



Review of mobile donor conveyance charges

Consultation document
Non-confidential

Consultation

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Section 1

Executive Summary

- 1.1 Number portability enables subscribers, if they wish, to retain their telephone number when they switch between communications providers. The telephone number is “ported” from one communications provider to another. When the subscriber subsequently receives an incoming call, it is first routed to the network that originally held the number being called. The call is then identified as a call to a ported number and “onward routed” to the network to which the number has been ported.
- 1.2 The donor conveyance charge (“DCC”) is a wholesale charge that is levied between mobile communications providers (“MCPs”) for the onward routing of a call to a ported mobile number. General Condition 18 sets out the principles that communications providers must comply with in setting porting charges (including when setting a DCC).
- 1.3 On 14 October 2013, we commenced this review into whether we should set a maximum DCC on an *ex ante*, mobile industry-wide basis and if so at what level. We are using this review as an alternative means of resolving disputes brought by Hutchinson 3G UK Limited (“H3G”) against each of EE Limited (“EE”) and Telefónica UK Limited (“Telefónica”) about the level of the DCC charged between them. We considered it would be preferable for us to consider the appropriate level of DCCs on a mobile industry-wide basis, rather than in determinations of disputes which would necessarily only apply to the parties to the particular disputes.
- 1.4 It has been six years since Ofcom last determined a rate for the DCC in 2007. We believe it is likely that the costs of donor conveyance have fallen in this time as technology has improved, network equipment has become cheaper and call volumes have grown. However, we are aware that a number of MCPs are still applying DCCs in accordance with the rate set in 2007. We have refrained from intervening to date and allowed commercial negotiations between the MCPs with respect to revised rate(s) to take their course. However, bilateral negotiations to re-set DCCs have proven unsuccessful in some instances.
- 1.5 Therefore, we consider it unlikely that DCCs will remain at a suitable rate across the mobile industry going forward, without Ofcom’s involvement. We also have a duty under Article 30(2) of the Universal Service Directive to ensure that charges between operators relating to the provision of number portability are cost-oriented. In light of these considerations, we consider that it would be appropriate and consistent with our duties for us to set a maximum DCC across the mobile industry on a forward-looking basis.
- 1.6 In setting a DCC, we propose to use the same cost standard as we used in 2007, namely total service LRIC plus a mark-up for network common costs. We also consider it appropriate to use the same model that we used in 2007, but have updated this in line with the latest version of Ofcom’s 2011 mobile call termination model in order to reflect the most up-to-date understanding of the costs of mobile service provision. We are also proposing to make some other adjustments to the model that we consider to be appropriate.
- 1.7 We propose to set maximum DCCs for the present year and following two years, as set out in Table 1.1 below:

Table 1.1: Proposed DCCs to be applied only to off-net originated calls (nominal ppm)¹

	2013/14	2014/15	2015/16
Proposed DCC	0.039	0.039	0.038

Source: 2013 DCC Model.

- 1.8 We are proposing to set these maximum DCCs by way of a direction issued under General Condition 18. The draft direction on which we are consulting is set out in Annex 5 to this document.
- 1.9 We are seeking responses to the specific consultation questions set out in this document by 5pm on 14 January 2014.
- 1.10 We have also recently commenced a separate policy project, which has a broader scope than this review, and will consider how General Condition 18 should be applied in setting porting charges. Depending on the outcome of that policy project, it may be necessary for us to revisit the conclusions we reach in this review.

¹ We are proposing not to adjust the level of the DCC to reflect the MCPs' practice of charging a DCC on on-net originated donor conveyance traffic on the basis that the DCC would not be charged on on-net originated calls. However, if such an adjustment were to be made, then we would propose applying an on-net adjustment of 30%. Based on the results in Table 1.1 above, this would result in DCCs of 0.027 ppm, 0.027 ppm and 0.027 ppm in 2013/14, 2014/15 and 2015/16 respectively.

Section 2

Introduction & Background

- 2.1 Mobile number portability (“MNP”) is a facility that enables mobile subscribers, who so request, to retain their mobile numbers when they change from one MCP to another. MCPs have been required to provide MNP since 1 January 1999.²

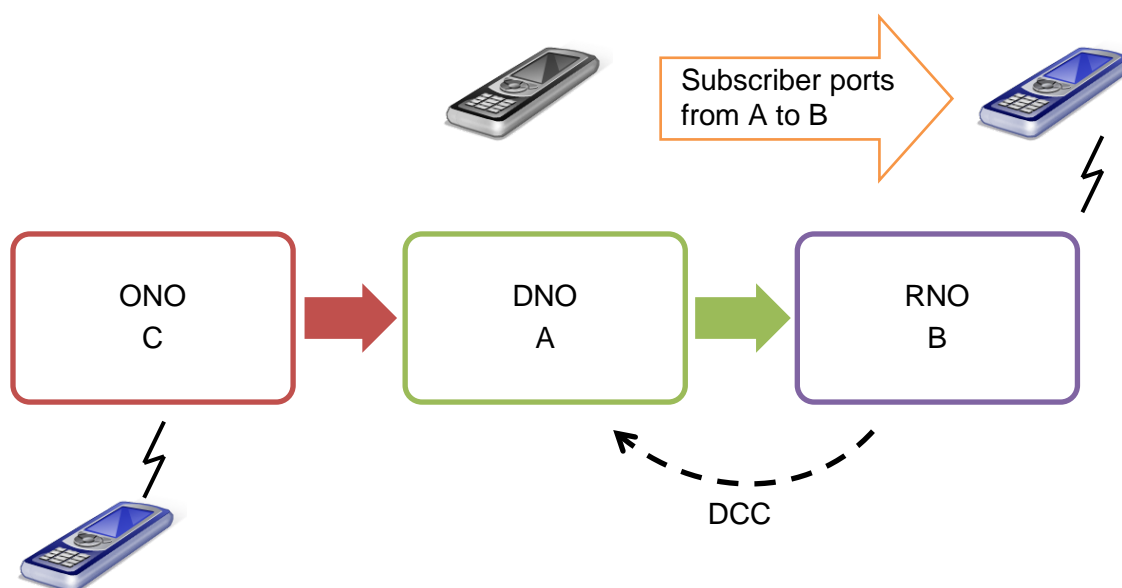
Onward routing

- 2.2 The current technical solution for routing calls to ported mobile telephone numbers is commonly referred to as the onward routing technical solution. In essence³, under the onward routing technical solution, an originating network operator (“ONO”) is not required to distinguish between calls to ported and non-portable mobile numbers. When a subscriber makes a voice call (from either a fixed or mobile network) to a ported mobile telephone number, the ONO analyses the dialled digits to identify the number range holder and the call is first routed to the network that originally held the number being called, the donor network operator (“DNO”).
- 2.3 The DNO must then identify whether the number that is called has been ported and, if so, onward route the call to the appropriate recipient network operator (“RNO”). Given that the called mobile device could be anywhere in a mobile network or even roaming, the DNO relays a routing enquiry to the appropriate RNO which returns a routing number to enable the DNO to onward route the call to the RNO for termination or further treatment.
- 2.4 Onward routing for mobile voice calls is illustrated in Figure 2.1 below. The steps involved in this process are illustrated in further detail in Annex 1.

² See http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/numbering/mobport.htm and http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/numbering/noport.htm.

³ This simple overview of how onward routing works assumes that the ONO, DNO and RNO are different network operators.

Figure 2.1: Onward routing for calls to ported mobile numbers



Source: Ofcom.

Donor conveyance charge

- 2.5 The onward routing of a ported mobile call by the DNO to the RNO is known as “donor conveyance”. The charge payable by the RNO to the DNO for this onward routing is called the DCC. It relates to the costs incurred by the DNO in conveying a mobile call to a number built on the DNO’s network but which has been exported to an RNO.
- 2.6 Calls to ported mobile numbers that originate with an RNO can be connected without routing via the DNO where the RNO has installed a “call trap” facility. This facility allows the RNO to “trap” calls that it originates to numbers that have been ported into its network. A call trap facility removes the requirement for a call to be inefficiently routed (sometimes described as “tromboned”) to the DNO and then back to the RNO in circumstances where the call originates on the RNO’s network. Calls that are effectively trapped do not attract a DCC. We also understand that MCPs have in practice applied a DCC to calls where the ONO is also the DNO (“on-net originated calls”).⁴ Illustrations of tromboned and on-net originated calls to ported numbers are provided in Annex 1.

Regulatory and factual background

The 1999 Determinations

- 2.7 In December 1998, Oftel received requests from One2One and Orange to resolve disputes between each of them and Vodafone Limited (“Vodafone”) and BTCellnet, respectively, regarding the DCC payable between them. In November 1999, Oftel made a determination in the case of each separate request (“the 1999

⁴ Our provisional view is that any porting costs incurred in relation to on-net originated calls are not recoverable by the DNO and, therefore, these calls should not attract a DCC. Please see paragraphs 4.70 to 4.76 for further discussion of this issue.

Determination”).⁵ The determination took into account the four operators’ submissions on their views of the most appropriate method of calculating the DCC. Oftel also took account of the six principles of cost recovery adopted by the Monopolies and Mergers Commission (“MMC”) in its 1995 report on number portability in the fixed network.⁶

- 2.8 Oftel based its estimate of the costs of donor conveyance on information provided by Vodafone, which at that time was deemed to be a “reasonably efficient operator” and because Oftel had “*the most detailed and reliable cost data in relation to Vodafone’s network*”. It estimated the cost of donor conveyance to be 1.6ppm.
- 2.9 Oftel decided that donor conveyance costs should be split equally between the DNO and RNO. In doing so it noted that there was an imbalance between the mobile networks, with some being net donors and others net recipients of ported numbers. This meant that the principle of effective competition could be compromised if the DCC were payable entirely by either the DNO or the RNO. Oftel also noted that the approach of dividing the costs between DNO and RNO was desirable in that it retained an incentive for DNOs to ensure that conveyance costs were minimised. This resulted in a DCC of 0.8ppm payable by the RNO to the DNO.
- 2.10 The 1999 Determination was expressly applied for a period of 1 January 1999 until 31 March 2000.

Introduction of GC18

- 2.11 The Communications Act 2003 (“the Act”) and the general conditions of entitlement (the “General Conditions”) entered into force in July 2003. General Condition 18 (“GC18”) obliges a CP to provide number portability⁷ to its subscribers, and to provide portability⁸ to other CPs for that purpose.
- 2.12 Paragraph 5 of General Condition 18 (“GC18.5”) obliges CPs to comply with certain principles when levying a charge for the provision of portability. As a charge payable by the RNO to the DNO for the routing of a ported call, the DCC amounts to a charge for the provision of portability within the meaning of GC18.5.

The 2007 Determinations

- 2.13 On 3 April 2007, H3G submitted disputes to Ofcom about the DCCs charged to it by each of T-Mobile (UK) Ltd (“T-Mobile”), Telefónica (then trading as O2) and Orange Personal Communications Services Ltd (“Orange”). As part of its assessment of the disputes, Ofcom engaged Analysys Mason (“Analysys”) to provide an estimate of the

⁵ See http://www.ofcom.org.uk/static/archive/oftel/ind_info/numbering/mnppetred.pdf.

