revised base case NPVs**

	Option B		Option D	
	Lower quantified	Upper quantified	Lower quantified	Upper quantified
<b>Revised base case £m:</b>				
<b>10 years</b>	-13	14	6	32
<b>7 years</b>	-12	8	4	23
<b>Consultation base case £m:</b>				
<b>10 years</b>	7	40	18	54

- 4.92 On the basis of the results above, we consider that Option D is likely to yield a higher net benefit than Option B.
- 4.93 For Option B we have assumed that two hour porting is equivalent to immediate porting (this is because our survey asked for the willingness to pay for immediate porting, but not two hour porting). In reality consumers are probably willing to pay less for two hour porting which means the benefits of Option B may be overestimated, which further supports our decision to implement Option D.
- 4.94 We have conducted sensitivity analysis on the key CBA inputs for Option D, the results of which are presented in Annex 6. The NPV range for Option D under the low and high case scenarios in the sensitivity analysis is -£2m to £46m, which indicates that the NPV is likely to remain positive under most scenarios.

## T-Mobile/Orange Joint Venture

- 4.95 As confirmed on 1 March 2010 the European Commission Competition Directorate cleared the T-Mobile/Orange joint venture (“JV”), subject to certain conditions.<sup>83</sup> We

<sup>82</sup> This is a conservative estimate since some of the respondents who indicated that they would probably pay or may or may not pay might actually value faster porting. In addition, no account is taken of the possibility that a faster porting process might increase the number of porters going forward. As noted above, we have also taken a conservative approach to estimating the average willingness to pay.

<sup>83</sup> See

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/208&format=HTML&aged=0&language=EN&guiLanguage=en>.



have attempted to model some scenarios which capture the possible impact of the JV on the NPV for Option D.<sup>84</sup>

4.96 We consider that a JV could have two impacts in relation to our analysis:

- the costs of implementation are reduced i.e. because a single solution to shorten the porting process is adopted for both parties; and
- consolidation in the sector means the number of people switching and porting declines.

4.97 In relation to costs we have included a scenario where T-Mobile and Orange incur half of their combined anticipated operator specific capital and operating costs<sup>85</sup>, and half their anticipated additional labour costs. We have also considered a scenario where the operator specific costs are unchanged.

4.98 It is also possible that the level of switching in the market will reduce if T-Mobile and Orange merge. If we assume that T-Mobile and Orange effectively become one operator (offering the same deals and packages) there is a possibility that fewer offers in the market place will lead to fewer subscribers switching. The impact on switching activity is clearly difficult to establish ex ante. A simple assumption, which we have included as a scenario, is that the reduction in the number of large operators from five to four could reduce the number of people porting by 20%. We have also included a scenario where the number of ports per year remains unchanged.

4.99 The results are shown in the table below. The results presented are based on those definitely willing and definitely and probably willing to pay for a one day process, over a ten year time horizon and discounted at the social discount rate.

**Table 9: Impact of T-Mobile/Orange JV on Option D (NPV £m)**

	Combined T-mobile/Orange costs of implementation are halved		Costs of implementation are not reduced	
	Definitely willing to pay	Definitely and probably willing to pay	Definitely willing to pay	Definitely and probably willing to pay
Number of ports is reduced by 20% per year	4	25	1	22
Porting is not reduced	9	35	6 (base porting & costs)	32 (base porting & costs)

4.100 The impact of the T-Mobile/Orange JV on the NPV is uncertain. As shown in the table above, the NPV could increase or decrease relative to the base case.

<sup>84</sup> Note: we have not received further information Orange or T-Mobile on the impact that a JV might have in relation to the porting process proposals.

<sup>85</sup> This includes the operator specific capital costs for issuing PACs by SMS in two hours and a one day porting process (which directly impacts on the operating costs for these aspects). It does not include the porting hub costs which remain at the base case value. The estimated costs for smaller MNOs and MVNOs remain at the base case value.

However, under all the scenarios shown above the NPV of Option D remains positive.

## Conclusion

- 4.101 Having taken into account the comments from stakeholders about our original CBA, our updated calculations indicate that, on the basis of those costs and benefits we have been able to quantify, Option D would have a higher NPV than Option B.
- 4.102 It is important to highlight that while this NPV includes costs both for reducing the porting process to one working day (from the time the PAC is provided to the new provider by the customer) and for introducing a requirement for PACs to be issued immediately over the telephone or in a maximum of two hours by SMS, we have only included the quantifiable benefits from the stated willingness to pay for a one day process. Therefore the NPV for Option D does not fully capture the unquantified benefits associated with a shorter PAC process.
- 4.103 The responses to the August consultation indicated widespread agreement that introducing consistency and a shorter PAC process would bring benefits for consumers. In addition, our consumer research has demonstrated that the PAC process can cause difficulties for consumers. Therefore, we consider that there are benefits from introducing a requirement for PACs to be issued in two hours which have not been captured in the current CBA.
- 4.104 Furthermore, there may also be other qualitative benefits of implementing Option D which we have not captured in our quantitative benefit assessment, including benefits which may accrue to those calling a porting individual who would have switched but not ported under the current system (such callers would not incur costs from updating their records or calling the wrong number) and any benefits to competition in the mobile market if improvements to the porting process result in greater switching. Although we are not able to quantify these effects robustly (and, as noted in paragraph 4.46, it is possible that there may be some off-setting costs) it is likely that improving the porting process will generate some qualitative benefits, which we have not captured in our quantitative analysis.
- 4.105 Overall, we are satisfied that the changes we have decided to implement under Option D are justified, and as discussed further in the next Section, we consider that our decision, and the proposals to amend GC18 to implement this decision, comply with our statutory duties.

## Section 5

# Consultation on proposed modifications to General Condition 18 and the implementation period

## Introduction

- 5.1 This section sets out our proposed modifications to GC18 together with reasons as to why we consider they satisfy the necessary legal tests.
- 5.2 We have also set out a proposed implementation period for the modifications to GC18 to take effect. We invite stakeholders' views on both the modification and the implementation period.

## Proposed modifications to GC18

- 5.3 In accordance with section 48 of the Act, we are setting out the Notification in Annex 8 which details our proposed modifications to the GC18.
- 5.4 The proposed modifications are to:
- require communications providers, at a minimum, to accept PAC requests over the phone;
  - where the customer requests the PAC over the phone, require PACs to be issued either immediately over the phone or within a maximum of two hours by SMS; and
  - reduce the porting time from two business days to one business day.
- 5.5 In Annex 7 we have set out a specification for Option D, which should act as guidance to operators on how we would expect the requirements to be implemented. Annex 7 reflects the original specification we set out in the August consultation and is based on the current process as set out in the Industry Manual.
- 5.6 In order to implement these changes, we propose the following modifications to GC18:
- i) Replace GC 18.2 to state:<sup>86</sup>
    - Communications Providers shall, at a minimum, allow Subscribers to request a PAC over the phone; and
    - where a Subscriber contacts the Communications Providers by phone to request a PAC, the Communications Provider shall provide the PAC immediately over the phone where possible or by SMS within a maximum of

---

<sup>86</sup> Definitions used (as indicated by capital letters) have the same meaning as provided in the General Conditions of Entitlement, [www.ofcom.org.uk/telecoms/ioi/g\\_a\\_regime/gce/cvogc160909.pdf](http://www.ofcom.org.uk/telecoms/ioi/g_a_regime/gce/cvogc160909.pdf). See the schedule to the proposed modification in Annex 8 for the list of definitions under GC18.

two hours of the request (or by such other reasonable mechanism as may be specifically requested by the Subscriber).

