Review of mobile donor conveyance charges

EE Ltd response to consultation

14 January 2014

Non-confidential version

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Introduction and summary

This document provides EE Limited's (EE's) response to Ofcom's proposed approach to setting mobile industry-wide donor conveyance charges (DCCs) for the period from 2013/14 to 2015/16, which also comprises an alternative means of resolving the disputes raised by Hutchison 3G UK Limited concerning the level of DCC charges.[1]

DCCs raise a number of fundamental issues that Ofcom has decided not to address in this consultation. Most fundamentally, there is the question of whether it is reasonable to require the donor network (DNO) to bear any of the cost of donor call conveyance given that this network's current customers neither cause the cost to be incurred nor benefit from the conveyance of calls between the originating network operator (ONO) and the recipient network operator (RNO).

EE also notes that Ofcom is in the process of reviewing its mobile call termination (MCT) cost model and mobile termination charges. Many of the key inputs into the DCC rate are taken from the MCT model. Hence there is a significant risk that if DCC rates are established now for a period of several years, Ofcom will actually increase regulatory uncertainty. This is because such an approach will either mean that rates purportedly set for several years will actually end up being changed sooner; or that Ofcom will force rates to remain at levels which, under its own policy and calculations (as updated), will be inefficient and inappropriate. Given that Ofcom proposes to consider the policy issues in a separate project and will be updating its mobile termination cost model this year, EE believes that Ofcom should adopt the following cautious approach until these projects are completed.

- Ofcom should avoid making major changes to the level of DCCs which may take DCCs further away from the appropriate level and require the change to later be reversed. Doing otherwise risks Ofcom reducing the level of DCCs which are paid by the RNO when Ofcom could soon decide that the DCC paid by the RNO should cover the full cost of donor call conveyance (potentially with the consequence that the DCCs should have been increased, not reduced).
- The charges determined as part of the current consultation should be limited to only the period required for the policy project to be completed and the MCT model to be updated. In particular, if Ofcom were to determine that the current policy framework for setting charges should be changed, then Ofcom should, at that time, implement changes to (at least) start moving the level of charges to the level considered appropriate. It makes no sense to lock in charges for a long period as part of the current consultation when Ofcom has already stated that there are fundamental policy issues that need to be resolved. We would recommend on this basis that the DCC rates to be set under the current limited review are set for a maximum period of up to 31 March 2015. Any subsequent legal instrument issued should take into account

1 As set out in the Ofcom consultation "Review of mobile donor conveyance charges" (published on 6 December 2013).

the status and findings of the wider policy review and the updated MCT model at that point in time.

Finally, EE remains firmly of the view that Ofcom should have prioritised the long standing and as yet unresolved DCC dispute for the period 2003 to 2008 before seeking to resolve this forward looking dispute. Priority should have been given to the historic dispute not only because it falls first in the chronological order of DCC disputes received by Ofcom but also because its commercial impacts are an order of magnitude greater than the effects of the forward looking dispute. Given the unusual approach that Ofcom has decided to take on the timing of resolution of these issues, EE considers it extremely important that Ofcom's final statement in relation to this forward looking review makes it clear that this statement is without prejudice to Ofcom's ongoing consideration of the appropriate level of and methodology for calculating the DCC for the period 2003 to 2008. We trust that Ofcom appreciates that all submissions made by EE in relation to this consultation on the forward looking review are also made on this same without prejudice basis in respect of the correct level at and basis upon which the historic DCC should be set.