⁶ In 1995, Oftel was unable to agree a licence modification related to number portability with BT and therefore referred the matter to the MMC. The MMC issued its report in November 1995 entitled ‘Telephone Number Portability’: see http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/numbering/mmc95.htm for explanatory statement, the full text is available from HMSO.

⁷ Number portability is defined in GC18 as a facility whereby subscribers who so request can retain their telephone number on a public communications network, independently of the person providing the service at the network termination point of the subscriber provided that such retention of a telephone number is in accordance with the National Telephone Numbering Plan.

⁸ Portability is defined in GC18 as any facility which may be provided by a CP to another CP enabling any subscriber who requests number portability to continue to be provided with any publicly available telephone service by reference to the same telephone number irrespective of the identity of the person providing such a service.

costs of donor conveyance that would be incurred by an average efficient operator. Analysys estimated the costs using data from the cost model constructed for the 2007 mobile call termination (“MCT”) market review.⁹

- 2.14 Analysys estimated that an average efficient operator would incur donor conveyance costs of 0.2ppm in 2007. On 17 August 2007, Ofcom determined the disputes by directing that the DCC payable between the parties should be 0.1ppm (“the 2007 Determinations”). This was based on the donor conveyance cost estimate of 0.2ppm being split equally between the DNO and RNO to derive the DCC.¹⁰

Industry wide DCC

- 2.15 On 8 February 2008, Ofcom wrote to all mobile network operators (“MNOs”), which at this time was H3G, T-Mobile, Vodafone, Orange and Telefónica (O2), noting that, in making the 2007 Determinations, it had assessed the costs of donor conveyance that would be incurred by an average efficient operator and, consequently, the results were applicable on an industry-wide basis.¹¹ Ofcom therefore expected all MNOs to ensure that their DCCs were cost-oriented, in accordance with GC18, which required them to be set at 0.2ppm, to be split equally between DNO and RNO.
- 2.16 On 7 March 2008, in light of responses to the 8 February letter, Ofcom wrote to all MNOs advising that compliance with GC18.5 required them to be charging a DCC of 0.1ppm as from 8 February 2008. The letter requested the MNOs to confirm, by 12 March 2008, that their DCC was set at 0.1ppm. All of the MNOs provided this confirmation to Ofcom.

H3G’s 2013 dispute submission and alternative means

- 2.17 On 20 September 2013, we received a request from H3G to resolve disputes under section 185 of the Act between H3G and each of EE and Telefónica. H3G subsequently revised the scope of its dispute submission on 9 and 11 October.
- 2.18 The dispute submission (as revised) advised us that the current DCCs were set at [X] and requested that we determine a new DCC payable going forward under each agreement.
- 2.19 After consideration of the parties’ submissions we agreed with H3G’s assertion that the parties are in dispute. However, as GC18 applies across the industry generally (including mobile), we considered it would be preferable for us to consider the appropriate level of DCCs on a mobile industry-wide basis, rather than in determinations of disputes which would necessarily only apply to the parties to the

⁹ Donor conveyance and MCT are wholesale services which involve the use of a number of common mobile network assets.

¹⁰ *Determinations to resolve disputes between Hutchison 3G and each of O2, Orange and T-Mobile concerning donor conveyance charges*, 17 August 2007, see: http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_952/deter.pdf.

¹¹ T-Mobile had appealed the 2007 Determinations to the Competition Appeal Tribunal in October 2007. However, T-Mobile did not challenge Ofcom’s assessment of the costs of donor conveyance (0.2ppm), nor Ofcom’s decision that this cost estimate should be split equally between the DNO and RNO to produce a cost oriented DCC of 0.1ppm. In light of the fact that Ofcom decided to consider enforcement of GC18.5 on an industry wide basis, T-Mobile subsequently applied, and was granted permission by the CAT, to withdraw its appeal and the dispute determinations were therefore not overturned. *T-Mobile (UK) Limited v Office of Communications (Donor Conveyance Charge)* (Case 1093/3/07), see: <http://www.catribunal.org.uk/237-655/1093-3-3-07-T-Mobile-UK-Limited.html>.

particular disputes. We considered that a review of DCCs on a mobile industry-wide basis would constitute appropriate alternative means for resolving the dispute, consistent with the requirements of section 186(3) of the Act.

2.20 Therefore, on 14 October 2013, we decided not to handle the disputes, as we considered them suitable for resolution via alternative means, and we commenced this review.

Scope of the review

2.21 The scope of the review is therefore to determine whether:¹²

2.21.1 it would be appropriate for us to set a maximum DCC on an *ex ante*, mobile industry-wide basis; and

2.21.2 if so, at what level.

2.22 As we are using this review as alternative means to resolve the disputes between H3G and each of Telefónica and EE, we intend to complete it in the same four month time frame as would have applied to the dispute process.¹³

Information requests

2.23 In the course of this review we requested information on donor conveyance traffic volumes, incurred costs and technical network information from each of Vodafone, H3G, EE and Telefónica, using our information gathering powers under section 135 of the Act (“s135 information requests”).

Structure of the document

2.24 The remainder of this consultation document is structured as follows:

- in Section 3 we consider whether we should set a maximum DCC;
- in Section 4 we analyse the appropriate level of the DCC;
- in Section 5 we set out our provisional conclusions;
- Annex 1 illustrates how calls to ported mobile numbers are routed;
- Annexes 2 to 4 set out how to respond to this consultation and Ofcom’s consultation principles; and
- Annex 5 contains a notification of the Direction that we propose to set in relation to DCCs.

¹² The scope is published in the Competition Bulletin at: http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01113/.

¹³ We may only use alternative means to resolve a dispute if we consider that a prompt and satisfactory resolution of the dispute by those alternative means is likely (section 186(3)(c) of the Act). Any party to the dispute may refer it back to Ofcom if the alternative means should fail to resolve the dispute within a four month period (section 186(6) of the Act).

Section 3

Should Ofcom set a maximum DCC?

Legal framework

- 3.1 Article 30(2) of the Universal Services Directive¹⁴ (“USD”) imposes a duty on Ofcom to ensure that pricing between operators and/or service providers related to the provision of number portability is cost-oriented.
- 3.2 GC18.5 implements Article 30(2) USD. It provides that any charges for the provision of portability shall be reasonable and cost oriented, and that charges must be based on the incremental costs of providing portability unless, either, the DNO and RNO have agreed another basis for the charges or Ofcom has directed that another basis for charges should be used. GC18.5 sets out some further principles that apply to charges for the provision of portability, including that the DNO shall not make any charge in relation to “Additional Conveyance Costs”.¹⁵
- 3.3 In 2006, the European Court of Justice (“ECJ”) held that, subject to the requirement for cost orientation, Article 30(2) USD confers a discretion on national regulatory authorities (“NRAs”) to define the methodology which appears to them to be the most suitable to make portability fully effective, in a manner which ensures that consumers are not dissuaded from making use of that facility. The ECJ considered that an NRA would be acting within the scope of its discretion by defining a maximum cost-oriented price, provided that it is genuinely possible for new operators to contest the application of maximum prices by operators already present in the market by showing that those prices are too high in relation to their cost structure. In principle, therefore, NRAs may adopt a national measure that lays down the specific method to be used in calculating costs under Article 30(2) USD and which fixes maximum *ex ante* prices in respect of all MCPs on the basis of an abstract model of costs.¹⁶

Current DCCs

- 3.4 As discussed at paragraphs 2.13 to 2.16, in the 2007 Determinations Ofcom determined the disputes by directing that the DCC payable between the parties should be 0.1ppm. This was based on the donor conveyance cost estimate of 0.2ppm being split equally between the DNO and RNO to derive the DCC.
- 3.5 It is therefore around six years since the DCC was last set by Ofcom. In common with the costs of many telecommunications services, we would expect the costs of donor conveyance to fall over time as technology improves and becomes cheaper and fixed and common costs are spread across growing call volumes. In particular, the 2007 MCT cost model has been updated in the 2011 MCT market review and subsequent appeal.¹⁷ We know from this work that the cost of MCT has fallen since

¹⁴ Directive 2002/22/EC as amended by Directive 2009/136/EC.

¹⁵ Additional Conveyance Costs are defined in GC18.11(a).

¹⁶ Case C438/04 *Mobistar v IBPT* (“the Mobistar case”), paragraphs 32 to 37. Although the case specifically concerned set-up costs incurred by mobile operators in implementing requests for number portability, we consider that the ECJ’s comments apply equally to any costs recovered through wholesale charges for portability.

¹⁷ The latest version of the 2011 MCT model (Release 4) is available on Ofcom’s website and post-dates the judgment of the Competition Appeal Tribunal in the appeals against Ofcom’s 2011 MCT statement, see: <http://www.ofcom.org.uk/static/wmvct-model/model-2011.html>.

2007. As donor conveyance uses some common network assets with MCT, particularly mobile switching centres (“MSCs”), we would expect a cost-oriented DCC to also be falling over time.

- 3.6 We are aware that a number of MCPs are still applying DCCs in accordance with the rate set in 2007. We have refrained from intervening to date and allowed commercial negotiations between the MCPs with respect to revised rate(s) to take their course. However, bilateral negotiations to re-set DCCs have proven unsuccessful in some instances.
- 3.7 In light of these considerations, we consider it unlikely that DCCs will remain at a suitable rate across the mobile industry going forward, without Ofcom’s involvement. We also have a duty under Article 30(2) USD to ensure that charges between operators relating to the provision of number portability are cost-oriented. In addition, we are seeking to use this review to resolve the disputes referred to us by H3G in October 2013 about the level of the DCCs payable between it and each of EE and Telefónica. We therefore consider that it would be appropriate and consistent with these duties for us to set a maximum DCC across the mobile industry on a forward-looking basis.

Question 1: *Do you agree that it would be appropriate for Ofcom to set a maximum DCC across the mobile industry on a forward-looking basis? If not, please explain why you disagree.*

Regulatory instrument

- 3.8 As noted above, the ECJ has confirmed that Ofcom may use “a national measure” to fix *ex ante* maximum charges for pricing related to portability on an industry-wide basis. Having provisionally concluded that it would be appropriate for us to set a maximum DCC, we have therefore considered what national measure we might use to set charges in this manner.
- 3.9 As noted above, as a charge payable by the RNO to the DNO for the routing of a ported call, the DCC amounts to a charge for the provision of portability within the meaning of GC18.5. GC18.5(a)(ii) provides that charges for portability should be cost-oriented and based on incremental costs unless Ofcom direct that another basis for charges should be used. However, we consider that this provision may be construed in accordance with EU law (see paragraph 3.3) to allow us to direct both the basis on which charges should be calculated and a resultant maximum DCC.
- 3.10 We also consider that a direction under GC18.5 is an appropriate measure to use in these particular circumstances as it will ensure that our proposals are subject to the statutory safeguards set out in sections 49 to 49C of the Act. In particular, these sections impose a requirement for consultation where the proposal would have a significant impact on the market and requirements that the giving of the direction is proportionate, not unduly discriminatory and transparent in relation to what it is intended to achieve.¹⁸

¹⁸ We note that, in 2008, we set a maximum DCC by way of a letter. In that context, we were dealing with a small group of operators who were well aware of the relevant issues. In particular, there were five MNOs in 2007, of whom four were parties to the disputes and we had been in contact with the fifth during the course of our assessment of the disputes. In addition, as our letters of February and March 2008 came shortly after our 2007 Determinations, our assessment of the costs of donor conveyance had been subject to prior consultation in the context of that dispute. By contrast, we are

- 3.11 We therefore propose to issue a direction under GC18.5(a)(ii) setting the basis on which DCCs should be calculated and the resultant maximum DCC that may be charged.

aware that there are now a larger number of operators potentially paying and charging DCCs and there has not been any consultation on our assessment of the costs of donor conveyance since 2007. We therefore consider that, if we decide to set a maximum DCC at the conclusion of this review, then it would be appropriate to do so by way of a direction under GC18.5, for the reasons set out above.

