



Vodafone's response to Ofcom's consultation

"Simplifying Non-geographic Numbers"

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Summary and conclusions

1. Vodafone welcomes the opportunity to respond to Ofcom's consultation. We recognise the considerable further analysis and evidence gathering Ofcom has undertaken in the light of responses to the previous consultation (including in response to points raised by Vodafone). Overall, there is much in the current consultation with which we agree although, inevitably in a consultation of such length and scope, we do not agree on every detail. In the interests of brevity we focus in this response on the most significant issues of principle and approach. While we also touch incidentally on some more detailed aspects of implementation, we note that this will necessarily be an iterative process requiring further rounds of discussion between Ofcom and industry. We look forward to engaging further with Ofcom and other stakeholders on these points of detail as the process unfolds.
2. We agree that Ofcom is right to take a holistic approach towards NGCs in the current consultation in contrast to the partial and piecemeal approach that has characterised previous interventions. We welcome Ofcom's recognition that past interventions have not been entirely successful in their own terms and have contributed to the overall confusion and complexity with which Ofcom is now trying to grapple. We therefore support the overall goal of greater simplicity and clarity, not least because it tempers the risk of regulatory failure and unintended consequences that, experience shows, can and do result from complex regulatory regimes.
3. We acknowledge that Ofcom has modified its approach to assessing the impact of regulation in response to comments received. Put simply, Ofcom is now comparing expected post-regulation outcomes with the status quo rather than with a hypothetical 'no regulation' baseline. This makes comparison with the counterfactual simpler in some respects, and we agree that this approach is appropriate in the particular circumstances of this consultation.
4. Overall, we agree that the leading options proposed – i.e. Freephone free to all callers and unbundling – are better than suggested alternatives (notably maximum price regulation). On balance we agree that it is possible (though not certain) that they will also yield an improvement over the status quo, though we also note that the extent of both the current consumer detriment and the hoped for net consumer benefit remains stubbornly hard to calibrate. While Ofcom continues to express its case in terms of three linked market failures, on closer inspection it appears that it is principally the underlying lack of price awareness that is critical to Ofcom's overall analysis, and that its proposals most directly address.
5. Our detailed reservations about Ofcom's analysis of vertical and horizontal externalities are set out further below. To be clear, our position is not to deny the possibility that externalities exist but rather to query Ofcom's characterisation of such effects, its inferences about their empirical significance relative to other factors and the strength of Ofcom's evidence base in this respect.

6. We find Ofcom's analysis and evidence more persuasive in relation to lack of price awareness, where we agree that there is evidence of widespread confusion and over-estimation of NGC call prices. To the extent these factors feed mistrust of NGCs and deter consumers from making calls, interventions that make it simpler to communicate pricing information and reduce the present degree of price over-estimation may potentially yield net consumer benefits. Expected benefits in this case would principally take the form of greater consumer confidence and propensity to call although, as noted, the precise extent of any resulting increase in NGC call volumes remains uncertain.
7. We therefore agree with Ofcom that *"the potential benefits from addressing the lack of price awareness could well be larger than the benefits from small changes in actual prices (given the extent to which consumers misperceive prices for NGCs and offsetting impacts via the tariff package effect)"*.¹
8. In any event, it seems to us that Ofcom's concern about potential effects of vertical and horizontal externalities itself largely turns on an underlying lack of price awareness. It follows that if price awareness can be tackled directly, Ofcom's concern about other suggested sources of market failure should be greatly reduced even if the possibility of spill-over effects is not entirely eliminated.
9. We therefore agree that this is the correct focus for intervention. However, Ofcom also needs to be realistic in its ambition. It simply does not have, and cannot readily obtain, data necessary to determine 'optimal' market outcomes by regulatory fiat. What it can and should do is to seek to create a simpler regulatory structure which does not directly determine market outcomes but rather provides the opportunity for markets to work better.
10. This overall view is subject to a number of critical provisos:
 - Our support for the Freephone free to caller model Ofcom outlines depends critically on recognition of the need for a differential mobile out-payment pitched at an appropriate level. We welcome Ofcom's recognition that limiting out-payments to incremental cost is not appropriate but believe the indicative 2.5-3p range used for Ofcom's impact assessment is still too low both with regards to efficient cost recovery and SP willingness to pay. The analysis behind this conclusion is set out in detail at Annex 2.
 - We note Ofcom's suggestion that Freephone out-payments should be set by commercial negotiation in the first instance. However, we doubt that spontaneous commercial negotiation is workable in practice in the context of a requirement that Freephone is universally available and free to caller and that the mobile out-payment is the same for all SPs and for all mobile OCPs. It is unclear who would negotiate with whom but bilateral negotiation between all

¹ See A16.105

conceivable OCP/TCP pairs would likely involve prohibitive transactions costs without yielding a uniform outcome. For all these reasons we think Ofcom will ultimately have to determine the level of the mobile origination out-payment. We discuss at Annex 3 how Ofcom might be able to do this in a manner compatible with the EU common regulatory framework (CRF).

- Our support for the unbundled model depends critically on OCPs retaining the commercial freedom to offer different access charges across different tariff packages and customer groups and to set the level of the access charge on each tariff. Attempting to set maximum access charges has all the same difficulties associated with maximum inclusive retail prices that caused Ofcom to reject that option. In any event, as we also explain at Annex 3, we maintain our view that Ofcom's 'transparency' powers do not extend to a power to set the level of access charge within the unbundled model.

11. The remainder of this response broadly follows the structure of Ofcom's consultation.

- In Section 1 below we offer some general comments on Ofcom's analysis and approach as outlined in Part A of the consultation.
- In Section 2 we discuss the unbundled remedy and supporting analysis as set out in Part B of the consultation.
- In Section 3 we turn to Freephone and Ofcom's proposals in Part C of the consultation.
- In Annex 1 we provide brief answers to Ofcom's specific consultation questions.
- Annex 2 provides a further discussion of the costs of Freephone call origination and service provider willingness to pay
- Annex 3 responds to Ofcom's legal analysis, explaining where and why we take a different view and discussing the implications for the appropriate form of regulatory intervention.

Section 1: Analytical framework and evidence base

12. As noted above, there is much in the present consultation with which we agree. Indeed, we agree that the leading options proposed - i.e. Freephone free to caller and unbundling – are better than suggested alternatives (notably maximum price regulation) and should be pursued. However, notwithstanding this broad support for Ofcom’s conclusions in this respect, we continue to find some aspects of Ofcom’s supporting analysis more persuasive than others.
13. We recognise and welcome the considerable further work Ofcom has undertaken since the previous consultation including facilitation of industry working groups, the behavioural economics experiment, further surveys of service providers and consumers, international comparisons and information gathering from CPs.²
14. We also welcome the fact that Ofcom has revised and refined its analysis in the light of new evidence and in response to comments received as part of the consultation. Ofcom previously presented its analysis in terms of three linked market failures: lack of consumer price awareness, the vertical externality and the horizontal externality. In the present consultation, Ofcom presents its analysis in substantially the same terms.
15. As Ofcom notes, Vodafone together with a number of other respondents queried aspects of Ofcom’s market failure analysis. In the present consultation Ofcom comes close to suggesting that its critics denied the existence of market failure and reasserts its position by reference to its new and more extensive analysis and evidence base.
16. To be clear, so far as Vodafone is concerned our comments were not intended to deny the possibility of market failure. Rather, our view was, and remains, that it is not sufficient to identify and describe a possible source of market failure to justify regulatory intervention. It is necessary also to consider its practical extent with reference to the available empirical evidence, to consider how far regulatory intervention might be expected to address the supposed failure, at what cost, and to weigh the costs of market failure against the risk of regulatory failure.
17. Indeed, this is especially important in relation to NGCs where, as Ofcom now acknowledges, the current picture is not the result of ‘market failure’ against a laissez faire background, but against a background characterised by successive rounds of piecemeal regulatory interventions that have become cumulatively incoherent. Against such a background, appeals to market failure to justify regulatory intervention need to be approached with caution.
18. We recognise that in the present consultation Ofcom has advanced further evidence and argument to substantiate its position. However, we remain of the view that some aspects of Ofcom’s account are more compelling than others.

² See 2.10 for further details

Lack of price awareness

19. We largely agree with Ofcom's assessment of the evidence under this heading. There is evidence that consumers do not have a good understanding of NGCs and tend to over-estimate prices considerably. It is plausible that this results in suppressed demand and call deterrence. By the same token it is plausible that if this basic lack of awareness and mis-perception of pricing can be addressed effectively, there is a prospect of increased consumer confidence resulting in increased NGC call volumes – although the extent of any such effect remains uncertain. We note that although Ofcom applies a threshold test to assess break-even in terms of quantifiable benefits exceeding implementation costs, Ofcom does not itself attempt to predict the net benefit it hopes and expects will result.

Vertical externality

20. We have more difficulty with Ofcom's characterisation of the vertical externality and interpretation of evidence claimed in support. Our essential point in relation to vertical externality was not to deny the possibility of spill-over effects and lack of alignment between the interests of OCPs and SPs.³ Rather it was to question the severity of this externality in practice, especially given the observed potential for the externality to be internalised through commercial negotiation. For example, as Ofcom notes, mobile operators have agreed to zero rate calls to DWP's benefit claim lines in return for a wholesale out-payment (an arrangement that in key respects mirrors the commercial model that Ofcom now proposes should apply industry-wide).
21. Ofcom devotes a whole annex (Annex 20) to discussion of SP bilateral deals including the DWP and concludes that the evidence does not, in its view, support the argument that SPs are able to control the retail prices of calls to their services by negotiating with OCPs. We disagree with Ofcom's interpretation of the evidence it presents for a number of reasons.
22. [3<]
23. Ofcom further suggests that the personal intervention of the DWP permanent secretary was necessary in order to conclude a deal, and portrays this, together with its assertion that agreed charges are significantly above cost, as suggesting

³ We note that Ofcom tends to present the vertical externality in terms of OCPs taking insufficient account of SP preferences. However, to the extent there is a vertical externality it is likely to operate in both directions. So Ofcom should be equally mindful of the fact that in formulating their own preferences, SPs are unlikely to take full account of the preferences of mobile consumers except very narrowly in relation to the cost of one particular call type. Unlike mobile OCPs, they will not generally take account of consumer preferences in relation to the balance of prices across the mobile package.

that the DWP was in a weak bargaining position vis a vis mobile OCPs. We respectfully suggest that the opposite was true, and that the DWP's evident willingness and ability to exert influence at a senior level and ultimately secure a deal on the terms it did are testament to its considerable buyer power.

24. While we recognise that the particular advantages at the DWP's disposal would not be available to all SPs, Ofcom's own analysis points to the importance of relative size in determining the bargaining position of the parties. We submit that DWP is far from unique among SPs in being able to exert buyer power if it wanted to. Many other government departments and large private sector organisations of similar size and sophistication would be equally able to engage in negotiations with mobile OCPs on their own account if minded to do so. The critical factor, as we underlined in our previous response, is SP willingness and ability to pay – at least to pay something – in order for negotiations to be worthwhile for either party in the first place.
25. Ofcom refers to the experience of National Grid and cites this as another example of failure 'despite its clear indicated preference for its calls to be zero rated'.⁴ Yet this is hardly a balanced conclusion. Ofcom reports that some mobile OCPs did in fact zero rate the number (mindful, no doubt, of the particular nature of the service in question). And while it appears that some others did not, this can hardly be considered a failure of commercial negotiation when the party 'expressing a clear preference' did not (at least, so far as Vodafone is aware) offer or indicate any willingness at all to support its 'preference' with a suitable out-payment.
26. A 'preference' for a free lunch does not amount to economic demand i.e. willingness and ability to pay. Thus failure to respond to such a 'preference' hardly constitutes unequivocal evidence of market failure. Similar objections apply to Ofcom's appeal to the lack of any agreement between SPs and mobile OCPs to price 0845 or 0870 identically to geographic calls.⁵ It seems to us that the underlying reason for lack of approaches to mobile OCPs in relation to any such claimed preference by SPs is a lack of economic demand.
27. We do recognise that transactions costs could be a material factor, particularly for smaller SPs who do not have the resources to negotiate directly with OCPs. However, as we noted in our previous response, if there is sufficient economic demand from SPs and if there are economies of scale in such negotiation it is possible an aggregator function might develop. The fact that the market has not developed in this way to date does not in itself demonstrate 'market failure' as one would not expect to see a market develop in the absence of underlying demand from SPs (or TCPs or transit operators, or other aggregators acting on their behalf).

⁴ See A20.43

⁵ See A20.54 – Ofcom cites its SP survey in support but in fact the survey sheds no light on the question of SP willingness to pay.

28. Ofcom makes a different point in relation to transactions costs as regards the DWP, noting that it is only the *major* mobile OCPs who have agreed to zero rate calls.⁶ This may well be the case, and we accept that increasing the number of OCP parties it is necessary to deal with will tend to increase overall transactions costs. However, it is instructive to ask why smaller OCPs have not been brought on board. Ofcom's analysis of the relative strength of buyers and sellers based on market size hardly suggests it is because smaller mobile OCPs would be in a stronger bargaining position than larger mobile OCPs in the face of a large and sophisticated buyer such as the DWP. Rather, it suggests that from the DWP's point of view, diminishing returns set in. In other words, it was content to strike a deal with major mobile OCPs on the grounds that the additional effort in dealing with further mobile OCPs was not sufficiently worthwhile.⁷
29. If the marginal cost of negotiating with an additional OCP exceeds the marginal benefit of doing so then the incomplete coverage observed would appear to be consistent with a competitive market outcome (whether or not that outcome also accords with a social policy objective in relation to social inclusion). This analysis has implications for the efficiency of achieving Ofcom's proposed free to caller Freephone model through bilateral commercial negotiation as we discuss further in relation to Freephone below.
30. Another way of thinking about non-participation by smaller mobile OCPs might be to regard the difference between most and all mobile OCPs participating as a form of horizontal rather than vertical externality. We turn to horizontal externalities below.

Horizontal externalities

31. We previously queried Ofcom's characterisation of horizontal externalities, questioning in particular the extent to which it could be said that OCPs were able to 'free ride' on well-established and understood NGC brands. We pointed out, for instance, that Freephone has never been universally free to caller from mobile and that 'local' and 'national' rate shorthand for 0845 and 0870 have similarly never had a clear meaning in the mobile context. Given the extent of lack of awareness and price mis-perception Ofcom points to elsewhere in the consultation, and particularly the fact that consumers typically *overestimate* the price of calling 08x prefixed numbers, the idea that OCPs can 'free ride' on a clearly understood brand perception, setting higher prices than that perception implies, is at odds with the available evidence.
32. In the present consultation Ofcom appears to have refined its position on horizontal externalities, identifying three distinct flavours⁸:

⁶ See A20.17

⁷ Asda Mobile, Lycamobile and Lebara are the only mobile OCPs Ofcom cites

⁸ See 9.291 and further discussion at Annex 8

- Between mobile originated and fixed originated calls to the same number range;
- Between one number range and another number range; and
- The collective brand of NGCs as a whole.

Externality between mobile originated and fixed originated calls to the same number range

33. In relation to the first of these, we note that fixed and mobile access and origination are separate markets with their own cost structures and demand conditions.⁹ Therefore there should be no expectation of identical pricing of NGC calls across these two markets (or indeed of identical pricing of NGC calls within the same market, given that NGCs are not a stand-alone service but offered in conjunction with other call types (and access) to a range of customers whose preferences vary).
34. Disparity between fixed and mobile pricing cannot in itself be construed as market failure. However, in respect of NGCs it seems likely that a significant factor contributing to different retail pricing outcomes is that fact that BT, still by far the largest fixed operator and thus a major influence on the market, has been subject to a very particular regulatory regime which, among other things, both regulates and guarantees its retail margin. Coupled with this, BT's unique position as a dominant wholesale access provider as well as a major player in retail call origination and NGC hosting enables it to suppress its hosting competitors' termination receipts through its own retail pricing policy.
35. The NTS formula means BT has little to gain from 'high' prices for NGCs on its own account because its margin is regulated and retail call revenue flows through BT to its competitors. By the same token, unlike any other OCP, BT has nothing to lose from 'low' NGC call prices because its retail margin is effectively guaranteed. Indeed, it is the peculiar regulatory regime that has grown up around NGCs that has in the past led to complaints from fixed line competitors in the hosting market that BT is able to conduct a costless margin squeeze against them.¹⁰ BT's fixed market competitors are not directly subject to the same regime as BT, but are nevertheless constrained by BT's pricing. So the distortive impact of the NTS formula permeates the observed pattern of prices in the fixed access and origination market well beyond BT itself. These factors are absent from the mobile access and origination market, so it is not surprising that pricing of NGC calls is very different between these two quite distinct and separate markets.

⁹ As Ofcom notes in passing at A24.63: *“Moreover, while there are some competitive interactions between fixed and mobile OCPs, they operate in different retail markets. This suggests that if mobile OCPs' effective retention is a little higher or a little lower than the equivalent amount for fixed OCPs then any distortion of competition is unlikely to be material.”* (*emphasis added*)

¹⁰ See http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_823/NCCN_500.pdf

36. We therefore disagree with the suggestion that lack of price homogeneity between fixed and mobile origination represents a market failure. On the other hand, it is highly likely that the NTS formula has distorted pricing among fixed originators of NGC calls by artificially depressing them relative to what might be expected in a competitive market.

Externality between one number range and another

37. The second horizontal externality identified by Ofcom is that between one number range and another. We agree with this to some extent. We have previously noted the scope for confusion created by having very different regulatory regimes (and hence pricing outcomes) in closely adjacent number ranges that are very difficult for the untrained observer to distinguish easily at a glance. Perhaps the most notable example is the contrast between 0870 and 0871 following Ofcom's decision to advocate an 'as geographic' pricing convention for 0870 while simultaneously re-classifying 0871 as a premium rate revenue share range. In these circumstances it is small wonder that consumers are confused. There is a blurring of perception which we accept could be labelled as a horizontal externality (though equally could be classified under Ofcom's broader 'lack of awareness' heading).

The 'collective brand' of NGCs as a whole

38. Ofcom's final flavour of horizontal externality is what it describes as the collective brand of NGCs as a whole. Here we agree with Ofcom's characterisation only in part. We recognise that there are many economic actors involved in NGCs at various points in the value chain and that (with the notable exception of BT) most actors are too small individually for their actions to change overall perceptions radically. On the other hand, overall perceptions will be coloured by the cumulative actions of all actors. This contributes to the overall confusion and 'lack of awareness' in Ofcom's terminology.
39. Ofcom's argument, as we understand it, is that this may inhibit (to some extent) unilateral price reductions because changing the perception of one's own price has extra 'noise' to cut through arising from other people's pricing. However, while we understand the theory, it is not clear that NGCs are unique in this respect. The idea of 'spillover' in perception such that the effect of price changes is not fully internalised is not, in principle, confined to NGCs. Ofcom's apparent view that it might be relatively more important in relation to NGCs than other call types seems to hinge on its prior view about lack of price awareness. Thus it is not clear that there is much of a separate point left over if lack of awareness is removed from the equation.

40. Critically, while Ofcom repeatedly states that it believes the various market failures it identifies result in prices that are ‘too high’ and out of line with underlying consumer preferences, it cannot say with any confidence by how much prices are ‘too high’. As noted above, in relation to fixed origination, there is good reason to think any price distortion is in the other direction i.e. prices are *too low*. Vodafone noted previously that even after taking cost differences into account, one would not expect to see a complete equalisation of unit margins across all call types where demand conditions vary. Ofcom acknowledges that NGCs may be relatively inelastic compared to other call types¹¹, even if reliable empirical data are hard to come by.¹² It also acknowledges that it may be economically efficient to apply higher mark-ups to NGCs than GCs.

41. For example, at A8.331 Ofcom notes:

“If customers were equally well informed about all aspects of OCPs’ retail offering, we would expect competition between OCPs to bring about an economically efficient pricing structure. With efficient pricing, differences in mark-ups between GCs and NGCs would reflect differences in market-level elasticities, which we recognise could lead to NGC prices being higher than GC prices.”

