



South East Water  
'Outcomes' Customer Research  
for PR14

Final Report  
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## ABBREVIATIONS

CCG	Customer Challenge Group
PR14	Price Review 2014
SEG	Socio-economic grade
SP	Stated preference
SEW	South East Water
UKWIR	UK Water Industry Research
WTA	Willingness to accept
WTP	Willingness to pay

**The research was undertaken in compliance with the market research standard ISO 20252:2006**

# 1. EXECUTIVE SUMMARY

## 1.1 Introduction

The study presented in this report has responded to an innovative proposal by SEW to link customers' bills to levels of satisfaction. This proposal was itself motivated by an innovative feature of Ofwat's price review methodology for PR14, which was a requirement for companies to specify the outcomes that customers value, for example "a reliable water supply", propose measures that capture customers' value in relation to these outcomes, propose a target for delivery against each measure that is cost-beneficial, and propose rewards and penalties for exceeding or failing to reach the target measures.

The objectives of the present research were as follows:

- 1) develop a set of survey questions to elicit robust measures of satisfaction – overall, and against a range of outcome types;
- 2) develop survey questions to elicit robust measures of WTP/WTA in relation to improvements/deteriorations in satisfaction ratings;
- 3) conduct a large-scale survey containing these questions to obtain current-year measures of satisfaction and marginal WTP for changes in satisfaction; and
- 4) conduct an ongoing tracker survey to measure changes in each measure of satisfaction over time.

The present report focuses on the first three of these objectives, with the fourth intended as the focus of a future study.

## 1.2 Survey Design and Development

The objectives for the study were novel, and, as such, not amenable to an 'off-the-shelf' survey design solution. As a consequence, the design of the questionnaire required careful development work to try and achieve results that could be considered to be meaningful measures of customers' preferences.

The questionnaire was written by Accent in close collaboration with South East Water and its CCG. In addition, an early version of the questionnaire was peer reviewed by Caroline Bryson, an independent survey expert

The full survey questionnaire comprised the following components.

- Recruitment screening questions, including questions on respondents' experiences of a range of water service problems
- Satisfaction rating questions against a range of outcome types (discussed in 3.3).
- WTP/WTA elicitation questions for improvements/deteriorations to satisfaction (discussed in 3.4).

- Follow up questions, for validity assessment, asking whether respondents felt able to rate their satisfaction, choose between different options, imagine what a higher or lower satisfaction score would entail, whether the bill changes seemed realistic and whether they understood the impacts of inflation.
- Overall satisfaction with the water supply service from South East Water.
- Questions to explore customer attitudes towards the proposed approach to the use of customer satisfaction ratings as a means of setting bill levels.
- Demographics questions to understand the composition of the sample obtained.

Immediately following the end of the interview, the interviewer completed three feedback questions relating to the respondents understanding, effort and concentration.

The survey design was tested via an initial series of 15 cognitive interviews (7 business and 8 household). These interviews were conducted by telephone and respondents were encouraged to “think aloud” and give feedback on the questionnaires as they worked their way through them. These interviews were conducted between 25 June and 4 July 2013.

Further pre-testing consisted of a pilot of 50 interviews with business customers conducted between 25-26 July. A further round of cognitive interviewing was then conducted to explore the use of the term ‘performance’ rather than ‘satisfaction’. These were conducted between 12-15 August with 7 household customers. Finally, a pilot of 51 interviews with household customers was conducted between 19-22 September.

### 1.3 Survey Administration and Performance

The main survey was implemented on a large sample of 1000 household customers and 608 business customers between 3-27 October 2013. The household sample matched the population profile well by age, SEG and sewerage area; and the business sample matched the population profile well by bill size and sewerage area.

The fieldwork for household and business customers was undertaken using a telephone method, where respondents were recruited and surveyed by telephone. This method allowed interviews to be drawn randomly from across the SEW region rather than from a small number of areas, or clusters, as would be the case with face-to-face interviewing. This well-established method also allows for high levels of quality control and interviewer administration to ensure respondent comprehension is maximised.

All research was undertaken in line with the requirements of the market research quality standard ISO 20252:2006.

Respondent and interviewer feedback suggested that the survey overall was successful, in the sense that respondent understanding, effort, concentration and perceived ability to rate were all very good. However, for some of the outcome measures, in particular the ‘leakage’ outcome, a substantial number of respondents, albeit still a minority, were unable to rate their current satisfaction, and answered ‘don’t know’ when asked to rate their current satisfaction. The respondents who answered in this way were excluded from the subsequent analysis of WTP and WTA for improved and reduced satisfaction,



and as a consequence the main results for these outcome areas will only be fully representative of that part of the customer base that feels able to rate how satisfied they are currently.

## 1.4 Key Findings and Conclusions

The results for customer satisfaction suggested that the majority of household and business respondents were satisfied with current service levels. Mean satisfaction was highest for the frequency and duration of interruptions (household mean=4.7/5; business mean=4.5/5); and lowest for leakage from South East Water pipes (household mean=3.6/5; business mean=3.1/5). Further analysis showed that those who had experienced a problem gave significantly lower satisfaction ratings for each service measure than those who had no experience of this problem, as expected.

Our analysis of WTP for improved satisfaction, and WTA for reduced satisfaction, encountered a tendency for the majority of respondents to prefer to maintain current satisfaction levels rather than to switch to either improved or reduced levels. Additionally, the choices made by respondents between options to improve, maintain or reduce satisfaction were not uniformly sensitive to the cost of the options in the expected direction. That is, it was not always the case that higher costs of the improved satisfaction option led to fewer people choosing it, and that higher bill reductions for the reduced satisfaction option led to more people choosing that option. Taken together, these findings suggest that some caution needs to be applied in interpreting and applying the WTP and WTA results.

Our main results showed that mean household WTP per one-point improvement in satisfaction ranged from £0.15 per household, in the case of 'Interruptions', to £0.54 per household in the case of 'Leakage'. For businesses, mean WTP ranged from £1.31 per business, in the case of 'Interruptions', to £2.92 per business in the case of 'Leakage'

For all outcome areas except for interruptions, WTP for improved satisfaction was significantly higher, for both households and businesses, amongst respondents that experienced the corresponding service problem than amongst those that had not. For interruptions, for both households and businesses, the differences were not statistically significantly different at the 10% level.

Mean WTA for a one-point reduction in satisfaction ranged from £14.30 per household, in the case of 'Customer service', to £17.76 per household in the case of 'Taste & smell'. For businesses, mean WTA ranged from £76.01 per business, in the case of 'Hosepipe bans', to £82.22 per business in the case of 'Taste & smell'. Experience of a corresponding service problem had no significant impact on WTA for reduced satisfaction for any of the outcome areas.

Notwithstanding the need for caution in interpreting and applying the WTP and WTA results, there is strong evidence from the survey that WTP for improved satisfaction is substantially smaller than WTA for reduced satisfaction.

In the final component of the survey analysis, we explored the extent to which customers supported SEW's proposal to link bills to customer satisfaction levels. The results showed that more households (53%) and businesses (47%) supported the proposal to

charge customers lower bills if customer satisfaction falls than opposed the proposal (23% of households and 31% of businesses).

In respect of increased bills for improved satisfaction, however, 59% of households and 63% of businesses opposed the idea while only 16% of households and 13% of businesses supported the proposal. These findings suggest that SEW may have a job to persuade customers that it is in their interests for its proposed policy to be implemented.

Overall, the study has generated several useful insights into customers' attitudes and satisfaction levels, and should hopefully be helpful to SEW in developing its proposed outcome delivery incentives for PR14. The study design was novel, and hence the methods were not tried and tested to an ideal extent. The methods may therefore benefit from further review and development if the overall approach is to play a central role in SEW's business model going forward.

## 2. INTRODUCTION

### 2.1 Background

In contrast to previous price reviews, Ofwat asked companies to produce a business plan focused on ‘outcomes’ rather than ‘outputs’ at PR14.<sup>1</sup> Outcomes were defined by Ofwat as ‘the higher-level objectives that company actions, activities and achievements are intended to help deliver, representing what customers and society really value’, whereas outputs were defined as ‘the observable and measurable activities, actions or achievements that a company needs to deliver to bring about the outcomes that customers and broader society value’.<sup>2</sup> Companies have been required to specify the outcomes that customers value, for example “a reliable water supply”, propose measures that capture customers’ value in relation to these outcomes, propose a target for delivery against each measure that is cost-beneficial, and propose rewards and penalties for exceeding or failing to reach the target measures.<sup>3</sup>

South East Water (SEW) commissioned Accent to explore a new idea in this spirit, which would aim to link outcomes and incentives to measures of customer satisfaction, rather than, say, measures such as the risks of interruptions, discoloured water, etc. The advantage of doing so was that customer satisfaction is itself an ultimate outcome for customers, whereas the more objective measures are only intermediaries to customers’ welfare. Linking penalties and rewards to customer satisfaction would hence mean that South East Water was directly targeting what really matters to customers.

