# Wholesale mobile voice call termination

Statement

*Non Confidential version*

✂ indicates passages that have been redacted

Annex 5

Publication date: 15 March 2011

## Annex 5

# Comments on stakeholder research

A5.1 This annex considers the survey evidence submitted by Vodafone[1] and EE[2] as part of their responses. These surveys were provided as evidence to address two parts of our assessment: the impact on ownership overall (considered in Section 7); and the impact on vulnerable consumers and whether this raised equity concerns (considered in Section 8 and Annex 3).

## The use of surveys in assessing likely future consumer behaviour

A5.2 As we have noted previously, we have serious concerns about the value of surveys in general to predict accurately consumers' behaviour in response to future hypothetical situations (as opposed to ranking their reactions to various options). This is set out in paragraph A13.86 of our April 2010 consultation.[3] In our Pay TV Statement, we also highlighted the risk of stated preference bias in relation to survey evidence carried out in relation to the SSNIP test, suggesting that such bias is "*a fundamental problem with surveys of this type*".[4] Similarly, when discussing issues raised by stated preference surveys, Case Associates notes:

> *"There will always be concerns that stated preferences do not accurately reveal true preferences and the choices consumers will make in practice. It will be usual for such evidence to be challenged on the grounds of relevance, reliability and bias. The onus will therefore be squarely on those submitting such evidence to ensure that it is carefully undertaken, and subject to cross-checks to ensure its reliability and consistency."*[5]

A5.3 Similar concerns have also been expressed by the CC. For example, in its 2003 review of Oftel's 2002 MCT decision, the CC commissioned a survey, part of which was designed to assess the number of consumers who would want to replace their mobile if it was lost or stolen, but would not be willing to pay enough to do so (i.e. would require a subsidy). The CC noted that:

> *"It should be noted that this result is based on a hypothetical question about how much respondents would be prepared to pay to replace a mobile phone, so it may be unreliable. It is possible that amounts people are prepared to pay are very much higher when*

[1] See pages 17-22, 32-38 of Vodafone's response, available at http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/responses/Vodafone.pdf, and Annex 2 of Vodafone's response. We subsequently received the supporting questionnaires and data tables, upon which the analysis in this annex is based.

[2] EE set out some of the results of its survey at paragraphs 74-77 of its response, available at http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/responses/Everything_Everywhere.pdf. We had a further discussion on this research at a meeting between Ofcom and EE on 20 July 2010. We subsequently received the supporting questionnaires and data tables, upon which the analysis in this annex is based.

[3] Available at http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/annexes/wmvct_annexes.pdf.

[4] Paragraphs 5.302-5.304 of *Pay TV Statement*, 31 March 2010, available at http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/statement/paytv_statement.pdf

[5] Case Associates (2003) *Market definition by survey: Approaches, acceptability and pitfalls*, available at http://www.casecon.com/data/pdfs/casenote35.pdf.

> *faced with actually going without a mobile phone if they did not pay enough."*[6]

A5.4 Further, in its review of Oftel's 1999 MCT decision, the CC stated:

> *"As noted in past MMC reports*[7] *consumers may have a tendency to overstate their price sensitivity because a lack of sensitivity maybe thought as indicating irrationality, poor or weak commercial acumen."*[8]

A5.5 This aside, we also have some serious concerns specific to these surveys in particular. These are set out below.

## Comments on the surveys submitted in response to the April 2010 consultation

A5.6 Firstly, it is not clear that the price changes suggested in either piece of research reflect the actual price changes that would be likely to prevail as a result of the choice between pure LRIC and LRIC+. As noted, the focus should be on the price rises necessary to compensate for the loss of revenue from fixed operators as most of the loss of revenues from M2M would net out because of lower interconnect payments (see paragraphs 7.49-7.54 in section 7 of this Statement). At least in the case of Vodafone's survey, the price rise suggested would reflect the revenue reduction from *both* F2M and M2M calls.

A5.7 In addition, despite Vodafone's claim that this reflects profit rather than revenue neutrality,[9] this does not seem to be the case. It appears that Vodafone constructed its price schedule for different customer cohorts on the basis of trying to earn as much revenue from its subscribers as it was currently earning. Vodafone has since confirmed[10] that the calculated price changes were based on retaining revenue rather than on margin neutrality. Although dependent on market conditions, we consider it unlikely that this would be a profit-maximising strategy for any operator.

[6] Paragraph 21 of appendix 8.1 of Vodafone, O2, Orange and T-Mobile: *Reports on references under section 13 of the Telecommunications Act 1984 on the charges made by Vodafone, O2, Orange and T-Mobile for terminating calls from fixed and mobile networks*, available at http://www.competition-commission.org.uk/rep_pub/reports/2003/fulltext/475a8.1.pdf.