42. However, Ofcom maintains that there are currently weaker competitive constraints on NGCs than on other elements of the retail package, *even after taking account of the differences in the volumes of different types of call*.¹³ It puts these weaker constraints down to lack of price awareness, which we agree could, in principle, be a factor. However, Vodafone’s point was that it is rational for consumers to attach less weight to the cost of minority call types they make infrequently than to majority call types they make more often and which are more important in budgetary terms, even if they have ‘perfect’ information. Ofcom accepts (see A8.93) that:

“. . . not all consumers would place significant weight on the price of NGCs at the point of subscription, even if they had good information. We recognise that it is rational for consumers to place more weight on types of call they expect to make more of when making their subscription decision. Indeed, only 11% of landline callers and 9% of mobile callers stated that the cost of calls to 08xx/09 numbers would be important to them when choosing a new supplier. Even with ‘perfect’ price awareness you would expect consumers to place more weight on the price of calls they make more of.”

43. Ofcom goes on in subsequent paragraphs to explain why, nevertheless, it considers that a ‘significant minority’ of customers would or might place weight on

¹¹ See A16.76: *“We consider that calls to many non-geographic numbers are likely to be fairly price insensitive. This is consistent with the comments from Vodafone, O2 and Virgin Media cited above. A low own-price elasticity such as -0.3 ties with this view.”*

¹² See A16.80 *“We are not aware of evidence that shows empirically what functional form best reflects the demand for non-geographic calls in the UK.”*

¹³ See A8.332

NGC prices when making subscription decisions, noting for instance that around one quarter of switchers said they would have liked this information and further suggesting that, as marginal customers, price-sensitive switchers play a key role in exerting competitive pressure on prices.

44. We note Ofcom's comments but continue to have serious reservations about Ofcom's analysis. Above all, the problem Ofcom has is that even though it may believe prices are 'too high' because of market failure, relatively high prices for NGCs compared to GCs are consistent with both 'efficient' and 'distorted' pricing. Disentangling these different possible underlying causes is fraught with difficulty. Without being able to identify by how far observed prices are adrift from a theoretical optimum, it is difficult to place much weight on such putative distortion because it is virtually impossible to calibrate empirically with any confidence. Ofcom is also forced to play down its own consumer survey evidence which, as Vodafone noted previously, directly contradicts Ofcom's previous assertion that 'rebalanced' prices would better reflect consumer preferences.¹⁴ In effect, Ofcom seems to suggest consumers may suffer a form of 'false consciousness' due to lack of price awareness, stating:

"With respect to arguments put forward by the mobile OCPs regarding Ofcom's consumer evidence that consumers do not favour re-balancing, our position on this is set out in detail in Section 16. In summary, though it may appear as though evidence from the consumer surveys shows that consumers do not care about NGCs, in practice it is difficult to extrapolate meaningful conclusions from the data as it is not clear whether consumers have understood the question. In addition, it may be the case that consumers have disengaged with the market as a result of the market failures identified. They could behave differently if they had a better awareness of prices. Overall, it is not clear what importance consumers attach to rebalancing the relative price of NGCs and other calls."¹⁵

45. In summary, while Ofcom continues to talk in terms of three linked market failures, it appears that the supposition that prices are 'too high' turns critically on lack of price awareness. It follows that once lack of price awareness is addressed, there can be no presumption that the resulting pattern of prices is 'distorted' or 'inefficient' even if NGC prices remain 'high' relative to other types of call. In any event, given the nature and scale of change envisaged by Ofcom's remedies, no straightforward comparison of 'before' and 'after' relative prices is possible, rendering it of little value as an assessment criterion. Moreover, as Ofcom itself now acknowledges, given the current extent of price over-estimation, the impact of more accurate price perception resulting from improved awareness is likely to overwhelm any effect stemming from small changes in NGC prices that may (or may not) also result.

¹⁴ See discussion at A8.323

¹⁵ See A8.333

Section 2: Unbundling

46. We said in our previous response that unbundling was an interesting idea, worth considering, though more evaluation would be needed before deciding whether or not to pursue. While there are clearly important details that still have to be worked out, we acknowledge the considerable further work Ofcom has undertaken to flesh out the concept and address the practicalities of introduction. This includes Ofcom's facilitation of industry working groups, collation and analysis of technical information on feasibility and costs of billing system development on various scenarios and the behavioural economics experiment conducted on Ofcom's behalf by London Economics.¹⁶
47. In the light of all this further work, we are persuaded that unbundling while preserving commercial freedom for OCPs to determine their own access charges is worth pursuing. Notwithstanding our reservations about aspects of Ofcom's analysis, we agree that unbundling is clearly preferable to maximum price regulation given the high associated risk of regulatory failure. We also think Ofcom has made enough of a case to show how unbundling can be expected to address lack of awareness and contribute towards better price perception and consumer confidence which, in turn, should make NGCs more attractive to SPs.
48. We say 'enough of a case' not simply because we are not persuaded by every aspect of Ofcom's analysis but because we recognise, as does Ofcom, that moving to the unbundled model will be a major change and that the eventual outcomes are inevitably uncertain. Ofcom is right in these circumstances not to claim to be able to predict results with certainty, and to be realistic in its ambition of improvement relative to the status quo rather than an unattainable perfection in correcting lack of price awareness.
49. We welcome the fact that Ofcom has modified its approach compared to the previous consultation in which it suggested that the current scale of consumer detriment is large¹⁷ and implied that its proposed remedies would bring about correspondingly large consumer benefits. We pointed out that Ofcom's estimates assumed, among other things, complete elimination of price mis-perception which, we suggested, was unrealistic given evidence over a period of many years showing that price perception is some way adrift of actual prices in relation to most call types. We are pleased to note that Ofcom has taken this point on board and set itself the more realistic goal of reducing rather than eliminating price mis-perception.¹⁸

¹⁶ See 2.10 for summary of additional work and evidence gathering

¹⁷ See previous consultation, Annex 2 which at A2.239 reports an estimate of £563M

¹⁸ See Annex 16, particularly discussion at A16.4 to A16.8

50. The key feature of the unbundled model is that it enables easier communication of pricing information by placing responsibility for communicating information about each price component in the hands of the party responsible for setting the respective price i.e. OCPs in relation to access charges, and TCPs/SPs in relation to service charges. This also reflects the fact that in the unbundled tariff model NGCs involve the provision of two quite distinct services to consumers. OCPs provide access to services provided by SPs but the SPs themselves provide services of their own to callers – whether in the form of information, entertainment, advice or support.

No regulation of access charges

51. We endorse Ofcom's decision to allow OCPs to set their access charges on a commercial basis and rejection of price cap regulation. We agree almost entirely with Ofcom's analysis on this point.¹⁹ In particular, we agree that seeking to regulate the level of access charges carries with it the same risks of regulatory failure that Ofcom rightly identifies in its rejection of setting maximum inclusive retail prices. In our view, both options would be inappropriate and disproportionate even if Ofcom maintains that the options might otherwise remain theoretically available. Ofcom should always seek the least onerous means of achieving its stated objective, which in this case is to combat lack of awareness via improved price transparency.

52. We welcome Ofcom's recognition that awareness and transparency are not the same thing²⁰ and that transparency in itself cannot guarantee spontaneous price awareness despite the efforts by at least some OCPs, including Vodafone, to present NGC charges transparently to consumers.²¹ A single access charge per tariff is clearly simpler to communicate than a potentially wide range of inclusive NGC charges currently, and at present we see no clear reason in principle why existing transparency provisions should not be sufficient to underpin clear communication of access charges alongside other prices.

53. Within the unbundled model it is the service charge rather than the access charge that will potentially vary on a call by call basis and it is therefore appropriate that the burden of communicating the service charge to callers should sit with the SP. Publicising service charges alongside the respective NGC number is likely to be far more effective in giving consumers a good guide to pricing at the time they need it than requiring them to refer to long and possibly complex price lists maintained by OCPs.

54. Although Ofcom presents the unbundled tariff as principally a retail market intervention we remain of the view that it is also a wholesale market intervention –

¹⁹ See discussion at Annex 10

²⁰ See A8.59

²¹ See A8.60 where Ofcom notes in passing that some OCPs, including Vodafone, have reasonable price list transparency

and necessarily so in order to work.²² In effect, the retail service charge advertised to consumers and the corresponding wholesale termination charge levied by TCPs on the SPs behalf are two sides of the same coin. They may be expressed differently (one including VAT, the other excluding VAT). Formal responsibility for communicating them to counterparties may rest with different people – SPs at a retail level, TCPs at a wholesale level. But essentially the wholesale and retail service charges have to match for the model to work.

55. Moreover, it is clear from industry discussion that to give meaning to the service charge at a wholesale level it is necessary to specify an assumed point of handover and have a clear convention for which party – OCP or TCP - is responsible for meeting costs associated with additional conveyance or transit where applicable. We agree with Ofcom's analysis on these points: that the assumed point of handover must be at the near end in order to preserve incentives for efficient investment and accordingly that transit costs downstream of the APH should be borne by the TCP.²³ The alternative model advocated by some TCPs clearly gives rise to a perverse incentive for TCPs to pick up calls as late as possible rather than as early as possible, which is clearly inefficient in routing terms.²⁴

Design of the access charge

56. We recognise that there are trade-offs involved as regards precise specification of the access charge.²⁵ Ofcom's proposal is to allow a single access charge per tariff, expressed in ppm terms but with allowance for a minimum one minute call charge. While we can see potential arguments in favour of allowing different access charges for different flavours of NGC call (e.g. different ACs for 08X business rate numbers and 09X premium rate numbers) we accept that allowing multiple access charges on the same tariff may detract from the simplicity of a uniform access charge that applies across all in scope NGC ranges. On balance, we think the simpler approach is better.
57. We also agree that Ofcom is right not to limit OCPs to a single access charge across all tariffs. Part of the point of the unbundled remedy is to enable competition in the access and origination market to include competition on the access charge (alongside all other prices). OCPs must therefore be free to experiment and to offer a choice of tariffs so that they can effectively respond to customer preferences. Some customers may prefer lower access charges in return for slightly higher charges elsewhere, while for other customers the reverse may be true. There is a strong argument for letting competition determine the pattern of charges OCPs offer. Imposing artificial restrictions on one particular aspect of the overall tariff

²² See also further analysis at Annex 3

²³ See Annex 18

²⁴ See discussion at A18.36

²⁵ Ofcom also recognises such trade-offs, for example in its recognition that there are valid efficiency and cost reasons for allowing OCPs to vary the AC across number ranges, although it ultimately concludes that these are outweighed by the need for simplicity.

package makes OCPs less able to respond to customer preferences, so should not go further than necessary to achieve the basic transparency objective which clearly does not require identical access charges across all tariffs.

Service charges

58. While Ofcom proposes to restrict access charges to one per tariff, it proposes to allow SPs/TCPs a much freer hand in relation to service charges. Nevertheless, as with the access charge, there are trade-offs that need to be considered.
59. It is entirely consistent with the overall aim of improving price awareness and customer understanding of NGCs that the distinctions between different ‘families’ of revenue share NGC are reinforced by some high level rules applying to each of the three main ranges in question, namely 08X, 09X and 118X.
60. We therefore support Ofcom’s proposal to set caps for permissible service charges in the 08X range in order to distinguish them from the generally higher SCs allowed on 09X and 118X ranges. Within 08X, we agree that a distinction at the second digit level e.g. 084, 087 has a better chance of being understood by customers over time than differences at the third digit level e.g. 0844 vs 0845. We therefore support the proposal to align the treatment of all 084 and 087 prefixed numbers with respective caps of 7ppm and 13ppm.
61. We understand that Ofcom plans to consult separately on the possibility of higher rate PRS numbers (i.e. allowing service charges in excess of the current 1.53ppm limit for BT originated calls). We thus reserve detailed comments for the time being, but make two brief observations as they relate to unbundling generally.
62. First, as a general principle it seems to us that the extent and specificity of transparency and other consumer protection measures should be in proportion to the risk of consumer harm. This will tend to mean less onerous requirements for services with lower maximum price points and correspondingly tougher rules and enforcement sanctions for higher rated services where the risks to consumers are greater. We therefore have sympathy with the argument that 08X numbers may not require the full panoply of PhonepayPlus regulation, and that it would be inappropriate for PPP to raise a levy on lower rated 08X numbers which effectively cross-subsidises investigation and enforcement activity on higher rated numbers outside the 08X range. We do, however, believe that some requirement to communicate service charges alongside numbers will need to apply to 08X numbers, even if the mechanism for imposing and enforcing such obligations differs in detail between 08X and other ranges.
63. Second, we note that the possible extension of higher rate PRS to allow higher maximum price points does complicate discussion of how many SC price points the unbundled remedy needs to accommodate.

How many SC price points?

64. This is the area where the trade-off between costs and benefits becomes most apparent. While we understand the desire by some TCPs to have as much flexibility as possible, flexibility comes at a cost. Since it is an intrinsic feature of the unbundled remedy that all OCPs need to be able to apply and pass through service charges correctly there is an externality associated with the management and maintenance of service charges by OCPs that will tend to increase with the number of SCs that need to be supported (unless, of course, it is internalised by those causing costs to be incurred).
65. Existing billing capabilities will vary from one OCP to another and it follows that the degree and associated cost of technical development needed to accommodate unbundling is likely to vary from one OCP to another. However, at least some OCPs are likely to be capacity constrained, at least in the short term. CPs contemplating billing upgrades will need to know what capacity they need to plan for as not all implementations will be infinitely scalable. All else equal, additional capacity and the flexibility it affords will therefore tend to increase overall costs across industry – costs that will ultimately have to be recovered from consumers. Reasonable certainty is therefore required over the number of SC price points OCPs will be expected to support for the foreseeable future.
66. We do not think it is necessary to have a large number of SC price points for the unbundled model to work. Indeed, relatively few price points, each sufficiently different from one another, would provide a broad menu of choice for SPs and greater control over price than they enjoy at the moment.
67. It is an open question how far and how fast price competition on advertised service charges may develop under Ofcom's new model. As noted previously, there may be very little price competition for 'locked-in' calls i.e. ones where consumers have very little choice over the SP they deal with and the number by which they contact them. This is especially true of monopoly providers in the public sector but there is also a locked-in element in relation to other consumer-provider relationships. While the degree of competition may vary across different types of SP and across different number ranges, it is not clear that price is the main dimension of competition between competing SPs today. While it is of course possible that this may change over time, and that greater price awareness could in principle make a difference, the extent of price competition that will emerge between SPs on the service charge is uncertain.
68. Although today's NGC charge bands may not be a perfect guide to future demand for SC price points, they do at least provide a starting point. Ofcom has analysed traffic flows on 0844/0871 and 09 charge bands and discovered that around 97% of all traffic is within the top twelve charge bands. Even more strikingly, around half of all traffic is accounted for by a single charge band with around two thirds of all

traffic on the two most popular charge bands – 5p G6 and 10p G7, the respective maxima for 0844 and 0871. Within 09, around 75% of traffic is within the top ten charge bands and around 95% within the top twenty. Although there is slightly greater dispersion of traffic across price points within the broader overall range, the maximum £1.50 P0 appears to be among the most popular although the 35p P10 band also attracts similar traffic volumes.²⁶

69. Overall, it is clear that a small handful of the hundred or so 08X and 09X charge bands posted in the Carrier Price List account for the overwhelming share of traffic.²⁷ This casts substantial doubt on the need for a large number of SC price points, at least initially. It is more important to have distinctive choices among price points that are actually used than to support large numbers of notional price points that seem to be very little used in practice.
70. We note, in this context, that Ofcom is not currently proposing to restrict time of day variation on service charges. However, a service charge with day, evening and weekend variants is not only harder to communicate to consumers, but also requires three SC price points instead of one. As such, we wonder whether time of day variation is a good use of limited SC price points. There is currently no standardisation of the terms day, evening and weekend across CPs. Yet if the time of day cut-offs specified by SPs do not correspond to those applied generally by OCPs there is a risk of customer confusion, undermining Ofcom's goal of greater simplicity and clarity. Supporting different day/evening/weekend profiles for different NGC numbers, or maintaining different profiles between NGC and non-NGC traffic may also add unnecessary cost for rather dubious benefit. For all these reasons we have a bias against time of day variation on the service charge.

Change control

71. As well as the question of how many price points need to be accommodated in total, and how migration to the unbundled model is to be achieved, there is also the question of how changes are to be managed once the new regime is up and running. Allowance must be made for periodic variation, for example if SPs wish to move between existing price points and/or to allow little-used price points to be withdrawn to create space for new price points for which there is greater demand.
72. It is unclear at this stage how this might work, although we note that this is likely to be a topic requiring further industry discussion. Leaving aside the vexed question of how decisions will be made on the introduction or withdrawal of price points, we see merit in the idea of a central clearing house for the notification of changes to service charges (which could be movement between existing price points rather than the introduction of new ones) or the application of price points to new number ranges. A voluntary code of practice has recently been developed for the opening

²⁶ NGCS Discussion Document prepared by Ofcom dated August 2011

²⁷ Ofcom notes at 10.346 that currently there more than 300 price points altogether but some 125 of these are for DQ services.

of new number ranges, and we think this provide a good starting point in terms of lead times to ensure that new number ranges can be built and available for use across industry with realistic and predictable lead times.

73. Agreement will be needed on the process to be followed both for notifying changes and for acting on such notifications. There is a clear efficiency case for notification by TCPs to a central reference point which can then be consulted by OCPs given the difficulty and risk of coordination failure associated with many to many change notification. However, the precise mechanism to achieve this will require further industry discussion and agreement on matters such as record format, rights of access, responsibilities and liability, funding and so on. These are important issues but the detail is beyond the scope of the present response.

Section 3: Freephone

74. As part of the overall reform of NGCs, we agree with the objective of creating Freephone numbers that are universally free to caller. The practical question is how that objective is to be achieved.
75. Ofcom is right to recognise that the key to making it possible for calls to be free to caller is to ensure that calls are appropriately funded by the called party. This clearly requires a differential out-payment to reflect the different cost and demand conditions of mobile OCPs compared to their fixed counterparts.
76. In the previous consultation, Ofcom suggested an out-payment somewhere in the range of 0.5 to 2ppm. The lower number, which approximates the average out-payment to fixed operators, was notionally based on a view of pure LRIC network costs of call termination, while the higher number appeared to have been selected arbitrarily. Ofcom suggested that a free to caller model supported by a differential mobile out-payment could be revenue neutral for mobile OCPs. Vodafone acknowledged that making Freephone calls universally free to caller might be expected to result in an increase in mobile origination call volumes, but noted that at the levels of unit out-payment Ofcom was then suggesting, it would require an implausibly large volume response – several times greater than that reported for the DWP benefit line – for wholesale receipts to outweigh the loss of retail call revenue.²⁸
77. We further noted that to the extent mobile OCPs face a shortfall, the mobile package tariff effect is likely to mean compensating price increases elsewhere to restore margin so it cannot safely be assumed that the net result is positive for mobile consumers. Indeed, we noted that Ofcom's own consumer survey evidence showed no consumer appetite for 'rebalanced' pricing, casting doubt on Ofcom's contention that such rebalancing might better reflect consumers 'underlying' preferences.
78. We can see from the present consultation that Ofcom has taken at least some of our comments on board, and has produced a revised 'impact assessment range' for the mobile out-payment of 2.5-3ppm. Unlike the previous figures Ofcom has explained in some detail the methodology it has used to derive these numbers. Essentially, Ofcom has approached the problem from two different directions. On one hand, it has looked at the costs of mobile origination. On the other hand, it has looked at the evidence on SP willingness to pay derived from its SP survey and applied some inferences from that survey as a cross check on the cost-based numbers to arrive at its 2.5 to 3p range.
79. We welcome the fact that Ofcom has revisited this issue and responded positively to our suggestion that better data on SP willingness to pay were required. We

²⁸ See previous Vodafone response, paragraph 62.

understand the basic approach Ofcom has taken and agree that this could, in principle, provide an appropriate starting point. However, as we explain more fully at Annex 2, Ofcom's cost-based numbers still considerably understate the costs it is appropriate to recover from Freephone calls. Similarly, Ofcom's inferences about the 'choke point' at which some SPs may choose to abandon Freephone in favour of other number ranges appear to hinge, among other things on heroic assumptions about the likely proportions of fixed and mobile call origination which there is good reason to doubt. Furthermore Ofcom's interpretation of the survey data is excessively conservative – a proper reading of the survey data supports the view that SPs are willing to pay a mobile out-payment commensurate with Vodafone's recalculation of the cost of mobile origination.