- o for the avoidance of doubt, this requirement will not apply to 'bulk ports' (i.e. to requests for porting of 25 or more Mobile Numbers).
  - ii) re-number the current GC 18.2 to GC18.3 and replace the reference to "two business days" with "one business day from the Subscriber's Request for Portability".<sup>87</sup>
  - iii) insert as GG 18.6(g) (and re-number other definitions accordingly) the definition of the term "PAC" as "Porting Authorisation Code, which is a unique code used to signify the Donor Provider's agreement that a Subscriber is entitled to request and have their Mobile Number ported to another Communications Provider."
  - iv) insert as GC18.6(n) the definition of the term "SMS" as "Short Message Service, which is a text message delivered to a Subscriber's handset or, if SMS is superseded or withdrawn, an equivalent text communication sent directly to the Subscriber's handset; and
  - v) insert as GC 18.6(p) the definition of "Subscriber's Request for Portability" as "the request for Portability which arises when the Subscriber submits their PAC to the Recipient Provider".
- 5.7 In addition, the functions of the Director General of Telecommunications appointed under section 1 of the Telecommunications Act 1984 are now carried out by Ofcom. Therefore, we also propose to update the text of GC18 by replacing references to "the Director" with "the Office of Communications" in GC18.3 and 18.5.

*Question 1: Do you have any comments on the wording of the proposed modifications to GC18 contained in Annex 8?*

## Implementation period

- 5.8 In the responses to the August consultation, a number of stakeholders indicated that Option D could be implemented relatively quickly (see paragraphs 3.126 to 3.131).
- 5.9 Two MNOs indicated that at least 12 months would be required. However, Syniverse indicated that three to six months would be sufficient. One MNO has said (since the August consultation) that it expects that Option D could be implemented in six to nine months. Another MNO has also since indicated that a period of four months would be sufficient.
- 5.10 We note that two MNOs already comply with the PAC requirements [X]. We therefore consider that implementing these changes is likely to take less than a year to implement.
- 5.11 We recognise that the one working day process will need to be jointly agreed between the operators and Syniverse and therefore a certain period of time will be

<sup>87</sup> We are maintaining the word "business" day rather than using "working day" (which is used in the revised Article 30(4) USD) because this reflects the current language in GC18. 'Working day' is defined by the EC Regulation 1182/71 as "all days other than public holidays, Sundays and Saturdays" (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31971R1182:EN:HTML>). We consider the same definition applies to 'business day'.

required to reach that agreement, as well as developing and testing any modifications to the existing process. We note that when the process was reduced from five days to two days we allowed a period of nine months<sup>88</sup>, and MNOs were able to achieve that deadline.

5.12 We therefore propose two options for the implementation period of either:

- a) six months from the publication of the final statement introducing the modifications to GC18; or
- b) nine months from the publication of the final statement introducing the modifications to GC18.

5.13 We consider that a period of six months from the publication of the final statement is likely to be the most proportionate in balancing delivery of consumer benefits soonest while at the same time allowing mobile providers to plan appropriately and minimise the costs of implementation. In particular, we consider that this is the most easily implemented option for changes consulted upon and at least some industry responses suggest that a shorter time frame is reasonable given the level of changes required.

*Question 2: Which implementation period do respondents consider achievable?*

- (a) six months from the publication of the final statement; or*
- (b) nine months from the publication of the final statement*

*Please give reasons, and provide evidence to support your view.*

## Monitoring and enforcement

5.14 If we decide to introduce the proposed changes (subject to consultation) and we receive complaints about alleged non-compliance with the revised GC18 these will be handled in line with our complaint handling guidelines.<sup>89</sup>

5.15 Once the revised GC18 comes into effect (subject to consultation) we will monitor providers' compliance with the new requirements and take enforcement action as appropriate.

## Legal tests

5.16 Under section 47(2) of the Act, Ofcom may not modify a condition unless it is satisfied that the modification complies with the tests in the Act. We are satisfied that our proposed modifications meet these tests being:

- **objectively justifiable**, in that:
  - it is already standard practice for providers to accept PAC requests over the phone;

<sup>88</sup> Ofcom, *Arrangements for porting phone numbers when consumers switch supplier – a review of General Condition 18*, 17 July 2007, Annex 7. Available at:

[www.ofcom.org.uk/consult/condocs/gc18review/numberportability.pdf](http://www.ofcom.org.uk/consult/condocs/gc18review/numberportability.pdf)

<sup>89</sup> [www.ofcom.org.uk/bulletins/eu\\_directives/guidelines.pdf](http://www.ofcom.org.uk/bulletins/eu_directives/guidelines.pdf).

- the introduction of the requirement for PACs to be issued within a maximum of two hours by SMS is likely to reduce consumer harm caused by delays in obtaining a PAC; and
- reducing the porting time from two business days to one business day will benefit consumers, as supported by our impact assessment, and is likely to be in line with the new EU one working day porting requirement set out in the revised Article 30(4) USD.
- **not unduly discriminatory**, in that the proposed modifications will apply equally to all MNOs, MNVOs and mobile service providers.
- **proportionate**, in that:
  - MNOs already accept PAC requests over the phone and it does not create any additional costs;
  - two out of the five MNOs and some MNVOs already comply with the requirement to issue PACs within a maximum of two hours, and this requirement is not expected to generate significant costs; and
  - the reduction of the porting time to one business day will not require significant changes to the current system and will still provide benefits to consumers through a shorter porting process.
- **transparent**, in that policy changes proposed in this notification have been consulted upon and stakeholders have had full opportunity to comment and express their views on the various options.<sup>90</sup> In addition, in accordance with the statutory process set out in section 48 of Act, we are now consulting for at least one month on the proposed modifications to GC18.

### Compliance with Ofcom's statutory duties

- 5.17 We consider that our decision to implement Option D, and accompanying proposals to modify GC18 to implement that decision, are consistent with our general duties in carrying out our functions as set out in sections 3 and 4 of the Act. In particular, we consider that ensuring that PACs are provided within a maximum of two hours, and reducing the port time to one business day, will improve consumer's experience of porting compared to the current process. It will make the process quicker and more convenient for consumers and will reduce any consumer harm arising from delays caused by the time currently taken to issue the PAC. We consider that this will comply with our primary duties under section 3(1) of the Act to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets. It will also comply with our duty to have regard, in particular, to the interests of consumers in respect of quality of service given that consumers will be able to rely on a faster porting process, including obtaining the PAC from their existing operator more quickly.
- 5.18 We recognise that the UK mobile market is relatively competitive but we believe that the introduction of a faster and easier mobile porting process will play an important part in fostering consumer choice and promoting competition by allowing consumers to switch their business between suppliers faster and more simply without the costs

<sup>90</sup> The August consultation: [www.ofcom.org.uk/consult/condocs/gc18\\_mnp/](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/)

or inconvenience of changing their telephone number. We consider that this will comply with our duty to promote competition.