Notwithstanding the desirability of treating customer satisfaction as the ‘outcome’ within the regime, there would be some significant practical issues to address in its implementation. In particular, it would first be necessary to be able to measure, and track changes in, customer satisfaction, and do so in such a way as to be assured that the measures obtained were ‘valid’. A first aim of the research was therefore be to obtain such measures, and explore and test their validity.

A second issue arising was that suitable reward and penalty amounts would need to be established, as without these there would be no financial incentive on the company to improve its performance against the target outcome measure. Ofwat’s guidance indicated that these rewards and penalties should be linked to customers’ willingness to pay (WTP) for improvements, and willingness to accept reduced performance in exchange for lower bills (WTA).<sup>4</sup>

The use of WTP/WTA measures would ensure that the company’s interest was aligned with customers’ interest, in the sense that, with these reward and penalty levels, any costs that the company could incur to improve its performance against its outcome measures would be financially worthwhile to the company if, and only if, the cost of achieving the improvement were less than the benefit. If the benefit were less than the cost then it

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<sup>1</sup> Ofwat (2013) Setting price controls for 2015-20 – final methodology and expectations for companies’ business plans, July 2013.

<sup>2</sup> Ofwat (2011) Inputs, outputs and outcomes - what should price limits deliver? A discussion paper, March 2011

<sup>3</sup> Ofwat (2013) *Op cit.*

<sup>4</sup> Ofwat (2013) *Op cit.*

would not be in the company's financial interest, and also not in the customers' interest, to incur the cost.

Obtaining measures of WTP/WTA for variations in customer satisfaction has, to our knowledge, never before been attempted. The present research therefore needed, to a degree, to venture into new territory.

Additional issues identified as being relevant to the present research included that it should explore customers' support, or otherwise, for the proposed linking of customer satisfaction to bill levels, and that it should explore the link between experience of service problems and satisfaction levels.

## 2.2 Objectives

The objectives of the present research were as follows:

- 1) develop a set of survey questions to elicit robust measures of satisfaction – overall, and against a range of outcome types;
- 2) develop survey questions to elicit robust measures of WTP/WTA in relation to improvements/deteriorations in satisfaction ratings;
- 3) conduct a large-scale survey containing these questions to obtain current-year measures of satisfaction and marginal WTP for changes in satisfaction; and
- 4) conduct an ongoing tracker survey to measure changes in each measure of satisfaction over time.

The present report focuses on the first three of these objectives, with the fourth intended as the focus of a future study.

## 2.3 Overview of the Study

The objectives for the study were novel and, as such, not amenable to an 'off-the-shelf' survey design solution. As a consequence, the design of the questionnaire required careful development work to try and achieve results that could be considered to be meaningful measures of customers' preferences.

The research involved the following tasks:

- Questionnaire design
- Pre-testing (including a series of 15 domestic (completed in two waves) and 7 business cognitive interviews, and a pilot of 50 households and 51 businesses.)
- Main fieldwork (comprising samples of 1,000 households and 608 businesses.)
- Analysis and reporting.

The questionnaire design and pre-testing results were peer reviewed by independent survey expert Caroline Bryson prior to the main fieldwork. Additionally, members of SEW's customer challenge group (CCG) contributed critical appraisals of the survey design at several points during the development phase, including in particular Kathryn Rathouse who was consulted extensively.

## 2.4 Report Structure

The remainder of this report is structured as follows. In section 3, we describe the survey design and its development; section 4 provides details of the survey administration and sample characteristics; section 5 reports on aspects of the survey performance, including respondent and interviewer feedback and the validity of the reasons given by respondents for their answers to the key questions in the survey; section 6 then reports findings from the survey on customer experiences and satisfaction, including the effect of experiencing service failures on satisfaction with South East Water's services; section 7 reports findings from the survey on customers' willingness to pay for improved satisfaction levels, and their willingness to accept reduced satisfaction levels in exchange for lower bills; section 8 discusses attitudes towards linking bills to customer satisfaction; and finally, section 9 contains our conclusions and recommendations.

The questionnaires that were used in the survey are contained in Appendix A, for households, and Appendix B for businesses. Appendix C contains sample characteristics, and Appendix D contains peer review reports and our responses.

### 3. SURVEY DESIGN AND DEVELOPMENT

#### 3.1 Introduction

The objectives of the survey design were to develop questions that would elicit robust measures of satisfaction – overall, and against a range of outcome types; and to elicit robust measures of WTP/WTA in relation to improvements/deteriorations in satisfaction ratings. These objectives were novel and so, as a consequence, the design of the questionnaire required careful development work to try and achieve results that could be considered to be meaningful measures of customers’ preferences.

The questionnaire was written by Accent in close collaboration with South East Water and its CCG. In addition, an early version of the questionnaire was peer reviewed by Caroline Bryson, an independent survey expert. Furthermore the questionnaire was pre-tested, and refined, via two phases of cognitive interviews (firstly with household and business customers, then with household customers), and a subsequent pilot survey, again of households and business customers.

In the remainder of this section: section 3.2 provides details on the selection of outcome measures included in the survey; section 3.3 describes our approach to measuring customer satisfaction against these outcomes; section 3.4 describes the WTP/WTA elicitation questions; section 3.5 gives an overview of the structure of the final survey questionnaire; and finally section 3.6 summarises the testing and refinement carried out on the survey instrument prior to the main fieldwork.

#### 3.2 Selection of Outcomes

The outcomes against which respondents were asked to rate their satisfaction were put forward by SEW based on previous research and development work. They were specified in the survey as shown in the ‘Full description’ column of the following table. In later parts of this report, we refer to the outcome measures by the name given in the left hand column of this table.

**Table 1: Outcome measures**

Outcome measure name	Full description
Pressure	The water pressure at your property (by this we mean the rate at which water flows from the taps).
Interruptions	The frequency and duration of interruptions to your water supply.
Discolouration	The appearance of the water supplied to you.
Taste & smell	The taste and smell of the water supplied to you.
Leakage	The amount of water that leaks from South East Water's pipes across their region.
Hosepipe bans	The frequency of hosepipe bans in your area.
Customer service	South East Water's customer service. (When considering your rating, think of things such as contact with South East Water either through a phone call, or by letter or email or when reading your bill.)
Overall	Your water supply service from South East Water overall

### 3.3 Measuring Customer Satisfaction

There is an established precedent in market research for measuring customer satisfaction with thousands of studies completed across a wide range of sectors. Consistent with this precedent a standard form of question was included in the survey, which asked: “*On a scale of 1 to 5, where 1 is ‘Completely dissatisfied’ and 5 is ‘Completely satisfied’, how satisfied are you with the following.*” The list of outcomes shown in section 3.2 followed.

Despite the longstanding use within market research of this form of questioning, legitimate concerns could be raised, and were raised by both study peer reviewers, about the measurement of customer satisfaction in the context of water services. An alternative approach, recommended by Kathryn Rathouse (a SEW CCG member), was to ask customers to rate SEW’s performance against each of the measures, on a scale from ‘Very poor’ to ‘Very good’.

In the following, we review and respond to each of the concerns that were raised by Ms Rathouse in relation to the measurement of customer satisfaction in this context following a review by Caroline Bryson, an independent survey expert. The final part of this section then reviews findings from a comparison of these questions with the alternative version, which focussed on performance rather than satisfaction rating.

#### **Risk 1: Improving services objectively might not result in improved satisfaction**

*“As Caroline pointed out, levels of satisfaction take into account customers’ expectations of the service. Low expectations have the potential to inflate satisfaction and vice versa. As you improve services, it’s very possible that satisfaction may not increase if expectations also increase.*

*What this means is that you could possibly find yourselves in the following situation. SEW invests a lot in improving, say, water quality. If SEW asked customers, they would say the water tastes better than it did. But their satisfaction rating does not improve because their expectations have improved as well. (This is a realistic situation. Central government invested a lot regenerating run down areas around the country. In the large scale evaluation of the programme, there was hardly any difference between respondents’ satisfaction with the area as a place to live before and after the investment. But residents were also asked whether the area had got better or worse as a place to live. Residents were more likely to say that the area had improved over the last three years after the investment than they had been before.)”*

Our response to this concern was that it was certainly possible that improving services objectively might not result in improved satisfaction, and that rising expectations may mean that improvements were needed to services just to maintain current satisfaction levels. Neither of these possibilities, however, seemed to us to give cause to measure something else instead, given the desirability of focusing management on customer satisfaction.