80. [3<]

Commercial negotiation and transactions costs

81. We see a clear tension between Ofcom's suggestion that it can leave the level of the mobile out-payment to commercial negotiation and its appeal to transactions costs as a source of market failure. We appreciate that transactions costs are an important factor that may indeed go some way towards explaining why more SPs have not chosen to initiate commercial discussion with mobile OCPs. Where we differ from Ofcom is in its apparent interpretation that the existence of transactions costs somehow constitutes evidence of market failure. Transactions costs are real and cannot simply be assumed away. It is worth pausing to consider two particular aspects of transactions costs.

82. One aspect is the cost of negotiation, which will tend to increase as the number of parties increases. This suggests there are likely to be economies of scale in negotiation. We accept that for smaller SPs, the costs of negotiation with mobile OCPs may be too high in relation to the perceived benefit of securing free to caller mobile call origination to make it worthwhile. To a large extent, the costs of negotiation are likely to be independent of the volume of calls at stake. Therefore, even if a small SP and a larger SP had a similar intrinsic willingness to pay for free to caller mobile origination, the transactions costs of negotiation make it less likely the small SP will pursue negotiation. Similar considerations apply in reverse from an OCP perspective.

83. As we have noted previously, there may be ways in which transactions costs can be reduced by aggregating demand so that the fixed costs of negotiation are shared between more parties and can be defrayed across a larger total volume of traffic. This is an efficiency benefit which could potentially be realised if enough SPs have similar intrinsic willingness to pay and are prepared to conduct their negotiations through a common intermediary.

84. However, while such arrangements have the potential to reduce transactions costs, they do not eliminate them. The intermediary will need to be recompensed for the

value of the service it provides and uncertainty about the outcome is likely to add a risk premium. There are transactions costs in brokering the initial decision to use an intermediary. Therefore, while lowering the transactions costs of negotiation may tend to increase the number of previously marginal deals that become viable, it should be no surprise that marginal transactions that would only be viable in the complete absence of transactions costs fail to materialise. Supply and demand simply do not meet.

85. The up-front costs of negotiation are not the only type of transaction costs that need to be considered. Assuming a price can be agreed between the parties, there is also the vital question of how to bill and invoice for it. The commercial deals that have been struck have had to make do without the convenience and cost-efficiency of cascade billing through the usual interconnect accounting route. Instead, separate bespoke invoicing arrangements have had to be instituted in parallel, adding cost.
86. The key problems we see with Ofcom's suggestion that mobile out-payments and associated commercial terms can be left to commercial negotiation are that:
- it is not clear who would negotiate with whom;
 - multilateral negotiation would be unwieldy (and questionable from a competition law perspective);
 - bilateral negotiation is likely to inflate transactions costs for all the reasons described above; and,
 - there can be no expectation that multiple bilateral negotiations arrive at identical conclusions.
87. This last point is critical, because Ofcom's proposals assume that the mobile out-payment is common across all mobile OCPs so that it is only necessary to identify traffic as fixed or mobile originated in order to effect the correct settlement; that it is not necessary also to identify which mobile operator has originated the call; and that it is not necessary to identify which particular SP the call is destined for.
88. We do not criticise those assumptions. Indeed, we suggest that it is only by imposing simplification and uniformity that transactions costs (and the technical billing development costs necessary for implementation) can be contained sufficiently to make the net benefits worthwhile. The problem is that the assumptions appear hard to reconcile with bilateral commercial negotiation as the chances of arriving at a standardised uniform solution spontaneously by this route must be confined to sheer fluke. We therefore think this aspect of Ofcom's implementation plan will have to be rethought. Fortunately, we believe alternative approaches are available to Ofcom as we discuss further in Annex 3.

Annex 1: Consultation questions

A4.1 Below is a list of the consultation questions asked in each part of this document.

Part A – NGCS market assessment and summary of approach

Section 4 – Summary of concerns

Q4.1 Do you agree that the analysis set out in Section 4 and the supporting annexes which draws on our initial assessment in the December 2010 review, stakeholder comments and the further research undertaken in 2011, appropriately characterises the market, the market failures and the effects on consumers? If not please set out your alternative views.

Not entirely – please see the main body of this response.

Section 5 – Equality impact assessment

Q5.1: Do you have any comments on our Equality Impact Assessment? In particular do you agree with our view that our proposals for changes to non-geographic numbers are likely to have an overall positive impact on the equality groups identified in Annex 15?

Overall we agree that to the extent Ofcom's proposals result in net consumer benefits, the equality groups identified are likely to share in such benefit and are unlikely to be significantly negatively affected. However, we note that the size of any overall net benefit remains uncertain and the same goes for the impact on any particular customer group.

We agree that the main impact on the equality groups identified is likely to flow from Freephone becoming universally free to caller. Clearly the extent of this impact depends in part on the extent to which the particular SPs vulnerable consumers have most need to contact choose to adopt Freephone numbers in preference to other contact routes. However, it also depends on the extent of rebalancing. If mobile out-payments do not allow reasonable recovery of common costs, other charges may have to increase to compensate leaving the net effect on vulnerable consumers indeterminate.

We note that Ofcom says it does not expect to see a significant tariff rebalancing effect resulting from unbundling. Since Ofcom notes elsewhere that the mobile tariff package effect is likely to be strong, Ofcom's conclusion within the equality impact assessment depends critically on Ofcom maintaining its current position of not regulating the level of access charges. In the event that Ofcom did intervene to set maximum access charges we would not expect the same conclusion to hold.

Part B - the Revenue-sharing ranges

Section 9 – Remedies to address the market failures

Q9.1: Do you have any comments on our assessment, and in particular the additional evidence (gathered since the December 2010 Consultation) which we have used to support our assessment, on our provisional conclusion that the unbundled tariff should be applied to the revenue-sharing NGC number ranges?

Please see Section 2 above for overall assessment.

Section 10 - Design of the unbundled tariff

The Access Charge

Q10.1: Do you agree with our proposal that the AC should be allowed to vary between tariff packages but that OCPs should be subject to a tariff principle permitting only one AC for non-geographic calls? If not please explain why.

We agree that the AC should be allowed to vary between tariff packages.

The question of whether it is appropriate to limit OCPs to a single AC per tariff for all non-geographic calls is more finely balanced. Uniformity removes flexibility to reflect different cost or demand conditions. On the other hand, an unlimited number of ACs on the same tariff would complicate communication and risk undermining the transparency objective.

On balance, we agree that the simpler approach is preferable.

Q10.2: Do you agree with our proposed structure for the AC, in particular that: (i) that the AC should be a pence per minute charge only, but can be subject to a minimum one minute call charge; (ii) that the AC should not vary by time of day; and (iii) that the AC can be included as part of call bundles/inclusive call minutes provided that inclusion does not differentiate by number range? If not please explain why.

We agree.

Q10.3: Do you agree with our proposal not to impose a cap on the AC in the first instance? If not please explain why.

We agree that Ofcom should not impose a cap on the AC (in the first instance or otherwise).

The Service Charge

Q10.4: Do you agree with our proposed approach for the structure of the SC? In particular that: (i) bespoke SCs should be prohibited; (ii) that no further restrictions on the SC structure should be required (e.g. allowing ppm and ppc SCs, no restriction of ToD charging subject to ability of billing systems to pass through the charges). If not, please explain why and provide evidence if possible.

We agree on (i) that bespoke SCs should be prohibited.

On (ii) however, we think Ofcom should consider whether allowing time of day variation on SCs is really warranted, particularly against a background of overall constraint on the number of SCs that can be supported.

Q10.5: Do you agree with our proposals to impose maximum SC caps for the purposes of protecting the identity of the number ranges? Do you agree that the caps should apply to the 084, 087 and 09 ranges and that they should be set exclusive of VAT in the Numbering Plan? If not please explain why and provide evidence to support your position if possible.

We broadly agree with Ofcom's proposals.

Q10.6: Do you agree with our proposed cap of 5.833p for the 084 range and 10.83p for the 087 range? If not please explain why.

We agree.

Q10.7: Do you agree that the number of SC price points should be restricted? Do you agree that that restriction should be somewhere between 60 and 100, and where within that range do you consider would be optimal? Do you have any comments in relation to how Ofcom should decide where in that 60 to 100 range the maximum number of SC price points available should be set?

Ofcom is right to recognise a trade-off between cost and the number of SC price points supported. All OCPs need to be able to support all allowable SCs but the costs of supporting any particular number of SCs are likely to vary among OCPs depending on their own particular legacy billing constraints. Even absent technical capacity constraints, however, the number of price points to be supported remains an important cost driver as Ofcom recognises at Annex 19.

We therefore agree that Ofcom should restrict the number of price points. Our initial view is that the 60-100 range Ofcom suggests may be reasonable, taking account of the current concentration on a more limited number of price points and the cost implications of a much higher limit for which there is no proven economic demand. We note that on-going annual maintenance costs could double between the lower and upper bounds proposed, so any decision to expand the number of available price points should not be taken lightly.

It is difficult to comment further at this stage on the precise number without knowing what Ofcom proposes in relation to higher rate PRS. To the extent that higher rates imply a need for additional price points, Ofcom will need to ensure that initial designations allow some room for future expansion within the overall limit.

Q10.8: Do you agree with Ofcom's proposed approach to agree the relevant SC price points with industry rather than specifying them as part of the Numbering Plan? Do you have a particular preference for which SC price points are necessary within the different number ranges? What criteria would you propose for the selection of price points?

We agree that this subject may benefit from further industry discussion within the bounds permitted by competition law. However, the scope and limits of such discussion are not yet entirely clear and it is in any case uncertain what degree of consensus (or otherwise) may emerge. Therefore Ofcom itself may also have to play a role, perhaps confirming decisions only after transparent consultation with all potentially affected stakeholders.

We do not at present have strong views on the need for particular price points beyond a few general observations.

We think the aim should be for a spread of distinctive price points that are different enough from one another for the difference to be meaningful for consumers. In this context, we wonder whether there will really be demand for penny increments within the 084X and 087X ranges, for example? If there is, an appreciable number of price points will already have been used up before getting to higher rated PRS and DQ numbers, where there may be more demand for ppc and hybrid unitisations. Larger increments are likely to be appropriate at higher rates.

We also note that allowing time of day variation on service charges may, if utilised, eat up the number of available price points rapidly as well as risking consumer confusion and billing inaccuracy due to the lack of standard conventions across industry for definition of peak and off-peak hours, for example. Time of day variation introduces additional complexity into the communication of service charges to customers, which may detract from the overall aim of simplicity. For all these reasons we think Ofcom should keep this matter under review and consider further whether the luxury of potential time of day variation in service charges is proportionate to the costs – including the opportunity cost of potentially squeezing out more distinctively different service charges.

Assumed Handover point ('AHP')

Q10.9: Do you agree with our assessment on the location of the AHP on BT's and other CPs' networks? If not, please explain why you disagree.

We agree.

Q10.10: Do you agree that for calls that route via a transit network, the TCP should pay for transit? If not, please explain why you disagree. In particular please explain your views on how incentives can be included within an "OCP pays" approach to ensure the TCP seeks to interconnect directly (where this is efficient) and not to reduce its points of interconnection at the expense of the OCP and efficient end to end call routing.

We agree.

Q10.11: Do you agree with our proposed approach for calls between two non-BT CPs, both for the case when a transit network is used and for when direct interconnection is implemented? If not, please explain why you disagree.

We agree.

Section 11 – the 0845 and 0870 ranges

Q11.1: Do you agree with Ofcom's assessment that an unbundled tariff should also apply to the 0845 and 0870 ranges? If not please explain why.

We agree. We think Ofcom is right to restore 0870 to revenue share, and that unbundling should apply to all revenue share ranges.

Section 12 – Implementation

Customer bills

Q12.1: Do you agree with our proposal not to mandate the presentation of disaggregated AC and SC charges on customers' bills? Do you agree with our view that it should be up to OCPs to decide the best way to present these charges to their customers on bills OCPs but that we require that at a minimum, the OCPs should include the customer's AC on the bill they receive?

Given the potentially substantial implementation costs identified in Annex 19, we agree that Ofcom should not mandate presentation of disaggregated AC and SC charges on customers' bills. Generally we agree that it should be up to OCPs to decide the best way to present charges to customers on bills and that Ofcom should avoid being overly prescriptive. While we do not object in principle to a lesser requirement to include a reminder of the customer's AC on a bill and we note Ofcom's expectation, we see no need to amend GC 12 to achieve this aim.

Wholesale issues

Q12.2: Do you agree with the requirement for a central SC database. If so what would be your preferred approach – public sector or private sector provision? If you do not agree with the need for the database what approach for the dissemination and verification of SC would you prefer and why. Are there any other issues with respect to the database you would wish to raise?

We see a good case in terms of efficiency and consistency for a central clearing house and reference source for communication of service charges (and any changes to service charges) associated with particular number blocks. This is clearly a subject that will require further industry discussion.

At present, pending further discussion, we think both public sector and private sector provision should remain options. Indeed, given the overlap with Ofcom's existing statutory functions, it may be that hybrid models of provision are appropriate – the public sector providing the core point of reference, but with provision for private sector access to the reference data and possible development of value added services to CPs based on it.

Practical questions that will need to be considered include:

- Content and format of information needed;
- Roles and responsibilities – who does what, how, notification lead times and implementation service levels;
- Scope – whether the central database to be used purely for wholesale settlement between CPs and accurate retail billing, or whether is it also necessary to provide a central reference source for retail service charges that consumers can consult and all interested parties can link to; and,
- Legal underpinning (statutory, contractual or some combination of the two); funding and liability.

Q12.3: Do you agree with the need for reformation of the existing processes for number range building and tariff change notification? If so, what do you consider to be

the key characteristic of a revised set of processes? Do you consider that there is a need for regulatory intervention in their establishment, if so why and on what basis should Ofcom intervene.

We think the overall approach should build on the principles of the voluntary code recently developed by industry. Some modification of existing processes is likely to be required but the detail of such change is clearly bound up with the previous question. We therefore reserve judgement at this stage as to whether and to what extent formal Ofcom intervention may be necessary, although we expect Ofcom to continue to facilitate industry discussion and take an active interest these matters, not least given its own statutory responsibilities concerning number administration.

Q12.4: Do you consider that there is a need for additional regulatory intervention in the area of end-users' access to non-geographic numbers, in addition to General Condition 20? If so why and what form should such an obligation take?

We do not see a pressing need for additional regulatory intervention in this area. It seems to us that the unbundled model provides appropriate incentives for all parties to support universal connectivity without any additional prescriptive mandate.

Communicating with consumers

Q12.5: What steps / actions do you consider need to be undertaken to ensure changes to the structure and operations of non-geographic numbers are successfully communicated to consumers?

We recognise that Ofcom is proposing fairly major changes that will need to be widely communicated to consumers to achieve their intended purpose and see a substantial role for Ofcom itself in publicising and promoting its policy decisions and explaining what they mean in practical terms for consumers. While TCPs and OCPs will doubtless also want to communicate these changes to their respective customers, we see merit in Ofcom producing central reference information and FAQs which others are able to reproduce or refer to in order to ensure consistency, accuracy and objectivity. Such material and the means of dissemination may well benefit from discussion with industry and other stakeholders nearer the time, but is likely to require input from Ofcom itself as well as an Ofcom seal of approval.

Price publication requirements

Q12.6. Do you agree with our proposal that existing price publication obligations (with some modifications) are sufficient to ensure that consumers are made aware of their ACs? Do you agree that we would need to specify the AC as a key charge?

Generally we agree that existing price publication obligations are sufficient, though we recognise that some modifications may be necessary to dispense with specific requirements in relation to particular NGCs that become otiose (e.g. detailed provisions relating to 0870 under the relevant GC 14 code of practice). Beyond that, it is not clear at this stage that any substantial revision is required (or indeed that access charges need to be singled out for special treatment since they will automatically be subject to existing price publication obligations unless Ofcom creates an exception).

Q12.7: Do you agree with our provisional view that the requirement for SPs to advertise their SCs could be implemented through a condition on SPs that is enforced through an industry Code of Practice and the ASA? Are there any other options (beyond the two outlined) which Ofcom should be considering? What do you consider is the best approach for securing industry commitment and developing a Code of Practice?

We agree that publication of the SC by the SP so that it is available to at least the majority of consumers at the point of call is a crucial element in the success of the unbundled tariff. It may be that a Code of Practice enforced by the ASA is capable of meeting this need (though Ofcom may also need to give thought to its reserve enforcement powers to act directly against SPs not abiding by any agreed Code).

Other implementation issues

Q12.8: Do you agree internationally originated calls should be charged at the same SC as an equivalent domestic call? If not, please set out your reasons. Do you agree that originators should be able to set a separate AC level for roaming calls in a given country, though the other characteristics of the AC should still apply?

We agree in principle that internationally originated calls should face the same SC as equivalent domestic calls at the assumed point of handover although additional conveyance charges might conceivably apply in cases where calls are received upstream of the AHP. We agree that OCPs should be able to set a separate AC for roaming calls. However, it is not clear what Ofcom intends when it suggests that other characteristics of the AC should still apply. Currently, both wholesale and retail roaming call charges within the EU are governed by the EU roaming regulation.

The case Ofcom describes is of a UK consumer roaming abroad and making a call to a UK NGC. In these circumstances we think the simplest solution is to carve out access charges whilst roaming from the domestic requirement and clarify that the EU roaming regulation bites only on the access element of a call to a UK unbundled NGC.

Another case to consider is the case of an inbound roamer in the UK calling a UK NGC subject to unbundling. In this case, the TCP would expect the usual SC out-payment but the OCP would be constrained by the wholesale roaming cap in relation to its charges to the home network. In these circumstances Ofcom should clarify that the EU

wholesale cap only bites on the access service and not on the service charge that the OCP is obliged to collect and pass through on behalf of a third party SPs.

Q12.9: We would welcome stakeholder views on our proposed approach for applying the unbundled tariff to payphones. Do you agree that it is appropriate to allow payphones to set a minimum fee for non-geographic calls?

As we understand it, all OCPs will be able to charge a minimum call fee in that they are permitted to charge the ppm amount for a full minute for short duration calls of less than a minute. It seems to us that any technical limitation in relation to payphones is more likely to result in the requirement for per second billing beyond one minute in cases where payment denominations are limited by coinage. It is not clear what Ofcom is proposing in this respect so we reserve our position.

Q12.10: Do you consider there is a need to exempt business to business telephony contracts from some of the constraints of the unbundling regime? If so what exemptions do you consider appropriate and why are they necessary (please give examples of the conflicts you would identify if exemptions are not provided). To which contracts should the exemptions apply and why?

Ofcom will need to ensure that the transparency aspect of its proposals does not compromise the principle currently embodied in GC10 that bespoke or individually negotiated tariffs are not subject to publication requirements (on grounds of commercial confidentiality).

Timing

Q12.11: Do you agree with our proposal that implementation should take place 18 months from the date of the final statement?

Yes.

Section 13 - Impact assessment

Q13.1: Do you agree with our estimates of the billing costs for implementing the unbundled tariff, taking into account the discussion in Annex 19? If not, please explain why and provide evidence to support your response, particularly of the level of costs you are likely to incur as a result of our proposals.