- 5.19 We consider that our decision will comply with our duty under section 3(3) of the Act to have regard to the principle of proportionality, because our impact assessment indicates that the NPV of Option D will be positive, and we consider there are likely to be a number of additional benefits from the changes which have not been quantified in the CBA. Therefore we consider that the benefits of these changes, including limiting the consumer harm arising from the current PAC process, will outweigh the costs.
- 5.20 By introducing a process that is likely to be in line with the one working day porting required by the new EU Regulatory Framework, we are also contributing to the development of the European internal market and the introduction of a faster porting process across Europe.

## Annex 1

# Responding to this consultation

## How to respond

- A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 13 May 2010**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at <http://www.ofcom.org.uk/consult/condocs/mnp/>, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 For larger consultation responses - particularly those with supporting charts, tables or other data - please email [mnp.consultation@ofcom.org.uk](mailto:mnp.consultation@ofcom.org.uk) attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.
- Valeria Baiamonte  
Floor 4  
Competition Group  
Riverside House  
2A Southwark Bridge Road  
London SE1 9HA
- Fax: 020 7783 3574
- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact on you.

## Further information

- A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Valeria Baiamonte on 020 7981 3834.

## Confidentiality

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



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

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

## Next steps

- A1.11 Following the end of the consultation period, Ofcom intends to publish the final statement by summer 2010.
- A1.12 Please note that you can register to receive free mail updates alerting you to the publications of relevant Ofcom documents. For more details please see: [http://www.ofcom.org.uk/static/subscribe/select\\_list.htm](http://www.ofcom.org.uk/static/subscribe/select_list.htm)

## Ofcom's consultation processes

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

Vicki Nash  
Ofcom  
Sutherland House  
149 St. Vincent Street  
Glasgow G2 5NW

Tel: 0141 229 7401  
Fax: 0141 229 7433

Email [vicki.nash@ofcom.org.uk](mailto:vicki.nash@ofcom.org.uk)

## Annex 2

# Ofcom's consultation principles

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

### Before the consultation

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

### During the consultation

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

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

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

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

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

### After the consultation

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

## Annex 3

# Consultation response cover sheet

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

**Cover sheet for response to an Ofcom consultation**

**BASIC DETAILS**

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

**CONFIDENTIALITY**

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

Nothing	<input type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input type="checkbox"/>	If there is no separate annex, which parts?	

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

**DECLARATION**

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

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

Name

Signed (if hard copy)

## Annex 4

# Consultation questions

A4.1 We have asked the following two questions in this consultation:

*Question 1: Do you have any comments on the wording of the proposed modifications to GC18 contained in Annex 8?*

*Question 2: Which implementation period do respondents consider achievable?*

*(c) six months from the publication of the final statement; or*

*(d) nine months from the publication of the final statement.*

*Please give reasons, and provide evidence to support your view.*

## Annex 5

# Detailed stakeholder comments on our cost benefit analysis

A5.1 This section summarises stakeholder's more detailed comments on our CBA which were not considered in Section 4. First we summarise stakeholder comments which will be considered in the context of the consumer switching project, then we cover other comments on the modelling approach and CBA.

## Stakeholder comments now considered in the context of the consumer switching project

### Costs of recipient-led processes versus donor-led processes

- A5.2 3UK said that the costs of implementing a porting hub necessary for the recipient-led processes were overestimated. It suggested that some of the complexity (and cost) associated with the UKPorting solution was due to fixed operators (who would not be involved in the mobile only solution set out in the August consultation).
- A5.3 Vodafone and T-Mobile said that the costs based on the UKPorting solution were provisional and might be inaccurate given that UKPorting had not completed its work and major issues were unresolved. They said it was possible that the UKPorting system would not have been delivered on time and further costs would have been incurred as a consequence.
- A5.4 T-Mobile also suggested that the UKPorting vendor quotes were likely to have been inflated due to the 'crash' nature of the project, which required greater resources and less planning and procurement efficiencies than would ordinarily be the case.
- A5.5 3UK said that not all operating costs of a recipient-led process would be incremental. Both it and Tesco noted that there were possible operational savings associated with a recipient-led switching process and from disbanding the current donor-led processes, for example, there would no longer be a requirement to issue PACs.
- A5.6 Tesco also commented on savings which would arise due to fewer queries about PACs and porting problems. It noted that their customers had to make many calls to customer care to resolve porting related queries which was both inconvenient for their customers and a cost to their business. Tesco commented that if that created a friction in the switching process then it was also likely to dampen competition.
- A5.7 C&W disagreed that the capital costs of a two hour process (Option A) would be the same as a process that was activated on the next working day (Option C), as was assumed in the August consultation.
- A5.8 Virgin Media and Vodafone said that Ofcom needed to undertake a further assessment of the costs for MVNOs and new entrant MNOs under a recipient-led process. Vodafone also considered that independent retail channels would incur costs if they offered recipient-led porting.

A5.9 A number of operators commented that a recipient-led approach, where the donor provider did not authenticate the identity of the customer prior to providing a PAC, could lead to higher levels of slamming. They noted that additional costs might be incurred in implementing processes to prevent slamming.

### **Quantification of benefits of recipient- versus donor-led processes**

A5.10 3UK commented that a number of benefits of recipient-led approaches had not been quantified in the August consultation. These included:

- enhanced competition (through improved switching);
- fewer contact points for consumers in the porting process;
- less aggressive save activity;
- less delay in the porting process (which acts as a barrier to switching);
- less consumer confusion;
- greater awareness and promotion of the porting process;
- opportunity to add safeguards against mobile slamming and fraud; and
- removal of entry barriers for new entrants (via a centralised system whereby an operator only needed to have contractual arrangements with the hub operator).

A5.11 3UK suggested that further investigation was required for; i) the possibility of increased porting rates and ii) potential significance of higher willingness to pay under recipient-led options. Tesco also commented that the benefits of increased competition and enhanced levels of porting were understated in the CBA.

A5.12 3UK commented that the benefits to those calling ported numbers were not captured within the CBA (e.g. not having to spend time updating an address book with a new number when someone switches and the possibility that it is difficult to get hold of someone because they change number but do not inform all of their contacts).

A5.13 3UK commented that there might be synergies in implementing a hub/database which could be used to speed up the porting process as well as implementing direct routing for calls to mobile numbers.

A5.14 3UK commented that recipient-led processes might be valuable if consumers were switching to bundled services. It considered that a recipient-led approach was more likely to foster entry into the 'bundles' market, which could in turn lead to more innovative service offerings.

A5.15 O2 commented that Ofcom had failed to take account of the full extent of the benefits available under a donor-led system, such as:

- the current system is free;
- the protection afforded against slamming;

- understanding of contractual liabilities and raising awareness of potential loss of bundled value;
- the value of customer choice about when they want to submit their PAC;
- the value of consistency across customer types; and
- the value of delivering certainty over speed.