In terms of the substance of Ofcom's proposed cost modelling approach for setting the forward looking DCC in this review, EE:

- Agrees with Ofcom that donor call conveyance costs are correctly measured as total service LRIC plus a mark-up for common costs. In the absence of more detailed information (such as on demand elasticities), LRIC+ will better promote efficient recovery of overall costs than alternative pricing approaches applied by regulators. However, we disagree with Ofcom that there should be no mark-up for administration costs;
- Considers that there is no basis in relation to Ofcom's six principles of cost recovery for mobile DNOs to be required to fund any of the cost of donor call conveyance. Most fundamentally, DNOs do not cause these costs nor benefit from them. As the DCCs are set by reference to Ofcom's model of a hypothetical efficient mobile operator, cost minimisation is not relevant. This approach is also most likely to promote and avoid distortion of competition in the mobile market.
- Believes that Ofcom should now set DCCs to include a mark-up for administration costs, as Ofcom's stated reasons for excluding these costs are not currently valid (if they ever were).
- Considers it imperative to ensure compliance with the EU Universal Service Directive (USD) that the DCC is set so as to enable DNO's to recover their efficiently incurred HLR look-up costs of providing number portability (ie that DNOs should be able to recover the efficient costs of Signalling Routing Function (SRF) related to ported traffic);
- Considers that DNOs should be able to recover the transmission costs that donor networks necessarily incur in conveying the call to recipient networks (even under the direct interconnection scenario);
- Considers that DNOs should be able to recover efficient MSC processor costs; and

Considers that for the purposes of the present review, DNOs should be allowed to continue to recover 100% of the DCC from all on-net and off-net originated traffic.

Process

EE agrees with the principle that Ofcom should seek to determine the maximum DCC rate across the mobile industry on a forward looking basis consistent with its legal obligations under Article 30(2) of the USD.

In doing so, Ofcom must ensure that in undertaking this review it is sufficiently flexible to take into account the various fundamental policy reviews that are currently being considered that have clear implications for the appropriate DCC level.

Importantly, EE also does not agree that Ofcom should have prioritised this review of the maximum DCC rate on a forward looking basis over either:

- the broader decoupled policy review on porting charges; or
- finalisation of the Determination to revise the DCC rate for the historic period 25 July 2003 to 8 February 2008, which still remains unresolved after almost 6 years.

In order to minimise the risk of distortions being created by Ofcom's unusual approach on timing, EE recommends that its final statement in relation to the present forward looking review is clearly stated to be:

- Without prejudice to Ofcom's ongoing consideration of the appropriate level of and methodology for calculating the DCC for the period 2003 to 2008. Furthermore, Ofcom should clarify that it understands and will respect that the submissions made in response to this review are without prejudice to the positions that the parties may take in relation to the DCC for the historic period[2]; and
- Subject to the findings of Ofcom's broader policy review of porting charges (see further our thoughts on this in the section below headed "The timeframe for setting DCC charges").

The timeframe for setting DCC charges

EE does not agree with Ofcom's timeframe for setting DCC charges based on an inflexible fixed three year period between 2013/2014 and 2015/16. Fundamental policy issues remain unresolved in the decoupled DCC policy review. Furthermore, Ofcom is currently reviewing the MCT cost model and mobile termination charges which are critical inputs into the DCC model.

2 For the avoidance of any doubt, all submissions made by EE in this document are submitted on this without prejudice basis.

A fixed three year period will prevent flexibility in adjusting the DCC rate in response to the resolution of fundamental policy issues likely to arise from relevant and completed policy reviews over this period. Moreover, Ofcom would need to be careful not to make major changes to the DCC rate over such a long fixed period since these changes would run the risk of moving the DCC rate further away from the appropriate rate level which would later need to be reversed. Alternatively, Ofcom will need to change the rates within the three year timeframe putatively set by the current review. In which case, the certainty provided by setting a rate for three years is entirely illusory. On the contrary, suggesting setting the rate in the current review for a three year period increases uncertainty by making it unclear what impact the policy review and revised MCT LRIC model will have during this period.

As an alternative and better approach, EE considers that Ofcom should limit the period for setting the DCC rate to the period required for the decoupled policy project to be complete and the MCT model updated to ensure that the inherent risks of inefficient rate setting in the context of ongoing and significant policy uncertainty are minimised. We would recommend on this basis that the DCC rates to be set under the current limited review are set for a maximum period of until 31 March 2015. Any subsequent legal instrument issued should take into account the status and findings of the wider policy review at that point in time. This approach will also allow any relevant changes to the MCT cost model (resulting from the current mobile call termination market review process) to be taken into account in a timely and appropriate manner.