Section 4

Ofcom's analysis of the level of the DCC

Introduction

- 4.1 In light of our provisional conclusion that it would be appropriate for us to set a maximum DCC on an *ex ante*, mobile industry-wide basis, this section explains our analysis of the appropriate level of that DCC.
- 4.2 In doing so we consider the following:
- the appropriate cost standard and modelling approach to use;
 - the relevant types of costs to be taken into account;
 - the appropriate level of donor conveyance costs;
 - estimates of incurred unit costs requested from Vodafone, H3G, EE and Telefónica;
 - the selection of an efficient cost level;
 - appropriate cost recovery to derive the DCC;
 - the application of the DCC to on-net originated traffic; and
 - the appropriate forward-looking period over which to set DCCs.
- 4.3 The analysis and reasoning underlying each of these considerations is set out in the following sub-sections.

The appropriate cost standard and modelling approach

Cost standard

- 4.4 The question of the appropriate cost standard to use in setting DCCs was not explicitly addressed in either the 1999 or 2007 Determinations. However, our 2007 Determinations set DCCs using asset unit costs calculated as intermediate outputs of the 2007 MCT model. The 2007 MCT model used a "LRIC+" cost standard, meaning long run incremental costs measured over a total service increment and including an equi-proportionate mark-up for both network and non-network common costs. In calculating DCCs we chose not to include non-network common costs (administration), so the cost standard used in the 2007 Determinations was effectively total service LRIC plus a mark-up for network common costs.¹⁹ For simplicity we refer to this as the "2007 cost standard" below.
- 4.5 As noted above, we are using this review as alternative means to resolve the disputes submitted to us by H3G. In its dispute submission²⁰ H3G has proposed a set of DCCs based on the "Pure LRIC" (henceforth referred to simply as "LRIC") of

¹⁹ See paragraphs 4.28 and 4.29 of the 2007 Determinations.

²⁰ Appendices A3 and B4 to H3G's dispute submission.

donor conveyance traffic.²¹ H3G's calculation defines the relevant increment of traffic as donor conveyance and includes only those fixed and variable costs which are incremental to providing donor conveyance, and could be avoided were that service no longer to be provided. In light of H3G's proposal, we have therefore considered whether we should maintain the 2007 cost standard or change our approach and use a LRIC cost standard.

- 4.6 In justifying its proposal H3G states that,²² *"charges shall be cost-oriented and based on the incremental costs of providing portability, i.e. LRIC"*. H3G appears to interpret the reference to "incremental costs" in GC18.5 as imposing a requirement for a LRIC standard.
- 4.7 We note that the reference in GC18.5 to "incremental costs" has been in place since the introduction of the General Conditions in 2003.²³ We also note that this reference pre-dates the use of LRIC as the relevant cost standard for MTRs (see footnote 21). Indeed, the 2007 Determinations using the 2007 cost standard were made with this reference in place.
- 4.8 We do not therefore consider that the wording of GC18 in itself requires the use of a LRIC cost standard in place of the 2007 cost standard. However, the question of the appropriate cost standard is a legitimate one and we examine this further below.
- 4.9 In our view, the use of a LRIC cost standard would constitute a change in policy in how we derive cost-based DCCs. However, we consider that it is inappropriate to consider and address this question by looking at mobile porting conveyance costs and charges in isolation, noting that the question of how to derive cost-based charges is relevant to any charges for portability pursuant to GC18 (i.e. including, for example, fixed porting conveyance charges) and therefore any such change in policy may have broader implications. In this regard, we note that a number of stakeholders raised the question of the appropriate cost standard to be used to derive cost-based geographic porting conveyance charges on fixed networks (these charges being known as geographic Average Porting Conveyance Charges (APCCs)) in the context of the recent Narrowband Market Review.²⁴ Similar to H3G's position as regards using LRIC for the DCC, some CPs consider that LRIC should be the basis for setting geographic APCCs.
- 4.10 In our view, in order to give full and proper consideration to the appropriate cost standard to be used in setting porting charges generally, we should (amongst other

²¹ LRIC was introduced in telecoms regulation by the EC's 2009 Recommendation on the regulatory treatment of fixed termination rates (FTRs) and mobile termination rates (MTRs). In that context it involves treating terminating traffic as the relevant increment of traffic over which to measure costs, and marked a departure from the "LRIC+" cost standard which had been used to set termination rates up to that point.

²² Page 3 of Appendix A7 to H3G's dispute submission.

²³ See

http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/cond_final0703.pdf. Prior to this, similar language had been used since 1999 in the relevant condition of the mobile operators' licences issued under the Telecommunications Act 1984.

²⁴ In the final statement of the Narrowband Market Review, published on 26 September 2013, we stated that *"We recognise that further guidance on the interpretation of GC18 has been requested by a number of stakeholders and that this would provide greater certainty for CPs. Therefore, following the completion of the Narrowband Market Review we will commence a project to consider how GC18 should be applied in setting porting conveyance charges."* Available at: http://stakeholders.ofcom.org.uk/binaries/consultations/nmr-2013/statement/Final_Statement.pdf.

things) give careful consideration to the cost standards we have used elsewhere such as the regulation of call termination markets and interconnection.

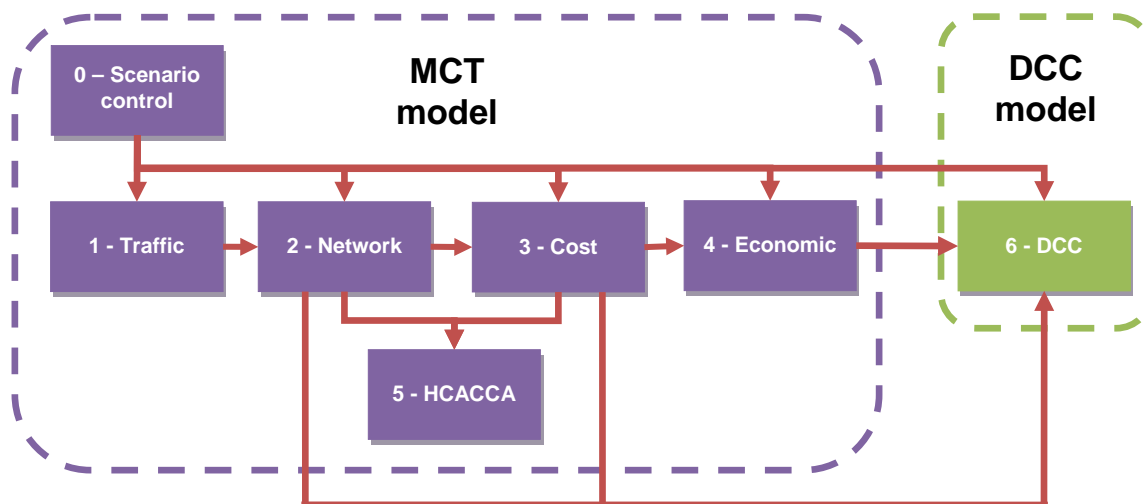
- 4.11 Further, in considering any policy change regarding how reasonable cost-based porting charges should be set on a forward-looking basis, the question of the appropriate cost standard should, in our view, be considered within a wider assessment of all the factors which form the basis for setting porting charges including, for example, the efficient costs incurred in porting conveyance over networks and who should bear these costs.
- 4.12 In light of the above, we consider that it is not appropriate to carry out an assessment of the relevant cost standard to use in setting DCCs within this review. We note that this review is limited in its scope, and also limited in the time available for its conclusion given that it is being used as alternative means for the resolution of regulatory disputes. Reconsidering the most appropriate cost standard for DCCs would require analysis of the alternative options and an impact assessment, which also cannot practically be delivered within the four month timescale of this review.
- 4.13 As a result, for the purposes of this review of DCCs we consider it appropriate to maintain the cost standard used in the 2007 Determinations and we therefore do not examine the substantive issues involved in determining the appropriate cost standard any further.
- 4.14 However, we are currently undertaking a separate policy project, which has a broader scope than this review, and has the aim of providing greater regulatory certainty, possibly through guidance, for industry on how to set compliant porting charges under GC18, reducing the need to resort to costly disputes. In that policy project we intend to address the question of the appropriate cost standard for DCCs and the broader policy questions outlined above. We consider that the question of the relevant cost standard to use in setting DCCs would be more appropriately addressed within that policy project for the following reasons:
- 4.14.1 Breadth of consultation: The policy project is better suited to seek views from a wide range of stakeholders, including those which may be indirectly affected by the issue (such as consumers and MVNOs), rather than only for stakeholders with a direct interest in this review.
- 4.14.2 Breadth of the issues considered: whereas this review is focussed on answering a specific question, the policy project is better placed to consider the implications and impacts of any change for the industry as a whole. The scope of the policy project encompasses costs and charges for porting all types of numbers (fixed geographic, fixed non-geographic and mobile numbers), whereas this review is limited to DCCs. The policy project is also better suited to consider the wider issues involved in setting all types of porting charges, including who should bear the costs, in the context of the wider regulatory framework for other charges, such as fixed and mobile termination rates.
- 4.14.3 Range of options considered: it is possible for the policy project to consider a wider range of regulatory options, which it would not be feasible to consider as part of this review. For example, the policy project could consider the implications and impacts of different cost standards as well as different approaches to the identification of the efficient technology and cost recovery.

- 4.15 Addressing the choice of cost standard and the broader policy questions within the wider policy project will also have the following consequences:
- 4.15.1 Length of time to reach a decision: The longer period of time leading to the final decision in the policy project (which we will nevertheless seek to conclude on an expeditious basis) means that the nature and level of detail of the analysis, including a robust impact assessment, would not be limited by the four month period of the present review.
 - 4.15.2 Length of consultation: The longer consultation period in the policy project (up to 10 weeks depending on the potential impact of our proposals) allows a more inclusive exercise than the consultation period of the present review.
- 4.16 In light of the above, we therefore consider it appropriate to use the 2007 cost standard for the purposes of this review. We consider that our proposed direction, which is based on this cost standard, satisfies the relevant legal tests and is consistent with our statutory duties (see paragraphs 5.5 and 5.6). As explained above, we will be assessing the choice of cost standard again in the near future. If, following that assessment, we decide that it would be appropriate to apply a different cost standard to set DCCs, we would also consider whether it is necessary to revisit the conclusions we reach in this review.