### Ofcom's response

- A5.16 Stakeholders' comments above on costs and benefits may be considered again in light of the recommendation of the consumer switching work, in particular as part of any detailed CBA that may be needed. These comments are therefore not considered further in this statement.
- A5.17 The costing undertaken for the August consultation was a simplified approach due to data limitations at the time. We commented on a number of the potential additional benefits (highlighted in particular in 3UK's comments) in the August consultation but did not attempt to quantify these. We noted that additional benefits to those calling ported numbers would only arise if a faster porting process led to more porting. These benefits are relevant to any changes which would lead to more porting (both recipient- and donor-led).
- A5.18 In response to 3UK's comment in A5.13, as discussed in the statement *Routing calls to ported telephone numbers*<sup>91</sup>, we have concluded that mandating direct routing is not appropriate at this time. Therefore, in so far as there may be synergies between a central database solution for direct routing which would also act as a porting hub, these would not be realised at this time.

### Stakeholder comments on modelling approach & consumer survey

- A5.19 The below table summarises other specific comments on our modelling approach and consumer survey. Again these comments will be considered in the context of the consumer switching work but we have also responded to the specific points raised.

**Table A5.1: Comments on modelling approach and consumer survey**

Stakeholder comment	Ofcom response
In the August consultation we presented a sensitivity annex with scenarios which explored the impact on the ranking of the four options (A-D) if consumers valued a recipient process more than a donor process. Vodafone commented that varying the ratio of benefits of a recipient-led process to a donor-led process in this way was unjustifiable.	We made it clear in the August consultation that the reweighting of the benefits in the sensitivity analysis was purely hypothetical. We noted in paragraph A5.10 of the August consultation that we were not able to determine the extent of the preference for a recipient led process and further research would be required to shed light on this issue.
In the August consultation Options A and	The survey information was based on the

<sup>91</sup> [www.ofcom.org.uk/consult/condocs/gc18\\_routing/statement](http://www.ofcom.org.uk/consult/condocs/gc18_routing/statement)



<p>B, and C and D were determined to deliver porting in the same timeframe (near instant for A and B and one day for C and D). 3UK and C&amp;W commented that the donor-led processes (B and D) actually took longer because they would require the consumer to obtain a PAC before they initiated the porting process (whereas recipient-led processes avoid that stage). They commented that it was not appropriate to attribute the same timeframe to A and B, and C and D, when calculating the benefits.</p>	<p>willingness to pay for a faster porting process, and did not ask about the willingness to pay for faster PAC provision (or in the case of the recipient-led processes the elimination of PAC provision entirely). We noted in the August consultation that our benefits assessment was not complete and, for example, not all potential benefits from recipient-led processes had been captured in the assessment.</p>
<p>Vodafone commented that the survey question which asked about consumer preferences for donor versus recipient-led porting was 'leading' i.e. respondents were more likely to select the recipient-led option due to the way the question was presented.<sup>92</sup> It considered that the consumer would need more information on the key practical features of each process to give a reasoned response.</p> <p>T-Mobile commented that care must be taken to ensure that any further research into consumer preferences regarding the porting process (i.e. recipient- versus donor-led) was not misleading.</p>	<p>A consumer survey needs to balance the demands of being sufficiently concise so that respondents complete the survey and sufficiently detailed so that the results are meaningful. We consider that the question, as asked, did concisely capture the donor and recipient-led processes. Capturing the key practical features of each process might have been desirable but would not have been practical within this survey which covered a wide range of questions. Such an approach might be more appropriate for a focus group which discussed a specific area in more detail.</p>
<p>3UK commented that we had not stratified our dataset to account for vulnerable social groups (e.g. elderly, disabled) who, potentially, could be seriously affected by a difficult or complex porting process.</p>	<p>Our survey did not identify disabled people as a separate group. Looking across age and social class it appears that:</p> <ul style="list-style-type: none"> <li>• younger adults and are more likely to be aware of the right to port and find porting easier than older adults;</li> <li>• ABC1 social groups more likely to be aware of the right to port and find porting easier than C2DE social groups;</li> <li>• amongst those who switched but didn't port the 'hassle/admin' of porting was more of a barrier for</li> </ul>

<sup>92</sup> The question was as follows: When changing mobile phone network - if you wanted to keep your existing mobile phone number, which of these processes do you prefer?

a) You contact your current mobile network telling them that you want to take your existing phone number to a new network, then contact your new network for them to complete the process, b) Your new mobile network automatically contacts your existing network to complete the process, c) No preference/Don't know

	<p>younger people, while the hassle of getting a PAC varied a little by age.<sup>93</sup></p> <p>We do not have sufficient evidence to indicate that particular groups are harmed by the current porting process. In addition, as indicated in the August consultation and in Section 2 above, we considered whether we were required to undertake a full equality impact assessment for this review. On the basis of our Initial Equality Impact Assessment Screening we determined that this was not required, because any changes to the MNP process do not raise specific equality issues; they will affect consumers equally regardless of race, gender or disability.</p>
--	---

## Other stakeholder comments on the CBA

A5.20 The table below summarises other detailed stakeholder comments on the CBA and our response to those comments.

**Table A5.2: Other stakeholder comments on the CBA**

Stakeholder comment	Ofcom comment
<b>Comments benefit calculations</b>	
<p>Vodafone commented that the measure of ‘willingness to pay’ assesses the sum consumers were willing to contribute for a given service. The impact of sales tax meant the sum operators would actually notionally receive was diluted by VAT. It considered that the amount net of VAT should be considered in the CBA to weigh against the real incremental costs.</p>	<p>The CBA captures the benefits to society from the introduction of an improved/faster porting process.</p> <p>In this context, VAT is a transfer paid from firms to the government. The fact that some of the notional revenues would go to the government rather than firms does not mean that the value of the benefit to society should be reduced.</p>
<p>Vodafone considered it likely that only the ‘definitely’ willing to pay results were valid. It considered that the ‘definitely’ and ‘probably’ willing to pay results might overstate the willingness to pay.</p>	<p>We recognise that in a stated preference survey there is a possibility that hypothetical willingness to pay may overestimate true willingness to pay. This is why we have presented the benefits as a range, where the upper bound is represented by consumers who are ‘definitely’ and ‘probably’ willing to pay and the lower bound is those ‘definitely’ willing to pay. In addition we have conducted sensitivity analysis on the results – see Annex 6.</p>
<p>Vodafone considered it inappropriate to interpret two hour porting as being</p>	<p>We used the willingness to pay for immediate porting in our calculations because this</p>

<sup>93</sup> These are indicative comments and do not necessarily imply statistical significance.

