

Part C – 080 and 116

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Part C - Section 11

Introduction to Part C

Introduction

11.1 In this section we set out the background to the 080 and 116 ranges, including how the market is currently structured. We then outline the structure of the remaining sections of this Part C.

Definitions

11.2 In this and the following sections we use two key terms; ‘Freephone’ and ‘free-to-caller’. The definition of Freephone in the Numbering Plan is:

“a number that is reached free of charge to the customer except where a charge is notified to the End-User at the start of the call.”¹

11.3 The definition of ‘free-to-caller’ in the Numbering Plan is:

“a number that is accessed at no charge to the customer and, in the case of a Public Pay Telephone, without having to use coins and cards”.

11.4 The number ranges which fall within the scope of this Part C are 080 (including the 0800 and 0808 ranges²) and 116 numbers. In the current Numbering Plan, 080 is defined as a Freephone range. 116 numbers, however, are considered on a case-by-case basis and designated as either Freephone or free-to-caller, depending on the nature of the service provided (see paragraph 11.17 below).

11.5 The 0500 range is also a Freephone range but is closed to new allocations. However, we do not discuss 0500 numbers further here as we have separately consulted on options for that range recently (see Section 2 in Part A for a summary of our planned next steps in relation to the 0500 range).³

The 080 range

History of regulation and Ofcom’s policy preference

11.6 In the April 2012 consultation, we provided a detailed account of the history of the 080 number range, noting that the 080 range had been in existence for several decades.⁴ In summary, we noted that, in a 1996 determination, Oftel did not preclude mobile operators from levying retail charges for calls to 080 numbers –

¹ The National Telephone Numbering Plan, p.4, available at

<http://stakeholders.ofcom.org.uk/binaries/telecoms/numbering/numplan201210.pdf>.

² This includes the 0800 (plus 6 digit) range which is currently closed to new allocations. This range is listed in Part C of the Numbering Plan and is designated as “Special Services – No charge to caller (except where charges shall be notified to callers at the start of the call)”. We consider this to be effectively the same as the definition of Freephone set out above.

³ The 0500 consultation, published on 23 October 2012, is available at

<http://stakeholders.ofcom.org.uk/consultations/0500-number-range/>. Some stakeholders, however, commented on options for the 0500 range in response to the April 2012 consultation. We have responded to these comments in Annex 29.

⁴ April 2012 consultation, Part C, pp.2-4, paragraphs 14.7-14.18.

subject to them giving callers a recorded warning message (known as a pre-call announcement or 'PCA'). This requirement for a PCA for 080 calls was introduced into the Numbering Scheme in February 2001 and, in 2003, Oftel published the first Numbering Plan, which introduced the definition of Freephone (as set out above) for the 080 range. Following a major policy review in 2006, Ofcom left the 080 Freephone range unchanged after finding that it was a well-recognised and trusted number range, and the "strong existing brand" of Freephone services on the 080 range should be protected.⁵

- 11.7 We also highlighted in the April 2012 consultation that Ofcom (and Oftel before it) had always had a policy preference that these numbers should be free, or as close to free as possible.⁶ This was articulated in Oftel's 1996 determination and reiterated several times afterwards. The legitimacy of this policy preference has also been recognised by the CAT.⁷ We also noted that the need for a 'Freephone' range was reinforced by references to such a service in the Universal Service Directive.⁸

Usage

- 11.8 080 numbers are used for a variety of services, and are provided by both private and public organisations. Typical services can include non-profit and charity helplines, some government and social services, customer sales enquiry lines and customer support lines for commercial services.⁹
- 11.9 The 080 range is the largest non-geographic range by active numbers, as well as the most popular range in terms of volumes of calls.¹⁰ Calls to 080 are overwhelmingly originated from a fixed line; mobile OCPs only accounted for 5% of total originated 080 traffic in 2009.¹¹

Wholesale arrangements

- 11.10 We noted in the April 2012 consultation that, unlike with other non-geographic ranges, SPs pay for Freephone (and free-to-caller) services, ultimately funding the origination payment which OCPs receive from TCPs.¹² According to the 2010 Flow of Funds study, SPs paid an estimated total of £120m in 2009 to receive 080 calls, of which £61m was paid to OCPs (with the remainder going to the TCPs hosting the SPs).¹³
- 11.11 We also noted that the wholesale level has been in a state of uncertainty because the historic approach to determining termination rates had begun to break down, with BT

⁵ *Telephone Numbering: Safeguarding the future of numbers*, July 2006 <http://www.ofcom.org.uk/consult/condocs/numberingreview/statement/statement.pdf>, paragraphs 1.34 and 1.6.

⁶ April 2012 consultation, Part C, pp.4-5, paragraphs 14.19-14.20.

⁷ 08x CAT Judgment, p. 22, paragraphs 63 and 64.

⁸ Recital 36, Universal Service Directive. See also recital 46 of the amending Directive 2009/136/EC.

⁹ We noted in the April 2012 consultation that some of the most popular services on the range were Government helplines, calling cards, conferences call services, reverse charge services, utilities and breakdown services. See Part C, p.6, paragraph 14.30 of the April 2012 consultation.

¹⁰ According to the 2010 Flow of Funds study, 080 calls generated 11.2 billion minutes (36% of all NGC call minutes) in 2009. 2010 Flow of Funds study, Figure 5.7, p.30. We discuss more recent trends in all NGC call volumes since the 2010 Flow of Funds study in Part A, Section 3.

¹¹ This represents 529 million minutes (out of the total 11.2bn). 2010 Flow of Funds study, p.36 and Figure 5.15, p.37.

¹² This origination payment can be thought of as a negative termination rate.

¹³ 2010 Flow of Funds study, Figure 5.23, p.45.

and other TCPs seeking to vary the termination rates that they charge for 080 numbers to link them to the retail price charged by the OCP (referred to as ‘ladder pricing’ or ‘tiered termination rates’). This has led to a number of disputes. In Ofcom’s dispute determinations of 5 February 2010 and 10 August 2010, we found that BT’s laddered termination rates for calls to 080 (and 0845/0870) were not fair and reasonable because there was a significant risk that they would have adverse effects for consumers.¹⁴ Those determinations were initially overturned by the CAT,¹⁵ but subsequently reinstated by the Court of Appeal.¹⁶ BT has recently been granted permission to appeal the Court of Appeal’s judgment to the Supreme Court. Since the 080 Dispute Determination, further disputes have been referred to us in relation to the operation of the wholesale level for calls to 080 (and other non-geographic) numbers. These disputes are summarised in Section 14. We therefore remain of the view that the wholesale level is in a state of flux. We explain this in more detail in Section 3, as part of the description of our analytical framework.

Retail prices

11.12 As explained in the April 2012 consultation, calls to 080 numbers fall into two categories:

11.12.1 those where no PCA is made and the caller is not charged regardless of what type of phone the call is made from (i.e. both fixed line and mobile phones), which are a small sub-set of the total set of 080 numbers; or

11.12.2 those that are free from some phones (usually fixed line) but are chargeable from others (usually mobile) and a PCA is provided to notify callers at the start of a call that a charge will be made. The PCA offered by mobile companies does not, however, normally give a statement of the specific charge that will be levied.

11.13 Fixed line providers do not therefore normally charge for calls to the 080 range. However, most mobile providers charge for calls to 080 numbers.¹⁷ Data from the 2010 Flow of Funds study suggests that callers paid a total of £86 million to make 080 calls in 2009 (including VAT) and the average retail price for a chargeable call was 14.1ppm (excluding VAT).¹⁸

11.14 Section 2 in Part A of this document sets out some examples of current retail prices for 080 calls. However, we noted in the April 2012 consultation that mobile OCPs’ retail prices had varied as a result of the 08x CAT Judgment, because the directions given by the CAT created a specific incentive for the mobile OCPs to reduce their

¹⁴ The 080 Dispute Determination -

http://stakeholders.ofcom.org.uk/binaries/consultations/draft_deter_bt_tmobile_vodafone/nonconf.pdf and the 0845/0870 Dispute Determination -

http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/closed-cases/all-closed-cases/761146/Final_Determination.pdf

¹⁵ The CAT 08x Judgment: *British Telecommunications Plc and Everything Everywhere Limited v Ofcom* [2011] CAT 24. http://www.catribunal.org.uk/files/1151_1168-1169_Judgment_010811.pdf

¹⁶ The Court of Appeal 08x Judgment: *Telefonica O2 UK Ltd and others v BT* [2012] EWCA Civ 1002. http://www.catribunal.org.uk/files/1151_1168-69_Judgment_of_the_Court_of_Appeal_250712.pdf

¹⁷ There are some exceptions, for example the MVNO Giff Gaff does not charge for any 080 calls.

¹⁸ Data from the Flow of Funds study indicates that mobile OCPs earned £75m (excluding VAT at 15%) from 080 calls in 2009. This is slightly different from the £77m figure given in 2010 Flow of Funds study, Figure 5.23 on page 45. This is because the underlying data (erroneously in our view) implies one fixed OCP charged for 080 calls.

prices.¹⁹ We said that, as a result of that, the retail prices charged by mobile OCPs for calls to 080 numbers at the time were not a good guide to what future prices might be without further regulatory intervention. We continue to consider that this is the case, given that the potential outcome of a further appeal (the 08X CAT Judgment is still subject to appeal – see paragraph 11.11 above) and the impact of subsequent disputes. See Part A, Section 3 where we explain our reasoning for this in more detail. Therefore given that retail 080 prices are still in a state of flux we consider it is appropriate to rely on previous price information (from the 2010 Flow of Funds study), combined with updated volume data, for much of our assessment of the 080 range. Nevertheless, we also consider that (in line with our view in the April 2012 consultation) our analysis is not especially sensitive to whether we use the current retail prices or previous retail prices (where we do consider there is a sensitivity we have highlighted it as part of our assessment).²⁰

11.15 There are only a few services where some mobile OCPs do not levy a charge for calls to 080 (where the SPs have negotiated, directly or indirectly, to have those charges zero-rated).²¹ For example:

- the Department for Work and Pensions ('DWP'). The DWP has negotiated with some mobile OCPs directly in order to ensure that calls to its 080 helplines are zero rated;²² and
- charities and not-for-profit organisations that are members of The Helplines Association's ('THA') special Freephone tariff scheme. THA has negotiated with most mobile OCPs to set up this scheme and it operates as a central body for charities and non-for-profit services to obtain an 0808 number that is not charged from a mobile (see Annex 20 of the April 2012 consultation for further discussion of this scheme and other examples of 080 numbers which some mobile OCPs have agreed to zero-rate).

116 numbers

11.16 These numbers are designated for services of social value in accordance with the European Commission's decision in 2007 to reserve the 116 range for this use (the '116 EC Decision').²³ The EC's aim was to introduce "same number – same service"

¹⁹ See paragraphs 14.42 to 14.45 of Part C of the April 2012 consultation.

²⁰ In the April 2012 consultation, the main area where we noted there was a sensitivity to the level of retail 080 prices was in relation to the assessment of the MMP option in terms of improving access to socially important services (because the MMP we were proposing was only slightly lower than the 7p charge being levied by some mobile OCPs for 080 calls at the time, therefore there was unlikely to be any significant reduction in mobile prices for 080 calls under MMP and therefore the incremental benefits of that option were lower when assessing it using current retail prices. See paragraph 16.244 footnote 200 in Part C of the April 2012 consultation.

²¹ Whilst the major mobile OCPs are involved with these schemes for zero-rating 080 calls, there are some smaller mobile OCPs which continue to charge for all 080 calls. For example, Lycamobile and Lebara charge for all 080 calls. Responses to our section 135 information request dated 21 October 2011 from Lebara (11 November 2011) and Lycamobile (15 November 2011).

²² <http://www.dwp.gov.uk/previous-administration-news/press-releases/2010/january-2010/dwp007-150110.shtml>

²³ Decision 2007/116/EC on reserving the national numbering range beginning with '116' for harmonised numbers for harmonised services of social value: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:049:0030:0033:EN:PDF>. The EC has subsequently amended this decision to introduce additional reserved numbers starting 116 (Decisions 2007/698/EC and 2009/884/EC).

for certain “services of social value” across Europe.²⁴ The EC requires 116 numbers to be Freephone.²⁵ The EC’s working documents show that 116 numbers were originally intended to be free-to-caller,²⁶ but the requirements of the final Decision were changed to ‘Freephone’ in recognition of the different arrangements that apply in different countries, such as the UK. However, the EC nevertheless stated that these numbers should ‘ideally’ be free-to-caller.²⁷

11.17 These numbers were introduced in UK numbering through Ofcom’s February 2009 statement on the charging and allocation arrangements for 116 numbers (the ‘2009 116 Statement’).²⁸ In that statement we decided that 116 numbers in the UK should be either “Freephone” or “free to caller”. Our assessment of which charging designation should apply takes into account a number of different factors, such as the level of social value or need met by the service for example. The charging arrangements for each 116 number form part of their service designation and therefore they can not be changed by the SP operating on that number.

11.18 At present, four of the five numbers that have to date been reserved by the EC in the 116 range have been designated as free-to-caller in the UK. These are:

- 116 000: Hotline for missing children (allocated to Missing People);
- 116 111: Child helpline (allocated to Childline);
- 116 123: Emotional support helpline (allocated to The Samaritans); and
- 116 117: Non-emergency medical on-call service (this number has not yet been allocated to a SP and is therefore not yet operational in the UK).

11.19 However, we have designated one 116 number as Freephone – 116 006 for a ‘Helplines for victims of crime’ service.²⁹ This number has not yet been allocated to a SP, and is therefore not yet operational in the UK.

11.20 Currently, awareness of the 116 range is very low and call volumes are extremely small. A 2011 EC research report found that awareness of the range in the UK was only 5% (compared to 13% across the EU).³⁰

11.21 Like 080 numbers, SPs pay to receive calls to their 116 numbers. OCPs are not obliged to carry calls at their own expense and they receive an origination payment

²⁴ The background to the 116 number range was set out in more detail in the April 2012 Consultation’s Annex 27.

²⁵ Article 2 and Recital 3, 116 EC Decision

²⁶ See EC Communications Committee, Draft Commission Decision on reserving the number range beginning with 116 for harmonised numbers for harmonised European services (COCOM 05-33), 30 September 2005: <https://circabc.europa.eu/sd/d/3e929f19-a94a-40de-b3a7-09bacfd5ccae/COCOM05-33%20116.pdf>

²⁷ See EC Communications Committee, Commission Decision on reserving the number range beginning with “116” for harmonised numbers for harmonised services of social value to European citizens (COCOM 06-30), 22 January 2007, Annex 1, page 2: <https://circabc.europa.eu/sd/d/2480503b-a12d-4e74-bc50-a32c980af3d8/COCOM06-30%20ANNEX%201%20116%20concept.pdf>

²⁸ *Harmonised European Numbers For Services Of Social Value: Allocation and charging arrangements for 116 numbers in the UK*, February 2009

<http://stakeholders.ofcom.org.uk/binaries/consultations/116/statement/116statement.pdf>

²⁹ <http://stakeholders.ofcom.org.uk/telecoms/numbering/guidance-tele-no/116-euro-numbers>

³⁰ Special Eurobarometer 367, *Harmonised numbers for services of social value*, October 2011, http://ec.europa.eu/public_opinion/archives/ebs/ebs_367_en.pdf, p.32.

which we understand to be at a similar level to the fixed origination payment for 080 numbers.³¹ We discuss the level of origination payments for calls to 116 numbers in more detail in Section 12.

April 2012 consultation

11.22 In the April 2012 consultation, we consulted on and assessed two options for the 080 and 116 ranges:

11.22.1 Free-to-caller: set a maximum price of zero that applies for both fixed and mobile calls; or

11.22.2 Maximum Mobile Price ('MMP'): set a maximum price of zero for all fixed calls, and a maximum price above zero for mobile calls.

11.23 We provisionally concluded that we should make the 080 and 116 ranges free-to-caller. We also provisionally concluded that we should intervene at the wholesale level in order to support a free-to-caller approach.

Structure of Part C

11.24 The next four sections focus on the decisions we are minded to take in relation to the 080 and 116 ranges and are structured as follows:

- Section 12 presents our assumptions about the likely ranges of origination charges that would apply if the 080 and 116 ranges were made free-to-caller. We use these assumptions in order to assess the impact of a free-to-caller option;
- Section 13 summarises our updated impact assessment of the free-to-caller and Maximum Mobile Price ('MMP') options, and sets out our provisional decision to make the 080 and 116 ranges free-to-caller;
- Section 14 discusses the wholesale regulation we are minded to impose on TCPs in order to support a free-to-caller approach for calls to 080 and 116 numbers;
- Section 15 sets out our view on issues relevant to the implementation of making the 080 and 116 ranges free-to-caller.

11.25 These sections therefore summarise the decisions we are minded to take (subject to the issues on which we are consulting), but reference should also be made to Annexes 26 to 31. These Annexes set out in more detail how we assessed the issues relevant to the 080 and 116 ranges in the April 2012 consultation, stakeholder comments in relation to our assessment and our response to those comments. The Annexes cover the following issues in greater detail:

- the costs of originating calls - Annex 26;
- assessment of origination payments for a free-to-caller range – Annex 27;
- the Tariff Package Effect ('TPE') – Annex 28;

³¹ For example in its Carrier Price List ('CPL') BT sets out origination payments of 0.6ppm (daytime), 0.3 (evening) and 0.2 (weekend). See section B3.54, https://www.btwholesale.com/pages/static/Library/Pricing_and_Contractual_Information/carrier_price_list/cpl_sectionb3ancillaryservice.htm

- analysis of options for the 080 and 116 ranges – Annex 29;
- wholesale regulation – Annex 30; and
- implementation of making the 080 and 116 ranges free-to-caller – Annex 31.

11.26 In Part A of this document, we also set out in more detail the comments received from stakeholders, and our response, in relation to the costs and (quantitative assessment of) the benefits of implementing the free-to-caller and MMP options. This forms part of our overall impact assessment for the 080 and 116 ranges. This is in Annex 10 and Annex 11.

11.27 We are also today publishing draft guidance as to how we would approach any future dispute as to whether origination charges for calls to 080 and 116 numbers are fair and reasonable. This is explained in more detail in Section 14.

Part C - Section 12

Framework for assessing 080 and 116 free-to-caller origination charges

Introduction

- 12.1 This section discusses the level of origination charges that we assume when assessing the impact of making the 080 and 116 number ranges free-to-caller. Our analysis focuses on the impact of different origination charges and does not consider the other effects derived from making these numbers free to caller, which are covered in Section 13.
- 12.2 We note that we are not proposing to directly regulate the level of origination charges, although we are proposing to implement an access condition which would require these charges to be fair and reasonable (see Section 14 for more details). Instead, the objective of this Section is to arrive at an appropriate assumption as to the likely level of origination payments in order to assess the impact of making the 080 and 116 ranges free to caller.
- 12.3 Following the publication of our final decision, we expect that TCPs and OCPs will start commercial negotiations to agree on the level of payments for originating calls to an 080 free to caller range.³² We are today consulting on guidance as to how we would approach any future dispute about fair and reasonable origination payments, and we would expect TCPs and OCPs to draw on the final form of this guidance in their negotiations. As further discussed in Annex 30, we believe this guidance will allow some degree of flexibility for stakeholders, while at the same time addressing stakeholders' concerns by restricting the scope for unreasonable terms to be imposed on any party.
- 12.4 Our framework for assessing origination charges for the purposes of our impact assessment and our dispute resolution guidance are both based on the same three principles, which we describe below. We consulted on the application of these principles to derive a range of origination charges for our impact assessment in the April 2012 consultation. In response to stakeholder comments, to which we have responded in more detail in Annex 27, we have updated our analysis and present the results below.
- 12.5 Since the April 2012 consultation, we have considered it appropriate to differentiate between two distinct ranges of origination payments:
- **Base case scenario range:** a range of origination charges that we have derived by applying the framework described in Principle 1 and Principle 2 below to the evidence currently available to us. This is also reflected in the consultation on our dispute resolution guidance.
 - **Impact Assessment Range (the 'IAR')**: a wider range (encompassing the Base case scenario range) that we use for reasons of robustness when assessing the cost and benefits of making 080/116 free to caller.

³² Given that all 116 numbers in use are already free-to-caller, we would not necessarily expect that the adoption of a final decision to make the 116 range free-to-caller would lead to changes in origination payments, as further discussed below.

- 12.6 The Base case scenario range reflects our assessment of what a fair and reasonable charge is likely to be, using the evidence currently available to us. It is therefore also reflected in the consultation on our dispute resolution guidance.³³ We consider it likely that market participants will draw on our guidance, and the Base case scenario range of origination charges, when conducting their negotiations. As a result, we consider it likely that origination payments will ultimately fall within our Base case scenario range and place most weight on origination payments within this range when conducting our impact assessment. We have however considered it appropriate to also use a wider range for the purposes of our impact assessment (the IAR) in recognition of the fact that some of our underlying assumptions are necessarily uncertain, as they relate to future events, and therefore a wider range assists the robustness of our decision-making. We place less weight on origination payments that are outside of our Base case scenario range but within our wider IAR as we consider they are less likely, but nonetheless take them into account in our impact assessment.
- 12.7 This section is structured as follows. We first describe the principles underpinning the framework that we use to reach an assumption about the level of fixed and mobile origination charges for free to caller 080 and 116 ranges. Using the evidence currently available to us, we then derive two ranges for these origination payments by applying this framework: the Base case scenario range and the Impact Assessment Range, described above.³⁴ We use both ranges to estimate the impact of our proposals on SPs and CPs in Annex 28, as well as to assess the policy options for intervention in relation to the 080 and 116 ranges in Section 13. We similarly use both ranges to estimate the costs of making the 080 range free-to-caller in Annex 10.

Analytical context

- 12.8 Apart from calls originated by BT, we currently do not directly regulate the origination payment (or termination rate) for calls to 080 and 116 numbers. Rather the level of origination payments/termination rates has been established by commercial negotiation.
- 12.9 TCPs pay on average 0.5ppm to OCPs for originating calls to 080 and 116 numbers, with no distinction between fixed and mobile OCPs.³⁵ In the case of fixed OCPs, this payment broadly covers the network and retail costs of originating a call to 080 and 116 numbers.³⁶ In the case of mobile OCPs, the payment is insufficient to cover the

³³ Although we note in the draft guidance that we cannot fetter our discretion and, in dealing with any future dispute, we would take into account the facts of the case and the evidence adduced by the parties.

³⁴ We use the term “Impact Assessment Range” rather than “assumption” for a number of reasons. First, it emphasises that the purpose of identifying this range is to inform our assessment of the various options for intervention in relation to the 080 and 116 ranges. Second, the use of distinct terminology highlights the particularly detailed analysis of origination payments which underlies the range we have selected (and on which we invited stakeholder comments in the April 2012 consultation).

³⁵ As discussed in the April 2012 consultation (see, for example, paragraph 14.46), we consider that origination charges are in a state of flux as a result of the 08x CAT Judgment on tiered termination charges and the subsequent appeal of that decision. For this reason, current average charges may differ from this level, but we consider it more appropriate to rely on the prices which prevailed prior to the introduction of tiered termination charges for much of our assessment. See Section 3, at paragraphs 3.44 to 3.45 for further explanation.

³⁶ In fact, 0.5ppm is the average price charged by BT for originating calls to 080 numbers, as determined by the NTS Retail Uplift charge control. This has been the average price charged by other fixed CPs for these calls.

costs of originating the call from a mobile network, and mobile OCPs have generally charged callers for making these calls.

- 12.10 A decision to make the 080 and 116 ranges free to caller, would mean that OCPs (particularly mobile OCPs) will no longer be able to charge consumers for these calls, and instead, will only receive a payment from TCPs for originating consumer calls to these numbers. This invites the question of what the level of origination payments will be for these calls. Crucially, the impact on consumers of making a number range free to caller depends in part on the level of origination payments.³⁷
- 12.11 The objective of this section is therefore to make an assumption as to the likely range of origination payments for the purposes of assessing the impact of making the 080 and 116 ranges free to caller.

Fixed origination payments

- 12.12 Our analysis in the April 2012 consultation was primarily focused on assessing the IAR for mobile origination payments, while we assumed that fixed origination payments would remain the same as at present (i.e. approximately 0.5ppm). We explained that this was appropriate because the origination charge received by BT was regulated under the NTS Call Origination Condition and this had effectively constrained the level of origination payments received by other fixed CPs.³⁸
- 12.13 On 5 February 2013, we published our Narrowband Market Review ('NMR') consultation, which proposes to remove the NTS Call Origination Condition from the date on which we implement the new regime for NGCs (which is likely to be around late-2014).³⁹ In addition, we are also consulting in the NMR on a new charge control model for BT's call origination and this may significantly affect the way we estimate (and the level of) BT's origination costs. As a result, we no longer believe that the assumption we made in the April 2012 consultation (that fixed origination charges would remain constant at 0.5ppm) is appropriate. Instead, we apply the same principles to derive an assumption about fixed origination payments as we do for mobile origination payments. The analysis of fixed and mobile origination charges below is consistent with and reflects our latest thinking as presented in the NMR.
- 12.14 We have used relatively wide origination payment ranges partly to reflect the uncertainty surrounding our final decision in the NMR. In particular, the NMR is currently consulting on a range of values for the LRIC+ of BT's wholesale call origination and pure LRIC of BT's call termination that we rely on to derive our assumptions for the fixed and mobile origination payments. Our IAR encapsulates the full range of these values and we therefore consider it to be robust to the likely outcome of the NMR consultation.⁴⁰

³⁷ To take an extreme example (for illustrative purposes), if the origination payment were extremely high then a large number of SPs would be likely to migrate away from the free to caller number range. This, in turn, is likely to have a negative impact on consumers.

³⁸ See paragraphs A23.11 to A23.14 of the April 2012 consultation.

³⁹ <http://stakeholders.ofcom.org.uk/consultations/nmr-13/>

⁴⁰ In particular, we rely on the NMR's network charge control ('NCC') model for wholesale call origination to derive our assumption regarding the fixed origination payment range. For this, we use the Low and High scenarios for the LRIC+ of wholesale call origination in 2014/15 in Figure 9.6 of the NMR consultation document. Similarly, we use the NCC's model estimate of the pure LRIC of termination to derive the value of the pure LRIC network costs of call origination, which we then use to derive the value of the LRIC differential (as explained in Annex 26). For this we use the Low and High scenarios in 2014/15 described in Figure 9.6 in the NMR consultation document.

12.15 In light of the change to our approach in deriving the appropriate fixed origination payment for the purposes of assessing the Impact Assessment Range for origination charges, we consider that we should provide stakeholders the opportunity to comment:

Q12.1: Do you agree that we should rely on our estimates of the cost of BT's call origination in the Narrowband Market Review to derive the fixed origination payments for the Impact Assessment Range for origination charges? If not, please explain why.

Framework for assessing the Impact Assessment Range for origination charges

12.16 In the April 2012 consultation we explained that, in determining the IAR for mobile origination payments, we had adopted the three cumulative principles that we had previously used in the 080 Dispute Determination.⁴¹ We noted that these three principles had been supported by the CAT.⁴² For the reasons discussed above, we now consider that our analytical framework should apply to both fixed and mobile origination payments. We have therefore modified the wording of the three principles slightly (removing any reference to mobile payments) to reflect this, as follows:

- **Principle 1:** OCPs should not be denied the opportunity to recover their efficient costs of originating calls to a free to caller number range.
- **Principle 2:** the origination payment should, taking into consideration our statutory duties:
 - provide benefits to consumers, taking into account indirect and tariff package effects,⁴³ and
 - avoid a material distortion of competition either among OCPs or among TCPs.
- **Principle 3:** the origination payment should be practical to implement.⁴⁴

12.17 These are the Principles that we used to derive the IAR that we consulted on in our April 2012 consultation. We note that our guidance on how we would approach a dispute about fair and reasonable origination payments, which we are consulting on today, is similarly based on these Principles. As noted above, we expect OCPs and

⁴¹ 080 Dispute Determination, paragraphs 1.17-1.21.

⁴² 08x CAT Judgment, paragraph 439.

⁴³ Indirect effects refer to the factors that influence the attractiveness to an SP of offering a service via a number on the free to caller range. Changes in the number, quality and variety of services provided by SPs on the free to caller range affect the welfare of consumers. As explained in paragraph 2.33 of the 0845/0870 Dispute Determination, there are two types of consumer in the NTS value chain: the caller and the call recipient (the SP). We made a similar point at paragraph 2.28 of the 080 Dispute Determination.

⁴⁴ We note that we have slightly modified the wording of these Principles in the latest 08x disputes to reflect the particular characteristics of those disputes (Cases CW/1055/08/10 and CW/1088/03/12)). We do not consider it necessary to use the same modified wording for the purposes of this impact assessment, as some of the issues driving our assessment of a free-to-caller approach are distinct from those applying to those 08x disputes. We also note that we consulted on the application of these Principles in their original form in our April 2012 consultation and consider that it is preferable not to depart from aspects of our framework on which we have already invited stakeholder comment, unless there is good reason to do so. Instead, we describe how we intend to apply these Principles when assessing the impact of making the 080 and 116 ranges free to caller when discussing each Principle in turn below.

TCPs to draw on this guidance in their negotiations over the level of origination payments.

12.18 In light of the specific characteristics of this impact assessment, and following several comments from stakeholders in response to our April 2012 consultation (that we discuss in more detail below), we have considered it appropriate that our analytical framework for deriving the Base case range and IAR follows these three principles by answering the following questions:

- **Range of efficient costs relevant to recovery through origination charges:** what type of costs should and should not be recovered through origination charges? (**Principle 1**);
- **The appropriate level within the range of costs determined under Principle 1:** within the range of costs determined under Principle 1, what is the level of fixed origination charge and mobile origination charge that maximises benefits to consumers and avoids material distortions to competition (**Principle 2**);
- **Practical to implement:** are the origination payments implied by our IAR practicable to implement? (**Principle 3**)

12.19 In order to help the explanation of our approach in answering each of these questions, we first set out the relationship between our analytical framework and Ofcom's six principles of pricing and cost recovery below. We then explain in more detail our approach in each of the three Principles and, finally, we apply our framework to the evidence currently available to us.

Relationship between our analytical framework and the six principles of pricing and cost recovery

12.20 We have used the six principles of pricing and cost recovery in previous decisions,⁴⁵ these are:

- cost causation: costs should be recovered from those whose actions cause the costs to be incurred;
- cost minimisation: the mechanism for cost recovery should ensure that there are strong incentives to minimise costs;
- effective competition: the mechanism for cost recovery should not undermine or weaken the pressures for effective competition;
- reciprocity: where services are provided reciprocally, charges should also be reciprocal;
- distribution of benefits: costs should be recovered from the beneficiaries especially where there are externalities; and
- practicability: the mechanism for cost recovery needs to be practicable and relatively easy to implement.

⁴⁵ See, for example, the 080 Dispute Determination, at paragraphs 4.55 – 4.59

- 12.21 The six principles of pricing and cost recovery cover the same substantive issues as the analytical framework of Principles 1 to 3 set out above, as follows:
- Principle 1 relates to the principles of *cost causation* and *distribution of benefits*, focusing primarily on the benefits derived by SPs from different types of origination costs, and *cost minimisation*;
 - Principle 2 relates to the principles of *effective competition* and *distribution of benefits* more widely between callers and SPs; and
 - Principle 3 relates to the principle of *practicability*.
- 12.22 The one principle that is not listed above is *reciprocity*. We consider that reciprocity is not relevant in this context as origination is not necessarily a reciprocal service.
- 12.23 We note that our interpretation of the relationship between our analytical framework and the six principles of pricing and cost recovery described above is specific to our assessment of the IAR for origination payments for calls to 080/116 numbers, and may differ from our approach in previous decisions.⁴⁶

Principle 1: recovery of efficient costs of origination

The range of efficient costs relevant to recovery through origination charges

- 12.24 In the April 2012 consultation our assessment of Principle 1 concluded that origination payments should allow OCPs to recover their incremental costs of originating 080 and 116 calls. We considered that there were several different cost metrics that allowed for this. We said that, in order to evaluate these metrics, we needed to consider what contribution SPs should make to OCPs' fixed and common costs. However, we looked at this under our evaluation of Principle 2.⁴⁷
- 12.25 We received several responses to our April 2012 consultation which suggested that some stakeholders had misunderstood how we had derived the IAR. Magrathea argued that in deriving the IAR we should not take into account the tariff package effect and, instead, our range should be based only on cost-based origination payments. Verizon considered that origination payments that were materially above cost-based charges would act against consumers' interests. It considered that the IAR should not be based on SPs' willingness to pay and should be determined by fair and reasonable origination payments. In addition, Vodafone argued that we had used the LRIC+ with no A&R measure as the floor of cost recovery. EE and Three considered that our IAR was broadly derived from the LRIC+ with no acquisition and retention (A&R) costs (the lower end) and LRIC+ with 50% A&R (upper end).
- 12.26 In light of these comments, to which we respond in more detail in Annex 27, to enhance the clarity of our framework we have modified our approach to Principle 1 to

⁴⁶ The relationship between our analytical framework and the six principles of pricing and cost recovery responds to our current specific aims and objectives. For example, as discussed above, one of the issues that we need to address in order to reach an assumption about an appropriate IAR for origination payments is whether SPs should contribute to acquisition and retention ('A&R') costs, whereas this consideration was not relevant in previous decisions relating to non-geographic numbers, such as the 080 Dispute Determination. For this reason, our interpretation of Principle 1 (and the relationship between this Principle and the six principles of pricing and cost recovery) in the present document may differ from that in previous decisions.

⁴⁷ See paragraphs A23.30 to A23.35 of the April 2012 consultation.

establish the range of efficient costs relevant for recovery through origination charges (i.e. the upper limit of a cost-based charge as well as the lower limit on which we focused the Principle 1 analysis in the April 2012 consultation). This characterisation allows us to separate the discussion about the types of efficient costs that should and should not be considered for recovery from origination charges (which was previously under Principle 2, and is now under Principle 1) from the discussion about the level of contribution to fixed and common costs (i.e. the level of origination charge) that maximizes benefits to consumers (in Principle 2).

- 12.27 Restricting the discussion of which types of costs should and should not be recovered from origination charges to Principle 1 allows us to set out more clearly the extent to which the origination payments that we consider under our Base case scenario range and wider IAR are cost-based (as argued by some stakeholders). It also helps in identifying more clearly the range of efficient costs that are relevant to recovery through origination charges for calls to 080/116 numbers.
- 12.28 We apply the principles of *cost causation*, *cost minimisation* and *distribution of benefits* to the evidence currently available to us, in particular, our cost modelling (described in more detail in Annex 26) to derive a range of efficient cost-based charges under Principle 1. We explain how we derive this range below.

The minimum level of efficient costs relevant to recovery through origination charges

- 12.29 We consider that the minimum level of costs that should be recovered through origination charges should be determined by the minimum level of cost recovery that ensures that OCPs have an incentive to supply origination. This is the **pure LRIC** of origination. This is because any origination charge above the marginal cost (approximated by the pure LRIC) will make a contribution to the recovery of fixed and common costs and therefore is likely to ensure that OCPs have an incentive to provide origination. In Annex 26 we explain which costs we consider are incremental to the provision of origination to a free to caller number range.

Acquisition and retention costs should not be recovered through origination charges

- 12.30 We consider that the upper bound of efficient costs relevant to recovery by OCPs through origination charges for calls to 080 numbers is the LRIC+ cost of origination, including a contribution to both network and non-network common costs.⁴⁸
- 12.31 In terms of network costs, we believe that SPs are likely to benefit from this expenditure, since it allows callers to contact them using mobile phones. We therefore consider that origination charges should include an appropriate contribution from SPs to the OCPs' fixed and common network costs.
- 12.32 In relation to non-network costs, we do not consider the LRIC+ measure of costs should include a contribution to all types of these costs. As discussed in the April 2012 consultation, we believe that a contribution to customer care costs would be consistent with the principle of *distribution of benefits* (i.e. that costs should be recovered from the beneficiaries), as these include expenditure on activities such as call centres from which SPs are likely to benefit.⁴⁹ However, we do not consider that

⁴⁸ As discussed above, this conclusion is relevant for the specific aims and objectives of our assessment of making the 080 number range free-to-caller.

⁴⁹ See paragraph A22.49 of the April 2012 consultation.

SPs should be required to contribute to the recovery of OCPs' A&R costs through higher origination charges, as SPs are unlikely to benefit from these costs.

12.33 As discussed in the April 2012 consultation, A&R costs relate to the following categories:

- **Marketing and advertising:** these costs include all the expenses associated with attracting customers through marketing and advertising. Examples of these costs are advertising campaigns and brand sponsorship.
- **Handset costs:** handset costs are incurred by mobile OCPs when they supply customers with a handset to make and receive calls. It is usual within the UK mobile sector that the initial cost of a handset for post pay customers is subsidised wholly or in part by the mobile OCP.
- **Discounts and incentives:** discounts and incentives are offered by mobile OCPs in order to attract or retain customers on or to their network. These generally take the form of reduced retail prices.
- **Sales:** a significant proportion of these costs relate to the large mobile OCPs' branch network of shops and particularly the personnel, distribution and depreciation costs associated with operating this network of shops. The other significant element within this category is contract commissions paid to third-party retailers for selling mobile OCPs' products. There are also a small amount of costs relating to telesales and Internet sales.⁵⁰

12.34 We similarly consider that recovery of A&R costs is unlikely to be consistent with the principles of *cost causation* and *cost minimisation*. In terms of *cost causation*, we consider that the activities described above are primarily targeted at callers (rather than SPs). Under these circumstances, we do not consider that SPs should make a contribution to these costs because they do not cause these activities to take place. In relation to *cost minimisation*, we consider that allowing OCPs to recover A&R costs from SPs is unlikely to provide them with the right incentives to minimise costs. This is because OCPs do not directly compete for SPs. Therefore, if SPs contribute to A&R costs, OCPs may have an incentive to increase their A&R expenditure to inefficient levels, as this would allow them to subsidise the services they offer to the customers they compete for (i.e. callers) through the origination payments they charge to SPs.

12.35 Stakeholders have expressed opposing views as to whether A&R costs should be recovered through origination payments, as further discussed in Annex 27. On the one hand, SPs and fixed CPs have expressed opposition to the recovery of these costs through origination payments, as SPs do not benefit from this expenditure. On the other hand, MNOs have disagreed with the view that SPs do not benefit from A&R costs. MNOs have argued that A&R expenditure (e.g. handset subsidies) help to ensure that mobile ownership is widespread, resulting in an expansion of the total number of subscribers in the market and hence in the number of calls that the SP might receive.

⁵⁰ We noted in the April 2012 consultation that this characterisation came from the CC's 2009 MCT Determination, paragraph 8.5, available at http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/appeals/communications_act/mobile_phones_determination.pdf

- 12.36 We consider that these arguments can be characterised as a network externality. A network externality arises in this context when some customers ('marginal customers') in the absence of A&R costs would choose not to get a mobile subscription because their private benefits would not cover the cost to them of becoming a subscriber, although total welfare would be enhanced if they did because of the benefits that their joining the network would give to others (for example, SPs in the form of additional mobile callers available to call them). We consider below whether the existence of this network externality provides an adequate justification for SPs contributing to the costs of acquiring these marginal customers, as SPs might benefit from their subscription.
- 12.37 As discussed in the April 2012 consultation, we consider that there are parallels between this discussion and the uplift that was previously applied to mobile termination rates ('MTRs') to reflect the positive externality created by growing the overall number of mobile subscribers (the 'network externality surcharge' or 'NES'). The objective of the NES was to increase termination revenues to support activities by mobile networks that increased the total number of mobile subscribers.⁵¹
- 12.38 The Competition Commission ('CC') recognized that the NES would have an impact on the incentives of MNOs to bring additional subscribers to mobile networks, however, it considered that the distortions associated with the NES were likely to outweigh its benefits due to the high proportion of 'leakage' and the inefficiencies associated with it. We consider that similar factors apply in relation to origination charges for a free to caller number. In particular:
- when revenues generated by higher origination payments charged to SPs are not used to subsidize marginal subscribers, a certain proportion is likely to be retained by the OCP as profit to the extent that the waterbed effect is not complete, and the remainder will be dissipated in competition for non-marginal subscribers;⁵² and
 - higher origination payments from SPs may produce unnecessary and inefficient upgrading and switching of handsets and of customers between one network and another.⁵³
- 12.39 We consider that even if origination charges for a free to caller number do not contribute to the recovery of A&R costs, OCPs will still have commercial incentives to target marginal customers because origination charges would include some contribution to administration costs and other fixed costs (which do not necessarily increase linearly with an increase in subscriber numbers). OCPs would therefore have an incentive to attract additional subscribers because this would increase revenues proportionally more than administration and/or fixed costs are increased, making a positive contribution to OCPs' profits. Similar arguments were used by the CC in the 2009 MCT Determination.⁵⁴
- 12.40 Furthermore, at current levels of mobile penetration, the majority of A&R costs relate to costs associated with subscribers switching between CPs, which are unlikely to benefit SPs, rather than expanding the total number of subscribers (as noted in the CC 's 2009 MCT Determination⁵⁵). Moreover, due to the existence of substitution

⁵¹ See paragraph A23.98 of the April 2012 consultation.