#### **Risk 2: Changing expectations might not result in improved satisfaction**

*“The link between expectations and satisfaction is not straightforward. For some people and in some domains, satisfaction is related to expectations but for others it isn’t. So it’s by no means guaranteed that changing expectations will improve satisfaction.*

*A review of research by MORI concluded that: “Understanding expectations is key as they appear to have an important impact on overall [satisfaction] of services. However, the relationship is not as straightforward as some theories suggest, and attempts to manipulate expectations to improve ratings are likely to fail.”<sup>5</sup>*

In response to this concern, we agreed that changing expectations is not guaranteed to improve satisfaction, but we did not see that this gave any cause to abandon measurement of customer satisfaction in favour of any alternative.

**Risk 3: Asking about satisfaction might not be meaningful to everyone**

*“As Caroline pointed out, satisfaction measures don’t really work for some of the issues in the questionnaire. For instance, she thought it wasn’t clear what it means to be satisfied with the level of leakage.*

*One of my questionnaire design books gives the following example. “Satisfaction is the relationship between what people want and what they get. Researchers should be careful to consider the possibility that respondents do not care about some aspect of their life. A satisfaction question should be asked only about things with which respondents come in contact and for which they have some kind of expectations. For example, if a person walks to work, a rating of satisfaction with available parking may be meaningless. If it is not reasonable to think that all respondents have expectations about something, it might be better to have them do a rating task than to have them report on their satisfaction.”<sup>6</sup>*

*As you pointed out, asking someone without a garden about their satisfaction with hosepipe bans is a bit like asking someone who does not have a car about their satisfaction with parking.”*

In our view, this concern was legitimate, and it was here that there was a potential challenge to the validity of the method. If respondents were unable to rate how satisfied they were with the various outcome measures, then any statistics derived from their responses would not be valid measure of customer welfare.

At the outset of the study, however, in contrast to the views of the peer reviewers, we expected that the majority of respondents would be able to rate their satisfaction with each of the outcome measures, including, although perhaps least of all in respect of, ‘the amount of water that leaks from South East Water’s pipes across their region’. Whether or not this was the case, however, was an empirical question.

The research study addressed this question, initially, via the use of cognitive interviews, details of which are reported on in section 3.6 below. In these interviews, respondents were asked to ‘think aloud’ as they answered, and were asked probing questions about what drove their ratings. For example, when asked to rate their satisfaction with ‘the amount of water that leaks from South East Water’s pipes across their region’, one respondent said:

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<sup>5</sup> Mori (2002) Public Service Reform: Measuring and understanding customer satisfaction. Report to Office of Public Services Reform, Cabinet Office.

<sup>6</sup> FJ Fowler (1995) Improving Survey Questions: Design and Evaluation. Sage.



*'Now we had some severe leaks up here, they border our property although most of them come from the driveway of our next door neighbours but we have had about 2 or 3 in the last 18 months so as I think that is a bit rubbish can I say that I am not happy with that so therefore I would give it a 1.'*

Another (business) respondent simply said:

*"Looking personally on this from these premises, 5 again."*

Overall, our review of the cognitive interviews suggested that the respondents could indeed give reasoned responses, in most cases, when asked to rate their satisfaction, even in respect of the 'leakage' outcome.

Cognitive interviews only capture a limited number of respondents, however, and we expected that there would be some in a larger sample that would struggle to provide satisfaction ratings. Rather than force everyone to provide a rating, which in these cases might not be meaningful, the survey allowed respondents to answer "don't know" when asked to rate their satisfaction with each of the outcome measures. If customers were unable to give a meaningful satisfaction rating against any of the outcome measures, we would expect them to answer "don't know". By including this option, our results on customer satisfaction should therefore capture the views of those who were able to provide a meaningful rating, and exclude those that were not able to do so. To the extent that those answering "don't know" were in the minority, this approach would be capable of obtaining valid measures of satisfaction for the customer base as a whole.

#### **Risk 4: You might get a ceiling effect i.e. high ratings with no room for improvement**

*"This is not a major concern but is a consideration. It is possible that the pilot might show that there are ceiling effects i.e. there isn't much room for improvement in satisfaction. (There may also be floor effects i.e. there isn't much room for deterioration though this is obviously less of a concern!)."*

*Research suggests that even though they might be tapping into the same underlying concept, answers on related but different questions can be quite different, and some types of questions tend to give more favourable than answers on others. Expectations, improvements and compared-to-ideal scales (see the email) tend to receive lower mean ratings than overall performance and satisfaction scales."*

We expected that there would be many respondents giving maximum satisfaction ratings against each of the outcome measures. We did not expect, however, that all respondents would do so. More importantly, however, we did not see this concern as a legitimate objection to the measurement of satisfaction per se in favour of any alternative. Even if customers were currently perfectly satisfied with a given outcome measure, there would still be merit in measuring their satisfaction against the outcome to focus the company's attention on avoiding deterioration in customer satisfaction.

In respect of the sensitivity of results to question format, we fully acknowledge that these effects occur. However, since it was intended that the same questions should be used in successive surveys to track changes in satisfaction over time, these effects should have no bearing on the validity of the method.

### Performance rating as an alternative to satisfaction

At the recommendation of Ms Rathouse, SEW asked Accent to conduct a supplementary series of cognitive interviews, with household customers only, using a variant of the survey instrument which included performance rating questions in place of satisfaction rating questions. The transcripts from these cognitive interviews were reviewed by Caroline Bryson. Her full review, and our response, are contained within Appendix D.

The relevant question in this variant asked: “*On a scale of 1 to 5, where 1 is ‘Very poor’ and 5 is ‘Very good’, how would you rate the performance of the following.*” The list of outcomes shown in section 3.2 then followed.

Upon analysis of the transcripts from these cognitive interviews, Ms Bryson concluded: “*Overall, the decision to use either approach is probably defensible, and which one to use depends on SEW’s information needs: whether it wants to try to pinpoint actual customer experience or whether it wants to capture customer perceptions of the services SEW provides.*”

On the basis of this conclusion, and given the strong prior motivation behind the use of customer satisfaction rather than performance as the target for the outcome delivery incentive regime, SEW took the decision, with Accent’s support, to retain the original customer satisfaction questions for the main survey.

### 3.4 Measuring WTP and WTA

In comparison to the measurement of customer satisfaction, which was expected to be relatively straightforward despite the issues discussed above, the measurement of WTP for improved satisfaction and WTA for reduced satisfaction was understood to be a much more daunting prospect. To our knowledge, obtaining measures of WTP/WTA for variations in customer satisfaction had never before been attempted. The present research therefore needed, to a degree, to venture into new territory.

On the basis of guidance from UKWIR (2011)<sup>7</sup>, a choice-based format was adopted as the principle method of elicitation, as opposed to a payment card, or open-ended method. Choice questions tend to be more natural and simpler for respondents to answer, and are less liable to bias due to the respondent misstating their WTP than the main alternatives. A disadvantage of choice questions, however, is that the responses only indicate that WTP is greater than or less than the stated cost amount, rather than give a point measure of WTP. This implies that assumptions are needed at the analysis stage to generate an estimate of mean WTP from the responses, rather than simply taking a sample mean. As a consequence, WTP estimates can be sensitive to the assumptions adopted, and are also less statistically precise than those obtained from payment card or open-ended questions. We discuss our analytical methods and assumptions in section 7.<sup>8</sup>

Specifically, the question format adopted was a sequence of questions, one for each outcome measure, which asked respondents to choose between two or three options depending on their current satisfaction rating for the outcome in question.

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<sup>7</sup> UKWIR (2011) Carrying out willingness to pay studies, Report ref no. 11/RG/07/22

<sup>8</sup> See UKWIR (2011) *ibid.* for a discussion of issues pertinent to the choice of WTP elicitation method.

- If they had rated their satisfaction as 5/5 they would be asked to choose between two options, one of which would be to maintain their satisfaction with no change to their bill, and the second would be to see a reduction in their satisfaction to 4/5, with an accompanying reduction in their annual water bill (by a specified amount).
- If they had rated their satisfaction as 2, 3 or 4 out of 5 they would be asked to choose between three options, one involving a one-point reduction in their satisfaction at a reduced bill, one maintaining their satisfaction with no change to their bill, and one increasing their satisfaction by one point, with an accompanying increase in their annual water bill.
- Finally, if they had rated their satisfaction as 1/5 they would be asked to choose between maintaining their satisfaction with no change to their bill, or increasing their satisfaction by one point, with an accompanying increase in their annual water bill.

Respondents who had answered “don’t know” when asked their current satisfaction with an outcome measure were not asked one of these choice questions and simply skipped to the next outcome measure for which they had provided a satisfaction rating.

The above question format required cost levels to be set for each option, for each outcome measure. Given the innovative nature of the survey design, it was not at all obvious at the outset of the study what these cost amounts should be. Consistent with standard SP survey designs, we intended that the cost levels should be split across the sample so that some respondents faced high costs and others faced low costs. Furthermore, the cost levels in an SP exercise should ideally be set at a level which encourages approximately 20% of respondents to choose the high cost option at the highest cost level, and 80% to choose the high cost option at the lowest cost level (Kanninen, 1995)<sup>9</sup>.