We broadly agree with Ofcom's overall analysis of cost drivers. We have previously provided more detailed information to Ofcom in confidence and do not presently have any further information to add.

Q13.2: Do you agree with our estimates of the level of migration and misdialling costs for service providers who may migrate as a result of the unbundled tariff (taking into account the analysis and evidence in Annex 12)? If not please explain why and provide evidence.

We are unable to comment on this question.

Q13.3: Do you agree with our estimates of the communication costs of implementing the unbundled tariff? In particular: (i) the costs of OCP communication with their customers; and (ii) the costs of TCP communication with their SP customers. If not, please explain why and provide evidence to support your response, particularly of the level of costs you are likely to incur as a result of our proposals.

We find it hard to calibrate the likely level of costs under (i) with any precision at this stage but unless Ofcom introduces specific onerous obligations on OCPs we do not think the costs need be large and will mainly be one-off. We are less well placed to comment on (ii).

Q13.4: Do you have any comments on our impact assessment for the unbundled tariff? Please provide evidence to support your response.

We do not have detailed comments on Ofcom's assessment but note that on the basis of this assessment (a) the threshold for benefit to exceed cost is low and (b) projected growth in call volumes as a result of narrowing the current extent of price estimation is likely to overwhelm other putative (and more speculative) benefits.

Part C - Freephone and 116

Section 16 – Assessment of options

Q16.1: Do you agree with our assessment of the options for the 080 range? In particular, do you agree with our preferred option of making 080 genuinely free to caller? If not, please explain why.

As discussed more fully elsewhere in this response, we support the objective of making 080 universally free to caller but with reservations about Ofcom's proposed approach. In particular, our support is contingent on a significantly higher out-payment than

suggested by Ofcom's current impact assessment range. We also think Ofcom will ultimately have to mandate a uniform mobile out-payment directly via an obligation on TCPs hosting the Freephone numbers in question.

Q16.2: Do you have any comments on the analysis used to develop the Impact Assessment Range for the mobile origination charge and the Mobile Maximum Price range for 080 calls as set out in Annexes 21 to 25? Please provide evidence to support your comments.

Yes – please see Annex 2.

Q16.3: Do you agree with our estimates of the level of migration and misdialling costs for service providers who may migrate as a result of our proposal to make the 080 range free to caller (taking into account the evidence and analysis in Annex 12)? If not please explain why and provide evidence.

We have no comments on this question.

Q16.4: Do you agree with our proposal to treat the 116 ranges in the same way as the 080 range (i.e. designate all as free to caller) as set out in detail in Annex 27? If not please explain why.

If the proposal was indeed that 116 ranges be treated in the same way as the 080 range, we could support it, subject to the same comments as for 080. However, it is not clear that this is actually what Ofcom is proposing in that Ofcom talks in terms of a much lower impact assessment range for the mobile out-payment, notionally based on Ofcom's view of incremental cost. This is not appropriate and we cannot support it. For one thing, Ofcom's assessment of incremental costs is itself too low. However, even if Ofcom's assessment of incremental cost were accurate we see no case for treating the particular SPs using 116 numbers differently from other worthy causes running behind 080 numbers. To do so risks distorting such SPs' choice of number and putting Ofcom in the invidious position of deciding which SPs should be allowed to use the limited range of 116 numbers and which not.

Section 17 - Implementation

Q17.1: Do you agree with our provisional view that it is appropriate for an access condition to be imposed on all TCPs hosting designated Free to caller numbers requiring them to:

purchase wholesale origination services for calls terminating on designated free to caller ranges from any requesting OCP;

to do so on fair and reasonable terms and conditions (including charges); and notify their SP customers of any initial revision to the charges for wholesale origination services within two months of Ofcom imposing the requirement for zero maximum prices.

If not do you consider any ex ante intervention is required? Please give your reasons for or against such intervention and your preferred approach.

Please see legal analysis at Annex 3.

Q17.2: Do you agree that the access condition does not need to be extended to OCPs, but is effectively binding on both parties? If not please give your reasons.

As above, please see Annex 3.

Q17.3: Do you have any other comments on our proposed implementation approach for making Freephone free to caller? For example, do you consider it necessary for Ofcom to impose a requirement on SPs to publicise that 080 calls are free and do you have any other suggestions for how SPs could be encouraged to publish that at the point of call? Are there any other implementation issues which need to be taken into account?

Annex 3 sets out our reservations about the legal approach currently outlined and proposes a more straightforward and effective alternative. As discussed in the body of this response, we doubt that Ofcom can actually leave the level of the out-payment purely to commercial negotiation. Annex 3 provides a way round the difficulty Ofcom has created for itself in this respect.

In addition to this, we recommend that Ofcom should require or at least encourage SPs to state not merely that 080 calls are free to call but also specify that they are free to call from mobile (given the current perception Ofcom is trying to overcome).

Annex 2: The appropriate level of the mobile out-payment for 080 under a universal free to caller regime

Summary

- 1.1 Whilst Vodafone agrees with the principle behind Ofcom's preferred solution for 080, i.e. making 080 calls free to callers from both fixed and mobile networks coupled with a higher service provider payment to mobile originating networks than fixed originating networks, it is clear from an analysis of the consultation that the indicated range of 2.5p to 3p for the mobile origination payment is not correct.
- 1.2 It can be seen in annexes 22 and 23 that Ofcom's view of the appropriate mobile origination payment has been derived from two opposing viewpoints – an assessment of the costs of mobile origination and a view of what existing 080 service providers might be willing to pay to allow all calls to be made free to caller. The 2.5p to 3p range comes from what Ofcom believes to be the reasonable intersection of these two interests. In relation to costs, Ofcom proposes a value above incremental cost but significantly below the level that allows recovery of fixed and common costs on an equi-proportionate mark-up (EPMU) basis. It supports such a restriction in part on the grounds that based on its interpretation of survey data, service providers are apparently unwilling to make such a contribution to mobile operators' costs.
- 1.3 Vodafone has examined the evidence that Ofcom has used to derive this range. We show below that a full reading of the evidence suggests that a significantly higher out-payment is justified by the cost data, and that such a higher out-payment is not in fact at odds with the survey evidence that Ofcom has obtained on service providers' willingness to pay an increased out-payment to mobile operators. The amended cost data gives a cost of mobile origination on an EPMU basis of 5.2p, a level of mobile out-payment (with the fixed out-payment unchanged) that is well within the range indicated by the service providers (given a reasonable view of the proportion of all 080 calls that might be mobile originated under the new regime) of the *average* out-payment they would be willing to pay.
- 1.4 There are in fact three components of Ofcom's analysis:
 - The costs of mobile origination, and what it is reasonable for mobile operators to recover;
 - The likely relative proportions of mobile and fixed originated calls, and thus the likely weighted average cost to 080 service providers with differential levels of fixed and mobile out-payments; and,
 - The willingness of service providers to pay a higher weighted average out-payment.
- 1.5 Whilst we agree with Ofcom that there is some merit in considering the views of service providers regarding the level of their out-payment, this cannot be determinative on its own. The fundamental question, however, is not what

service providers say they want to pay for mobile origination, but what they ought to pay, which also requires a proper appreciation of mobile origination costs.

- 1.6 We consider these three issues separately below. Section 1 of this annex considers the costs of mobile origination and the appropriate level of cost recovery, section 2 the sensitivity of different traffic mixes on the relationship between different mobile out-payments and the average out-payment for 080, and section 3 examines the survey data in summary form. Section 4 examines in more detail the derivation of the cost of mobile origination, and section 5 considers the survey evidence in more detail.

Section 1: The costs of mobile origination

Different views of mobile cost

- 1.1 In its consideration of the cost of mobile origination, Ofcom uses several alternative views of cost:
- “LRIC+ with 100% A&R”. This is fundamentally a cost recovery of the incremental cost of mobile origination, both network and retail, plus all fixed and common costs of mobile operation (both network and retail) allocated across mobile services on an EPMU basis. Ofcom calculates a cost of 3.9p for this.
 - LRIC+ with no A&R. This is similar to the “with 100% A&R” measure with the exception that acquisition and retention retail costs are excluded from the total of retail costs that are recovered as fixed and common costs from mobile origination. Ofcom calculates a cost of 2.3p for this measure.
 - Pure LRIC, or incremental cost. Here only the incremental costs relating to the mobile origination service are captured. Ofcom comes up with a range of 0.7p when only incremental network costs are included, and 0.8p when an additional allowance is made for estimated incremental retail costs.
- 1.2 Vodafone questions the accuracy of each of these costs. We have used Ofcom’s own methodology of sourcing the cost data from the MTR model and the MTR market review, but updated it with respect to the May 2012 decision of the CAT, particularly in relation to the fact that from April 2013 MTR services will no longer recover any fixed and common costs and must also be considered the last increment in mobile cost recovery. Our work shows that the MTR model’s outputs give values in 2013/14 (at 2013/14 prices) of 5.2p for LRIC+ with 100% A&R, and 3.2p for LRIC+ with no A&R.
- 1.3 We have not attempted to calculate a pure LRIC result since Ofcom uses the LRIC+ with no A&R measure as the floor of cost recovery, and self-evidently the

LRIC must be below this, but its actual level is not particularly relevant to the setting of the mobile out-payment.

- 1.4 These results are tabulated below, and we explain the calculations in detail in section 4 of this annex.

In ppm	Ofcom output	Vodafone output in 2013/14 prices
Ofcom LRIC+ no A&R	2.3p	3.2p
Ofcom LRIC+ with 50% A&R	3.1p	4.2p
Ofcom LRIC+ with 100% A&R i.e. full CARS	3.9p	5.2p

Table 1: Ofcom and Vodafone LRIC+ outputs

- 1.5 Two things are obvious from these results. First, Ofcom’s view of the mobile origination cost with full recovery of CARS of 3.9p considerably understates the real outputs that are obtained from Ofcom’s own MTR model, which suggests that a cost of over 5p is more representative of “LRIC+ 100% A&R”. [§<]
- 1.6 Second, the “Ofcom LRIC+ no A&R” formulation that Ofcom uses to inform its cost floor in Annex 23 is 3.2p, not 2.3p. It is thus *above* not below Ofcom’s suggested service provider mobile out-payment of 2.5p – 3p.
- 1.7 These results have important implications for the assessment of the appropriate level of the out-payment.

Appropriate level of cost recovery

- 1.8 We agree with Ofcom that fundamentally the primary concern must be not with how much the service providers say they want to pay, but how much they ought to pay in the new Ofcom world of free to mobile caller. Given the reasoning behind the change is that Ofcom believes that consumers will benefit from universal free to caller for 080 the starting point of the evaluation really ought to be a question as to why the cost should not be, as a minimum, LRIC+ 100% A&R i.e. 5.2p?
- 1.9 There are in fact good reasons to suggest why the recovery should be more than that, given the inelastic nature of the demand for 080 compared with geographic mobile origination.²⁹ However we note that the fixed origination out-

²⁹ Ofcom acknowledges the efficiency arguments in favour of Ramsey pricing which, put simply, imply proportionately greater cost-recovery on services where demand is relatively inelastic and proportionately lower cost recovery where demand is elastic. Given the practical difficulty of establishing reliable elasticity estimates we do not pursue this approach further here. However, we emphasise that “LRIC+ 100% A&R” recovery does not mean that 100% of A&R costs (and other fixed and common costs) are recovered from Freephone origination. Rather, it implies that Freephone attracts a proportionate mark-up which, if applied equally across all other services (excluding termination where it is disallowed by regulation), would enable A&R costs to

payment has been set on a FAC basis (effectively equivalent to LRIC + EPMU recovery).

1.10 From paragraph A23.92 Ofcom commences a discussion on the benefits to service providers from mobile operators' retail expenditure, and proceeds to the view that some portion of this cost should not be recovered from 080 service providers since they do not benefit from it. This argument is flawed on several grounds:

- Ofcom's reasoning behind the change to 080 to make it free to all callers is that this will benefit consumers. It is not clear from this why any particular decomposition of mobile operator cost structures to identify only those costs that 080 *service providers* can obtain benefit from is appropriate in the first place. The most benefit to service providers will obviously result if they do not have to pay for origination at all, but this is not an argument for zero-origination. The benefit to consumers will arise from their being able to use the services behind the 080 numbers free of charge from a mobile phone that they possess. Mobile customers are attracted and retained on mobile by the existing structure of mobile prices, including handset subsidies (A&R costs). As a result of this price structure, mobile ownership is very widespread. Why should a proportion of these costs calculated on an EPMU basis not be recovered from 080 service providers, but instead be recovered disproportionately from some other unspecified mobile services?
- Ofcom's logic in suggesting a less than EPMU recovery from mobile operators is based on A23.94 which develops a theory that mobile A&R expenditure could be disaggregated:

"Where expenditure increases the total number of calls to SPs, for example because it grows the number of mobile subscribers, then SPs are likely to benefit. In contrast, expenditure that simply results in a subscriber moving from one mobile OCP to another mobile OCP ("customer redistribution expenditure") is unlikely to benefit SPs. This begs the question of what proportion of mobile OCPs' A&R costs reflects customer redistribution expenditure."

Ofcom does not go so far as to attempt to identify this proportion, but does say in A23.102 that only a small proportion such as 10% "seems reasonable", and in A23.103 "we thus have some concerns that assuming that 45% of expenditure on A&R costs is recovered from SPs is too high".

be (just) fully recovered. Clearly, to the extent that services that are more price elastic than Freephone call origination actually attract lower mark-ups (due to the operation of competition in the mobile access and origination market driving the mobile tariff package effect) there remains a potential efficiency argument for greater than EPMU recovery of common costs, so "LRIC+100% A&R" as described is conservative in this respect.

However this 10% is derived from the gap between the Ofcom view of costs excluding A&R of 2.3p, of costs including A&R of 3.9p, and of the bottom end of the 2.5p to 3p mobile out-payment range that arises from the survey. It is thus no sort of objective measure, merely an almost accidental output of the calculation. Similarly the 45% comes from the assumption based on the survey data that 3p is the upper level of the mobile out-payment range³⁰.

In effect therefore Ofcom appears to be using the survey data on service providers' willingness to pay to suggest the range of the underlying cost related payment that mobile operators should be allowed to receive. Even if the survey data could be seen as a 100% robust and unambiguous expression of service providers' willingness to pay or to exit, which is not correct, we question the use of essentially subjective expressions of willingness to pay to derive what should be an objective measure of cost. Survey data on willingness to pay may provide a useful cross-check on the appropriate level of out-payment, but using the survey results as a driver of cost recovery introduces an element of circularity.

Attempting a separation of costs between these two questionable cost categories even if such an analysis were meaningful is, we suggest, not one that should be attempted in a couple of paragraphs. Vodafone sees high A&R expenditure as simply the price of doing business in the competitive mobile market in the UK that Ofcom has played its part in fostering. Saying that some of this A&R expenditure would not occur as a net cost to operators if consumers were prepared to pay for it and thus should not be recovered from service providers is a strange argument to pursue when Ofcom's goal is that consumers make no contribution to 080 calls. But if Ofcom is really intending to attempt to restrict mobile operators' cost recoveries on these grounds it is going to have to base any such calculation on some objective measure, to derive an evidence based proportion, rather than any casual assertion that "45% looks too high" that apparently emerges from willingness to pay surveys³¹.

- If mobile operators are artificially restricted in their recovery of 080 origination costs so that they may only recover a less than proportionate share of fixed and common costs, then inescapably, there are two alternative outcomes: either any shortfall in cost recovery is not made up at all and the costs are stranded, or some other service (potentially an

³⁰ The difference between 2.3p and 3.9p, or 100% A&R = 1.6p. With a 3p cost, A&R recovery must implicitly be 0.7p, thus approximately 45% of the total A&R is being recovered.

³¹ In any case we show below that the survey evidence does not support any upper limit on mobile out-payments at the levels suggested by Ofcom

adjacent service offering) must pick up the shortfall. The question is, why should this be the case?

- Given that from April 2013 MTRs will by regulation no longer be able to attract any recovery of fixed and common cost, any suggestion that there are yet other services which must be prevented from making a full EPMU recovery must be treated with very considerable scepticism and caution. Ofcom must be very wary in advancing special consideration for under-recovery for another mobile service in addition to termination – moving too far down that road creates the risk that mobile operators' considerable fixed and common costs would become in part unrecoverable. At the very least there is the risk of regulator imposed price distortion.
- In any case Ofcom makes no explanation as to why 080 numbers are a special case that needs subsidising in terms of cost recovery from other services. If all 080 service provision were limited to charities, there might be an argument that mobile operators should be restricted from recovering all the costs of origination. But in fact with the THA scheme, mobile operators are voluntarily not recovering any origination costs that relate to calls to these numbers. In the DWP arrangement the mobile out-payment is close to (but below) the cost of origination, suggesting that this may form a reasonable benchmark. It is far from obvious why owners of sales inquiry lines or customer service lines who choose to host their services behind 080 instead of behind a different number range should receive a subsidised service from mobile operators where any alternative choice of number range would not. Furthermore any decision reducing the mobile out-payment below EPMU risks distorting the service providers' choice between 080 and other number ranges.
- Whilst there is a very limited discussion of “customer redistribution expenditure” with respect to mobile and why it should be excluded there is no such analysis in relation to fixed origination, except in A23.131 where it is merely reported that:

“A&R costs include handset subsidies. For the purposes of assessing an equivalent mobile origination payment that would place mobile OCPs on a similar competitive footing to fixed OCPs it does not seem appropriate to include an allowance for mobile handset subsidies. This is because such subsidies are not paid to purchasers of fixed handsets.”

But this is not quite correct – Ofcom has restricted the mobile A&R costs apparently in an attempt to remove “customer redistribution expenditure” i.e. effectively resource expended in inter-operator competition. We accept that there is no subsidy paid to purchasers of

fixed handsets, but this merely emphasises the difference between fixed and mobile operations and price structures and the difficulty of attempting any equality of treatment. It is quite clear however that there is extensive competition between fixed operators for customers, with special discounts, switching costs, intensive marketing etc. Ofcom states in A23.130 in relation to fixed operators that “*we included sales and marketing costs aimed at the acquisition and retention of customers, since these do benefit NTS service providers*”. This clearly conflicts with Ofcom’s proposed approach in relation to mobile operators. Ofcom’s analysis is thus one-sided.

To restrict mobile operators from recovering certain costs whilst allowing fixed operators to recover their equivalent costs merely because the costs of mobile operation are higher than fixed would seem to undermine the principle of cost equivalence that Ofcom is advancing as one of its judgement criteria.

We conclude therefore that Ofcom’s case for suggesting that a less than LRIC+ 100% A&R recovery of mobile origination costs is appropriate for calls to 080 on the basis of the structure of mobile costs is not made out.

Section 2: Average service provider out-payments

- 2.1 It is obvious that the level of the increase in the average service provider out-payment from the present 0.5p³² will depend on two variables: the level of the mobile out-payment and the proportion of mobile originated traffic. Whilst at some point the mobile out-payment will become a known value, the latter will remain uncertain.
- 2.2 Ofcom’s assessment is that the likely future level of mobile traffic is 40 - 50% of the total, and that with a mobile out-payment of 2.5p to 3p this will lead to a weighted average cost increase to service providers of around 1p. This is simple maths – with a 2.5p mobile origination out-payment and 50% of traffic being mobile the increase will be 1p; at 40% it will be 0.8p; and with a 3p mobile origination out-payment and 40% of traffic being mobile, the increase will be 1.0p and at 50% 1.25p. It is obviously possible to carry out a sensitivity analysis using various mobile traffic mix proportions – we tabulate this below using Ofcom’s preferred range of mobile out-payments between 2.5p and 3p.