⁵² See paragraphs 4.119 and 4.122 of the CC's 2009 MCT Determination.

⁵³ See paragraph 4.121 and 4.122 of the CC's 2009 MCT Determination.

⁵⁴ See paragraph 4.58 and 4.74 of the CC's 2009 MCT Determination.

⁵⁵ See paragraph 8.69 of the CC's 2009 MCT Determination.

between fixed and mobile devices by callers, a simple confirmation that A&R costs lead to an increase in the number of mobile subscribers would not be sufficient for us to consider that these costs truly benefit SPs. Instead, we would want to be satisfied that such marginal customers would not have made the call to the SP from a fixed line if they did not have access to a mobile device.

- 12.41 In addition, a significant proportion of the handset subsidies provided by mobile OCPs currently relate to smartphones. We do not consider that SPs should be required to contribute to subsidizing these type of handsets at all because in many cases, due to the internet access these handsets offer, they may cannibalise demand for the services being provided by SPs on 080. That is, not only may SPs fail to benefit from such costs being incurred, they may be adversely affected by them.
- 12.42 In light of the above, we consider that **LRIC+ (with no allowance for A&R costs)** should be the upper bound of the range of efficient costs relevant for recovery from origination charges in Principle 1.

Principle 2: benefit consumers and avoid material distortions of competition

Overview of the analytical steps in Principle 2

12.43 As discussed above, our analysis under Principle 2 relates to the principles of *effective competition* and *distribution of benefits*. In this respect, in the April 2012 consultation we looked at how different levels of origination charges would impact consumers and competition, and we noted that trading off the impact on service availability against the impact on wider retail prices was at the heart of our assessment of Principle 2.⁵⁶ As discussed above, we received several responses to our April 2012 consultation which suggested that stakeholders had misinterpreted our framework for assessing an appropriate IAR for origination charges. In light of this, we have decided to separate our framework into three distinct steps for clarity, as follows:

- **Step 1: Trade off for consumers between the reduction in service availability/quality and tariff package effect.** We have discussed above that a charge between pure LRIC and LRIC+ (with no A&R costs) satisfies Principle 1. We need to determine how different levels of origination charges within this range are likely to affect consumers. Increasing the level of origination charges has two opposing effects on consumer welfare. This trade off arises because higher payments from SPs (who ultimately pay the origination charge through their host TCP) are likely: (i) to limit service availability/quality on free-to-caller ranges as a result of SPs exiting those number ranges (e.g. by migrating to other number ranges on which callers have to pay for calls); but (ii) to reduce the prices which OCPs charge consumers for other retail services through the tariff package effect ('TPE'). We need to determine the level of SPs' origination payments that would, in our view, best take account of this trade off.
- **Step 2: Assess the relative level of the fixed and mobile origination charges.** Once we have determined under Step 1 an appropriate level of SPs' origination payments, we need to look at the level of fixed and mobile origination charges that would be likely to result in an average SP payment of this amount given the relative volume of fixed and mobile calls. For this, we first need to take

⁵⁶ See paragraph A23.39 to A23.82 of the April 2012 consultation.

a view on how our proposals to make the 080 and 116 ranges free to caller will affect fixed to mobile substitution (as this will affect how different fixed and mobile origination charges translate into the average payments made by SPs). Second, we need to look at the implications that different price-cost differentials between fixed and mobile OCPs will have on competition and the price signals to SPs.

12.44 We explain in more detail each step in turn below.

Step 1: Trade off between the reduction in service availability/quality and the tariff package effect

12.45 We need to take into account how increases in the payments made by SPs are likely to affect consumers, starting from the lower bound of pure LRIC.⁵⁷ Higher origination charges are likely to have both positive and negative effects on consumers. We look into these in turn below.

Positive effects on consumers

12.46 In terms of the positive effects, we consider that these include:

- reduction in the prices for other services and/or access; and
- positive network externality effect.

12.47 We discuss each of these below.

Reduction in prices for other services and/or access

12.48 In relation to the first effect, higher origination payments are generally likely to increase OCPs' profits from calls to the free to caller number range.⁵⁸ Those higher profits are likely to support lower retail prices for other services and/or access via the tariff package effect. The more complete that the tariff package effect is then the greater proportion of any origination payments that are passed onto consumers.

12.49 We have updated our analysis of the tariff package effect in Annex 28. As discussed in the April 2012 consultation, our view is that the tariff package effect is significant but is unlikely to be complete (100%). In other words, if mobile OCPs receive an extra £1m (say) from higher origination payments then the retail price of other telecoms services is likely to fall by less than £1m.⁵⁹ In the April 2012 consultation we assessed whether higher origination payments, and the tariff package effect derived from it, could be targeted to particular types of consumers or services. However, we did not draw clear conclusions about which particular telecoms prices were likely to be affected by changes in origination payments or which customer groups were particularly likely to benefit from those price changes.⁶⁰

⁵⁷ We note that our analysis is independent of the choice of starting point. The same conclusion would be reached if we started from the upper bound of efficient cost-based charges determined under Principle 1 and assessed the effect on consumers of a reduction in charges.

⁵⁸ In principle, once a certain level of origination payments is reached (namely the level set by an OCP that was able to act as an unconstrained monopolist at the wholesale level) then further increases would actually reduce OCPs' profits. This is because the reduction in revenues due to migration of SPs away from the number range would outweigh the extra profits from calls to those SPs that remain on the number range.

⁵⁹ See paragraphs A23.71 to A23.72 of the April 2012 consultation.

⁶⁰ See paragraphs A23.73 to A23.79 of the April 2012 consultation.

Positive network externality effect

12.50 Higher origination charges can be directed to the provision of subsidies to marginal consumers (through the TPE), which may expand the number of subscribers and result in a positive network externality that increases total consumer welfare. This is the effect that we have discussed under Principle 1 when considering whether A&R costs should be recovered through origination payments. As discussed above, we do not consider that higher origination charges are an appropriate means of expanding the number of (marginal) subscribers. For this reason we do not consider this effect further.

Negative effects on consumers

12.51 In terms of the negative effects, we consider that these include:

- reduction in the availability and/or quality of services on the free to caller number range; and
- increase in the price paid by SPs.

12.52 We discuss each of these below.

Reduction in the availability and/or quality of services on the free to caller number range

12.53 Higher origination payments are likely to be ultimately passed on to SPs by TCPs through higher charges for hosting.⁶¹ Higher origination payments are likely to discourage SPs from delivering services via the free to caller number range and may prompt some SPs on the number range to migrate to other ranges or reduce the quality of the services provided over the free to caller range. A reduction in the number of SPs offering their services on the free to caller number range (or the quality of the services offered) is likely to reduce the attractiveness of the number range for consumers. As set out in the April 2012 consultation, we conducted a survey of SPs using the 080 number range ('the 2011 SP Survey') to assess, amongst other issues, the extent of migration away from 080 resulting from different levels of increases in hosting charges. We discuss this in more detail below when applying our framework using the evidence currently available to us.

12.54 In addition to the issues explained above, which we discussed in the April 2012 consultation, we have since then added two additional factors that we consider should be taken into account when assessing the appropriate IAR for fixed and mobile origination charges to a free to caller number. In particular, there are two additional factors that imply that higher origination payments may result in negative effects for consumers and, consequently, affect the appropriate trade-off for consumers, namely:

- **Asymmetric risk of the level of payments:** as noted above, we consider negotiations over origination payments are likely to be informed by our dispute resolution guidance and by the Base case scenario range, which we have derived from applying the three Principles to the evidence currently available to

⁶¹ We believe this is a reasonable assumption given that in the December 2010 consultation (paragraphs 5.12 to 5.17) we concluded that the hosting market currently appeared to be operating well and, therefore, we would expect that a high share of any increase in TCPs' costs would be passed on to SPs in the form of higher hosting charges.

us. As a result, the estimates set out in our IAR (in particular, the Base case scenario range) are likely to influence actual origination payments, giving rise to two potential risks, namely, the origination payments resulting from commercial negotiations could be (i) too low or (ii) too high. In the case of too low (high) origination payments, these are likely to result in lower (higher) levels of migration away from 080, and a lower (higher) tariff package effect on other telecommunications prices. We therefore need to consider whether consumers may be more adversely affected by one of these outcomes (compared to the other) in light of the current evidence on (i) the tariff package effect on other telecommunications prices and (ii) the extent of migration away from 080. For example, if we found that there is an asymmetric risk (e.g. that consumers may be worse off from too high fixed and mobile origination payments than too low) this could mean that we should take this into account when assessing the appropriate IAR. In the next section we explain in more detail how we have accounted for the potential for this asymmetric risk in light of the current evidence available to us.

- **Caller externality:** SPs base their decision to stay on (or move to) a free to caller number by weighing their private benefit against the costs of their decision. The SPs may not have an incentive to take into account, at least not to the full extent, the benefits to callers of being able to make free calls to 080/116 numbers (paid for by the SP). In other words, there may be a positive externality for callers resulting from the SP's decision to stay on (or move to) a free to caller number range. In the next section we explain in more detail how the potential existence of a positive caller externality may affect our assessment of the appropriate IAR for fixed and mobile origination payments.

12.55 Here we note that there are key differences between the caller externality and the network externality which mean we consider the former may be relevant to our assessment of the IAR but that the latter is not. In particular, we consider there is significant potential for leakage of any revenues intended to address the network externality given there are very few genuinely marginal mobile subscribers. In contrast, we consider that a significant proportion of SPs may withdraw their line as a result of higher origination charges, and therefore that there is less potential for inefficiency in setting a lower origination charge with the caller externality in mind. In addition, we consider there are clearer external benefits to callers from a marginal SP remaining on the 080 range than there are to SPs from an increase in the number of mobile subscribers (because of the potential for fixed-mobile substitution).

Increase in the price paid by SPs

12.56 As discussed above, we would expect the payments made by SPs to OCPs (through their TCPs) to increase as a result of higher origination charges. This would negatively affect SPs, who fall within the definition of consumers in the Act.⁶² We do not consider we should put much weight on this factor because the increase in the price paid by SPs would simply be a consequence of shifting the payment of origination costs from callers to SPs (rather than representing an increase in the net cost to consumers) and we tend to favour callers over SPs where their interests are in conflict. To the extent that SPs' reaction to higher origination charges adversely affects callers through reduced service availability or quality, we take this into account through the previous consideration.

⁶² See sections 405(1) and (5) of the Act.

Focus on the trade off between the reduction in service availability/quality and the tariff package effect

- 12.57 In the April 2012 consultation we noted that trading off the impact on service availability against the impact on wider retail prices was at the heart of our assessment of Principle 2.⁶³ Although we also investigated the impact of different origination payments on the price signals for SPs and competition, our decision on the IAR was primarily based on the trade off between lower prices for other telecoms services and/or access (first positive effect above) and reduced service availability on 080 and 116 (first negative effect described above).⁶⁴
- 12.58 We continue to believe that our assessment in Step 1 should be based on these two factors (plus the two further considerations - caller externality and asymmetric risk of the level of origination payments - which may affect the appropriate trade-off between them) because we do not consider that we should account for the potential positive network externality effect or the negative effect of increased prices paid by SPs from higher origination charges, for the reasons discussed above.
- 12.59 Therefore, our analysis in Step 1 determines the appropriate level of average SP origination payments by trading off the impact of higher origination charges on service availability/quality against the potential for lower prices for other telecoms services and/or access.

Step 2: Relative prices between fixed and mobile origination charges

- 12.60 In Step 1 we take a view on the average SP payment that strikes the right balance for consumers between service availability and the TPE. There are however many combinations of potential fixed and mobile origination charges (within the range of costs established under Principle 1) that would yield this average SP payment. We therefore need to take a view on the appropriate ranges of fixed and mobile origination payments having regard to:
- the impact of making the 080 and 116 ranges free to caller on fixed to mobile substitution, given that this will determine the average payments made by SPs for calls to their numbers; and
 - the implications that different price-cost differentials between fixed and mobile OCPs will have on competition and the price signals given to SPs.
- 12.61 We explain in more detail each of these issues in turn below.

Fixed to mobile substitution

- 12.62 Only 5% of all calls to 080 numbers were originated from mobile in 2009.⁶⁵ As we discussed in the April 2012 consultation, the relatively low share of calls originated from mobile (compared to other non-geographic numbers) was mainly due to the difference between the prices of calls to 080 from a fixed line (free) and from mobile (14ppm on average in 2009). This showed that consumers adapt their calling

⁶³ See paragraphs A23.47 to A23.82 of the April 2012 consultation.

⁶⁴ See, for example, the discussion in paragraphs A23.80 to A23.82 of the April 2012 consultation.

⁶⁵ See 2010 Flow of Funds study, p. 6.

patterns to non-geographic numbers from fixed and mobile lines based on their relative pricing.⁶⁶

12.63 A decision to make the 080 and 116 ranges free-to-caller is therefore likely to change the share of calls to these numbers that are originated from mobiles. This will in turn affect the relative impact of the level of fixed and mobile origination charges on SPs' average payments and, hence, on the risk that higher SPs' outpayments may lead to additional migration away from 080/116, as considered under Step 1.

12.64 For example, assume that under Step 1 we conclude that an average SP outpayment of 1ppm strikes the appropriate balance between service availability/quality and the TPE. If we assumed that the level of fixed origination payments remained unchanged at 0.5ppm, this would mean that an appropriate mobile origination charge would be:

- 1.50ppm if 50% of call minutes came from mobiles⁶⁷; but
- 2.17ppm if 30% of call minutes came from mobiles.⁶⁸

12.65 This means that, in order to derive an appropriate range for the fixed and mobile origination charges from the average SP outpayments obtained in Step 1, we need to form a view on what proportion of call minutes to a free to caller number range are likely to be accounted for by fixed and mobile CPs.

The impact of price differentials on competition and price signals

12.66 As we discussed in the April 2012 consultation, differences in fixed and mobile origination charges may have an impact on:

- the price signals given to SPs; and
- competition between fixed and mobile OCPs.⁶⁹

12.67 We look at each of these issues in turn below.

The price signals for SPs

12.68 In the current regime origination payments are broadly the same (i.e. 0.5ppm) independently of whether the call to a 080/116 number is originated from a mobile or a fixed OCP.⁷⁰ Against this backdrop, a decision to make the 080 and 116 ranges free to caller could potentially lead to a situation where the fixed and mobile origination payments differ. In the April 2012 consultation we considered it was appropriate to distinguish between the following two effects of a decision to zero-rate mobile calls:

- a diversion effect (i.e. calls which would otherwise be made from a landline are made from mobiles); and

⁶⁶ See 2010 Flow of Funds study, p. 6.

⁶⁷ It can be seen that if we assume fixed origination payments of 0.5ppm and the share of calls originated from mobile is 50%, then the value for the mobile origination payments that gives an average SP outpayment of 1ppm is 1.5ppm. In other words, $0.5\text{ppm} \times 50\% + 1.5\text{ppm} \times 50\% = 1\text{ppm}$.

⁶⁸ In other words, $0.5\text{ppm} \times (1-30\%) + 2.17\text{ppm} \times 30\% = 1\text{ppm}$.

⁶⁹ See our analysis in paragraphs A23.83 to A23.141 of the April 2012 consultation.

⁷⁰ As explained above, we refer to the rates prevailing before the introduction of tiered termination rates for our assessment.

- an expansion in total demand (i.e. the SP receives truly additional calls from mobiles as a result of calls being free).
- 12.69 An SP would be willing to accept calls from mobiles (rather than block them) if the benefits from the expansion in demand outweigh the additional costs (due to higher mobile origination payments) of calls that would otherwise have been made from a landline.
- 12.70 We argued that if the difference between origination payments for fixed and mobile calls is greater than the difference in the incremental costs of fixed and mobile origination, then the price signal for SPs would not be efficient because SPs would have an incentive to block too many mobile calls.⁷¹
- 12.71 We now recognise, as discussed in Section 14, that the access condition will effectively prevent TCPs from blocking calls from mobile, as they will be required to purchase call origination from mobile OCPs upon reasonable request. We consider however that, in order to mitigate their costs of more expensive mobile-originated calls, SPs may resort to alternative measures (e.g. shortening the duration of the call when originated from a mobile) or request their host TCPs to apply alternative measures (e.g. playing recorded announcements that re-direct callers to non free to caller numbers). Such cost mitigation measures by SPs may reduce the risk of SPs exiting the free-to-caller number ranges by enabling them to manage their costs, which benefits consumers, but they may also adversely affect the consumer experience of calling from a mobile phone.
- 12.72 In order to avoid these inefficient price signals to SPs, differences between fixed and mobile origination charges should reflect differences in their LRIC costs.⁷² Once the level of the fixed origination charge is determined, the mobile origination charge that reflects differences in the incremental costs between fixed and mobile is given by the LRIC differential. As explained in Annex 26, we can calculate the extent to which any given level of fixed origination charge contributes to a fixed OCP's fixed and common costs. This will be the amount by which the charge exceeds the pure LRIC of fixed call origination. By adding the same pence per minute amount to the pure LRIC of mobile call origination, we can derive a mobile origination charge which gives the mobile OCP the same pence per minute contribution to its fixed and common costs as the fixed OCP has received. We call this the LRIC differential charge. A mobile origination charge at the LRIC differential level reflects the difference between fixed and mobile incremental costs, and therefore creates incentives for SPs to only engage in cost mitigation measures regarding mobile calls when it is efficient to do so.

The impact on competition between fixed and mobile OCPs

- 12.73 In the April 2012 consultation we noted that fixed and mobile OCPs competed in relation to (i) the retail origination of 080 calls and (ii) wider bundles of telephony services.
- 12.74 In terms of competition in retail origination, we argued that there could not be price competition between fixed and mobile OCPs in the supply of origination to a free to caller number, as the price for callers was zero. We noted however that SPs could

⁷¹ See paragraphs A23.112 to A23.116 of the April 2012 consultation.

⁷² We recognise that efficient pricing may involve additional considerations, such as differences in the elasticity of demand and/or the range of services over which common costs are recovered, but focus here on the efficiency of price signals to SPs because of their direct impact on service availability.

influence which device callers used (e.g. if they blocked calls from mobile) and, therefore, we argued that mobile CPs could be disadvantaged by too high mobile origination payments. This suggested that mobile origination payments at the LRIC differential level would create incentives to block mobile calls only if it is efficient to do so. However, we said that there was only a small proportion of SPs (20%) that said they would block calls from mobile if the origination payment was higher than what they were willing to bear. We therefore concluded that the level of mobile origination had a limited impact on competition in the supply of origination to a free to caller 080 number.⁷³

- 12.75 As discussed above, we now recognize that the access condition on TCPs will effectively prevent them from blocking calls from mobile OCPs, as they will be required to purchase call origination from mobile OCPs upon reasonable request. However, in the next section we look at new evidence from TCPs and SPs on alternative measures (other than call blocking) that SPs and TCPs may be able to use to mitigate the higher costs of calls from mobile, and which may impact on competition between fixed and mobile CPs in retail origination.
- 12.76 In addition, we considered in the April 2012 consultation whether a distortion in competition could arise if mobile OCPs obtain a greater contribution from TCPs/SPs to the recovery of their common costs than fixed OCPs receive. This may enable them to undercut fixed OCPs when competing against them for subscribers or calls in wider telephony bundles (i.e. to numbers other than to 080). In this case, we argued that while fixed and mobile CPs provided services in separate markets this did not preclude some material degree of competitive interaction between the two.⁷⁴ We considered that a LRIC+ figure with full allowance for A&R costs was too high and did not represent an origination payment at which fixed and mobile OCPs are on an equal competitive footing. For example, it allowed mobile OCPs to subsidise handsets in a way that fixed OCPs did not engage in.⁷⁵ Instead, we argued that mobile origination payments at the LRIC differential would not distort competition between fixed and mobile OCPs as charges would reflect differences in fixed and mobile OCPs' incremental costs of call origination.⁷⁶ However, we considered that mobile origination payments above the LRIC differential level might avoid a *material* distortion in competition between fixed and mobile OCPs because revenues from origination payments were small (an origination payment above the LRIC differential could result in £11-£14m 'excess' revenues) when compared to overall mobile retail revenues (£15.1bn in 2010). We therefore concluded that an origination payment in the region of 2.5-3.0ppm was unlikely to materially distort competition.⁷⁷ We update our assessment of competition in wider telephony bundles using the latest available evidence below.

Principle 3: practicality

- 12.77 The analysis under Principle 3 relates to the principle of *practicability*, namely, that our approach needs to be practicable and relatively easy to implement. The assessment of Principle 3 in the April 2012 consultation was mainly driven by the comments we had received in response to the previous December 2010 consultation. In the April 2012 consultation, we noted that we had received representations on the following practical issues:

⁷³ See paragraphs A23.121 to A23.123 of the April 2012 consultation.

⁷⁴ See paragraph A23.128 of the April 2012 consultation.

⁷⁵ See paragraphs A23.129 to A23.132 of the April 2012 consultation.

⁷⁶ See paragraphs A23.133 to A23.135 of the April 2012 consultation.

⁷⁷ See paragraphs A23.136 to A23.141 of the April 2012 consultation.

- the existence of more than two origination payments; and
- distinction between fixed and mobile origination payments.

12.78 In relation to the first issue, we discuss the possibility of there being more than two origination payments (i.e. one for each of fixed and mobile CPs) in Annex 30, and in Annex 10 when assessing the costs of a free to caller approach. We no longer assume in our impact assessment that there will necessarily be a single origination charge for each of fixed and mobile calls. Whilst this is potentially relevant to certain aspects of our impact assessment (e.g. costs of implementation), we no longer consider it necessary to assess the existence of more than two origination payments under Principle 3 for the purposes of deriving our IARs. This is because the purpose of the IAR is to reach an assumption about the likely level of origination payments in order to assess the impact of a free-to-caller approach. We consider that the issue of practicality is relevant to deriving our IARs only insofar as it affects the upper and lower bounds of our IARs. The ranges specified by our IARs are consistent with either a single origination payment for each of fixed and mobile CPs or with multiple origination charges, as long as the charges in each case are within the bounds of the relevant IAR. In particular, we note that we have adopted a range to reflect uncertainty over our assumptions rather than to allow for multiple charges. As a result, we do not consider that we need to reach a view on whether multiple origination charges are practical for the purposes of deriving our IAR.

12.79 In terms of the distinction between fixed and mobile origination payments, stakeholders have suggested that it may be difficult for TCPs to identify the type of OCP – fixed or mobile - that has originated a particular call (for the purposes of deciding which origination payment is appropriate, mobile or fixed), particularly when the call has been routed through a transit provider. We therefore need to assess whether CPs are likely to be capable of distinguishing the identity of the originator of the call for the purpose of deciding which origination payment is applicable. In contrast to the issue of multiple origination charges, we consider that it is necessary to address this issue under Principle 3 for the purposes of deriving our IARs. This is because our IARs imply two non-overlapping ranges for fixed and mobile origination payments and are therefore not consistent with a single origination charge for both fixed and mobile. As a result, we need to assess whether a separate origination charge for fixed and mobile calls is practical when deriving our IARs. We consider this, in light of the evidence currently available to us, in the next section.

Application of the framework to 080 numbers using the evidence currently available

12.80 In this sub-section we apply the framework described above to the 080 number range using the evidence currently available to us in order to derive the Base case scenario and IAR for fixed and mobile origination payments to these numbers.

Principle 1: recovery of efficient costs of origination

12.81 In Annex 26 we describe the changes we have made to our cost modelling since the April 2012 consultation. The assessment of the range of efficient costs relevant to recovery through origination charges described below is based on our analysis in that Annex.

The range of efficient costs relevant to recovery through fixed origination charges

12.82 In the previous section we explained that origination payments should allow OCPs to recover the marginal costs of origination, as this would avoid any incentive for OCPs to block outgoing calls to 080 numbers. Conversely, we argued that OCPs should not recover A&R costs through origination payments, for the reasons discussed in paragraphs 12.30 to 12.42 above. Using these principles and our modelling of fixed origination costs in Annex 26, we can derive the range of efficient costs relevant to recovery through fixed origination payments under Principle 1.

12.83 As described in Annex 26, we estimate the costs using two components:

- **Network costs:** these are based on the modelling of BT's network costs that we are currently consulting on in the Narrowband Market Review ('NMR').
- **Non-network costs:** these are based on the modelling of the NTS Retail Uplift. We note that this charge control will expire in September 2013 and we have proposed in the NMR to maintain the price ceiling at the September 2013 level plus RPI until a free-to-caller approach on the 080/116 ranges is implemented.⁷⁸ Our non-network cost estimates are consistent with this as they express the costs in September 2013 in 2014/15 prices.

12.84 We estimate the pure LRIC of fixed call origination at between 0.0-0.1ppm (both figures rounded to one decimal place). This is the result of the sum of our estimate of the pure LRIC network costs of call termination in 2014/15 of 0.002-0.076ppm in 2014/15 prices)⁷⁹ and our estimate of the non-network incremental costs of originating a call to a free to caller number from the NTS Retail Uplift (i.e. 0-0.02ppm), as further discussed in Annex 26.

12.85 We estimate the network costs of originating a call on BT's network on a LRIC+ basis in 2014/15 at 0.23-0.48ppm in 2014/15 prices and the non-network costs from the NTS Retail Uplift on a LRIC+ basis with no A&R costs at 0.02-0.08ppm (depending on the share of 'other CARS' costs included), as further discussed in Annex 26). This results in a total LRIC+ with no A&R costs between 0.3-0.6ppm (both figures rounded to one decimal place).

12.86 In light of our cost modelling in Annex 26, we estimate that the range of costs derived under Principle 1 for fixed origination charges to a free to caller number is between **0.0-0.6ppm**.⁸⁰

12.87 In light of the change to our approach in deriving the appropriate non-network costs for fixed origination payments for the purposes of assessing the Impact Assessment Range for origination charges, we consider that we should provide stakeholders the opportunity to comment:

Q12.2: Do you agree that the upper bound of non-network costs that are relevant to recovery through origination charges to 080 numbers should be LRIC+ excluding A&R, billing and bad debt costs? If not, please explain why.

⁷⁸ See paragraphs 5.289 to 5.291 of the NMR consultation.

⁷⁹ As we anticipate our decision on free-to-caller will be implemented in 2014/15, we are using 2014/15 cost figures for our assessment.

⁸⁰ Both figures have been rounded to one decimal place. The lower bound represents the lower bound of the pure LRIC estimate and the upper bound reflects the upper bound of the LRIC+ with no A&R costs, as described above.

The range of efficient costs relevant to recovery through mobile origination charges

- 12.88 In Annex 26 we present our updated modelling of mobile origination costs, which takes into account the various comments received from stakeholders.
- 12.89 As in the case of fixed origination, our cost modelling estimates have two components (as further discussed in Annex 26):
- **Network costs:** are based on the 2011 MCT Cost Model (updated to reflect the CAT MCT Judgment) and include additional common costs reallocated from mobile termination to origination.
 - **Non-network costs:** these are based on the CC 2009 MCT Determination.
- 12.90 We estimate the pure LRIC of mobile call origination at between 0.8-0.9ppm (both figures rounded to one decimal place). This is approximated by the sum of our estimate of the pure LRIC network costs of call termination in 2014/15 of 0.76ppm in 2014/15 prices and our estimate of the non-network incremental costs of originating a call to a free to caller number of 0-0.09ppm in 2014/15 prices, as further discussed in Annex 26.
- 12.91 We estimate the network costs of mobile call termination on a LRIC+ basis in 2014/15 at 2.15ppm (in 2014/15 prices) and the non-network costs on a LRIC+ basis with no A&R costs at 0.29-1.18ppm in 2014/15 prices (depending on the share of 'other CARS' costs included), as further discussed in Annex 26). This results in total LRIC+ with no A&R costs between 2.4-3.3ppm (both rounded to one decimal place).
- 12.92 In light of our cost modelling in Annex 26, we estimate that the range of costs derived under Principle 1 for mobile origination charges to a free to caller number is between **0.8-3.3ppm**.⁸¹ We recognize that there may be some limitations with the input data we have used to estimate the costs of mobile origination, however, for the reasons discussed in Annex 26, we believe our cost analysis is appropriate and proportionate for the purposes of deriving an assumption about mobile origination charges in order to assess the impact of making the 080 range free-to-caller.

Principle 2: benefits to consumers and avoiding material distortion of competition

- 12.93 In line with the description of our framework above, we distinguish between the two analytical steps included under Principle 2.

Step 1: Trade off between service availability and tariff package effect

- 12.94 In line with our analysis in the April 2012 consultation⁸², we assess the trade off between service availability and the tariff package effect by first looking at each of the two in turn. Then we take account of the additional considerations described in our framework above and thereafter we draw our conclusions.

⁸¹ Both figures have been rounded to one decimal place. The lower bound represents the lower bound of the pure LRIC and the upper bound reflects the upper bound of the LRIC+ with no A&R costs, as described above.

⁸² See paragraphs A23.47 to A23.82 of the April 2012 consultation.

Impact of higher origination payments on service availability

- 12.95 Consistent with our analysis in the April 2012 consultation⁸³, we use the evidence from the 2011 SP Survey to assess the impact on service availability of different levels of origination charges. We received several comments from stakeholders on the use we made of the 2011 SP Survey in the April 2012 consultation. In particular, several stakeholders argued that we should have placed more weight on the survey's question on SPs' "willingness to pay"⁸⁴ (rather than on the question on the "willingness to exit"⁸⁵). We have responded to these comments in Annex 27. For the reasons described in more detail in that annex, we remain of the view that our assessment of the impact of origination charges on service availability should be based on the 2011 SP Survey question on "willingness to exit".
- 12.96 The 2011 SP Survey asked SPs about the likelihood that they would get rid of their 080 number as a result of different levels of increases in their outpayments to TCPs (the "willingness to exit" question). We summarise the responses to this question in Table 12.1 below.

Table 12.1: Likelihood of 'getting rid of' free to caller 080 number in response to higher origination payments (% of all 080 SPs)

Increase in origination payments	0.5ppm	1ppm	1.5ppm	2ppm
Very likely	8%	11%	18%	24%
Fairly likely	10%	7%	10%	12%
Unsure	10%	13%	14%	15%
Fairly unlikely	16%	24%	19%	15%
Very unlikely	55%	44%	38%	34%
Net likely ⁸⁶	19%	19%	28%	36%
Net unlikely ⁸⁷	71%	68%	57%	49%

- 12.97 As we discussed in the April 2012 consultation, we consider that the survey results show that even fairly low increases in origination payments are likely to result in a reasonable minority of SPs getting rid of their 080 free to caller number(s). In particular, Table 12.1 shows that approximately 19% of SPs on the 080 range would migrate to another number range for any increase in their current level of origination payments.⁸⁸ However, when the increase in SPs' outpayments exceeds 1ppm this share increases significantly, to 28%. In light of this, we argued that the 2011 SP

⁸³ See paragraphs A23.58 to A23.67 of the April 2012 consultation.

⁸⁴ Question 16 of the 2011 SP Survey: "By how much would you be willing to increase the pence per minute amount that you pay to receive calls on your freephone number(s) in return for the charge to mobile callers being reduced to zero?"

⁸⁵ Question 17 of the 2011 SP Survey: "If your freephone number(s) were made completely free to all callers and the amount you currently pay per minute for those calls was increased, how likely would you be to get rid of your freephone number(s)?" Respondents were asked about increases of 0.5ppm, 1ppm, 1.5ppm and 2ppm.

⁸⁶ This is the sum of those SPs that responded that they were "very" and "fairly" likely to get rid of their 080 number.

⁸⁷ This is the sum of those SPs that responded that they were "very" and "fairly" unlikely to get rid of their 080 number.

⁸⁸ This is the sum of those SPs that responded that they were "very" and "fairly" likely to get rid of their 080 number for increases in the level of outpayments at each of 0.5 and 1ppm.

Survey showed that increases in origination payments beyond 1ppm would result in a steady decline in availability.⁸⁹

Impact of higher origination payments on the tariff package effect

12.98 We then assessed the tariff package effect noting that we considered that the magnitude of the tariff package effect was likely to be significant but incomplete.⁹⁰ Since the April 2012 consultation we have updated our estimation of the tariff package effect in Annex 28. We estimate that the impact on mobile CPs could be positive or negative depending on the assumptions used, mainly the level of origination payments. For SPs, making 080 free-to-caller is likely to increase their costs significantly, although the magnitude of the increase depends on the underlying assumptions. In the case of fixed CPs, we estimate that making 080 free-to-caller will have a negative impact.

Asymmetric risk of the level of payments

12.99 As discussed in the previous section, there are two sources of asymmetric risk, namely, that the origination payments resulting from commercial negotiations could be (i) too low or (ii) too high.

12.100 We consider that the potential adverse effect on consumers of origination charges that are 'too high' are likely to be more significant than those arising from origination charges that are 'too low'. We consider that the adverse effects on consumers of a loss in service availability on 080 that is greater than we are anticipating are likely to be more significant than a TPE that is larger than we have estimated. This is because in the first case consumers suffer a degradation of the service offered on 080, whereas in the second case there is only a slightly different balance of retail prices (which changes the balance of prices between SPs and callers).

12.101 The best evidence currently available to us on the loss in service availability on 080 from higher origination charges comes from the 2011 SP survey. For example, this suggests that a larger increase in average outpayments than 1ppm could result in a material increase in the extent of migration from 19% or less to 28% or more of 080 SPs. Such evidence is relevant and useful and we have taken it into account in our analysis. However, as with all survey evidence seeking to test responses to hypothetical scenarios, it may be subject to a margin of error with respect to any prediction of likely behaviour. In addition, we note that whilst we sought to conduct our survey on a representative sample of 080 SPs, we have had difficulties in getting SPs to engage with us throughout our review of NGCs - despite considerable efforts to encourage them to do so.⁹¹ As a result, we cannot be confident that the views of those SPs we surveyed are representative of all 080 SPs. We therefore consider it appropriate to take into account the risk that the actual migration decisions by SPs may turn out to be different than indicated by the responses in the 2011 SP survey.⁹²

12.102 The impact of higher average SP outpayments (under the scenario of 'too high' charges) may be a reduction in the quality of the service provided by SPs (e.g. through the application of measures to mitigate the costs of calls from mobiles, as discussed above), or a loss in service availability on 080 through migration to another

⁸⁹ See paragraph A23.65 of the April 2012 consultation.

⁹⁰ See paragraphs A23.71 to A23.76 of the April 2012 consultation.

⁹¹ The 2011 SP survey included a sample of 304 SPs.

⁹² We note that several stakeholders provided comments on the reliability of the 2011 SP survey. We respond in more detail to these in Annex 27.

number range or (perhaps in a small proportion of cases) a loss in the availability of the service on any number range. While the loss in service availability may be mitigated if 080 SPs migrate to another range (e.g. 03 or 084), there is still likely to be a loss in consumer benefits.

12.103 In addition, we consider that there is an asymmetry in the degree of uncertainty surrounding our estimates of the extent of migration away from 080 and the TPE. We consider that the loss in service availability on 080 is more difficult to predict than the TPE because, as discussed above, the 2011 SP survey is necessarily subject to a margin of error and there is therefore a possibility that the loss in service availability associated with a given level of origination payment may be either higher or lower than we have assumed for the purposes of our assessment. Conversely, although there is uncertainty surrounding the exact level of the TPE, we can be confident it will not be greater than the 100% we have assumed to arrive at the estimates shown above. Therefore whilst it is possible that the impact on service availability may be either more or less favourable than we have assumed for the purposes of our assessment, the TPE will only be more favourable than our assumptions suggest.

12.104 The existence of these asymmetric risks suggests that in determining the appropriate range of origination payments we should err on the side of caution. We consider that the existence of this asymmetric risk supports limiting the increase in SP average outpayments to below 1ppm.

12.105 We recognise that we have not provided the opportunity to stakeholders to comment on our assessment of the asymmetric risk of the level of payments in deriving the Impact Assessment Range for origination charges:

Q12.3: Do you agree that the asymmetric risk of the level of payments supports limiting the increase in SP average outpayments below 1ppm? If not, please explain why.

Positive caller externality

12.106 In terms of the positive caller externality on consumers of a free to caller range, this arises from the fact that SPs may not take into account (at least not completely) the positive effect that their decision to stay on (or move to) a free to caller range has on consumers (who can call them for free). The magnitude and existence of this externality will depend on SPs' degree of internalisation of the benefits arising to callers from their choice of a free to caller range. If this internalisation is not complete, and therefore the benefits to callers from SPs staying on a free to caller range are higher than the benefits derived by SPs from this decision, then there will be a positive externality on callers. For example, if the SP's service is a helpline for bank customers, the internalisation may be through the SP's relationship with callers as bank customers (such as by setting higher charges for banking services) or through the SP gaining more customers from competitors because of being more attractive through offering free calls to contact the SP.

12.107 In general, there is often significant scope for call externalities to be internalised and this is the view Ofcom has usually taken (e.g. for geographic calls, through the ability of consumers in a calling relationship to call each other, rather than one person always calling the other).⁹³ However, the externality in the case of non-geographic calls is different as it relates to a discrete event, the choice of number range by SPs, rather than a continuous series of call by call decisions that build on a calling

⁹³ See, for example, April 2010 MCT Consultation, Volume 3, paragraphs A12.70 to A12.75.

relationship. This difference may limit the extent to which the externality is internalised in practice in the case of 080/116. The external benefit to callers is also potentially significant because when the SP chooses to use the 080 range, callers will pay a zero call price. As a consequence of these differences, the potential for uninternalised caller externalities may be more significant in the case of 080 than in the case of geographic calls.

12.108 The right response to a positive externality is generally to reduce the price paid by the decision-maker, in this case the origination charge paid by the SP (via its TCP). This is to reflect the positive externality and make it more attractive for the SP to choose the free to caller number, thereby yielding the benefits to callers. The existence of a positive caller externality (if there is less than complete internalisation by SPs) may therefore imply that the optimal origination charge for consumers is below SP's willingness to pay (i.e. its private benefit of remaining on the free to caller range as opposed to migrating to another number range), that we have derived under Step 1 above. This is to enhance the incentives on SPs to remain on the range so that consumers obtain the net benefit that results from free calls.

12.109 We recognise that we have not provided the opportunity to stakeholders to comment on our assessment of the positive caller externality in deriving the Impact Assessment Range for origination charges:

Q12.4: Do you agree that the potential for a positive caller externality supports limiting the increase in SP average outpayments to below 1ppm? If not, please explain why.

Conclusion on Step 1

12.110 In the April 2012 consultation we suggested that a maximum increase in origination payments of 1ppm represented a reasonable trade-off between service availability and the tariff package effect.⁹⁴ Based on the available evidence, we continue to believe, in particular, that an increase above the 1ppm level would have negative effects on consumers through a steeper reduction in service availability, which would outweigh the moderate consumer benefits in terms of lower prices for other mobile services (via the tariff package effect).⁹⁵

12.111 In addition, we believe that there are two other factors that we did not consider in the April 2012 consultation that support an increase in average outpayments below the 1ppm level. In particular, we consider that there is an asymmetric risk of the level of payments which suggests that we should err on the side of caution when determining the appropriate range of origination payments. Furthermore, the potential for a positive caller externality that is not fully internalised also supports limiting the increase in origination payments to SPs below the 1ppm level.