Ofcom's cost modelling approach

In this section, we comment on Ofcom's analysis of the level of the DCC.

Cost standard and general modelling approach

Ofcom proposes in the consultation to retain as its cost standard the total service LRIC plus a mark-up for network common costs. EE supports the proposal to retain a LRIC+ standard in the context of the current review. EE also agrees with Ofcom that there is nothing in either the USD or the wording of General Condition 18 which requires the use of a "pure LRIC" cost standard rather than LRIC+.

EE notes Ofcom's view that any change to the current LRIC+ standard used to calculate DCCs should take into consideration the findings of Ofcom's wider policy review into porting charges. EE agrees. EE considers that this reinforces the importance of Ofcom avoiding locking in a particular cost (and by implication cost standard) now for years into the future.

For the purposes of the present review and subject to the findings that will come out of the wider porting policy review, EE has the following comments on the cost standard and general modelling approach. EE notes that it will also provide a more detailed response on this issue in the context of the policy project.

As Ofcom is aware from the inquiries into the level of mobile termination charges, EE believes that in the absence of detailed information on relevant parameters (such as elasticities) LRIC+ will better promote efficient overall cost recovery than other cost standards applied in regulation (such as pure LRIC). Applying LRIC+ to all services ensures overall efficient cost recovery and reduces distortions to efficiency by spreading the recovery of fixed and common costs across as large a volume as possible.

To the extent that charges for some services are set below a LRIC+ level then a larger "plus" mark-up will be needed on the remaining services to ensure an operator can fully recover its costs.

EE notes that in 2007 Ofcom excluded any mark-up for administration costs (but did include a mark-up for network common costs). Ofcom's reasons for excluding administration costs in 2007 were: (i) the MCT model calculated the termination rate by allocating administration costs across services which did not include donor conveyance (suggesting that to also recover some administration costs from donor conveyance would have implied that the then termination rate would be slightly too high); and (ii) the estimated mark-up for administration costs of 0.01ppm was considered so small relative to the then level of donor conveyance costs as not to warrant a special mark-up.[3]

Without prejudice to EE's views as to whether it has historically been appropriate for Ofcom to exclude administration costs, EE notes that as termination rates are now set in line with pure LRIC (i.e. excluding any contribution to administration costs), Ofcom's first reason no longer applies. Further, the inclusion of administration costs in the order of 0.01ppm[4] would increase Ofcom's proposed new DCC level by around 13% so that Ofcom's de minimis argument also no longer holds. Given that Ofcom's reasons for excluding administration costs are obsolete, EE believes that Ofcom should now set DCCs to include a mark-up for administration costs.

EE agrees with Ofcom that the MCT model as updated in 2012 is the best currently available basis on which to calculate DCCs for the purposes of this review.

Finally, EE notes that it has serious concerns that even if Ofcom gets the cost standard right, it will end up with highly inefficient charges because of its approach to cost recovery. We return to this in the section on appropriate cost recovery below.

Relevant costs to be taken into account

HLR look-up costs

3 Ofcom, Determinations to resolve disputes between Hutchison 3G and each of O2, Orange and T-Mobile concerning donor conveyance charges, 17 August 2007, para. 4.29.

4 Since 2007, the required mark-up level for administration costs can be expected to be impacted by factors operating in opposite directions. For example, while overall mobile volumes have grown, as termination volumes are now prevented from recovering any administration costs these costs need to be recovered from only the remaining services.

Ofcom accepts in the Consultation (§4.33) that HLR look-up costs are required in the provision of donor conveyance, although Ofcom argues that they should not be recovered in DCCs as they are additional to the costs of conveyance of non-ported calls.