³² Assumed to be the current out-payment made by SPs for all origination, irrespective of whether it is fixed or mobile originated

Mobile traffic % sensitivities	Mobile out-payment of 2.5p		Mobile out-payment of 3p	
	Average cost	Increase over 0.5p	Average cost	Increase over 0.5p
5%	0.6p	0.1p	0.6p	0.1p
10%	0.7p	0.2p	0.8p	0.3p
15%	0.8p	0.3p	0.9p	0.4p
20%	0.9p	0.4p	1.0p	0.5p
25%	1.0p	0.5p	1.1p	0.6p
30%	1.1p	0.6p	1.3p	0.8p
35%	1.2p	0.7p	1.4p	0.9p
40%	1.3p	0.8p	1.5p	1.0p
45%	1.4p	0.9p	1.6p	1.1p
50%	1.5p	1.0p	1.8p	1.3p

Table 2: varying average out-payments with different mobile out-payments and traffic sensitivities³³

- 2.3 Clearly therefore the proportion of mobile originated 080 traffic to the total is a significant driver of the average service provider cost in relation to a given mobile out-payment. At say 35% mobile traffic, at the top of Ofcom's range with a 3p mobile out-payment, the average service provider out-payment increase is only 0.9p, rather than the 1.3p that would result at 50% mobile traffic.
- 2.4 But there are considerable reasons to doubt that 40% to 50% is the correct outcome. In arriving at the overall mobile proportion Ofcom has made use of three datapoints:
- It notes from the flow of funds work that approximately 5% of 080 calls originated on mobiles in 2009;
 - It has used the DWP example to suggest a representative increase in mobile traffic when 080 calls are made free to mobile caller; and
 - It points out that in general approximately 50% of all calls are mobile originated.
- 2.5 One way of looking at this is that for 40% to be the correct outcome, there is an assumption that mobile traffic volume will increase eightfold, and for 50%, a tenfold increase is implied.
- 2.6 The DWP evidence that Ofcom cites is in fact slightly confusing – in the 2010 consultation at paragraph A2.91 Ofcom notes:

“Additionally, following the agreement between DWP and mobile companies in January 2010 that calls to its 0800 helplines would now be zero rated, there was a significant change in calling patterns between mobile and fixed originated calls. In a sample week before the agreement, 15% of calls came from mobiles (with the remaining coming from landlines or a payphone – 47% and 38% respectively). But this changed to 52% from mobiles (and 30% and

³³ For ease of presentation, results have been rounded to one decimal place

18% from landlines and payphones) in the first week of June 2010 following the change.)

2.7 But in the April 2012 consultation at A23.52 Ofcom states:

“We have obtained data on how the mix of calls to DWP’s helplines changed as a result of these being made free to caller. In 2009, the proportion of call minutes originated from mobiles was stable at 7%. After these helplines were made free to caller in January 2010, there was an immediate jump in the proportion of calls from mobiles. Between 40-45% of call minutes came from mobiles between November 2010 and June 2011.”

2.8 Both of these cannot be right. Was there an increase from 7% to 15% before calls were made free to caller, so is 15% the better starting point than 7%, and was the 52% a high point that has now stabilised at 40-45%? In effect there are four possible permutations of mobile volume increase from this unsatisfactory data:

- 7% to 52% - just over a sevenfold increase
- 7% to say 42.5% - a six fold increase
- 15% to 52% - a three and a half fold increase
- 15% to 42.5% - less than a threefold increase

2.9 Interestingly the table in the December 2010 consultation shows that the split of traffic before the free to mobile caller change was 15% mobile, 47% fixed customer and 38% payphone, and that after the change the peak mobile proportion was achieved with 52% mobile, 18% payphone and 30% fixed customers. In other words the mobile change would appear to be: from the starting point of 15%, plus 20% from payphones, plus 17% from fixed customers to reach the 52%.

2.10 The flow of funds study does not identify how much of the total 080 traffic is payphone originated, but it would seem unlikely that across all 080 numbers called, the proportion can be as high as 38%. If the payphone traffic is excluded from the DWP before and after volumes, using the December 2010 data, then the mobile share of the mobile plus fixed customer origination market started at $15\% / (15\% + 47\%)$ or 24% and peaked at $52\% / (52\% + 30\%)$ or 63%. But this is only a two and a half fold increase.

2.11 Furthermore it is not difficult to see why the DWP 080 lines might otherwise be atypical as a result of the services provided behind the numbers, with for example a higher proportion of calls from mobile only households or individuals. Benefit claimants facing tight budget constraints might perhaps be more price sensitive than the general population of 080 callers, and so on.

2.12 It is very hard to conclude from this that the DWP experience is necessarily typical of the possible change. In any event Ofcom is anticipating an average increase not of the DWP levels, whatever they really were, with or without the payphone effect i.e. any range between threefold and sevenfold, but an even

greater one, on average from 5% to 40% or to 50% i.e. somewhere between an eightfold and tenfold increase across all 080 numbers.

- 2.13 In fact the flow of funds study reports that it was not 5% but actually less than 5% of 080 calls that originated from mobile. Given also that some proportion of this less than 5% must already be free to caller calls (under the THA scheme) and thus presumably unaffected by any change in fixed/mobile call mix resulting from equalisation of call prices, the eightfold to tenfold increase is still an underestimate of the volume increase in calls to currently charged numbers necessary to achieve an overall 40% to 50% mobile call mix – potentially a twelve fold increase might be required in mobile calls to achieve such a proportion. This is a very impressive range of increase to project in the fundamental absence of any reliable data.
- 2.14 What would appear likely is that making mobile 080 free to caller will have a varying impact on the mix of calls originating from fixed and mobile lines, that will vary with the specific number being dialled (obviously ranging upwards from a zero impact for calls to THA and DWP destinations). What is also likely is that each 080 provider will at this point have no clear view as to the likely future mobile and fixed origination traffic mix on their own particular numbers.
- 2.15 Rather than all called destinations changing by a common percentage, it is reasonable to expect that there will be a wide distribution around the unknown future weighted average outcome (i.e. call destinations weighted by the volume of calls to each destination). There are many factors that could potentially affect the impact on a particular number, at least including:
- The service supplied behind the number – is this a one-off or repeat sales enquiry (sales enquiries are anecdotally the most common type of both 080 calls and 080 numbers), or a regular call to a customer service number?
 - How and where was the phone number obtained – e.g. in the home or away from home?
 - What choices are available to the caller given their particular circumstances – mobile, fixed, payphone?
 - Do particular circumstances dictate the location of the call – e.g. need for privacy at/away from home, need to refer to data or a piece of equipment held at home.
 - Is the reason for the call business or personal? Business callers are less likely to be price sensitive to the cost of the call as well as being more fixed phone based, so if it is one business calling another concerning a sales enquiry or product support etc. there is less likelihood of a switch from fixed to mobile.
 - Is there an age/socio-economic or other distribution of the callers to a particular number that make a particular origination source more or less likely?

- Will inertia or habit play some part – i.e. if certain regularly used 080 numbers are dialled from a fixed phone, will this pattern necessarily change?
- 2.16 None of these variables has been or is likely to be easily quantifiable, except perhaps anecdotally. But taken in the round, they suggest that the DWP experience is likely to be on the high side of the average change in the mobile proportion of 080 calls.
- 2.17 Taken together all these considerations suggest an increase over time in the 080 mobile call origination proportion from the existing 5% mobile proportion but towards a lower proportion than the average of 40% to 50% that is suggested by Ofcom. We accept that it is impossible to predict the actual outcome in the event that Ofcom were to implement free to caller for all 080 calls, but it seems eminently reasonable to accept the strong possibility that the average increase in mobile volumes would be less than the roughly tenfold increase that is required to reach a 40% to 50% mobile call mix, and to examine the consequences of this on the level of service provider average out-payments using various sensitivity assumptions. A reading of the DWP data might perhaps suggest an outcome of a sevenfold increase – this would result in a 35% mobile traffic volume (but this is at the highest possible level of apparent DWP traffic increase, which might in reality be a threefold to sevenfold change).
- 2.18 This suggests the need for a sensitivity analysis. The best way to consider the implications of different possible proportions of mobile originated traffic is to reverse the logic of Ofcom's analysis – rather than considering the out-payment that could be made to mobiles assuming an average service provider out-payment increase, to calculate if the mobile out-payment is Xp and the mobile traffic proportion is Y%, what the average service provider out-payment would become³⁴. The table above showed the outcomes at 2.5p and 3p – for the sake of illustration we extend this analysis below to mobile out-payments up to 7.5p.

³⁴ This clearly is the way matters will work out in reality – Ofcom is not going to set or otherwise suggest an average service provider out-payment that will mean varying mobile out-payments depending on the traffic mix – its intention is for all fixed operators to receive one standard out-payment rate and all mobile operators to receive a single, higher rate.

Mobile proportion - sensitivities	Increase in SP out-payment when mobile out-payment is:								
	2.5p	3p	3.5p	4p	4.5p	5p	6p	7p	7.5p
5%	0.10p	0.13p	0.15p	0.18p	0.20p	0.23p	0.28p	0.33p	0.35p
10%	0.20p	0.25p	0.30p	0.35p	0.40p	0.45p	0.55p	0.65p	0.70p
20%	0.40p	0.50p	0.60p	0.70p	0.80p	0.90p	1.10p	1.30p	1.40p
25%	0.50p	0.63p	0.75p	0.88p	1.00p	1.13p	1.38p	1.63p	1.75p
30%	0.60p	0.75p	0.90p	1.05p	1.20p	1.35p	1.65p	1.95p	2.10p
35%	0.70p	0.88p	1.05p	1.28p	1.40p	1.58p	1.93p	2.28p	2.45p
40%	0.80p	1.00p	1.20p	1.40p	1.60p	1.80p	2.20p	2.60p	2.80p
45%	0.90p	1.13p	1.35p	1.58p	1.80p	2.03p	2.48p	2.93p	3.15p
50%	1.00p	1.25p	1.50p	1.75p	2.00p	2.25p	2.75p	3.25p	3.50p

Table 3: increase in average SP out-payment under varying assumptions of mobile out-payments and traffic mix

2.19 One can use this table to construct a range of outcomes. For example:

- Using Ofcom’s suggested out-payment range, the average increment would be 0.7p at 35% mobile traffic (Vodafone’s suggested possible outcome) if 2.5p is used as the mobile out-payment, or 0.9p at 45% (the mid-point of Ofcom’s traffic estimate) or if 3p is used 0.88p at 35% or 1.13p at 45%.
- Using the 5p column to approximate Vodafone’s cost estimate of 5.2p, a 35% mobile proportion would give an out-payment average increase of 1.58p, and at 45% an increase of 2.03p.
- With the 3.5p out-payment column used to approximate the origination costs excluding all A&R calculated by Vodafone at 3.2p, at 35% traffic mix this would suggest an increase of 1.05p, or at 45% an increase of 1.35p.
- At a higher level of mobile out-payment, such as 7.5p, the average out-payment increase would be 2.45p at 35%, or 3.15p at 45%.

2.20 Thus from Ofcom’s out-payment range it would appear that an average service provider increase of somewhere between 0.7p and 1.13p is possible, assuming 35%-45% traffic mix, and under Vodafone’s cost measure an average increase of 1.5p to 2p, with the recovery excluding A&R somewhere in between and a higher mobile out-payment somewhere above these levels. The next stage of the analysis is to evaluate these against Ofcom’s survey results – what would be the reaction of the service providers if their average out-payment cost went up by this range of alternatives?

Section 3: 080 service providers’ willingness to pay an increased out-payment for mobile free to caller

- 3.1 Ofcom has presented some useful evidence from survey data on what it believes service providers may be willing to pay as a higher out-payment.
- 3.2 There are inherent difficulties in carrying out such a survey – apart from the obvious reluctance for service providers to want to pay more, if at any stage and

for any reason service providers believe that their response will contribute to Ofcom's assessment of the level of out-payment then there is a very great risk that any response will be coloured by this. The survey data that Ofcom has already obtained can therefore be the last survey that can be usefully conducted. The present consultation makes very clear the importance Ofcom is attaching to surveys of willingness to pay – it is unlikely therefore that service providers or resellers will now be unaware of this point when making their responses to any future survey. We consider the evidence in detail in section 5 below.

- 3.3 In essence Ofcom's view of service provider willingness to pay is that at somewhere between a 1.0p and a 1.5p incremental average out-payment cost there is a drop-off of service provider willingness to pay³⁵, and that this implies a mobile out-payment range of between 2.5p and 3p. As discussed above, in any case even a 3p mobile out-payment at a lower traffic level than 40-50% will give an incremental average out-payment below the 1.5p level. For example at 35% mobile traffic, 3p represents only an incremental 0.88p, and the mid-point of Ofcom's 1p to 1.5p range of incremental average out-payment, 1.25p represents just over a 4p mobile out-payment at 35% mobile traffic proportion. Ofcom's own interpretation of the survey results could thus easily support a higher mobile out-payment than 3p. In fact only at the highest Ofcom forecast of the mobile traffic proportion (50%) and at the lower end of the out-payment range from the survey (1p to 1.25p) is Ofcom's 2.5p to 3.0p mobile out-payment actually the maximum level of willingness to pay indicated by Ofcom's take on the survey results.
- 3.4 Ofcom's use of the survey results is thus very conservative with respect to the potential size of the mobile out-payment: thus we do not believe that the survey data actually supports the conclusion that 3p is the upper limit of service provider acceptability.
- 3.5 But rather more importantly, the evidence provided on willingness to exit and willingness to pay is in any case in favour of a higher *average* out-payment than Ofcom has stated. A more detailed view of the survey data that we conduct in section 5 below suggests in fact that the results from the two relevant survey questions asked can be analysed as follows:
- a willingness to exit question suggests a willingness not to exit but to pay an average increment of at least 1.5p, to a substantial extent 2p and possibly a little more;
 - a willingness to pay question suggests, although it was asked of a smaller population, a willingness to pay an average increment of 2.9p including those "freeloaders" that Ofcom has suggested should be ignored, and 5.7p on average for those who were actually willing to suggest an increase.

³⁵ Or more strictly speaking, a decision to exit from 080

- 3.6 Furthermore it is clear that whilst the survey elicited responses from current 080 providers who may or may not leave the number range when the charging regime changes, it does not contain any response from those who are currently not users of 080 numbers but who may become so if 080 were to become free to mobile callers – such providers would clearly value free to mobile and be willing to make an appropriate out-payment to support it.
- 3.7 It is possible then to examine under varying mobile traffic proportions, what an average out-payment increase of 1.5p to 2.5p with respect to the willingness to exit question, and of 2.9p and 5.7p for the willingness to pay result would imply in terms of the level of mobile out-payment. The data in the table below shows with varying average out-payments, and with different traffic sensitivities, the implied mobile out-payment that would result in a particular average out-payment increase over the existing 0.5p.

Implied mobile out-payment at varying traffic mixes	Average out-payment increase indicated by survey outputs:						
	Willingness to exit:					Willingness to pay:	
	1.50p	1.75p	2.00p	2.25p	2.5p	2.9p	5.7p
20% mobile proportion	8.0p	9.25p	10.5p	11.75p	13.0p	15.0p	29.0p
25%	6.5p	7.5p	8.5p	9.5p	10.5p	12.1p	23.3p
30%	5.5p	6.33p	7.17p	8.0p	8.83p	10.2p	19.5p
35%	4.79p	5.5p	6.21p	6.93p	7.64p	8.79p	16.8p
40%	4.25p	4.88p	5.5p	6.13p	6.75p	7.75p	14.5p
45%	3.83p	4.39p	4.94p	5.5p	6.06p	6.94p	13.2p
50%	3.5p	4.0p	4.3p	5.0p	5.5p	6.30p	11.9p

Table 4: mobile out-payments produced at varying average out-payment increments and traffic mixes

- 3.8 Quite clearly, an overwhelming proportion of the outputs from the table suggest that a mobile out-payment at least as large as Vodafone’s view of mobile origination cost under EPMU, 5.2p, is a payment that the 080 service providers would be willing to make in exchange for free to mobile calling. The responses to the willingness to pay question, which arguably is the one more directly relevant to the issue, in fact suggest that a mobile origination out-payment that allows a higher than EPMU recovery of fixed and common costs would be acceptable to 080 service providers.
- 3.9 We see no reason therefore why from the costing and survey data, the mobile origination out-payment from 080 service providers should not be at least 5.2p.

Section 4: Vodafone calculation of the cost of mobile origination

MTR model

- 4.1 Ofcom builds its view of mobile origination costs in Annex 22 of the consultation. Its primary source for this quite rightly is the MTR work that Ofcom has previously undertaken, specifically the 2011 MTR costing model and the 2011 MTR statement. We agree that the MTR work is the best available source for this: however events on MTR have moved on slightly since the NGC consultation was published in April 2012, in that the CAT in May gave its verdict on various MTR appeals that arose from the MTR statement. This has two points of relevance to the current consultation:
- A revised version of the MTR model has been arrived at that gives a slightly lower MTR cost from the 2011 version of the model. It is the outputs from this revised model that have been used to drive the current MTR charge control. For the sake of consistency, this edition of the model should be used instead of the now superseded 2011 version.
 - The CAT has modified the MTR charge control (and Ofcom has implemented this change) so that from April 2013 MTR does not recover any element of fixed and common costs. This needs to be taken into account in the calculation of the costs of origination.
- 4.2 This somewhat changes the necessary approach to the use of the MTR model for deriving a cost of mobile origination. Since MTR has been determined by regulation to be the last increment, and one that recovers only incremental costs from April 2013, the starting point for mobile origination cost assessment in 2013/14 that Ofcom attempts in Annex 22 must be from a model where MTR traffic volumes have already been removed.
- 4.3 There cannot be two last increments, and so consideration of the pure LRIC of origination must be at best the penultimate increment of the model, not the last increment. Furthermore if MTR traffic is deemed to make no contribution to fixed and common costs, then it is axiomatic that on the EMPU basis adopted in Annex 22 all other services must recover a greater proportion of such costs than they otherwise would.
- 4.4 Ofcom in Annex 22 suggests that the effect of making MTR a pure LRIC only recovery would lead to an increase in the LRIC+ of call origination of 0.3p over and above the values that it tables, but that this increase should somehow not necessarily be added to the LRIC+ of call origination. With the decision of the CAT this is no longer a valid argument. Given the CAT's decision, there is no need now to consider this 0.3p "uplift" to be an over-weighted LRIC+ of call origination. Since the decision has been made that MTR will not recover any fixed and common costs from April 2013, it follows that all remaining mobile services must recover the total of fixed and common costs, not the total less some notional deduction for the fixed and common costs that used to relate to

termination. Any calculation of LRIC+ costs for the remaining services, whether in relation to network costs or total operator costs must therefore naturally and logically exclude any recovery of fixed and common costs (either network or retail) from MTR services.

- 4.5 Fortunately this is mechanically relatively easy to accomplish in the MTR model with minimal adjustment. Very simply, the model can be run with no termination traffic. Given that such traffic can attract, as is deemed by regulation, only its own incremental costs, and is also considered to be the last increment, running the model without termination traffic then permits identification of the network costs of all other mobile services, to enable the model to calculate their costs either including fixed and common cost recoveries or on an incremental basis (as the penultimate increment).
- 4.6 As a first step, the starting point must be the 2012 version of the model accepted by the CAT (including the CC’s RQ3 adjustments). This is the scenario characterised by Ofcom in its email to the CC dated 8th February 2012 as model run 1, “*closely aligning GBV with the 2011 Cost Model GBV and using opex from the 17 January model (including RQ3 adjustments and subsequent recalibration)*”. This version of the model, as Ofcom’s accompanying spreadsheet shows produces the following outputs for MTR³⁶:

	2011/12	2012/13	2013/14	2014/15
Pure LRIC	0.6800	0.6625	0.6871	0.6693
LRIC+	1.8375	1.7347	1.6370	1.5926

Table 5: MTR outputs from the MTR model, as used in the charge control

- 4.7 These outputs were then used by Ofcom to set the MTR LRIC charge control targets for 2013/14 of 0.69p and 2014/15 of 0.67p, in the 2008/09 prices that are used by the model. This version of the model needs only minor adjustment to produce the various outputs that are necessary for mobile origination costs i.e.:
- Network LRIC+; and
 - Network and retail LRIC+, with and without A&R.