12.112 We recognise that the evidence from the 2011 SP survey shows that the proportion of SPs that are “net likely” (i.e. the sum of those responding “very likely” and “fairly likely”) to get rid of their 080 line as a result of an increase of 1ppm in their hosting charges is the same for an increase of 0.5ppm, namely, 19%. However, we note that the composition of the 19% is different under each case. In the case of a 0.5ppm increase there were 8.2% that responded “very likely” and 10.3% “fairly likely”, whereas these proportions were 11.3% and 7.3%, respectively, in the case of a 1ppm

⁹⁴ See paragraphs A23.80-A23.82 of the April 2012 consultation.

⁹⁵ See paragraph A23.82 of the April 2012 consultation.

increase. As a result, we consider there may be a slightly smaller risk of exit at an increase of 0.5ppm.

12.113 Whilst quantifying these additional factors is not straightforward, we consider that in determining the appropriate Base case scenario range for origination payments we should consider increases between 0.5-1.0ppm in the current level of charges.

12.114 As noted above, TCPs paid an average of 0.5ppm to both mobile and fixed OCPs for originating calls to 080 numbers before the introduction of tiered termination rates. Assuming that TCPs would pass on in full any increase in origination payments,⁹⁶ this means that an increase in outpayments of between 0.5-1.0ppm would imply that the average origination charge paid by SPs (via the TCPs) should be between 1.0-1.5ppm (across both business and residential calls⁹⁷, assuming that both are likely to be free-to-caller).

12.115 We have noted in Section 6 that our intervention on the 080/116 ranges would only affect consumers (i.e. residential customers). However, we believe it is reasonable to assume for the purposes of our impact assessment that, as an indirect effect of our decision, all type of calls are likely to be made free-to-caller and therefore would not receive a differentiated payment based on whether the caller is a residential or a business customer.⁹⁸

Step 2: Relative prices between fixed and mobile origination charges

12.116 As discussed above, in Step 2 we determine an appropriate fixed and mobile IAR by adding to our analysis in Step 1 an assessment of:

⁹⁶ We note that we are implicitly assuming that increases in origination payments will be passed-through in full by TCPs into hosting charges paid by SPs. In the medium to longer term, we would expect this pass-through rate to be high as a result of competition between TCPs, and particularly after the share of mobile-originated calls has stabilised. However we recognise that the precise scale and speed of pass through is uncertain. We reached a similar conclusion when assessing the pass-through of higher revenues from tiered termination rates by TCPs into hosting charges paid by SPs in the latest Tiered Termination Rates dispute (see paragraphs 3.65 to 3.70 of our final determination, available here: <http://stakeholders.ofcom.org.uk/binaries/consultations/provisional-conclusions/statement/040413.pdf>).

⁹⁷ In the April 2012 consultation we relied on the October 2011 section 135 information request to estimate a split between residential and business calls for all non-geographic call numbers. This looked at origination volumes to all non-geographic numbers and BT submitted a split of roughly [3<]. Since then we have informally requested data specifically on 080 numbers from BT. BT provided us with data on termination traffic to its hosted 080 numbers showing a split of call origination between business and residential customers of roughly [3<]. We consider that the disparities between both datasets are difficult to reconcile, and could be explained by the portfolio of BT's SPs being mostly concentrated in the business segment (e.g. conference call facilities hosted on 080 numbers). We note however that BT's latest evidence may not necessarily be representative of the entire 080 number range, particularly, given that BT only represented 26% of total 080 terminated traffic in 2009, compared to roughly 60% of all originated traffic (from the 2010 Flow of Funds study).

⁹⁸ In the case of calls from fixed CPs, we note that currently all calls from fixed CPs (including from business customers) are free. Therefore, we would expect that business customers would continue to demand free calls to 080 from fixed lines after the implementation of a free-to-caller approach, particularly if business customers value calls to 080 numbers, as the latest evidence from BT (discussed in the footnote to the previous paragraph) seems to indicate. Similarly, in the case of mobile callers, we would expect that business contracts would generally provide more beneficial terms than residential contracts, particularly if business customers value calls to 080 (which would be consistent with the latest evidence from BT). We would therefore expect, in practice, that all types of contracts on mobile would offer free calls to 080 and would receive the same origination payment. We have, however, only accounted for residential calls when estimating the benefits of making 080 free-to-caller.

- the fixed to mobile substitution that is likely to result if we made the 080 range free to caller;
- the implications that different price differentials between fixed and mobile OCPs will have on the price signals given to SPs; and,
- the implications that different price differentials between fixed and mobile OCPs will have on competition.

12.117 We look at each of these in turn below.

The fixed to mobile substitution assumed

12.118 The share of fixed and mobile originated calls assumed will affect the relative strength of the impact of the fixed and mobile origination charge on SPs' average payments and, hence, on the extent of migration by SPs away from the 080 range.

12.119 In the April 2012 consultation we assumed that the share of mobile originated calls to 080 would increase from about 5% to around **40%-50%** in the medium term.⁹⁹ This was based on:

- evidence from DWP showing that the share of mobile originated calls to their 080 number had increased to around 40-45% following their agreement with mobile OCPs to make it free-to-caller;¹⁰⁰ and
- evidence that the share of all voice calls originated from mobiles in 2011 was approximately 50%.¹⁰¹

12.120 In response to our April 2012 consultation analysis, several stakeholders argued that the impact of making 080 free-to-caller on fixed to mobile substitution could be larger than we had anticipated. Conversely, other stakeholders argued that our analysis of the evidence from DWP was flawed and that the fixed to mobile substitution would be lower than we forecasted. We respond to these comments in Annex 27. We remain of the view that it is appropriate to rely on the evidence from DWP, in addition to evidence on calling patterns for other call types, to assess the scale of fixed to mobile substitution that is likely to result from a free-to-caller approach.

12.121 Since the April 2012 consultation we have requested updated information from BT on the share of calls to DWP that were originated from mobiles.¹⁰² In Figure 12.2 we present the information on the minutes of calls to DWP's 080 numbers that we used in the April 2012 consultation (i.e. the series up to April 2011)¹⁰³ and we update it with the latest available information from BT (i.e. the series from April 2011 to August 2012).

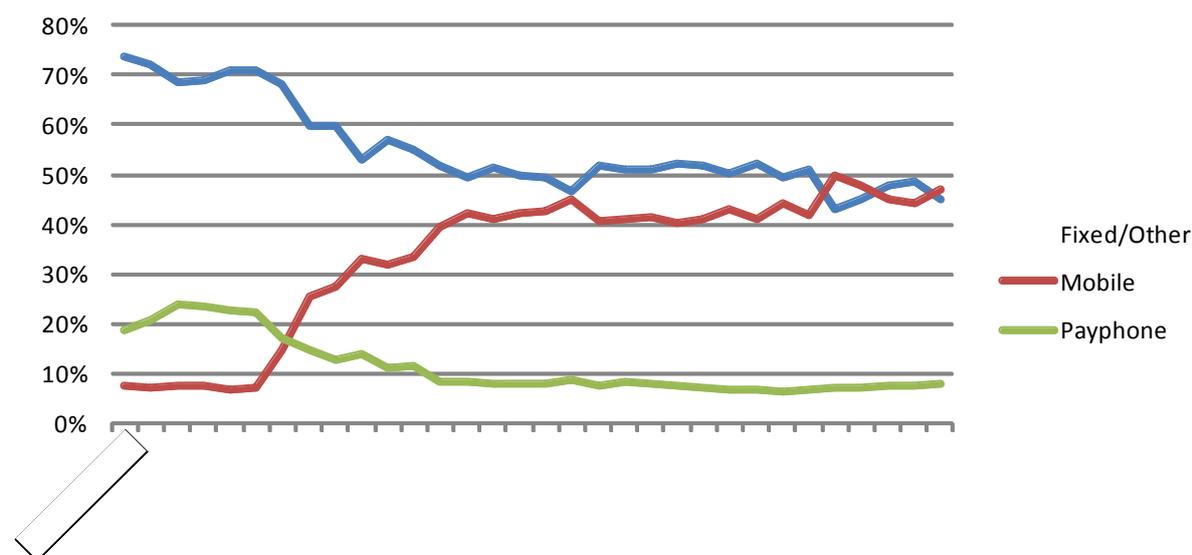
⁹⁹ See paragraph 16.84 and A23.56 of the April 2012 consultation.

¹⁰⁰ See paragraphs A23.52-A23.55 of the April 2012 consultation.

¹⁰¹ See paragraph A23.55 of the April 2012 consultation.

¹⁰² Email from BT dated 2 October 2012

¹⁰³ See Figure 16.1 of the April 2012 consultation.

Figure 12.2 Minutes of calls to DWP helplines by type of origination

Source: BT, DWP call volume data.

12.122 Figure 12.2 above shows that the share of call minutes to DWP originated from mobiles has generally continued to increase (if we ignore the high point reached on April 2011)¹⁰⁴, albeit at a slower rate. Whereas in the April 2012 consultation we concluded that the share of calls originated from mobile had stabilised around 40-45%, the updated call data shows that the share has now slightly increased, stabilising at around 45-50%.

12.123 In addition, we consider that we should take into account a more forward-looking assumption regarding all voice call data. The share of all voice calls originated from mobiles was 52% in 2011,¹⁰⁵ however, free-to-caller is likely to be implemented in late-2014 and, therefore, we expect that the share of calls originated from mobile will continue to increase until the implementation date (as has been the case in the past). We therefore believe it is appropriate to account for this when assessing the likely share of calls to 080 that will be originated from mobiles by late-2014. In Table 12.3 below we present the share of all voice calls originated from fixed and mobile phones in the UK between 2006-2011, as well as the average annual percentage increase in mobile originated calls.

¹⁰⁴ It can be seen that there is a significant decline in the share of calls originated from mobile just after April 2011. This was the last data entry that we had at the time of the April 2012 consultation and the next data point (i.e. August 2011) is part of the updated information that BT sent to us after our April 2012 consultation. We consider that there are two possible explanations for this change in calls originated from mobile. On the one hand, DWP's consolidation of its 080 numbers (it reduced its 080 numbers from 45 to just 25 on July 2011 and to 20 by March 2012) may have affected the pattern of call minutes originated from mobile. On the other hand, the steep decline may be due to differences in the way BT has calculated call minutes in the updated information request (compared to the one we used in the April 2012 consultation). For this reason, when considering the general trend of the share of calls originated from mobile, we believe that we should ignore the high point reached around April 2011. In this case, the evidence seems to suggest that the share of calls to DWP originated from mobile has generally continued to increase.

¹⁰⁵ Figure 5.14 in the 2012 Communications Market Report.

Table 12.3 Share of all voice calls originated from a mobile and fixed line in the UK

	2006	2007	2008	2009	2010	2011
Fixed	64%	59%	55%	52%	51%	48%
Mobile	36%	41%	45%	48%	49%	52%
Average annual percentage point ('pp') increase ¹⁰⁶	3.0pp	2.6pp	2.2pp	1.9pp	2.4pp	N/a

Source: 2012 Communications Market Report, Figure 5.14 and Ofcom calculations.

12.124 We consider that assuming that the share of calls originated from mobile will increase by 2 percentage points between 2011 and late 2014 is consistent with the evidence shown in Table 12.3 above. Assuming this would result in a mobile share of all UK voice calls of approximately 58% by late 2014. However, if we base our analysis on residential customers only, the evidence shows that the share of all UK residential voice calls originated from mobile in 2011 was 45%, significantly below the 52% for all voice calls. In addition, the annual average increase has also been slower for residential customers, as shown in Table 12.4 below.¹⁰⁷

Table 12.4 Share of all residential voice calls originated from a mobile and fixed line in the UK

	2006	2007	2008	2009	2010	2011
Fixed	65%	59%	57%	55%	56%	55%
Mobile	35%	41%	43%	45%	44%	45%
Average annual percentage point ('pp') increase ¹⁰⁸	2.0pp	1.1pp	0.7pp	0.3pp	1.0pp	N/a

Source: 2012 Communications Market Report, Figure 5.16 and Ofcom calculations.

12.125 We consider that the above evidence is consistent with an annual percentage point increase of around 0.5pp. This would result in around 47% of all residential calls being originated from mobile by late 2014. We have been unable to determine whether callers of 080 numbers are more likely to behave as residential or business customers for the purposes of deciding the share of calls to 080 that are likely to be originated from mobile by late 2014.¹⁰⁹

12.126 In addition, we have some anecdotal evidence showing that the share of calls originated from mobile could significantly exceed the 60% share for some numbers. In response to our December 2010 consultation, the THA stated that some of its members in Ireland (which use free to caller numbers) received 89% of their calls from mobiles.¹¹⁰ Similarly, evidence from Samaritans shows that they receive around 70% of calls from mobile to their free to caller 116 number.¹¹¹ While such SPs may

¹⁰⁶ The average annual percentage point increase is calculated as the average annual percentage point change between the year and 2011. For example, in the case of year 2006, the average annual percentage point increase is equal to $(52\% - 36\%) / (2011 - 2006) = 3.0\%$.

¹⁰⁷ See Figure 5.16 in the 2012 Communications Market Report.

¹⁰⁸ The average annual increase is calculated as the average annual percentage change between the year and 2011. For example, in the case of year 2006, the average annual increase is equal to $(52\% - 36\%) / (2011 - 2006) = 3.0\%$.

¹⁰⁹ As discussed above, our working assumption is that all types of calls (including business and residential calls) are likely to be free-to-caller after the implementation of our approach.

¹¹⁰ THA, December 2010 consultation responses, Q6.6.

¹¹¹ Email from Samaritans on 25 October 2012.

not be representative, it does suggest that some SPs may receive a proportion of calls from mobile exceeding 60%.

12.127 In light of the above evidence, we believe there is significant uncertainty about the share of calls that are likely to be originated from mobile across all 080 numbers on a free-to-caller range. For this reason we have decided to assume a relatively wide range. We consider it is consistent with the above evidence to assume that implementing a free-to-caller approach will increase the share of calls to 080 originated from mobile to somewhere between **45-60%**. The lower bound represents a share of calls originated from mobile slightly below our estimate for residential calls by late 2014. The upper bound reflects a share slightly above our estimate for all voice calls by late 2014.

The level of origination charges implied by the fixed to mobile substitution assumed

12.128 We now consider what our assessment above implies for the likely level of fixed and mobile origination charges. In summary, our analysis of the 2011 SP survey evidence in Step 1 suggests that an appropriate trade-off between service availability and the TPE is reached when the average SP cost is no more than 1.5ppm (i.e. a 1ppm increase when compared to the pre-existing 0.5ppm average outpayment). However, the asymmetric risk to service availability from having origination payments which are too high and the existence of a positive caller externality support an increase of less than this. As a result we consider an appropriate average SP cost to lie between 1ppm and 1.5ppm, with the exact position within this range being dependent on the weight given to these two factors.

12.129 We consider that origination payments are unlikely to be fair and reasonable unless they lead to an average SP cost within this range. We are consulting today on draft guidance as to how we would resolve any future dispute about whether origination payments are fair and reasonable. In that consultation, we apply our proposed guidance to the evidence currently available to us and set out our view of the level of fixed and mobile origination payments that would lead to an average SP cost within the 1ppm – 1.5ppm range. As noted above, we assume that fixed and mobile origination payments will be set with reference to our fair and reasonable guidance, and therefore will be consistent with an average SP cost of this magnitude.¹¹²

12.130 We now need to determine the distribution of the average outpayment estimated under Step 1 (i.e. 1.0-1.5ppm) between the fixed and mobile IAR, assuming that the share of calls to 080 originated from mobile is likely to increase to 45-60%, and bearing in mind that the application of Principle 1 to our current cost modelling suggests a range of costs of 0.0-0.6ppm for fixed calls and 0.8-3.3ppm for mobile calls.

12.131 To do this, we first assume a given level of fixed to mobile substitution (e.g. 45% of calls originated from mobile). Then, we start from the pure LRIC of both fixed and mobile origination (i.e. the lower bound of the efficient cost ranges described above) and increase these in equal pence per minute proportions, say 0.1ppm. We do this in Table 12.5 below.

¹¹² This is assuming that this average SP cost range is maintained in our final statement in relation to free-to-caller and our final fair and reasonable guidance.

Table 12.5 Average outpayment for different fixed and mobile origination payments assuming 45% of calls originated from mobile

Fixed origination payment		0.0	0.1	0.2	0.3	0.4	0.5	0.6
Mobile origination payment	0.8	0.36 ¹¹³	-	-	-	-	-	-
	0.9	-	0.46	-	-	-	-	-
	1.0	-	-	0.56	-	-	-	-
	1.1	-	-	-	0.66	-	-	-
	1.2	-	-	-	-	0.76	-	-
	1.3	-	-	-	-	-	0.86	-
	1.4	-	-	-	-	-	-	0.96

12.132 The Table shows that if we start from the pure LRIC of fixed and mobile origination and increase both by 0.1ppm steps, the average SP outpayment when we reach fixed origination payments in the 0.3-0.6ppm range (i.e. the LRIC+ with no A&R for fixed origination) is 0.66ppm and 0.96ppm, respectively. This level of average outpayments is below 1.0-1.5ppm, the maximum level of average outpayments that we consider strikes the right balance between service availability and the tariff package effect in Step 1 (as discussed above).

12.133 Based on our current cost modelling, we do not consider that fixed origination payments should recover costs beyond the 0.3-0.6ppm range (i.e. beyond LRIC+ with no A&R costs), as discussed in Principle 1. For this reason, we can fix the fixed origination payment at this level (0.3-0.6ppm) and calculate the maximum mobile origination payments that result in an average SP outpayment of exactly 1.0ppm and 1.5ppm (i.e. the range for the average outpayment, as derived under Step 1 above), respectively. In doing so, we need to make an assumption about the share of calls originated from mobile as this will affect the average SP outpayment for a given fixed and mobile origination payment. As discussed above, we have assumed that the share of calls originated from mobile is likely to be between 45%-60%.

12.134 In line with this, we present in Table 12.6 below the mobile origination payment that results in an average SP outpayment of 1.0ppm for different levels of fixed origination payments (in the 0.3-0.6ppm range) and different shares of calls originated from mobile (between 45%-60%).

Table 12.6 Mobile origination payments for different fixed origination payments and shares of mobile originated calls, keeping SPs' average outpayments at 1.0ppm

Fixed origination payments (ppm)		0.3	0.4	0.5	0.6
Share of mobile originated calls	45%	1.86	1.73	1.61	1.49
	50%	1.70	1.60	1.50	1.40
	55%	1.57	1.49	1.41	1.33
	60%	1.47	1.40	1.33	1.27

12.135 In Table 12.7 below, we present the same calculation but assuming an average outpayment of 1.5ppm (i.e. the higher average outpayment derived under Step 1).

¹¹³ Each figure is calculated as follows: mobile origination payment assumed x 45% + fixed origination payment assumed x (1-45%). For example, in this case: 0.36ppm = 0.8 x 45% + 0.0 x 55%.

Table 12.7 Mobile origination payments for different fixed origination payments and shares of mobile originated calls, keeping SPs' average outpayments at 1.5ppm

Fixed origination payments (ppm)		0.3	0.4	0.5	0.6
Share of mobile originated calls	45%	2.97	2.84	2.72	2.60
	50%	2.70	2.60	2.50	2.40
	55%	2.48	2.40	2.32	2.24
	60%	2.30	2.23	2.17	2.10

12.136 Table 12.7 above shows that the mobile origination charge consistent with a given SP average outpayment decreases with higher shares of mobile originated calls and higher fixed origination charges. The highest mobile origination charge (i.e. 2.97ppm) is reached when we assume an average SP outpayment of 1.5ppm, 45% of calls originated from mobile and a fixed origination payment of 0.3ppm. Conversely, the lowest mobile origination charge (i.e. 1.27ppm) results from assuming an average SP outpayment of 1.0ppm, 60% of calls originated from mobile and a fixed origination payment of 0.6ppm.

12.137 In summary, the level of mobile origination payment that generates an average SP cost between 1.0-1.5ppm (consistent with our conclusion in Step 1) depends on what we assume about the extent of fixed-mobile substitution and the level of the fixed origination payment. For assumptions we consider reasonable, the level of mobile origination payments consistent with an appropriate average SP cost (1ppm to 1.5ppm) could range from 1.3ppm to 3.0ppm (highlighted in red in the tables above). This forms the basis of our base case scenario range for the mobile origination payment.

12.138 However, there are some combinations of assumptions within this range where the average SP cost would be greater than 1.5ppm - potentially more than 2ppm - with consequent adverse effects on service availability, or lower than 1.0ppm with consequent effects on the TPE. We show this in Table 12.8 and Table 12.9 below, where we estimate the average SP outpayment for a fixed origination payment of 0.3ppm and 0.6ppm,¹¹⁴ respectively, and different combinations of the assumptions regarding the share of calls originated from mobile and mobile origination payments.

Table 12.8 Average SP outpayment for different mobile origination payments and shares of mobile originated calls, keeping the fixed origination charge at 0.3ppm

Share of calls originated from mobile		45%	50%	55%	60%
Mobile origination payment (ppm)	3.0	1.52	1.65	1.79	1.92
	2.5	1.29	1.40	1.51	1.62
	2.0	1.07	1.15	1.24	1.32
	1.5	0.84	0.90	0.96	1.02
	1.3	0.75	0.80	0.85	0.90

¹¹⁴ We limit our estimation of the average SP outpayments to the two extremes of our range of fixed origination payments (i.e. 0.3ppm and 0.6ppm) for simplicity. We note however that other values within the 0.3-0.6ppm range of fixed origination payments would result in slightly different average SP outpayments than the ones presented in Tables 12.8 and 12.9.

Table 12.9 Average SP outpayment for different mobile origination payments and shares of mobile originated calls, keeping the fixed origination charge at 0.6ppm

Share of calls originated from mobile		45%	50%	55%	60%
Mobile origination payment (ppm)	3.0	1.68	1.80	1.92	2.04
	2.5	1.46	1.55	1.65	1.74
	2.0	1.23	1.30	1.37	1.44
	1.5	1.01	1.05	1.10	1.14
	1.3	0.92	0.95	0.99	1.02

12.139 In the tables above we highlight in purple the scenarios where the average SP outpayment is below 1ppm or exceeds 1.5ppm. We do not include these scenarios within our base case because we would not consider such an average SP cost fair and reasonable on the basis of currently available evidence. Instead, our base case includes only those combinations of assumptions that result in an average SP cost of between 1ppm and 1.5ppm. We set these out in the Tables above in red (these tables are also reflected in our draft guidance).

12.140 We note that within our base case scenario, we place less weight on mobile origination payments at the extreme ends of the range (e.g. below 1.5ppm or above 2.5ppm) because we would consider these payments fair and reasonable in a more restrictive set of circumstances than we would payments closer to the middle of our base case range.

Implications of the differential between fixed and mobile origination charges on price signals

12.141 The ranges of fixed and mobile origination charges estimated in the previous section (i.e. 0.3-0.6ppm for fixed and 1.3-3.0ppm for mobile) would result in a different pence per minute contribution to fixed and mobile CPs' fixed and common costs. In Annex 26 we have updated our estimates of pure LRIC costs for both fixed and mobile CPs. In that Annex we explain that fixed origination charges in the 0.3-0.6ppm range would contribute between 0.2-0.6ppm to fixed CPs' fixed and common costs.¹¹⁵ Accordingly, the mobile origination charge that would make the same contribution to mobile CPs' fixed and common costs (the 'LRIC differential' charge) would be in the range of **1.0-1.5ppm** (depending on the mobile pure LRIC estimate assumed).

12.142 In the April 2012 consultation we considered that if the origination charges for fixed and mobile CPs made a different contribution to their fixed and common costs this could distort SPs' incentives to block calls from mobile. For example, it could result in too many SPs blocking calls from mobile. We however noted that the evidence from the 2011 SP Survey suggested that SPs were unlikely to block calls from mobile and that therefore we had not made any adjustment in our estimate of the IAR to reflect this factor.¹¹⁶

12.143 We based our assessment on the responses to question 18 of the 2011 SP Survey. This question asked SPs who had answered that they were "very likely" to get rid of their 080 number at any increase in hosting charges in question 17 (24% of total SPs), what they would do, offering five possible answers: (i) switch calls to a different

¹¹⁵ This would depend on the estimate of the pure LRIC of fixed termination that we use, as further discussed in Annex 26.

¹¹⁶ See paragraphs A23.111 to A23.118 of the April 2012 consultation.

line they already had; (ii) get a “new” non-freephone number and use that instead; (iii) block calls from mobile; (iv) get rid of the line completely; and (v) don’t know. We noted that only 20% of respondents to question 18 said they would block calls from mobiles when the origination charge was higher than they were willing to bear. We therefore concluded that incentivising efficient blocking decisions was not the most important factor and that we had not made any adjustment to the Impact Assessment Range to reflect this factor.¹¹⁷

12.144 As discussed above, we consider that the imposition of an access condition on TCPs will remove the possibility for TCPs to block calls from mobile (in the sense that they will be obliged to provide connectivity). However, since the publication of the April 2012 consultation we have received responses from some TCPs and SPs¹¹⁸ indicating the alternative methods that they could use to mitigate the increase in their SPs’ mobile origination payments. In their responses, TCPs and SPs explained that they could implement different alternatives,¹¹⁹ for example:

- **Different treatment of fixed and mobile calls.** The TCP could identify the origination of the call and provide this information to the SP who could then offer a differentiated service to each type of customer (e.g. try to shorten the length of the call if originated from a mobile) or route the call to different call centres depending on its origination.
- **Routing to an automated message.** The TCP could route the call to a short automated message indicating to the mobile caller that it should use a different number or that the caller will be called back by the SP.

12.145 Since the April 2012 consultation we have also had submissions from SPs indicating that they could resort to these or similar methods to limit the impact of an increase in mobile origination charges. C&W indicated that one of its 080 SPs had requested the possibility of re-directing mobile calls to an automated message that would request callers to redial on an alternative number.¹²⁰ The THA indicated that blocking calls would not be an appropriate response for the helplines sector. Instead, SPs were likely to look for other solutions such as offering callbacks or running parallel numbers for callers from mobiles.

12.146 It is difficult for us to determine how widely adopted these alternative methods may become if the 080 range were made free-to-caller, and we do not now consider that question 18 of the 2011 SP survey (discussed above) is a reliable basis for this purpose. This is because question 18, which asked SPs whether they were likely to block calls from mobile, was only asked to SPs who responded that they were “very likely” to get rid of their Freephone number in question 17 of the 2011 SP survey. It is not clear whether the SPs in this category might be more or less prone to use these alternative methods than SPs that provided different answers to question 17. For example, SPs that answered they were “fairly likely” to get rid of their Freephone number or were “unsure” could be more inclined to block calls from mobile or engage

¹¹⁷ See paragraph A23.118 of the April 2012 consultation.

¹¹⁸ We informally requested [redacted], [redacted] and [redacted] (the CPs that provided comments in relation to call blocking in our April 2012 consultation) to identify measures that they could offer to SPs in order to mitigate any potential increase in the costs of calls originated from mobile. In addition, we received unprompted submissions from THA and [redacted] indicating that SPs were likely to adopt several alternative methods to mitigate the costs of calls from mobile, instead of blocking these calls.

¹¹⁹ Email from [redacted] to Ofcom, dated 2 October 2012; email from BT to Ofcom, dated 17 October 2012; email from CWW to Ofcom, dated 10 January 2013 and email from THA to Ofcom, dated 15 February 2012.

¹²⁰ CWW email to Ofcom, dated 10 January 2013.

in other methods to mitigate their costs, as alternatives to getting rid of their Freephone number, than those that responded that they were “very likely” to get rid of their Freephone number. SPs that answered question 17 by saying they were likely to remain on the 080 range might also be interested in the alternative methods which might offer attractions to them in terms of managing their costs. In addition, SPs’ preferences towards alternative measures (such as the ones discussed above) that are less extreme than outright call blocking may not necessarily be similar. For example, the evidence from THA discussed above shows that in the case of helplines, call blocking would not be an appropriate measure for the sector, which would be likely to look for other alternatives.¹²¹

12.147 In terms of the weight that should be given to the evidence described above, we consider that we should first have regard to the context under which we have received these submissions from TCPs and SPs. Currently, SPs face no differentiation in the prices they pay (through hosting charges) for calls originated from mobile and fixed lines. Even the introduction of tiered termination rates is unlikely to change this, given that the share of calls to 080 originated from mobile has remained at fairly low levels (around 5% of total calls to 080). We also note that many SPs are still unaware of the impact that our approach to 080 may have on the hosting charges they pay.

12.148 As discussed above, the evidence shows that TCPs consider that they could offer a range of alternatives to SPs that may be willing to mitigate the costs of calls to 080 from mobile devices, although they are unable to anticipate the likely demand of these from their client SPs. In addition, several SPs have without prompting expressed an interest in using some of these alternative measures (e.g. CWW’s client and THA). We recognize that it is unclear the extent to which these SPs are representative of the entire 080 range, however, below we present an example to illustrate the magnitude of the savings that SPs could make using these measures.

12.149 We have estimated the cost that would be saved if an SP were to play a recorded announcement asking a mobile caller to redial another number. In the April 2012 consultation we noted that the average duration of calls to 080 was 6.5 minutes from fixed and 4.0 minutes from mobile (see paragraph A12.83 of the April 2012 consultation). We assume that under a free-to-caller approach, the average duration of a call to a 080 number from a mobile is likely to be 5.2 minutes (i.e. the average of 6.5 and 4.0 minutes) and that the average duration of the recorded announcement is likely to be 1 minute (i.e. SPs would be charged for one minute when called from a mobile). Under these relatively conservative assumptions we estimate that SPs could avoid between 36%-49% of the increase in costs associated with higher mobile origination payments (depending on the share of calls originated from mobile: 45% and 60%, respectively).¹²²

12.150 In light of the above, we consider that there is evidence that higher mobile origination payments relative to fixed origination payments may encourage SPs to request measures such as the ones described above from their TCPs. We believe that if SPs face an excessive incentive to use these types of measures it could cause significant consumer detriment in the form of lower quality of service when calling from a mobile

¹²¹ THA email to Ofcom, dated 15 February 2013.

¹²² We estimate this as follows. The use of a recorded announcement implies a mobile origination payment for 1 minute, whereas this charge would have been for 5.2 minutes (if we assume the average duration described above). This implies a reduction in the cost of calls from mobile of $81\% = 1/5.2 - 1$. However, we need to take into account that we expect that mobile calls would only represent between 45% to 60% of total calls. Hence, the reduction in total costs would be between 36% (i.e. $81\% \times 45\% = 36\%$) and 49% (i.e. $81\% \times 60\% = 49\%$).

phone or a reduction in service availability if the caller is requested to contact another number.

12.151 In addition, as discussed in the April 2012 consultation, we note that many SPs are likely to derive the same benefit independently of whether the calls originate from a mobile or fixed line (even if there are exceptions as some stakeholders have suggested in their responses). For this reason, we consider it may be appropriate to ensure that SPs make the same contribution to the common costs of fixed and mobile CPs.¹²³

12.152 We therefore consider that there is potential for consumer detriment from differentials between fixed and mobile origination charges that exceed the LRIC differential (which provides an efficient price signal to SPs in this respect). We therefore consider that we should place some weight on the negative impact that mobile origination charges above the LRIC differential could have in distorting the price signals to SPs.

12.153 We consider that the above reasoning supports a Base case scenario range for mobile origination payments below the top of the 1.3-3.0ppm range, to be closer to our estimated LRIC differential of 1.0-1.5ppm. The greater the weight that is placed on the importance of efficient price signals for SPs regarding cost mitigation measures for mobile originated calls, the closer the mobile origination payment should be towards the bottom end of the Base case scenario range.

12.154 We recognise that we have not provided the opportunity to stakeholders to comment on our assessment of the extent to which stakeholders may resort to these alternative measures to mitigate the costs of calls from mobile and their implications for the LRIC differential:

Q12.5: Do you agree that SPs are likely to resort to alternative measures to mitigate the costs of calls from mobile (e.g. routing the mobile calls to a recorded announcement) at higher mobile origination payments? Do you agree that this supports a Base case scenario range towards the LRIC differential? If not, please explain why.

Implications of the differential between fixed and mobile origination charges on competition

12.155 In terms of competition, there is a possibility that mobile CPs could be disadvantaged by mobile origination payments that are too high when competing against fixed CPs for retail origination. This is because we consider that a significant proportion of SPs could resort to some type of measure to mitigate the increase in the costs of calls from mobile (as discussed above). This could reduce the quality of service provided to mobile callers by SPs and so make originating 080 calls from mobile phones less attractive to callers than from a fixed line. However, we do not place much weight on this issue as a similar consideration is already taken into account in our analysis of the differential between fixed and mobile origination charges.

12.156 In the case of competition on wider telephony bundles, in the April 2012 consultation we concluded that the impact of higher mobile origination payments was unlikely to have a *material* impact on competition between fixed and mobile CPs, given that:

- they operate in different retail markets; and

¹²³ See paragraph A23.46 of the April 2012 consultation.

- revenues from origination payments are comparatively small, compared to overall mobile revenues.¹²⁴

12.157 As discussed in more detail in the NMR consultation, we continue to believe that fixed and mobile CPs operate in different retail markets.¹²⁵ We similarly consider that any impact on competition between fixed and mobile CPs resulting from mobile origination payments being too high is likely to be small due to the low levels of revenues involved in origination to 080 numbers. Even under relatively conservative assumptions, we estimate that the ‘excess’ revenues (i.e. above the LRIC differential) that could arise from mobile origination payments within the assumed cost-based charges derived under Principle 1 would be below 1% of total mobile revenues.¹²⁶

12.158 In light of the above, we remain of the view that mobile origination charges within the Base case scenario range described so far (i.e. between 1.3-3.0ppm) are unlikely to result in a material distortion of competition between fixed and mobile CPs for wider telephony bundles.

Conclusion on Step 2

12.159 In Step 1 we concluded that an appropriate trade-off between service availability and the TPE is reached when the average SP cost is no more than 1.5ppm (i.e. a 1ppm increase when compared to the pre-existing 0.5ppm average outpayment). However, we argued that the asymmetric risk to service availability from having origination payments that are too high and the existence of a positive caller externality support an increase of less than this. As a result we considered an appropriate average SP cost to lie between 1ppm and 1.5ppm, with the exact position within this range being dependent on the weight given to these two factors.

12.160 In Step 2 we have applied our assumption about fixed to mobile substitution (i.e. that the share of calls originated from mobiles is likely to increase to 45-60%) to the average outpayment consistent with Step 1 (i.e. 1.0-1.5ppm). A direct application of this assumption about fixed to mobile substitution (i.e. before considering other factors such as the impact of price differentials on price signals to SPs) suggests a fixed IAR between 0.3-0.6ppm and a Base case scenario range for mobile origination payments between 1.3-3.0ppm (as discussed above).

12.161 However, we believe that the considerations regarding the negative impact on the price signals that are given to SPs as a result of differences in origination charges that do not reflect differences in fixed and mobile resource costs supports a mobile origination payment below the top end of the 1.3-3.0ppm Base case scenario range, for the reasons discussed above. As discussed above, there is a risk that a mobile origination payment that is too high relative to the fixed origination payment (or,

¹²⁴ See paragraphs A23.136 to A23.137 of the April 2012 consultation.

¹²⁵ NMR February 2013 consultation, see for example paragraphs 5.34 to 5.58:

<http://stakeholders.ofcom.org.uk/consultations/nmr-13/>

¹²⁶ This assumes a mobile origination charge of 3.3ppm (the highest cost that we consider would be efficient to recover through mobile origination payments in light of our cost modelling, under Principle 1 above) and a LRIC differential charge of 1ppm (i.e. lower bound), resulting in an excess of 2.3ppm. There were 11.2bn minutes of calls to 080 in 2009 (from the 2010 Flow of Funds study) and we assume these will decrease by 10% annually until late 2014 (i.e. 41% decrease) to 6.6bn minutes of calls. We assume 60% of these will be mobile which would result in payments to mobile OCPs being ‘too high’ by £91m. This compares to £15.0bn mobile retail revenue in 2011 (see Figure 5.34 of the 2012 Communications Market Review), in other words, the excess would only represent 0.6% of total mobile retail revenue.

alternatively, a fixed origination payment that is too low relative to the mobile origination payment) could result in inefficient price signals to SPs.

Conclusion on Principle 2

12.162 As discussed in the introduction to this section, based on the evidence currently available to us, we consider that the application of the two steps in Principle 2 suggests that we should distinguish between two different ranges of fixed and mobile origination charges, namely, (i) Base case scenario range and (ii) Impact Assessment Range (which we have defined above).

12.163 We discuss each of these ranges in turn below.

Base case scenario range

12.164 In the case of mobile origination, we believe that the application of Step 1 suggests that the average outpayment should be between 1.0-1.5ppm. This takes into account, on the one hand, the trade-off between service availability and the tariff package effect and, on the other hand, the fact that additional factors (such as the asymmetric risk of the level of payments and the potential for a positive caller externality) support a lower average outpayment than that suggested by an assessment of the trade-off between service availability and the tariff package effect on its own.

12.165 The level of mobile origination payment that generates this average SP cost depends on what we assume about the extent of fixed-mobile substitution and the level of the fixed origination payment. For assumptions we consider reasonable, the level of mobile origination payment consistent with an appropriate average SP cost (1ppm to 1.5ppm) could range from 1.3ppm to 3ppm. This forms the basis of our base case scenario range for the mobile origination payment. However, there are some combinations of assumptions within this range where the average SP cost would be greater than 1.5ppm - potentially more than 2ppm - with consequent adverse effects on service availability, or lower than 1.0ppm with consequent effects on the TPE. We do not include these scenarios within our base case because we would not consider such an average SP cost to be fair and reasonable on the basis of currently available evidence. Instead, our base case includes only those combinations of assumptions that result in an average SP cost of between 1ppm and 1.5ppm. We set these out in Table 12.8 and 12.9 above (these are also reflected in our draft guidance). We also note that within our base case scenario, we place less weight on mobile origination payments at the extreme ends of the range (e.g. below 1.5ppm or above 2.5ppm) because we would consider these payments fair and reasonable in a more restrictive set of circumstances than we would payments closer to the middle of our base case range.

12.166 In the case of fixed origination, we do not consider that the evidence described above supports having a range that is different from that derived from considering the trade-off between the TPE and service availability. We recognize that both the asymmetric risk of the level of payments and the existence of a positive caller externality could suggest that *both* the fixed and mobile ranges should be reduced from this level. However, this would leave unchanged the difference in common cost recovery between the mobile and fixed charges (and the distortion in price signals arising from that). In order to address this and bring the mobile range more in line with the LRIC differential, we would need to reduce the mobile range even further (resulting in a lower mobile Base case scenario range than under our approach). It would also result in a lower average SP outpayment than the one derived in Step 1. For this reason, we take into account these three factors supporting lower origination charges

(i.e. asymmetric risk of the level of payments, existence of a positive caller externality and difference in common cost recovery) primarily in relation to the mobile Base case scenario range, to ensure that the final fixed and mobile ranges are consistent with the average SP outpayment derived under Step 1. We therefore consider that the range for fixed origination charges should remain unchanged from that presented at the end of Step 1 – i.e. between **0.3-0.6ppm** based on the cost modelling we present in Annex 26.

Impact Assessment Range

12.167 As described above, the Base case scenario range has been derived by applying our framework to the evidence currently available to us. However, we consider that we should adopt a wider mobile range for the purpose of assessing the impact of making the 080 range free-to-caller. In particular, we recognise that we have made assumptions about the likely reactions of SPs, CPs and callers to future events in order to derive the mobile Base case scenario range. Whilst we consider our assumptions to be reasonable and based on the evidence currently available to us, we acknowledge that they are subject to some uncertainty. We therefore consider it prudent to assess the impact of our decision on the basis of a wider mobile IAR, in order to take account of these uncertainties and to improve the robustness of our decision-making.

12.168 In relation to mobile origination, we believe the evidence currently available to us supports an IAR of **1.0-3.7ppm**, based on:

- our current estimate of the LRIC differential (our current estimate of its bottom end being 1.0ppm, as described above);
- the upper bound of the range estimated under Principle 1 above (i.e. 3.3ppm, based on the LRIC+ with no A&R costs) increased by 0.4ppm to obtain 3.7ppm. We increase the upper bound to 3.7ppm to account for the uncertainties surrounding our assumptions, as we consider that 0.4ppm gives us sufficiently wide headroom to accommodate these uncertainties. We also consider that widening the range will improve the robustness of our decision-making (as discussed above).