Our approach to setting cost levels was to take an educated guess at suitable levels for the pilot survey, and then revise these for the main stage based on the pilot responses. The initial levels chosen were {+1%, +2%} of respondents current bills for a one-point improvement in satisfaction, and {-1%, -2%} of respondents current bills for a one-point reduction in satisfaction. On the basis of pilot data which showed that respondents tended to choose the status quo option ‘too often’, the cost levels were revised for the main stage so that more respondents would be encouraged to choose both the lower satisfaction option and the higher satisfaction option. To this end, the costs were revised to {+0.5%, +1%} for the improvement option, and {-5%, -10%} for the reduced satisfaction option. In the former case, the costs were revised down to make the improvement option cheaper and hence more attractive to respondents; while in the latter case the cost reductions for the reduced satisfaction option were revised upwards to also make this option more attractive to respondents.

Ideally, an SP survey to elicit WTP would present respondents with a consequential, rather than a hypothetical, scenario in order to encourage the respondent to carefully consider their preferences and truthfully report their preferred choice. Typically in a contingent valuation survey, an accurate presentation of the sponsor’s decision context, coupled with a dichotomous choice question between the two key decision alternatives,

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<sup>9</sup> Kanninen, B. (1995) Bias in Discrete Response Contingent Valuation, *Journal of Environmental Economics and Management*, **28**, 114-125

is sufficient to establish validity by this criterion<sup>10</sup>. In the present case, however, this approach was not possible due to the fact that the good being valued was potentially different for every individual, with some respondents requiring a much greater underlying service improvement than others to raise their satisfaction level. It was therefore not possible to credibly tell people that the cost to them of raising their satisfaction level to  $S_1$  would be  $X$  because the company could not have known in advance what would be needed to raise each respondent's satisfaction to this higher level. Consequently, the context would inevitably need to be framed, and interpreted by the respondent, as being hypothetical, rather than consequential.

The hypothetical nature of the survey design inevitably weakens the validity of the resulting estimates in comparison with, for example, those obtained from the Primary WTP survey. To the extent that respondents always answer truthfully providing that they understand the question and there are no incentives for them to do otherwise, the results will not be materially affected by the hypothetical nature of the questions. On the other hand, if respondents perceive, in the absence of a clear motivation for asking the questions, that there is less risk to them in choosing to maintain the status quo, for example, than in choosing an improved or reduced satisfaction option, then there will be a bias in the data towards status quo choices. If this is the case, then estimates of WTP would be biased downwards and estimates of WTA would be biased upwards.

A number of further issues were considered to be relevant when designing and testing the WTP/WTA elicitation framework. Firstly, the underlying change in service imagined to cause a one-point improvement or reduction in satisfaction would need to be sufficiently clear in the respondent's mind to allow them to determine if it was worth the bill increase/reduction associated with it. This condition would fail if, for example, a respondent felt unable to imagine any scenario where they would rate their satisfaction at the higher or lower level.

We tested this condition by asking, for each outcome measure, what might cause the respondent to give a one-point lower satisfaction rating than they originally recorded, and what might cause them to give a one-point higher satisfaction rating. (These questions were only asked of respondents that had not originally given a rating of 1/5 or 5/5 respectively.) Answers to these questions were recorded verbatim and analysed at cognitive interview and pilot stages of the research, while for the main stage we recorded and analysed the proportion that were able to provide an answer to these questions in comparison with the proportion saying "don't know", which we interpret to mean that the respondent was unable to imagine a scenario that might cause them to give a one-point higher or a one point lower satisfaction rating. The results from the pre-testing confirmed that in the majority of cases, respondents were able to answer this question with sensible reasons. (We report results from the main stage survey to these questions in section 5.)

A second issue considered relevant to the validity of the WTP/WTA elicitation mechanism was that there should be a correspondence between what a person imagined would cause them to lower, or raise, their satisfaction rating, and the type of outcome that would actually cause them to lower, or raise, their satisfaction rating in practice. If respondents were to systematically underestimate or overestimate the nature of the

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<sup>10</sup> See, for example, Carson, R. and Groves, T. (2007) Incentive and informational properties of preference questions, *Environmental and Resource Economics*, **37**, 181-210.

service change that would be likely to cause them to increase or reduce their satisfaction rating by one point, then they might also systematically underestimate or overestimate their WTP/WTA for the resulting satisfaction change. In this case, the estimates would be accordingly biased.

On the other hand, if respondents had a clear sense of what the satisfaction level itself would feel like, then the extent of any bias would be minimal, even if respondents did fail to accurately forecast the service change needed to induce them to increase or reduce their satisfaction. If they did have this clear sense, then there would be no bias since their choices would validly measure their WTP/WTA for the change in satisfaction itself.

It was not possible to test this issue in the present study due to the fact that respondents were surveyed at one point in time only, rather than repeatedly sampled. The results obtained from the survey accordingly must be qualified with the caveat that their validity is contingent on the unknown ability of respondents to accurately forecast and value a revised level of satisfaction.

A further issue considered when designing the survey was that the estimates obtained should be sensitive to the possibility of so-called ‘package effects’, whereby the value of a particular improvement is sensitive to the overall package in which it is elicited. For example, if WTP values are intended to be applied for several outcome measures simultaneously, as was the case in the present study, it would be invalid to simply add up the values obtained for each one individually without allowing respondents to review their choices in the context of the cost of the package as a whole.

Our approach to this issue was to tell respondents the overall impact on their bill as a consequence of all the choices they had made in respect of each of the outcome measures, and give them the opportunity to revise their choices in light of this overall impact. This would ensure that the WTP results were not biased upwards as a consequence of adding up separate values for each outcome.

This approach would also mitigate, to a degree, any biases due to the order in which the outcomes were presented. In the absence of this mechanism, one might expect WTP to be higher for the earlier outcome measures in the sequence than for the later ones. An additional feature of the design, however, was to randomise the order in which the outcome measures were presented to respondents so that different respondents answered the question in different orders. This approach would average over any remaining order effects, and thereby mitigate against any remaining bias.

### 3.5 Questionnaire Structure

The full survey questionnaire comprised the following components.

- Recruitment screening questions, including questions on respondents’ experiences of a range of water service problems
- Satisfaction rating questions against a range of outcome types (discussed in 3.3 above).

- WTP/WTA elicitation questions for improvements/deteriorations to satisfaction (discussed in 3.4 above).
- Follow up questions, for validity assessment, asking whether respondents felt able to rate their satisfaction, choose between different options, imagine what a higher or lower satisfaction score would entail, whether the bill changes seemed realistic and whether they understood the impacts of inflation.
- Overall satisfaction with the water supply service from South East Water.
- Questions to explore customer attitudes towards the proposed approach to the use of customer satisfaction ratings as a means of setting bill levels.
- Demographics questions to understand the composition of the sample obtained.

Immediately following the end of the interview, the interviewer completed three feedback questions relating to the respondents understanding, effort and concentration.

### 3.6 Testing and Refinement

The survey design was tested via an initial series of 15 cognitive interviews (7 business and 8 household). These interviews were conducted by telephone and respondents were encouraged to “think aloud” and give feedback on the questionnaires as they worked their way through them. These interviews were conducted between 25 June and 4 July 2013.

Further pre-testing consisted of a pilot of 50 interviews with business customers conducted between 25-26 July. A further round of cognitive interviewing was then conducted to explore the use of the term ‘performance’ rather than ‘satisfaction’. These were conducted between 12-15 August with 7 household customers. Finally, a pilot of 51 interviews with household customers conducted between 19-22 September.

#### **Cognitive interviews**

The main objectives of the cognitive interviews were to test:

- the clarity and flow of the questionnaire
- the appropriateness of the language used
- the exercise design and understanding.

Respondents were recruited by telephone and completed the interview at a time convenient to them, over the telephone.

Respondents were taken through the survey instruments as they would in the main fieldwork. However, further questions were inserted throughout the interview to probe and test levels of understanding, where improvements to the survey could be made, and, what was driving their ratings.

The results from the cognitive testing showed that overall, participants were able to complete the survey, with a good degree of comprehension. However, upon

dissemination of the findings to SEW and the CCG, some concerns were raised with the CCG about the survey design. This ultimately led to a re-design of the questionnaire using 'performance' as the term of measure rather than 'satisfaction'. A further series of 7 cognitive interviews were then conducted with household customers with half being asked questions of 'performance' and half, questions of 'satisfaction'.

The transcripts from these interviews were reviewed by Caroline Bryson, an independent survey expert, who concluded that either approach would be appropriate. South East Water took the decision to retain the original design of 'satisfaction' questioning.

### **Pilot surveys**

Following on from the cognitive phase, the questionnaire was pilot tested via telephone interviews with 50 business customers. The household pilot of 51 interviews was conducted after the second phase of cognitive interviews.