Network LRIC+

- 4.8 As above, the principal necessary adjustment arising from the decision that MTR services should not recover any fixed and common costs, but only their own incremental costs, is to eliminate MTR traffic before attempting any run of the model to identify the cost of mobile voice origination. This can be straightforwardly done as follows:

³⁶ The version of the model that will produce this particular output has not actually been released by Ofcom, but it is straightforward to modify the released MTR model to allow it to run with these specific assumptions and generate this particular output.

In the traffic workbook, on the sheet entitled traffic forecast, in the section “total demand calculation”, in the table described as total before pure LRIC adjustment, the rows “2G incoming voice call” and “3G incoming voice call”, the values can be set to be zero, either on a permanent basis, or as an optional adjustment for the model runs that exclude MTR. Having made this adjustment, the model can be selected to be run in LRIC+ mode, to derive network LRIC+ outputs for all services excluding termination.

- 4.9 The result for 2013/14, when weighted for 2G and 3G outputs, is 1.8404p in 2008/09 prices. (This total includes a recovery of network administration costs.) Given that the model excludes termination traffic, it is thus in this scenario recovering network fixed and common costs across all services other than termination, in the approximation to LRIC + EPMU that is employed by the model.

Retail or CARS costs

- 4.10 The other element of mobile origination cost that Ofcom examines is the retail cost of supplying mobile services, characterised as customer acquisition, retention and service, or CARS costs. In table A22.6 a cost of 2.38p per minute is quoted. The basis of this calculation by Ofcom however is incorrect. Ofcom states in A22.7 that *“using data provided by the largest mobile OCPs as part of a data request submitted in 2009, we have estimated that a “typical” model operator has CARS costs of £1,508m (2009 prices). Uplifting this to 2011/12 prices gives a total average CARS cost of £1,602m for a mobile OCP.”*
- 4.11 This cost however differs from that employed by Ofcom in the April 2010 MTR consultation and the March 2011 MTR statement which both also reported on the results of the same data request. The CARS cost for the average mobile operator was sought from operators and then applied in these documents for the purpose of identifying the size of the network administration costs (as a proportion of total administration costs). In table 16 of Annex 8 of the April 2010 consultation a CARS cost of £1,827m in 2008/9 prices is quoted. In table A9.6³⁷ of the March 2011 statement a CARS cost of £1,846m including an attributable fixed asset cost is used to derive the size of the network administration costs. These costs are rather higher than the £1,508m cited by Ofcom in the present consultation (a number that was not used in the MTR statement but apparently is derived from the same common source; namely operator responses to a common statutory information request).
- 4.12 It is not clear why Ofcom has chosen to use a lower value from the one it supplied in the MTR statement. The most plausible explanation is that Ofcom has somehow included the costs of H3G to derive a lower industry operator average, but this cannot be correct. The MTR model specifically does not include H3G’s market share of customers, traffic or costs in deriving an MTR cost. In attempting to recover CARS costs on an EMPU basis using the MTR

³⁷ At letter O of the Statement table

model to split the cost between services, it must be right to derive a cost per minute using the average CARS cost of the 2G/3G MNOs that are actually modelled in the MTR model, as in the March 2011 statement.

- 4.13 There is a further missing element in the mobile operator's cost stack of CARS costs. The purpose of table A9.6 of the MTR statement (and the reason why the MTR analysis needed CARS costs in the first place) is to identify the proportion of administration costs that relate to network activities, in order to assemble the network LRIC+ cost of MTR, since this includes network administration costs. It can be seen that the methodology adopted in table A9.6 is to split the total of administration costs, £421m³⁸, by the relative proportion that network costs bear to the total of network and CARS costs. In other words, the balance of the £421m that is not network administration cost (£421m - £170m or £251m) is considered by Ofcom to be CARS administration cost. It follows therefore that this residual component of the £421m, i.e. £251m of retail administration costs needs to be added to the £1,846m CARS costs to arrive at the total CARS plus related administration costs that must be recovered from traffic services. If this is not done, the £251m becomes a stranded cost that is not being recovered from any service. One can see in Annex 22 that whilst Ofcom have allocated the network proportion of the administration costs to network LRIC+ (table A22.5 quotes a total of £181m, which is presumably the £170m above in 2011/12 prices) the CARS proportion of the administration costs has not been accounted for, and is thus not being recovered at all against mobile services in Ofcom's calculations. This is clearly an error. The appropriate CARS number to use for cost recovery in the model is thus £1,846m plus £251m or £2,097m.
- 4.14 Given that the model already allocates network administration costs on an EPMU basis it is no problem to adjust it to additionally allocate CARS costs on the same basis, merely by adding the £2,097m CARS cost total (which is already expressed in 2008/09 terms) into the administration calculation. The result of this yields a network LRIC+ combined with full CARS recovery of 4.4786p.

Disaggregation of CARS costs

- 4.15 Ofcom then in table A22.4 disaggregates CARS costs into two categories, A&R costs, which it estimates to be 65% of the total, and the rest, which it terms customer service costs and other CARS costs. It reports a total of £1,057m of A&R costs, and thus the balance is £545m. Applying this same proportionate split to the corrected total of £2,097m gives the following results:

³⁸ At letter Q of the table

	Ofcom total	Pro-rata corrected version
A&R costs	£1,057m	£1,384m
Customer service costs:		
Billing	£42m	£55m
Bad debt	£42m	£55m
Customer care	£152m	£199m
Sub total	£236m	£309m
Other CARS	£309m	£404m
Total of non A&R costs	£545m	£713m
Total CARS costs	£1,602m	£2,097m

Table 6: CARS costs disaggregated

4.16 The purpose of this disaggregation is to establish several different measures of less than full EPMU cost recovery used by Ofcom in its analysis:

- Network LRIC+ combined with CARS on an EPMU basis but excluding all A&R;
- Network LRIC+ plus CARs on an EMPU basis but with only 50% A&R.

4.17 It is thus necessary to calculate further intermediate outputs from the model:

- Network LRIC+ with customer service and other CARS costs – this gives a relevant CARS cost of £713m as per the table above. When this CARS cost is input into the model an output of 2.7374p in 2013/14 is obtained.
- Network LRIC+ with customer service and other CARS costs plus 50% A&R costs – this gives a CARS cost of £1,405m. This gives an output of 3.6080p.

Network and retail Pure LRIC

4.18 We note that the assessed level of the pure LRIC output plays little part in the evaluation of the level of the mobile origination out-payment: in fact Ofcom's floor for cost recovery is the LRIC+ excluding A&R, which Ofcom believes to be 2.3p. Clearly the LRIC cost is somewhere below the level of LRIC+, but the determination of exactly where is not particularly relevant to the decision on the level of the out-payment. We have therefore not attempted to provide a view of the LRIC of call origination (though we would expect that the cost is above the level suggested by Ofcom) particularly since:

- it is not clear that the MTR model is suitable for production of a reliable network cost of the penultimate increment;
- satisfactorily identifying the level of CARS costs that are incremental to a particular service would be a complex exercise; and
- if one considers that it is appropriate that neither outbound nor inbound voice services should be allowed to recover fixed and common costs, then

there are not many mobile services left to recover such costs. Given that it is clearly not reasonable to consider more than one service as the last increment, and that the regulatory determination has been that MTR has to be the last increment, it is obvious that further incremental slicing away of the cost base in an attempt to state that other services as well as MTR should be considered to be restricted to incremental cost recovery only is going to leave fixed and common costs (which in relation to network costs alone are more than 50% of the total) to be either recovered from progressively fewer services, requiring a considerable shift in cost recovery structures, or else not recovered at all.

Conversion to current prices

- 4.19 The model outputs above are expressed in 2008/09 prices. The final stage of the cost calculation is to re-express these in the prices of the relevant year. The formulation that Ofcom uses is curiously of 2013/14 costs in 2011/12 prices. The use of 2013/14 costs is explained in A22.58:

“all cost estimates relate to the year 2013/14 since any changes to 080 and 0500 may not be introduced until 12 or 18 months after our final statement. However these cost estimates are expressed in current (2011/12) prices since these are likely to be more intuitive for stakeholders to understand and comment on.”

- 4.20 Whilst we understand in theory the use of 2011/12 prices in any survey of stakeholders (though the consultation was actually published in the 2012/13 year), in any assessment of the costs of mobile call origination that might be appropriate to use in 2013/14 it must be rational to consider the 2013/14 costs in 2013/14 prices. The alternative might be to consider the rather higher 2012/13 costs in 2012/13 prices.
- 4.21 Conversion of the 2008/09 prices into 2013/14 prices is straightforward, using the RPI conversion built into the MTR statement. This gives the following calculation: RPI 2008/09 to 2012/13 = 13.5%³⁹, and with the Ofcom assumed RPI (in the MTR statement) for 2013/14 of 2.5% the cumulative result is an RPI uplift of 16.35%.

Results

- 4.22 The outputs from the model reported by Vodafone can be adjusted by this RPI uplift and the results tabulated as below:

³⁹ From table 20 of the consumer prices indices for April 2012 from the Office for National Statistics online site, the starting point of Dec-07 was 210.9 and the closing point of Dec-11 was 239.4. $(239.4-210.9)/210.9 = 13.514\%$ uplift

In ppm	Model output in 2008/09 prices	Model output in 2013/14 prices
Network LRIC+ no CARS	1.8404p	2.14p
Ofcom “LRIC+ no A&R” i.e. network LRIC with customer service + other CARS	2.7374p	3.18p
Ofcom LRIC+ with 50% A&R	3.6080p	4.20p
Ofcom LRIC+ with 100% A&R i.e. full CARS	4.4786p	5.21p

Table 7: conversion of Vodafone outputs to 2013/14 prices

- 4.23 By “Ofcom LRIC+ no A&R” and similar descriptions in this table we refer to outputs produced by Vodafone using Ofcom’s methodology for LRIC+.
- 4.24 Finally these Vodafone generated costs can be contrasted with those provided by Ofcom in table A22.8:

In ppm	Ofcom output ⁴⁰	Vodafone output in 2013/14 prices
Ofcom LRIC+ no A&R	2.3p	3.2p
Ofcom LRIC+ with 50% A&R	3.1p	4.2p
Ofcom LRIC+ with 100% A&R i.e. full CARS	3.9p	5.2p

Table 8: comparison of Ofcom and Vodafone 2013/14 origination costs

- 4.25 We have not shown any results for the “LRIC differential” method that Ofcom suggests gives a cost of 1.1p to 1.2p since we frankly cannot understand how this method might serve to identify a plausible measure of the cost of mobile origination, given the very different cost structures of fixed and mobile operation acknowledged by Ofcom.

Section 5: 080 service providers’ willingness to pay an increased out-payment for mobile free to caller

- 5.1 Ofcom has presented some useful evidence from survey data on what it believes service providers may be willing to pay as a higher out-payment. We welcome the efforts Ofcom has gone to on this matter.
- 5.2 There are inherent difficulties in carrying out such a survey – apart from the obvious reluctance for service providers to want to pay more, if at any stage and for any reason service providers believe that their response will contribute to Ofcom’s assessment of the level of out-payment then there is a very great risk that any response will be coloured by this. The survey data that Ofcom has

⁴⁰ Converting these 2013/14 costs in 2011/12 prices into 2013/14 prices would give: LRIC+ no A&R = 2.5p rather than 2.3p, LRIC+ with 50% A&R = 3.3p rather than 3.1p, LRIC+ with 100% A&R = 4.2p rather than 3.9p

obtained can therefore be the last survey that can be usefully conducted. The present consultation makes very clear the importance Ofcom is attaching to surveys of willingness to pay – it is unlikely therefore that service providers or resellers will now be unaware of this point.

- 5.3 In essence Ofcom’s view of service provider willingness to pay is that at somewhere between a 1.0p and a 1.5p incremental average out-payment cost there is a drop-off of service provider willingness to pay, and that therefore its preferred range of 2.5p to 3p for the mobile out-payment is appropriate:

“The results ... suggest that even fairly low mobile origination payments (1.5-1.75ppm) are likely to result in a reasonable minority of SPs getting rid of their free to caller number(s). Beyond this point, the incremental impact on availability seems limited until a threshold a little above the 2.5-3.0ppm level is reached. From that point onwards, SPs’ responses suggest that higher origination payments would result in a steady decline in availability.”⁴¹

- 5.4 As discussed in section 3 above, in any case a 3p mobile out-payment at a lower mobile traffic proportion than 40-50% will give an incremental average out-payment some distance below the 1.5p level. For example at 35% mobile traffic, a 3p mobile out-payment represents only an average incremental 0.88p, and the mid-point of Ofcom’s 1p to 1.5p range, an average out-payment increase of 1.25p represents just over a 4p mobile out-payment at 35% mobile traffic proportion. Ofcom’s own interpretation of the survey results could thus easily support a higher mobile out-payment than 3p. In fact only at the highest Ofcom forecast of the mobile traffic proportion (50%) and at the lower end of the average out-payment increase range from the survey (1p to 1.25p) is Ofcom’s 2.5p to 3.0p mobile out-payment actually the maximum level of willingness to pay indicated by Ofcom’s take on the survey results.
- 5.5 Ofcom’s application of the survey results is thus very conservative with respect to the potential size of the mobile out-payment. But rather more importantly, the evidence provided on willingness to pay is in any case somewhat more limited and ambiguous than Ofcom suggests.
- 5.6 A more detailed view of the survey data suggests in fact that respondents who are willing to embrace Ofcom’s vision of free to all callers are in fact willing to pay more than the average increment that is suggested by Ofcom.

Analysis of the survey data

- 5.7 We see several key issues with the initial interpretation of the survey responses:

- The current population of 080 service providers will no doubt in the large majority have adopted an 080 number in the present charging regime, that is free to fixed caller, but is charged to mobile caller since the service

⁴¹ Consultation at A23.65

provider out-payment does not cover the costs of mobile origination. Some providers will not want this regime to change in that either they are happy that mobile consumers pay for 080 calls, or they do not attach any value to users of their 080 number to call from a mobile free of charge (or, even if they claim to value such a change, remain ostensibly unwilling to pay for it). But it is inherent in Ofcom's vision that the charging regime will change, with a higher mobile out-payment. Whilst it is obviously reasonable to take into account the views of existing service providers who do not wish a change in deciding whether such a change is supported, it is not appropriate to take account of their views on the level of the future mobile out-payment once the decision to make a change has been made. Such service providers will be exiting because of the changed charging arrangements, not because of the level of the new charge – the survey evidence clearly brings this out.

- Inevitably excluded from the surveyed population will have been potential 080 service providers who are not currently using the number range because of the fact that it is not free to mobile. These future users can be expected to adopt 080 as a result of Ofcom's change, and given their circumstances of valuing free to mobile caller can be expected to be willing to pay for a higher mobile out-payment. The extent to which these "joiners" will outweigh the "leavers" is unknown – but at the least this emphasises the point that little or no weight should be attached to the willingness to pay of those who do not value Ofcom's vision of free to all caller with a higher mobile out-payment.

In reality the service provider out-payment, or in the case of other 08 numbers the service provider in-payment, may be a small proportion of the total cost of providing the service that lies behind the non-geographic number. In the context of a sales enquiry line, the service that the service provider may be providing is at least approximately equivalent to a call centre, so the overall level of the cost of service provision is likely to be roughly similar to this. It may in fact be rather more expensive if specialised knowledge of particular service provider products is required, so the 080 number may have to be supported by more expensive staff than in the average call centre, or by more sophisticated software, or the call may trigger further costs.

The current 0.5p out-payment made by the service provider will therefore have virtually no material impact on the real costs of the service provider in supporting the service behind the 080 number. This places in a much more understandable light a comment made by Analysis Mason in their research for the first consultation:

“the reasons for selecting specific number ranges focus mainly on the perception of the IP (size, physical location, national reach, etc.) that is

*created by using a specific number range, rather than any specific cost implications*⁴².

So merely for illustrative purposes if one assumes that the total cost of supplying the service behind an 080 number were to be 50p per minute⁴³, an increase in the average out-payment from 0.5p to 2.5p is not really a fivefold increase in cost but merely 4% from 50p to 52p. Providing the service provider is obtaining a benefit from its service when it is costing 50p a minute, it makes it relatively unlikely that an increase from 50p to 52p (for whatever reason) will really lead to a radical shift in behaviour for a large proportion of service providers, but particularly so given the likely benefit that will arise to the service provider from the change to free to mobile caller.

Obviously however in any survey response the service provider is naturally quite likely to express a preference for a service that costs 50p rather than 52p, particularly if there is any expectation that their opinion might impact the final outcome.

- Individuals at service providers (not necessarily the decision maker) were, in effect, being asked off the cuff a complex question concerning the level of future average out-payment that required an implicit but immediate estimation of a future mobile call proportion to derive an average out-payment cost and to balance this against a no doubt unknown and subjective estimation of the benefit of mobile free to caller in the particular circumstances of the 080 provider. Given the difficulty of answering this question in such circumstances, and a natural inclination towards the free lunch, it is striking how many survey respondents nevertheless suggested they were willing to pay a reasonable sum.
- Under Ofcom's preferred outcome, service providers will only face a cost increase as their mobile proportion of origination rises: as we have discussed, the increase in this proportion will vary individually by 080 number, will probably grow slowly over time, and will not be entirely predictable. All these factors suggest the likelihood that many service providers will, rather than immediately exit in the expectation of a particular final cost, adopt a wait and see position before deciding whether to exit or not when the long-run cost change becomes clear (also allowing time for a better evaluation of the benefits of free to mobile 080 calling). Such a delayed reaction allows for more time to not only evaluate but also accept the change, reducing the likelihood of early exit.

⁴² Page 2 of the report, Vodafone emphasis

⁴³ For example assuming a service agent employment cost of £19k, 100% overheads and on-cost, 220 effective working days a year, a 7 hour day, and 80% call occupancy gives 51p per minute

- The Analysys Mason anecdotal survey evidence from the first consultation contains some useful insights, including that the most common uses for 080 are sales enquiries and customer services⁴⁴.

“This result for the 080 range could be expected, as IPs will be willing to incur the greater cost of providing free call access to their services if they expect to derive revenues as a result of the services provided.”

Also:

“0800 is mainly used for marketing purposes – as a way to encourage prospective customers to make an enquiry with many small businesses using it, since consumers are more likely to call a freephone number. Although there is a charge to have an 0800 number, one respondent stated the main advantage of this range is that it is the single range that is universally recognised by the public, specifically for its zero cost.”⁴⁵

The report also provides some data on attitudes to an out-payment increase in exchange for free to caller provision:

“The following points were made regarding specific client types:

- *call centres – may not be affected, if the cost can be absorbed into their marketing budget; technical support may move onto chargeable NGN ranges;*
- *sales lines – it is to their advantage to receive more calls and so make more sales, even if they have to pay 5p per minute extra, so they will carry on using these numbers;*
- *public sector – would be in favour of the idea, as long as they have the budget;*
- *charities – most do not use 0800 numbers and would be unwilling to increase their costs”*

Taken together these insights suggest a high valuation of the 080 number by some providers, and a relative indifference to the absolute level of cost of the out-payment by many service providers.

Interpretation of Ofcom evidence on service providers' preferences

5.8 Ofcom identifies in Q23.58 that two different questions were asked:

“In the 2011 SPs survey we asked respondents with 080 numbers to state their willingness to pay in return for 080 being made to free to caller. We also asked how large an increase in costs 080 SPs would be willing to bear before they got rid of free to caller numbers.”

⁴⁴ At page 14 of the report

⁴⁵ Page 25 of the report

5.9 Ofcom pays most attention to the latter question, and it is thus this which we examine first: however we believe there are significant insights that can be obtained from the willingness to pay question, which is obviously more oriented to the specific issue at hand.

Willingness to exit

5.10 This question was asked of all 080 service providers:

“If your freephone number(s) were made completely free to all callers and the amount you currently pay per minute for those calls was increased, how likely would you be to get rid of your freephone number(s)?”