12.169 We do not consider there is a need to adopt a different IAR for fixed origination than the range described above. In particular, we note that there is less uncertainty about the likely range of fixed origination payments than for mobile. We therefore consider that the IAR for fixed origination charges should be between **0.3-0.6ppm** based on the cost modelling we present in Annex 26, as described above.

Principle 3: practicality

12.170 As discussed above, our interpretation of Principle 3 relates to whether any fixed and mobile origination payment falling within the ranges we have specified by our Base case scenario and IAR would be practical to implement. We outlined above that Principle 3 had potential relevance in relation to the ability of TCPs to identify whether a call was originated from a fixed line or a mobile, because our IARs implied there would be a separate (non-overlapping) charge for fixed and mobile calls. We believe this Principle is satisfied because we consider that TCPs will be able to identify if the party originating the call is a fixed or mobile CP using the CLI. In addition, they will have a commercial interest in ensuring that the OCP presents the information necessary for this purpose. This is discussed in more detail in Annex 27.

Conclusion

12.171 In light of the evidence considered under Principles 1 to 3 above, we believe that in the case of **fixed origination** it is appropriate to adopt the following:

- **Impact Assessment Range: 0.3-0.6ppm.**

12.172 In the case of **mobile origination** we believe it is appropriate to adopt the following:

- **Impact Assessment Range: 1.0-3.7ppm.**
- **Base case scenario range: 1.3-3.0ppm.**

12.173 For ease of reading, we refer here (and in the remainder of this Part C) to a base case scenario range for mobile origination payments of 1.3ppm to 3ppm. However, this should be read in light of the further explanation at paragraph 12.165 above.

12.174 We use these ranges to estimate the likely tariff package effect in Annex 28, to estimate the costs of migration in Annex 10 (Part A), as well as to inform our policy assessment in Section 13.

Application of the framework to 116 numbers using the evidence currently available

12.175 The purpose of our IAR is to provide an appropriate assumption about the likely level of origination payments for 080 and 116 calls in order to assess the impact of our proposal to make these number ranges free-to-caller. In the case of 080, our proposal would imply significant changes to the retail price of mobile 080 calls, which we would expect in turn to give rise to considerable changes in wholesale arrangements. In contrast, the three 116 numbers currently in use are already free-to-caller for both fixed and mobile calls, and so our proposal to make the 116 range free-to-caller would have no impact on the retail price of calls to these numbers. We therefore consider it is possible that origination payments for calls to 116 numbers could remain at their current commercially agreed levels following the implementation of our proposal, and include these charges within our IAR.

12.176 Nonetheless we recognise that some OCPs may use the change of regime as an opportunity to renegotiate existing charges for 116 calls - particularly given the historic link between 080 and 116 origination charges (which we describe in more detail below). We also recognise the possibility that the number of SPs on the 116 range may increase over time if use is made of the 116006 number allocated for victims of crime support and any future allocations of 116 numbers. The commercial agreements between these future users of 116 and OCPs may differ from existing arrangements, particularly for numbers which have already been or may have been designated as Freephone rather than free-to-caller under the status quo. In light of these possibilities, we consider it appropriate to derive an IAR for 116 origination payments which is wider than the current level of charges. In determining this IAR for 116 calls, we follow the same framework used for 080.

Principle 1: recovery of efficient costs of origination

12.177 Following the same reasoning discussed in the case of 080, we consider that the minimum level of costs that OCPs should have the opportunity to recover through origination charges should be determined by the minimum level that ensures that

OCPs have an incentive to supply origination- that is, the pure LRIC of origination. As in the case of 080, we do not consider it efficient for A&R costs to be recovered from origination charges to 116 free to caller numbers. This means that the upper bound of the range of costs that it is efficient to recover from origination charges in Principle 1 should be LRIC+ (with no allowance for A&R costs).

12.178 In line with our conclusion on 080, based on our cost modelling, the range of efficient costs relevant to recovery from fixed origination charges to a 116 free to caller number is between 0.0-0.6ppm, and 0.8-3.3ppm in the case of mobile origination. However, we note that Principle 1 requires that OCPs are not denied the opportunity of recovering this level of efficiently incurred cost. It is therefore open to OCPs to agree to a charge lower than this should they wish to do so (e.g. for reasons of social responsibility).

12.179 In this respect, we understand that origination payments for 116 calls are currently the same for both fixed and mobile, and are linked to fixed origination payments for 080 calls made prior to the introduction of tiered termination rates.¹²⁷ This suggests the average origination payment for 116 calls is likely to be similar to the average outpayment for 080 calls in 2009 that we obtained from the 2010 Flow of Funds study, namely, 0.5ppm. This implies that mobile OCPs are currently providing call origination to 116 number ranges at a price below our latest estimate of the mobile LRIC (i.e. 0.8-0.9ppm). We consider that this may be due to the specific features of the services offered on the 116 range, for example, their characterisation as services of social value.

12.180 As noted above, our proposal will have no impact on the retail price of calls to existing 116 numbers. It is therefore conceivable that mobile OCPs may choose to continue their current practice of charging below pure LRIC for originating 116 calls. As a result, we extend the range of payments derived under Principle 1 to include the current wholesale arrangements for mobile calls to 116 numbers.

Principle 2: benefit consumers and avoid material distortions of competition

12.181 We distinguish between the two analytical steps followed under Principle 2.

Step 1: Trade off between service availability and tariff package effect

12.182 In the April 2012 consultation we assumed that the origination payment for 116 numbers should only cover the incremental cost of mobile calls, mainly because:

- it is a range used to provide services of extreme social value and allocated by Ofcom; and
- some mobile CPs voluntarily choose not to charge for calls to certain helplines for social responsibility reasons (e.g. Childline, and members of The Helplines)

¹²⁷ There are currently three active SPs on the 116 range: “Missing People”, “Childline” and “Samaritans”. In BT’s Carrier Price List, origination charges for calls to 116 numbers are listed as follows for all operators (fixed and mobile CPs): 0.6481ppm for calls made during daytime, 0.2967ppm for evenings and 0.2336ppm for weekends (see BT Carrier Price List, section B3.54, available at: https://www.btwholesale.com/shared/document/CPL/SectionB3_Ancillary/b3_54.xls). These are the same as the origination payments that BT made for calls to 080 numbers for most of the year 2009 and before the introduction of tiered termination rates (see BT’s charge change notice NCCN 1007, available at https://www.btwholesale.com/shared/document/CPL/NCCN_2010_jan/nccn_1007a.xls).

Association) and they have historically not required any origination payments from these SPs.¹²⁸

12.183 Since the April 2012 consultation we have had several meetings with current and prospective SPs on the 116 range.¹²⁹ The main conclusion from these meetings has been that there are some SPs who are already facing financial difficulties in meeting the current level of hosting charges. In particular, we have evidence from Samaritans showing that as part of an internal project in 2011 they considered several measures to limit their expenditure on their free-to-caller 116 number, namely:

- routing to an automated message;
- limiting calls by time of day;
- withdrawing their 116 number;
- restricting callers to a maximum number of calls per month; and/or
- restricting the length of calls.¹³⁰

12.184 In the case of Samaritans, the evidence provided shows that they chose to restrict callers to a maximum of 100 calls per caller per month (later reduced to 50) to their number. The system they put in place operated in such a way that when the caller exceeded the maximum number of calls, the call was routed to an automated message asking them to redial another number. In addition, Samaritans provided evidence showing that they did not currently advertise their 116 123 number, in order to limit their mobile origination payments.

12.185 We are therefore concerned that any increase in the level of origination charges could have a significant negative impact on service availability on this range. This is of particular concern given the type of services being offered on 116.

12.186 The relatively low volume of calls to 116 means that, compared to 080, the impact on mobile and fixed CPs' incremental profits from agreeing origination charges equal to (or below) pure LRIC is likely to be very small.

12.187 We believe that the two additional factors discussed under Step 1 for 080 similarly apply in the case of 116. We consider that the asymmetric risk of the level of payments and the potential for a positive caller externality reinforce our conclusion that limiting the origination charges for calls to 116 as much as possible is appropriate to mitigate any impact on service availability.

12.188 We therefore consider that the above evidence suggests that from the application of Step 1 a maximum IAR equal to the pure LRIC for both fixed and mobile CPs would be appropriate for the 116 range, in order to mitigate the impact of any changes in origination charges on service availability. According to our cost modelling, the pure LRIC of fixed origination is 0.0-0.1ppm and that of mobile origination is 0.8-0.9ppm (as further discussed in Annex 26).

12.189 However, we recognise that current charges for both fixed and mobile calls to the three existing 116 numbers lie outside of the ranges implied by our estimates of pure

¹²⁸ See paragraph A27.30 of the April 2012 consultation.

¹²⁹ We met [redacted]; Samaritans on 17 October 2012 and Missing People on 23 October 2012.

¹³⁰ Email from Samaritans to Ofcom, dated 25 October 2011.

LRIC. We also recognise that our proposal to make the 116 range free-to-caller would have no impact on the retail price of calls to these numbers, and therefore that OCPs and TCPs may wish to continue their existing wholesale arrangements for these calls. As long as both fixed and mobile charges are maintained at current levels, average charges to SPs would remain the same and so there would be no impact on current levels of service availability. As a result, we also consider fixed and mobile origination charges both equal to current levels to be consistent with Step 1 and include this scenario within our IAR.

Step 2: Relative prices between fixed and mobile origination charges

12.190 If fixed and mobile origination charges are renegotiated and set at LRIC in line with Step 1 above, the concerns discussed under Step 2 in the case of 080 relating to differences in common cost recovery between fixed and mobile CPs would not apply as there would be no contribution to either fixed or mobile common costs.

12.191 If instead fixed and mobile origination charges are both maintained at current levels for existing 116 services, which we also find consistent with Step 1 above, there would obviously be a difference in the contribution made to fixed and common costs between fixed and mobile OCPs because fixed OCPs would continue charging above LRIC and mobile OCPs below. However, our concerns regarding this issue in relation to 080 arose from the fact that the origination payment for mobile calls could be significantly higher than for fixed calls, and that this could give rise to inefficient price signals to SPs about whether to engage in cost mitigating measures for mobile calls. If both fixed and mobile origination charges for 116 calls were maintained at current levels, then there would be no difference in the origination charge paid by an SP to receive a fixed or mobile call and this situation would obviously not arise. We also note that we do not consider that the current level of origination charges for 116 calls leads to any material distortion of competition between fixed and mobile OCPs given the low volumes and revenues associated with 116 calls. As a result, we do not consider that we should exclude the scenario in which existing wholesale arrangements for 116 are maintained from our IAR on the basis of Step 2.

Principle 3: practicality

12.192 If origination payments are maintained at their existing levels, this clearly satisfies Principle 3 as it must be practical to implement charges that are already in place.

12.193 If instead origination payments for 116 calls are renegotiated to reflect our estimates of pure LRIC, this would imply a different level of payment for each of fixed and mobile 116 calls. In this case, we consider that our conclusion for 080 under Principle 3 is equally relevant to 116; i.e. that it would be possible to distinguish between fixed and mobile originated calls if a separate charge for each were to be implemented.

12.194 We recognise that our proposed IARs imply significantly higher origination charges on 080 than on 116, despite the fact that both number ranges will be free-to-caller under our proposals. In the absence of other factors, having a significant difference in origination charges between the two number ranges may raise issues of practicality by encouraging migration from 080 to 116. However, we note that the current system applying to 116 numbers (whereby these are allocated by Ofcom under very strict conditions) means that the scope for arbitrage between 116 and 080 (e.g. to avoid higher origination charges on 080) is likely to be negligible in practice.

Conclusion

12.195 In light of the evidence considered under Principle 1 to 3 above, we consider it appropriate to assume that fixed and mobile origination charges for 116 calls will either both be maintained at existing levels or will be set at our estimates of pure LRIC.

12.196 For the purposes of clarity, we consider that there are two possible scenarios:

- origination payments reflect the current arrangements, whereby both the fixed and mobile origination payments are at 0.5ppm (below LRIC in the case of mobile and above pure LRIC in the case of fixed); or
- If any of the current arrangements are renegotiated, both the fixed and mobile origination payments reflect the pure LRIC costs in each case, namely:
 - 0.0-0.1ppm in the case of fixed origination; and
 - 0.8-0.9ppm in the case of mobile origination.

12.197 In response to the comments from EE and Vodafone (summarised in Annex 27), we disagree that our approach would result in under-recovery of their costs of originating calls to 116 numbers. We note that the application of the three Principles of our framework to the evidence currently available to us would give mobile OCPs the opportunity to recover costs equal to our estimate of pure LRIC for 116, thereby allowing for efficient cost recovery. However, we also consider the current charging arrangements involving a mobile origination payment below pure LRIC to be consistent with our Principles because these arrangements were commercially agreed between OCPs and TCPs, and we noted that under Principle 1 OCPs were free to choose a payment below pure LRIC if they wished. This does not mean that we would expect mobile OCPs to agree to a payment below pure LRIC, but rather that they may choose to do so.

12.198 We use the ranges described above to inform our policy assessment in Section 13.

Part C - Section 13

Assessment of 080 and 116 options

Introduction

- 13.1 In this section we set out the reasoning behind our provisional decision¹³¹ to set a maximum retail price of zero for consumer calls to the 080 and 116 ranges (a ‘free-to-caller’ approach). We consider that this will address the consumer harm and market failures we identified in Section 4. In reaching this provisional decision, we have also taken account of our policy preference for the 080 range.
- 13.2 Annex 29 contains a summary of the stakeholder responses we received to the April 2012 consultation on our preferred option for the 080 and 116 ranges, and the alternative options we considered. It also sets out our response to the points raised.
- 13.3 We set out below a summary of our concerns, our updated assessment and the decision we are minded to take. We do this first for the 080 range and then for the 116 range.

Ofcom’s policy preference for the 080 range

- 13.4 In the April 2012 consultation we highlighted that Ofcom (and Oftel before it) had historically had a policy preference for 080 numbers to be “free, or as close to free as possible”. We also noted that the original intention for the range was that it should be free-to-caller, which was reflected in Oftel documents dating from 1996.¹³²
- 13.5 In setting out our provisional view that the 080 range should be made genuinely free-to-caller, we noted in the April 2012 consultation that our view differed from Oftel’s 2001 determination that retail charges for calls to 080 numbers should be permitted (provided an announcement was made to the caller about the charges at the start of the call).¹³³ However, we set out a number of reasons why taking a different view to the Oftel determination was justified, in particular the increased reliance by consumers on mobile phones as their primary communication method, the evidence of consumer harm (discussed further below) and evidence that SPs on the range were willing to pay increased origination charges in order to guarantee free calls to their customers from mobile phones. Furthermore, we noted that making 080 free-to-caller was also in line with the original intention for the range.
- 13.6 Having considered the responses to our April 2012 consultation, we remain of the view that it is appropriate for us to have a policy preference that calls to 080 numbers should be free-to-caller. We also remain of the view that, to the extent this policy preference differs from Oftel’s view in 2001, this is justified by changes in circumstances during the intervening period (as described above) and that this policy preference brings the range back into line with the original intention behind its allocation and designation in the Numbering Plan.

¹³¹ As stated in Section 2 of this document, we are minded to make the 080 and 116 ranges free-to-caller. Our decision remains subject to final confirmation in light of some specific areas of further consultation which are listed in paragraphs 2.46 to 2.53.

¹³² See paragraphs 14.19 to 14.22 in Part C, Section 14 of the April 2012 consultation.

¹³³ See paragraphs 16.261 to 16.264 and Table 16.17 in Part C, Section 16 of the April 2012 consultation.

13.7 Notwithstanding this preference, we have also presented evidence of market failures and consumer harm arising from the current operation of the 080 number range, and consider that a free-to-caller approach is the most appropriate and proportionate means of addressing these harms. In order to reach this view, we have assessed the impact of a free-to-caller approach (as well as the alternative regulatory option we considered) by reference to a number of different criteria. We set out this assessment below, together with the detailed reasoning and evidence upon which we have relied. We have reached our provisional decision to make the 080 range free-to-caller as a result of this assessment, coupled with our policy preference.

Consumer harm and market failures on the 080 number range

13.8 We set out in Part A, Section 4 our view of the consumer harm and market failures that arise on the 080 number range. We identified the following three market failures:

- **lack of consumer price awareness;**
- **the vertical externality:** by this we mean that OCPs are not sufficiently motivated by the preferences of SPs on non-geographic numbers and therefore do not take into account the impact of their call pricing decisions on these SPs when setting their retail prices; and
- **the horizontal externality:** by this we mean that individual OCPs and SPs do not have an incentive to take into account the impact of their NGC pricing on the reputation/brand of the 080 number range, or on non-geographic numbers as a whole.

13.9 As set out in the April 2012 consultation and in Section 4, while the 080 number range is the most recognised and popular non-geographic number range¹³⁴, consumer confidence in the pricing of 080 calls is surprisingly low. There is clear evidence of consumer price confusion, even on fixed lines (despite the consistent pricing of 080 calls from fixed lines, i.e. they are always free). We consider that this suggests that the actions of mobile CPs with respect to retail prices for 080 calls is influencing consumer perceptions with respect to the prices for those calls from a fixed line (this is the horizontal externality effect). This confusion over the price of fixed calls to 080 numbers appears to be linked to consumers' expectations about the price of calls to other number ranges, including the 0870 and 0845 ranges. In addition, there is evidence that some consumers may be overestimating the price of 080 calls, and therefore they could be deterred from making 080 calls as a result.

13.10 The absence of a completely free-to-caller number range is a central example of the vertical externality problem. Evidence from our survey of SPs on the 080 range indicates that a significant proportion would like a genuinely free-to-caller number, however, the preferences of those SPs are not being met. This is because mobile OCPs do not have the incentives to take account of these SP preferences. Whilst a handful of SPs have been able to negotiate directly with mobile OCPs in order to obtain a free-to-caller 080 number, there is clear evidence of significant difficulties in that negotiation process, with high transaction costs and a negotiating power imbalance. It is therefore clear that SPs are denied a choice of a true free-to-caller service despite the willingness of some SPs to fund such a service.

¹³⁴ 080 has the highest volumes of calls of all the non-geographic number ranges. 2010 Flow of Funds study, p.44.

13.11 These market failures lead to a number of outcomes which have a harmful impact on consumers, these are:

- demand for 080 calls is suppressed;
- the prices of 080 calls (specifically 080 mobile calls) are not set at efficient levels;
- SPs may be prevented from providing certain services on the 080 number range, and may not have sufficient incentives to invest in service availability and innovation; and
- loss of access to socially important services on the 080 number range, particularly for vulnerable customers.

13.12 We therefore consider that there is significant evidence of consumer detriment in relation to the 080 number range which warrants our intervention. Section 4 and Annex 8 in Part A set out the evidence supporting our conclusions in this respect.

13.13 Our policy objective is therefore to address these market failures and develop a structure which protects consumers from the harm we have identified. We have set out below our updated assessment of the options for achieving this and the decision that we are minded to take, based on that assessment.

Assessment of the options for the 080 range

Approach in the April 2012 consultation

13.14 We consulted on and assessed two options in the April 2012 consultation:

- **Option 1: free-to caller:** set a maximum price of zero that applies to all OCPs; and
- **Option 2: Maximum Mobile Price ('MMP'):** set a maximum price of zero for all fixed calls, and a maximum price above zero for mobile calls to 080 numbers.

13.15 In the April 2012 consultation, we did not differentiate between consumer and business calls to 080 numbers and assumed that each Option would apply in respect of both types of call. We assessed these options against the status quo.¹³⁵ We also considered some alternative approaches put forward by stakeholders, such as intervention only at the wholesale level and an extension of the approach taken by the DWP with its 080 helplines.¹³⁶ However, we proposed to reject these alternative options on the basis that they would not be sufficient to address the concerns we had identified.¹³⁷

¹³⁵ We rejected the status quo as an option in the April 2012 consultation, noting that given the evidence of consumer harm it was not an appropriate option (see paragraph 16.48 in Part C, Section 16 of the April 2012 consultation).

¹³⁶ The DWP negotiated directly with some mobile OCPs to ensure the zero-rating of its 080 helplines (see paragraph 11.15 for further details of this arrangement). Some stakeholders suggested that this approach could be expanded so that SPs that had a particular need or desire for their service to be free-to-caller could enter into commercial arrangements with mobile OCPs.

¹³⁷ See paragraphs 16.19 to 16.44 of the April 2012 consultation (Part C, Section 16) for our assessment of the alternative options. Some stakeholders continue to argue in favour of these alternative options. We have responded to these arguments in Annex 29.

- 13.16 We carried out a qualitative assessment of the potential benefits and costs of each of the two consultation options using our assessment criteria.¹³⁸ On the basis of that assessment our provisional view was that Option 1 would best address the consumer detriment identified in relation to 080 calls. We recognised that this option would result in significant additional costs for SPs and was likely to result in some migration by SPs away from the 080 number range. However, we considered that the costs would be outweighed by benefits to SPs and consumers of making the 080 range free-to-caller. In particular, we considered that Option 1 would have the greatest impact on consumer price awareness. We recognised that SPs on 080 had diverse preferences, but noted that more preferred the free-to-caller option as opposed to setting a MMP.
- 13.17 Our preferred approach in the April 2012 consultation was to make the 080 range free-to-caller.

Stakeholder responses and updated analysis of the 080 options

- 13.18 Nearly all respondents to the April 2012 consultation supported our preferred approach of making the 080 range free-to-caller. These respondents included the majority of fixed CPs that responded¹³⁹, two mobile OCPs¹⁴⁰, several consumer groups¹⁴¹, SPs (or their representative groups),¹⁴² and several individual respondents. Some of these stakeholders indicated, however, that their support was dependent on the way in which the free-to-caller approach was implemented (in particular the level of the mobile origination charge and the regulation of those charges).¹⁴³
- 13.19 EE and Virgin Media were the only respondents that were opposed to making the 080 range free-to-caller. They continued to argue that alternative, less interventionist, options were more appropriate. EE in particular challenged the proportionality of the free-to-caller approach and Virgin Media argued that we had not sufficiently taken into account the negative consequences. Furthermore EE argued that, if intervention was required, then MMP would be the more effective approach on the 080 range for addressing the consumer harm (along with designating 0500 as the free-to-caller range).¹⁴⁴
- 13.20 EE also noted that we had not conducted a quantitative assessment of the costs and benefits of our proposals for the 080 range. It said it found our reasons for doing so ‘unconvincing’, and our failure to do so was evidence that our proposals did not meet the mandatory statutory requirements of being necessary and proportionate for the protection of consumers.
- 13.21 We have responded to stakeholder comments on our analysis of these options in more detail in Annex 29 and take these comments into account in our analysis in the remainder of this section. In summary, we remain of the view that the alternative options put forward by these stakeholders do not adequately address our concerns

¹³⁸ These criteria are set out in Section 3.

¹³⁹ Including BT, CWW, FCS, [X], Magrathea, Sky, Scottish and Southern Energy (‘SSE’), TalkTalk, UKCTA and Verizon,

¹⁴⁰ Vodafone and Three.

¹⁴¹ Including the Citizens Advice Bureau (‘CAB’), Consumer Focus, the Communications Consumer Panel and the Fair Telecoms Campaign.

¹⁴² Including Action4, the Direct Marketing Association, the DWP, National Grid, Northern Gas Networks and the Helplines Association (‘THA’).

¹⁴³ We discuss these issues in Sections 12 and 14 respectively.

¹⁴⁴ Annex 29 sets out EE’s and Virgin’s comments, as well as our response, in more detail.

and that a free-to-caller approach is proportionate in light of our objectives (described above). Our updated impact assessment now quantifies a number of costs that were not included in our April 2012 consultation – see Annex 10. However, we continue to consider it more appropriate to assess the benefits of making the 080 range free-to-caller in a qualitative manner, rather than by applying the quantitative framework that we have used to evaluate the unbundled tariff – see Annex 11.

13.22 Below, we set out our analysis of the free-to-caller and MMP options against each of our assessment criteria, and summarise the evidence which supports our assessment.¹⁴⁵ We have also updated certain parts of our analysis, in light of stakeholder comments in response to the April 2012 consultation, which affect our assessment of the options for 080. In particular:

- as already explained in Section 12, we have revised our impact assessment range ('IAR') for the level of fixed and mobile origination charges which we assume in order to assess the impact of making the 080 range free-to-caller;
- the revisions to the IAR have also led us to revise our assessment of the potential tariff package effect ('TPE') that would result from making the 080 range free-to-caller, as well as the costs to SPs resulting from increases in their origination charges (see Annex 28 where we set out this assessment) and the impact this may have on service availability;
- as noted above, we have updated our cost estimates for implementing a free-to-caller approach. In particular, as well as updating our migration cost estimates, we have now set out estimates for communication costs, misdialling costs and billing costs. See Annex 10 for details of these estimates; and
- in light of stakeholder comments, we now consider that both the free-to-caller and MMP approaches should only apply to calls made by consumers to 080 numbers. By "consumer" we mean a natural person who uses the service for purposes which are outside his or her trade, business or profession (i.e. it does not include business callers). This is a consequence of our legal powers to impose maximum prices and is explained in more detail in Section 5 and Annex 13. Where we refer to 'free-to-caller' or 'MMP' in the remainder of this section, we therefore mean the options described at paragraph 13.14 above, but applied only to calls made by consumers to 080 numbers.

13.23 In the next sub-section, we assess Option 1 – free to caller against our assessment criteria. We then assess Option 2 – MMP against the same criteria. We then set out our overall assessment in relation to the 080 range.

Assessment of Option 1: free-to-caller

Assumptions used for the assessment of Option 1

13.24 In the April 2012 consultation we set out certain assumptions which we had made in order to analyse the impact of a free-to-caller option. As noted above, we have updated some of these assumptions since the April 2012 consultation and summarise our revised assumptions below.

¹⁴⁵ We frequently refer to the December 2010 consultation, the April 2012 consultation and accompanying surveys or research for full details of the evidence upon which we rely.

Impact Assessment Range ('IAR')

- 13.25 If the 080 range is made free-to-caller, then origination charges for calls to 080 numbers may also be subject to change. In order to assess the impact of making the 080 range free-to-caller on CPs, SPs and callers, we therefore need to make assumptions about the likely level of mobile and fixed origination charges that would apply under this option. For the purposes of our assessment we have assumed two ranges for mobile origination payments. As explained in Section 12, our base case scenario range is derived by applying our framework for assessing origination charges to the evidence currently available to us. This results in a range of mobile origination payments between 1.3ppm and 3ppm, although we note there are some parts of this range which apply only in conjunction with certain other assumptions. In particular, our base case scenario range excludes any combinations of assumptions which are inconsistent with what we consider to be an appropriate average SP cost. As noted in Section 12, we place less weight on the extreme ends of the range (e.g. below 1.5ppm or above 2.5ppm) because we would consider these payments fair and reasonable in a more restrictive set of circumstances than we would payments closer to the middle of our base case range.
- 13.26 Our base case scenario range is also reflected in the consultation (also published today) on our draft guidance as to how we would resolve any future dispute about whether origination charges are fair and reasonable. We think that mobile origination payments are most likely to fall within our base case scenario range. However, we have also assumed a wider IAR of between 1.0ppm to 3.7ppm for mobile origination payments, which includes those scenarios not considered within our base case scenario range. We consider it very unlikely that mobile origination payments will fall within this wider IAR because of the requirement that origination charges be fair and reasonable and our proposed guidance on how we would approach any dispute about fair and reasonable charges. In conducting our impact assessment, we therefore place most weight on costs and benefits associated with a mobile origination payment within our base case scenario range, and consider the costs and benefits associated with payments within our wider IAR for the purposes of robustness only.
- 13.27 The fixed origination charge we have assumed for the purposes of our impact assessment is 0.3 to 0.6ppm. Section 12 set out the methodology we have used to derive these assumptions and explains any differences from the assumptions we made about origination charges in the April 2012 consultation. Stakeholder comments in relation to our impact assessment ranges for origination charges are addressed in detail in Annex 27.

Impact on demand (fixed to mobile substitution)

- 13.28 We explained in the April 2012 consultation that fixed to mobile substitution was likely under the free-to-caller option. We explained that it would be reasonable to assume that between 40% and 50% of 080 call minutes would be originated from mobiles, in the medium term, if 080 were made free-to-caller.¹⁴⁶
- 13.29 We now consider that the share of 080 calls originated from mobile is likely to be slightly higher. For the purposes of our assessment we now assume that the share of 080 calls originated from mobile is likely, over time, to reach 45% to 60%. This is explained in more detail in Section 12. Substitution is likely to bring some

¹⁴⁶ Compared to 5% of 080 calls being originated from mobiles in 2009. 2010 Flow of Funds study, p.6.

convenience benefits to callers (as a caller presumably uses their mobile rather than a fixed line to make a call because it is more convenient). On the other hand, SPs may not benefit if they are indifferent to the device used to originate a call and would face higher mobile origination payments.¹⁴⁷ Substitution also benefits mobile OCPs at the expense of fixed OCPs.

Impact on demand (overall demand)

13.30 We believe that an increase in overall demand from making the 080 range free-to-caller is likely to benefit callers, SPs, OCPs and TCPs. We stated in the April 2012 consultation that we would expect an increase in overall demand for two reasons:

- because of improved consumer price awareness (including greater certainty and confidence in the price of 080 calls); and
- from lower actual mobile call prices.

13.31 One stakeholder (EE) argued that we had not provided evidence that making 080 free-to-caller would increase overall demand. We have responded to these arguments in Annex 8 in Part A. We have set out evidence of how demand for 080 calls is currently suppressed by a lack of consumer confidence in 080 prices in Section 4 of Part A. In light of this evidence, we remain of the view that whilst it is difficult to predict the exact impact of making 080 free-to-caller on overall demand, it is likely that greater consumer confidence in call prices, as well as lower actual call prices from mobiles, will create an increase in demand.

13.32 It is, however, worth highlighting that we have not assumed an increase in demand for 080 calls in all parts of our assessment. In our estimates of the potential TPE that we use in this impact assessment, we have assumed that demand is static. This has been done primarily for the purposes of simplicity, because, as noted above, it is difficult to predict with accuracy the actual extent of the likely increase in demand. It is also a conservative assumption because it is likely to overstate the costs (and understate the benefits) to both fixed and mobile OCPs.¹⁴⁸

13.33 We discuss in more detail below how making the 080 range free-to-caller will improve consumer price awareness thereby leading to increased demand.¹⁴⁹

Assessment against criteria

13.34 As in the April 2012 consultation, we have assessed the free-to-caller option against the following criteria:

- consumer price awareness;
- efficient prices;
- service quality, variety and innovation;

¹⁴⁷ We recognise this may not be the case for all SPs as some may use specific numbers to target mobile callers.

¹⁴⁸ We note that in Annex 28, we have considered scenarios where overall demand increases- albeit by a small amount. These scenarios are not discussed in this section, but have no material impact on the TPE due to the scale of demand increase assumed.

¹⁴⁹ See the sub-section below headed 'consumer price awareness'.

- access socially important services; and
- regulatory burden.¹⁵⁰

13.35 Annex 29 sets out in more detail how we assessed these criteria in the April 2012 consultation, stakeholder comments on our assessment and our response to those comments. The following paragraphs summarise our conclusions having taken account of the full range of evidence presented in the April 2012 consultation,¹⁵¹ stakeholder comments and any further analysis we have carried out in light of those comments. However, reference should be made to Annex 29 and the relevant sections of the April 2012 consultation for the evidence and analysis which supports these conclusions.

13.36 The analysis in the paragraphs below summarises our impact assessment of making the 080 range free-to-caller but this is supported by other sections and Annexes, including the previous section, Annex 26 on the cost of originating calls and Annex 28 on the tariff package effect. In addition, as discussed in more detail in paragraph 13.135 below (and in Annex 11) we have not carried out a quantified assessment of the benefits of making 080 free-to-caller but have instead set out these benefits qualitatively in our assessment in this Section. We weigh these benefits against our estimates of the costs (which we quantified in Annex 10) to arrive at our preferred policy option.

Consumer price awareness

13.37 In response to the April 2012 consultation, the majority of stakeholders supported our view that making the 080 range free-to-caller would improve consumer price awareness, in particular noting the benefits of its clearer pricing message. EE, however, disagreed. It questioned whether price awareness of 080 was in fact poor and considered that other, less interventionist means would achieve similar improvements in price awareness. We have responded to EE's comments in more detail in Annex 29. In summary, we remain of the view that consumers are confused about the price of calling 080 numbers and that some consumers overestimate the price of these calls. As noted above, in Section 4 we set out the evidence that supports our view.

13.38 We consider that making the 080 range free-to-caller is the most effective means of addressing the issues of consumer price awareness on the 080 range. In particular:

- **SPs will be able to advertise a clear pricing message:** unlike currently, SPs will be able to state in their advertising to consumers that their 080 number is 'free' (and that will apply from both fixed and mobile lines). Most consumers are likely to obtain non-geographic numbers from sources which allow the free-to-caller message to be presented alongside the number being dialled, meaning those consumers will be aware that calls are free at the point of call.¹⁵² This will

¹⁵⁰ We asked for stakeholders views on the appropriateness of these criteria in the December 2010 consultation (see question Q2.3, and in particular Annex 1). We set out stakeholder comments made in response to this question in Part A, Section 5 of the April 2012 consultation (see paragraphs 5.86 to 5.115). Whilst some stakeholders commented on specific aspects of the criteria, including how they were applied, none indicated that they were inappropriate as a basis for an assessment of the options for regulating non-geographic calls.

¹⁵¹ See the April 2012 consultation, Part C, Section 16, paragraphs 16.94 to 16.209.

¹⁵² 2011 Consumer survey, question GL14. 65% of callers obtained the telephone number for the last company or publication organisation they called from at least one of the following sources: the

promote greater certainty and confidence in 080 call prices by consumers. The 2011 Experimental research found that providing participants with the exact price at the point of call led to the best call decisions;¹⁵³ and

- **‘free’ is the simplest price point:** this simplicity means it will be easy for consumers to learn and remember (as well as being easy for OCPs and SPs to communicate). Therefore, even where consumers do not have a pricing message in front of them for a particular 080 number, the consistency and intuitive simplicity of the ‘free’ price point will assist callers in learning that 080 calls are always free, for example they may remember having seen another 080 number advertised as ‘free’. In addition there will be a number of other ways in which the 080 is free-to-caller message will be reinforced, for example:
 - it will be in the interests of mobile OCPs to promote that 080 calls are free-to-caller (because it will encourage the increase in volumes of mobile 080 calls);
 - we expect the positive message that 080 is free-to-caller will form a central part of Ofcom’s general communication activities (see Section 5 for further details); and
 - a free-to-caller number associated with the 080 prefix is consistent with the practice in many other countries.¹⁵⁴ Indeed, there is evidence which suggests that other countries who have implemented a genuinely free-to-caller model also have high consumer understanding of the system.¹⁵⁵

13.39 We therefore consider that making 080 free-to-caller will significantly improve consumer price awareness and act to protect consumers from the harm currently arising from the confusion and lack of confidence in 080 call prices. In the April 2012 consultation we said that we considered this option would offer the greatest benefits in terms of consumer price awareness, and we therefore gave particular weight to this benefit in assessing this option.¹⁵⁶ We still consider this to be the case. In addition, we consider there are wider benefits to consumer confidence from making 080 free-to-caller, extending beyond improved confidence in the price of calls to 080 numbers alone. In particular, given the high profile nature of 080, we expect this change to contribute significantly to efforts to increase consumer confidence in non-geographic numbers generally.

Efficient prices

13.40 We consider that making the 080 range free-to-caller will lead to more efficient prices than the status quo. We recognise, nevertheless, that we cannot be certain that it will lead to the *most* efficient pattern of prices.

13.41 Making the 080 range free-to-caller will help address the negative externalities we have identified (and these externalities are one reason why prices are currently inefficient). It will:

internet; a letter, bill or leaflet from the company being called; a written advertisement; or an advert on the TV or radio.

¹⁵³ Specifically ‘treatment 2’ in that research (where there was no unbundling of call charges and participants were told the price at the point of call) led to the highest percentage of correct call decisions. 2011 Experimental Research, Table 9 on page 13.

¹⁵⁴ See Table 6.5, p.48, Section 16 in Part C of the April 2012 consultation.

¹⁵⁵ 2011 International study, p.23

¹⁵⁶ See paragraph 16.111 in Section 16, Part C of the April 2012 consultation.

- **reduce the effect of the vertical externality:** making the 080 range free-to-caller will enable SPs who want a free-to-caller 080 number to obtain and advertise such a number (currently, OCPs have limited incentives to take the preferences of these SPs into account). This will offer significant benefits given that a significant proportion of SPs would like to have a free-to-caller number range.¹⁵⁷ As noted earlier, SPs that would prefer a free-to-caller number are currently unable to offer (or face significant barriers in offering) one to their customers and this is a primary example of the vertical externality which would be addressed by making the 080 range free-to-caller;
- **address the effect of the horizontal externality:** making the 080 range free-to-caller will align 080 mobile prices with the 080 brand intention (i.e. a ‘free’ number range) and will allow SPs to advertise a single pricing message to consumers of ‘free’ across all OCPs, and fixed and mobile calls. This strengthening of the 080 brand, and also improvements in consumer price awareness from a simpler pricing message of ‘free’ 080 mobile calls, means consumer perceptions of the prices of 080 fixed calls are also likely to improve.¹⁵⁸

13.42 We consider that by, helping to address these negative externalities, making the 080 range free-to-caller will enable 080 prices to better reflect consumer preferences compared to the status quo.

13.43 In assessing whether making the 080 range free-to-caller will result in efficient prices, we also need to consider to what extent it is likely to lead to a rebalancing of call charges (i.e. the price for other types of calls could increase as a result of a reduction in revenues from 080 calls). We refer to this as the tariff package effect (‘TPE’). We have updated our TPE assessment in Annex 28 and we have set out a summary of the results in the Tables below. The figures coloured in red relate to our estimates of the TPE assuming origination payments within our Base case scenario range, whereas those in purple relate to the wider IAR.

¹⁵⁷ See paragraph 13.58 below where we set out evidence of SP’s preferences in this respect.

¹⁵⁸ As set out in Part A, Section 4 consumer understanding of mobile charging for 080 calls has led to confusion about the price of fixed 080 calls, which is supported by the evidence of a correlation between callers’ expectations of fixed and mobile 080 calls. In addition this confusion about the price of fixed 080 calls appears to be linked to consumer expectations of the price of calls to other number ranges, including 0845 and 0870. In particular see paragraph 4.15 in Section 4.

Table 13.1: Impact on mobile OCP profits from 080 of making 080 free-to-caller (compared to the status quo)¹⁵⁹

Mobile origination payment	Proportion of 080 calls originated from mobiles	
	45%	60%
1.0ppm	-£39m	-£37m
1.5ppm	-£24m	-£17m
2.5ppm	+£6m	+£22m ¹⁶⁰
3.7ppm	+£42m	+£70m

Note: Based on 2010 Flow of Funds data

Table 13.2: Impact on fixed OCPs profits from 080 of making 080 free-to-caller (compared to the status quo)

Fixed origination payment	Change in overall 080 call volumes	45% of 080 calls originated from mobiles	60% of 080 calls originated from mobiles
0.3ppm	0%	-£22m	-£25m
	5%	-£22m	-£24m
0.6ppm	0%	-£11m	-£17m
	5%	-£10m	-£16m

Note: Based on 2010 Flow of Funds data

13.44 The first table indicates that there could be a negative impact on mobile 080 profits as a result of making the 080 range free-to-caller, particularly at the lower end of our IAR. As set out in Annex 28, we expect a significant proportion of any reduction in mobile 080 profits will be passed through to callers in the form of higher prices for other mobile services via the TPE. We note that our estimates in all scenarios are likely to overstate the impact of any adverse TPE on callers (and understate the impact of any positive TPE on callers) because the calculations assume there is no overall increase in demand resulting from making 080 free-to-caller. As set out in paragraphs 13.30 – 13.33 above, we consider that some increase in demand is likely as a result of improved consumer confidence in prices. As such, we consider it likely that the actual impact on mobile 080 profits, and therefore on the TPE, would be more favourable than is suggested by the numbers in the table. We also note that the numbers below will overstate the impact of any TPE on callers (positive or negative)

¹⁵⁹ This assessment is made relative to the status quo and assuming no change in overall call volumes.