<p>equivalent to immediate porting. It therefore argued that the benefits for Options A and B were overstated because the willingness to pay for immediate porting had been used when the options actually set out a two hour porting process.</p>	<p>information was available from the consumer survey (whereas the willingness to pay for two hour porting was not). We recognise that a consumer may value the benefits from immediate porting more highly than two hour porting. However, we are now only considering Options B and D in our revised CBA and, in any case, we consider that in terms of quantified benefits and costs, Option D has a higher NPV than Option B.</p>
<p>[X] commented that not all consumers wanted to port their numbers so they would not all benefit from improvements to the process.</p>	<p>The Omnibus survey indicated that 71% of consumers considered that keeping their phone number when they changed network was very important or important (versus 15% who considered it was unimportant or not at all important). Therefore, the majority of consumers do value the ability to port. Furthermore, the benefits calculated are based on the number of actual ports arising each year, so no benefits are attributed to those who switch but do not port.</p>
<p>C&amp;W commented that the survey questions might have been misleading because respondents were prompted that the current process takes 2-3 days. It noted that in many cases by the time the PAC has been obtained the current process could take up to six days end to end. It suggested that the relative improvement (in moving from the current process to one day or immediate porting) might therefore be understated.</p>	<p>The survey concentrated on measuring the benefits of a faster porting process defined as starting from the point when the PAC is submitted to the recipient operator. We did not include or measure the benefits of speeding up PAC provision within the survey. C&amp;W have included PAC provision within their definition of the time taken to port – so the comparison is not on the same basis as that used in our CBA.</p> <p>We agree that improvements could be made to the PAC process and our proposals do include measures to harmonise and speed up the PAC provision process.</p>
<p><b>Other comments</b></p>	
<p>A number of operators commented that the willingness to pay for faster porting should be set against other possible service improvements. They argued that because funding is limited, undertaking investment to achieve a faster porting process may mean that other value enhancing projects are forgone. It was noted that Ofcom should also be mindful of its proposed new duty to promote efficient investment.</p>	<p>We are currently proposing the implementation of Option D which includes issuing PACs by SMS within two hours and a one day porting process. The move to a one day porting process is likely to be in line with the new EU Regulatory Framework, which the Government will need to implement by 25 May 2011.</p> <p>Even if there were a displacement effect, some providers already comply with the requirement to issue PACs via SMS within two hours, and for others is a relatively low cost change. Our revised CBA demonstrates that the NPV of Option D will be positive and this does not take</p>

	<p>into account certain unquantified benefits.</p>
<p>C&amp;W commented that consideration should be given to the relationship between porting and contract cancellation. Under the current regime the PAC request acts as a notification to cancel the existing contract (which might have a one month notice period). This means that a customer who wishes to avoid paying for two mobile services simultaneously must delay submission of their requested PAC for 20+ days and then utilise it to port their number before the PAC expires. If the PAC is utilised immediately on receipt then generally the old service will still be paid for until the contract notice period expires.</p> <p>3UK made a similar comment and thought this would be less of a problem under a near-instant recipient-led approach (because there would be no need to have a PAC at all).</p>	<p>We are monitoring OAT complaints on this issue. We note that operators' typical minimum notice period (30 days) reflects the PAC expiry period. We understand that part of the reason for the length of the validity of the PAC is to allow customers time to shop around and consider different offers before committing to a particular operator.</p> <p>If this did represent a problem, moving to recipient-led would not be the only means of addressing it, for example the length of time the PAC is valid for could be reduced.</p>
<p>C&amp;W suggested that improving the speed of the porting process was the wrong target, and actually it might be more important for the consumer to know exactly when the number port will take place. Currently the port occurs at some point between 11am-3pm and a porter might experience some service interruption during this time. C&amp;W argued that providing greater certainty about when the port will occur would be more useful to consumers.</p>	<p>We agree that providing greater certainty about when a port will occur could be beneficial to consumers. We would encourage operators to provide information to consumers about the likely timing of the port wherever possible and we understand some operators send a text message to the customer to inform them when the port will occur and also a message confirming that it has been successful.</p>
<p>[3X] and Vodafone commented that running a different process for bulk ports versus non bulk ports would incur extra costs.</p>	<p>Although the changes to the MNP process involved with Option's B and D (which are the only options we have considered further in this statement) will not apply to bulk ports, these options still essentially involve the same (donor-led) process for bulk and non bulk ports (only the timing of ports and the timing for issuing PACs is different, which is the situation with the current process already).</p>

## Annex 6

# Sensitivity analysis of Option D

## Introduction

A6.1 We recognise that there is uncertainty around some of the input values used in our analysis so we have created some sensitivity scenarios to show how changing specific inputs will affect the NPV. We have only conducted sensitivity analysis for our chosen option (Option D). We have conducted the following analyses:

- a) we have conducted sensitivity analysis changing one input at a time, while holding the other inputs constant at the 'base' values. We refer to this exercise as the 'individual sensitivity scenarios'; and
- b) we have constructed low case and high case scenarios by taking the key inputs and varying them simultaneously. As a result, the range of NPVs between the low and high cases is significantly wider than for the individual sensitivity scenarios.

## Individual sensitivity scenarios for Option D

A6.2 We have conducted sensitivity scenarios for the following inputs:

- costs – +/-20% change in the implementation capital costs<sup>94</sup> and additional labour costs;
- ports per year - +/-20% change in the number of ports per year;
- Discount rate – using the mobile industry pre tax real WACC of 11.5%<sup>95</sup>; and
- time horizon – assuming that two years of ongoing costs and benefits are accrued.

A6.3 We have already identified a lower and an upper bound to the benefits of Option D based on those 'definitely' and 'definitely and probably' willing to pay for a faster porting process (see above), therefore we are not going to apply a further sensitivity analysis to the willingness to pay values. The sensitivity scenarios noted above are presented for the 'definitely' and 'definitely and probably' willing to pay values in the table and the chart below, the time horizon used is ten years unless otherwise stated:

---

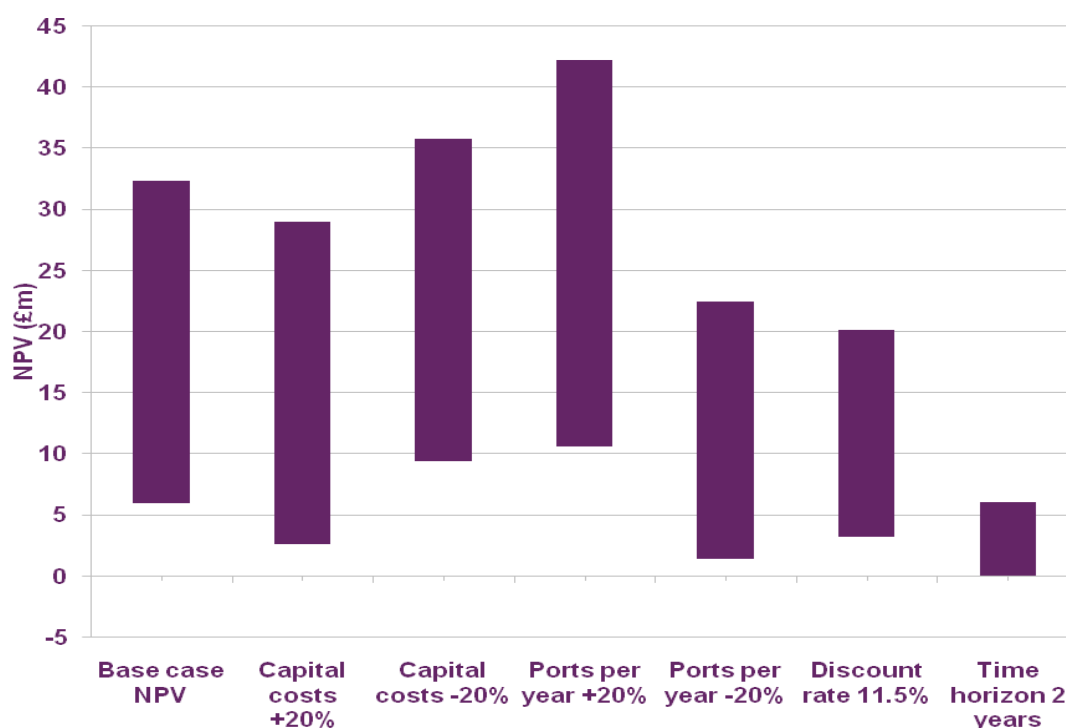
<sup>94</sup> Note that the non-labour operating costs are a fixed percentage of the capital costs so changing the capital costs means the non-labour operating costs also change by the same percentage.