[7] The "Littlewoods Organisation plc and Freemans plc (a subsidiary of Sears plc): a report on the proposed merger", The Stationery Office, Cm 3761, November 1997, and "Foreign package holidays: a report on the supply in the UK of tour operators' services and travel agents' services in relation to foreign package holidays", The Stationery Office, Cm 3813, December 1997.

[8] Footnote 1, pg. 180 of Cellnet and Vodafone: Reports on references under section 13 of the Telecommunications Act 1984 on the charges made by Cellnet and Vodafone for terminating calls from fixed-line networks, available at http://www.competition-commission.org.uk/rep_pub/reports/1999/fulltext/421c4.pdf.

[9] O2 submitted that our views on profit vs. revenue neutrality overlooked other costs of maintaining mobile connections, such as customer service costs, and implies that MCPs would currently be earning supernormal profits (paragraphs 181-183, available at http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/responses/O2.pdf). Our argument here was merely to point out that MCPs were unlikely to maximise profits by disconnecting a substantial number of customers, as this would not increase (and would be likely to decrease) their revenue or allow them to make substantial cost savings, not least because they would then seek to acquire new customers, which is likely to be more costly than retaining existing subscribers. This is discussed further in section 7 and annex 4.

[10] E-mail from Vodafone to Ofcom on 15 November 2010.

A5.8 Furthermore, it is not clear that the distribution of price increases between different groups of consumers is realistic. EE implicitly assumes that all customers will face the same price increases, because it asks all consumers about the same price changes. When determining what price scenarios to investigate, Vodafone allowed price increases to vary between different spending cohorts, so that low spenders faced smaller increases.[11] However, all cohorts faced some price increases.

A5.9 As set out in section 7, it is not clear to us that this would actually be the case, particularly for very price-sensitive customers. It is possible that the price increase scenario posed to some cohorts of respondents might have been larger than they would have actually experienced.

A5.10 We also have some concerns with the survey methodology and some of the questions asked by both Vodafone and EE.

## Vodafone

A5.11 Vodafone's questions were included within an ICM Research online omnibus survey. The sample covered 2,039 adults, of whom 1,936 paid for mobile services themselves. Of this total population, 84% were single handset users and 11% paid to use two or more handsets.

A5.12 The proposed charges[12] were:

- A £1 or £2 increase in the monthly price (in the case of PAYG customers this would be through minimum pre-pay top-up levels, and credit expiry).
- A £2 increase in the monthly price (in the case of PAYG customers. minimum pre-pay top-up levels and credit expiry), combined with a 10% or 20% increase in the number of calls within the calling allowance, or the number of calls made with the same PAYG top-up.

A5.13 The drawbacks of the submitted research are:

5.13.1 An online survey methodology is not appropriate for this subject matter, hence we cannot be confident that conclusions based on this sample are representative of the total market.

5.13.2 The questions are structured in a way that is likely to create error in the responses, and increase the likelihood that consumers will falsely claim that they will leave the mobile market.

5.13.3 The response codes and scenarios are not clearly explained and are not comprehensive.

5.13.4 The response codes and scenarios are not realistic, i.e. do not match the respondents' likely behaviour.

[11] ✂

[12] On 11 March 2011, Vodafone informed us that it had previously overestimated the price increase which would be faced by low spending consumers. Therefore, it stated that the reductions in ownership estimated in its survey results are overstated.

5.13.5 Analysis of departing customers overstates the negative impact of no longer having a mobile, as it does not take account of the specific characteristics of the sample used for the market research.

A5.14 The reasons for these conclusions are detailed below.

## Online survey methodology

A5.15 The survey was conducted via an online omnibus survey. While this approach can have advantages, it is unsuitable for a survey of this type for two main reasons.

A5.16 Firstly, online surveys over-represent respondents who have the internet at home and who have a landline. Current Ofcom data[13] suggest that 15% of the population do not have access to a landline phone at home.[14] In the ICM online survey commissioned by Vodafone 5% of the sample do not have a landline phone. Current Ofcom penetration data also show that 73% of people have internet access at home; this drops to 52% of those in socio-economic group DE.[15] On this basis less than three-quarters of the population, and only half of those in the DE group, are likely to be able to participate in an online survey. As a result, our concern about representation applies particularly to more vulnerable consumers; this has also been noted by some MCPs. There are likely to be fundamental differences between the attitudes of those who are online and those who are not. For example, consumers with a landline and a home internet connection are likely to have access to more communications services overall, so may be less dependent on their mobile phone, and more likely to give it up in response to a price increase. Therefore, the results from this sample should not be extrapolated to the wider population and, in particular, to consumers in the DE socio-economic group.