¹⁶⁰ For the avoidance of doubt, we note that this estimate is outside the Base case scenario range as it assumes a fixed origination payment equal to 0.6ppm, which combined with a mobile origination payment of 2.5ppm and a share of calls originated from mobile equal to 60% results in an average SP outpayment exceeding 1.5ppm. We do not consider this scenario to lie within our Base case scenario range for the reasons discussed in section 12. However, we do consider it for reasons of robustness as part of our wider IAR.

because we consider that the TPE is unlikely to be complete (i.e. 100%).¹⁶¹ This will have the effect of overstating the harm to callers from a negative TPE but also the benefits to callers from a positive TPE.

- 13.45 For most of the scenarios considered within our IAR, the estimated impact is relatively small and indeed could potentially be positive (if the mobile origination payment is at the upper end of our IAR and a greater proportion of 080 calls are originated from mobile). Our base case range suggests the TPE is most likely to be between -£24m and +£21m for mobile callers (as further discussed in Annex 28).
- 13.46 We recognise that the more pessimistic scenarios considered above are not insignificant amounts, but note that even the most pessimistic of these is nonetheless a small proportion of overall mobile OCP revenues.¹⁶² Furthermore, we only predict a negative impact of this magnitude when mobile origination payments are the bottom of our IAR. As discussed in Section 12, within our base case range we place less emphasis on payments at the extreme ends of the range (e.g. below 1.5ppm or above 2.5ppm) because we would only consider these charges fair and reasonable in a more limited set of circumstances. We are even less likely to consider payments below our base case range and within our wider IAR (i.e. 1ppm to 1.3ppm) to be fair and reasonable, given our proposed guidance and currently available evidence. See Section 12 for more detail on this point.
- 13.47 The second table indicates, as we noted in the April 2012 consultation, that because of the likely decrease in 080 fixed call volumes (due to fixed to mobile substitution) there is likely to be a negative impact on fixed 080 profits, which we consider likely to result in a negative TPE for fixed callers.¹⁶³ We estimate the negative TPE faced by fixed callers could lie between £10m and £25m depending on the extent of fixed-mobile substitution and the fixed origination payment, which we note is relatively small in the context of overall fixed OCP revenues.¹⁶⁴
- 13.48 With respect to the question of whether any rebalancing of prices will reflect consumer preferences, we noted in the April 2012 consultation that the results of our 2010 Consumer survey (which tried to ask consumers about their preferences in this respect) did not seem to provide reliable evidence on consumers' attitudes to the price structure effect.¹⁶⁵ Some stakeholders (e.g. EE) have continued to argue that we should take into account the 2010 Consumer survey evidence, because they consider it indicates that consumers are unlikely to prefer the rebalancing of retail prices that would occur via the TPE if the 080 range is made free-to-caller. We have responded to these arguments in more detail in Annex 29.

¹⁶¹ This means that if (for example) mobile OCPs receive £1m less (say) from higher origination payments then the retail price of other telecoms services is likely to increase by less than £1m

¹⁶² In 2012 mobile retail revenues were £15.1bn (Figure 5.1, Ofcom 2012 CMR, p.281). The 2010 Flow of Funds study indicates that mobile retail revenues from non-geographic calls in 2009 were £610m (p.9).

¹⁶³ Note that because of revisions to our volume assumptions and to our IAR for fixed origination charges, our estimates of the impact on fixed OCPs profits have changed compared to those we set out in the April 2012 consultation, where we set out a range of -£14m to -£20m (Table 16.7, p.55 in Section 16, Part C of the April 2012 consultation).

¹⁶⁴ In 2012 fixed access and call revenues were £8.9bn (Figure 5.1, Ofcom 2012 CMR, p.281). The 2010 Flow of Funds study indicates that fixed retail revenues from non-geographic calls in 2009 were £1255m (p.9).

¹⁶⁵ See paragraphs 16.125 to 16.132 in Section 16, Part C of the April 2012 consultation. In particular we considered that the phrasing of Q39 in that survey made it difficult for respondents to think about the pros and cons of the price structure effect (i.e. the structure of prices where the total amount that a consumer pays each month is unchanged).

- 13.49 In summary, we recognise that it is difficult to precisely ascertain the importance which consumers attach to rebalancing the relative prices of 080 mobile calls and other call prices. However, as indicated in the paragraphs above, we consider that the impact on both fixed and mobile callers via the TPE is likely to be relatively small compared to the overall revenues in each market (although the more relevant comparison for this impact assessment is with the benefits from making 080 free-to-caller).
- 13.50 In any case, as noted in the April 2012 consultation, we consider the existence of any TPE is not necessarily undesirable in the context of making the 080 range free-to-caller. We have set out evidence which demonstrates that, because of consumer confusion about prices, there are currently weaker constraints on the price of mobile 080 calls than on other, more visible, elements of consumers' retail packages.¹⁶⁶ This means that current mobile 080 prices are likely to be inefficient and are unlikely to reflect consumer preferences. As a result, at least some rebalancing of prices between mobile 080 calls and other mobile services is likely to be beneficial.
- 13.51 We consider that making the 080 range free-to-caller will better reflect consumer preferences than the status quo, by bringing mobile prices closer to an efficient level. There is evidence to indicate that it would result in a more efficient structure of prices than is currently observed:
- first, the price of mobile 080 calls will be significantly closer to any reasonable estimate of the cost of originating an 080 call from a mobile than they are under the status quo. We estimated the average retail price of a mobile 080 call to be 14.1ppm in 2009, according to data from the 2010 Flow of Funds study.¹⁶⁷ This is significantly further from any of our reasonable estimates of underlying cost of originating an 080 call, which range from 0.8-0.9ppm – 5.5ppm¹⁶⁸, than a retail price of zero;
 - second, we note that the balance of fixed to mobile calls on 080 is different from the balance for other NGCs, and significantly different from the balance for other call types.¹⁶⁹ We have previously set out evidence which illustrates that where 080 calls have been made genuinely free-to-caller, a large proportion of consumers have switched from making fixed calls to mobile calls.¹⁷⁰ This is likely to be because consumers may often value a mobile call more highly than they do a fixed line call (for example, because of the additional convenience offered by mobile);

¹⁶⁶ See Section 4 for details of this evidence, in particular paragraph 4.38.

¹⁶⁷ 2010 Flow of Funds study, p.44.

¹⁶⁸ See Annex 26. We note the upper bound relates to the costs of originating a 080 call under MMP rather than free-to-caller because average mobile OCP retail prices are currently non-zero and therefore incur the additional costs associated with billing and bad debt of originating a call under MMP.

¹⁶⁹ In particular in 2009 only 5% of 080 calls were originated from a mobile, compared to 11% of all NGCs. 2010 Flow of Funds study, p.6. In addition, in 2011, 52% of call voice calls (49% in 2009) were made from mobiles. Ofcom, 2012 CMR, p.14.

¹⁷⁰ In particular, call volume data from the DWP indicates that when their 080 helplines were made free-to-caller from mobiles, the proportion of mobile calls rose from around 7% to 40-45% within 12 months. See paragraphs 16.84 to 16.86 in Section 16, Part C of the April 2012 consultation. In addition we discuss this evidence in further detail in Section 12.

- third, as noted above, a significant proportion of SPs would like to obtain and advertise a free to caller 080 number.¹⁷¹ SPs' preferences are likely to be largely a function of their callers' demand for 080 calls, which suggests many consumers may prefer free 080 calls from their mobiles. However, we recognise that SP demand is not informative about consumers' preferences for the price of 080 calls relative to other mobile services, so we put less weight on this factor in our assessment of efficient prices; and
- finally we note that most stakeholders, including all of the consumer groups who responded to this consultation, were strongly in favour of making the 080 range free-to-caller. As these respondents were representing the interests of consumers, we consider this is supportive of our view that the balance of prices under a free-to-caller approach will be more closely aligned with consumer preferences than the status quo.

13.52 Some stakeholders (EE and Virgin Media) are concerned that the fixed-to-mobile substitution that is likely to occur as a result of making the 080 range free-to-caller will be inefficient as callers will not receive a price signal which reflects the additional costs of originating mobile calls (compared to the costs of originating fixed calls). We have responded to these comments in more detail in Annex 29. We recognise that making the 080 range free-to-caller does not provide this price signal and therefore may result in some callers using their mobile phones too frequently (rather than their fixed lines). We have calculated the possible upper bound of the level of this inefficiency to be between £21m and £32m. These calculations are explained in more detail in Annex 29. In particular, we note that these figures will overstate the level of inefficiency (for the reasons explained in that Annex) and we expect the actual level of inefficiency to be significantly lower.¹⁷²

13.53 However, we consider the efficiency impact of setting both mobile and fixed prices to zero will be limited by the fact that the difference in incremental resource cost of originating fixed and mobile 080 calls is relatively small - approximately 0.7 to 0.8ppm according to our estimates (see Annex 26).¹⁷³ This is in contrast to the gap between fixed and mobile prices, which is significantly larger than the difference in resource costs – the average retail charge for mobile calls in 2009 was 14.5ppm (compared to zero for fixed line calls).¹⁷⁴ As a result whilst we accept that the mix of calls arising under a free-to-caller approach may not be at the *most* allocatively efficient level, we consider that it is likely to be an improvement compared to the status quo. Indeed we consider that the overall impact of this fixed to mobile substitution could be beneficial for consumers, because it will lead to some consumers choosing the 'wrong' device less frequently, i.e. they will benefit from calling 080 numbers from their mobiles more often, because this is more convenient for them.

13.54 In summary, we consider that making 080 free-to-caller will lead to a more efficient pattern of prices than is currently the case- particularly for mobile origination payments within our base case scenario. For mobile origination payments below this

¹⁷¹ For example, in our 2011 SP survey, 72% of SPs said that mobile callers not paying for calls to 080 would be important to their organisation (Q11). See also the evidence set out in paragraph 13.58 below.

¹⁷² In addition we consider that this cost will be built in to some extent because SPs will take it into account in deciding what type of service or interaction they want to have with their customers who use 080 numbers. Some SPs may make the calculation that it will internalise that inefficiency cost because the value to them of offering their customers ease of contact is greater.

¹⁷³ We calculate the LRIC cost of fixed to be between 0-0.1ppm and for mobile as 0.8 to 0.9ppm, therefore the difference is 0.7 to 0.8ppm.

¹⁷⁴ 2010 Flow of Funds study, p.44.

level and towards the lower end of the IAR, we still consider the benefits to pricing efficiency from addressing the vertical and horizontal externalities would be significant and would represent an improvement in pricing efficiency over the status quo. Nonetheless we do recognise there would be a more material mobile TPE in these scenarios and take this into account in our overall assessment of the free-to-caller option below.

Service quality, variety and innovation

13.55 As noted above, making the 080 range free-to-caller will increase consumer price awareness and confidence and also provide a ‘free’ retail price point for both consumers and the significant proportion of SPs who are willing to pay for a free-to-caller number. These effects are likely to have a positive effect on service quality, variety and innovation on 080 number range in the following ways:

- **better price awareness and lower mobile 080 call prices are likely to increase demand:** we set out evidence above that supports our expectation that overall demand for 080 calls would increase if the 080 range was made free-to-caller. This would be likely to increase the attractiveness of the number range to SPs, encouraging SPs to open new services on the range and to invest more in existing 080 services with a positive effect on service availability;
- **improved consumer confidence in using 080 numbers will improve the brand reputation of the number range:** we anticipate that consumer price awareness will be considerably improved if the 080 range is made free-to-caller, with the result that consumers will be more aware that calls are free and have more confidence in the number range as a result. We consider this is likely to mean that 080 numbers are better regarded by callers, which in turn is likely to make it more attractive for SPs to use them. As with increased demand for 080 calls, improving the reputation of the 080 number range with callers is likely to encourage SPs to invest in service quality and availability on the range;
- **widen the potential for SPs to adopt innovative business models:** while it is difficult to predict with certainty the scale and type of services which may become available if the 080 range is made free-to-caller, we consider it likely that innovative services may develop (e.g. certain services which are dependent on callers not being charged such as reverse-charge services or services funded by advertising revenue rather than revenue share).¹⁷⁵

13.56 On the other hand, a consequence of making the 080 range free-to-caller is that SPs currently active on this number range would be likely to face an increase in mobile origination charges, which is likely to have a negative effect on service availability. We have set out our updated estimates of the likely cost impacts on 080 SPs below. We provide cost estimates using both our base case scenario range for mobile origination charges and our wider IAR.

¹⁷⁵ In Annex 11, Part A of the April 2012 consultation we set out some examples where innovative services may have been stifled by the current NGC system. This included Freephone services.

Table 13.3: Making 080 free-to-caller impact on SP costs (using the base case – estimates marked in red - and IAR)

Mobile origination payment	Proportion of mobile 080 calls	
	45%	60%
1.0ppm	+£5m (+7%)	+£20m (+28%)
1.5ppm	+£20m (+28%)	+£39m (+56%)
2.5ppm	+£49m (+70%)	+£79m (+112%) ¹⁷⁶
3.7ppm	+£85m (+120%)	+£127m (+179%)

13.57 In the April 2012 consultation, we estimated that the costs to SPs of making the 080 range free-to-caller were likely to lie between £87m and £137m.¹⁷⁷ We now consider the increase in SP costs is likely to be lower than this for reasons set out in Annex 10 - between £20m and £64m¹⁷⁸ for mobile origination payments within our base case scenario, and between £5m and £127m for our wider IAR.

13.58 Nevertheless, we recognise that there would still be significant increases in costs for SPs in making the 080 range free-to-caller. However, our evidence suggests that a significant proportion of SPs would like a free-to-caller number:

- 89% of SPs said that the fact that the callers from fixed lines do not have to pay for calls to their 080 number was important, or very important, to their organisation, and 72% said that mobile callers not paying for calls was important or very important;¹⁷⁹
- 87% said the message or brand associated with having an 080 number was important or very important;¹⁸⁰
- 45% of respondents said the one aspect of the 080 range that they would most like to change was the charges from a mobile;¹⁸¹

¹⁷⁶ For the avoidance of doubt, we note that this estimate is outside the Base case scenario range as it assumes a fixed origination payment equal to 0.6ppm, which combined with a mobile origination payment of 2.5ppm and a share of calls originated from mobile equal to 60% results in an average SP outpayment exceeding 1.5ppm. We do not consider this scenario to lie within our Base case scenario range for the reasons discussed in Section 12. However, we do consider it for reasons of robustness as part of our wider IAR.

¹⁷⁷ See Table 16.8 on p.59 in Section 16, Part C of the April 2012 consultation.

¹⁷⁸ This estimate is calculated assuming a mobile origination payment equal to 3.0ppm, 45% of calls originated from mobile and a fixed origination payment equal to 0.3ppm.

¹⁷⁹ 2011 SP Survey, Q11 "How important is it to your organisation that 080 numbers have the following features ...the fact that callers from fixed lines don't have to pay / callers from mobile phones don't have to pay".

¹⁸⁰ 2011 SP Survey, Q11 "How important is it to your organisation that 080 numbers have the following features ... the message or brand associated with having a 080 number".

¹⁸¹ 2011 SP Survey, Q13 "If you could change only one of the following aspects of 080 numbers, which one would it be?"

- 47% of 080 SPs said that the current mobile charges were a disadvantage to their business (in terms of the number of calls they received), and of that 47%, 36% were willing to pay more in exchange for making mobile 080 calls free-to-caller (and some SPs were willing to pay quite a lot more).¹⁸²

- 13.59 Nevertheless, we recognise that not all SPs will be able to afford increases in mobile origination charges and some may migrate away from the 080 range. A number of stakeholders (CWW, EE and FCS for example) indicated concerns about this impact in response to the April 2012 consultation, for example noting that it could lead to perverse consequences for SPs and consumers (e.g. reduced service availability, reduced quality of service, less innovation). We set out our detailed response to these comments in Annex 29.
- 13.60 In the April 2012 consultation we said that, based on the 2011 SP survey, only a minority of SPs (around 19%) might potentially migrate away from the 080 range as a result of making it free-to-caller.¹⁸³ This 19% was based on the IAR of 2.5ppm to 3ppm which we used in the April 2012 consultation (as well as an assumption that the proportion of mobile calls would increase to between 40 and 50%).
- 13.61 We have now revised our assumptions about the likely level of mobile origination charges and extent of fixed-mobile substitution - see paragraph 13.22 above and Annex 27 and Section 12 for further details of these revisions. These revisions potentially affect our interpretation of the 2011 SP survey results because the question about migration was asked in the context of different increases in overall origination charges, which will depend both upon the level of mobile origination payment and the degree of fixed-mobile substitution.
- 13.62 On the basis of these revised assumptions, we still consider the results of the 2011 SP survey suggest it is likely that 19% of SPs could get rid of their 080 number because this is the level which the survey results suggest would occur for mobile origination payments within our base case scenario.¹⁸⁴ However, for mobile origination payments outside of this base case but within our wider IAR, the same survey results suggest that the proportion of SPs who would get rid of their 080 number may be lower or higher than 19%.
- 13.63 We discuss the impact of potentially lower migration levels in the context of our overall conclusions on the impact of free-to-caller, where we weigh this benefit against the more negative mobile TPE that would result from a lower mobile origination payment. We note here that the survey results suggest that for origination payments below our base case scenario range, the reduction in the proportion of SPs

¹⁸² 2011 SP survey, Q14 “How do you feel about the impact of these mobile charges on the total number of calls that you receive”, and Q16, “By how much would you be willing to increase the pence-per-minute amount that you pay to receive calls”. The mean increase in the willingness to pay in response to Q16 was 2.9ppm, but 8% indicated that they would pay between 10-19ppm more than their current charges.

¹⁸³ Q18 of the 2011 SP survey, where respondents were asked whether they would be likely to keep their 080 number if their payments for using the number increased by 0.5ppm, 1ppm, 1.5ppm and 2ppm. At 1ppm 19% of SPs said they would be likely to get rid of their 080 number. Since not all calls to an SP come from mobiles we estimated in the April 2012 consultation that a 1ppm increase equated to a mobile origination charge of between 2.5ppm to 3ppm (using an assumption that the proportion of mobile calls made to that SP is between 50% and 40%).

¹⁸⁴ We discuss the accuracy of our survey results for predicting SPs’ likely behaviour in Section 12, where we recognise there may be a margin of error in our predictions given the hypothetical nature of the question posed to SPs. We nonetheless consider our survey results to be the most reliable guide available to SPs’ likely responses.

who say they would get rid of their 080 number would be likely to be small - see Section 12 when we discuss the impact of different levels of origination payment on SP reactions in deriving our base case scenario range.

13.64 In relation to potentially higher levels of migration, we note that there are some scenarios when mobile origination payments are towards the upper end of our wider IAR and fixed-mobile substitution is also high where the survey results suggest the proportion of SPs who said they would get rid of their 080 number could be materially higher than 19% - between 28% and 36% in the most extreme scenarios. However, we consider these scenarios very unlikely.

13.65 As discussed at paragraph 13.26, we place more weight on likely SP migration for origination payments within our base case range than for origination payments within our wider IAR because we consider that origination payments are most likely to fall within our base case range. Moreover we consider mobile origination payments towards the upper end of our IAR are unlikely, given our requirement that origination charges be fair and reasonable and our proposed guidance on how we would approach any dispute about fair and reasonable charges.

13.66 Overall we accept that there is likely to be a potential negative impact of either migration or loss of service as a result of making the 080 range free-to-caller. The impact of this on consumers depends on whether SPs choose to migrate to another range (and the type of number range they choose to migrate to) or to withdraw their services altogether. In this respect, we note the 2011 SP survey asked all those SPs who said they were 'very likely' to get rid of their 080 number under any increase in hosting charges (i.e. including our base case scenario) what they were likely to do.¹⁸⁵ Of those SPs:

- 60% said they would migrate their service to another line. The impact on consumers of this type of migration will depend on the number range they opt to move to. We consider that many SPs are likely to migrate to number ranges which offer many of the same benefits as the 080 number range (for example the 03 range, which is included in bundles of inclusive call minutes for many customers) whilst more directly reflecting the preferences of the SP (which is that a portion of the call charge is funded by the caller). Nevertheless, we recognise that for most consumers the cost of calling these 080 services could increase if they migrate to other numbers (particularly those callers which were using a fixed line as contacting the service will no longer be free); and
- 15% said they would get rid of services altogether. This implies only 4% of SPs overall might choose to do this¹⁸⁶ and therefore we consider that the impact is likely to be small.

13.67 In the April 2012 consultation we highlighted that a further way in which SPs might react to an increase in mobile origination charges could be to block mobile originated calls to their service. The impact of this on service availability is unclear. On the one hand, mitigating the impact of making 080 free-to-caller on SP costs by blocking mobile calls may reduce migration, which would decrease any negative effect on

¹⁸⁵ Q18 of the 2011 SP survey. "if you did get rid of your Freephone number, which of the following would you be likely to do". This was therefore asked to 24% of the total SP sample. The small sample size for this question was therefore small and the results can only be seen as indicative.

¹⁸⁶ This is 15% of the 24% sample referred to in the footnote above. Note that there was an error in Figure 16.11 of the April 2012 consultation (Part B, Section 16, page 63) where we incorrectly reported this figure as 2%.

service availability. On the other hand, call blocking may be used by those SPs who did not indicate they were likely to migrate following an increase in origination charge, which could increase the negative effect of making 080 free-to-caller on service availability. Call blocking by SPs who were unlikely to migrate would particularly disadvantage mobile-only callers who would no longer be able to access the service. However, as set out in Section 14 we are proposing to set an access condition which will require TCPs (who host 080 services on behalf of SPs) to purchase wholesale call origination from any OCP upon reasonable request, which we consider will effectively prevent TCPs/SPs blocking mobile calls.

- 13.68 We recognise, nevertheless, that SPs may retain their 080 service but react in other ways which may reduce the quality of service. For example, it is possible to retain a 080 service but treat calls from mobile differently (e.g. routing them to an automated message or using some other means to keep the duration of the call as short as possible).¹⁸⁷ As with call blocking, the overall impact on service availability is unclear. To the extent these cost mitigation measures are used instead of migration, they will reduce the negative impact on service availability that would otherwise occur. To the extent they are used by SPs who were not at risk of migrating, however, they will increase the negative effect.
- 13.69 In Section 12, we discuss whether SPs are likely to use such cost mitigation strategies as a result of making 080 free-to-caller. We observe that they do not currently but also consider there is less cause for them to do so under the current regime than there would be under a free-to-caller approach. TCPs have indicated such measures are feasible and we are also aware of certain SPs who have adopted similar measures to mitigate their overall cost (albeit not by treating mobile calls differently from fixed). As a result, although we cannot be confident of the degree to which these strategies would be used, we consider that higher mobile origination payments (relative to fixed origination payments) may encourage SPs to request these measures. If SPs face an excessive incentive to use these measures then it could cause significant consumer detriment in the form of lower quality of service when calling from a mobile or a reduction in service availability if the caller is requested to contact another number. We note in Section 12 that we would expect a mobile origination charge towards the lower end of our base case scenario (and origination charges below this), to reduce the extent of any such reactions.
- 13.70 In assessing the overall impact of making 080 free-to-caller on service availability, we note as we did in the April 2012 consultation that there are therefore two conflicting factors at play:
- higher mobile origination charges are likely to lead to lower service availability and quality as a result of increased costs for SPs leading to migration/loss of some services from 080 and potentially other cost mitigation strategies; but
 - improved consumer confidence and lower mobile call prices (addressing the vertical externality), along the resulting increase in demand, are likely to increase the attractiveness of the 080 range for SPs and thereby encourage service availability and innovation. Making 080 genuinely free-to-caller is also likely to have a positive effect on service availability by allowing SPs to introduce more innovative business models, such as reverse-charge and advertising funded services.

¹⁸⁷ We received evidence from two TCPs [3<] who said that this may be a potential reaction from CPs to higher origination charges.

- 13.71 The balance between these effects depends on the level of mobile origination charges. For mobile origination payments within our base case scenario, our view is that the benefits to service availability are likely to outweigh the negative effects, leading to an overall improvement in service availability relative to the status quo. We recognise that a material proportion of SPs could migrate to another number range even for an increase in their average outpayment which is consistent with our base case (i.e. between 0.5ppm and 1ppm), and also that some SPs who remain on 080 may choose to adopt cost mitigation measures that reduce service quality (particularly for mobile callers). However, we consider the benefits to service availability from making 080 genuinely free-to-caller are likely to be significant. We set out evidence in the April 2012 consultation that the status quo is having an adverse impact on innovation on non-geographic numbers as a whole, including 080 - in particular as a result of consumer's lack of confidence in NGCs (leading to suppressed demand) and the vertical externality.¹⁸⁸ We consider that making the 080 range free-to-caller will lead to a substantial increase in consumer confidence in the number range and thereby to increased call volumes, making the 080 range more attractive to SPs and boosting service availability. It will also address the vertical externality by creating a number range that is genuinely free-to-caller, which will allow for the introduction of innovative business models that are very difficult to introduce under the status quo (such as reverse charging and advertising funded services). We consider the benefits to callers from this stimulus to service availability and innovation on 080 are likely to be significant and therefore to outweigh the negative effects of a loss of some existing services.
- 13.72 We also note that our survey evidence suggests that a significant proportion of SPs would like a free-to-caller 080 number range.¹⁸⁹ Whilst those SPs remaining on the range will have to absorb additional costs and a proportion will migrate to avoid facing these costs, the fact that a majority would like a free-to-caller number when mobile origination payments are within our base case scenario indicates that SPs themselves also recognise the benefits of this approach. We consider this lends further support to our view that SPs are likely to invest more in service availability and quality on the 080 range as a result of making it free-to-caller.
- 13.73 We recognise that the balance between the two opposing effects on service availability becomes less favourable at higher levels of mobile origination payments. In particular, when mobile origination payments are towards the upper end of our IAR and fixed-mobile substitution is also high, our survey evidence suggests that more than 28% of SPs may choose to migrate to another number range or cease their service altogether, and we also consider that a greater proportion of those SPs remaining on 080 are likely to adopt cost mitigation measures. In addition, whilst these scenarios would still result in increased demand for 080 calls and improvements to the reputation of 080, the impact of these effects on the attractiveness of 080 to SPs is likely to be reduced by the greater increase in cost. As a result, we consider it is more finely balanced in these scenarios as to whether making 080 free-to-caller would result in an overall improvement in service availability relative to the status quo. However, we note as above that we consider mobile origination payments of this level very unlikely.
- 13.74 For origination payments towards the lower end of our IAR, the net impact on service availability could be even more positive than our base case scenario suggests. This is because the proportion of SPs getting rid of their 080 number could potentially be lower than 19% and the increased attractiveness of 080 to SPs as a result of it being

¹⁸⁸ See Annex 11, April 2012 consultation.

¹⁸⁹ See paragraph 13.58 above, and paragraphs 13.122 – 13.124 and Table 13.7 below.

made free-to-caller would be offset by a smaller increase in cost. However, this potentially greater benefit to service availability would come at the cost of a greater mobile TPE, and therefore would not necessarily lead to better outcomes for callers. We take this into account in our overall assessment of making 080 free-to-caller below. As with mobile origination payments towards the upper end of our IAR, we also consider these scenarios unlikely.

Access to socially important services

- 13.75 A wide range of different socially important services are provided on the 080 number range. These include services offered by Government departments and utility providers (e.g. gas, electricity and telephony providers), but also charities and not for profit services. Information gathered from OCPs and TCPs in 2011 indicated that up to 30% of services on the 080 range could fall within our definition of ‘socially important’.¹⁹⁰ The same data indicates that around 10% of these ‘socially important services’ (i.e. 10% of the 30%) on the 080 range are charities and/or not for profit, and that the remaining 90% are mostly Government departments and utility providers (e.g. gas, electricity and telephony providers). It is also worth noting that some of these socially important services are already free-to-caller.¹⁹¹
- 13.76 In response to the April 2012 consultation, several stakeholders (including the CAB and Consumer Focus) agreed that making 080 free-to-caller would have a particular benefit to vulnerable mobile only consumers. EE, however, argued that we had overstated the potential for improvements in access to socially important services for those consumers. Some stakeholders (in particular THA, and Consumer Focus) were concerned that making the 080 range free-to-caller could have significant negative consequences for SPs who offer socially important services, because the increased costs created by a higher mobile origination charge could either lead to them migrating away from the range (which also generates costs) or would necessitate a reduction in the quality of the service they provide. We have responded to these comments in more detail in Annex 29.
- 13.77 We consider that making the 080 range free-to-caller will improve access to socially important services provided on that range for vulnerable consumers, in the following ways:
- **consumers will no longer be charged for calling socially important 080 services from a mobile:** this is likely to be of particular benefit to those vulnerable consumers that only have access to a mobile phone;¹⁹² and

¹⁹⁰ See Section 4 in Part A where we set out our definition of socially important services. The information about socially important services was set out in Part A, Section 5 paragraphs 5.106 to 5.111 of the April 2012 consultation. It was based on responses to an s135 request issued by Ofcom to TCPs and OCPs in October 2011.

¹⁹¹ Certain charities and non-for profits are currently zero rated through the THA scheme (where mobile OCPs do not pay any origination charge). The DWP negotiated directly with mobile OCPs to make its 080 helpline numbers free-to-caller in January 2010. See Annex 20 of the April 2012 consultation for further details of these arrangements.

¹⁹² In 2010 approximately 4% of households did not have access to a fixed line due to involuntary factors – mainly affordability; and a further 7% voluntarily did not have access to a fixed line – The 2011 consumer experience report, Fig. 81, p.56 and Fig.80 on p.55. The 2012 Consumer Experience Report did not break down voluntary and non-voluntarily non-ownership of fixed lines. However, the total proportion of mobile-only households remained the same at 15% (Figure 26, p.38 of the 2012 Consumer Experience research report) and a higher proportion of DE households were mobile only (26% in Q2 of 2012 – see Figure 32 on p.41 of the same report).

- **improved confidence and certainty in prices:** the simplified pricing message (a single ‘free’ price point) is likely to ensure that vulnerable consumers are not deterred from calling 080 numbers to access socially important services.¹⁹³

13.78 In terms of the potential impact of SPs offering socially important services on the 080 range, we note that the 2011 SP survey evidence suggests that SPs providing ‘socially significant’ services were more likely to consider it ‘very important’ that their 080 numbers were made free-to-caller.¹⁹⁴ However, we recognise that certain types of SP who provide socially important services (e.g. charities and not-for-profit services) may find it more difficult to absorb increases in mobile origination payments than other providers of socially important services (e.g. government services and utility companies).¹⁹⁵ The former category of SPs may choose to migrate, cease their service altogether or adopt the cost mitigation strategies described above, to the detriment of socially important service availability.

13.79 The potential impact of making the 080 range free-to-caller on charities and not-for-profit services is difficult to predict with any precision. However, a number of charities and not-for-profit services already have free-to-caller 080 numbers (for example Childline, or those registered with THA’s scheme), for which some mobile OCPs do not receive origination payments. We noted in the April 2012 consultation that mobile OCPs had previously indicated that they supported the THA’s scheme as part of their commitment to corporate social responsibility.¹⁹⁶ Therefore there should be no reason for the mobile OCPs to change that approach if the 080 range is made free-to-caller.

13.80 We note that the 030 sub-range could provide a viable alternative for those charities and not-for-profit services who do face an increase in origination charges and choose to migrate as a result, having been specifically carved out for these particular services.¹⁹⁷ 03 calls are required to be treated in the same way as geographic calls, including the inclusion within a call bundle where applicable. However, we recognise that 03 is less attractive for callers than 080, particularly for fixed line callers who may no longer be able to access any socially important services which migrate to 03 for free from a fixed line (e.g. where their contract does not include bundled minutes or where they have exceeded their bundled minutes).

13.81 We expect that origination payments towards the lower end of our base case scenario range (and below) would limit any negative impact of making the 080 range free-to-caller on socially important services, particularly on those not-for-profit bodies and charities who may find it more difficult to afford increases in origination payments, by reducing the number of those SPs who choose to migrate as well as

¹⁹³ 2010 CAB survey evidence - 67% of mobile only respondents (versus 61% of all respondents) said they had been deterred from calling a government helpline due to high cost of mobile calls.

¹⁹⁴ 55% of ‘Socially significant’ SPs said ‘free calls from mobiles’ were very important compared to 32% of other SPs. 2011 SP survey, p.6. Q11. Note that the ‘socially significant’ definition used in the 2011 SP survey is slightly different to the ‘socially important services’ definition we have used in this document (and which is defined in Section 3, Part A). The definition of ‘socially significant’ is set out in Annex 1 of the 2011 SP survey.

¹⁹⁵ The DWP for example, has already demonstrated its willingness to pay a higher mobile origination charge in exchange for making its 080 helplines free-to-caller. See paragraph 11.15 in Section 11 for further details of this arrangement.

¹⁹⁶ See 080 Dispute Determination, paragraph 5.1. Also paragraph 16.201 in Section 16, Part C of the April 2012 consultation.

¹⁹⁷ Ofcom publishes guidance on the types of organisations that are eligible to use the 030 range (<http://stakeholders.ofcom.org.uk/telecoms/numbering/guidance-tele-no/030-guidance/030-previous-guidance-may/>).

limiting the extent to which those remaining on 080 employ cost mitigation strategies. At the higher end of our base case scenario we recognise there is greater potential for a negative impact on access to these socially important services, however as already explained above (see paragraph 13.25) we place less weight on origination payments at this upper end. We also note that other types of socially important SPs (e.g. Government departments, utilities etc), which as noted above make up the majority of socially important services on the 080 range, are likely to have less difficulty in affording any increases in origination payments and access to these services is therefore less likely to be negatively impacted by higher charges.

- 13.82 As a result, we consider that, on the available evidence, the potential negative impacts on the provision of socially important services on the 080 range are likely to be outweighed by the significant benefits of making 080 free-to-caller - particularly for origination payments towards the lower end of our base case scenario range (and below). In particular, we consider there will be significant benefits from ensuring that mobile-only households are not deterred from accessing socially important services on the 080 range which are likely to outweigh any negative impact of migration or cost mitigating measures associated with origination charges of this level.

Regulatory burden

- 13.83 Making the 080 range free-to-caller will result in costs for CPs and SPs (and potentially callers, as a result of misdialling costs¹⁹⁸). We have set out our estimates of these costs in more detail in Annex 10. In response to the April 2012 consultation a number of stakeholders commented on the costs involved with making the 080 range free-to-caller. EE in particular noted that we had not quantified all the costs involved. We have updated our estimates in light of these stakeholder comments. In particular we have now set out estimates of the potential billing costs, communications costs and misdialling costs, as well as updating our estimates of the migration costs, which could arise as a result of making the 080 range free-to-caller. Given that stakeholders have not previously had an opportunity to comment on these cost estimates (because they were not included in the April 2012 consultation) this is one aspect of our assessment on which we are requesting stakeholders comments. We have set out some specific consultation questions in this respect in Annex 10 (and this is also listed alongside the other consultation questions in Annex 4).
- 13.84 Our assessment in that Annex indicates that the total one-off costs of making the 080 range free-to-caller could be in the range of £8.8m to £57.5m. Our assessment indicates that there is unlikely to be any material increase in ongoing costs (other than for SPs remaining on the range resulting from the increased mobile origination charge, which we discuss below). Our estimate of the one-off costs is therefore a significant increase (at the upper end of the range in particular) from our April 2012 consultation estimate where we estimated that costs would be in the range of £2.6m to £11.4m (this figure reflected only our estimate of migration costs as we did not quantify other potential costs). This increase is largely a result of some of the assumptions we have used in calculating migration costs (we now estimate migration costs of between £2.2m to £36m). This includes costs for SP migration associated with the wider IAR, which results in SP migration between 8% to 36%. However, as discussed at paragraphs 13.25 – 13.26 above, we consider origination payments at this level to be very unlikely. As noted at paragraphs 13.60 to 13.65 above, using origination payments within our Base case scenario range we expect migration to be significantly lower (between 8% to 19%) and note that the costs associated with

¹⁹⁸ These costs are discussed in Annex 10. They would result from callers making calls to 080 numbers where the SP has in fact migrated their service to an alternative number.

migration at this level are likely to be between £3.2m to £19.0m which, when combined with the other costs we have identified, gives total costs of between £8.8m and £33.0m when we assume origination payments within the Base case scenario range.

13.85 Table 13.4 summarises all the different types of incremental costs we have estimated will result from making the 080 range free-to-caller:

Table 13.4: Summary of cost estimates for making 080 free-to-caller

	IAR	Base case scenario range
Billing costs	Not material	Not material
Migration costs	£3.2m to £36.0m	£3.2m to £19.0m
Misdialling costs (including consumer time costs)	£3.3m to £15.5m	£3.3m to £8.0m
Communication costs	£2.3m to £6.0m	£2.3m to £6.0m
Total costs	£8.8m to £57.5m	£8.8m to £33.0m

13.86 In addition to these incremental costs, there will also be significant costs to SPs as a result of the increased origination charges. We have set out in Table 13.3 above (as well as in Annex 28) that an origination payment within our base case range would imply an increase in ongoing costs for SPs of between £20m and £64m. For origination payments within our wider IAR, the impact on ongoing costs for SPs could be higher than this - up to £127m. As noted in Annex 28, these estimates are lower, at least in absolute terms, than we estimated in the April 2012 consultation (where we estimated a range of £87m to £137m).¹⁹⁹ These costs, however, do not represent additional resource costs (unlike the migration and communications costs discussed above) but instead represent a rebalancing of payments, i.e. they change who pays for the cost of originating 080 calls from mobiles (callers or SPs), rather than creating an additional cost.

Overall conclusions

13.87 Taking the above criteria together, our assessment of the overall impact of making 080 free-to-caller depends on what we assume about the level of mobile origination payments. In all scenarios, we consider it likely that consumer awareness of the price of 080 calls will be significantly improved by the simplicity of the free-to-caller pricing message and the fact that SPs will be able to advertise this clear pricing message. In addition we consider that, given the high profile nature of 080, this change will contribute significantly to our efforts to increase consumer confidence in non-geographic numbers more generally. We also consider pricing efficiency will be

¹⁹⁹ As we note in Annex 28 the estimate for the upper end of our IAR is higher in relative terms (i.e. compared to the costs they are currently paying). In the April 2012 consultation we estimated that SPs would see a 73% to 115% increase in their costs, whereas our updated range of £5m to £127m represents a 7% to 179% increase. This is because of the revisions to our IAR, as well as updates to our volume calculations which are explained in more detail in Annex 28. Estimates for our base case range are lower both in absolute and relative terms.

improved relative to the status quo as a result of the vertical and horizontal externalities on 080 being addressed. However, we recognise there is trade-off between the level of prices to consumers (as a result of the TPE) on the one hand and service availability on the other. In particular, a higher mobile origination payment mitigates any negative impact of the TPE on mobile callers, improving the level of prices paid by consumers overall, but could lead to a less favourable impact on service availability by giving rise to greater levels of SP migration and/or increased use of cost mitigation measures.