Respondents were asked about increases of 0.5ppm, 1ppm, 1.5ppm and 2ppm⁴⁶.

5.11 As we discussed above this is a really difficult question to attempt to answer on an off the cuff basis. It would require a relatively complex cost benefit analysis as well as certainty of the unknown final cost impact to inform any such exit decision, so all results from it must be treated with some caution.

5.12 But it must be pointed out that the question is not totally addressing the underlying reality that Ofcom is considering, since the question as posed is strictly incorrect⁴⁷.

5.13 The reported results are as follows:

Increase in out-payment	0.5p	1.0p	1.5p	2p
Resulting average out-payment	1.0p	1.5p	2.0p	2.5p
Likelihood of exit:				
Very likely	8%	11%	18%	24%
Fairly likely	10%	7%	10%	12%
Unsure	10%	13%	14%	15%
Fairly unlikely	16%	24%	19%	15%
Very unlikely	55%	44%	38%	34%

Table 9: Ofcom willingness to exit survey results

5.14 Ofcom has chosen to sum the very likely and fairly likely category into a result reported as “net likely”. There is obviously always a risk that including the “fairly” as well as the “very” overstates the intention to act: any general concern

⁴⁶ Footnote 134 of Section C Annexes

⁴⁷ It suggests that in order to achieve free to mobile calling, all out-payments will rise, including those paid to fixed originators. This is clearly not what is intended by Ofcom, but responses from service providers may well have been coloured by this, as well as by the absence of any suggestion that the rise in mobile out-payment is to cover the higher costs of mobile origination. Vodafone considers that had the question been asked in a more neutral manner, the degree of willingness to exit from the respondents might have been rather less.

on the reliability of questions of this nature to indicate real future action in a complicated situation is reinforced where the cost based reason for any increase has not been explained, and what is being suggested, i.e. exit from the present number is in itself not necessarily a cost-free action.

- 5.15 Looking at the results themselves, what Vodafone finds striking is that using Ofcom's measure of combining "very likely" with "fairly likely" the survey suggests that the same proportion of respondents (18% or 19%) would exit at a 1p increase as at a 0.5p increase, i.e. to put it another way all those who are willing to pay something (the large majority of respondents) are willing to pay in excess of 1p more, but that 19% of respondents are unwilling to accept any change in cost.
- 5.16 Vodafone would suggest that the small apparent hard-core of opposition to any increase indicated by the survey are those in the categories suggested above, i.e. those who see no benefit to extending free to caller to mobile origination and are thus unwilling to consider an increase in costs (although they might give a different view if the reason for the increase were explained) or in the alternative do see a benefit but do not want to pay for it. It is clear, however, that those who are not willing to embrace Ofcom's vision of free to all callers will most likely not be using 080 in the future, so their decision to exit is not really relevant to the consideration of how much those who wish to remain with the reshaped 080 are willing to pay.
- 5.17 This point is not uniquely made by Vodafone. In the December 2010 consultation, at paragraphs 6.134 and 6.135 Ofcom said:

"We recognise therefore, that while overall some SPs will be able to absorb higher origination payments, others will not be able to. To this extent, we would expect that some services on 080 would be withdrawn and those SPs would either choose to migrate the service to another number range or choose not to provide the service at all.

This is not necessarily an adverse outcome. At the moment, the cost of operating an 080 number for SPs, to some extent, reflects the lack of consumer transparency about the prices. As such, albeit implicitly, many SPs may be free-riding on the Freephone concept in terms of termination payments. As stated at the outset, our central aim in this review is to put the consumer interest at the heart of NGCs policy. If addressing the problem of pricing transparency leads to SPs migrating from the range, then this might well be the appropriate outcome to achieve a numbering scheme that works well for users."

- 5.18 The logic of this conclusion is that it is appropriate to exclude from the survey results those "Freephone free-riders" who will exit anyway, since their views should not be used to colour the willingness to pay of those who embrace Ofcom's suggested charging methodology and are prepared to increase their out-payment.

- 5.19 If we then remove the bottom 19% of the respondents from the responses, the survey results when rebased to 100% for the remaining service providers would appear to look something like this⁴⁸:

Increase in out-payment	0.5p	1.0p	1.5p	2p
Resulting average out-payment	1.0p	1.5p	2.0p	2.5p
Likelihood of exit:				
Very likely	N/A	N/A	6%	10%
Fairly likely	N/A	N/A	7%	10%
Unsure	12%	16%	17%	19%
Fairly unlikely	20%	30%	23%	19%
Very unlikely	68%	54%	47%	42%

Table 10: willingness to exit survey results - adjusted

- 5.20 It is perhaps unfortunate that this question did not seek answers above a 2p increment, since after removing the 19% of dissenters, there is not really a significant drop-off of service providers between the three data points of 1.0p, 1.5p and 2p.
- 5.21 These results would thus suggest that very few (13% including both “very” and “fairly” likely) of the engaged respondents are unwilling to pay an increase of 1.5p or less and only 20% are apparently unwilling to pay an increase of 2.0p. This does not on the face of it rule out an out-payment increment of 2p or more, so a range of 1.5p to 2.5p increase may be considered not out of the question from these limited survey results. The conclusion accords fairly well with the results from the question asked in the survey on willingness to pay, which also suggested a willingness to pay a reasonable increase.

Willingness to pay

- 5.22 Ofcom attaches very little weight to this additional survey question, but we feel that the results are worthy of consideration, particularly given that it directly bears on the relevant issue of future average out-payments.
- 5.23 For some reason information on service providers’ willingness to pay was only sought from those who felt that mobile call charges had a negative impact “on the total number of calls that you receive⁴⁹”. Ofcom explains the reason for this as “since 52% do not regard mobile call charges as a disadvantage they are unlikely to be willing to pay higher origination payments for mobile calls to be free⁵⁰”. We believe this is something of a non-sequitur. The first question was on the impact of priced mobile originated calls on the total volume of calls rather than on the call mix. It is not clear why this preliminary question was used as a

⁴⁸ Clearly there is some subjectivity in the way that this has been done – we have taken the 19% off the very likely and fairly likely categories and assumed the remainder in this group (at levels above 1p increase) are evenly distributed between the two categories

⁴⁹ Vodafone emphasis

⁵⁰ At paragraph A23.61

filter before asking about willingness to increase the out-payment in order to achieve free to mobile calling.

- 5.24 For those who were asked about their willingness to pay more, respondents were not given a range of out-payments, they were merely requested to name an incremental amount. Ofcom shows the results from this in figure 16.9 of the consultation. Unsurprisingly 29% were not able to give an answer and 35% were not willing to pay more even though they saw a benefit to them (“the free lunchers”). However 36% were able to supply a value for the increment they were willing to pay. Ofcom states in figure 16.9 that the responses indicate a mean increase in willingness to pay of 2.9p. Clearly however this includes the zero increment respondents in the calculation: excluding these, the average willingness to pay for those who were willing to pay more than zero would appear to be 5.7ppm.
- 5.25 Ofcom makes clear in table A23.4 of the consultation that this willingness to pay of 2.9p or 5.7p relates not to an increased mobile out-payment, but to the average out-payment increase.

Survey results combined

- 5.26 The two survey questions produce slightly different results:
- the willingness to exit question suggests a willingness not to exit but to pay an average out-payment increment of at least 1.5p, certainly 2p and possibly a little more;
 - The willingness to pay question suggests, although it was asked of a smaller population, a willingness to pay an average out-payment of 2.9p more than the current level including those “freeloaders” that Ofcom has suggested should be ignored, and 5.7p of those who were actually willing to suggest an increase.
- 5.27 It is possible then to examine under varying mobile traffic proportions, what these average out-payment increases would allow in terms of the mobile out-payment. The data in table 11 below shows with varying average out-payments, and with different traffic sensitivities the implied mobile out-payment that would result in a particular average out-payment increase over the existing 0.5p.

	Average out-payment increase indicated by survey outputs:						
Implied mobile out-payment at varying traffic mixes	Willingness to exit:					Willingness to pay:	
	1.50p	1.75p	2.00p	2.25p	2.5p	2.9p	5.7p
20% mobile proportion	8.0p	9.25p	10.5p	11.75p	13.0p	15.0p	29.0p
25%	6.5p	7.5p	8.5p	9.5p	10.5p	12.1p	23.3p
30%	5.5p	6.33p	7.17p	8.0p	8.83p	10.2p	19.5p
35%	4.79p	5.5p	6.21p	6.93p	7.64p	8.79p	16.8p
40%	4.25p	4.88p	5.5p	6.13p	6.75p	7.75p	14.5p
45%	3.83p	4.39p	4.94p	5.5p	6.06p	6.94p	13.2p
50%	3.5p	4.0p	4.3p	5.0p	5.5p	6.30p	11.9p

Table 11: mobile out-payments produced at varying average out-payment increments and traffic mixes

5.28 Quite clearly, an overwhelming proportion of the outputs from the table of the survey results suggest that a mobile out-payment that is at least as large as Vodafone’s view of mobile origination cost, i.e 5.2p is a payment that the 080 service providers would be willing to make in exchange for free to mobile calling. This is an important conclusion. The willingness to pay question, which arguably is more directly relevant to the issue, in fact suggests that a mobile origination out-payment that allows a higher than EPMU recovery of fixed and common costs would be acceptable to 080 service providers.

Annex 3: Legal analysis

Section 1: Introduction and Summary

- 1.1 Vodafone welcomes the fact that Ofcom has sought in its Consultation Document to assess the scope of its legal powers in relation to non-geographic call services and determine that its proposed course of regulatory intervention has a secure legal foundation. We also note that Ofcom has indicated that it intends to conduct a separate consultation in respect of the legal instruments to be adopted to give effect to its proposed policy.⁵¹ Vodafone recognises that Ofcom’s legal analysis is has not yet been finalised. However, since Ofcom is inviting views as part of the current consultation we wish, at this juncture, to highlight our significant reservations about the analysis as currently presented. Were Ofcom to proceed on the basis of the approach described in the Consultation Document, there is a clear risk that any final statement would be incompatible with the principles and objectives of the pan-European common regulatory framework (the “CRF”) to which Ofcom must adhere when performing its duties.
- 1.2 Specifically, we would query Ofcom’s apparent view that its powers are targeted at and primarily enable direct imposition of retail price controls upon originating operators. As can be seen most clearly in the case of Ofcom’s approach to the regulation 080 non-geographic call services, this legal analysis results in Ofcom concluding that it is constrained in its ability to impose the corresponding necessary regulatory obligations upon other operators in the non-geographic services value chain, namely those involved in the termination of non-geographic calls. In this case, Vodafone is concerned that Ofcom’s legal analysis will give rise to legal and regulatory uncertainty as deadlock and disputes occur over the terms of interconnection between originating and terminating operators.
- 1.3 In our analysis below, we consider firstly how the provisions of the CRF relating to the regulation of numbering should be construed against the wider objectives and principles laid down by the Community legislature relating to the regulation of the communications industry across the EU. We then consider the validity of the preliminary view expressed by Ofcom that the specific provisions of the CRF (the Authorisation Directive) and the applicable UK domestic legislation might enable the imposition of retail price controls upon an originating operator even where there is no finding that a market is not effectively competitive.
- 1.4 Our examination of the provisions of the relevant legal framework and its application to the provision of the non-geographic call services demonstrates that it is unnecessary to form such forthright (and contentious) conclusions to

⁵¹ See Ofcom update note dated 22 May 2012 at <http://stakeholders.ofcom.org.uk/consultations/simplifying-non-geographic-no/>

enable Ofcom realise its objectives. Instead, Vodafone's analysis reveals that an alternative analytical framework can be adopted; one that would still facilitate the regulatory outcome desired by Ofcom in relation to 080 numbers and to other non-geographic number ranges. By considering the primary services provided via non-geographic number ranges, it is possible to construct a legal framework that is coherent and provides for a consistent regulatory approach across all non-geographic numbers in a way that is compatible with the overarching principles of the CRF.

Section 2: Ofcom's analysis and assumptions

2.1 As presented in the current consultation, the legal analysis upon which Ofcom relies in support of its proposed approach to the regulation of calls to non-geographic services appears to rest upon a number of core assumptions. These assumptions are set out below:

- (i) Certain provisions of the CRF can be considered on a standalone basis to provide National Regulatory Authorities ("NRAs") to impose "retail price controls" for "consumer protection" reasons. This power enables the regulation of origination charges in the retail access and origination market and is not subject to the general principle that ex ante regulation at the retail level is only possible where there is a clear finding that one or more undertakings is in a position of Significant Market Power and that measures at the wholesale level would not be sufficient to protect the position of mobile consumers;
- (ii) Such a power arises in a situation where an originating operator has a "right of use" over a particular number range. The provisions of the Universal Service Directive and the Communications Act 2003, in particular, can be construed in a way that suggests an originating operator does have a right of use over a number range;
- (iii) Collectively, these factors provide Ofcom with a putative power to impose price controls at the 'retail level', provided that Ofcom is able to demonstrate that such a course of action is consistent with the principles of proportionality and objective justification.

2.2 Relying on the above interpretation of the legal framework, Ofcom has provided for two different forms of regulation of non-geographic services. There are two distinct categories of non-geographic services that are subject to different regulatory regimes under Ofcom's proposals, namely 080 (so-called 'Freefone') services and other non-geographic services beginning with the prefix 08, 09 or 118. Ofcom intends to 'unbundle' the different constituent elements of the charge for calls to these numbers by enabling end users to distinguish in future between the origination charge levied by the originating operator and the charge levied by the Service Provider for providing the facility to an end user (e.g. a sales helpline or after-sales query call centre). However, the nature of the regulation of the access and the service charge will vary according to the number range.

- 2.3 In the case of 080 services, Ofcom has proposed the imposition of a maximum retail price of zero for the origination of calls to 080 numbers and the provision of the service to mobile consumers by Service Providers (the service charge). Such an outcome is to be achieved through a modification to the General Conditions. This obligation will be buttressed by an obligation placed upon terminating operators to purchase wholesale origination services at a “fair and reasonable” rate from originating operators that will be determined through commercial negotiations between the originating operator and the terminating operator. This objective will be realised through the imposition of an access condition upon terminating operators.
- 2.4 In the case of other non-geographic numbers beginning with the prefix 08, 09 or 118, Ofcom proposes to require that originating operators should provide consumers with a single transparent access charge for calls to all 08 and all 09 numbers. Service Providers must publicise the charge that will be levied upon consumers for making use of the particular facility supported by the 08 or 09 number range and ensure that it is recorded in any billing statements. In practice, this service charge will be levied by the terminating operator upon the originating operator and will thus be included in the total charge billed and collected by the originating operator from the end user.
- 2.5 Below, we examine Ofcom’s interpretation and application of the legal framework governing the regulation of numbers. We further consider the extent to which it is capable of providing succour to the proposed form of regulatory intervention and the corresponding legitimacy of the tools that Ofcom seeks to employ to achieve its stated policy objectives. Through this examination, we reveal that Ofcom’s legal analysis of the limits to its legal powers is unlikely to be capable of providing a sound basis for the coherent and consistent regulation of non-geographic call services.

Section 3: Vodafone’s analysis of the legal framework governing the regulation of non-geographic services

- 3.1 The correct starting point to understand the scope of Ofcom’s powers in respect of non-geographic services is neither the Communications Act 2003, nor the General Conditions nor even the National Telephone Numbering Plan. Important though these may be, what is more critical in this case are the objectives of the CRF and the specific provisions of the CRF relating to the regulation of telephone numbers since Ofcom’s powers in this realm derive from these legal provisions. Once these are properly understood, then UK domestic legislation must, as a matter of Community law, be construed so as to be consistent with the provisions of the CRF.
- 3.2 The most significant of these provisions are, as Ofcom recognises, those set out in the Framework and the Authorisation Directives. We consider these below and the extent to which they are capable of sustaining the arguments summarised in section 2 above.

No authority from the Authorisation Directive for a free-standing power to impose retail price regulation upon originating operators

- 3.3 Vodafone has previously described in some detail the objectives and principles of the CRF. In the interests of brevity, we do not repeat them at length here. However, what is clear is that competition law principles, buttressed by well-established economic concepts, are the cornerstone of ex ante regulation across the EU. Thus, regulation imposed on an ex ante basis is only permissible where markets are found not to operate effectively. Such a finding is only possible where a prospective market analysis, conducted in accordance with a methodology employed and developed in competition law jurisprudence over several decades, finds that one or more undertakings is in a position of Significant Market Power (a concept equivalent to dominance in competition law terms).⁵² Retail price regulation, for example in the form of a price control, is a measure of last resort, designed to protect consumers because one or more undertakings may be in a position to engage in exploitative or exclusionary conduct that will plainly not further the welfare of end users.⁵³ It is not by accident that this principle underpinning the approach to regulation across the EU is articulated in a legal instrument whose purpose is to govern a suite of more specific, specialist directives. These directives are clearly subordinate to the Framework Directive and must be construed in a way that is compatible with or seek to give effect to it.
- 3.4 Accordingly, if it were really the case that the Authorisation Directive provided a free-standing power outside of the CRF to regulate retail origination charges, the Community legislature would surely have been explicit in its intention to confer upon NRAs such a wide-ranging power. In this regard, Vodafone would note that in the context of the pan-European regulation harmonising the wholesale and retail international roaming pricing and of private market actors, the Community legislature made clear when introducing the legislation that it provided for a new power that was not consistent with the approach to regulation proposed by the CRF:

“The 2002 regulatory framework for electronic communications, in particular the Framework Directive, should therefore be amended to allow for a departure from the rules otherwise applicable, namely that prices for service offerings should be determined by commercial agreement in the absence of significant market power...” [emphasis added]⁵⁴

- 3.5 The Authorisation Directive and Annex C make no such claim, nor is there slightest suggestion in the germane provisions of the Directive that the Community legislature intended to confer upon NRAs the ability to regulate

⁵² Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services as amended by Directive 2009/140/EC and Regulation 544/2009, Recital 27 and Article 14(2)

⁵³ Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services as amended by Directive 2009/136/EC, Article 17(2)

⁵⁴ Regulation (EC) 717/2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC, Recital 12

retail origination charges on an entirely novel basis, distinct from that described in the Framework Directive. A simple review of the precise wording of the Authorisation Directive and its annexures is instructive; Article 6(1) of the Authorisation Directive confirms that conditions attaching to the rights of use of numbers may only be those prescribed in the Annex to the directive. Annex C, which provides for the exhaustive list of conditions that may be attached to a right to use a number, does no more than at paragraph 1 provide:

“Designation of service for which the number shall be used, including any requirements linked to the provision of that service, and for the avoidance of doubt, tariff principles that can apply in the specific number range for the purposes of ensuring consumer protection in accordance with Article 8(4)(b) of Directive 2002/21/EC (Framework Directive).”⁵⁵

3.6 The provision plainly does not stipulate that an NRA possesses a new found power to impose retail price regulation outside of the core principles governing regulation in the communications sector. Rather, what it provides is that NRAs may:

- Specify the service for which a particular number range may be used;
- Attach requirements to the provision of a service in a particular range, some of which could include tariff principles and maximum prices.

There is also no indication in any of the recitals to the Authorisation Directive that the purpose underpinning these provision was to confer upon an NRA the power to impose retail price controls in competitive retail access and call origination markets. Instead, what is clear is on the face of the wording of the directive is that the Community legislature simply wished to enable NRAs to influence the way in which some services might be supplied in certain number ranges.

3.7 Nor does Ofcom’s suggestion that the Authorisation Directive provides for the possibility of the regulation of retail origination charges under a separate head of consumer protection (somehow distinguishable from competition-related remedies justified on the basis of a finding of SMP) advance matters much further. Any attempt to distinguish between a retail price cap imposed pursuant to a ‘consumer protection’ objective and a retail price cap imposed pursuant to a competition analysis is likely to fail. This is because regulatory intervention at the retail level triggered by a ‘competition’ objective is by its very nature designed to protect consumers. As noted above in paragraph 3.3, undertakings

⁵⁵ Directive 2002/20/EC on the authorisation of electronic communications networks and services as amended by Directive 2009/140/EC, Article 6(1) and Annex C, paragraph 1

with market power are likely to be in a position where there is a risk that their conduct may adversely affect consumers (through for example the exclusion of competitors or exploitative pricing practices).