A5.17 Secondly, online surveys are self-administered – there is no interviewer present to explain the questions, probe responses or challenge inconsistent responses. This is particularly problematic when posing hypothetical trade-off scenarios, which consumers may find difficult to understand. We describe below several examples of inconsistent or unrealistic responses which are likely to be related to this issue.

## Structure of questions

A5.18 In any research in which people are asked about changes to an existing service, particularly those involving potential price increases, it is critical to structure the questions in an appropriate way in order to reduce the risk of bias in the responses. There are several elements of the structure of Vodafone's questionnaire that are likely to increase the effect of mis-attribution in the responses and overstate the proportion of respondents who say they would stop using their mobile.

A5.19 The initial scenario had no offset element (i.e. the impact on the respondent could only be negative), so the questions were framed from the negative (no benefit) to the relatively positive (trade-off offered). This question order tends to bias respondents towards negative responses. It is likely that if the same set of questions was asked in the reverse order this would have a significant impact on

[13] See figure 6 of the *Consumer Experience 2010*, available at http://www.ofcom.org.uk/static/tce-10/fig-6.html.
[14] Note that the Ofcom tracker survey asks about landline phone ownership. Landline ownership may be higher as some people may have a landline purely so that they can get broadband.
[15] See figure 36 of the *Consumer Experience 2010*, available at http://www.ofcom.org.uk/static/tce-10/fig-36.html.

the survey findings; i.e. the proportion who claim they would stop using their phone would drop (although this could lead to overly positive responses and so could understate the proportion who say they would stop using their phone).

A5.20 In addition, only those respondents who said that they would stop using their mobile phone were asked to respond to the trade-off scenarios in subsequent questions, hence analysis of those responses is based only on the most negative group of respondents. Asking all respondents the same scenarios would have allowed consistency checks and further analysis of response patterns.

A5.21 Starting the questioning with a purely negative proposition tends to create a negative, spontaneous reaction to what is being proposed; people have a tendency to over-react and claim they will pursue a course of action which they will not take in reality. As a result, we believe that best practice is to rotate the starting points across the sample; i.e. for some respondents to start with the most favourable proposition, gradually reducing the favourability of the options offered, and for some respondents to start with a negative proposition, increasing the favourability of the options.

A5.22 Assuming that all respondents are asked all scenarios, then rotating the scenarios ensures that any bias is cancelled out. The combination of responses given should also be reviewed during the course of the interview to ensure consistency. This approach would ensure that we more accurately identify each respondent's true 'tipping point' – i.e. the point at which they are not prepared to absorb the perceived additional cost and choose instead to exit the market.

Response codes and scenarios are not clearly explained or comprehensive

A5.23 Only limited answer codes are provided in the price increase scenarios with no off-sets. Specifically, they relate only to reducing usage or switching to a cheaper price plan, and no other options are presented. For example, no option is provided to allow respondents to cancel their landline and rely on mobile as their sole form of telephony, which would have the effect of reducing their overall spend and is behaviour that is currently evident in the market.[16]

A5.24 The following specific issues relate to the wording of the questions:

5.24.1 The option for contract customers to switch to pre-pay is not clearly positioned (it is combined with several other options into one response code, which may have been unclear to respondents. In addition, only the description "pre-pay price plan" is used, whereas many consumers refer to this type of phone as "pay-as-you-go" and so may not have understood the terminology used).

5.24.2 Where there is likely to be a difference between claimed and actual behaviour Ofcom believes it is good practice to collect scaled responses (e.g. *likelihood* to stop having a mobile rather than yes/no), as this allows the pattern of responses to be reviewed and a conversion factor to be applied to those with the highest likelihood to act in a particular way. Although Vodafone acknowledged in its submission that the actual percentage of people who will decide to stop having a mobile in response to

[16] See, for example, Figure 5.67 of CMR 2010, which shows that an increasing proportion of consumers (15% in Q1 2010) are choosing not to have a landline (available at http://www.ofcom.org.uk/static/cmr-10/UKCM-5.67.html).

the price increase would be lower than the percentage who claimed this, it did not collect the data in a way that would allow this to be tested.

5.24.3 The pre-pay scenario is likely to be confusing to respondents. It states that they would have to pay a minimum £1 top-up fee, but that they would not get any additional minute/texts. It is not clear whether the fee is an additional charge and they do not get any minutes for it, or whether it is a minimum fee and they do get additional minutes for it. The use of the term ‘top-up’ suggests in itself that they will get something for the money, so is misleading.