Modelling approach

- 4.17 As discussed in Section 2, Analysys built a model to estimate the costs of donor conveyance for the 2007 Determinations (the “2007 DCC model”). This was constructed as an additional module to Ofcom’s then recently published model used in the 2007 MCT review, which was also built by Analysys.²⁵
- 4.18 The structures and interaction between the 2007 MCT model and the 2007 DCC model are shown in Figure 4.1 below. It shows that the 2007 DCC model draws inputs from the MCT model in the form of:
- 4.18.1 summary information on the selected scenario from the “Scenario control” module of the MCT model;
 - 4.18.2 conversion factors, routing factors and network element outputs from the “Network” module of the MCT model;
 - 4.18.3 inflation data from the “Cost” module of the MCT model; and
 - 4.18.4 network equipment unit costs (in £ per unit) from the “Economic” module of the MCT model.

²⁵ Available from http://www.ofcom.org.uk/static/LRIC_files/.

Figure 4.1: The MCT and DCC models

Source: Ofcom. Note that the labels in the boxes refer to the names of the Excel workbooks.

- 4.19 This ensured that the 2007 Determinations were based on efficient unit costs consistent with those used for MCT.²⁶ Analysys explained the 2007 DCC model in an accompanying report (the “Analysys 2007 DCC Report”).²⁷
- 4.20 Having provisionally concluded in the previous sub-section that we should use the 2007 cost standard in reviewing the level of the DCC, we also consider it appropriate to use the 2007 DCC model as the basis for calculating the efficient costs of donor conveyance.²⁸ However, before using the 2007 DCC model to calculate the current costs of donor conveyance, we consider it necessary to update the inputs to the 2007 DCC model in order to reflect the most up-to-date understanding of the costs of mobile service provision.
- 4.21 As noted in paragraph 3.5, since 2007 Ofcom has conducted a further MCT market review and issued an updated version of the MCT model in 2011. The 2011 MCT model was further updated in 2012 following the Competition Appeal Tribunal’s judgment on the appeals against our 2011 MCT Statement.²⁹ In our view this version of the MCT model is the most comprehensive and detailed source currently available on which to base DCC modelling, and we use it as the basis for our estimates of the costs of donor conveyance.
- 4.22 In doing so we are mindful that the 2011 MCT model was built to examine the costs of MCT, which involves a much broader set of network assets than donor conveyance. In 2007 Analysys identified a number of modifications that were necessary to estimate donor conveyance costs. This principally involved adjusting

²⁶ See paragraph 4.11 of the 2007 Determinations.

²⁷ This report was not published at the time, but is published as a related item to this document.

²⁸ In particular, we consider this will ensure consistency with the model used for the 2007 Determinations. Whilst it would be possible to make adjustments directly into the updated 2011 MCT model to calculate “LRIC+” results (indeed, H3G reports results calculated in this way in its correspondence with Telefónica - Appendix A7 to H3G’s dispute submission), we consider it unnecessary to create a new modelling approach when the 2007 DCC model already provides the functionality that we require for this review.

²⁹ MCT Model Release version 4, available at: <http://www.ofcom.org.uk/static/wmvct-model/model-2011.html>.

the routing factors and asset utilisation used in the MCT model for the donor conveyance service. Then, as now, we note that the estimates presented below should be considered against a background of broader assumptions used in the MCT review,³⁰ and again present sensitivities in relation to demand levels.

Question 2: *Do you agree with our analysis of the appropriate cost standard and modelling approach? If not, please explain why you disagree.*

The relevant types of costs to be taken into account

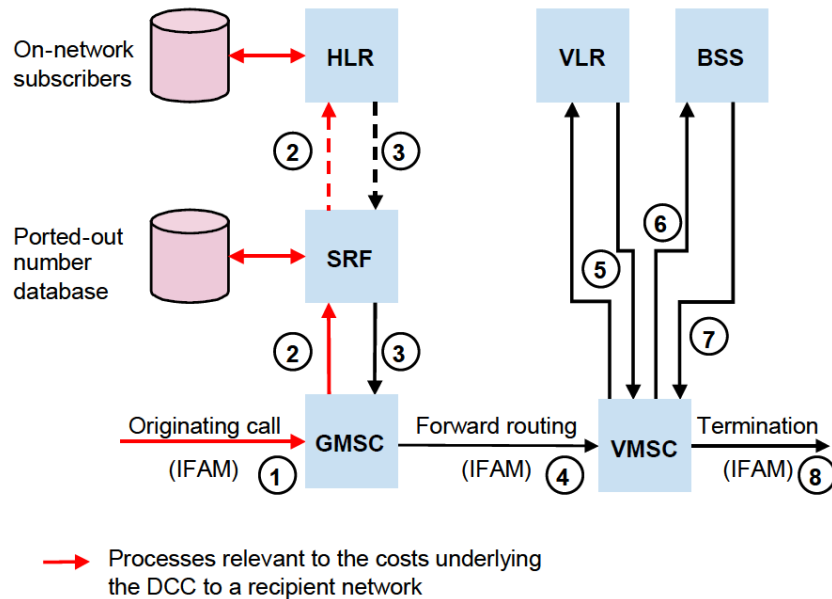
- 4.23 In this sub-section we consider what types of costs should be taken into account in setting a maximum DCC.
- 4.24 When a call to a mobile number is originated from a third-party network (fixed or mobile) it is routed to the MCP which holds the relevant mobile number range to which the called number belongs. This will be received by the range holder MCP at a Gateway Mobile Switching Centre (G-MSC) which, as the name suggests, acts as the "entrance" onto the MCP's network.
- 4.25 Normally, the first job of the G-MSC is to determine the current location of the called mobile phone in order to connect the call which it does by consulting the Home Location Register (HLR) – a central database that contains details of each mobile phone subscriber on the network – and which returns routing information for the visited Mobile Switching Centre (MSC) where the called mobile phone is currently located. This allows the G-MSC to route the call to the appropriate visited MSC to complete the call connection.
- 4.26 However, where the called mobile number has been ported to a different MCP (the recipient), the G-MSC uses a feature called Signalling Relay Functionality (SRF) to first carry out a look-up against a database of the donor MCP's ported out mobile phone numbers and identify the recipient MCP. Routing enquiries are then usually relayed between the donor MCP and recipient MCP and routing instructions (a porting prefix or routing number) returned to enable the call for a ported number to be onward routed to the recipient MCP for subsequent treatment. A full service description for Mobile Number Portability is published by NICC Standards Limited (reference NICC ND 1208 v1.5.1 2010-09).³¹
- 4.27 In support of the 2007 Determinations, the Analysys 2007 DCC Report provided an explanation of the eight steps necessary to set up a mobile call according to the European Telecommunications Standards Institute (ETSI) GSM standards. This is reproduced in Figure 4.2 below, which highlights that "only steps (1) and (2) incur cost for the donor network in handling donor conveyed calls".³²

³⁰ For the avoidance of doubt we again also note that none of the modifications used in the 2007 DCC model would have affected the cost benchmarks used in the 2011 MCT review.

³¹ See <http://www.niccstandards.org.uk/files/current/NICC%20ND1208%20v1.5.1.pdf?type=pdf>.

³² See p9 of the Analysys 2007 DCC Report.

Figure 4.2: Processes required to set up a call in a network according to the ETSI GSM standards



Source: Exhibit 3.1 of the Analysys 2007 DCC Report.

4.28 Based on this analysis Analysys identified costs of onward routing associated with the following types of assets:³³

- MSC costs (2G processor/3G server and gateway, associated software);
- MSC ports (interconnect facing only);
- MSC interconnect interface;
- other MSC-related costs (support plant, sites);
- Network Management System (“NMS”); and
- Home Location Register (“HLR”) look-up.

4.29 Analysys also explained that its calculations “*exclude interconnect or indirect transit charges which are settled outside of the DCC arrangement*”.³⁴

4.30 In the following sub-sections we discuss HLR look-up costs and transit costs in more detail, before reaching a provisional conclusion about the relevant types of costs that we should take into account in setting a maximum DCC.

HLR look-up costs

4.31 In relation to the HLR look-up, Analysys explained that the provision of donor conveyance involves “MNP infrastructure” in the form of a look-up in a database in order to establish whether the number has been ported out and therefore requires the donor conveyance service.

³³ See Exhibit 4.3 of the Analysys 2007 DCC Report.

³⁴ See p 8 of the Analysys 2007 DCC Report.

- 4.32 This process has costs associated with it, and Analysys explained that although such costs were not explicitly modelled in the 2007 MCT model, *“given that MNP infrastructure is closely related to the HLR – in some instances, integral to it – then we assume that within the cost model, MNP infrastructure costs are captured within the HLR cost element”*. It *“estimated that the cost of the SRF (Signalling Relay Function) and ported-out database is small compared to the cost of the HLR”*, and allowed 10% of the exogenous per-minute cost of the HLR to be included in DCCs.³⁵ We therefore included the costs of HLR look-up within the DCC that we set in the 2007 Determinations.
- 4.33 We have re-visited the question of relevant costs in the context of this review. We consider that, although HLR look-up costs are relevant to the provision of donor conveyance, they fall within the category of “Additional Conveyance Costs” as defined in GC18.
- 4.34 GC18.11(a) defines Additional Conveyance Costs as *“any costs incurred by the [DNO] associated with resources used in: (i) effecting the switch processing required to set up each ported call; and (ii) providing the switch and transmission capacity for any part of the duration of each ported call, additional to the costs of conveyance of non-ported calls from the [DNO’s] network to the [RNO’s] network”*. GC18.5(b) explicitly prohibits the DNO from charging for these costs (see paragraph 3.2).
- 4.35 We consider that the costs of the HLR look-up (i.e. the SRF look-up of a database and set up for routing to a RNO) are costs associated with resources used in effecting the switch processing required to set up the ported call which are additional to the costs of conveyance of non-ported calls. As such, we consider that they fall within the definition of Additional Conveyance Costs set out in GC18 and are therefore not recoverable.
- 4.36 We therefore provisionally conclude that costs incurred when performing a look-up in a ported numbers database should not be included in the calculation of the costs of donor conveyance for the purposes of setting DCCs.

Transit costs

- 4.37 In the 2007 Determinations we explained our view that BT transit costs should be excluded from the relevant costs of donor conveyance. The reason for this was that, at that time, four of the five MNOs had or were close to achieving direct interconnection with each other. We reasoned that BT transit costs were no longer efficiently incurred, and that their inclusion would contravene the principle of cost minimisation.
- 4.38 We remain of the view that transit costs should not be included in our calculations, and moreover that since direct interconnection arrangements will be separately negotiated on a commercial basis it is not necessary to include any allowance for this in estimating the costs of donor conveyance for the purpose of setting DCCs.³⁶

³⁵ See p 14 of the Analysys 2007 DCC Report.

³⁶ We further note that, based on information received from the MCPs in response to our s135 information requests and information in the 2011 MCT model, total market donor conveyance traffic represents only around 7% of the total market interconnection traffic (2G and 3G incoming and outgoing voice calls) in 2013. This result has remained relatively stable over time, and suggests that donor conveyance traffic would not be an important consideration in negotiating direct interconnection arrangements.