In all cases, respondents were recruited and surveyed by telephone.

The pilot survey was conducted in order to test:

- the recruitment process
- the clarity and flow of the questionnaire
- the appropriateness of the language used
- the accuracy of all routings
- the design and understanding of the survey exercise
- the interview duration
- the survey hit rate.

As the core deliverables of the study are concerned with perceptions of service, the targets for this research were customers with responsibilities for paying bills.

Screening questions were used to ensure that the most appropriate target was selected for invitation to take part. Various quotas were used for the pilot phase to ensure the issues in question were explored with a full range of participants. For household customers, region, age and socio-economic grouping quotas were applied. For business customers, region, bill size and sector quotas were applied.

The key findings from the business and household pilot were:

- The majority of respondents felt able to rate how satisfied you were with each of the service measures discussed.
- The majority of respondents were able to imagine what a lower and higher satisfaction score would entail for each of the service measures
- The majority of respondents felt the bill changes discussed seemed realistic
- Interviews assessed respondents as generally showing very good levels of understanding, effort and concentration.

Following on from the household pilot (the final testing phase) it was found that respondents tended to stick with the status quo 'too often', rather than choose improved or reduced satisfaction options. In order to try and encourage respondents to choose the non-status quo options more often, and thereby improve the estimates of WTP and WTA, we revised the cost levels from {-1%, -2% } to {-5%, -10% } for the reduced satisfaction option, and from {+1%, +2% } to {+5%, +10% } for the improved satisfaction option.

Following the pilot survey, the questionnaire was adopted for the main stage of the survey with only minor changes to the wording in a few places. The amendments, as with all other amendments, were submitted to SEW for approval prior to the main fieldwork commencing.



## 4. SURVEY ADMINISTRATION

### 4.1 Sampling and Quota Controls

#### Households

The sampling frame for the household survey was sourced from Accent's preferred list supplier, Sample Answers who provided 'random digit dialling' (RDD) and 'lifestyle' sample for householders across the South East Water region.

RDD sample is created by selecting a known, existing telephone number and randomising the last couple of digits to generate a new telephone number that may or may not exist. Checks are made to ensure, firstly that the number is valid, and, so far as is possible, that the number is not a business number. The main advantage of RDD is that all households in a given geographical area are given equal opportunity to participate in the research. The main disadvantage is that there is no information known about the person on the other end of the phone before the call.

Lifestyle sample comes from a database of people based on a questionnaire covering all or some aspects of their lives including age, number of people in household, income, housing, family, education, sports and activities etc. This has the advantage of enabling specific targeting for quotas.

The overall target number of interviews to achieve was 1,000.

Quotas were set to try to ensure that the overall dataset was representative of South East Water's customers in terms of age, socio-economic group (SEG) and sewerage region.

Specifically, the following targets for the quotas were used:

- Age
  - 16% 16-34 yrs; 30% 35-49 yrs; 27% 50-64 yrs; 27% 65+yrs.
- SEG
  - 28% AB; 32% C1, 20% C2; 20% DE.
- Sewerage Region
  - 33% Thames Water; 67% Southern Water

The profile of interviews achieved, in comparison with population counterparts, is shown in Table 2. The achieved interviews broadly match the population structure with regard to age and SEG.

**Table 2: Regional and achieved profiles by age and SEG**

	Regional profile (%) <sup>(1)</sup>	Achieved profile (%) <sup>(2)</sup>
<b>Age</b>		
16-24	3	1
25-34	13	8
35-49	30	26
50-64	27	32
65-74	13	17
75+	14	16
<b>SEG</b>		
A/B	28	25
C1/C2	52	53
D/E	20	23
<b>Sewerage Region</b>		
Thames Water	33	29
Southern Water	67	70

(1) Source for "Age" regional profile: Census 2011 table DC6101EW, base: all household reference persons aged 16 and over in South East region. Source for "SEG" regional profile: Census 2011 table QS611EW, base: all household reference persons aged 16 to 64 in South East region. (2) Base for "Age" achieved profile: all respondents except those that refused to answer the question (985). Base for "SEG" achieved profile: all respondents aged under 65 (665).

Based on the results in this table, all household results are unweighted.

### Businesses

The business sampling frame for this survey was supplied by South East Water. The target respondent was the individual responsible for paying the organisation's water bills and/or for liaising with South East Water.

The key criteria used to develop the business sample plan were bill size and sewerage region. Table 3 shows the proportion of customers in the population in each of these categories, and the proportion achieved in the sample in the same categories.

The target set for the sample was to try and obtain a representative sample by these categories; the table shows that this target was closely achieved.

**Table 3: Target and achieved profiles by bill size**

	Target profile (%) <sup>(1)</sup>	Achieved profile (%) <sup>(2)</sup>
<b>Bill size</b>		
Less than £1k	79	74
£1k-£5k	15	19
£5k+	6	8
<b>Sewerage Region</b>		
Thames Water	33	33
Southern Water	67	67

(1) Source: SEW database of all business customers. (2) Base: all business respondents (608)

Based on the results in this table, all business results are unweighted.

## 4.2 Fieldwork Methodology

The fieldwork for household and business customers was undertaken using a telephone method, where respondents are recruited and surveyed by telephone. This method allows interviews to be drawn randomly from across the SEW region rather than from a small number of areas, or clusters, as would be the case with face-to-face interviewing. This well-established method also allows for high levels of quality control and interviewer administration to ensure respondent comprehension is maximised.

The interviews were completed by experienced interviewing teams, trained to ISO 20252 standards. Computer-aided interviews were undertaken using Accent's proprietary software *Accis*.

All telephone work was fully supervised, and interviews were monitored on a regular basis in line with Accent's quality system requirements.

The main stage business and household survey was conducted between 3-27 October 2013.

All research was undertaken in line with the requirements of the market research quality standard ISO 20252:2006.

## 5. SURVEY PERFORMANCE AND DATA SCREENING

### 5.1 Introduction

The survey design was novel, and made demands on respondents that were unfamiliar; for example, asking them to rate their satisfaction with water service measures and choose between options for different future satisfaction levels. As a consequence, it was therefore important to carry out validity checks on respondents' understanding and ability to answer the questions in the intended manner.

This section begins by presenting findings from a collection of respondent feedback questions on issues pertinent to the survey's performance in obtaining valid results (section 5.2). Section 5.3 then examines feedback from interviewers on understanding, effort and concentration; section 5.4 reviews the extent to which respondents answered 'don't know' when asked to rate their current satisfaction levels; and section 5.5 reviews the extent to which respondents answered 'don't know' when asked what improvements or reductions in service levels might cause them to raise or lower their satisfaction ratings by one point.

In summary, feedback from respondents and interviewers indicates that respondent understanding, effort, concentration and perceived ability to rate were all very good. For some of the outcome measures, however, in particular the 'leakage' outcome, respondents were unable to rate their current satisfaction, as indicated by the proportion answering 'don't know'. Their responses were not used within the subsequent analysis of WTP and WTA, and as a consequence the main results for these outcome areas will only be fully representative of that part of the customer base that feels able to rate how satisfied they are currently.

### 5.2 Respondent Feedback

Table 4 shows results from a series of respondent feedback questions, which asked whether respondents felt they were able to answer the questions, whether they thought the bill levels were realistic and whether they understood that their bill would increase alongside increases in inflation.

Overall, the results are very positive, and indicate that the vast majority of respondents did feel they were able to answer the questions, thought the bill levels were realistic and understood that their bills would increase in addition to rises in general inflation.

**Table 4: Respondent feedback, by customer type**

Question		Frequency, by customer type (%)	
		All Households	All Businesses
Q28 (HH) / Q28 (Bus)	Did you feel able to rate how satisfied you were with each of the service measures we talked about?		
	Yes No	97 3	94 6
Q28A (HH) / Q28A (Bus)	Did you feel able to choose between the different options?		
	Yes No	95 5	90 10
Q30 (HH) / Q30 (Bus)	Did you feel able to imagine what a higher satisfaction score than the one you gave us would entail for each of the service measures?		
	Yes No	87 13	76 24
Q31A (HH) / Q31A (Bus)	Did you feel able to imagine what a lower satisfaction score than the one you gave us would entail for each of the service measures?		
	Yes No	88 12	77 23
Q32 (HH) / Q32 (Bus)	Did the bill changes we talked about seem realistic?		
	Yes No	84 17	73 27
Q34 (HH) / Q34 (Bus)	Did you understand that the amount your bill would change would be in addition to increases due to general inflation which would happen even with no change to your service levels?		
	Yes No	95 5	94 6

*Base: All households = 1,000; All businesses = 608.*

### 5.3 Interviewer Feedback

Table 5 shows results from three feedback questions completed by interviewers immediately following completion of each survey. These results are also very positive and indicate that the vast majority understood the questions, gave them due consideration and were able to maintain concentration throughout the survey.