5.24.4 The offset scenarios are difficult to follow, with too many hypothetical clauses. In particular they refer to respondents receiving “an additional (10 or 20) free calls or texts for every hundred that you paid for”. Most mobile phone users buy call packages in minutes, and it is not clear from the question wording how the additional calls would relate to these packages in terms of minutes. Expressing the additional calls in percentages would potentially have been easier for respondents to understand – i.e. the wording suggests that respondents would effectively receive an additional 10% in one scenario and 20% in the other.

## Response codes and scenarios are not realistic

A5.25 If we look at the pattern of responses among post-pay customers some problems are evident; post-pay customers who spend more than £20 a month are more likely than those spending under £20 a month to say they will stop having a mobile phone in response to a given price increase. In reality, we know from our consumer research that anyone spending over £20 a month on their mobile is very unlikely to stop having a mobile phone (most are aged 18-44, less likely to have a landline, and more likely to use data services, so the loss of their mobile would have a significant impact on them).

A5.26 Vodafone pointed out that we did not provide a "stop using a mobile" option for post-pay respondents in our survey. We did not provide this option because when we piloted the survey, we found that this was not a realistic answer for the vast majority of people for the scenarios we were presenting, as very few post-pay respondents giving this response will actually decide to stop using their mobile; when queried on their answers, most pilot respondents admitted that they were actually very unlikely to do this. To avoid capturing an inaccurate spontaneous response, we removed this as a prompted option but did deliberately allow an ‘other’ code instead, so that if people felt strongly they could still give this answer.

## Analysis of departing customers does not take into account sample profile

A5.27 Vodafone’s submission suggested that the detrimental impact of the proposed changes would be highest among DE/low-income consumers, as the majority of those who would decide not to have a mobile phone would be in this group.

A5.28 However, further analysis of these data suggests that there are a number of specific drivers and mitigating factors that offset this finding. In particular, the profile of the sampled group suggests that their mobile dependence may be minimal (compared to low-income/DE consumers as a whole), due to their landline use for voice calls (as discussed in paragraph A5.16).

A5.29 Specifically:

5.29.1 Ten per cent of respondents who spend £10 a month or less on their phone say that they would stop using their mobile – all of these have a landline phone.

5.29.2 Intention to stop using a mobile is highest among pre-pay customers spending less than £5 (14%). In terms of demographic and usage profile, these tend to be older consumers (42% are aged 65+), with very high landline penetration and very low data use. Their reliance on their mobile phone - and the subsequent detrimental effect of not having one – is therefore likely to be limited and easily replaceable by their existing landline service.

**EE**

A5.30 For EE's survey, the questions were added to GfK NOP's weekly face-to-face UK omnibus survey of a representative sample of the UK population (n=1,000). However, given the subject matter of the research, only those with primary or secondary PAYG SIMS (n=434) were interviewed.

A5.31 The proposed charges were:

- Additional £5, £10, £15, and £20 charges for new replacement handsets
- Minimum daily charges of 15p and 50p
- An outbound call charge of 3p/min
- A charge of 3p/min to call voicemail
- An additional inbound call charge of 3p/min

A5.32 The key issues with the research submitted are as follows:

5.32.1 The price change scenarios were the same for all respondents, regardless of their current level of expenditure.

5.32.2 Respondents with pre-pay on a secondary phone were included in the overall analysis; unsurprisingly, intention to disconnect the main phone (i.e. their primary pre-pay connection) was higher within this group.

5.32.3 Non-bill payers were included in the sample for the cost-based scenarios.

5.32.4 The questions were structured in a way that is likely to create error in the responses, and increase the likelihood that consumers will falsely claim that they will leave the mobile market.[17]

5.32.5 The response scenarios are unrealistic and are not clearly explained, hence are likely to result in misleading responses.

[17] While the concern here is similar to that raised by Vodafone's survey, the reason for the concern is different, as explained in paragraph A5.36-A5.39 below.

## Price change scenarios were the same for all respondents

A5.33 All respondents were asked about the same absolute price change scenarios (e.g. £5, £10, or £20 extra charge for new handset; 15p or 50p minimum daily charge), irrespective of their expenditure on mobile services.[18] This has the effect that consumers who spend less (and may be more price sensitive) are faced with larger price increases. This seems counterintuitive to what we might expect to happen in reality (see section 7), and may lead to a more negative reaction by some respondents than if they were faced with more realistic price scenarios.