<sup>95</sup> This is the pre tax real WACC published in the 2007 statement on mobile call termination, available at [www.ofcom.org.uk/consult/condocs/mobile\\_call\\_term/statement/statement.pdf](http://www.ofcom.org.uk/consult/condocs/mobile_call_term/statement/statement.pdf)

Table A6.1: Individual sensitivity scenarios

Input	Lower bound for quantified benefits (definitely willing to pay)	Upper bound for quantified benefits (definitely and probably willing to pay)
	NPV £m	NPV £m
Base case NPV	6	32
Capital costs +20%	3	29
Capital costs -20%	9	36
Ports per year +20%	11	42
Ports per year -20%	1	22
Discount rate 11.5%	3	20
Time horizon 2 years <sup>96</sup>	0	6

Figure A6.2: NPV range for individual sensitivity scenarios



Note: range for each scenario reflects lower bound for quantified benefits and upper bound for quantified benefits

- A6.4 The sensitivity on the discount rate used above is based on a mobile operator cost of capital of 11.5% pre-tax real, which is taken from the March 2007 statement on mobile call termination.<sup>97</sup> We note that a new mobile call termination model is currently under consultation as part of the wholesale mobile voice call termination review for the period 2011 to 2015.<sup>98</sup> The range for the pre-tax real cost of capital in the new mobile call termination model is 6.5% to 8.8% with a base case value of

<sup>96</sup> This assumes that implementation costs are incurred at the end of 2010 and benefits/ongoing costs accrue in 2011 and 2012.

<sup>97</sup> Available at: [www.ofcom.org.uk/consult/condocs/mobile\\_call\\_term/statement/](http://www.ofcom.org.uk/consult/condocs/mobile_call_term/statement/) - see Annex 18 in particular.

<sup>98</sup> The latest consultation as part of this review is available at [www.ofcom.org.uk/consult/condocs/wmctr/](http://www.ofcom.org.uk/consult/condocs/wmctr/).

7.6%. If we used the cost of capital from the new mobile call termination model, the NPVs for the discount rate sensitivity scenarios would be higher. However, we have decided to retain the 2007 value for the cost of capital since the new mobile call termination cost model (including the range for the cost of capital) is subject to consultation.

### Low and high case scenarios

- A6.5 The sensitivity scenarios above capture the impact of changing one input at a time. We have also created a 'low case NPV' and a 'high case NPV' by changing the inputs simultaneously.
- A6.6 The 'low case' scenario is created by setting the key inputs to the values that imply lower benefits and higher costs. The 'high case' scenario reflects higher benefits and lower costs. The input values used in the low and high case scenario are set out in the table below, along with the NPV. Inputs not listed in the table below remain at base case values.

**Table A6.3: Low and high case NPV scenarios**

Input	Input values and NPV (£m)	
	Low case scenario	High case scenario
<b>Benefits</b>	Based on those definitely willing to pay for faster porting	Based on those definitely and probably willing to pay for faster porting
<b>Capital costs</b>	+20% relative to base	-20% relative to base
<b>Ports per year</b>	-20% relative to base	+20% relative to base
<b>Discount rate</b>	11.5%	3.5%
<b>Time horizon</b>	2 years	10 years
<b>NPV</b>	<b>-2</b>	<b>46</b>

- A6.7 Under the low case scenario the NPV is slightly negative at -£2m and we could not rule out the possibility of a slightly negative NPV if there was substantial downside variation to several key inputs simultaneously. However, we consider that this has a low probability of occurrence given that:
- i) all of the key inputs would simultaneously need to take values which reduce the benefits and increase the costs relative to the base case; and
  - ii) although both costs and benefits are uncertain, through our consultation and analysis of responses we consider we have been able to quantify costs relatively more thoroughly than benefits.

## Annex 7

# Outline specification of Option D

## Introduction

- A7.1 The outline specification which we set out in the August consultation is repeated below.<sup>99</sup> It also now includes additional information about the PAC process, which is broadly based on the current process as set out in the Industry Manual.<sup>100</sup> We invited stakeholders to provide feedback on the specifications set out in the August consultation but we received no specific comments on our outline specification of Option D.<sup>101</sup>
- A7.2 This is intended as guidance to the industry as to how we would expect these changes to be implemented.

## PAC allocation

- A7.3 The PAC allocation process will be implemented by the donor service provider (“DSP”).
- A7.4 The DSP must, at a minimum, allow customers to request a PAC over the phone, normally by the customer telephoning the DSP’s customer service centre.
- A7.5 PAC requests must be handled during all normal working hours of the customer service centre.
- A7.6 The DSP will collect the relevant information from the customer and will carry out the necessary checks to ensure that a PAC can be issued.
- A7.7 The DSP can refuse to provide a PAC only in the following circumstances:
- the MSISDN<sup>102</sup> is not held by a customer of the DSP;
  - the MSISDN has been terminated;
  - the account holder is deceased;
  - the DSP has already issued a PAC that is still valid;
  - the customer fails to provide the necessary security information; or
  - the customer fails to provide adequate identification that he or she is the legitimate account holder.

Matters relating to unpaid debt on the part of the customer may not be used as grounds to refuse to issue a PAC.

<sup>99</sup> See Annex 6 of the August consultation:

[www.ofcom.org.uk/consult/condocs/gc18\\_mnp/mnpcondoc.pdf](http://www.ofcom.org.uk/consult/condocs/gc18_mnp/mnpcondoc.pdf)

<sup>100</sup> Available at: <http://www.mnposg.org.uk/>

<sup>101</sup> Paragraph A6.5 of the August consultation.

<sup>102</sup> An MSISDN (Mobile Subscriber Integrated Services Digital Network) number is essentially the mobile phone number of the SIM card in a mobile phone.



- A7.8 Where the checks are completed satisfactorily and a PAC can be issued then, in the case of requests involving less than 25 numbers:
- when a customer has telephoned to request a PAC, operators are encouraged wherever possible to give the PAC verbally to the caller during the call; or
  - the PAC must be sent to the customer by SMS within two hours (or by such other reasonable mechanism as may be specifically requested by the customer).<sup>103</sup>
- A7.9 Operators are encouraged to treat this two hour period as a maximum, and wherever possible to send out the PAC by SMS at the earliest opportunity.
- A7.10 At their discretion, in addition, operators are permitted to issue duplicate or supplementary information to the PAC via any appropriate media (e.g. email, post).
- A7.11 A PAC is valid from the date that it is generated for a period of 30 calendar days, including bank holidays.