The policy to exclude additional conveyance costs resulted from the Monopolies and Mergers Commission (MMC) 1995 report focused on the introduction of portability into the UK fixed services market then dominated by BT, with most callers continuing to be BT subscribers. The MMC's reasoning is not valid for the current competitive UK mobile market and where the donor network (DNO) is often a separate network to the originating network (ONO) and the recipient network (RNO). In relation to the six principles of cost recovery, the MMC concluded that:

- There were arguments to say that such costs were caused both by people making the calls and by recipients who have ported their numbers.[5] However, DNOs who are not also ONOs do not cause these costs.[6]
- "*Calling customers derive evident benefit from the fact they can still use the original number to reach the called party who has changed supplier*."[7] Customers who have ported their number also gain a benefit from being able to do so (referred to as a Type 1 Benefit in the MMC report). Again, these arguments are clearly not a basis to require HLR look-up costs to be fully borne by mobile DNOs whose customers may gain no benefit from a call ported by the DNO between a separate ONO and RNO.
- "*The routeing of calls to ported numbers should be regarded as a normal part of a telecommunication service and not as a facility requiring special charging arrangements, particularly as telephone numbers are now a national resource and no longer `owned' by individual operators. The normal principle of telephony charging is that the caller pays; in practice, however, there is much averaging of costs in the setting of charges. We see the spreading of these costs over all subscribers as another, and not particularly significant, form of averaging*."[8] This argument supports spreading of costs across all subscribers whereas the effect of excluding HLR look up costs from the DCC is to instead narrow the recovery of these costs to be borne only by the DNO.
- "*Under our proposal BT will have every incentive to minimize the costs*."[9] This effect is irrelevant given that mobile DCCs are set on

5 MMC, Telephone Number Portability, 1995, para. 2.134 and 2.202.

6 It is true that a single operator may be on some calls a DNO, an ONO and/or an RNO. However, to avoid distortions and because operators will differ to the extent that they perform each of these roles, it is important that the charging structure correctly allocates costs for each type of call. In a similar way, termination charges are important between operators even though each operator sends and receives calls.

7 MMC, Telephone Number Portability, 1995, para. 2.199.

8 MMC, Telephone Number Portability, 1995, para. 2.200.

9 MMC, Telephone Number Portability, 1995, para. 2.201.

the basis of Ofcom's model of a hypothetical efficient mobile operator rather than be reference to actual operator costs.

EE notes that whatever policy Ofcom may have historically adopted on this issue, Ofcom has a current duty under Article 30(2) of the Universal Service Directive (USD) to ensure that charges between operators relating to the provision of number portability are cost-oriented. In this respect, General Condition 18.5(d) would seem to comply with Ofcom's obligations under Article 30(2) of the USD. In the manner interpreted by Ofcom in the current consultation, General Condition 18.5(b) is in conflict with General Condition 18.5(d) – to the extent that Ofcom's proposed interpretation means than an efficient DNO will be precluded from setting porting charges which enable the DNO to recover a relevant and material cost efficiently incurred in the provision of mobile number portability – i.e. the HLR look-up cost. General Condition 18.5 does not make it clear which of Conditions 18.5(b) and 18.5(d) should prevail in the event of any conflict. EE submits that compliance with the USD can only be achieved if the exclusions for Additional Conveyance Costs referred to in General Condition 18.5(b) are interpreted so as to only preclude recovery of Additional Conveyance Costs which are not reasonably incurred by an efficient DNO in providing portability as per General Condition 18.5(d). Given Ofcom's findings at paragraph 4.33 of its consultation, this means that HLR look-up costs should be recoverable under the DCC.[10]

Such an interpretation is also consistent with facts underpinning Oftel's rationale for originally precluding BT from recovering (most of its) Additional Conveyance Costs following the MMC investigation into this issue[11], which included the facts that:

- These additional costs, in BT's case known as "tromboning costs" could be largely removed through a relatively minor addition to the computer software used by BT (§17);
- The Director General seriously doubted that BT would, in fact, incur significant additional conveyance costs for any length of time, with BT confirming that it would be possible for it to replace the "tromboning" method with the more cost effective "call-dropback" by October 1997 (§19);
- Post October 1997, BT was still enabled to recover its additional conveyance costs associated with the more efficient "call-dropback" method – it was just that it was determined that this should be done by way of small additions to BT's standard regulated charges for services to its own business units and interconnecting parties, rather than a specific porting charge (§21). In contrast, DNOs are

10 The only further exception would be if recovery of this cost would cause the DCC to act as a disincentive for subscribers against changing service provider. This concern is covered by the further obligations in relation to subscriber charges in General Condition 18.5(e), hence this exception is not triggered. Furthermore, Ofcom's model shows that inclusion of these costs would only increase the DCC to a maximum of 0.091ppm. This is less than the current charge of 0.1ppm, which does not appear to have caused any disincentive for subscribers against changing service provider.