Provisional conclusion on relevant costs

- 4.39 We consider that in setting a maximum DCC, we should take into account the same categories of cost as were taken into account in the 2007 Determinations (see paragraph 4.27), except for HLR look-up costs as we consider these are Additional Conveyance Costs and therefore not recoverable under GC18.5. We also note that consideration of 2G and 3G MSCs is necessarily different to that in the 2007 Determinations, which is explained further below.

Question 3: *Do you agree with our analysis of the relevant types of cost to take into account? If not, please explain why you disagree.*

The appropriate level of donor conveyance costs

- 4.40 We have based our modelling of the costs of donor conveyance on the 2007 DCC model, with a number of updates and changes. Our modelling process is explained further below and we then set out the results of that modelling at the end of this subsection. A revised version of the 2007 DCC model, updated as described in this section, is published alongside this consultation (the “2013 DCC model”).³⁷

Process

- 4.41 We have updated the 2007 DCC model in the following respects:
- 4.41.1 to reflect inputs from the 2011 MCT model;
 - 4.41.2 to reflect a revised assumption about MSC processor load; and
 - 4.41.3 to account for actual inflation for the years between 2008/09 and the present and forecast inflation to 2015/16.
- 4.42 We explain each of these adjustments in turn below.

2011 MCT model

- 4.43 As noted in paragraph 4.16 above, the 2007 DCC model was constructed by Analysys and appended to the 2007 MCT model as an additional module. The first step in updating the model is therefore to use the latest release of the 2011 MCT model (see paragraph 4.21) as the source of input data.³⁸
- 4.44 In doing so we take account of changes that have been made to the 2011 MCT model compared to the 2007 version. Specifically, in the 2011 MCT model we assumed a migration of traffic from “2G monolithic MSCs” to “combined 2G/3G MSCs/MGWs, such that as of 2011/12 no traffic was assumed to use 2G monolithic MSCs”.³⁹

³⁷ See <http://www.ofcom.org.uk/static/consultations/7992Review-mobile-donor-conveyance-charges/condocDCCmodel.zip>.

³⁸ Note that in order to produce DCC estimates using the 2007 cost standard it is necessary for the 2011 MCT model to be calculating live LRIC+ results. The 2013 DCC model includes checks to ensure that this is the case.

³⁹ See paragraph A6.165 of the 2011 MCT Statement. In the 2011 MCT model 80% of 2G traffic was assumed to be processed by 2G monolithic MSCs in 2007/08, falling to 0% in 2011/12.

- 4.45 Since MSC costs are a key component of the costs of donor conveyance, and the 2007 DCC model drew on the costs of the “2G monolithic MSCs” from the 2007 MCT model in estimating the 2G/3G cost of donor conveyance, the change explained above means that it is no longer possible or necessary to calculate 2G and 3G costs of donor conveyance separately. Instead we calculate a single 2G/3G cost based on the costs of combined 2G/3G MSCs/MGWs.⁴⁰

MSC processor load

- 4.46 In the 2007 DCC model Analysys assumed that “a donor-conveyed call uses the MSC 25% compared to an average incoming call”. It therefore applied a 25% adjustment to the routing factors used to estimate donor conveyance costs.⁴¹
- 4.47 In its modelling underlying the DCCs proposed in its dispute submission, H3G assumed that the MSC processor load imposed by a donor conveyance call is 20 milliseconds (ms) per busy hour call attempt (BHCA).
- 4.48 This assumption of 20 ms per BHCA matches that in the 2007 and 2011 MCT models for an outgoing call, and compares to assumptions for incoming calls of 50 milliseconds per BHCA in those models. We also note that the Vodafone calculation underpinning Oftel’s 1999 Determination (see paragraph 2.8) assumed that donor conveyance was akin to an outgoing call.⁴²
- 4.49 In our s135 information requests, we asked Vodafone, EE and Telefónica for any evidence that might support or contradict H3G’s assumption that calls to ported numbers currently involve an MSC processor load of 20 ms per BHCA. However, none of them were able to provide any evidence on this point.
- 4.50 In the absence of further evidence we consider it reasonable to assume the MSC processor load for donor conveyance calls is more akin to that for an outgoing call than an incoming call, and therefore that a MSC processor load of 20 ms per BHCA is a more appropriate assumption to use when calculating the DCC than 50 ms per BHCA. The assumption that a donor conveyance call is akin to an outgoing call corresponds to 40% of the MSC processor load associated with an incoming call⁴³ rather than the Analysys assumption of 25%.
- 4.51 We therefore consider that we should apply an assumption of 40% to the routing factors in the 2013 DCC model in each case in which Analysys assumed 25% in 2007.

Inflation

- 4.52 The 2007 DCC model drew historic and forecast inflation data from the 2007 MCT model, which used the RPI measure of inflation. In updating the 2007 DCC model we use inflation data from the 2011 MCT model, which also uses RPI inflation and

⁴⁰ A further minor change to the 2011 MCT model is the labelling of site costs. Site costs are now under the asset heading ‘Buildings (switch building preparation) - allocated to voice services’ and ‘Site lease - allocated to voice services’.

⁴¹ See p 15 and Exhibit 4.3 of the Analysys 2007 DCC Report, specifically adjustments ‘A’ and ‘F’.

⁴² This is because a donor conveyance call, like an outgoing call, must simply be routed to a point of interconnection. In contrast an incoming call must be routed to wherever the relevant handset is in the network.

⁴³ Relative to an incoming call, a donor conveyance calls has an MSC processor load of 20 ms per BHCA / 50 ms per BHCA = 40%.

includes actual data for the years up to and including 2009/10 and forecasts thereafter.

- 4.53 Reflecting the passage of time since the publication of the 2011 MCT model we have included inflation figures for the years 2009/10 to 2012/13 based on ONS data.⁴⁴ For the years 2013/14 to 2015/16 we have used an estimate of 3% based on the most recent independent figures published by HM Treasury.⁴⁵
- 4.54 We recognise that in more recent charge controls we have considered the use of the CPI inflation index⁴⁶ and proposed to make it the default inflation index for the LLU/WLR and future charge controls. However, in order to ensure consistency with the estimate of the weighted average cost of capital (“WACC”) and the equipment unit price trends in the 2011 MCT model we propose to maintain the use of the RPI inflation in the specific circumstances of this review.

Modelling results

- 4.55 Having made the updates described above, the 2013 DCC model produces estimates of unit costs of donor conveyance in 2013/14 for an average efficient 2G/3G operator as shown in Table 4.1 below.⁴⁷

Table 4.1: Calculation of the costs of donor conveyance in 2013/14 (ppm)

	Combined 2G/3G cost
MSC cost (real 2008/9 prices)	0.053
Switch site, building and lease (real 2008/9 prices)	0.012
Total cost per minute (real 2008/9 prices)	0.065
Cost of donor conveyance (nominal prices)	0.078

Source: 2013 DCC model.

- 4.56 We have tested the sensitivity of this result to changes in a number of key assumptions. The results of this analysis are shown in Table 4.2 and discussed further below. Note that Table 4.2 presents the individual effects of each of the tests relative to the base case (which is shown in the first row).

⁴⁴ Using the RPI measure of inflation (the ONS “CHAW” series), consistent with that used in the 2011 MCT model. This is available from <http://www.ons.gov.uk/ons/datasets-and-tables/data-selector.html?cdid=CHAW&dataset=mm23&table-id=2.1>.

⁴⁵ See HMT, *Comparison of independent forecasts*, Nov 2013, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/260252/201311_ForecastComparison.pdf. RPI is forecast at 3.0% for 2013/14 and we note that the medium term forecast of RPI inflation remains stable around 3% to 2016. We therefore retain a value of 3.0% for inflation for the years 2014/15 and 2015/16.

⁴⁶ See paragraphs 3.155 to 3.191 of *Fixed access market reviews: Approach to setting LLU and WLR charge controls*, July 2013, available at: http://stakeholders.ofcom.org.uk/binaries/consultations/llu-wlr-cc-13/summary/LLU_WLR_CC_2014.pdf.

⁴⁷ These results are calculated using the calibrated base case (“scenario 95”) of the 2011 MCT model following the Competition Appeal Tribunal’s judgment in the appeals (see paragraph 4.20). This is the scenario used to set MTRs under the 2011 MCT model.

Table 4.2: Sensitivity analysis on costs of donor conveyance in 2013/14 (nominal ppm)

	Combined 2G/3G cost
Base case (as in Table 4.1 above)	0.078
Low MCT demand assumption	0.080
High MCT demand assumption	0.076
Test for economies of scale/scope	0.078
25% MSC processor usage	0.055

Source: Table 4.1 2013 DCC model.

- 4.57 The second and third rows of Table 4.2 show that the results are relatively insensitive to the use of the low and high voice traffic demand scenarios specified in the 2011 MCT model.⁴⁸
- 4.58 Our modelling approach means that the unit cost of donor conveyance appropriately benefits from the economies of scale and scope of all traffic in the 2011 MCT model. However the 2011 MCT model does not include donor conveyance traffic. In light of this we have tested whether including donor conveyance traffic affects the unit cost results.⁴⁹ The result of this is shown in the fourth row of Table 4.2 and has the effect of reducing the base case result by 0.0003 ppm, or 0.4%.
- 4.59 Given this and the need for speculation as to forecast levels of donor conveyance traffic required to include it in the 2011 MCT model (which requires traffic forecasts to Q4 2020/21) we do not consider that it is proportionate or necessary to include this traffic when estimating the appropriate level of donor conveyance costs.
- 4.60 The fifth row of Table 4.2 presents the results when using the 25% MSC processor load as explained in paragraph 4.45 above. We note that the result is sensitive to changes in the MSC processor load assumption, and welcome views on this assumption.

Question 4: Do you agree with our analysis of the appropriate level of donor conveyance costs (in particular the assumption about MSC processor load)? If not, please explain why you disagree.

Operator estimates of incurred costs

- 4.61 In our s135 information requests, we asked Vodafone, H3G, EE and Telefónica to provide us with their current estimates of the incurred costs of donor conveyance. In

⁴⁸ The low and high voice usage scenarios are “scenario 97” and “scenario 98” respectively from the 2011 MCT model, as shown in Figure A6.5 and described in paragraph A6.46 of the 2011 MCT Statement. We also tested “scenario 107” and “scenario 108”, which represent low and high demand scenarios for voice and non voice traffic. We found the results of the model to also be relatively insensitive to the use of these scenarios.

⁴⁹ To implement this addition of donor conveyance traffic to the 2011 MCT model we need to have a forecast of DCC traffic (for an average operator) up to Q4 2020/2021. For simplicity this test has been performed in a separate version of the DCC model rather than the one published alongside this consultation.

response to this request, none of these MCPs provided us with estimates of incurred costs:

- 4.61.1 Vodafone explained that given that it is satisfied that it has fully complied with its legal and regulatory obligations under GC18.5 since the application of the 2007 Determinations, *“there would be no reason for Vodafone to have generated detailed cost information of the type [requested], nor the methodology used to derive a view of costs”*.
- 4.61.2 H3G explained its view that *“the efficient way to implement mobile number portability is to use a national central database for the direct routing of calls to ported numbers”*, and that this should be used *“as the Modern Equivalent Asset (“MEA”) technology choice when setting the level of the DCC”*. It also provided a copy of its model of the efficient costs of donor conveyance which it had used to produce the numbers underlying its commercial negotiations and contained in its dispute submission. However, it did not provide an estimate of its own incurred costs.
- 4.61.3 EE explained that it had *“not undertaken any up to date assessment or estimate of the current efficient cost of donor conveyance nor a detailed breakdown of the nature and level of costs EE currently incurs in providing donor conveyance”*.
- 4.61.4 Telefónica stated that it was *“not... able to provide a response”*.