- 13.88 As set out in Section 12, our base case scenario range is derived from the level of mobile origination payments which we consider, on the basis of current available evidence, strikes the most appropriate balance for consumers between these two countervailing effects. For mobile origination payments within our base case scenario range, we therefore consider there are likely to be significant net benefits to both callers and SPs as a result of making 080 free-to-caller. We recognise there may be some rebalancing of tariffs, with potential increases in the price of other fixed and mobile services via the TPE, but we nonetheless consider the overall effect on pricing efficiency to be positive in this scenario. The overall impact on service availability is also likely to be positive because the boost to service availability resulting from greater consumer confidence in 080 and the ability to introduce innovative business models is likely to outweigh the levels of migration which could occur for origination payments of this level. Similarly, access to socially important services is likely to be improved because the benefits of ensuring mobile-only households are not deterred from calling socially important services on 080 are likely to outweigh any negative effects of SP migration or cost mitigation measures. We consider these benefits, along with improvements to consumer price awareness and wider benefits to consumer confidence in non-geographic numbers, are likely to significantly outweigh the regulatory burden when taken together.
- 13.89 For mobile origination payments towards the upper end of our wider IAR (between 3ppm and 3.7ppm), we recognise that the trade-off between service availability and the TPE may not result in the best outcomes for consumers. In particular, when payments are towards the upper end of our IAR and fixed-mobile substitution is also high, more than 28% of SPs may choose to migrate and a greater proportion of those SPs remaining on 080 may choose to adopt cost mitigation measures. In these scenarios, we consider it is less clear whether making 080 free-to-caller would result in an overall improvement in service availability relative to the status quo. Although the mobile TPE would be more favourable in these scenarios, we do not consider the benefits to consumers from a more favourable TPE would necessarily off-set the potentially negative impact on service availability. However, we still consider it likely that there will be significant improvements to consumer price awareness and improvements to pricing efficiency (i.e. addressing the externalities we have identified). Nevertheless, we consider it more finely balanced in these scenarios as to whether the benefits to consumer price awareness and pricing efficiency would outweigh the regulatory burden and potentially adverse effect on service availability.
- 13.90 For origination payments towards the lower end of our IAR (between 1ppm and 1.3ppm), the impact on service availability may be more positive than in our base case. However, the difference may not be large as our SP survey suggested that migration levels would be similar for origination payments up to the top of our base case scenario range- see the discussion in Section 12 on how likely migration varies with origination payments. On the other hand, the negative impact on callers of the mobile TPE would be greater with consequent adverse effects on pricing efficiency. In these scenarios, we still consider pricing efficiency would be improved relative to the status quo and therefore that making 080 free-to-caller would result in net overall

benefits, but these net benefits would be smaller than for origination payments within our base case scenario.

13.91 As noted in paragraphs 13.25 – 13.26, we consider mobile origination payments are most likely to lie within our base case scenario range - and especially within the range of 1.5ppm and 2.5ppm. We therefore place most weight on scenarios resulting in significant net benefits to consumers. We recognise there are some scenarios towards the upper end of our wider IAR where the case for making 080 free-to-caller is more finely balanced as a result of the negative impact that high mobile origination payments could have on service availability. However, we consider these extreme scenarios very unlikely because of the requirement that origination charges be fair and reasonable and our proposed guidance on how we would approach any dispute about fair and reasonable charges.

Assessment of Option 2: setting a Maximum Mobile Price

13.92 We assessed two alternative MMP options in the April 2012 consultation:

- **Option 2(a):** a fixed ceiling for the retail price of mobile calls to 080 numbers, set at either 4.2ppm (including VAT) or 5ppm (including VAT); or
- **Option 2(b):** a variable ceiling set at the same level as the AC that applies to calls to the unbundled tariff number ranges.²⁰⁰

13.93 The retail ceilings under Option 2(a) were derived from our estimates of the cost of originating a call to a free-to-caller range.²⁰¹ In both Options, the price of calling a 080 number from a fixed line would be zero. We did not differentiate between consumer and business calls to 080 numbers and assumed that the MMP options would apply in respect of both types of call.

13.94 Following revisions to our cost estimates, we are now using a price of 6.6ppm only for Option 2(a) for the reasons set out in Annex 28.²⁰²

13.95 As noted at paragraph 13.22 above, we now consider that the MMP approach should only apply to calls made by consumers to 080 numbers (i.e. it would not apply where a person calls a 080 number for the purposes of his trade, business or profession). This is explained in more detail in Section 6 and Annex 13.

13.96 We have also made some other updates to our assumptions about the MMP option following the IAR revisions, these are set out below.

²⁰⁰ See Part B of this document (in particular Section 8) for details of the unbundled tariff structure which we have decided will apply to the 084, 087, 09 and 118 ranges and involves the separation of charges into an Access Charge ('AC') which is charged by the OCP and a Service Charge ('SC') which is the amount that goes to the TCP and SP. Therefore under Option 2(b), consumers making calls from a mobile to a 080 number would be charged the same AC that they would be charged for a call to an 084, 087, 09 or 118 number. However, under this option, fixed calls to 080 numbers would continue to be free-to-caller.

²⁰¹ In particular, the 4.2ppm figure reflected our LRIC+ estimate with 100% A&R costs including VAT. The 5ppm figure reflected our LRIC+ estimate with 100% A&R costs including VAT, an allowance for common costs no longer recovered from termination and slightly rounded up to facilitate consumer memorability.

²⁰² This reflects our revised estimate of LRIC+ with 100% A&R costs including VAT with an allowance for common costs no longer recovered from termination.

13.97 Only one stakeholder, EE, provided detailed comments on the MMP option in response to the April 2012 consultation. We have set out our response to EE's comments in Annex 29.

Assumptions for Option 2

Origination payments

13.98 We have made the same assumptions for the mobile origination payments under the MMP options as in the April 2012 consultation. These are that Option 2(a) has an origination charge equal to the fixed origination charge (as under the status quo) and that there is no mobile origination payment under Option 2(b).²⁰³

13.99 In the April 2012 consultation we assumed that the fixed origination charge would be 0.5ppm. We now assume that the fixed origination payment under both options is 0.3ppm to 0.6ppm in line with our assumed fixed IAR under the free-to-caller approach. As a result, we also consider it likely that the mobile origination charge under Option 2(a) would lie between 0.3ppm and 0.6ppm. For ease of presentation, however, we only present estimates associated with a mobile origination charge of 0.5ppm.

Impact on demand (fixed mobile substitution)

13.100 We consider that setting a MMP is likely to lead to fixed to mobile substitution for two reasons. First, the actual price of mobile 080 calls may fall, although we note that the reduction in the price of mobile 080 calls would not necessarily be significant (particularly under Option 2(b), depending on the level of AC offered by the mobile OCP).²⁰⁴ Second, the perceived difference between fixed and mobile call prices may fall.²⁰⁵ The evidence we have does not allow us to accurately estimate the proportion of 080 calls that would be originated from mobiles under MMP, particularly as it will depend on the level at which the retail call price is set. We expect the extent of fixed to mobile substitution to be smaller if we set a MMP than if 080 was made free-to-caller (since mobile calls will remain more expensive than fixed calls under a MMP approach). For the purposes of our assessment of the TPE (in Annex 28) we have used four scenarios for the proportion of mobile calls under a MMP approach, 5% (no change), 10%, 20% and 30%.

13.101 Since mobile 080 call prices are generally likely to be higher under Option 2(b) than Option 2(a), we would expect the proportion of mobile calls to be lower under Option 2(b) than under Option 2(a).

Impact on demand (overall demand)

13.102 We consider that setting a MMP may lead to an overall increase in demand for 080 calls due to improved price awareness, greater certainty about call prices, and

²⁰³ This is because the mobile OCP would be able to set the level of their AC to include the costs of origination.

²⁰⁴ This reduction could in fact be small when compared with some of the current retail 080 mobile prices (some mobile OCPs charge 7ppm for existing customers for 080 calls (in particular Orange, although more recently they have increased their prices for new customers, see Tables 2.3 in Section 2 for current 080 mobile prices), however, as noted in Section 3 for the purposes of our assessment we have used prices from the 2010 Flow of Funds study.

²⁰⁵ In the 2009 Consumer survey, the mean expected price of fixed 080 calls was 6ppm compared to just less than 29ppm for mobile 080 calls. 2009 Consumer survey, Q43 and Q44.

potentially lower actual call prices from mobiles.²⁰⁶ However, it is not clear how this impact on demand would compare with that which would be likely to result under a free-to-caller approach (particularly once factors such as potential SP migration are taken into account).

13.103 On the one hand, SPs who remain on 080 may experience a smaller increase in overall demand were we to set a MMP than they would if we made 080 free-to-caller (given the greater improvements to price awareness as well as the lower mobile prices under a free-to-caller approach). On the other hand, under a MMP approach, SPs are less likely to migrate to another number range than they are under a free-to-caller approach.

13.104 In our analysis of the potential TPE generated by the MMP approach, we have assumed no overall increase in demand. This is, however, primarily for the purpose of simplicity and because it is a conservative assumption.

Assessment against criteria

13.105 We have set out our updated assessment of the MMP option under each of our assessment criteria below.

13.106 Annex 29 sets out in more detail how we assessed these criteria in the April 2012 consultation, stakeholder comments on our assessment and our response to those comments. The following paragraphs summarise our views, having taken account of the full range of evidence presented in the April 2012 consultation,²⁰⁷ stakeholder comments and any further analysis we have carried out in light of those comments. However, reference should be made to Annex 29 and the relevant sections of the April 2012 consultation for the evidence and analysis which supports our assessment.

Consumer price awareness

13.107 Under Option 2, SPs would be able to advertise that either (a) calls from a mobile will cost no more than 6.6ppm, or (b) that their AC will apply for mobile calls. Therefore, where callers have the number in front of them (e.g. a leaflet or website for the SPs service), MMP would potentially improve consumer price awareness relative to the status quo.

13.108 In addition, callers could also be made aware of the price of mobile calls at the point of call, through a pre-call announcement ('PCA'). Under Option 2(a) the PCA could indicate the maximum price the caller would be charged, and under option 2(b) the PCA could state that the caller will be charged their AC.

13.109 Where callers must remember or infer the price of a 080 call, setting a MMP could still be an improvement over the status quo, because both SPs and mobile OCPs would be publishing a consistent pricing message for mobile calls to 080. Some consumers may therefore be able remember and infer prices in light of the consistency and repetition of that pricing message.

13.110 However, there are drawbacks of setting a MMP compared to a free-to-caller approach. The pricing message involved with a MMP approach is more complex,

²⁰⁶ We have considered the same evidence as was used to illustrate the potential overall increase in demand under a free-to-caller approach – see paragraphs 13.30 to 13.32 above.

²⁰⁷ See April 2012 consultation, Part C, paragraphs 16.227 to 16.249.

which may make it difficult for consumers for learn and remember the message (and even with a PCA, consumers would need to initiate a mobile call to a 080 number to receive that message). While most consumers currently expect mobile 080 calls to cost more than fixed 080 calls, to make informed decisions under a MMP approach they would still need to understand the extent of this price difference which may be more difficult given the added complexity of the pricing message.²⁰⁸

13.111 In addition, the concern about the horizontal externality would not be addressed as effectively under an MMP approach compared to making 080 free-to-caller. In particular, consumer experience of the price of mobile 080 calls could continue to affect their expectations about the price of fixed 080 calls (as well as other 08 number ranges).²⁰⁹ This risk of confusion would be greater under Option 2(b) because the AC would only apply for mobile calls, whereas for all other number ranges which feature an AC, it would apply for both fixed and mobile calls.

Efficient prices

13.112 Setting a MMP could have the advantage of sending price signals to consumers which encourage them to take into account the difference in the cost of fixed and mobile calls when choosing how to make a 080 call (i.e. whether to call from a fixed line or a mobile). However, under both Options 2(a) and 2(b) the difference between the price of a fixed 080 call and the MMP would still be significantly in excess of the additional incremental cost of making an 080 call from a mobile compared to calling from a fixed line (which we estimate at 0.7-0.8ppm, see Annex 26). This could lead to too few calls being made from a mobile, albeit that we would expect some improvement compared to the status quo (in that the difference between fixed and mobile call prices could be slightly closer to the difference in resource cost).

13.113 In terms of whether setting a MMP would address the negative externalities:

- **vertical externality:** it would address this to some extent, because Option 2(a) would allow SPs to advertise that calls from mobiles had a maximum price of 6.6ppm or that an AC applied. However, whilst it might meet the preferences of some SPs, it would not reflect the preferences of the significant proportion of SPs who want a free-to-caller range (see the evidence set out in paragraph 13.58 above, as well as Table 13.7 below). Currently no number range exists which is able to provide SPs with a genuinely free-to-caller number for their customers. Setting an MMP would not address this concern as there would continue to be no completely free non-geographic number range; and
- **horizontal externality:** Option 2(a) would be likely to lead to convergence in mobile OCP prices, which would in turn reduce the horizontal externality between OCPs of the same type. Both options would be likely to mitigate the horizontal externality between fixed and mobile 080 price expectations by improving consumer price awareness. However there would still be a material difference between fixed and mobile 080 call prices which (as set out above under the consumer price awareness criterion) could lead to some continued confusion. Therefore this effect would not be addressed as effectively as it would if the 080 range were made free-to-caller.

²⁰⁸ 78% of respondents to the 2010 Consumer survey thought that mobile 080 calls were more expensive than fixed 080 calls. Only 8% thought they were the same price and 12% responded “don’t know”. 2010 Consumer survey, Q33.

²⁰⁹ However, an MMP approach would reduce the horizontal externality effect between OCPs of the same type (e.g. mobile).

13.114 Because the MMP option would be less effective at addressing these negative externalities than making the 080 range free-to-caller, we consider it is also less likely to result in prices which reflect consumer preferences. There are also some other indications that setting a MMP would be less likely to reflect consumer preferences. As set out in Table 13.7 below, more SPs indicated a preference for making 080 free-to-caller than the MMP approach, which is likely to be a reflection of the consumer demand (as noted in paragraph 13.51 above in relation to the free-to-caller option). In addition, only one stakeholder (EE) indicated a clear preference for an MMP approach, whereas those groups representing consumers were strongly in favour of the free-to-caller option.²¹⁰

13.115 It is likely that setting a MMP would lead to some re-balancing of retail prices through the TPE. Similar to the free-to-caller approach, we consider that this would not necessarily be undesirable, given that we consider the current pattern of retail prices is likely to be inefficient. In particular, we consider that the relative price of fixed and mobile 080 calls would better reflect the difference in their underlying costs under an MMP approach than the status quo.

13.116 We have updated our estimates of the likely TPE if we set a MMP for the 080 range and summarise these below. Annex 28 sets out in more detail the assumptions underlying these calculations.

²¹⁰ EE in particular argued for the 080 range to have a MMP and for the 0500 range to be designated as free-to-caller. We have responded to EE's arguments on this point in Annex 29. The THA also indicated that some of its members would prefer an MMP approach. However, overall the THA said it favoured making the 080 range free-to-caller.

Table 13.5: Maximum Mobile Price for 080 – impact on mobile OCP profits from 080 (compared to the status quo)²¹¹

Maximum price of mobile calls (incl. VAT)	Percentage of 080 calls originated from mobiles			
	5%	10%	20%	30%
6.6ppm	-£26m	-£9m	+£25m	+£59m
AC of 10ppm	-£17m	+£10m	+£62m	Omitted
AC of 16.1ppm	+£0m	+£43m	Omitted	Omitted

Table 13.6: Maximum Mobile Price 080 – impact on fixed OCP profits from 080 (compared to status quo)

Fixed origination payment	Proportion of 080 calls from mobiles	5%	10%	20%	30%
0.3ppm	Impact on fixed OCPs' 080 incremental profits	-£15m	-£16m	-£18m	-£20m
0.6ppm	Impact on fixed OCPs' 080 incremental profits	+£3m	+£2m	-£2m	-£6m

13.117 Table 13.5 indicates that the estimated impact on mobile OCPs' incremental profits from 080 calls under a MMP approach would be between -£26m and £62m. This indicates that the TPE may be small or even positive for mobile users but is sensitive to the proportion of calls that are originated from mobiles.²¹² Even with a low maximum mobile price, if the proportion of mobile calls rises to 20% or more then this offsets the effect of lower call prices (the overall impact on mobile OCPs' incremental profits from 080 calls is positive). If mobile call volumes do not significantly increase then there may be a negative tariff package effect of up to £26m. Whilst this is not an insignificant amount, it is small in relation to the overall size of mobile revenues.

13.118 Table 13.6 suggests that the impact on fixed OCPs' incremental profits from 080 calls of setting a MMP for 080 (between -£20m and £3m) is likely to be smaller than making it into a free-to-caller range, given that there is likely to be less fixed to mobile substitution.

13.119 The TPE for the MMP approach is particularly uncertain, because we have less evidence about how the proportion of fixed and mobile calls might change. Our estimates above suggest that the impact could be positive or negative, depending on the assumptions used.

²¹¹ Where the maximum mobile price is relatively high the increase in the proportion of mobile calls is likely to be smaller. We have thus deliberately omitted the cases where the maximum price is equal to the AC but a high level of fixed to mobile substitution occurs. These cases are less plausible (they all involved an increase in mobile 080 incremental profits of over £100m).

²¹² In Annex 28, we consider the issue of why mobile OCPs do not reduce mobile 080 prices now, given the indication from these estimates that it may in fact be profitable for them to do so.

13.120 In summary, we consider that while MMP is likely to lead to a more efficient pattern of prices than the status quo, it will not address the vertical and horizontal externalities as effectively as the free-to-caller approach and is therefore less likely to lead to prices which reflect consumer preferences.

Service quality, variety and innovation

13.121 We would expect a MMP approach to offer an improvement relative to the status quo, in particular because SPs would be able to advertise a clearer pricing message for mobile calls to their 080 numbers (i.e. either that they have a maximum price of 6.6ppm or that an AC applies) and the price of mobile calls could be reduced (which would be more likely to reflect SP preferences), which we consider could result in an increase in demand for 080 calls. A small increase in overall demand for 080 services may also increase the attractiveness of running and investing in 080 services. In addition, origination payments are unlikely to significantly increase under a MMP approach and therefore SPs' costs are unlikely to increase. Therefore, compared to a free-to-caller approach, we would expect to see less SP migration away from the 080 range, and a more limited impact on service availability, as well as fewer commercial restrictions on SPs' ability to invest in their services.

13.122 However, the potential improvements in service quality, variety and innovation depend on the extent to which setting a MMP reflects SP preferences for the 080 range. As we noted in the April 2012 consultation, the evidence from the 2011 SP Survey indicates that SPs have diverse preferences but that a higher proportion preferred a free-to-caller approach rather than setting a MMP. In particular, we asked 080 SPs whether they preferred 080 to have a MMP of 7ppm or to be free-to-caller but with higher origination charges for the SP.²¹³ Responses varied according to the increase in overall origination payments under a free-to-caller approach. The responses to the SP survey associated with an increase in overall origination payment of 0.5ppm to 1.5ppm are summarised in Table 13.7 below. An increase of an amount of either 0.5ppm or 1ppm consistent with mobile origination payments within our base case scenario range.

Table 13.7: 080 SPs' preferences between a free-to-caller and setting a MMP approach

	Prefer free-to-caller range	Prefer MMP range	Indifferent	Don't know
1.5ppm increase in average outpayment	35%	43%	17%	5%
1ppm increase in average outpayment	47%	33%	16%	5%
0.5ppm increase in average outpayment	51%	24%	20%	6%

²¹³ 2011 SP survey, Q20

- 13.123 Table 3.7 indicates that, for an increase of 0.5ppm in average SP out-payments, a majority of 51% of SPs preferred making 080 free-to-caller compared to 24% for the MMP approach. If the increase in SP out-payment is higher at 1ppm, the number of SPs that would prefer making 080 free-to-caller would be lower but still be greater than the number preferring an MMP approach - 47% compared with 33%. This suggests that for an increase in overall origination payment of 1ppm or less, more SPs would prefer making 080 free-to-caller than would prefer an MMP approach.
- 13.124 We recognise that the number of SPs preferring free-to-caller is lower (35%) if the increase in average outpayments is 1.5ppm. This may occur if mobile origination payments were above our base case scenario range. In these scenarios, which we place less weight on for the reasons explained in paragraph 13.25 - 13.26, we recognise that fewer SPs may prefer free-to-caller over MMP and take this into account in our overall assessment.
- 13.125 In summary, setting a MMP is likely to improve service quality, variety and innovation relative to the status quo. In comparison to making 080 free-to-caller, setting a MMP would lead to fewer costs for SPs but it implies higher mobile call prices. The evidence indicates that 080 SPs have diverse preferences, but a higher proportion of 080 SPs appear to prefer making 080 free-to-caller for scenarios where mobile origination charges are within our base case scenario range (or lower). For these SPs, setting a MMP is not as attractive as making 080 free-to-caller – these SPs who want to offer a genuinely free service would still face significant difficulties in being able to do so, thereby indirectly affecting their ability to innovate and offer new services on the 080 range.

Access to socially important services

- 13.126 Setting a MMP for 080 calls could improve vulnerable consumers' access to socially important services compared to the status quo, because vulnerable consumers (and in particular mobile-only households) may be able to access these services for a lower price than they currently pay. Nevertheless, as noted above, the reduction in the price of mobile 080 calls would not necessarily be significant (particularly under Option 2(b), albeit that would depend on the level of AC offered by the mobile OCP). Therefore some mobile-only consumers may continue to be deterred from accessing socially important services on the range.
- 13.127 As discussed under the price awareness criterion, we expect setting a MMP would lead to some improvements in price awareness, because SPs would be able to advertise a clearer pricing message for 080 calls. This greater clarity could reduce the confusion over prices, which currently deters callers from accessing socially important services on the 080 range. However, because the pricing message would be more complex, and it would not fully address the horizontal externality effect, some confusion could remain which in turn runs the risk of some callers being deterred from accessing socially important services.
- 13.128 Setting a MMP for the 080 range is likely to lead to less SP migration than if it were made free-to-caller, therefore we would expect most socially important services to remain on the 080 range. However, it would not meet the preferences of those SPs

providing socially important services that would prefer a free-to-caller number range.²¹⁴

Regulatory burden

13.129 As noted in the April 2012 consultation, the costs of this approach for industry, in particular for SPs, are likely to be lower compared to making 080 free-to-caller, because mobile origination payments are unlikely to increase and therefore we do not expect as much migration away from the 080 range.

13.130 The costs we have estimated for the free-to-caller approach are discussed in Annex 10, and set out in Table 13.4 above. By way of comparison, we describe below the costs we expect to arise under a MMP approach:

- **Billing costs:** as with the free-to-caller approach, we would not expect these costs to be material, given that there would be minimal changes required to OCPs' billing systems (mobile OCPs would only need to change their retail price point for 080 calls and update their PCAs);
- **Migration and misdialling costs:** as noted in the paragraph above, given that origination costs for SPs would not change, we do not expect any significant migration (and any subsequent misdialling costs) as a result of setting a MMP;
- **Communication costs:**
 - **OCPs:** there would likely be some communication costs for OCPs, as they would need to inform their customers of the changes to their 080 prices. We would expect these to be similar to our estimates for the free-to-caller approach, with the potential for some greater costs, given the greater complexity of the message;
 - **TCPs:** unlike the free-to-caller approach, given that there will be minimal changes to origination payments, the requirement for TCPs to communicate with their SP customers will be reduced compared to the free-to-caller approach. Therefore we would not expect any significant communication costs for TCPs;
 - **Wider communications campaign:** Ofcom would need to include information on the mobile charges for 080 as part of its campaign. Therefore we would expect these costs to be similar to the free-to-caller approach.
- **SP costs:** as noted above there is unlikely to be an increase in SP origination costs as a result of an MMP approach.

13.131 Finally, an additional cost involved with the MMP approach which we noted in the April 2012 consultation is the regulatory burden associated with setting and reviewing a maximum price for mobile 080 calls (particularly under Option 2(a)). Ofcom is likely to need to review this price on a regular basis to ensure it remains appropriate.

²¹⁴ In the 2011 SP survey, a greater proportion of 'socially significant' SPs indicated that 'free calls from mobile phones' was important to them (55% of socially significant rated it as very important compared to 32% of SPs overall), Q11.

Overall impact assessment of both options

Summary of costs

13.132 The Table below sets out a comparison of the both the incremental resource costs of each option, and the costs that we expect to be rebalanced (i.e. from callers to SPs via the increase in mobile origination payments or between different call types via the TPE).

Table 13.8: Comparison of costs of each option for 080

	Option 1: free-to-caller		Option 2: MMP
	Wider IAR	Base case scenario	
Billing costs	Not material	Not material	Not material
Migration costs	£3.2m to £36.0m	£3.2m to £19.0m	Not material
Misdialling costs (including consumer time costs)	£3.3m to £15.5m	£3.3m to £8.0m	Not material
Communication costs	£2.3m to £6.0m	£2.3m to £6m	£0.2m to £3.2m
Total additional costs	£8.8m to £57.5m	£8.8m to £33.0m	£0.2m to £3.2m

Table 13.9: Impact of rebalancing of 080 costs

	Option 1: free-to-caller		Option 2: MMP
	Wider IAR	Base case scenario	
Increase in SP costs	+£5m to +£127m	+£20m to +£64m	n/a
Mobile TPE	+£70 to -£39m	+£21m to -£24m	+£62m to -£26m
Fixed TPE	-£10m to -£25m	-£10m to -£25m	+£3m to -£20m

13.133 As already indicated, and as Table 13.8 above highlights, there are likely to be significant costs as a result of making the 080 range free-to-caller. The main type of cost is migration costs and the increase in SPs' origination costs (although we note that the latter is a rebalancing of costs between callers and SPs, rather than an additional resource cost). As discussed in paragraph 13.84 above, we consider that the range of migration costs we have estimated for Option 1 are more likely to be towards the lower end of the range - i.e. within the range associated with 19% SP migration. These migration costs and increase in SP costs do not occur under the MMP approach.

13.134 As noted in paragraph 13.44 above, we expect the figures indicated in Table 13.9 above will overstate the impact of any TPE on callers (positive or negative) because we consider that the TPE is unlikely to be complete.

Summary of benefits

13.135 We have not carried out a quantified assessment of the benefits of the free-to-caller approach. We have set out the reasons for this in detail in Annex 11 (in response to the comment from EE summarised in paragraph 13.20 above). We consider it more appropriate to assess the benefits of making 080 free-to-caller within a qualitative framework than by applying the quantitative framework we have used to evaluate the unbundled tariff. In summary, there are three reasons for this. First, we do not consider that applying the ‘averaging approach’ to consumers’ estimates of 080 prices is appropriate (this is the approach we have used in order to quantify the benefits of introducing the unbundled tariff for 084/087 numbers). Second, there are significant difficulties in accurately modelling the benefits of callers using the ‘wrong’ device less often, which we expect to occur as a result of making the 080 range free-to-caller. These reasons also explain why we have not quantified the benefits of a MMP option for the 080 range. Finally, modelling the benefits to SPs of creating a genuinely free-to-caller range, which are central to our proposal (as discussed further in the following paragraphs), is not straight-forward.

13.136 In the following paragraphs we consider the benefits of a free-to-caller and MMP approach in respect of each of our assessment criteria (except for ‘regulatory burden’, which is covered by the summary of costs above). We consider the benefits of each approach compared to the status quo, and then compared to each other.

Consumer price awareness

13.137 We consider that making the 080 range free-to-caller is likely to lead to improved consumer confidence in the price of 080 calls (compared to the status quo), reducing the harm consumers currently experience as a result of their confusion over prices. In particular, consumers will benefit because SPs will be able to easily communicate a simple, clear price to consumers - 080 prices will be consistently free across all CPs, from both fixed and mobiles. We consider that the simplicity of the free-to-caller pricing message is a significant benefit.

13.138 We consider that a MMP approach is also likely to improve consumer price transparency to some extent (compared to the status quo) as it would allow SPs to advertise a clearer pricing message for mobile 080 calls (i.e. either (a) a maximum price of 6.6ppm or (b) that an AC applied). However, the overall pricing message could still have the potential to confuse consumers, in particular because the price will vary between mobile and fixed calls (fixed would be free, mobile would not), which is not as intuitively simple to remember as ‘free’;

13.139 Overall, we consider that a free-to-caller approach is likely to be significantly more effective than MMP in addressing the current consumer confusion over prices and lead to greater improvements in consumer price awareness, because of the simplicity of the ‘free’ pricing message. We also consider that making 080 free-to-caller is likely to offer significantly greater benefits to consumer confidence in non-geographic numbers in general than setting a MMP for 080 calls.

Efficient prices

13.140 We consider that a free-to-caller approach is likely to lead to a more efficient pattern of prices than the status quo. It will address the vertical externality by allowing SPs to obtain and advertise a free-to-caller 080 number. Our evidence shows that a significant proportion of SPs would like a free-to-caller number range, suggesting there is significant unmet demand for a genuinely free-to-caller number range which does not exist at present.²¹⁵ We therefore consider this to be a significant benefit. The simpler pricing message for mobile 080 calls will also address the horizontal externality by improving consumer confidence in the price of fixed calls to 080 numbers (and potentially fixed calls to other non-geographic number ranges). Whilst making the 080 range free-to-caller may result in a rebalancing of other retail call prices through the TPE (particularly the price of other fixed services), we expect this would result in a structure of prices which is more closely aligned with consumer preferences than the status quo. We recognise that a consistent retail price of zero will not provide a price signal which reflects the additional resource costs of originating mobile calls, but we consider that it will nevertheless lead to a more efficient mix of fixed and mobile originated calls than is currently the case.

13.141 We consider that a MMP approach is also likely to lead to a more efficient pattern of prices than the status quo, by allowing SPs to advertise a clearer pricing message and potentially also by reducing the price of calls from mobiles. It would allow price signals to be sent to consumers to encourage them to take into account the difference in the cost of fixed and mobile calls when choosing how to make a 080 call, although we note that the difference in price of a fixed and mobile 080 call under this approach may still significantly exceed the difference in resource cost. However, it is unlikely to effectively address the vertical and horizontal externalities, and therefore may not necessarily lead to prices which reflect consumer preferences.

13.142 Overall, we consider that a free-to-caller approach will be more effective at addressing the vertical externality and the horizontal externality than MMP, and is therefore more likely to lead to efficient prices. As noted above, we consider that addressing the vertical externality is a significant benefit, as allowing prices to reflect the willingness of some SPs to subsidise consumer call charges (by making 080 free-to-caller) is likely to lead to prices which better reflect efficient price outcomes, including consumer preferences. We acknowledge that an MMP approach will provide a price signal to consumers that reflects the additional cost of originating a mobile call. However, we note that prices under MMP would not necessarily send a more appropriate signal than free-to-caller about which device to use, as the difference in the price of a fixed and mobile call may still significantly exceed the difference in resource cost.

Service quality, variety and innovation

13.143 As noted above, our evidence suggests that a significant proportion of SPs would like a free-to-caller number. For mobile origination payments within our base case scenario range, we therefore consider that a free-to-caller approach is likely to increase the attractiveness of the number range to those SPs who choose to remain on 080. We also consider that it will lead to improved consumer price awareness, increased consumer confidence and lower mobile 080 call prices which are likely to result in an increase in demand, and improve the reputation of the 080 number range. Making 080 genuinely free-to-caller may also allow SPs to introduce innovative business models (e.g. reverse charging or advertising funded services)

²¹⁵ See paragraph 13.58.

which are difficult to implement under the status quo. These combined effects are likely to improve service quality, variety and innovation on the range, leading to a net positive effect on service availability compared to the status quo (taking account of any migration/loss of service as a result of increased origination charges).

13.144 We expect that setting a MMP is also likely to improve service quality, variety and innovation relative to the status quo, given that SPs will be able to advertise a clearer price for mobile calls to 080.

13.145 Overall, for all scenarios where origination payments are within our base case range (or lower), we consider that the benefits to service availability from making the 080 range free-to-caller are likely to exceed the benefits from setting a MMP. Our evidence suggests that, at these levels of origination payments, more SPs would prefer making the 080 range free-to-caller than setting a maximum mobile price (see paragraphs 13.122 to 13.124 and Table 3.7 above), and that only a relatively small, albeit material, proportion of SPs are likely to migrate or get rid of their service as a result of the 080 range being made free-to-caller. Whilst MMP would meet the preferences of some SPs on the 080 range, it would therefore not meet the preferences of the greater proportion of SPs who would prefer a free-to-caller approach for mobile origination payments within this range. While we recognise that setting a MMP would imply lower costs for SPs, it is not likely to meet the preferences of the significant number of 080 SPs who want a free-to-caller range instead of a range with a MMP for origination payments within our base case. SPs who would prefer a range with some retail charge have other alternatives (e.g. 03), whereas setting a MMP will result in there being no true free-to caller number range which is clearly desirable for some types of services and meets the preferences of a majority of SPs.²¹⁶

13.146 When mobile origination payments are above our base case scenario range and towards the upper end of our IAR and fixed to mobile substitution is also high, we recognise that the overall effect on service availability is more finely balanced. We also recognise that fewer SPs may prefer free-to-caller over MMP in these scenarios, and therefore that the benefits to those SPs remaining on a free-to-caller 080 range may be lower than if it were made MMP instead. We consider these scenarios unlikely for the reasons set out in paragraphs 13.25 to 13.26 above.

Access to socially important services

13.147 We acknowledge that a free-to-caller approach may lead to the migration of some socially important services to other number ranges, but we expect this to affect only a small minority of socially important services on 080. We also recognise the potential for some SPs providing socially important services to adopt cost mitigation measures that could affect access to these services, but consider this risk is likely to be lower for origination payments towards the lower end of our base case scenario range and lower origination charges in the wider IAR. We consider that this negative impact will be outweighed by the significant benefits that making 080 free-to-caller will provide in terms of accessing socially important services. In particular, mobile only households (and particularly vulnerable consumers) will no longer be charged for calling socially important services, which we expect will increase their confidence in calling these

²¹⁶ EE argued in response to the April 2012 consultation that 0500 could be designated as a free-to-caller range alongside setting a MMP for the 080 range (in order to meet the preferences of those SPs who want such a range). There are a number of reasons why we consider such an approach would not be appropriate and we have set out our response to EE's arguments in Annex 29.

numbers. We therefore consider that a free-to-caller approach will lead to a net positive effect compared to the status quo

- 13.148 An MMP approach could also improve consumers' access to socially important services on the range to some extent compared to the status quo, particularly because of lower mobile call prices. However, there is a risk that the complexity of the pricing message could deter some consumers from accessing those services.
- 13.149 Overall, we consider that a free-to-caller approach may provide greater benefits than a MMP approach if mobile origination payments are within our base case scenario range. In these scenarios, we consider that the benefits of lower mobile prices and a greater reduction in consumer confusion under the free-to-caller approach (compared to MMP) will lead to greater benefits for vulnerable consumers in accessing socially important services that will outweigh any negative effect on service availability. We recognise the case may be more finely balanced for mobile origination payments towards the upper end of our IAR, where the negative impact on service availability is likely to be greater. In these scenarios, setting a MMP may be more beneficial in terms of vulnerable consumers' access to socially important services than making the 080 range free-to-caller. However, we consider these scenarios are unlikely for the reasons set out above.

Net benefits

- 13.150 Having summarised both the costs and benefits of each approach, we now consider the likely scale of any net benefits for each approach (i.e. weighing the costs and benefits of each approach against each other).
- 13.151 As set out above, we recognise the net benefits of making 080 free-to-caller depend on the level of origination payments. For origination payments within our base case scenario range, we consider the benefits of a free-to-caller approach are likely to be substantial, particularly the improvements to consumer confidence in 080 numbers, and the ability of this approach to meet the preferences of a significant proportion of 080 SPs that want a genuinely free-to-caller number. We consider these primary benefits combined with the other benefits described above are likely to outweigh the costs we have estimated for making 080 free-to-caller, resulting in net benefits. We also place weight on the wider benefits to consumer confidence in non-geographic numbers more generally that we anticipate would result from making 080 free-to-caller.
- 13.152 We recognise that the degree to which the benefits of a free-to-caller approach outweigh the costs will depend on the actual increase in cost to SPs resulting from this approach. For scenarios within our base case range, which we consider most likely and therefore place most weight on, there are likely to be significant net benefits. However, we recognise there are some scenarios where origination payments are above our base case scenario range, where the net benefits of making 080 free-to-caller may be more finely balanced due to higher levels of migration and a greater increase in ongoing costs for those SPs remaining on 080. We consider these scenarios to be very unlikely for the reasons set out in paragraphs 13.25 to 13.26 above but nonetheless recognise that the case for making 080 free-to-caller rather than setting a MMP is less clear-cut in these scenarios.
- 13.153 We have discussed the benefits of an MMP approach above. We consider these to be smaller than those that are likely to result from a free-to-caller approach, at least for origination payments within our base case scenario range. However, the costs of MMP are also smaller. Taking into account the costs and the benefits of an MMP

approach, we consider that this is also likely to result in net benefits compared to the status quo. However, we consider that the net benefits of a free-to-caller approach for an origination payment within our base case scenario range, are likely to be significantly greater than an MMP approach (despite greater cost) because of the greater benefits to consumer price awareness and efficiency of prices. We consider it most likely that actual origination payments will lie within our base case scenario range, and therefore place most weight on this assessment. However, we recognise that if actual origination payments were above our base case range, the arguments in favour of free-to-caller over MMP would be less strong.

Provisional decision to make 080 free-to-caller

13.154 On the basis of the assessment above, and taking into account stakeholder comments set out in Annex 29 as well as the additional evidence presented in the April 2012 consultation, we consider that making the 080 range free-to-caller (Option 1) will be most effective in addressing the consumer harm we have identified on this number range and, in doing so, in contributing to our wider efforts to improve consumer confidence in non-geographic numbers more generally.

13.155 We note that this assessment accords with our policy preference that calls to 080 should be free-to-caller (see paragraphs 13.4 to 13.7 above).

The 116 range

Consumer concerns

13.156 As set out in Section 12, the 116 range was introduced relatively recently and there are only three numbers in active use (with two further designated but not yet allocated). These three active numbers are already designated as free-to-caller (all 116 numbers are required to be either free-to-caller or Freephone under the current regulatory approach). There is only one 116 number which has been designated as Freephone, and this has not yet been allocated to an SP (this is the 116006 'helplines for a victim of crime service').

13.157 As set out in Section 4, given the relatively recent introduction of these numbers, and that there are only three actively in use, consumer understanding and awareness of the range, as well as usage, is very low. We expect, however, that as the existing numbers are promoted more widely, and as more numbers become available, usage will grow. Whilst the existing low usage means that evidence of existing consumer harm in relation to this number range is limited, we noted in both the December 2010 consultation²¹⁷ and the April 2012 consultation²¹⁸ our concerns that, as the 116 range becomes more widely used, the existing pricing framework (where the numbers are either designated as free-to-caller or Freephone) is likely to create the same issues around consumer confusion, as well as vulnerable consumers being deterred from access, which are present on the 080 range. In particular consumers currently struggle to distinguish between similar looking numbers (beyond the third digit at least)²¹⁹ and this suggests that they are likely to find it difficult to recognise different subcategories of number within the 116 number range (i.e. that some are free-to-caller whereas others could be charged from a mobile).

²¹⁷ December 2010 consultation, Annex 7, paragraphs A7.128 to A7.134.

²¹⁸ For example, see paragraphs A27.24 in Part C, Annex 17 of the April 2012 consultation.

²¹⁹ See for example our discussion of the consumer confusion between 0844 and 0845 numbers in Part B, Section 9.

13.158 The EC requires 116 numbers to be Freephone.²²⁰ The EC's working documents show that 116 numbers were originally intended to be free-to-caller,²²¹ but the requirements of the final Decision were changed to 'Freephone' in recognition of the different arrangements that apply in different countries, such as the UK. However, the EC nevertheless stated that these numbers should 'ideally' be free-to-caller.²²²

13.159 We established the procedure for designating the charging arrangements for 116 numbers in the UK in 2009 and it involves balancing different factors such as the level of social value or need met by the service and the likely situation of the caller when she/he needs to call the service.²²³ However, our decision to set up the 116 charging arrangements in this way was made on the basis of the Freephone charging arrangements at that time. We have set out our provisional decision above to adopt a free-to-caller approach for the 080 range and this alters the position that we reached in the 2009 116 Statement on charging arrangements for the 116 range. In particular, in the context of the wide-ranging changes to the non-geographic numbering regime, and the changes to the charging arrangements for 080 in particular, we consider that it would be counterintuitive and would cause confusion to consumers if we were to leave 116 numbers with two different charging arrangements, particularly given that these numbers are clearly designated for services of 'social value'.

13.160 We therefore consider that the potential for future consumer confusion, which is supported by the existing consumer confusion evident on the 080 range, justifies intervention on the 116 number range. In particular we consider intervention is necessary to protect consumers from the market failures that are likely to arise with further usage of the 116 range, particularly given the nature of the services that it is used for.