11 See http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/numbering/mmc95.htm

unable to recover the HLR look-up costs that they incur in providing number portability from any other regulated[12] charges and any requirement to recover these costs from retail revenues would distort competition between operators

- For the period up to October 1997, BT was allowed to recover a fair and reasonable proportion of its unavoidable additional conveyance costs associated with the "tromboning" method (§§21-22). In determining that BT should not be able to recover 100% of these costs, clearly it was a relevant factor that a much more efficient method which did not cause these costs could have been used. In the present case, there is no suggestion that DNOs can avoid the HLR look-up costs that Ofcom is proposing to prevent them from recovering

Analysys' 2007 report to Ofcom noted that the Signalling Routeing Function (SRF) is a signalling element specified for UK MNP which carries out a look-up against a database of all ported-out numbers. This cost should properly be included in cost-oriented charges for donor call conveyance. Analysys estimated the cost of the SRF and ported-out database is around 10% of the exogenous per minute cost of the HLR. Without prejudice to EE's position in relation to the setting of the DCC for the historic period of 2003 to 2008 regarding whether it is appropriate for DNOs to be allowed to recover more than 10% of the exogenous per minute cost of the HLR, EE believes that Ofcom is obliged under the USD to allow for at least this level of these costs to be recovered in DCCs. Retaining the approach established in 2007 is also appropriate while Ofcom is still to complete its policy project.

Ofcom's model shows that the inclusion of SRF costs would increase the estimated nominal cost of donor conveyance to 0.081ppm (or to 0.091ppm if a 0.01ppm mark-up for administration costs is also included).

Transit/transmission costs

Ofcom argues in the Consultation (§4.38) that the cost of interconnection arrangements should be excluded because such arrangements will be separately negotiated on a commercial basis and, in any event, make up only 7% of the total market interconnection traffic.

While it is the case that operators have largely established direct interconnection arrangements, EE notes that donor networks will nonetheless incur transmission costs in conveying the call to recipient networks. For example, in Ofcom's consultation assessing whether direct routing (DR) arrangements should replace onward routing (OR), Ofcom noted:

> *"Onward routing of ported traffic results in additional incremental transmission costs because (at least) two interconnection links are required for a given call to a ported number (one for originator to donor and one for donor to recipient) whereas DR requires only one*

[12] EE notes that DNOs that are not also ONOs may not have the ability to recover costs from retail customers.

interconnection link from the originator to the recipient. While operators are likely to have interconnect links already established, OR means these links carry more traffic (thus possibly leading to a requirement for higher capacity) relative to a scheme where the majority of traffic is DR."[13]

In Ofcom's "*Statement on routing calls to ported numbers*" of April 2010, Ofcom estimated the costs of transmission that would be avoided by switching to direct routing to be 0.012ppm (in 2008/09 prices) and to be falling by 3.25% per year. This transmission cost is an incremental cost incurred for the onward routing of calls (it is also the same as the per minute transmission cost that would be incurred for the conveyance of non-ported calls from the donor network to the recipient network). Accordingly, this transmission cost should also be recovered in DCCs. To exclude these costs would breach the USD requirement for charges relating to the provision of number portability to be cost oriented.

Ofcom's 2010 estimate brought forward to 2013/14 would require an addition of 0.013ppm to the DCC in nominal terms increasing the DCC to 0.092ppm (or 0.104ppm once SRF costs and a mark-up for administration costs are also included).