The selection of an efficient cost level

- 4.62 In selecting a proposed level for the donor conveyance costs for an average efficient 2G/3G operator we have borne in mind the estimates presented in Table 4.1, the sensitivity analyses shown in Table 4.2, and the responses to our s135 information requests.
- 4.63 In the absence of information on the incurred unit costs of donor conveyance (see paragraph 4.60) we must draw exclusively on our own estimate of efficient costs as presented in Table 4.1. We note in particular that Table 4.2 shows little variation around the base case estimate of 0.079 ppm under different demand assumptions.
- 4.64 In light of the above our provisional conclusion is that a reasonable estimate of the efficient costs of providing donor conveyance is 0.079 ppm in 2013/14 (nominal prices).

Question 5: *Do you agree with our analysis of an efficient cost level? If not, please explain why you disagree.*

Appropriate cost recovery to derive the DCC

- 4.65 The 1999 Determination set out our six principles of cost recovery⁵⁰ and explained that, based on the principles of cost causation, distribution of benefits and cost

⁵⁰ Namely: cost causation, cost minimisation, distribution of benefits, effective competition, reciprocity and symmetry, and practicability. These principles were developed by Oftel in the context of number portability, endorsed by the MMC (see Telephone Number Portability: A Report on a reference under s13 of the Telecommunications Act 1984 (MMC, 1995): http://www.competition-commission.org.uk/rep_pub/reports/1995/374telephone.htm#full) and have subsequently been used by Ofcom in analysing various pricing issues.

minimisation, the costs of donor conveyance should be recovered from mobile network customers rather than fixed network customers. The 2007 Determinations reiterated this position and we maintain this view.

- 4.66 In both 1999 and 2007 Oftel/Ofcom also considered how the costs of donor conveyance should be borne between the mobile networks. Oftel decided in 1999 that donor conveyance costs should be split equally between the DNO and RNO. In doing so it noted that there was an imbalance between the mobile networks, with some being net donors and others net recipients of ported numbers. This meant that the principle of effective competition could be compromised if the DCC were payable entirely by either the DNO or the RNO. Oftel also noted that the approach of dividing the costs between DNO and RNO was desirable in that it retained an incentive for DNOs to ensure that conveyance costs were minimised.
- 4.67 This position was maintained in a 2001 Oftel Statement resolving a dispute,⁵¹ and in 2007 we continued to consider that the reasoning from 1999 remained valid, noting the continued imbalance of ported traffic between the mobile networks, with some acting as net donors and some as net recipients. We therefore continued to split the costs of donor conveyance equally between the DNO and RNO in the 2007 Determinations.
- 4.68 The information received in response to our s135 information requests confirms that these imbalances in flows of ported traffic remain. We have therefore considered whether, as part of the present review, it would be appropriate to address the question of what split of the costs of donor conveyance between the DNO and RNO should be used to calculate the DCC.
- 4.69 However, for the same reasons as explained in paragraphs 4.9 to 4.14 above in the context of the appropriate cost standard, we consider that it would not be appropriate to address this issue as part of the present review. We note in particular that the split of costs between DNO and RNO represents an important difference between the methodologies used to derive APCCs and DCCs⁵², and that this question would be more appropriately addressed within the broader policy project which we recently commenced (see paragraph 1.9).
- 4.70 For the purposes of the present review we therefore consider that we should continue to apply the 50:50 split of costs established in 1999 and followed in 2007. However, we will be undertaking an assessment of the appropriate split of costs to derive DCCs in the near future as part of the ongoing policy project.

Application of the DCC to on-net originated traffic

- 4.71 In Annex A3 to its dispute submission H3G explains that it has “scaled” its estimates of DCCs to take account of non-chargeable calls. It explains that such scaling is necessary *“to account for the fact [that] whereas the DCC is only chargeable on off-net originated calls, in practice it is charged on both off-net originated and on-net*

⁵¹ Orange/BT Interconnection disputes: freephone origination and mobile number portability, 21 September 2001: <http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/oran0901.pdf>.

⁵² As already noted, in the 1999 and 2007 DCC Determinations the costs of onward routing were split equally between the DNO and RNO. When calculating APCCs the costs of onward routing are borne wholly by the RNO, see paragraphs S.3 and S.4 of: <http://www.ofcom.org.uk/static/archive/oftel/publications/pricing/2002/nupo0502.pdf>. The principles set out in these paragraphs remain in place today.

originated donor conveyance calls". H3G's adjustment reflects the approach used when calculating APCCs.⁵³

- 4.72 In our s135 information requests, we have sought information from Vodafone, H3G, EE and Telefónica on the volumes of different types of donor conveyance traffic in order to estimate the proportion of total donor conveyance traffic which is on-net originated for an average efficient operator. In response to this:
- 4.72.1 Vodafone provided the information requested, which showed that [redacted]
- 4.72.2 H3G was not able to provide the requested information within the time available, and instead used a "proxy percentage split" [redacted]
- 4.72.3 EE was able to provide some information in its response [redacted]
- 4.72.4 Telefónica said that it was "*not able to separate the data*".
- 4.73 In relation to DCCs being levied on on-net originated donor conveyance traffic, we consider that the only porting costs which might arise as a result of these calls are "Additional Conveyance Costs", which are a non-recoverable category of porting costs (see GC18.5(b)). In our view, on-net originated calls to ported numbers are simply calls from the ONO to the RNO for which the ONO recovers its costs of call origination (and the regulated MTR which it has to pay to the RNO) through its retail charges, i.e. like any "normal" call.
- 4.74 Despite this, we understand from the responses to our s135 information requests described above that some MCPs remain unable to distinguish on-net originated donor conveyance traffic from total donor conveyance traffic. The reasons for this are not clear to us (although we presume that this might involve changes to MCPs' wholesale billing systems).
- 4.75 Given our view that GC18 does not permit the MCPs to recover porting costs for on-net originated donor conveyance traffic, our provisional view is that a DCC should not be charged on this traffic and, consequently, that no adjustment of the type proposed by H3G is required. However, we particularly welcome stakeholders' views on this proposal, on the reasons why some MCPs are unable to distinguish on-net originated traffic from total donor conveyance traffic and on the scale of the changes that would be required to achieve this.
- 4.76 Table 4.3 below shows the DCCs that would result from the application of the 50:50 split of costs to our estimate of the efficient costs of donor conveyance (paragraph 4.63 above).

⁵³ Ibid., see Annexes A and B.

Table 4.3: Proposed DCC in 2013/14 to be applied only to off-net originated calls (ppm, 2013/14 prices)

	2G/3G results
Cost of donor conveyance	0.078
Proposed DCC (50% of cost)	0.039

Source: 2013 DCC model and Ofcom calculation.

- 4.77 We propose to set a DCC of 0.039 ppm for the year 2013/14. As explained in Section 3 we propose to set this as a maximum DCC, which would allow MCPs to charge a DCC below this level if they so wish.
- 4.78 In particular, and given the low level of the proposed DCC, we note the possibility that certain pairs of MCPs might wish to agree to waive the payment of DCCs between them in certain circumstances. For example, where porting traffic between them is similar, and/or where the transaction costs involved in recovering DCCs may be such that it is preferable for them not to make any charge. We consider that such agreements are consistent with the relevant porting regulations which seek to ensure that any porting charges that are levied are cost-oriented.

Question 6: *Do you agree with our view that a DCC should not be charged on on-net originated traffic? Are there material obstacles to levying DCCs on only off-net originated calls to ported numbers? If so, what are those obstacles and what would be necessary (including the scale of likely costs) in overcoming them?*

- 4.79 Although our provisional view is that no adjustment should be made to the level of the DCC to account for on-net originated traffic, we have nevertheless considered what an appropriate adjustment would be (if one were to be made).
- 4.80 In the modelling underlying our 2010 Statement on routing calls to ported telephone numbers, we assumed that the proportion of onward routed minutes for which the same MCP was both the originator and the range holder was 17%.⁵⁴ The evidence from the MCPs indicates that the figure may now be higher than this and we have reconsidered the assumption as follows.
- 4.81 The information provided by the MCPs is incomplete and some of the evidence varies materially over time. However, a weighted average (using the most recent evidence on donor conveyance traffic volumes as weights) of the values explained in paragraph 4.71 produces an estimate of around 33% of total donor conveyance traffic being on-net originated.
- 4.82 We note that this figure closely matches the share of total market on-net mobile calls (i.e. including both ported and non-porting calls) seen in Ofcom's Telecoms market data tables for the most recent period available (Q1 2013), which is 34%.⁵⁵

⁵⁴ See paragraph 4.28 of the April 2010 Statement, *Routing calls to ported telephone numbers*, available at

http://stakeholders.ofcom.org.uk/binaries/consultations/gc18_routing/statement/statement.pdf.

⁵⁵ See <http://stakeholders.ofcom.org.uk/binaries/research/cmr/telecoms/Q1-2013.pdf>. Q1 2013 on-net mobile calls represent 9.73 billion minutes, compared to a total (excluding international, calls when roaming and "other") of 28.99 billion minutes.

- 4.83 In light of these findings, and reflecting the uncertainty surrounding the MCP estimates we consider it would be reasonable to assume that 30% of total donor conveyance traffic is on-net originated, requiring an on-net traffic adjustment of 70% to be applied to the DCC results.⁵⁶
- 4.84 With the use of this on-net adjustment of 70%, the result in Table 4.3 above would be reduced to 0.027 ppm.

Question 7: *If an adjustment were to be made to the DCC to account for the fact that it is charged in practice on on-net originated traffic, do you agree with our proposed value for the adjustment factor of 70%? If not, please explain why you disagree.*

The appropriate forward-looking period over which to set DCCs

- 4.85 As discussed in Section 3, we consider it appropriate and consistent with our duties to set a DCC on a forward-looking basis by way of a direction under GC18.5 and have proposed a DCC for the year 2013/14 in the previous sub-section. We have also considered whether it would be appropriate and desirable to set a maximum DCC for a period beyond 31 March 2014 (i.e. the end of the 2013/14 modelling year) and, if so, for how long.
- 4.86 We consider that setting a DCC for a time period beyond 2013/14 would be consistent with our obligations under Article 30(2) USD as it would ensure the DCC remains cost orientated going forward. It would also be consistent with our duties under section 3(3) of the Act as it would provide regulatory consistency and certainty. We consider that setting the DCC for the current year and the following two years is a sufficient time period to allow for certainty (we note that this is similar to the three-year period over which we would set a charge control) but does not pre-empt developments too far into the future.
- 4.87 As discussed earlier in this document, we intend to consider questions such as the choice of cost standard and the appropriate split of costs to derive DCCs from the costs of donor conveyance in the separate policy project that we have recently commenced in relation to porting charges. We therefore recognise that the outcome of that project may require us to revisit the conclusions we reach in this review (and, therefore, to modify or withdraw the direction we are proposing to set in this review). However, we do not wish to pre-empt the outcome of that project and therefore consider that the timeframe for which we set the maximum DCC in this review should be informed by the considerations set out above.
- 4.88 We anticipate that MCPs might continue to negotiate DCCs, notwithstanding that we are proposing to set a direction until 31 March 2016. In particular, we are setting only a maximum rate and MCPs might therefore wish to consider applying a lower rate or waiving the DCC altogether. Our proposed direction does not preclude this.
- 4.89 We anticipate that the policy project will be complete well before the end of the period for which we are proposing to set the DCC in this review. In the event that the outcome of that project does not affect the level of the DCC we propose in this review, we will consider the appropriate approach to DCCs at the relevant time. Notwithstanding the expiry of our proposed direction (either at the end of 2015/16 or prior to this as a result of the outcome of the policy project), the cost orientation

⁵⁶ Since $1 - 0.3 = 0.7$. This would ensure that only the costs of 70% of total donor conveyance traffic are recovered through the DCC on each minute as a consequence of the base of call minutes on which the DCC is levied including on-net as well as off-net originated traffic.

provisions of GC18 will continue to apply to setting porting charges and MCPs should ensure that they are compliant with these obligations.