## Inclusion of respondents with pre-pay on a secondary phone

A5.34 The analysis included respondents with pre-pay as their main phone and those with pre-pay on a secondary phone (we estimate that 28 in 434 respondents in the sample had pre-pay on a secondary phone in addition to a main mobile on post-pay). Those with a pre-pay contract on their secondary phone are more likely to disconnect their mobile as a result of price increases and, as we explain in section 7, this is likely to have no impact on ownership. These respondents should ideally be excluded from this analysis (although this factor is unlikely to have skewed the overall results significantly).

## Inclusion of non-bill-payers in the sample for cost-based scenarios

A5.35 Respondents who are not responsible for paying for their phone should have been excluded from the price change scenarios, as they are unlikely to be able to provide accurate responses to questions of this nature. We estimate this accounts for approximately 25 to 30 respondents in the sample for the price change questions (base sizes differ for some of the scenarios). As above, the impact on the overall results presented by EE is likely to be limited, but we believe these respondents should have been excluded.

## Structure of questions

A5.36 There are two questions on value for money asked early in the questionnaire. Our market research experience suggests that including questions of this type early in the survey may have the effect of 'priming' respondents for later questions and can influence their answers, particularly those perceived to be related to the value or cost of the service. This may be because they are giving greater consideration to their mobile spend than is typical, or because they believe they know what the survey relates to and are factoring this into their responses.

A5.37 The scenarios described in the price change questions posed only negative hypothetical situations – i.e. consumers were asked for their response to an additional cost on top of what they already paid. This approach is likely to overstate a negative response in each case – i.e. consumers are more likely to say they would change their behaviour or disconnect their phone.

A5.38 Consumers were not given the option of combining responses to the scenarios, which would have allowed them to customise their response to a price increase, to take account of how they use their phone and potentially to minimize the impact on them.

---

[18] This is in contrast to Vodafone's approach, which attempted to calculate the price changes likely for different spending cohorts, ✂. It is not clear to us from EE's submission how it determined the price changes to investigate in its survey.

A5.39 A high proportion of respondents did not pay for their existing handset; they acquired it as a gift or hand-me-down (41% at Q5).[19] But these respondents were asked to respond to Q10,[20] and are likely to comprise a high proportion of those respondents who said they would not pay for a replacement phone (as they did not pay for their current phone it is highly unlikely that they would pay an additional charge for a replacement). The analysis and conclusions drawn are likely to be misleading as a result of the inclusion of these respondents, and will overstate the proportion saying that they would not pay for a replacement (this is likely to explain why the proportion who would not pay is as high as 33% in the scenario where *no extra charge is applied*).

<u>Response scenarios are unrealistic and are not clearly explained</u>

A5.40 The scenario used to test views on handset replacement does not reflect the actual experience of consumers – it refers to what they would do if they needed to replace their handset “if it was broken/lost/stolen”. The incidence of this is likely to be relatively low, and responses to this scenario will not reflect typical handset replacement behaviour patterns. Using the response to this question to estimate the impact on the market is, therefore, flawed. It is likely that this is why these data conflict with Ofcom findings, as the scenario used in our questionnaire was markedly different: “what do you think you would do when it is time to replace your handset?” This implies that consumers have a choice about how and when they do this, rather than being forced to replace their handset at short notice because they can no longer use their existing one.

A5.41 The scenario used in Q11[21] is hard to understand as it does not reflect how pre-pay customers actually pay for their phone use. It would have been difficult for consumers to a) estimate the actual impact of this or their total monthly spend and b) understand how this payment might be administered. Pre-pay customers may also react negatively to the idea of introducing a commitment or contract.[22] It would have been helpful to have provided actual estimates of the likely cost of this fee over the course of the month, based on an individual respondent’s typical spend or use, particularly for consumers with low spend/low usage for whom this fee might have had a minimal impact. Option B (50 pence per day) also seems to be a very high daily charge.

## Conclusion

A5.42 The issues highlighted in this annex are likely to have generated an overly negative response in the surveys. This, combined with the general problems identified with the hypothetical questions, means that we do not consider the findings to be a realistic representation of the likely impact of a further reduction in MTRs if adopting pure LRIC instead of LRIC+.

[19] “Did you purchase your current main mobile handset/second mobile handset/SIM yourself or was it given to you, as a gift or ’hand-me-down’?”
[20] “If you had to replace your current main mobile handset/second mobile handset/SIM (if it was broken/lost/stolen), considering how much you paid for it, if all the mobile operators added no extra charge/£5/£10/£20, what would you do?”
[21] “What would you do if mobile operators were to introduce a minimum daily charge of 15p/50p per day on pay as you go tariffs for each day you use your phone?”
[22] For example, see section 4.3.2 of http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/annex4.pdf.