The appropriate level of donor conveyance costs

As noted in the previous section, EE believes that Ofcom's proposals improperly exclude three elements of the cost of donor conveyance: SRF costs, transmission costs and a contribution to administration costs. Including these elements would increase the estimated level of donor conveyance costs to 0.104ppm. EE believes that this is a reasonable estimate of the efficient costs of providing donor conveyance given the limited nature of the review of costs that Ofcom is undertaking as part of the current review.

EE supports using estimates that ported traffic utilises (at least) 40% of the MSC processor load for an inbound call as a relevant minimum benchmark for recovering relevant efficient MSC processor costs.

Appropriate cost recovery to derive the DCC

Ofcom proposes in the Consultation (para. 4.70) that the recovery of donor call conveyance costs should be split 50/50 between the donor network and the recipient network because it believes that the reasoning set out in Oftel's 1999 Determination remains valid. In particular, Ofcom notes that there are still imbalances in flows of ported traffic between mobile operators.

EE believes that Oftel's 1999 Determination is a flawed basis for determining cost recovery under the USD and for the effectively competitive current UK

13 Ofcom, Routing calls to ported telephone numbers, August 2009, para. A5.21.

mobile market. We set out our reasons with reference to Ofcom's principles of cost recovery.

Cost causation. Donor call conveyance costs are caused by two parties: the (fixed or mobile) calling party and the call recipients who have ported their numbers. Thus cost causation indicates that these costs should be recovered from ONOs and RNOs, not DNOs. While Oftel's and Ofcom's earlier analysis of cost causation focused on the appropriate split of costs between ONOs and RNOs, it does not lead to a conclusion that DNOs should bear the cost.

Cost minimisation. This principle is no longer relevant given that DCCs are set with reference to Ofcom's model of a hypothetically efficient operator rather than actual operator costs – that is to say, these costs are already relevantly constrained.

Distribution of benefits. Donor call conveyance benefits both calling parties (who can call recipients using their original number) and call recipients who have ported their numbers (who can be called using their original number). While Oftel in 1999 ignored the benefit to calling parties, they did identify another benefit of increased competition in the mobile market. While effective competition has now been obtained in the UK mobile market, we consider the relevance of competition impacts next.

Effective competition. In reaching the decision of a 50/50 split of costs between DNOs and RNOs, Oftel and Ofcom seem to have given overriding weight to effective competition (and cost minimisation which is now irrelevant). EE considers that Oftel's and Ofcom's analysis of effective competition wrongly focuses on limiting aggregate payments between operators rather than considering the conditions required for effective competition for the marginal subscriber.

What is important for efficiency and effective competition is that artificial distortions are not created in the relative ability of operators to compete for subscribers. Prima facie it enhances efficient and effective competition where an operator which gains a subscriber from another network bears the full efficient cost of so doing. All networks can then compete equally for subscribers[14] and successful operators would be able to recover the costs of donor call conveyance across their larger customer bases without the need to increase charges to their customers. Under Ofcom's 50/50 split of costs, DNOs that lose customers not only have smaller customer bases but are required to fund 50% of the cost of conveying calls to their former customers and their new networks. Ofcom's policy thus results in higher costs being imposed on operators with falling customer bases, requiring them to increase prices to their remaining customers with the likely consequence of reinforcing the migration of customers away from such operators. Ofcom's policy does not promote effective competition.

14 Potentially, there is an argument for a different approach in the early days of competition where the ability for the incumbent's customers to port numbers is key to the ability of new entrant operators to compete with the incumbent, but of far less relevance to the ability of the incumbent operator to compete. However that is not the applicable situation in the current highly competitive UK mobile market where there is benefit to all operators in being able to offer porting to their competitors' subscribers.

Reciprocity, symmetry and practicality. These principles do not favour one split of costs over another.

On the basis of the reasoning above (but without prejudice to consideration of other factors that may be relevantly raised in the context of Ofcom's wider porting policy review), EE believes that there is no basis for the purposes of the current forward looking review to require DNOs to fund any of the donor call conveyance costs. DNOs do not cause such costs nor benefit from them. Effective competition is undermined by required DNOs to fund these costs even in part.