**Table 5: Interviewer feedback, by customer type**

Question		Frequency, by customer type (%)	
		Households	Businesses
Q42 (HH) / Q38 (BUS)	<b>In your judgement, did the respondent understand what he/she was being asked to do in the questions?</b>		
	Understood completely	51	65
	Understood a great deal	31	29
	Understood a little	16	5
	Did not understand very much	2	0
	Did not understand at all	0	0
Q43 (HH) / Q39 (BUS)	<b>Which of the following best describes the amount of thought the respondent put into making their choices?</b>		
	Gave the questions very careful consideration	49	57
	Gave the questions careful consideration	32	33
	Gave the questions some consideration	17	9
	Gave the questions little consideration	2	1
	Gave the questions no consideration	1	0
Q44 (HH) / Q40 (BUS)	<b>Which of the following best describes the degree of fatigue shown by the respondent when making their choices?</b>		
	Easily maintained concentration	54	76
	Maintained concentration with some effort	27	19
	Maintained concentration with a deal of effort	15	3
	Lessened concentration in the later stages	3	1
	Lost concentration in the later stages	1	0

*Base: All households =1,000; All businesses = 608.*

## 5.4 Respondent's Ability to Rate Their Current Satisfaction Levels

Table 6 shows the proportion of respondents that answered 'don't know' when asked to rate their current satisfaction against each of the outcome measures shown. The table shows that respondents tended to have little trouble rating the pressure, appearance and taste and smell of their water, or their water supply service from SEW overall, but a substantial proportion, albeit still a minority, were unable to rate their satisfaction against the frequency and duration of interruptions, the amount of water that leaks from SEW's pipes across the region, the frequency of hosepipe bans, and SEW's customer service.

All those that answered 'don't know' to these questions were excluded from answering the subsequent questions which asked respondents to choose between options for increasing, reducing or maintaining their satisfaction levels. Our main WTP and WTA results are therefore based only on the sample of respondents that were able to rate their current satisfaction level against the outcome measure in question.

**Table 6: Frequency of ‘don’t know’ responses to current satisfaction questions, by outcome measure and customer type**

Outcome measure	Frequency saying ‘don’t know’, by customer type (%)	
	Households	Businesses
The water pressure at your property (by this we mean the rate at which water flows from the taps).	1	4
The frequency and duration of interruptions to your water supply	14	11
The appearance of the water supplied to you	1	4
The taste and smell of the water supplied to you	1	6
The amount of water that leaks from South East Water’s pipes across their region	46	34
The frequency of hosepipe bans in your area	27	29
South East Water’s customer service (When considering your rating, think of things such as contact with South East Water either through a phone call, or by letter or email or when reading your bill.)	29	17
Your water supply service from South East Water overall	0	1

*Base: All households = 1,000; All businesses = 608.*

## 5.5 Respondent’s Ability to Articulate Causes for Improved/Reduced Satisfaction

Table 7 shows the proportion of household and business respondents that answered ‘don’t know’ when asked to articulate, for each outcome measure, what improvements might move their satisfaction rating up by one point from its current level, and what reduction in service might move their rating down by one point. The former question was asked of all respondents except those stating their current satisfaction was 5/5 or who answered ‘don’t know’, and the latter question was asked of all respondents except those stating their current satisfaction was 1/5 or who answered ‘don’t know’.

The table shows a consistent pattern where around 20% to 30% of respondents answered don’t know to these questions. A clear majority were therefore able to articulate answers to these questions. Furthermore, it is possible that some of the respondents who said ‘don’t know’ might still have been able to clearly imagine what a higher or lower satisfaction rating would feel like, and hence whether it would be worth more or less to them than the bill impact shown, even if they were not able, or willing, to articulate what underlying changes in service might cause that change to their satisfaction.

**Table 7: Frequency of ‘don’t know’ responses to questions asking respondents what improvements/deteriorations to service levels might cause them to increase/reduce their satisfaction rating by one point, by outcome measure and customer type**

Question and outcome measure	Frequency saying ‘don’t know’, by customer type (%)	
	Households	Businesses
<b>What improvements might move your satisfaction from a score of [X] to a score of [X+1] out of 5? (ie you would receive a slightly better service than you get now.)</b>		
The water pressure at your property (by this we mean the rate at which water flows from the taps).	28	32
The frequency and duration of interruptions to your water supply	33	33
The appearance of the water supplied to you	30	37
The taste and smell of the water supplied to you	24	22
The amount of water that leaks from South East Water’s pipes across their region	17	10
The frequency of hosepipe bans in your area	23	28
South East Water’s customer service (When considering your rating, think of things such as contact with South East Water either through a phone call, or by letter or email or when reading your bill.)	39	22
<b>What reduction in service might move your satisfaction from a score of [X] to a score of [X-1] out of 5? (ie you would receive a slightly worse service than you get now.)</b>		
The water pressure at your property (by this we mean the rate at which water flows from the taps).	26	25
The frequency and duration of interruptions to your water supply	28	24
The appearance of the water supplied to you	24	24
The taste and smell of the water supplied to you	26	23
The amount of water that leaks from South East Water’s pipes across their region	31	28
The frequency of hosepipe bans in your area	30	32
South East Water’s customer service (When considering your rating, think of things such as contact with South East Water either through a phone call, or by letter or email or when reading your bill.)	38	32

*Base: All households = 1,000; All businesses = 608.*

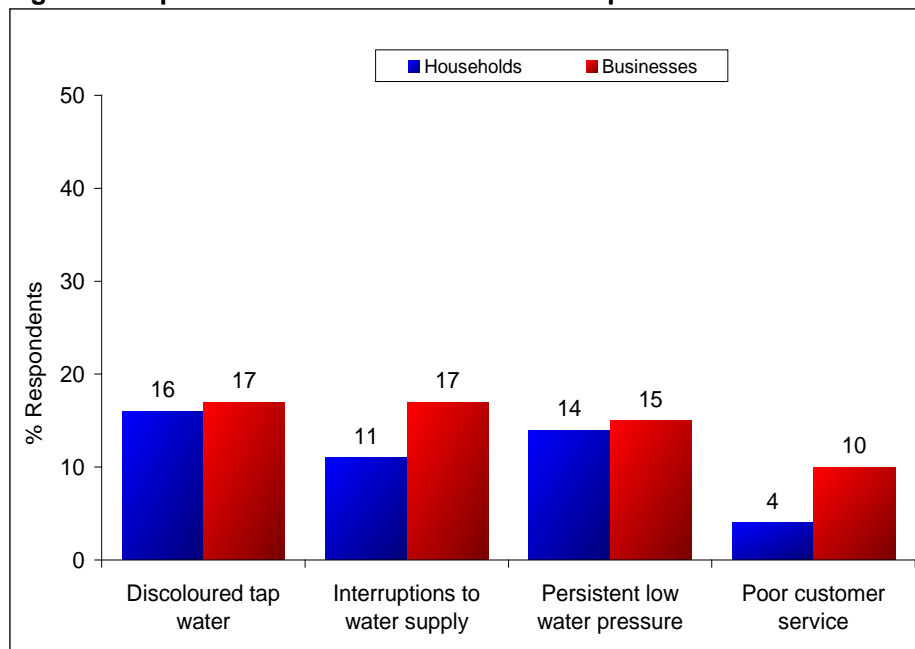


## 6. EXPERIENCES AND SATISFACTION

### 6.1 Experience of Water Service Problems

Respondents were asked whether they had experienced any problems with their water supply in the past 12 months. Around one in six households (16%) and businesses (17%) had experienced discoloured tap water in the past 12 months (Figure 1). Experience of interruptions to the water supply, persistent low water pressure and poor customer service was generally higher amongst business respondents than household respondents. Around one in six businesses had experienced interruptions to their water supply (17%) and persistent low water pressure (15%) while only 11% of households had experienced an interruption to their water supply and 14% had experienced persistent low water pressure. One in ten businesses had experienced poor customer service from South East Water compared to 4% of households.