Options for the 116 number range

Approach in the April 2012 consultation

13.161 In the April 2012 consultation, in line with our proposals for the 080 number range, we proposed the following options for the 116 range²²⁴:

- **Option 1:** we designate all existing and future 116 numbers as free-to-caller²²⁵;
or

²²⁰ Article 2 and Recital 3, 116 EC Decision

²²¹ See EC Communications Committee, Draft Commission Decision on reserving the number range beginning with 116 for harmonised numbers for harmonised European services (COCOM 05-33), 30 September 2005: <https://circabc.europa.eu/sd/d/3e929f19-a94a-40de-b3a7-09bacfd5ccae/COCOM05-33%20116.pdf>

²²² See EC Communications Committee, Commission Decision on reserving the number range beginning with "116" for harmonised numbers for harmonised services of social value to European citizens (COCOM 06-30), 22 January 2007, Annex 1, page 2: <https://circabc.europa.eu/sd/d/2480503b-a12d-4e74-bc50-a32c980af3d8/COCOM06-30%20ANNEX%201%20116%20concept.pdf>

²²³ This was part of our 2009 116 Statement setting out the allocation procedure for 116 numbers. In particular see paragraph A6.30.

²²⁴ These options related specifically to 116 numbers designated as 'Freephone' in the Numbering Plan. We noted in the April 2012 consultation that we were not proposing any changes to the existing 116 numbers that had been designated as free-to-caller in the Numbering Plan. See paragraph A27.29 in Part C, Annex 27 of the April 2012 consultation.

- **Option 2:** we set a maximum price for mobile calls to those 116 numbers that are designated as Freephone.

13.162 We considered both options against our assessment criteria in Annex 27 of the April 2012 consultation, and we provisionally concluded that Option 1 would offer the greatest benefits overall. We acknowledged that there was a risk of reduced service availability under the free-to-caller approach (because some SPs might be less able to afford the increased mobile origination payments likely under a free-to-caller option). However, we said that a consistent free-to-caller price for 116 would offer greater benefits for consumers and that avoiding different regulatory regimes within the 116 range was consistent with our approach to the 080 range and our overarching strategy of simplifying the non-geographic numbering system. We said that Option 1 would minimise the risk of the 116 range developing the same issues with consumer confusion that were present on the 080 range and was also most likely to facilitate access to 116 services by vulnerable households.

Stakeholder response and updated assessment of the 116 options

13.163 In response to the April 2012 consultation several stakeholders agreed that we should apply a consistent approach to the 080 and 116 number ranges (for example Three, BT and CWW). However, EE continued to challenge our approach to 116.²²⁶ In addition both EE and Vodafone raised concerns about our proposals for the mobile origination charges for 116 numbers under a free-to-caller approach. We have responded to EE's specific arguments in more detail in Annex 29.

13.164 We have revised our impact assessment range ('IAR') for the level of fixed and mobile origination charges which we assume in order to assess the impact of making the 116 range free-to-caller. See Annex 27 and Section 12 where we set out these revisions and our response to stakeholder comments. We set out two possible IARs for both fixed and mobile origination payments. The first assumes that current origination payments for both fixed and mobile calls remain unchanged at 0.5ppm. The other assumes that the origination payments for fixed and mobile calls are set at the pure LRIC of originating a call, which we estimate to be between 0.0 and 0.1ppm for fixed calls and between 0.8ppm and 0.9ppm for mobile calls. We also consider the impact of higher origination charges for both fixed and mobile calls where relevant in conducting our analysis for reasons of robustness, although note that we consider origination payments outside of our IARs to be unlikely.

13.165 Below we set out our updated analysis of the two 116 options against each of our assessment criteria. Because, other than EE, most respondents agreed with our preferred approach this assessment is largely in line with that presented in the April 2012 consultation.

Consumer price awareness

13.166 Whilst current awareness of 116 numbers is low²²⁷ because of its low usage, we consider that making all 116 numbers free-to-caller (Option 1) would benefit

²²⁵ This would remove the need for any specific assessment of the charging arrangements for each 116 number.

²²⁶ In particular EE argued that the current arrangements for 116 were sufficient because there was no evidence of consumer harm. See Annex 29 for further details of their arguments.

²²⁷ A European Commission research report found that awareness of the range in the UK was only 5% (compared to 13% across the EU). When asked what number they would call if they needed one of the services currently provided on the 116 ranges, none of the respondents spontaneously

consumers by providing a consistent, simple price point for the number range to help it develop in the future. The clear pricing structure will help consumers develop an understanding of the range as it becomes more widely used. As noted in the April 2012 consultation, a universally free-to-caller approach for all 116 numbers will protect the integrity of the range and allow SPs with an allocated 116 number to provide a clear pricing message when they promote the service (and that pricing message will be reinforced by the fact that other 116 numbers will also be promoted as free-to-caller). In particular it will avoid the risk of consumer confusion between 116 numbers that are free-to-caller and those which could attract a charge from mobiles, and any potential horizontal externality effect causing consumers to be deterred from calling from a mobile (for example because they assume that since one 116 number is charged from a mobile, others will also be charged).

13.167 Under Option 2, setting a maximum mobile price would enable any future SPs using a 116 number with a Freephone designation to provide a clearer pricing message than they would have been able to do so under the current system. Consumer price awareness might therefore be improved. However, the pricing message would be more complex compared to free-to-caller. Whilst SPs would be able to communicate the mobile price for a 116 call in their advertising, if a caller did not have that material in front of them they would have to remember the price, or infer it from the price of other 116 numbers they might have called.²²⁸

Efficient prices

13.168 All 116 numbers that are currently in use are already designated as free-to-caller (one 116 number has been designated as Freephone, but it has not been allocated to an SP and has not been brought into use). If there is no change in the origination payment for calls to these numbers, neither of the 116 options would lead to any rebalancing of fixed or mobile prices relative to current levels (i.e. to a TPE). However, we recognise that a change in regime may lead to a change in the level of origination payment for calls to existing 116 numbers. Our IAR sets out that, if this were to happen, we would expect to see fixed and mobile origination payments at our estimates of LRIC - which would imply a 0.4-0.5ppm reduction in origination payments for fixed calls and a 0.3-0.4ppm increase for mobile calls. Such a change would lead to a negative fixed TPE and a positive mobile TPE, although the scale of each effect would be likely to be very small given the low volumes of calls to 116 numbers and the change in origination charge implied. In relation to future 116 numbers, we consider retail prices are more likely to be efficient if the vertical and horizontal externalities are addressed.

13.169 In respect of the vertical externality, the 116 charging designation is required to be Freephone or free-to-caller, and the decision as to which designation is applied to a particular number is made by Ofcom as part of the process of adding the 116 number to the Numbering Plan. Therefore the vertical externality is less relevant to an assessment of the 116 options, given that the price is largely outside of the SP's control because it is set by regulation rather than being set by OCPs who do not take SPs' interests into account (as in 080). Nevertheless, as noted in the April 2012 consultation, arguably Option 2 would better address any externality effect because a

mentioned the 116 numbers. Special Eurobarometer 367, *Harmonised numbers for services of social value*, October 2011, http://ec.europa.eu/public_opinion/archives/ebs/ebs_367_en.pdf, pp.32 & 53-61.

²²⁸ However, consumers are likely to need to call these numbers on a very infrequent basis. The Eurobarometer research report found that 76% of respondents said they had never been in need of calling one of the types of service currently allocated to the 116 range. http://ec.europa.eu/public_opinion/archives/ebs/ebs_367_en.pdf, p.65.

potential SP would be able to indicate its preference for a Freephone designation for a particular 116 number whereas Option 1 implies a 'one size fits all' approach.²²⁹

13.170 However, as noted under the consumer price awareness criterion, there is a risk that if some future 116 Freephone numbers were charged from mobiles, it might damage the pricing message for fixed line callers to those numbers and for mobile and fixed line callers to other (free-to-caller) 116 numbers (i.e. the horizontal externality). In contrast the consistent, clear pricing message of free-to-caller would not create this potential for confusion.

Service quality, variety and innovation

13.171 The potential impact on service availability is particularly relevant for the 116 number range (which is noted in EE's comments set out in Annex 29).²³⁰ There is a concern that Option 1 might result in fewer SPs applying in future to offer a service on a particular 116 number reserved by the EC if they are unable to afford any increase in cost resulting from the number being designated as free-to-caller instead of Freephone (i.e. if origination payments and therefore hosting charges are higher for free-to-caller 116 numbers than they would have been for Freephone 116 numbers).

13.172 We noted in the April 2012 consultation that Victim Support had indicated in response to Ofcom's consultation on appropriate charging arrangements for the 116006 'Helpline for Victims of Crime' number that it would not have the necessary funding to be able to support a free-to-caller service and this was one of the factors which led to the designation of 116006 as Freephone. [3<]. We also set out in Section 12 the evidence we have seen suggesting there are some 116 SPs who are already facing financial difficulties in meeting the current level of hosting charges.

13.173 We therefore recognise the potential for any increase in average origination payment resulting from making 116 numbers free-to-caller to have a significant negative impact on service availability relative to setting a MMP. We now consider the potential impact of making 116 free-to-caller on current and future 116 services separately.

13.174 In relation to the existing 116 services (which are already free-to-caller), we consider it possible that current charging arrangements could be maintained. In this case, making 116 free-to-caller would clearly have no impact on availability of these services relative to the status quo (or to MMP). We recognise that the change in regime may be used to renegotiate existing charges, and that any increase in average SP payment could have a significantly negative effect on the availability of these services. However, for payments within our IAR, any increase in average SP outpayments would be limited to a maximum of 0.4ppm (the difference between current average charges and the pure LRIC mobile charge) and, given the current split between fixed and mobile calls, would be likely to remain similar to current average outpayments.²³¹ As a result, we consider Option 1 is unlikely to have a material impact on availability of existing 116 services.

²²⁹ See paragraph A27.35 in Part C, Annex 27 of the April 2012 consultation.

²³⁰ Note that the issue of service quality is less relevant for the assessment of the 116 number range, because as part of the allocation process for 116 numbers, Ofcom and the advisory committee take quality of service into account when considering which SP the number will be allocated to. Therefore a certain level of quality needs to be met in order for the number to be allocated.

²³¹ The maximum increase of 0.4ppm would occur if the mobile origination charge were set at the upper bound of our pure LRIC estimate and 100% of calls were originated from mobile. However, data from call volumes to the Samaritans 116 helpline suggests that approximately 70% of 116 calls

- 13.175 With regard to future 116 numbers, we recognise the impact on service availability could be significant if requiring these numbers to be free-to-caller were to lead to higher origination payments than would have been the case if they had been designated Freephone. However, in the first instance we note that it is not clear that this would be true. The only 116 number currently designated as Freephone, the 116006 number for a helpline for victims of crime, has not yet been allocated to an SP. As a result, there are no existing agreements over origination payments for calls to Freephone 116 numbers which we could use to compare with the likely level of origination payments to free-to-caller 116 numbers. Moreover, we consider that relatively low fixed and mobile origination charges would help to mitigate this risk. We have set out our revised estimate of the IAR for the 116 range in Annex 27. We assume that origination payments for these future 116 numbers would either be set on the same basis as charges for calls to existing 116 numbers (approximately 0.5ppm for both fixed and mobile) or at our estimates of pure LRIC (0.1ppm for fixed calls and 0.8-0.9ppm for mobile). On this basis we expect any negative impact on availability of future 116 numbers to be mitigated, if not completely removed.
- 13.176 For origination payments above our IAR, making 116 free-to-caller could have a significant negative impact on the availability of both current and future services. However, we consider these scenarios very unlikely because of our requirement that charges be fair and reasonable and our proposed guidance on how we would approach any dispute about fair and reasonable charges.
- 13.177 Setting a maximum mobile price might reduce the risk of the impact on service availability, because we would expect origination payments to be lower for Freephone 116 numbers than free-to-caller 116 numbers. However, as we noted in the April 2012 consultation it is difficult to know whether in practice service availability would be greater under Option 2 compared to Option 1 because there are no services currently operating a 116 Freephone number.²³²

Access to socially important services

- 13.178 Services on 116 numbers are clear examples of socially important services (or services of ‘social value’ as defined by the EC).²³³ Therefore it is important to ensure that consumers, and vulnerable consumers in particular, will not be deterred from accessing these services. Option 1 is more likely to meet that objective because both fixed and mobile calls to all 116 numbers will be free-to-caller, whereas under Option 2 mobile callers could still face charges for calling some 116 services in future (albeit that the level of that charge would be capped). Furthermore, because of the consistent pricing message under Option 1 there is less risk that consumers will be deterred from accessing 116 services because of confusion about call costs, whereas Option 2 could lead to some consumers assuming that all 116 numbers are charged from a mobile and/or that these numbers are charged from a fixed line and being deterred from accessing them as a result (i.e. the horizontal externality effect).

are originated from a mobile and 30% from a fixed line. If both fixed and mobile origination charges were set at the upper bound of our pure LRIC estimates, this would imply an average SP outpayment of 0.66ppm (i.e. an increase of 0.16ppm).

²³² April 2012 consultation, Part C, Annex 27, paragraph A27.40.

²³³ The 116 EC Decision defined ‘Harmonised service of social value’ as “a service meeting a common description to be accessed by individuals via a freephone number, which is potentially of value to visitors from other countries and which answers a specific social need, in particular which contributes to the well-being or safety of citizens, or particular groups of citizens, or helps citizens in difficulty”.

13.179 We recognise that the benefits of the free-to-caller approach on 116 in addressing the concern relating to access to socially important services has to be weighed against the risk that it could lead to reduced service availability, as discussed under the previous criterion. However, we consider this risk will be mitigated for origination payments within our IARs.

Regulatory burden

13.180 We have not conducted a quantified assessment of the costs of changes to the 116 range, because as set out in Annex 10 (in Part A) we do not consider that there are likely to be any material costs as a result of making 116 free-to-caller. This is primarily because all the active 116 numbers are already free-to-caller and the 116006 Freephone number has not yet been allocated to an SP. There may, however, be higher costs under a free-to-caller approach compared to setting a MMP for any SP that wants to use the 116006 number, or for future 116 numbers that might otherwise have been designated as Freephone (or had a maximum mobile price under Option 2). The level of these costs will depend on the origination payment for 116 numbers. However, we are proposing to include the origination payment for 116 numbers within the scope of the access condition, which will require TCPs to purchase origination on fair and reasonable terms. We expect the application of the access condition to reduce the risk of origination payments for 116 numbers being unreasonably high and mitigate to some extent the cost impact on SPs.

13.181 In terms of the regulatory costs, under both options only the existing Freephone designation of the 116006 number for the victims of crime service would need to change in the Numbering Plan. Under Option 1, the consistent charging approach to 116 numbers would also remove the need for Ofcom to consult on the charging regime for each 116 number, instead all designated 116 numbers would automatically be free-to-caller.

Provisional decision to make 116 free-to-caller

13.182 There are clear benefits of making all 116 numbers free-to-caller, in particular it will provide a clear, consistent pricing message which will be easily understood by consumers and protect consumers from potential confusion, and address any horizontal externality effect, which will encourage consumer confidence in using the range as it becomes more widely used. In contrast there is a risk that setting a MMP could create consumer confusion which could negatively impact on consumer understanding of the existing 116 free-to-caller numbers, as use of the range increases.

13.183 We recognise there is a risk of a negative impact on service availability on the currently designated Freephone 116 number (and any future 116 numbers which might have been given a Freephone designation). However, we consider that this risk is reduced by our proposed access condition and guidance as to how we would resolve any future dispute about whether origination charges are fair and reasonable. We consider that the benefits to consumers in having a single, clear and consistent free-to-caller pricing message, particularly in terms of removing the risk of this range developing the same problems with consumer confusion (and access to socially important services provided on the range) that are present on the 080 range today, outweigh the potential risk of any impact on service availability for origination payments within our IARs.

- 13.184 Furthermore, we note that clear and consistent free-to-caller pricing structure for 116 numbers is consistent with the decision we are minded to take on the 080 range and with our overarching strategy of simplifying the non-geographic numbering system.
- 13.185 Therefore, on the basis of the assessment above, and taking into account the points made in Annex 29 as well as the decision we are minded to take on the 080 range, we consider that making all 116 numbers free-to-caller would create greater net benefits to consumers and be more effective at protecting them from potential harm as the range becomes more widely used (compared to setting a MMP for the existing, and any future, 116 numbers designated as Freephone).
- 13.186 As explained in Section 15 below, given that this approach will only require a change to the designation of the 116006 number in the Numbering Plan (which has not yet been allocated to an SP or brought into use), we consider that this change should come into effect immediately upon publication of our final statement.²³⁴ In particular, we wish to avoid the situation in which an SP may be allocated this number and set it up on a Freephone basis, only for it to change to free-to-caller in late 2014. We are therefore consulting on an immediate modification to the Numbering Plan to change the designation of the 116006 number from 'Freephone' to 'Free-to-caller' (see Section 6 and Annex 15).

Overall conclusions on the 080 and 116 number ranges

- 13.187 In light of our assessment, we are minded to designate both the 080 and 116 number ranges as free-to-caller. We have set out in Section 6 the proposed changes that we intend to make to General Condition 17 and the Numbering Plan in order to bring these changes into effect (and our proposed modifications are set out in full in Annexes 14 to 15).
- 13.188 In the next Section we set out how we intend to approach the wholesale regulation of these number ranges, assuming that we proceed with a free-to-caller approach.

²³⁴ Unlike the changes to the 080 range which will need more time to implement and will therefore come into effect 18 months after the publication of our final statement.

Part C - Section 14

Wholesale arrangements

Introduction

- 14.1 In this section we consider whether there is a need for wholesale regulation if the 080 and 116 ranges are made free-to-caller.
- 14.2 We considered the commercial effects of adopting a free-to-caller approach in the April 2012 consultation. We were not confident that commercial negotiations at the wholesale level (absent further involvement by Ofcom) would be likely to deliver desirable outcomes for consumers. We discounted the option of not intervening at the wholesale level (i.e. reliance on dispute resolution alone) and the option of conducting a formal wholesale market review. We proposed instead to set an access condition on TCPs requiring them to purchase wholesale call origination for calls to 080 and 116 numbers on fair and reasonable terms (including charges). We also proposed to issue guidance as to how we would approach any future dispute about what constitutes a fair and reasonable charge.
- 14.3 Annex 30 contains a summary of the stakeholder responses we received in relation to these proposals. That annex contains our detailed response in relation to comments about the need for, and form of, wholesale regulation, and also more specific implementation issues²³⁵ related to the access condition (for example, wholesale billing and transit arrangements).
- 14.4 Having carefully considered the responses received, our view is that, if we proceed to make the 080 and 116 ranges free-to-caller, we should also impose an access condition on TCPs, as described above. We are re-consulting on one particular element of the access condition that we proposed in the April 2012 consultation. Namely, the requirement that TCPs provide a notification of any proposed revision to their existing origination charges. We set out our revised position with respect to this element in paragraphs 14.68 to 14.75 below.
- 14.5 Annex 17 contains a draft of the access condition on which we are consulting (see also Section 6 for further commentary on this proposed condition). We are also consulting today on draft guidance as to how we would approach any dispute about fair and reasonable origination charges.²³⁶ This section is structured broadly as follows:
- wholesale concerns;
 - wholesale regulatory options:
 - no ex-ante regulation (reliance on our dispute resolution powers);
 - access condition;
 - SMP regulation;
 - alternative approach;

²³⁵ See Annex 30, at paragraphs A30.75 to A30.98.

²³⁶ See <http://stakeholders.ofcom.org.uk/consultations/080-116-ranges/>

- design of the access condition; and
- conclusion and further consultation.

Wholesale concerns

- 14.6 In the April 2012 consultation we recognised that the existence of imbalances in negotiating power between certain OCPs and TCPs could lead to concerns, if we were to set the retail price of 080 calls to zero and refrain from regulatory intervention at the wholesale level. We noted the absence of market conditions which would be likely to lead to origination payments being set at reasonable levels, and which would deliver stable origination payments in a timely fashion. We also identified that absent ex-ante wholesale regulation, there may be interconnection failures, at least in the short term.²³⁷
- 14.7 Respondents to the April 2012 consultation were concerned about the effects of these imbalances in negotiating power, if the 080 and 116 ranges were made free-to-caller.²³⁸ However, they did not challenge our assessment that concerns would arise, absent ex-ante wholesale regulation.
- 14.8 We remain of the view that, if we proceed with a free-to-caller approach and do not intervene at the wholesale level, imbalances in negotiating power could lead to undesirable outcomes for consumers. We explain our concerns in more detail below.
- 14.9 In Annex 30 we set out our views on how the wholesale level for NGCs operates and, in particular, on the termination rates that would be likely to arise commercially (absent regulation or involvement by Ofcom). We consider this analysis is relevant to an assessment of the origination payments that would be likely to arise on a free-to-caller range, in the absence of ex-ante wholesale regulation, because an origination payment is simply a negative termination rate.
- 14.10 Applying this analysis, we consider that in the absence of ex-ante wholesale regulation, OCPs and TCPs would enter into commercial negotiations about the level of origination payments that should apply on a free-to-caller range. There would be inherent tensions in these negotiations, with OCPs preferring higher origination payments and TCPs lower. Predicting their likely outcome is complicated by the fact there are a large number of heterogeneous OCPs and TCPs, each in a different commercial position. As a result, negotiations would depend on the particular OCP and TCP involved, rather than one side consistently being in a strong position, and commercial negotiations would therefore be likely to produce a range of origination payments depending on the parties involved.
- 14.11 Given this, we have concerns about delays in interconnection and refusals of interconnection. Even where there is not a breakdown in interconnection, we are nevertheless concerned that agreement over stable origination payments will not necessarily be reached in a timely manner, giving rise to the potential for a lengthy period of uncertainty. We also cannot be confident that the origination payments that would ultimately arise would lead to desirable outcomes for consumers. In particular,

²³⁷ April 2012 consultation, Part C, Section 17, pp.89-94,

²³⁸ Some respondents were concerned that our proposed access condition would not sufficiently address the concerns we had identified. These comments are considered in Annex 30 and the subsection below 'Wholesale regulatory options - access condition'. Annex 9 in Part A addresses stakeholder comments in relation to our broader analysis of whether there are market failures at the wholesale level for calls to non-geographic numbers.

origination payments would not necessarily be set at a fair and reasonable level. In particular, the following may occur:

- i) Where the balance of negotiating power is heavily in favour of either OCPs or TCPs then delays or interconnect failures may occur. Some TCPs may seek to drive origination payments down to a particularly low level, resulting in OCPs refusing interconnection or leading to delays in interconnection. Similarly, some OCPs may seek to drive origination payments up to a particularly high level resulting in TCPs (on behalf of SPs) refusing interconnection or leading to delays in interconnection.
- ii) Even where there is not a breakdown in connectivity, a potentially lengthy period of uncertainty over the likely level of origination payments is likely to occur, at least for some CPs. Such a period of uncertainty could have adverse effects on SP service availability, investment and innovation, regardless of the levels of origination payment that are ultimately agreed.
- iii) In terms of the origination payments that would ultimately arise, as noted above, some OCPs may be able to drive payments to a particularly high level. In the long run, this would result in detrimental effects for SPs, harming service provision and innovation, which would not be offset by significant benefits to callers.
- iv) As noted above, some TCPs may be able to drive origination payments down to a particularly low level. Although this would not affect the retail price of 080 calls (which would still be free-to-caller), it could prevent OCPs from recovering efficiently incurred costs, which in turn may affect the retail price they charge for other services. It may also result in an inefficiently high number of SPs being present on the 080 range, although this may offer benefits to consumers in terms of service availability and innovation on 080.
- v) Different TCPs may negotiate different origination payments. In the longer term, this asymmetry between TCPs could lead to consolidation in hosting, which could potentially harm competition at the hosting level with detrimental effects on both SPs and callers. This impact may be limited in practice by the fact that OCPs are likely to transit traffic to smaller TCPs via larger TCPs, and smaller TCPs are likely to benefit from the rates negotiated by larger TCPs as a result. The incentives for TCPs to differentiate their origination charges may also be limited if they incur costs associated with monitoring and maintaining many different origination charges (so-called 'menu costs').
- vi) Different OCPs may also negotiate different origination payments. Given the fact that 080 call volumes are significant, this may affect their ability to compete on other aspects of their retail offering, although we recognise this impact may be mitigated if smaller OCPs are able to benefit from the rates negotiated by larger OCPs by transiting traffic via the larger OCPs. As with TCPs, the incentives for OCPs to differentiate their origination charges may also be limited by menu costs.).

14.12 We now consider these effects in more detail.

Effect on interconnectivity

14.13 The differences in negotiating power between OCPs and TCPs may result in delays or failures in interconnection. OCPs may refuse to interconnect where origination

payments are too low (for example, if they are below the incremental cost of originating the call). On the other hand, TCPs (on behalf of SPs) may refuse to interconnect if origination payments demanded by OCPs are too high. CPs may also seek to employ other tactics (short of refusing interconnection) in response to origination payments that they consider to be unacceptable. For example, TCPs may seek to block calls which originate from mobiles and OCPs may seek to block calls to particular number blocks.

- 14.14 In the April 2012 consultation, we discussed several instances of SPs seeking to negotiate a retail price of zero with mobile OCPs for particular 080 services. The reports we received suggested that the ability of mobile OCPs to demand origination payments significantly above their efficient costs had contributed to prolonged negotiations and that there were only isolated cases of those negotiations being successful.²³⁹
- 14.15 We have also previously set out evidence suggesting that SPs may block calls on 080 number ranges where they cannot afford origination payments. For example, we set out evidence that call blocking by SPs has occurred in other countries, such as Germany and the Netherlands.²⁴⁰ In addition to this evidence we note that some TCPs suggested, in response to the April 2012 consultation, that they may seek to block calls on behalf of SPs if origination payments for a free-to-caller range were set at a level which they consider to be too high.²⁴¹
- 14.16 More generally, the 080 number range also has a history of interconnection problems, demonstrated by lengthy and extensive disputes:
- 14.16.1 In autumn 2009, each of EE, O2 and Vodafone referred a dispute to Ofcom regarding the introduction of tiered termination rates by BT for calls to 080 numbers.²⁴² In February 2010, Ofcom's determined the dispute, ordering the parties to revert to the trading conditions that had applied prior to the introduction of tiered rates and ordering BT to make repayments by way of adjustment for overpayments made by the MNOs (the 080 Dispute Determination). This determination was appealed by BT to the CAT in April 2010, with EE, Vodafone, O2 and Three intervening.²⁴³ After an eleven day hearing, the CAT issued judgment (the 08x CAT Judgment) in August 2011, setting aside Ofcom's determination. This judgment was subsequently appealed to the Court of Appeal, which issued its judgment in July 2012, setting aside the CAT's Order and reinstating Ofcom's original determination. In February 2013, BT was granted permission to appeal the Court of Appeal's judgment to the Supreme Court. The case is pending before the Supreme Court.
- 14.16.2 In September 2010, each of EE, O2, Vodafone and Three referred a dispute to Ofcom, again regarding BT's tiered termination rates for calls to 080 numbers.²⁴⁴ Ofcom's decision to open a dispute was appealed by BT to the CAT,²⁴⁵ with EE, Vodafone, O2 and Three intervening in the appeal. The CAT issued judgment in May 2011 dismissing BT's appeal. In

²³⁹ April 2012 consultation, Part C, Annex 20, paragraph A20.55

²⁴⁰ International survey 2011

²⁴¹ See Annex 30, at paragraphs A30.81 to A30.83.

²⁴² Case CW/1055/08/10 regarding NCCN 956

²⁴³ Case 1151/3/3/10, which was consolidated with Cases 1168/3/3/10 and 1169/3/3/10 concerning disputes regarding BT's termination rates for 0845 and 0870 numbers.

²⁴⁴ Case CW/1055/08/10 regarding NCCN 1007, as corrected by NCCN 1046

²⁴⁵ Case 1171/3/3/10

December 2012, Ofcom issued its provisional determination that BT's termination charges for 080 numbers are not fair and reasonable,²⁴⁶ and confirmed this in its final determination in April 2013.²⁴⁷

- 14.16.3 In February 2012, each of EE, Three and O2 referred a dispute to Ofcom regarding paragraphs 12 and 13 of BT's Standard Interconnect Agreement ('SIA').²⁴⁸ A number of other operators have registered an interest in the outcome of the disputes (CWW, Gamma, IV Response, Sky, TalkTalk, TNUK, Virgin Media and Vodafone). Paragraphs 12 and 13 of BT's SIA set out the contractual process by which amendments to existing termination rates (as well as changes to other rates) may be introduced. These paragraphs formed the contractual basis on which BT sought to introduce the termination charges for 080 calls, which formed the subject of the two disputes described above. The MNOs submit that the imbalance between these contractual provisions (in particular, the rights of BT on the one hand, and other operators on the other hand, to introduce changes to rates) is unfair and unreasonable. In October 2012, Ofcom issued its provisional determination that, on balance, it had not seen sufficient evidence that the terms of these paragraphs of the SIA create detriments in practice for consumers and competition.²⁴⁹
- 14.17 The background of disputes and appeals in relation to origination/termination charges for 080 calls adds to our concerns about the potential for connectivity issues to occur in the absence of ex ante wholesale regulation.
- 14.18 With respect to the 116 range, the three numbers currently in use are already free-to-caller. We therefore recognise the possibility that, absent ex ante wholesale regulation, origination payments for calls to these numbers could remain at their current commercially agreed level following the implementation of our proposals. If so, our proposals may not affect interconnectivity in relation to these numbers. However, the number of SPs on the 116 range may increase over time if use is made of the 116006 number allocated for victims of crime support and any future allocations of 116 numbers. We are concerned that the same imbalances of negotiating power described in relation to 080 may apply to negotiations over origination payments for calls to these 116 numbers. We also recognise that some OCPs may use the change of regime as an opportunity to renegotiate existing charges (which usually follow the current level of fixed origination payments for 080), and that any such negotiations may also be adversely affected.
- 14.19 We outlined in the April 2012 consultation that there were indications that existing 116 providers had experienced difficulties in reaching an agreement with mobile OCPs on an origination charge which they found affordable.²⁵⁰ Indeed the 116 range

²⁴⁶ Ofcom, *Provisional conclusions to resolve disputes concerning BT's tiered termination charges in NCCNs 1107, 1106 and 1046*, 4 December 2012 -

<http://stakeholders.ofcom.org.uk/consultations/provisional-conclusions/>

²⁴⁷ Ofcom, *Determination to resolve disputes concerning BT's tiered termination charges in NCCNs 1101, 1107 and 1046, Final determination*, 4 April 2013 -

<http://stakeholders.ofcom.org.uk/binaries/consultations/provisional-conclusions/statement/040413.pdf>

²⁴⁸ Case CW/01083/01/12

²⁴⁹ Ofcom, *Dispute between BT and each of Everything Everywhere Limited, Hutchison 3G UK Limited and Telefónica UK Ltd relating to BT's Standard Interconnect Agreement, Provisional Conclusions*, 1 October 2012 -

http://stakeholders.ofcom.org.uk/binaries/consultations/dispute_interconnect_agreement/summary/2012_Sept_28_SIA_provisional.pdf

²⁵⁰ See Part C, Annex 17, paragraph A27.38.

has a history of interconnection failures, with initial delays by some providers in providing access to the existing 116 numbers. Although this problem has now been resolved, we consider it suggests the potential for issues of interconnectivity to arise on this number range in the future. We also consider there is reason to believe that some OCPs would push for higher origination payments when negotiating charges for calls to 116 numbers in the future (absent ex ante regulation). In particular, we find it notable that EE and Vodafone considered the level of origination payment set out in our Impact Assessment Range for 116, which was higher than current 116 charges, to be too low.

- 14.20 Further barriers to commercial agreement over 116 origination charges may arise if there is no clear starting point for negotiation. In this respect, we note that 116 numbers can be designated either free-to-caller or Freephone under the status quo. Furthermore, we consider it is likely that origination charges for a free-to-caller 080 range will be higher than current origination charges for calls to existing 116 numbers. This may lead to disagreement between OCPs and TCPs as to whether the free-to-call 080 charge or existing 116 charge is more appropriate for 116 numbers that are brought into use in future (including 116006, which has already been designated Freephone, but which we are now minded to designate as free-to-caller).²⁵¹
- 14.21 As a result of these factors, we are concerned about the potential impact of our proposals on interconnection in relation to future (and possibly current) 116 numbers.

Effect on certainty of origination payments

- 14.22 In addition, we consider it likely that, in the absence of wholesale regulation, there would be a potentially lengthy period of uncertainty over the likely level of origination payments, at least for some CPs (even if a breakdown in connectivity does not occur). As noted above,²⁵² the wholesale arrangements for calls to 080 numbers have been the subject of multiple industry disputes and appeals in recent years, which are ongoing. We are concerned that, absent ex ante wholesale regulation, negotiations over origination payments for 080 calls would be protracted and result in ongoing uncertainty. Such a period of uncertainty could have further adverse effects on investment and innovation, regardless of the levels of origination payment that are ultimately agreed. This is because, if we proceed to make the 080 range free-to-caller, many SPs are likely to make the decision about whether to remain on the range or migrate as soon as possible if they are sensitive to the level of the origination charge. If a SP was to delay such a decision but ultimately decide it needed to migrate then it would risk incurring higher migration costs (such as having to reprint advertising/promotional materials purely for this purpose, rather than part of business as usual changes) or accept the higher costs of continuing to use the 080 number for the period of migration. They may therefore base this decision on their own expectations of the likely level of origination payment rather than waiting for origination payments to be commercially agreed. In particular, if SPs are excessively pessimistic about the likely level of origination payments, more SPs may choose to migrate than would have done had they been able to base their decision on more accurate expectations. This would increase the cost of our proposal for SPs and may also reduce service availability on 080 for callers.
- 14.23 In relation to 116, we noted above the possibility that origination payments for calls to these numbers might remain at their current agreed levels following the

²⁵¹ See Section 13 where this is discussed in more detail.

²⁵² See paragraph 4.16 above.

implementation of our proposals (absent ex ante regulation). If so, the current SP users of 116 might not need to reassess their decision to operate a service on this number range as a result of it being made entirely free-to-caller. However, we recognise the potential for OCPs to take advantage of the change in regime to renegotiate these charges. We also expect further allocations may be made on the 116 range, which would require an agreement with OCPs on the level of origination charge. We observed above there were factors which may lead to difficulties in these negotiations, and noted it may not be clear to OCPs and SPs whether the origination charge for current 116 numbers or the (future) charge for free-to-call 080 numbers would be more appropriate when negotiating over the level of charges for future allocations on 116.

- 14.24 We are therefore concerned there could be periods of uncertainty surrounding the level of origination payment for future (and possibly current) users of the 116 range. We consider that, given the type of SP that operates on the 116 range tends to be very sensitive to cost, any such cost uncertainty will have a major impact on their planning. We, therefore, consider this could have adverse effects on decisions to sustain, or promote/expand/improve existing services or take on a new commitment to a 116 number.²⁵³

Effect on origination payments

- 14.25 In the absence of wholesale regulation, TCPs with a poor negotiating position may end up with relatively high origination payments, which would be likely to affect their ability to compete for SP customers. This may in turn lead to consolidation in the 080 hosting market over time, adversely affecting competition at this level. Similarly, OCPs with a weaker negotiating position may end up with relatively low origination payments. However, we note that the effect on competition between TCPs may be limited in practice by the fact that OCPs are likely to transit traffic to smaller TCPs via larger TCPs, and smaller TCPs are likely to benefit from the rates negotiated by larger TCPs as a result. Similarly, the impact on OCPs may be mitigated by the fact that smaller OCPs can choose to transit their traffic via a larger OCP, benefiting from the rates negotiated by the larger OCP. We also note that the incentives of both OCPs and TCPs to seek to differentiate origination charges may also be limited by the existence of menu costs.
- 14.26 The absence of wholesale ex-ante regulation would not have any impact on 080 retail prices, as these would remain free to caller under our proposal. However, it may affect the efficiency of wholesale prices (in particular, the hosting charges paid by 080 SPs) and the efficiency of prices for other fixed and mobile services (via the TPE).
- 14.27 The efficiency of wholesale prices, and in particular the hosting charges paid by SPs, is important in sending appropriate signals to SPs about whether or not to operate a service on the 080 number range. We discuss this effect in detail in Section 12 and Annex 27. In particular, we take into account the trade-off for consumers between a reduction in the availability/quality of services offered on the number range and the TPE resulting from a higher origination payment in reaching an assumption about the IAR for origination payments.

²⁵³ We have had several meetings with the active and potential SPs on the 116 range – [X]; Samaritans on 17 October 2012 and Missing People on 23 October 2012. The main conclusion from these meetings has been that SPs are already facing financial difficulties in meeting the current level of hosting charges. We set out more detail on this in Section 12, paragraphs 12.183 to 12.185.

- 14.28 The level of origination payment is likely to be reflected in the level of hosting charges via competition between TCPs, with higher origination payments leading to higher hosting charges (all else equal). If origination payments (and therefore hosting charges) were to be set at too high a level, then some SPs may be deterred from operating services on 080 even though the total benefits of their services (i.e. to the SPs and their consumers) exceed the efficient costs of being hosted on the 080 number range. This could have an adverse effect on efficient investment in service availability and innovation on 080 (see below). On the other hand, if hosting charges were to be set at too low a level, it could encourage some SPs to continue services or open new services on the 080 range where the benefits to SPs and consumers from the services concerned are less than the efficient costs of hosting the service. Although this would have benefits to consumers in terms of service availability, it may come at the cost of inefficient prices for other fixed and mobile services.
- 14.29 We discuss in detail in Annex 28 how a reduction (increase) in the contribution of 080 calls to OCPs' fixed and common costs is likely to lead to an increase (reduction) in the price of other fixed and mobile services via the TPE. The TPE is relevant in this context because the contribution of 080 calls to OCPs' fixed and common costs is affected by the level of origination payment, which (as set out in our analysis above) we consider is also likely to be affected by the presence or absence of wholesale regulation. We observe in Section 12 that higher origination payments are generally likely to increase OCPs' profits from calls to the free to caller number range.²⁵⁴ Those higher profits are likely to support lower retail prices for other services and/or access via the TPE. Similarly, lower origination payments are likely to reduce OCPs' profits from 080 calls, leading to higher retail prices for other services via the TPE.
- 14.30 As noted above, a wholesale price that is fair and reasonable takes into account the trade-off to consumers between service availability on 080 on the one hand and the price of other fixed and mobile services on the other. In the absence of wholesale ex-ante regulation, there is no guarantee that commercially negotiated origination payments would be fair and reasonable, at least initially,²⁵⁵ and therefore that this balance would be appropriate. As a result, we could not be confident that origination payments would send appropriate signals to SPs currently active on 080 as to whether they should remain on the 080 range or migrate once it is made free-to-caller. Similarly, we could not be confident they would send appropriate signals to SPs considering opening new services on the 080 range once it is made free-to-caller.
- 14.31 With respect to 116, we noted above that we consider imbalances in negotiating power could give rise to difficulties in negotiations over origination payments for calls to future allocations on the 116 range, or indeed to renegotiations over charges for existing 116 numbers. However, in contrast to 080, we do not consider it likely that the resulting origination payments would have a material impact on competition between OCPs or between TCPs. This is because call volumes to 116 are so low that even if an OCP were to negotiate a particularly low level or a TCP a particularly high level of origination payment, it would have little impact on the OCP's/ TCP's overall profitability and hence on its ability to compete with other OCPs/TCPs.

²⁵⁴ We also noted in Section 12 that in principle once a certain level of origination payments is reached (namely the level set by an OCP that was able to act as an unconstrained monopolist at the wholesale level) then further increases actually reduce OCPs' profits. This is because the reduction in revenues due to migration of SPs away from the number range outweighs the extra profits from calls to those SPs that remain.

²⁵⁵ We recognise that dispute resolution may result in fair and reasonable charges at some point, but not in the short run.

Although we expect that usage of 116 may increase, we note that there are currently only three SPs active on 116. Usage would therefore have to increase very significantly for the level of 116 origination payments to have any material impact on competition, which we think is unlikely given the process for allocating new 116 numbers. We also consider it unlikely that commercially agreed origination payments for 116 calls could have any material impact on the efficiency of prices for other fixed and mobile services for similar reasons. However, we are nonetheless concerned that imbalances in negotiating power may mean that commercially negotiated origination payments for calls to future (and possibly current) 116 numbers are not fair and reasonable, at least initially.