On-net originated traffic

[✂ ✂]

For the purposes of the present proposed DCC direction, EE does not consider that it is necessary or appropriate for Ofcom to implement a change in policy such that the DCC is not recoverable in relation to on-net originated traffic. Rather, similar to any contemplated change to the cost standard used to derive the DCC, EE submits that this issue should only be considered as part of Ofcom's wider porting policy review, so that any broader implications (as well as relevant implementation costs etc) can be taken into due consideration.

In particular in circumstances where it would appear that three of the four MNOs are currently unable to comply with this requirement (§4.72) EE further notes that allowing the DCC to be recovered in relation to on-net originated ported traffic is:

- consistent with the terms of GC18.5(a), which makes the requirement of cost orientation of charges subject at all times to the requirement of reasonableness;
- ensures that Ofcom's direction will meet the principle of practicality of pricing and cost recovery; and
- avoids any risk of potential competitive distortion and/or inefficient investment into solutions to meet this requirement by some but not necessarily all MNOs being caused by Ofcom's direction (e.g. wasted investment if DCCs are ultimately discarded in favour of a direct routing of MNP traffic).

Ofcom admits that the information in its possession in relation to proportions of on-net originated traffic is incomplete and varies materially over time (§4.81). In fact, it seems that only one of the four MNOs was able to provide a full response to Ofcom ((§4.72). In these circumstances, EE considers that there would be a very high risk of regulatory failure and non-compliance with the requirements of Article 30(2) of the USD to allow DNO's to recover their costs of providing portability if Ofcom were to simply apply an uncertain and relatively arbitrary 30% reduction to what is otherwise a principled calculation of the efficient costs of providing portability. For the reasons set out above in relation to EE's response regarding the ability of DNO's to recover their costs associated with HLR look-up, EE also does not agree that the relevant costs of porting this traffic should be discounted merely because they may fall within the definition of "additional conveyance costs". To the extent that proportions of on-net ported traffic may have changed materially over time, there is also a policy question as to whether it would be distortive to apply percentages based on 2013 data to a model which is otherwise based on a 2007 model.

On balance, EE considers that the lowest risk of regulatory failure is created by allowing 100% of the DCC to be recovered from all off-net and on-net originated traffic as currently for the purposes of this current direction, but with this issue to be considered in more detail going forwards as part of Ofcom's broader policy review on porting charges (where the impact and appropriateness of other differences between APCCs and DCCs will also be considered).

Responses to specific consultation questions

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.

Whilst EE has some issues with the timing of this review, EE agrees with the principle that Ofcom should seek to determine the maximum DCC rate across the mobile industry on a forward looking basis consistent with its legal obligations under Article 30(2) of the USD. See further our reasoning in the section headed "Process".

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

EE agrees with the proposed continued use of the LRIC+ cost standard. However, EE has some significant concerns in relation to the way in which Ofcom has applied this standard (notably its proposed exclusion of administration costs when considering the "plus" element of this cost standard) and in relation to Ofcom's modelling approach regarding cost recovery. Please see our reasons in the section 'Cost standard and general modelling approach'.

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.

Not entirely. Please see our reasons in the section 'Relevant costs to be taken into account.'

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.

No, EE believes that Ofcom has significantly underestimated the appropriate level of donor conveyance costs. Please see our reasons in the section 'Appropriate level of donor conveyance costs'.

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

No. Please see our reasons in the section 'Ofcom's cost modelling response.'

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?*

No. Please see our reasons in the section headed “On–net originated traffic”.

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.

No. Please see our reasons in the section headed “On–net originated traffic”.

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

No. Please see our reasons in the sections “Introduction and summary” and “The timeframe for setting DCC charges”.

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?

For the reasons set out in the section of this response headed “The timeframe for setting DCC charges”, EE considers that:

- paragraph 1(c) of the Direction should be deleted; and
- paragraph 2 should be amended so that it ceases to have effect on 31 March 2015.