**Figure 1: Experience of water service issues in past 12 months**



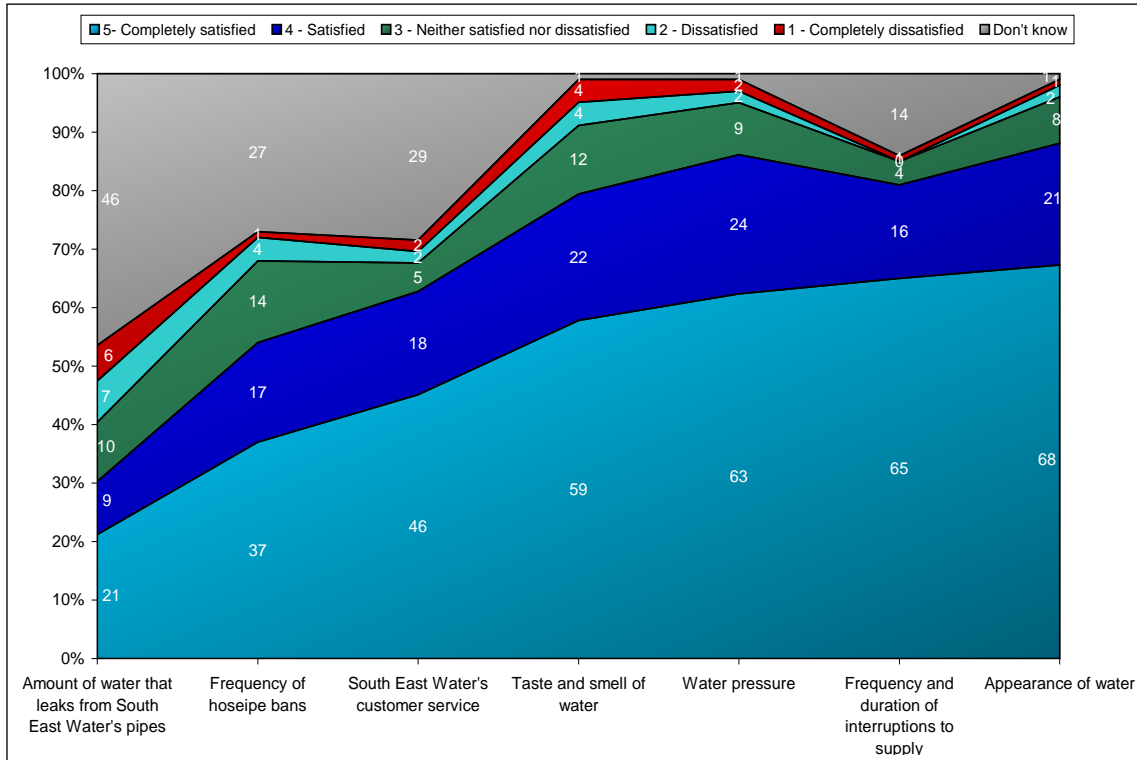
Base: all households = 1,000; all businesses = 608

### 6.2 Satisfaction with South East Water Services

#### Current Satisfaction Levels by Outcome Measure

Generally, the majority of household respondents were satisfied with current service levels (Figure 2). Satisfaction was highest for appearance of water (89% satisfied or completely satisfied), frequency and duration of interruptions (81%), water pressure (87%) and taste and smell of water (81%). Satisfaction was lowest for customer service (64% satisfied or completely satisfied), frequency of hosepipe bans (54%) and leakage from South East Water pipes (30%). However it should be noted that for these three service areas, a notable proportion of customers stated 'don't know' when asked to rate their satisfaction (29% for customer service; 27% for frequency of hosepipe bans and 46% for leakage).

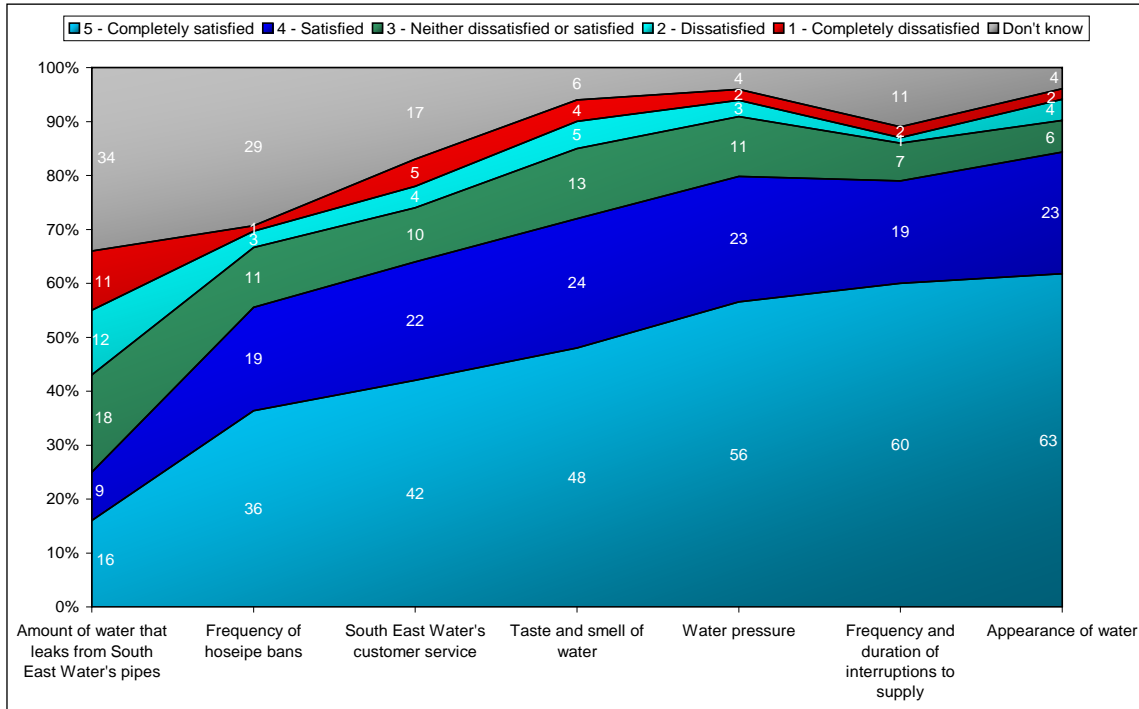
**Figure 2: Household satisfaction with current service levels**



Base: all households = 1,000

Figure 3 indicates that the majority of business respondents were satisfied with current service levels. Satisfaction was particularly high for appearance of water (86% satisfied or completely satisfied), frequency and duration of interruptions (79%), water pressure (79%), taste and smell of water (72%) and customer service (64% satisfied or completely satisfied). Satisfaction was particularly low for frequency of hosepipe bans (55%) and leakage from South East Water pipes (25%). In line with this, almost one quarter of businesses (23%) were either dissatisfied or completely dissatisfied with the amount of leakage from South East Water pipes and roughly one in three (29%) did not know whether they were satisfied or dissatisfied with the frequency of hosepipe bans, or the amount of water that leaks from South East Water's pipes (34%).

**Figure 3: Business satisfaction with current service levels**

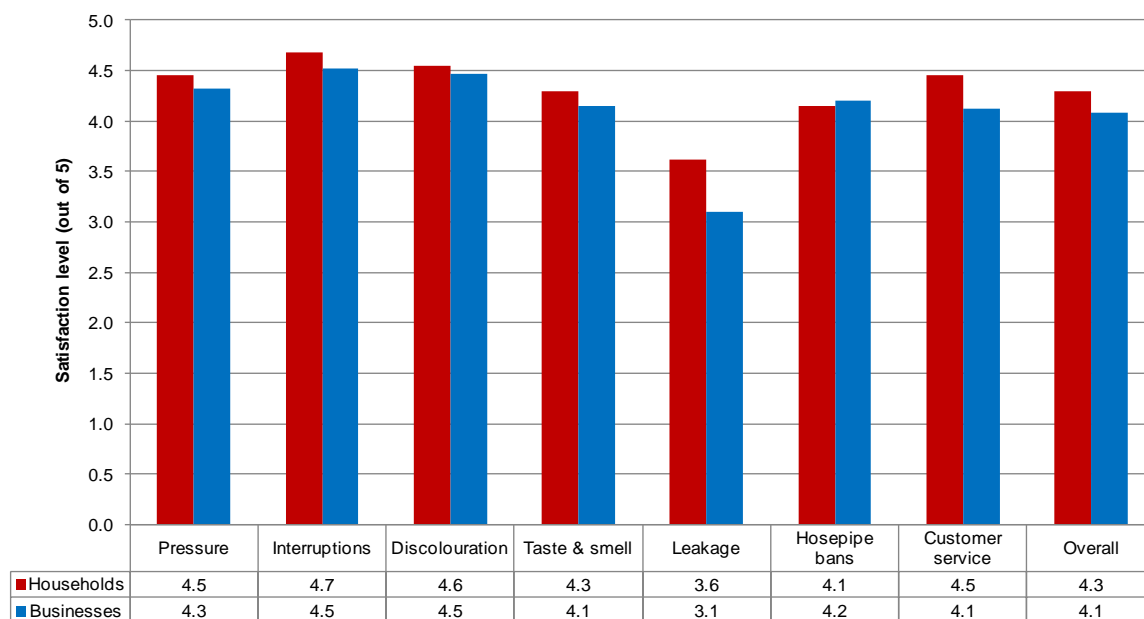


Base: all businesses = 608

Figure 5 shows mean current satisfaction levels for each service measure (out of 5) for households and businesses, where those answering 'don't know' have been excluded from the calculation. The figure also shows 95% confidence intervals around the estimates, which represents the range within which the mean could be expected to fall in 95% of same-sized samples from the same population.