4.90 Since the updated DCC model is based on the 2011 MCT model, which models costs over a 50 year period to 2040, it is straightforward to use it to estimate the costs of donor conveyance in 2014/15 and 2015/16.⁵⁷

4.91 As explained in paragraph 4.52 we use actual inflation and recent forecasts to calculate these nominal results for future years.⁵⁸ The resulting DCC proposals are set out in Table 4.4 below.

Table 4.4: Proposed forward-looking DCC to be applied only to off-net originated calls (ppm, nominal prices)⁵⁹

	2013/14	2014/15	2015/16
DCC (50% of cost)	0.039	0.039	0.038

Source: 2013 DCC model.

Question 8: Do you agree with the period over which we are proposing to set a DCC? If not, please explain why you disagree.

⁵⁷ The desired year can be selected in the “Scenario” worksheet of the 2013 DCC model.

⁵⁸ We note that in this respect our proposed approach to a forward-looking DCC is different to that we would use in a charge control. Our charge control results are produced in real terms, and inflation then added using (lagged) actual figures in order to derive nominal prices in each year. In the present case however, we consider that updating the DCC on an annual basis would be disproportionate and hence propose nominal results using inflation forecast at the level included in the 2011 MCT model (and consistent with its WACC).

⁵⁹ As explained in paragraphs 4.78 to 4.83, we are proposing not to adjust the level of the DCC to reflect the MCPs’ practice of charging a DCC on on-net originated donor conveyance traffic. However, if such an adjustment were to be made, then we have proposed applying an on-net adjustment of 70%. Based on the results in Table 4.4 above, this would result in DCCs of 0.027 ppm, 0.027 ppm and 0.027 ppm in 2013/14, 2014/15 and 2015/16 respectively.

Section 5

Provisional Conclusions

Proposed DCCs

- 5.1 We propose to set a maximum DCC across the mobile industry from the date on which we issue a final decision concluding this review until 31 March 2016. During this period, we propose that the DCCs charged between MCPs should be no higher than the ppm charges listed in Table 5.1 below.

Table 5.1: Proposed forward-looking DCC to be applied only to off-net originated calls (ppm, nominal prices)⁶⁰

	2013/14	2014/15	2015/16
DCC (50% of cost)	0.039	0.039	0.038

Source: 2013 DCC model.

- 5.2 We propose to set these maximum DCCs by way of a direction issued under GC18.5(a)(ii). A draft of our proposed direction is set out in Annex 5.
- 5.3 The charging years in the 2011 MCT model (and therefore also in the 2013 DCC model) run from 1 April to 31 March. The direction therefore applies our proposed maximum DCC for 2013/14 from the date on which the direction is made until 31 March 2014. The subsequent maximum DCCs run from 1 April to 31 March the following year. We propose that the direction should cease to have effect on 31 March 2016, in line with the end of the last modelling year for which we propose to set a DCC. The draft direction reflects our proposed approach of not applying an adjustment to account for on-net originated traffic (see paragraphs 4.70 to 4.74 above). The maximum DCCs that would be set by way of paragraph 1 of the draft direction therefore only apply to off-net originated traffic (see the definition of a “Call” in paragraph 3) and the maximum charges reflect the figures in Table 5.1 above.⁶¹

Legal tests

- 5.4 As set out in Section 3, we have a duty under Article 30(2) USD to ensure that pricing between operators/service providers related to the provision of number portability is cost-oriented. We may also set a maximum DCC on an *ex ante*, industry-wide basis using an average efficient cost model, and consider that a direction under GC18.5(a)(ii) is an appropriate means of doing so.
- 5.5 We consider that our proposed direction satisfies section 49(2) of the Act as it is:

⁶⁰ As discussed in footnote 59, if we were to apply an adjustment for on-net originated donor conveyance traffic, our proposal would result in DCCs of 0.027 ppm, 0.027 ppm and 0.027 ppm in 2013/14, 2014/15 and 2015/16 respectively.

⁶¹ If we were to modify our approach following consultation and decide to apply an adjustment factor for on-net originated traffic, then we would delete the words “*other than the mobile network of the Donor Provider*” from the definition of a “Call” in paragraph 3 and would replace the pence per minute caps in paragraph 1 with the adjusted figures set out in footnote 60.

- 5.5.1 Not unduly discriminatory, in that it would apply to all CPs that levy a charge for the onward conveyance of a call to a ported mobile number;
 - 5.5.2 Proportionate to what it is intended to achieve, in that the proposed direction ensures that charges for mobile portability remain cost-oriented. In particular, we refrained from regulatory intervention for a period of time before proposing this direction in order to allow MCPs to enter into bilateral commercial negotiations with regard to revised DCC(s); and
 - 5.5.3 Transparent in what it is intended to achieve, in that the proposed direction is explained in this consultation document and set out in full in Annex 5.
- 5.6 We also consider that our proposed direction is consistent with our principal duty under section 3 of the Act, and the Community requirements set out in section 4 of the Act. Ensuring that DCCs are capped at a cost oriented level serves to promote effective competition, and through this furthers the interests of consumers. We have also had regard, as required by section 3(3) of the Act, to the principle that regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, and to other principles of best regulatory practice. In particular, we have sought to ensure that our modelling approach is consistent (insofar as possible) with that used in the 2007 Determinations and we have sought to provide a degree of consistency and regulatory certainty going forward by proposing to set the DCC until March 2016.

Question 9: *Do you have any comments on the wording of the proposed direction in Annex 5 or our view that it satisfies the legal tests set out above?*

Next steps

- 5.7 The consultation period will finish on **14 January 2014**. As discussed in Section 2, as we are undertaking this review as alternative means of resolving two disputes, we intend to follow the same timeframe as would apply in a dispute process. Whilst there is no statutory obligation on Ofcom to consult on its provisional conclusion in a dispute, in practice we typically provide a two week consultation period. However, we are required by section 49A of the Act to consult for a month where we are proposing to make a direction under a General Condition. Additionally as the consultation period includes the Christmas holidays, we have allowed an additional week for responses. However, in light of our desire to conclude this review within a four month period, please note that the deadline for consultation responses will be strictly observed. Details of how to respond to this consultation can be found in Annexes 2 to 4.
- 5.8 We plan to publish a final statement on the proposals set out in this consultation in mid February 2014.

Annex 1

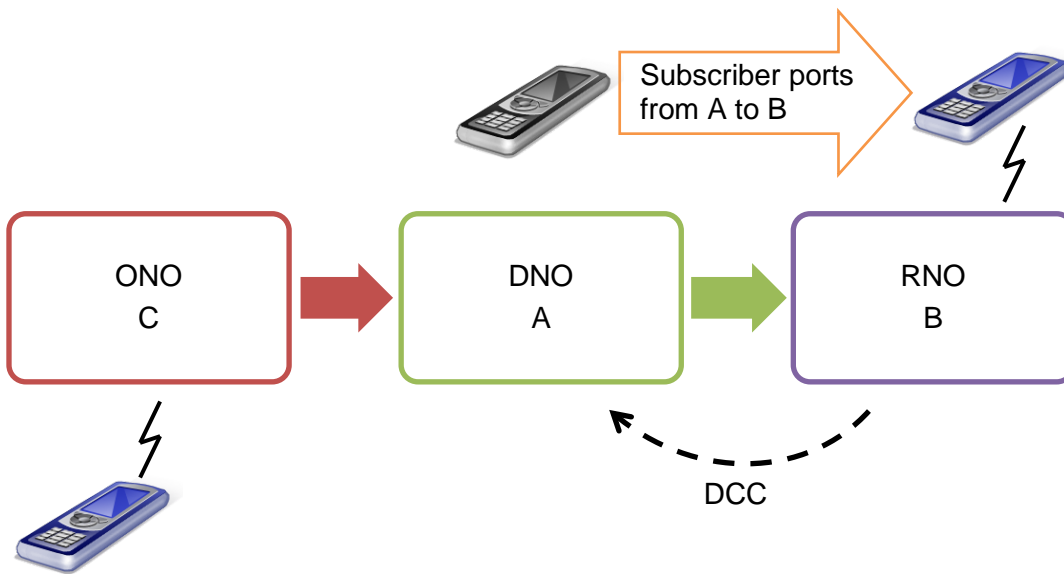
Onward routing of calls to ported mobile numbers illustrated

A1.1 Onward routing of calls to ported mobile numbers (“regular” donor conveyance traffic) works as follows:

- a) A subscriber ports from the DNO (A) to the RNO (B);
- b) A customer of a third network, the ONO (C), calls the customer who has ported;
- c) The ONO (C) routes the call to the DNO (A) which checks its ported number database and in turn **onward routes** it to the RNO (B);
- d) The RNO (B) pays the DNO (A) the DCC.

A1.2 This is shown in Figure A1.1 below.

Figure A1.1: Onward routing



Source: Ofcom.