### Implementation of the porting request

- A7.12 The default port date (for ports involving less than 25 numbers) is the next working day following the day on which the porting request is made (i.e. one business/working day).
- A7.13 The customer may request an alternative port date that is later than the default date but this date must not be later than the PAC expiry date.
- A7.14 As far as possible, the current porting process as defined in the “Mobile Number Portability Porting Process Manual”<sup>104</sup> should be followed.
- A7.15 For this one working day process, we propose that the current batch operated system is retained, and that appropriate modifications are made to the existing timetables for both the initial day and the porting day. This will allow time for coordination and problem resolution whilst still enabling a reduction to the overall porting time for the majority of applicants. This will also require that any activities that would have been performed during the intermediate day will have to be performed at other times.
- A7.16 For this approach it is proposed:
- i) that port-out requests submitted before a nominal cut-off time would have a default porting date of the following working day; and
  - ii) that port out requests submitted after the nominal cut-off time would have a default porting date of the day after the following working day.
- A7.17 We consider that a reasonable nominal cut-off time is 6pm on the relevant day. We note the Industry Manual enables recipient service providers (“RSP”) to make a port request on the Syniverse system up to midnight. We consider that a 6pm cut off point for submitting the PAC would allow operators time to complete the steps required on the day prior to the port. We are not, however, mandating this cut off

---

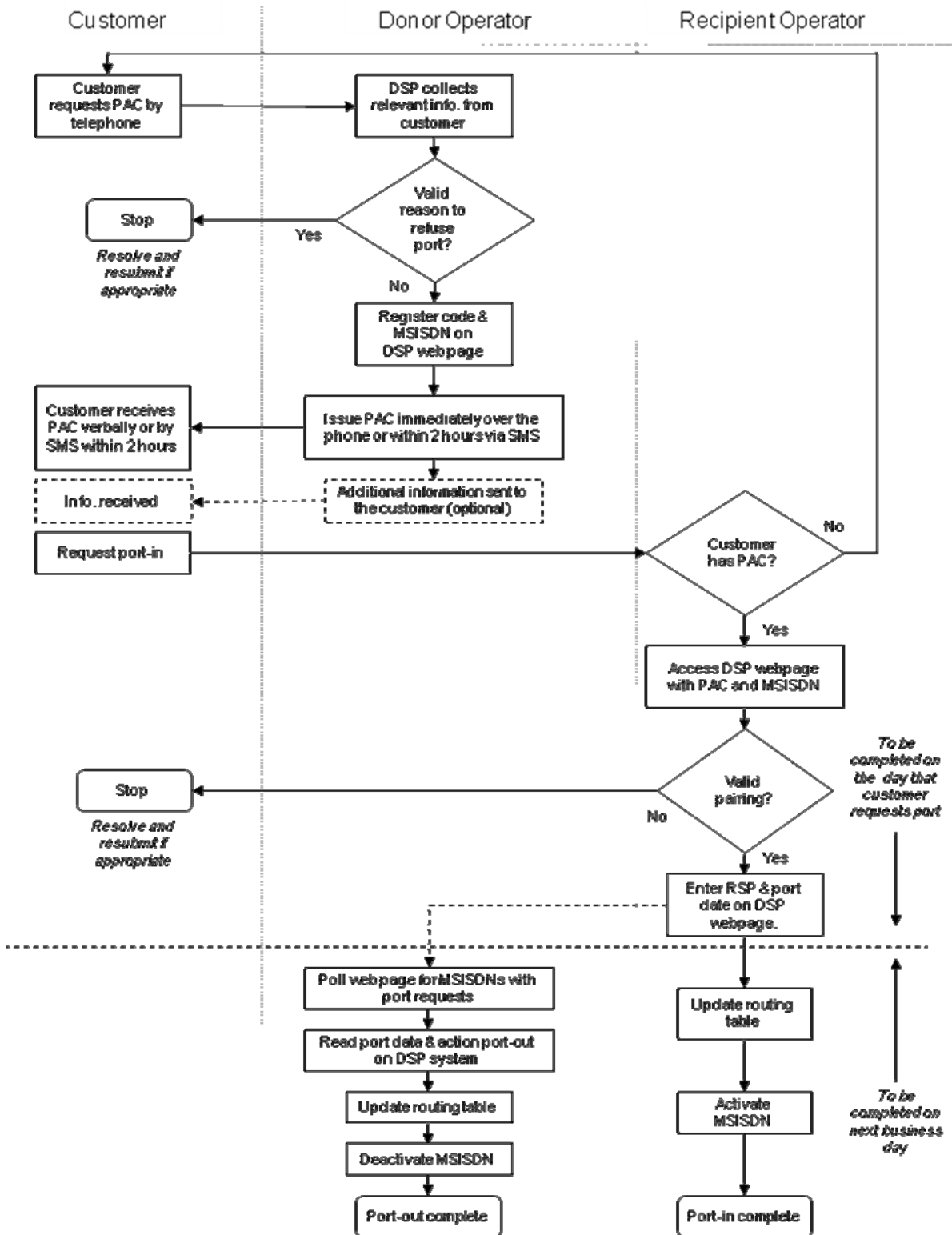
<sup>103</sup> Note that the period is two hours (elapsed time), irrespective of whether part of this period falls outside normal working hours

<sup>104</sup> Available at: <http://www.mnposg.org.uk/>

point and would encourage industry to jointly agree on a reasonable and appropriate cut off point for the consumer to submit the PAC in order to port by the next working day.

- A7.18 The Porting Event Timeline for the porting date could remain as at present i.e.:
- i) the RSP must activate the new subscription for the porting MSISDN by no later than 11:00 on the porting date;
  - ii) the DSP must initiate the port-out of the porting MSISDN no earlier than 1100 hours, and by no later than 14:00 on the porting date; and
  - iii) all ports should have been completed and fully activated by 15.00 on the porting date.

Figure A7.1 Flow chart of Option D



## Annex 8

# Notification of proposed modification to General Condition 18

**Notification of a modification under section 48(2) of the Communications Act 2003 of Part 1 and General Condition 18 of Part 2 of the General Conditions regarding number portability, which is set out in the Schedule to the Notification under Section 48(1) of the Communications Act 2003 published by the Director General on 22 July 2003 as amended by the notification made by Ofcom on 30 March 2006 and further amended by the notification made by Ofcom on 17 July 2007.**


1. Ofcom, in accordance with section 48 of the Act, hereby makes the following proposal for modification of General Condition 18 of Part 2 of the General Conditions regarding number portability.
2. The draft modification to General Condition 18 is set out in the Schedule to this notification.
3. The reasons for making the proposal and the effect of the modification are set out in the accompanying document.
4. Ofcom considers that the proposed modification complies with the requirements in section 47(2) of the Act.
5. In making the proposals referred to above, Ofcom has considered and acted in accordance with the six Community requirements in section 4 of the Act and its general duties in section 3 of the Act.
6. Representation may be made to Ofcom about the proposals set out in the Notification and the accompanying consultation by **5pm on 13 May 2010**.
7. A copy of this Notification has been made available to the Secretary of State in accordance with section 50(1) (a) of the Act and to the European Commission in accordance with section 50(6) of the Act.
8. Ofcom is proposing that the revised General Condition 18 will take effect six months after the date of publication of the final statement.<sup>105</sup>
9. In this Notification:
  - “Act” means the Communications Act 2003;
  - “General Condition 18” means General Condition 18 of the General Conditions of Entitlement set by the Director by way of publication of a Notification on 22 July 2003;

---

<sup>105</sup> We are also, however, consulting on an alternative implementation period of nine months from the publication of the final statement. See Section 5 of the accompanying document.

- “Director” means the Director-General of Telecommunications as appointed under section 1 of the Telecommunications Act 1994; and
- “Ofcom” means the Office of Communications.