- 3.8 What therefore remains of the case advanced by Ofcom in support of its assertion that the Authorisation Directive enables the regulation of retail origination charges is that an originating operator could be deemed to have a “right of use” over non-geographic number ranges. If an originating operator were to possess such a “right of use” over a number range, it is possible, according to Ofcom’s analysis, to construe the wording of the Annex C of the Authorisation Directive in such a way as to enable the regulation of retail origination charges, through, for instance, the imposition of maximum retail origination charges for calls to specific numbers. Reinforcing this dubious line of argument is Ofcom’s reliance on the provisions of sections 58 and 56(6) of the Communications Act and Article 28(1) of the Universal Service Directive. We examine each of these arguments below.
- 3.9 Section 58(1) of the Communications Act established that general conditions may be imposed relating to the ‘allocation and adoption of numbers’ In the case of non-geographic numbers, originating operators will not be allocated number ranges (unless they are active in the termination and hosting of non-geographic services). General conditions could not therefore be imposed on originating operators where they are not the number range holder. It thus remains to be seen whether the regulation of retail origination charges is possible in the case of the ‘adoption of numbers’. Ofcom highlights specifically that the term ‘adoption of numbers’ is defined by virtue of section 56(6) to include using a number for “identifying a service or route used by that provider or by any of his customers”.
- 3.10 Ofcom proposes that the wording of section 56(6) can be applied to originating operators in the context of non-geographic call services to mean that they deemed to have ‘adopted’ the number in question. On any objective analysis, the consequences of Ofcom’s contention are highly controversial. If Ofcom’s claim were correct, it would provide it with a near unfettered right to regulate retail origination charges simply by virtue of the fact an originating operator identified a service or route for the conveyance of traffic. Given that an originating operator may ‘identify a route’ every time that it interconnects with a third party (for instance with a mobile or fixed line operator), Ofcom’s argument would, if followed to its logical conclusion, enable the regulation of retail origination charges for any calls to other mobile or fixed lines. Indeed, this is what Ofcom appears to believe when it states at paragraph 5.60 of section 5 of Part A of the Consultation Document, “we are therefore satisfied that s.58(1)(aa) does allow for retail price controls for the purpose of protecting consumers.” This proposition has no basis in the Authorisation Directive, nor in the Framework Directives. To the contrary, it tramples across a coherent and well-established regulatory framework governing the regulation of communications and, as such, must be in clear breach of the CRF.

- 3.11 Even if, contrary to Vodafone’s primary case, Ofcom’s interpretation and application of the Authorisation Directive to the regulation of non-geographic numbers were valid, this would still not enable the direct regulation of an originating operator’s retail charges. This is because the ability of the origination operator to ‘use’ or ‘adopt’ a number for the purposes of the Communications Act would be dependent on the undertaking originally allocated the number range sub-allocating the number or authorising a third party (such as an originating operator or Service Provider) to use that number range. This is clear from the provisions of General Condition 17 governing the allocation of numbers pursuant to the aforementioned section 58 of the Communications Act:

“17.1 A Communications Provider shall not Adopt Telephone Numbers from the National Telephone Numbering Plan unless: (a) the Telephone Numbers have been Allocated to the Communications Provider; or (b) the Communications Provider has been authorised (either directly or indirectly) to Adopt those Telephone Numbers by the person Allocated those Telephone Numbers.” [emphasis added]

The clear corollary of the terms of General Condition 17.1 is that general conditions (and specific requirements contained therein) must first attach to the number range holder before any further appropriate obligations could be passed through to the undertakings granted permission to use the number range. This is logical given that the number rangeholder (to whom the number has been allocated) will be subject to the obligations contained in the General Condition in the first instance.

- 3.12 Thus, in the case of non-geographic numbers, the terminating operator could potentially, pursuant to the terms of General Condition 17.1, permit (through the provision of interconnection to originating operators and hosting of number ranges for Service Providers) both the Originating Operator and the Service Provider to ‘adopt’ the non-geographic numbers in question to provide two distinct services to subscribers: (i) the ability to call a particular number range as part of a retail access and call origination basket of services; and (ii) the provision of a facility to subscribers (a helpline or sales call centre for example). We describe in further detail in section 4 how this analysis would support the adoption of a regulatory mechanism that would enable the origination charge and the service charge in the 080 number range to be zero-rated in a way that would still be consistent with the guiding principles of the framework and achieve Ofcom’s policy objective (assuming that policy objective were capable of objective justification, something that is not considered in this analysis).
- 3.13 For completeness, we examine the last of Ofcom’s contentions, namely the proposition that the ability of an NRA, by virtue of the terms of Article 28(1) of the Universal Service Directive (the “USD”), to ensure that end-users can access number ranges is indicative of a right on the part of the originating

operator to 'use' the number ranges concerned. This is, with respect, a complete non sequitur and reflects a misunderstanding of how an end-user might be able to access a number and the parties involved in facilitating that access to a number. Originating Operators plainly have no more of a right to use or access a number range unless the number range holder has facilitated that access through an interconnection agreement. This is entirely consistent with the provisions of General Condition 17.1 described above, which envisages that an undertaking could only 'adopt' a number if the original number range holder has facilitated or permitted its use. Accordingly, if an NRA wished to guarantee that access on the part of the end user, any obligations would first need to be attached to the number range holder to ensure that the originating operator is able to interconnect and enable its subscribers to call those numbers. Absent such an access obligation, an originating operator required by an NRA to enable its subscribers to call a particular number range would be in the invidious position of seeking to enable access for its end user customers with no certainty that it could actually comply with that obligation because it has no right to use the number range without the acquiescence of the Terminating Operator.

- 3.14 This last point reveals an incoherence in Ofcom's preliminary approach. This incoherence manifests itself further in the regulatory mechanism that Ofcom proposes to adopt to secure its policy objectives in relation to the 0800 number range. To achieve its objective of a zero-rated origination and service charge for 0800 numbers, Ofcom proposes the imposition of obligations upon an originating operator to zero-rate calls to 0800 numbers and supply wholesale origination services to a terminating operator on terms that are to be agreed commercially. This form of regulatory intervention flows directly from Ofcom's apparent belief that Annex C of the Authorisation Directive and the provisions of the UK domestic legislation (transposing the Directive) apply primarily to originating operators rather than Terminating Operators. Ofcom justifies this claim on the basis that such an interpretation of the relevant legislation is more likely to be consistent with the promotion of a consumer protection objective. We explain below why this argument is not sustainable both from the perspective of commercial reality and also more rigorous scrutiny of the Authorisation Directive.
- 3.15 As has been described above, an originating operator does not, as a simple matter of commercial reality, supply origination services to a terminating operator using non-geographic number ranges. It is simply not in a position to offer a 'wholesale origination service' as contemplated by Ofcom. Rather, an originating operator must secure interconnection terms to enable subscribers to call or access a non-geographic number. If anything, terminating operators holding non-geographic number ranges display all the characteristics of unavoidable trading partners for originating operators. In this context, Ofcom will be entirely familiar with recent disputes (and ensuing litigation) between a number of mobile operators and about the charging arrangements imposed unilaterally by BT for the termination of 080, 0845 and 0870 calls. These

disputes have demonstrated the limited bargaining power enjoyed by the originating operator in relation to the terminating operator; as Vodafone has previously advised Ofcom, an originating operator cannot simply avoid or elect not to interconnect with a terminating operator in respect of non-geographic number ranges.

3.16 Thus, an obligation on the originating operator to supply wholesale origination services on terms to be commercially agreed simply does not reflect the commercial reality of interconnection. The consequence of this failure to give appropriate consideration to the commercial context in which non-geographic call services operate is that Ofcom's chosen regulatory mechanism under contemplation is unlikely to deliver an efficient outcome; there is a clear risk that the originating operator would be unable to secure commercial agreement over the terms of this theoretical "wholesale origination service" that enabled it to recover its costs of origination since the parties to such an agreement are likely to have divergent views as to the appropriate level of such a rate. Accordingly, Vodafone has doubts that Ofcom is able to satisfy itself that this particular access condition would meet the criteria stipulated by the Communications Act when Ofcom imposes such an access condition.⁵⁶ Indeed, if Ofcom's analysis of the legal framework were correct, then any retail price controls must be accompanied by price regulation in respect of interconnection agreements to avoid the risk of originating operators facing the possibility of supplying origination below cost. The need for corresponding 'wholesale' measures to accompany retail regulation has been recognised previously by the European Commission in its regulation of retail and wholesale international roaming charges.⁵⁷

3.17 Yet, curiously, Ofcom declares itself to be hamstrung in this regard because such action would be at the 'wholesale' level and as such does not promote consumer protection. Accordingly, 'wholesale' regulation is not consistent with or does not give effect to the provisions of Annex C of the Authorisation Directive. With respect, this argument is not credible when considering that Ofcom is proposing to impose an access condition upon an originating operator to provide wholesale origination services to terminating operators. That ability to impose such access conditions flows from the provisions of Article 6(1) and Annex A, paragraph 3 of the Authorisation Directive which provide that an NRA can attach conditions to the use of numbers governing interoperability and interconnection of networks. That Ofcom considers itself unable to adopt

⁵⁶ Specifically, Vodafone considers that this access condition would not be compatible with section 73(2)(a) of the Communications Act, which provides that access conditions should "secure efficiency on the part of communications providers and persons making associated facilities available".

⁵⁷ In its impact assessment assessing various policy options for the regulation of international roaming, the Commission explicitly ruled out retail regulation without corresponding wholesale intervention on the grounds that "Intervening only at a retail level could mean that some operators might be forced to offer roaming services below cost." Impact Assessment of Policy Options in relation to a Commission Proposal for a Regulation of the European Parliament and of the Council on Roaming on Public Mobile Networks within the Community {COM(2006) 382 final} {SEC(2006) 925} 12 July 2006, p.5

measures to govern the terms of interconnection is a direct consequence of its misconstruction of the legal framework for the provision of non-geographic services.

- 3.18 Fortunately there is a very simple solution to this apparent conundrum. The starting point is to consider the simple commercial reality of the way in which non-geographic services are actually provided to end users. In so doing, we reveal that once the provisions of the Authorisation Directive are interpreted in the light of this commercial context, it is feasible and indeed straightforward to fashion an appropriate regulatory solution that achieves Ofcom's policy objectives in a way that is still compatible with the objectives and principles of the CRF.

Ofcom's erroneous and artificial distinction between retail and wholesale services

- 3.19 What appears to have caused much of the confusion in Ofcom's analysis of the legal framework governing the regulation of non-geographic call services is its persistent attempt in the Consultation document to distinguish between a retail and a wholesale service when seeking to establish the scope of its legal powers in relation to non-geographic call services. This artificial distinction results in its claim that retail regulation could only apply to an originating operator and that 'wholesale' regulation further along the value chain is inappropriate because it does not further consumer protection as envisaged by the Authorisation Directive.
- 3.20 As noted earlier, the Authorisation Directive, and in particular Annex C, do not distinguish between measures aimed at the wholesale or retail level. Rather, it focuses on services provided in the number range and the requirements that may be attached to the provision of such services. In this context, it is worth noting that Article 8(4)(b) of the Framework Directive, which Annex C of the Authorisation Directive is designed to promote, simply requires NRAs to promote the interests of citizens by "*ensuring a high level of protection for consumers in their dealings with suppliers...*[emphasis added]" The use of the term 'supplier' in Article 8(4)(b) is significant and plainly capable of being interpreted broadly as to include undertakings not necessarily involved in the origination of calls. Had the Community legislature intended to limit the scope of the powers of NRAs to the regulation of originating operators alone, it would not have adopted the formulation it did.
- 3.21 In fact, the provisions of Annex C demonstrates there are plainly other "services" that are being provided to end users beyond the origination of calls to non-geographic numbers. This is reinforced by the provisions of Article 8(4)(b) of the Framework Directive that targets "suppliers" of services. In the context of non-geographic number ranges, Service Providers, by virtue of General Condition 17.1, are also likely to have the ability to use the non-geographic number (provided by their terminating and hosting operator) and clearly do supply a service to end users. In this regard, Ofcom's own unbundling remedy to the concern that it has identified about the supply of non-geographic services

recognises that there are a number of different suppliers of services in the value chain.

- 3.22 By proposing the introduction of a distinct service charge as part of its 'unbundling' remedy, Ofcom itself recognises that there are a number of constituent elements in the provision of non-geographic call services to end users:

“The unbundled tariff will ensure consumers can know, for the first time, how much of their money is paid to their phone company and how much is passed to others, such as the organisation or service being called. It will require that, instead of paying a single charge to their phone company, they will instead pay two separate charges:

*i) **the Access Charge:** which will cover the costs and revenues of the phone company which originates the call; and*

*ii) **the Service Charge:** which is paid to the terminating companies and the company providing the service for the number (a bank for example) to cover or contribute towards their costs.”⁵⁸*

- 3.23 The primary service being offered to end users is in reality the facility offered by the Service Provider and Terminating Operator hosting the number, such as a sales or helpline. The call access and origination service supplied by the communications provider is consequential and dependent upon the initial facility being supplied in the first instance by the Service Provider and its Termination and Hosting operator to the end users who are their (existing or potential) customers. Once this is understood, it is possible to interpret and apply the Authorisation Directive to the specific context of non-geographic services in a manner that is consistent with the CRF. As we consider further below, it is therefore possible to achieve the policy objective sought by Ofcom in relation to 080 numbers in way that preserves the integrity of the CRF.

Section 4: Appropriate mechanisms to provide for the regulation of non-geographic services

Calls to 080 numbers

- 4.1 If the provisions of Annex C of the Authorisation Directive are applied to the commercial facts described in paragraph 3.22, then regulatory obligations can be imposed that achieve the policy outcome sought by Ofcom without the difficulties that would be likely to arise under the current course of action proposed in Ofcom's Consultation document. On the basis that the primary service is that provided by Service Providers and Terminating Operators, Ofcom is in practice able to do the following:

- Specify the purpose of the number range provided by the Terminating Operator and used by the Service Provider;

⁵⁸ Ofcom, NGCS Consultation, 22 May 2012, Paragraph 1.17

- Attach conditions to the operation and use of the number range in question;
- Where justifiable to achieve a legitimate policy objective, specify the range of prices or the maximum price that can be levied for the provision of the service.

4.2 Applying these provisions to the provision of services in the 0800 number range, it would be possible for Ofcom to:

- Specify that the 0800 number range is to be used to supply services to end users that attract no service or access charge;
- Require that the terminating operator to whom the 0800 number has been allocated levy no termination charge for the interconnection of calls;
- Require that the Service Provider that has been given a right to use the number by the Terminating Operator levy no service charge for calls to the 0800 number that it is using and make clear that no service charge is to be levied; or in the alternative, require that the Terminating Operator procure that any Service Provider wishing to use the 0800 number range communicate to its customers that no service charge is to apply for the 0800 number range that it is using.
- Require that the Terminating Operator procure that any originating operator wishing to interconnect with it in respect of the specific 0800 number range will levy no retail charge for the origination of calls to that number range;
- Require that the Terminating Operator provide an outpayment to the originating operator at a rate specified by Ofcom to enable the originating operator to zero-rate the origination of calls to the specific 0800 number range.

4.3 This course of action is plainly permissible and envisaged under the terms of the Authorisation Directive and Article 8(4)(b). In the first instance, it results in obligations being attached to the primary supplier of an 0800 non-geographic service about the terms on which the number range may be used. Moreover, an approach providing that obligations about the use of the number range are flowed through to Service Providers and originating operators seeking to interconnect with Terminating Operators would be consistent with General Condition 17.1, which plainly envisages that the original number range holder in effect permits third parties to 'use', 'adopt' or access the number range concerned. Given this fact, it is entirely logical that regulatory obligations should be flowed down by the Terminating Operator as part of the terms of access or interconnection to the number range.

- 4.4 Using the legal framework proposed by Vodafone also enables the imposition of a mandated outpayment to originating operators since this is plainly an ancillary regulatory obligation designed to achieve the wider policy objective. As such, it is capable of being construed as ‘a requirement linked to the provision of the service’. Moreover, it obviates the need for the imposition of ‘wholesale’ access conditions upon originating operators. The proposed approach also minimises the scope for disputes about the level of any outpayment that would be highly likely to arise as a result of Ofcom’s current legal analysis in relation to the scope for the regulation of the terms of interconnection. The other important consequence of the legal framework outlined by Vodafone is that it also enables a consistency of regulatory approach across other non-geographic number ranges. This is a subject that we consider below.

Other 08 and 09 non geographic services

- 4.5 The legal analysis and framework articulated above is equally capable of supporting Ofcom’s approach to the regulation of other 08 numbers and 09 numbers. Ofcom currently proposes at paragraph 13.76 of the Consultation Document a number of obligations attaching to the Terminating Operator or Service Provider in relation to the Service Charge for other 08 and 08 numbers. These include obligations not to discriminate between originating operators and also not to exceed a maximum charge stipulated in a revised Numbering Plan.
- 4.6 Under Ofcom’s legal analysis, these proposals would not be feasible since they would appear to constitute price regulation at the ‘wholesale’ level and therefore not capable, in Ofcom’s parlance, of promoting a consumer protection objective. However, the approach proposed by Vodafone would enable such regulatory measures to be imposed since the measures concerned (tariff principles and maximum prices) are aimed at the undertakings using the number range and acting as a supplier of services to end users for the purposes of Article 8(4)(b) of the Framework Directive. Given that Ofcom’s stated policy aim is essentially confined to improved price transparency, any further conditions attaching to the use of or access to the number ranges on the part of Service Providers or Originating Operators concerned would plainly not be capable of meeting the objective justification or proportionality tests that Ofcom must satisfy when imposing such conditions.
- 4.7 Ofcom’s proposals in relation to the access charge of originating operators for all other 08, 09 and 118 numbers are essentially transparency measures that are capable of being introduced under existing powers provided by the USD . Article 21 of the USD confirms that NRAs are able to impose obligations on communications providers to publish up-to-date, easily accessible and transparent information on retail tariffs, including specific transparency obligations relating to “any number or service subject to particular pricing conditions”. Ofcom’s proposals in relation to the access charge for calls, specifically, the introduction of obligations to advertise the level of the access charge prominently are all plainly capable of being imposed pursuant to the provisions of Article 21 of the USD. Accordingly, the provisions of Annex C of

the Authorisation Directive would not need to be invoked to enable Ofcom's proposed approach to the regulation of the access charge; in this case no additional obligation would therefore need to be imposed upon the number rangeholder that would need to be flowed down to the originating operator.

Section 5: Concluding remarks

- 5.1 Vodafone is aware that the matters raised by this annex are subject to further consideration by Ofcom. Nevertheless, the examination that we have undertaken plainly demonstrates that any decision to proceed simply on the basis of the approach currently proposed by Ofcom would be likely to be both wrong in law and on the facts. In any event, as we have demonstrated, the preliminary and somewhat controversial views articulated by Ofcom in the Consultation Document about the nature and extent of its legal powers are in fact unnecessary to enable Ofcom to achieve its stated policy outcome.
- 5.2 But the legal issues identified in this annex are not simply of a purely technical nature with no regulatory consequences. As we have demonstrated both in the substantive section of our response and this annex, the corollary of the type of analytical approach being proposed by Ofcom will be legal and regulatory uncertainty, which will ultimately frustrate Ofcom's policy objectives in this matter and most likely be incompatible with its wider statutory objectives.
- 5.3 We therefore look forward to engaging further with Ofcom about this matter and would urge Ofcom to consider the adoption of a legal framework that is more likely to deliver the stable commercial and regulatory environment of benefit to all stakeholders.

Vodafone Limited
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