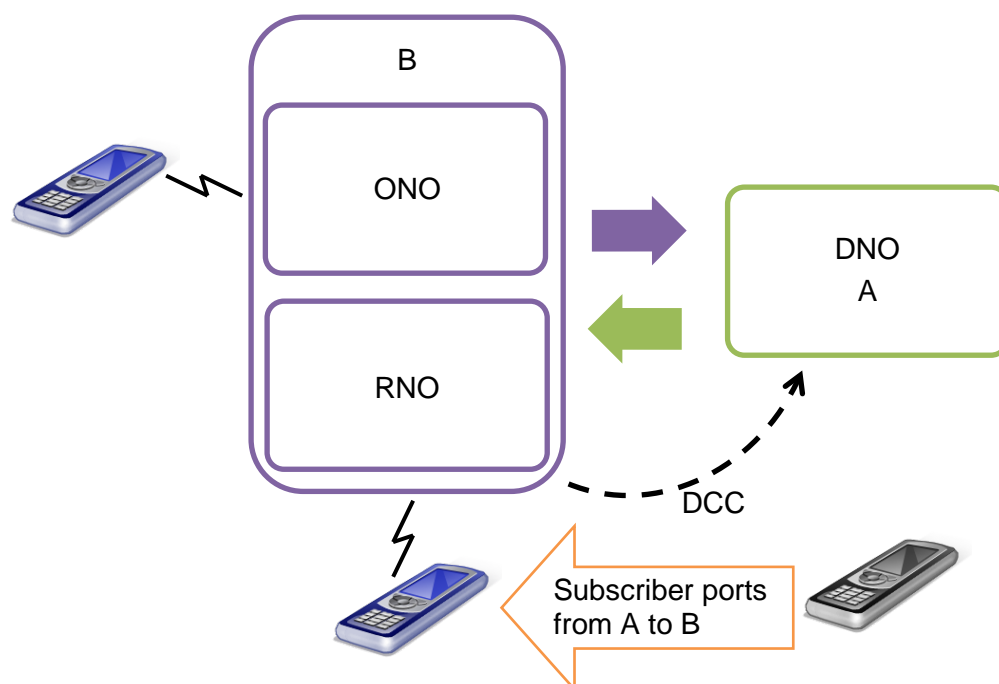
Tromboned traffic

A1.3 Onward routing of calls to ported mobile numbers which “trombone” works as follows:

- a) A subscriber ports from the DNO (A) to the RNO (B);
- b) A customer of B calls the customer who has ported, so B is the ONO as well as the RNO;
- c) The ONO (B), routes the call to the DNO (A), which checks its ported number database and in turn **onward routes** it to the RNO (also B);
- d) The RNO (B) pays the DNO (A) the DCC.

A1.4 This is shown in Figure A1.2 below.

Figure A1.2: Tromboned traffic



Source: Ofcom.

A1.5 This traffic is prevented from “tromboning” if the ONO has implemented a “call trap” system.

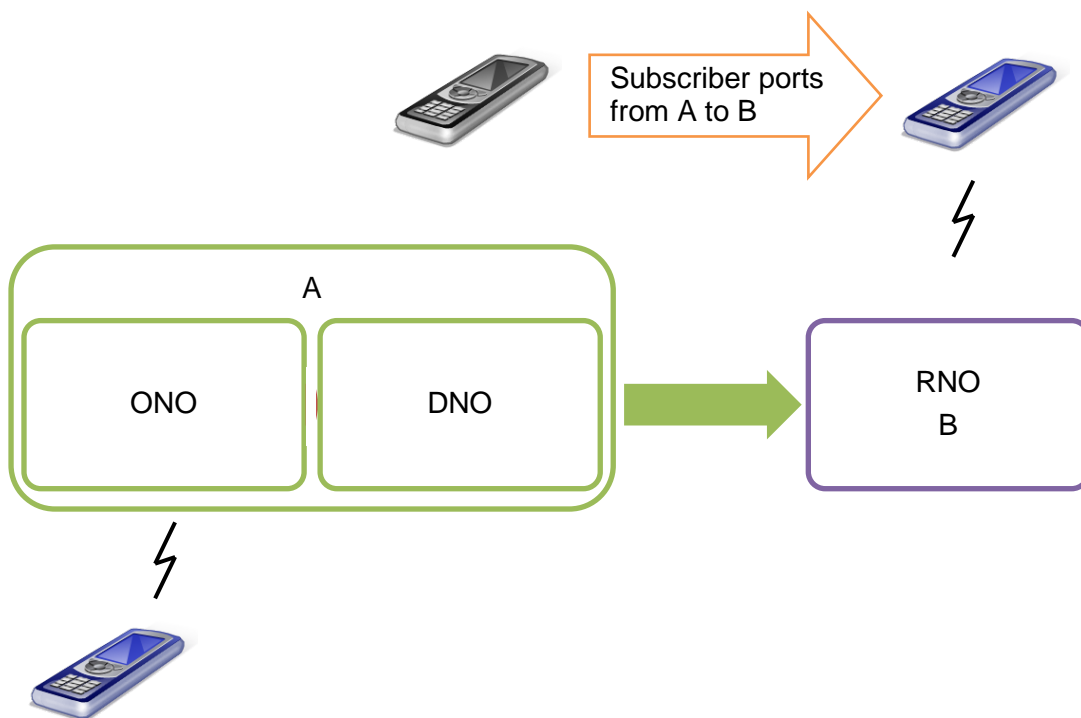
On-net calls to ported numbers

A1.6 “On-net originated” calls to ported mobile numbers works as follows:

- a) A subscriber ports from the DNO (A) to the RNO (B);
- b) A customer of A calls the customer who has ported, so A is the ONO as well as the DNO;
- c) The ONO/DNO (A) checks its ported number database and **directly routes** the call to the RNO (B);

A1.7 This is shown in Figure A1.3 below.

Figure A1.3: On-net calls to ported numbers



Source: Ofcom.

Annex 2

Responding to this consultation

How to respond

Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 14 January 2014**.

- A2.1 Ofcom strongly prefers to receive responses using the online web form at <http://stakeholders.ofcom.org.uk/consultations/review-mobile-donor-conveyance-charges>, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A2.2 For larger consultation responses - particularly those with supporting charts, tables or other data - please email gala.poole@ofcom.org.uk attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A2.3 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.
- Gala Poole
4th Floor
Competition Group
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- Fax: +44 20 7783 4109
- A2.4 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A2.5 It would be helpful if you can explain why you hold your views and how Ofcom's proposals would impact on you.

Further information

- A2.6 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Gala Poole on 020 77783 4338.

Confidentiality

- A2.7 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, www.ofcom.org.uk, ideally on receipt. If you think your response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.

- A2.8 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and will try to respect this. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A2.9 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's approach on intellectual property rights is explained further on its website at <http://www.ofcom.org.uk/about/accoun/disclaimer/>

Next steps

- A2.10 Following the end of the consultation period, Ofcom intends to publish a statement in mid February 2014.
- A2.11 Please note that you can register to receive free mail Updates alerting you to the publications of relevant Ofcom documents. For more details please see: http://www.ofcom.org.uk/static/subscribe/select_list.htm

Ofcom's consultation processes

- A2.12 Ofcom seeks to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.
- A2.13 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at consult@ofcom.org.uk . We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.
- A2.14 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Graham Howell, Secretary to the Corporation, who is Ofcom's consultation champion:

Graham Howell
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA

Tel: 020 7981 3601

Email Graham.Howell@ofcom.org.uk

Annex 3

Ofcom's consultation principles

A3.1 Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

A3.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

A3.3 We will be clear about who we are consulting, why, on what questions and for how long.

A3.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

A3.5 We will consult for up to 10 weeks depending on the potential impact of our proposals.

A3.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Ofcom's 'Consultation Champion' will also be the main person to contact with views on the way we run our consultations.

A3.7 If we are not able to follow one of these principles, we will explain why.

After the consultation

A3.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We would usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

Annex 4

Consultation response cover sheet

- A4.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.
- A4.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A4.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A4.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at www.ofcom.org.uk/consult/.
- A4.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

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

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

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

DECLARATION

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

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

Name

Signed (if hard copy)

Annex 5

Notification of proposed Direction under section 49A(3) of the Communications Act 2003

Proposal for making a Direction under paragraph 18.5(a)(ii) of General Condition 18 in relation to charges for Mobile Portability

1. Ofcom make the following proposal for a Direction to be given under paragraph 18.5(a)(ii) of General Condition 18.
2. The proposed Direction is attached to this Notification.
3. Ofcom's reasons for making this proposal, and the effect of the proposed Direction, are set out in the accompanying consultation document.
4. Ofcom consider that the proposal is not of EU significance pursuant to section 150A(2) of the Act.
5. Ofcom are satisfied that the proposed Direction complies with the requirements of sections 49 to 49C of the Act, insofar as they are applicable.
6. In making this proposal, Ofcom have considered and acted in accordance with their general duties under section 3 of the Act and the six Community requirements set out in section 4 of the Act.
7. Representations may be made to Ofcom about the proposed Direction until **5pm on 14 January 2014**.
8. A copy of this Notification and the accompanying consultation document is being sent to the Secretary of State in accordance with section 49C(1) of the Act.
9. In this Notification:
 - a. "the Act" means the Communications Act 2003;
 - b. "General Condition 18" means the General Condition 18 of the general conditions set under section 45 of the Act by the Director General of Telecommunications on 22 July 2003, as amended from time to time;
 - c. "Mobile Portability" shall have the meaning ascribed to that term in General Condition 18;
 - d. "Ofcom" means the Office of Communications.
10. Words or expressions shall have the meaning assigned to them in this Notification, and otherwise any word or expression shall have the same meaning as it has in the Act.

11. For the purposes of interpreting this Notification: (a) headings and titles shall be disregarded; and (b) the Interpretation Act 1978 shall apply as if this Notification were an Act of Parliament.

Neil Buckley
Director of Investigations

6 December 2013

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

[Draft] Direction under paragraph 18.5(a)(ii) of General Condition 18 relating to charges for Mobile Portability

WHEREAS:

- A. Paragraph 18.5(a) of General Condition 18 provides that, subject always to the requirement of reasonableness, any charges for the provision of Portability shall be cost-oriented and shall be based on the incremental costs of providing Portability unless the Donor Provider and the Recipient Provider have agreed another basis for the charges, or Ofcom has directed that another basis for charges should be used.
- B. The Donor Conveyance Charge is a charge for the provision of Portability.

THEREFORE, PURSUANT TO PARAGRAPH 18.5(a)(ii) of GENERAL CONDITION 18, OFCOM DIRECTS THAT:

- 1. The Donor Conveyance Charge shall be based on the 2013 DCC Model such that it shall not exceed:
 - a. for any Call made during the period beginning on the date of this direction and ending on 31 March 2014, 0.039 pence per minute;
 - b. for any Call made during the period beginning on 1 April 2014 and ending on 31 March 2015, 0.039 pence per minute;
 - c. for any Call made during the period beginning on 1 April 2015 and ending on 31 March 2016, 0.038 pence per minute;
- 2. This Direction shall cease to have effect on 31 March 2016.
- 3. In this Direction:
 - a. "2013 DCC Model" means the cost model described in the statement entitled [*to be inserted into final Direction*] and published by Ofcom on [*to be inserted into final Direction*];
 - b. "Act" means the Communications Act 2003;
 - c. "Call" means a voice call that originates on a public electronic communications network (whether fixed or mobile) other than the mobile network of the Donor Provider and is terminated to a Mobile Number that:
 - i. is within a number range that has been allocated to the Donor Provider; and
 - ii. has been ported to the Recipient Provider;
 - d. "Donor Conveyance Charge" means the amount charged by the Donor Provider to the Recipient Provider for the conveyance of a Call from the Donor Provider's network to the Recipient Provider's network;
 - e. "General Condition 18" means General Condition 18 of the general conditions of entitlement set under section 45 of the Act by the Director General of Telecommunications on 22 July 2003, as amended from time to time;

- f. "Ofcom" means the Office of Communications;
 - g. "pence per minute" means the sum in pence charged for a minute of a Call.
4. Any word or expression not defined in paragraph 3 shall have the same meaning as it has:
- a. in General Condition 18;
 - b. if it has no meaning ascribed as mentioned in paragraph 4a, in the Act.
5. The Interpretation Act 1978 shall apply as if this Direction were an Act of Parliament.