- 14.32 As noted in relation to the effect on certainty of origination payments above, the evidence we have seen suggests 116 SPs are likely to be particularly sensitive to the cost of operating their services such that even a small increase in origination charges above current levels could have a significant impact on service availability. Indeed, we noted in our assessment of options for 116 that making all 116 numbers free-to-caller carries a risk that fewer services will be available on the range in future than under the counterfactual of the status quo (see Section 13). We said that a relatively low mobile origination charge would help to mitigate this risk, but note here that we cannot be confident that a relatively low mobile origination charge would arise in the absence of ex-ante regulation. Instead, we consider there is reason to believe some OCPs would be likely to push for a higher mobile origination charge in future negotiations over 116 calls, with potentially significant impacts on 116 service availability. Given the socially important nature of services on 116, we would be particularly concerned about these potential impacts.

Wholesale regulatory options

- 14.33 In the April 2012 consultation, we considered whether there was any existing ex-ante regulation that would address concerns we had identified. We said that the NTS Call Origination Condition²⁵⁶ regulated origination charges where BT was acting as wholesale OCP, but this constraint did not necessarily flow through to the wider market and, in particular, it did not provide any benchmark for mobile origination charges.²⁵⁷ We also considered General Condition 20 ('GC20'), which obliges CPs to ensure that, where technically and economically feasible, callers are able to access and use non-geographic numbers adopted by that CP.²⁵⁸ However, we said that the proviso in relation to feasibility created some uncertainty about the extent to which it could be relied upon to secure connectivity in all circumstances. In particular, that CPs may use SPs' views about the affordability of origination payments as evidence of access being economically unfeasible. In this context, we noted evidence of call blocking occurring in other EU Member States. We also said that GC20 did not address our concerns about the terms on which interconnection might occur.²⁵⁹

²⁵⁶ BT is required by the NTS Call Origination Condition to make no charge for wholesale call origination services, other than regulated origination charges, the NTS retail uplift and bad debt. These three components make up the origination payment required by BT for 080 calls originated through its network. The NTS Call Origination Condition was applied to BT by virtue of its SMP in the wholesale fixed narrowband call origination market.

²⁵⁷ April 2012 consultation, Part C, Section 17, p.93

²⁵⁸ GC20 implements Article 28 of the Universal Service Directive.

²⁵⁹ April 2012 consultation, Part C, Section 16, p.64-65 and April 2012 consultation, Part C, Section 17, p.93.

- 14.34 We therefore did not consider that existing ex ante regulation would be sufficient to address the concerns we had identified. Accordingly, we set out three regulatory options:
- no ex-ante regulation (i.e. reliance on dispute resolution)
 - ex-ante access condition
 - wholesale market review – SMP regulation
- 14.35 We proposed to reject the wholesale market review and no ex-ante regulation options, in favour of an ex-ante access condition.
- 14.36 All stakeholders who responded to this aspect of the April 2012 consultation broadly agreed that some form of ex-ante wholesale regulation was needed, but there was some disagreement over the type of ex-ante wholesale regulation which should be imposed. In particular, some stakeholders considered that we should impose wholesale SMP regulation. Vodafone and Three also put forward an alternative wholesale regulatory approach to those which we considered in the April 2012 consultation.
- 14.37 After considering these comments, we remain of the view that existing ex-ante regulation would not sufficiently address our concerns. In addition to the analysis set out above, we also note that we are now consulting on the removal of the NTS Call Origination Condition from BT as part of our Narrowband Market Review.²⁶⁰
- 14.38 In the following sub-sections we summarise comments from stakeholders and our response to these comments in relation to each regulatory option. We then consider the extent to which each regulatory option addresses the wholesale concerns we have set out above. Stakeholders' comments and our response to those comments are also discussed in more detail in Annex 30 (except for Vodafone's and Three's alternative regulatory approach, which is considered in more detail in Annex 13).

No-ex ante regulation (reliance on dispute resolution)

- 14.39 We set out our view above that, if we proceed with a free-to-caller approach and do not intervene at the wholesale level, imbalances in negotiating power could lead to undesirable outcomes for consumers. In particular, the risk of connectivity delays or failures, the potential for an extended period of uncertainty, and the risk that the origination payments that ultimately arise would not lead to desirable outcomes for consumers. In the April 2012 consultation, we nevertheless considered a "no ex ante regulation" scenario.
- 14.40 In particular, we recognised that parties would still have recourse to the dispute resolution process in relation to the provision of network access. We noted that we had established and used a framework to consider whether origination charges are fair and reasonable in the 080 Dispute Determination. We also noted that the analytical framework from which we derived our IAR in the April 2012 consultation was also potentially relevant to a dispute about origination payments for a free-to-caller range (although we noted that the purpose of the IAR was not to determine the approach we would take to any dispute). We nevertheless noted that disputes are an ex post solution, they are reactive to matters being brought to Ofcom and are decided

²⁶⁰ 2013 Narrowband MR consultation, see paragraphs 5.280 to 5.297.
<http://stakeholders.ofcom.org.uk/consultations/nmr-13/>

on a case-by-case basis. We therefore considered that dispute resolution, at least initially, may not be sufficient to adequately address the concerns we had identified. We also considered that dispute resolution would not adequately address the risk of an extended period of uncertainty over origination charges, as a dispute would not arise in advance of the proposal for a new (higher) charge.²⁶¹

14.41 As noted above, all stakeholders who responded to this aspect of the April 2012 consultation broadly agreed that some form of ex-ante wholesale regulation was required. Our view also remains unchanged. In particular, we consider that there are a number of factors which make timely commercial agreement over origination payments for calls to 080 numbers unlikely (and, at worst, may lead to interconnection delays or failures). This is an important consideration given that we want to minimise the period of uncertainty which may result from our proposals (in particular as result of likely increases in the level origination payments on 080). In particular:

- It would be unclear to OCPs and TCPs which of them should make the initial proposal for any revision to the currently applicable origination charge. In this respect, we note that an origination payment for a free-to-caller range might also be characterised as a negative termination payment, and that the two alternative characterisations may result in differences in treatment under the parties' bilateral interconnect agreement.²⁶²
- There may be no clear starting point for negotiations, as the existing guidance (i.e. the 080 Dispute Determination and the framework for deriving our IAR) has been applied in different contexts.
- In light of imbalances in negotiating power, certain OCPs and TCPs may have a strong incentive to prolong commercial negotiations to achieve the best possible outcomes for themselves, which may lead to uncertainty.
- In addition, as a free-to-caller approach would not be implemented until late 2014 (i.e. an 18 month implementation period), there may be no pressing incentive for TCPs and OCPs to conclude an agreement at an early stage and they might defer or prolong wholesale negotiations until the latter part of this period, also leading to extended uncertainty.²⁶³ This would also mean that where a TCP and OCP are unable to reach commercial agreement, the matter may not be referred to us for dispute resolution until quite late into the implementation period.

14.42 Given these factors, there is a significant risk that, absent some form of ex-ante regulation, origination payments for calls to 080 numbers will not be agreed (or set by us in a dispute determination) in a timely manner. If so, in turn TCPs will be unable to provide their 080 SP customers with certainty about the level of their origination charges at a sufficiently early point in the implementation process. Existing guidance is also unlikely to provide SPs with much indication, if any indication at all, of the

²⁶¹ April 2012 consultation, Part C, Section 17, paragraphs 17.45 – 17.53

²⁶² This issue was considered in the CAT 08x Judgment in relation to BT's Standard Interconnect Agreement. In discussing the draft access condition, we set out our view below that the relevant service provided is wholesale origination. However, in the absence of ex ante wholesale regulation, the characterisation of the service may fall to be determined by the parties' existing contractual arrangements.

²⁶³ TCPs and OCPs would be subject only to their contractual obligations to provide advance notice of any proposed revision to charges. Whilst this notice period is likely to differ from one interconnect agreement to another, in our experience it is unlikely to be longer than 2 months prior to the date on which the revised charge is to take effect.

likely level of origination charges on which to base their decisions about staying on 080 in advance of it being made free to caller. Given the potential impact of origination charges on 080 SPs, a lack of early certainty would hinder SPs' ability to undertake their assessment of continued use of the 080 range (on the basis of an understanding of costs) in sufficient time to make any necessary adjustments – risking disruption to service. As noted above, if origination payments for 080 calls are not agreed or determined by the time that retail prices are set to zero, then this may result in breakdowns in connectivity or action having similar effects for consumers, such as call blocking by either OCPs or TCPs. Some stakeholder responses to the April 2012 consultation suggest that TCPs may be contemplating the use of call blocking for this purpose (see paragraph 4.15 above). Although TCPs and OCPs may ultimately reach agreement on the level of the origination charge (or we may set it in a dispute), there is a risk that not all OCPs would obtain connectivity to all 080 numbers in a timely manner.

- 14.43 As noted above, we also cannot be confident that the origination payments that ultimately arise for calls to 080 numbers would lead to desirable outcomes for consumers. In particular, origination payments for these calls would not necessarily be set at a fair and reasonable level under this scenario, which may send the wrong signals to 080 SPs about the appropriate level of investment in service quality and availability on these number ranges. Commercially agreed origination payments for 080 calls may also give rise to inefficient prices of other fixed and mobile services and/or result in harm to competition. However, we acknowledge that these risks are likely to be mitigated by the prospect of dispute resolution, at least in the longer term.
- 14.44 In relation to 116, we noted above the possibility that current SP users of 116 may not be affected by our proposals because the numbers they use are already free-to-caller and the current arrangements for origination payments may continue. However, we also outlined above that we are concerned that future number allocations on 116 may suffer from delays in negotiations over origination payments. We also recognised the possibility that OCPs may take advantage of the change in regime to renegotiate existing charges for 116 calls, and that these negotiations may suffer similar difficulties. Such delays, if they were to arise, could create problems of uncertainty for the SP users of 116, which may affect their decision whether to offer a service on the 116 range or not. As with 080, we also cannot be confident that the origination payments which would ultimately arise for calls to future 116 numbers would be fair and reasonable. We noted above that 116 SPs are likely to be particularly sensitive to costs, and to any uncertainty over their level. We are therefore concerned that together these factors may have a significant adverse effect on service availability on 116, which is of particular concern to us given the socially important nature of services on this number range.
- 14.45 In summary, we consider that ex ante regulation is appropriate in this case, as a reliance on our dispute resolution powers alone would be unlikely to deliver a sufficiently stable wholesale environment, in a timely fashion.

Access condition

- 14.46 In the April 2012 consultation, we considered whether the concerns we had identified could be addressed using our powers under section 73 of the Act (which is derived from Article 5 of the Access Directive). We considered that it would be proportionate to impose an access condition on TCPs, requiring them to purchase wholesale origination for calls to designated free-to-caller ranges on fair and reasonable terms (including charges). We noted that this would allow some degree of flexibility for stakeholders, but would restrict the ability of CPs to impose unreasonable terms on

other CPs with a relatively poor negotiating position. In order to provide certainty to stakeholders, we proposed to provide guidance as to how we would approach any future dispute about whether charges are fair and reasonable. We noted that dispute resolution would still be an option in the event that parties are unable to agree terms. However, in the presence of guidance, we expected that stakeholders would be better placed to be able to agree charges and, in the event of a dispute, the guidance would potentially provide a clearer focus.²⁶⁴

- 14.47 We received a number of comments from stakeholders in relation to the design of the access condition that we proposed. These issues are considered further below. With respect to the efficacy of the access condition in addressing the wholesale concerns we had identified, there were two themes that emerged from stakeholder responses. First, stakeholders were concerned that the access condition would not address the imbalances in negotiating power that we had identified. In particular, some respondents were concerned that these imbalances would give rise to differences in the origination payments negotiated in each bilateral OCP-TCP relationship, leading to competitive distortions, potential over/under-recovery of efficiently incurred costs and high negotiation and billing costs. Second, one respondent submitted that an access condition would provide no incremental benefit over a reliance on our dispute resolution powers alone.
- 14.48 We set out our responses to these stakeholder comments in detail in Annex 30. With respect to the first point, we describe in Annex 30 a number of factors relating to the characteristics of the market and our access condition proposals which we expect will together create a process for commercial agreement, and support convergence towards a small number of charges (if not a single charge) for each of fixed and mobile originated calls.²⁶⁵ We consider that this will minimise the risk of competitive distortions and support recovery of efficient costs. We also note that our proposed guidance as to how we would interpret the requirement for fair and reasonable charges in any dispute explicitly recognises the need to allow the opportunity for recovery of efficient costs and the need for consumers to benefit from the level of charges proposed, including the avoidance of any material distortion to competition. We expect this guidance to be used as the basis for commercial negotiations and therefore to mitigate the risk of potential issues relating to efficient cost recovery and distortions to competition raised by stakeholders.
- 14.49 With respect to the second point, we consider that the proposed access condition will provide some substantive benefit compared to reliance on commercial negotiation and dispute resolution alone. In particular, it clarifies which of the two parties should make the initial proposal for any revision to the currently applicable origination charge and facilitates a timely process for commercial agreement by prompting negotiations to start at an early point in the 18 month implementation process. We believe that this will help to ensure that any dispute is referred to us at an earlier stage than might otherwise occur, and that TCPs are able to provide their SP customers with certainty about the level of their origination charges at an earlier point in the implementation process than might otherwise occur. Finally, the access condition will effectively prevent call blocking by TCPs/SPs that might otherwise occur. These factors are discussed in more detail in Annex 30.

²⁶⁴ April 2012 consultation, Part C, section 17, paragraphs 17.55–17.69.

²⁶⁵ In particular, we consider that the combined effect of existing transit arrangements, a desire from both OCPs and TCPs for a single charge, costs incurred by OCPs associated with monitoring and maintaining many different origination charges, the proposed terms of the access condition and our proposed dispute resolution guidance will mean that origination payments are likely to converge towards a small range of origination charge for each of fixed and mobile.

- 14.50 Having considered comments from stakeholders, we remain of the view that, if we proceed with a free-to-caller approach, the imposition of an access condition on TCPs is a proportionate and appropriate means of addressing the concerns we have identified at the wholesale level.
- 14.51 In relation to our concerns about delays or failures in interconnection, the access condition will secure end-to-end connectivity and prevent call blocking by TCPs/SPs, ensuring that all OCPs can obtain connectivity to 080 and 116 numbers in a timely manner.²⁶⁶ We have explained above that the access condition will facilitate a timely process for origination charges for 080 calls and calls to new 116 numbers to be agreed (or determined by us as a result of a dispute), thereby avoiding an extended period of uncertainty that may have negative impacts on innovation and investment by SPs.
- 14.52 We also outlined concerns above that, absent wholesale ex ante regulation, origination payments for 080 calls and calls to future 116 numbers agreed through commercial negotiation would not necessarily be fair and reasonable, at least initially. In relation to 080, we were concerned that this would not send the appropriate signal to 080 SPs about whether to remain on the range or not, and consequently would not strike an appropriate balance between service availability on 080 on the one hand and the TPE on the other. We also noted potential concerns regarding the effect commercially agreed 080 origination payments may have on competition between TCPs and between OCPs, but recognised these effects would be limited in practice by the use of transit arrangements. In relation to 116, we noted there was reason to believe some OCPs would push for higher origination charges for 116 calls in future negotiations and furthermore that 116 SPs would be very sensitive to any increase in cost. We were therefore concerned that an origination charge that was not fair and reasonable could have a significant adverse effect on service availability on 116, which we would be particularly concerned about given the nature of services hosted on this range.
- 14.53 We consider the access condition also addresses these concerns by requiring origination charges to be fair and reasonable. We consider that stakeholders are likely to base their negotiations on our proposed guidance as to how we would approach any dispute about fair and reasonable charges. As a result, we consider that origination payments for 080 calls arising under the access condition are likely to send appropriate signals to SPs about whether to remain on the 080 range or migrate, and therefore to strike an appropriate balance between service availability on 080 and the price of other telecoms services. We also consider that origination payments for 116 calls arising under the access condition are likely to mitigate the risk we identified in our analysis of options for 116 that making all 116 numbers free-to-caller could reduce service availability on this number range.

SMP regulation

- 14.54 In the April 2012 consultation we explained that we had assessed, at a high level, the relative negotiating positions of stakeholders, and considered that there was a wide variation in the positions of OCPs and TCPs, and this would make any formal analysis under market review procedures inherently complex and time-consuming. In light of the availability of a suitable remedy in the proposed access condition, and the

²⁶⁶ We are aware that TCPs/SPs may employ alternative approaches to managing their origination costs, which are not addressed directly by the access condition (e.g. reducing the time of calls from mobile customers or employing recorded announcements that redirect callers to non-080 numbers etc.). These other types of behaviour are discussed in more detail in Section 12.

fact that the consumer detriment identified is current and ongoing, we did not consider it would be proportionate or appropriate to conduct a market review to address our wholesale concerns.²⁶⁷

- 14.55 Some stakeholders continued to argue that we should conduct a wholesale market review instead of intervening at the retail level. We respond to these comments in Annex 29.
- 14.56 In response to the April 2012 consultation, Three also made a slightly different comment that, even if we proceeded with our proposed intervention at the retail level, we should nevertheless commit to carrying out an SMP review at the wholesale level in the medium term to address concerns (i.e. imbalances of negotiating power) at that level, and in order to underpin and validate the wholesale changes that we were proposing.²⁶⁸
- 14.57 As we set out in the April 2012 consultation, if we were to proceed with our free-to-caller approach at the retail level, we do not consider that a market review would be an appropriate and proportionate means of addressing the concerns which are specific to the wholesale level, for the reasons set out above. Again this is because we consider that there are likely to be wide variations in the positions of OCPs and TCPs, as a result of considerable differences in their relative market shares and business models. We do not consider that one side (i.e. either OCPs or TCPs) would consistently be in a strong position in negotiations, but rather the relative strength of bargaining power in any particular negotiation would depend upon the identity of the particular OCP and TCP involved (this is discussed further in Annex 9). As such, we may not be able to impose SMP regulation on a consistent basis across the market. In addition, the wide variance in the position of OCPs and TCPs would make any formal analysis under market review procedures inherently complex and time-consuming. Our power under the Act to impose an access condition is legally and conceptually distinct from SMP regulation and enables us (where we have satisfied the relevant legal tests) to impose obligations on operators irrespective of their market power. If we proceed with our proposal to regulate at the retail level to implement a free-to-caller approach, then we consider that the concerns we have identified at the wholesale level can be addressed in a more appropriate, proportionate and timely manner by the imposition of an access condition. Three's comments and our response are set out in more detail in Annex 30.
- 14.58 Nevertheless, we have not ruled out conducting a wholesale market review in the future. We recently explained, in the Narrowband Market Review that we would consider whether any further review of the market for call termination to non-geographic numbers is necessary in the future (after our proposals as part of this review have been implemented). However, we stated it would currently be inappropriate to conduct a market review of non-geographic call termination because of the very significant changes to this market likely to result from our proposals for NGCs within the period of the review.²⁶⁹

²⁶⁷ April 2012 consultation, Part C, section 17, paragraph 17.71. We also considered stakeholder comments that we should conduct a wholesale market review instead of intervening at the retail level in Annex 17 of the April 2012 consultation.

²⁶⁸ Three, April 2012 consultation response, pp.6 and 43

²⁶⁹ http://stakeholders.ofcom.org.uk/binaries/consultations/nmr-2013/summary/NMR_Consultation.pdf

Alternative approach

- 14.59 As noted above, Vodafone and Three proposed an alternative approach to wholesale regulation that we had not considered in the April 2012 consultation. Specifically, they suggested that we should use our power under section 58(1)(aa) of the Act (which derives from paragraph 1 of Part C of the Annex to the Authorisation Directive) to attach a 'rights of use' requirement to the 080 and 116 number ranges that requires TCPs to pay OCPs' efficient costs of origination.
- 14.60 We consider this suggested approach in more detail in Annex 13. In summary, we consider that our concerns at the wholesale level are more appropriately addressed through an access condition (which is intended to secure end-to-end connectivity), rather than our powers under section 58(1)(aa) (which must be exercised for consumer protection purposes).

Our view on wholesale regulatory options

- 14.61 Having considered the responses to the April 2012 consultation, we remain of the view that, if we proceed with a free-to-caller approach, then an ex-ante access condition is an appropriate and proportionate means of addressing the concerns we have identified at the wholesale level. We also remain of the view that the other options which we consulted on in the April 2012 consultation would not adequately address our concerns. We have also considered the alternative proposal put forward by Vodafone and Three but we think that the nature of our concerns means that an access condition is the more appropriate regulatory approach.

Design of the access condition

- 14.62 In the April 2012 consultation we provisionally concluded that it would be appropriate to impose an access condition on all TCPs requiring them:
- to purchase wholesale origination services for calls terminating on designated free-to-caller ranges from any requesting OCP;
 - to do so on fair and reasonable terms and conditions (including charges); and
 - to notify their SP customers of any initial revision to the charges for wholesale origination services within two months of Ofcom imposing the requirement for zero maximum prices.²⁷⁰
- 14.63 We received comments from many stakeholders about this proposal. A number of these comments have already been discussed above. In the remainder of this section we address stakeholder comments in relation to the detailed design of the access condition. We also outline one aspect of the access condition on which we have altered our proposal since the April 2012 consultation and on which we are inviting further comment from stakeholders. We have divided the remainder of the section into the following areas:
- imposition of the access condition on TCPs; and
 - notification of initial revision to charges.

²⁷⁰ April 2012 consultation, Part C, Section 17, p.98, paragraph 17.172

14.64 We also received comments from stakeholders in relation to implementation and other related issues (in particular, the potential for contract ‘lock in’, call blocking, transit arrangements, wholesale billing with respect to CLI and CLI arbitrage). We discuss these comments, and our response to them, in Annex 30.

Imposition of the access condition on TCPs

14.65 In the April 2012 consultation, we noted our view that the relevant service provided is wholesale origination, and that this was reflected in current commercial arrangements where a payment is made by a TCP to an OCP. We therefore considered it appropriate to impose an access condition on TCPs, requiring them to purchase wholesale origination services from OCPs. We considered that, although the obligation would formally lie with the TCP, it would, in effect, bind the OCP given the obligation to purchase on fair and reasonable terms including charges.²⁷¹

14.66 There were divergent views amongst respondents to the April 2012 consultation as to whether the access condition should be imposed solely on TCPs (i.e. an obligation to purchase call origination), solely on OCPs (i.e. an obligation to sell call origination), or whether an obligation should be imposed on both of them. We set out our response to these comments in Annex 30, sub section ‘imposition of the access condition on CPs’.

14.67 In summary, we remain of the view that an obligation on TCPs (rather than on OCPs), better reflects the reality of commercial and contractual arrangements, as a payment is made by a TCP to an OCP for the origination of calls to 080 and 116 numbers. We consider that extending the obligation to OCPs is unnecessary as the obligation on TCPs will, in effect, bind both parties. Where there is a breakdown in commercial negotiations then either party will be able to refer a dispute to us for resolution. While there will be costs to TCPs in implementation (e.g. re-negotiating contracts with customers, commercial agreement of origination payments), we do not consider that these costs would be lessened or avoided if we instead required OCPs to sell call origination to TCPs on fair and reasonable terms.

Notification of initial revision to charges

14.68 In the April 2012 consultation, we recognised that making the 080 and 116 ranges free-to-caller would likely lead to material changes in origination payments for 080 calls, and could lead to a period of uncertainty affecting 080 SPs in particular. We also recognised that our proposal could increase the mobile origination payment for future 116 numbers, although we noted that we expected the origination payment for these calls to be closer to the incremental cost of originating mobile calls (implying a less material change than for 080). We therefore proposed to include an obligation within the access condition that would require TCPs to notify their SP customers of any initial revision to charges within two months. We considered that this would allow SPs to consider how they may be affected. The implementation period, before a free-to-caller approach came into effect, would then provide a sufficient period in which OCPs could consider the proposed level of payments and SPs could make an initial assessment as to whether they should migrate or not. Once a level of payment was agreed between OCPs and TCPs, SPs would then be able to finalise any decision.²⁷²

14.69 Stakeholders who agreed with our proposal considered that the two month time period for the proposed notification was reasonable. However, some stakeholders

²⁷¹ April 2012 consultation, Part C, Section 17, p.96, paragraphs 17.62 – 17.63

²⁷² April 2012 consultation, Part C, Section 17, p.96, paragraphs 17.66 – 17.68

considered that our proposal to require TCPs to notify SPs was unnecessary and would provide little, if any, benefit. Another stakeholder noted that our proposal was impracticable as origination charges may still be subject to negotiation between OCPs and TCPs at this point in time, and the notice would therefore provide little certainty to SPs. In particular, EE suggested that we should instead require TCPs to notify OCPs of their proposed revisions to origination charges (but said that notice could also be given to SPs for their information).²⁷³ Another respondent (UKCTA) also said that TCPs are likely to have a commercial incentive to notify SPs of any potential changes to origination payments in good time to allow them to make an initial assessment.²⁷⁴

- 14.70 On reflection we agree with these comments. We accept that it is likely to be impracticable for TCPs to provide initial notice to SPs at a time when they may not yet have concluded negotiations with OCPs about their origination charges, and that any notice at this point would therefore provide little certainty to SPs. We also agree with stakeholder comments that a requirement on TCPs to notify SPs may be unnecessary, as TCPs are likely to have a commercial incentive to notify SPs of any potential changes to origination payments in good time to allow them to make an initial assessment.
- 14.71 Since the April 2012 consultation closed, we have also spoken to a majority of the fixed TCP respondents in relation to this particular issue.²⁷⁵ Some TCPs we spoke to suggested that the TCP to SP initial notification would be impracticable, as origination charges would still be subject to negotiation with OCPs. Most explained they would in any case notify SPs of how they may be affected during the implementation period, in the absence of regulation. We set out these TCPs' views in more detail in Annex 30. These further exchanges with TCPs confirmed our view that we should revise our original proposal with respect to the notification requirement.
- 14.72 We are therefore consulting on a revised proposal, as part of the access condition, for TCPs to notify OCPs of any initial proposed revision to their charges for wholesale origination services. The obligation would only apply to the extent that the TCP has an existing agreement to purchase origination services from the OCP for calls to 080 and 116 numbers (however, it would not oblige TCPs to give notice to transit providers).
- 14.73 After further reflection, we also now consider that more advance notice for industry of any initial revision to origination charges could be helpful. We are therefore also consulting on a revised proposal that this notice should be given within one month of the access condition being set (instead of two months). This will help ensure that negotiations between TCPs and OCPs commence as quickly as possible, and as a consequence also help minimise the period of any uncertainty for SPs.
- 14.74 We recognise that respondents who agreed with our original proposal considered that the two month time period for the proposed notification was reasonable. We have also asked some fixed TCPs about this issue since the April 2012 consultation closed.²⁷⁶ We received varying responses, which were complicated by the fact that some TCPs clearly had in mind the minimum time they would need to notify SPs,

²⁷³ EE, April 2012 consultation response, p.55

²⁷⁴ UKTA, April 2012 consultation response, p.9

²⁷⁵ We sent an informal request to CWW, Gamma, Verizon, Magrathea and BT on 24 October 2012. We received responses from Verizon (29 October 2012), Gamma (30 October 2012), Magrathea (7 November 2012) and BT (8 November 2012, which was followed up with a further response on 17 January 2013).

²⁷⁶ See preceding footnote.

rather than OCPs. Some responses also appeared to focus on the processes that are required to actually implement a revised charge (e.g. updates to billing systems, etc.), which would not be (immediately) relevant to the notice that we are proposing should be given. However, another response suggested that a one month period may be insufficient to obtain corporate approval of the proposed charge, which we recognise would be a potentially relevant consideration. We would therefore welcome further comments from stakeholders on whether a one month period would provide them with sufficient time to calculate their proposed revision to origination charges and to notify this proposal to OCPs with whom they interconnect. While we recognise that our revised proposal provides TCPs with less time to administer and calculate their proposed revision to charges than the proposal we set out in the April 2012 consultation, we consider a one month notification period may be feasible. In particular, we consider that stakeholders can begin to start considering and calculating what a potential wholesale origination charge might look like from the date of publication of this document, in advance of the access condition being set and the one month notification period commencing.

- 14.75 In summary, we are therefore consulting on a revised proposal that TCPs should notify OCPs (with whom they have an existing interconnection agreement) of their proposed revision to origination charges within one month after the access condition is set.²⁷⁷ We consider that this will allow OCPs to consider proposed revisions to the origination charges, and negotiations between OCPs and TCPs can commence, at an early stage of the 18 month implementation period. An early start to negotiations will also help to ensure that, if a TCP and OCP are unable to reach agreement, the matter can be referred to us for dispute resolution at an early point. In turn, early agreement (or determination) of charges will enable TCPs to provide their SP customers with certainty about the level of their origination charges at an earlier point in the implementation process than might otherwise occur. Although we are no longer proposing to set a formal obligation on TCPs requiring them to provide notice to SPs, we consider that it is likely that in practice SPs will be notified of proposed changes to origination payments in good time. In particular, we consider that the hosting market appears to be currently working well and we consider that TCPs will have a commercial incentive to inform their SP customers of changes to origination payments in good time.

Q14.1: Do you agree that the notice to be given by TCPs of initial revisions to origination charges (as set out in the draft access condition): (i) should be given to OCPs; and (ii) should be given within one month of the condition being set? If you do not agree, please explain why.

Conclusion and areas of further consultation

- 14.76 In summary, we are concerned that, if we proceed to make the 080 and 116 ranges free-to-caller, then imbalances in negotiating power may give rise to interconnection delays or failures, the risk of an extended period of uncertainty and origination payments that would not necessarily be in the interests of consumers. We consider that existing regulation would not adequately address these concerns. We therefore remain of the view that, if we proceed to make these ranges free-to-caller, then we should also intervene at the wholesale level by setting an access condition on TCPs. We consider this to be an appropriate and proportionate means of addressing our concerns.

²⁷⁷ The revised charge would not take effect until the free-to-caller approach is implemented, which is likely to be in late 2014 (i.e. almost 18 months later).

- 14.77 The draft access condition is set out in Annex 17. In Section 6 we explain how the draft access condition meets the relevant legal tests and furthers our statutory duties.
- 14.78 The access condition would be set on all TCPs (i.e. CPs that provide wholesale termination for calls to 080 or 116 numbers). It would require the TCP:
- to purchase wholesale origination services for calls made by consumers to 080 and 116 numbers from any requesting OCP;
 - to do so on fair and reasonable terms and conditions (including charges); and
 - within one month of the access condition being set, to notify any OCP with whom it has an existing interconnection agreement of its proposed revision to the charges for wholesale origination.²⁷⁸
- 14.79 As noted above, we would welcome comments from stakeholders on the third element of the condition. In particular: (i) our proposal that TCPs should provide notice to OCPs (rather than SPs, as set out in the April 2012 consultation), and (ii) that the notice should be given within one month of the condition being set (instead of two months, as proposed in the April 2012 consultation). We also welcome comments from stakeholders on the draft legal instrument set out in Annex 17.
- 14.80 We are also separately consulting today on draft guidance as to how we would approach any future dispute about whether origination charges for calls to designated free-to-caller ranges are fair and reasonable.²⁷⁹

²⁷⁸ As explained above and in Section 6, TCPs would not be required to give notice to transit providers.

²⁷⁹ See <http://stakeholders.ofcom.org.uk/consultations/080-116-ranges/>

Part C - Section 15

Implementation of changes to 080 and 116

Introduction

- 15.1 In this section we set out how we intend to implement the decisions we are minded to in relation to the 080 and 116 ranges, i.e. to make them free-to-caller. We have already set out in the previous section how we intend to implement the change at the wholesale level. In this section we therefore address the remaining implementation issues which are:
- communication of 080 price information;
 - timing of implementation; and
 - other implementation issues.
- 15.2 Annex 31 sets out the stakeholder comments we received in response to the April 2012 consultation on the above issues, as well as our response to those comments.
- 15.3 Our overall approach to the implementation of both the unbundled tariff and free-to-caller regimes is set out in Section 5. This includes a timeline of various actions that will need to be undertaken during the implementation period, and our outline of Ofcom's communications strategy and the industry-led communications activities that we consider will be needed.

Communication

- 15.4 In the April 2012 consultation we explained that any changes to 080 and 116 numbers would form part of a wider communications campaign Ofcom was planning.²⁸⁰ We noted that this, and more specific communications activities (e.g. through Ofcom's website or other consumer groups), would help to ensure that the message that calls to these numbers are always free would be reinforced in consumers' minds.
- 15.5 In light of the publication requirements we were proposing for the unbundled tariff number range, we also considered whether regulations requiring SPs to provide information to consumers at the point of call were needed for 080 and 116 calls (i.e. whether we should impose a requirement on SPs to state in their advertising that these calls were free-to-caller, in order to improve consumer price awareness). We presented reasons both for and against such a regulatory requirement,²⁸¹ before concluding that our provisional view was that such a requirement would be unnecessary and disproportionate. We noted, nevertheless, that there might be benefits in incorporating a requirement on SPs to advertise that 080 calls are free if an industry Code of Practice was developed in relation to the advertising requirements on SPs for the unbundled tariff number ranges.

²⁸⁰ April 2012 consultation, Part C, paragraphs 17.107-17.113, pp. 104-105.

²⁸¹ See paragraphs 17.109 and 17.110 of the April 2012 consultation.

- 15.6 Respondents to the April 2012 consultation were somewhat divided on whether a requirement on SPs to publicise that calls are free should be made a regulatory requirement. Several stakeholders (for example Three, CAB, Vodafone and BT) considered that it would aid transparency and consumer awareness. The CAB noted that it would ensure consumers did not continue to avoid calling these numbers out of a fear of calling costs. However, several other stakeholders (including CWW, UKCTA, EE, O2, and the DWP) argued that such a requirement was unnecessary because SPs had an incentive to inform their customers that contacting them by phone was free. CWW, for example, considered that the general NGCS communication campaign would itself dramatically improve consumer price awareness.
- 15.7 The Advertising Standards Authority ('ASA') said it was unlikely, under its existing rules, to regard the omission of a statement that 080 calls are free-to-caller as a "misleading omission", thus it was "highly unlikely" to impose a requirement that SPs publicise that 080 calls are free in their advertisements (particularly given that this might not be consistent with the Consumer Protection from Unfair Trading Regulations ('CPRs')).²⁸²
- 15.8 Our view is that, if we proceed to make the 080 and 116 ranges free-to-caller, then we should not impose a requirement on SPs to publicise the price of calling these numbers in their advertising. In light of the ASA's comments about the CPRs, and given that we agree with stakeholders that many SPs will have an incentive to advertise that these calls are now free, we consider it would be disproportionate and unnecessary to impose a regulatory obligation on SPs to advertise that their 080/116 numbers are free-to-caller. Nonetheless, we recognise that it will be important for consumers to be made aware of the changes, otherwise there is a risk that some consumers will still be deterred from making calls. We consider, however, that there are a number of factors which will assist communication:
- the simplicity of the message, and that it will be consistent across all 080 and 116 numbers (which will make it easy for consumers to learn and remember);
 - as well as some SPs, mobile OCPs will also be incentivised to promote that 080/116 calls are free to their customers; and
 - our planned communications activities (set out in Section 5) should be sufficient to ensure that consumers are made aware of the changes.
- 15.9 We would, however, encourage SPs to include a message that 080 and 116 calls are free-to-caller in their advertising wherever possible in order to ensure that this is as widely communicated to consumers as possible.

Timing of implementation

- 15.10 In the April 2012 consultation, we set out a list of all the steps we considered would be involved in making 080 and 116 numbers free-to-caller.²⁸³ These included the commercial negotiations between TCPs and OCPs over origination payments, communication between TCPs and SPs about changes to their hosting charges, SPs making decisions about whether to stay on the 080 range, updates to pricing information and communication of the message to consumers.

²⁸² All stakeholder comments on this issue are set out in detail in Annex 31 along with our response to those comments.

²⁸³ See paragraph 17.98 in Part C of the April 2012 consultation.

- 15.11 Taking into account all these different steps, we consulted on two options for the implementation period for making the 080 and 116 ranges free-to-caller:
- 12 months (i.e. ahead of the wider proposed changes for the other non-geographic ranges); or
 - 18 months (in line with the other proposed changes).
- 15.12 We considered that a 12 month period was likely to be sufficient to carry out the implementation actions we had set out. We also noted that communicating the changes to consumers would be much more straightforward than some of the other changes we were proposing (because of the simplicity of the message) which meant they could potentially be communicated separately from the other changes).
- 15.13 However, we also recognised that there were benefits in communicating all the changes to consumers at the same time, so we could present a simplified numbering plan as a single message, rather than promoting one message (080 and 116 calls are now free) followed by further changes to other number ranges. We were concerned that staggering those messages could have the potential to confuse consumers. Also, we noted that some of the costs of the changes would be further reduced by a longer implementation period, in particular the migration costs for SPs who decide to move away from the 080 range. We said there were pros and cons of both options and invited stakeholders to comment on both.²⁸⁴
- 15.14 Respondents were divided over this issue. Several stakeholders (including National Grid, Northern Gas Networks, BT and SSE) expressed a preference for quicker implementation, arguing that the current consumer harm needed to be addressed as soon as possible. However, several other stakeholders (including CWW, UKCTA, Virgin Media, Verizon and EE) were sceptical that the necessary wholesale agreements on origination payments between mobile OCPs and TCPs would be reached speedily and argued that an 18 month timescale was more realistic. Both Verizon and EE indicated that even 18 months might be 'optimistic' and should be the minimum period required.²⁸⁵
- 15.15 Having carefully considered the responses from stakeholders, we consider that an 18-month implementation period would be appropriate.²⁸⁶ This is because:
- we consider that costs are likely to be higher with a shorter implementation period and there would be some risk that agreement on origination charges would not have been reached in time for implementation if we opted for a shorter period;
 - an 18-month period will reduce SPs' migration costs by giving them more time to prepare for any transition, reducing the risk of disruption caused to their operations and allow more time for advertising and other documentation to be replaced; and
 - an 18-month implementation period will match that for the unbundled tariff and therefore potentially provide a more effective communications message for

²⁸⁴ April 2012 consultation, Part C, paragraph 17.106, p. 104.

²⁸⁵ A detailed summary of stakeholders' views on these subjects and our response to the points raised can be found in Annex 31.

²⁸⁶ The implementation period will begin when we publish a notification of the modifications to the General Conditions and the Numbering Plan which are necessary to implement our decision. We are consulting on these modifications as part of this document (see Section 6).

consumers by allowing the most significant changes to non-geographic numbering to be communicated to consumers at the same time.

15.16 There is, however, one change relating to the 116 number range that we propose to make immediately upon publication of our final legal instruments. The 116006 number²⁸⁷ has not been allocated to a SP or brought into use, but it has been designated as 'Freephone' in the Numbering Plan (i.e. calls may be charged if the end-user is informed by way of a pre-call announcement). If we proceed with a free-to-caller approach on the 116 range, then we consider that we should change the designation of the 116006 number immediately from 'Freephone' to 'free-to-caller'. We wish to avoid a situation where a SP may be allocated the number and bring it into use on the basis of one regulatory regime, only for it to be changed shortly thereafter. We are therefore proposing a modification to the Numbering Plan that would take effect straight away (see Schedule 1 to the Notification at Annex 15).

Other implementation issues

15.17 Stakeholders also raised some other implementation issues in response to the April 2012 consultation. We have set out and responded to these comments in Annex 31.

15.18 We summarise below the issues raised and our response:

- **00800 Universal International Freephone range:** as noted in the April 2012 consultation, because this range is not part of the Numbering Plan (and the numbers are therefore not allocated by Ofcom) it is not within scope of the decisions that we are minded to take; and
- **Itemised billing of free-to-caller numbers:** currently General Condition 12 ('GC12') requires CPs to ensure that calls which are free of charge to its subscribers are not identified in the subscriber's itemised bill. Therefore once the 080 and 116 ranges are made free-to-caller, CPs will need to ensure that calls to these numbers do not appear on their subscriber's itemised bills.

²⁸⁷ The 116006 number has been reserved by the European Commission, and designated in the UK, for the use of a helpline for victims of crime.