Signed by



**Marina Gibbs**  
**Competition Policy Director**

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

31 March 2010

## Schedule

**Modification to General Condition 18 of Part 2 of the General Conditions regarding number portability, which is set out in the Schedule to the Notification under Section 48(1) of the Communications Act 2003 published by the Director General on 22 July 2003 as amended by the notification made by Ofcom on 30 March 2006 and further amended by the notification made by Ofcom on 17 July 2007.**

General Condition 18 on Number Portability shall be modified as set out below (the deleted text has been struck through and added text underlined, both highlighted in yellow for ease of reference).

18.1 The Communications Provider shall provide Number Portability as soon as it is reasonably practicable on reasonable terms, including charges, to any of its Subscribers who so requests.

**18.2** In the case of Mobile Portability, where the request is for porting a total of less than 25 Telephone Numbers, the Communications Provider shall:

**(a)** at a minimum, allow Subscribers to request a PAC over the phone; and

**(b)** where a Subscriber contacts the Communications Provider by phone, provide the PAC immediately over the phone where possible or by SMS within a maximum of two hours of the request (or by such other reasonable mechanism as may be specifically requested by the Subscriber).

**18.2** **18.3** The Communications Provider shall, pursuant to a request from another Communications Provider, provide Portability (other than Paging Portability) as soon as is reasonably practicable in relation to that request on reasonable terms. In the case of Mobile Portability, where the request is for porting a total of less than 25 Telephone Numbers, the total period for providing Portability in respect of those Telephone Numbers shall not exceed two one business days from the Subscriber

**Request for Portability.** Any charges for the provision of such Portability shall be made in accordance with the following principles:

- (a) subject always to the requirement of reasonableness, charges shall be cost oriented and based on the incremental costs of providing Portability unless:
  - (i) the Donor Provider and the Recipient Provider have agreed another basis for the charges, or
  - (ii) ~~the Director~~ **the Office of Communications** has directed that another basis for charges should be used;
- (b) the Donor Provider shall make no charge in relation to System Set-Up Costs or Additional Conveyance Costs;
- (c) in respect of Mobile Portability, the Donor Provider shall make no charge or annual fee for ongoing costs relating to registration of a ported Telephone Number or a Subscriber;
- (d) charges levied by the Donor Provider shall be based on the reasonable costs incurred by it in providing Portability with respect to each Telephone Number.

~~18.3~~ **18.4** Where the Communications Provider provides Portability in accordance with paragraph ~~18.2-18.3~~:

- (a) the Recipient Provider; and
- (b) the Transit Provider,

shall, as appropriate, provide Portability (other than Paging Portability) on reasonable terms.

~~18.4~~ **18.5** The Communications Provider shall, on the written request of ~~the Director Ofcom~~, provide ~~the Director~~ **the Office of Communications** with a record of each Telephone Number in relation to which it is providing Portability, specifying the relevant Recipient Provider in each case.

~~18.8~~ **18.6** For the purposes of this Condition:

- (a) “Additional Conveyance Costs” mean any costs incurred by the Donor Provider associated with resources used in:
  - (i) effecting the switch-processing required to set up each ported call; and
  - (ii) providing the switch and transmission capacity for any part of the duration of each ported call, additional to the costs of conveyance of non-porting calls from the Donor Provider’s network to the Recipient Provider’s network;
- (b) “Communications Provider” means a person who provides an Electronic Communications Network or an Electronic Communications Service;

- (c) “Donor Provider” means a Communications Provider whose Subscriber Numbers are in the process of being, or have been passed or ported to a Recipient Provider ;
- (d) “Mobile Communications Service” means any Publicly Available Telephone Service consisting in the conveyance of Signals by means of a Public Telephone Network where every Signal that has been conveyed thereby has been, or is to be, conveyed through the agency of Wireless Telegraphy to or from a Public Telephone Network which is designed or adapted to be capable of being used in motion;
- (e) “Mobile Portability” means Portability relating to Telephone Numbers Allocated for use with Mobile Communications Services;
- (f) “Number Portability” means a facility whereby Subscribers who so request can retain their Telephone Number on a Public Telephone Network, independently of the person providing the service at the Network Termination Point of a Subscriber provided that such retention of a Telephone Number is in accordance with the National Telephone Numbering Plan;

~~(g)~~ (g) “PAC” means Porting Authorisation Code, which is a unique code used to signify the Donor Provider’s agreement that the subscriber is entitled to request and have their Mobile Number ported to another Communications Provider

~~(g)~~ (h) “Paging Portability” means Portability relating to Telephone Numbers Allocated for use with Radiopaging Services;

~~(h)~~ (i) “Point of Connection” means a point at which one Public Telephone Network is connected to another;

~~(i)~~ (j) “Portability” means any facility which may be provided by a Communications Provider to another enabling any Subscriber who requests Number Portability to continue to be provided with any Publicly Available Telephone Service by reference to the same Telephone Number irrespective of the identity of the person providing such a service;

~~(j)~~ (k) “Publicly Available Telephone Service”:

(a) in relation to a service to be used with a Telephone Number for receiving calls only under the contract between the person and the provider in question, means a Public Electronic Communications Service for only receiving national and international telephone calls through a number or numbers in a national or international telephone numbering plan;

(b) in relation to a service to be used with a Telephone Number for originating and receiving calls and access to Emergency Organisations under the contract between the person and the provider in question, has the meaning ascribed to it under paragraph 1 of Part 1 of this Schedule;

~~(k)~~ (l) “Radiopaging Service” means Electronic Communications Services consisting in the conveyance of Signals by means of Wireless Telegraphy where every Signal, apart from simple acknowledgement, is ultimately transmitted from a station for Wireless Telegraphy comprised in the Communications Provider’s Electronic Communications Network to a station for Wireless Telegraphy or Wireless Telegraphy Apparatus that is not comprised in that network;

~~(l)~~ (m) “Recipient Provider” means a Communications Provider to whom Subscriber Number(s) are in the process of being, or have been passed or ported from a Donor Provider;

(n) “SMS” means Short Message Service, which is a text message delivered to a Subscriber’s handset or, if SMS is superseded or withdrawn, an equivalent text communication sent directly to the Subscriber’s handset.

~~(m)~~ (o) “Subscriber” means any person who is party to a contract with the provider of Publicly Available Telephone Services for the supply of such services in the United Kingdom;

~~(n)~~ (p) “Subscriber Number” means the Telephone Number (or Telephone Numbers) which any Communications Provider’s Public Telephone Network recognises as relating to a particular Subscriber of that Communications Provider;

~~(o)~~ (q) “Subscriber Request for Portability” means the request for Portability arising when the Subscriber submits their PAC to the Recipient Provider.

~~(p)~~ (r) “System Set-Up Costs” mean costs of the Donor Provider incurred—

(i) in the course of making network and system modifications, configuration and reconfiguration, including adapting or replacing software;

(ii) in the course of testing functionality within that provider’s network and in conjunction with any Recipient Provider’s network,

(iii) thereby establishing the technical and administrative capability to provide Portability;

~~(q)~~ (s) “Transit Provider” means a Communications Provider providing, by agreement, Interconnection between a Donor Provider and Recipient Provider via Points of Connection with both Communications Providers.