Table 8 then contains the full set of results from Figure 4 including the upper and lower values of each range shown by "T" bars in the figure.

**Figure 4: Mean current satisfaction levels, by customer type**



Main figures presented are the mean current satisfaction scores for the corresponding customer type and service measure. The “I” bars show the 95% confidence interval. Bases include all respondents except where respondent answered “Don’t know” to their current satisfaction with the service measure. Bases for households: pressure (988); interruptions (857); discolouration (992); taste & smell (990); leakage (538); hosepipe bans (735); customer service (714); overall (997). Bases for businesses: pressure (586); interruptions (541); discolouration (586); taste & smell (571); leakage (404); hosepipe bans (431); customer service (502); overall (603).

**Table 8: Current satisfaction ratings (out of 5), by service measure and customer type**

Outcome measure	Households		Businesses	
	Mean	Range	Mean	Range
Pressure <sup>(1)</sup>	4.5	(4.4, 4.5)	4.3	(4.2, 4.4)
Interruptions <sup>(2)</sup>	4.7	(4.6, 4.7)	4.5	(4.4, 4.6)
Discolouration <sup>(3)</sup>	4.6	(4.5, 4.6)	4.5	(4.4, 4.5)
Taste & smell <sup>(4)</sup>	4.3	(4.2, 4.4)	4.1	(4.1, 4.2)
Leakage <sup>(5)</sup>	3.6	(3.5, 3.7)	3.1	(3.0, 3.2)
Hosepipe bans <sup>(6)</sup>	4.1	(4.1, 4.2)	4.2	(4.1, 4.3)
Customer service <sup>(7)</sup>	4.5	(4.4, 4.5)	4.1	(4.0, 4.2)
Overall <sup>(8)</sup>	4.3	(4.2, 4.3)	4.1	(4.0, 4.2)

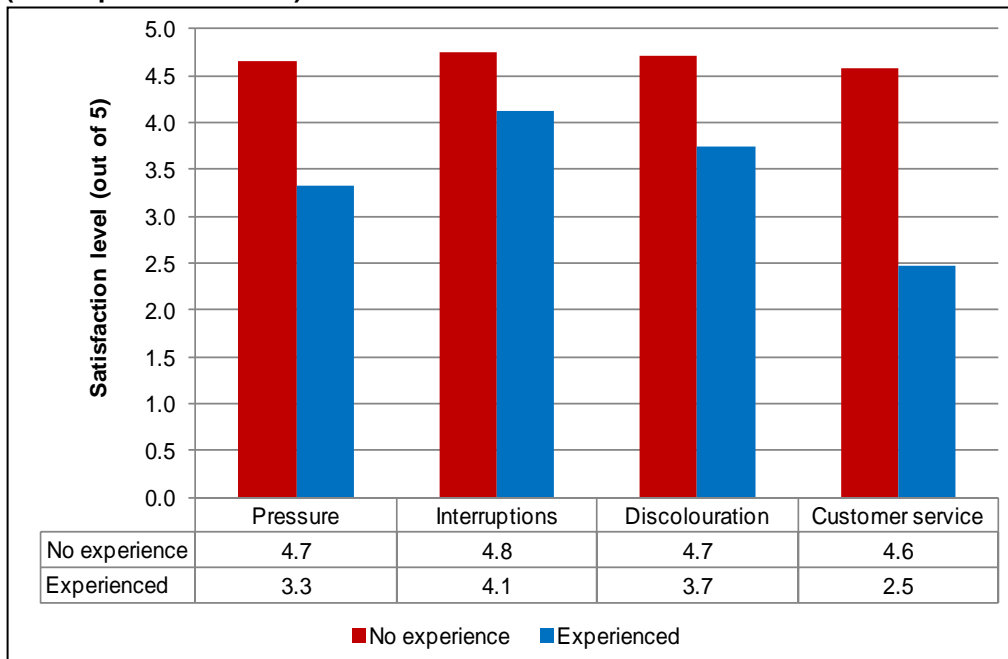
“Range” figures show the 95% confidence interval around the corresponding mean. Bases include all respondents except where respondent answered “Don’t know” to their current satisfaction with the service measure. Bases for households: pressure (988); interruptions (857); discolouration (992); taste & smell (990); leakage (538); hosepipe bans (735); customer service (714); overall (997). Bases for businesses: pressure (586); interruptions (541); discolouration (586); taste & smell (571); leakage (404); hosepipe bans (431); customer service (502); overall (603).

### Current Satisfaction Levels by Experience of Service Problem

Figure 5 and Figure 6 below show mean current satisfaction levels for each service measure (out of 5) for households and businesses respectively, by whether or not they had experienced a problem with the service measure in question over the course of the previous 12 months.

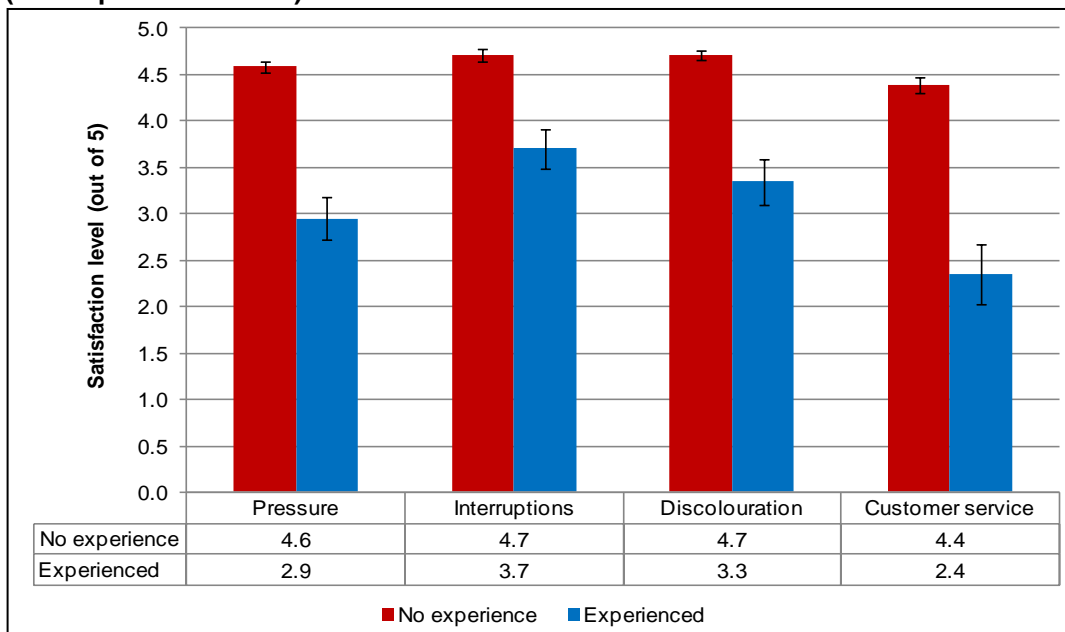
The figures show that those who had experienced a problem gave substantially lower satisfaction ratings for each service measure than those who had no experience of this problem, as expected. The differences are all statistically significant at the 1% level for households and businesses, for each of the service measures.

**Figure 5: Household mean current satisfaction levels, by experience of service problem (within past 12 months)**



Main figures presented are the mean current satisfaction scores for the corresponding group. The “I” bars show the 95% confidence interval. “Experienced” means the respondent had experienced the corresponding service problem within the last 12 months; “No experience” means they had no experience of this within the last 12 months. Bases include all households in the corresponding group except where respondent answered “Don’t know” to their current satisfaction with the service measure. Bases: No experience, pressure (834); No experience, interruptions (747); No experience, discolouration (822); No experience, customer service (663); Experienced, pressure (144); Experienced, interruptions (107); Experienced, discolouration (162); Experienced, customer service (42).

**Figure 6: Business mean current satisfaction levels, by experience of service problem (within past 12 months)**



Main figures presented are the mean current satisfaction scores for the corresponding group. The “I” bars show the 95% confidence interval. “Experienced” means the respondent had experienced the corresponding service problem within the last 12 months; “No experience” means they had no experience of this within the last 12 months. Bases include all businesses in the corresponding group except where respondent answered “Don’t know” to their current satisfaction with the service measure. Bases: No experience, pressure (486); No experience, interruptions (436); No experience, discolouration (474); No experience, customer service (434); Experienced, pressure (94); Experienced, interruptions (101); Experienced, discolouration (98); Experienced, customer service (60).

## 7. WILLINGNESS TO PAY/ACCEPT

### 7.1 Introduction

In this section we present our analysis of the choices made by respondents between options for improving, reducing or maintaining satisfaction. We begin in section 7.2 by describing our analysis methodology for these questions. Section 7.3 presents descriptive findings on the frequency of each type of choice, by customer type, current satisfaction level, and cost range for the improve and reduce satisfaction options. Section 7.4 then presents our main findings on WTP for improved satisfaction and section 7.5 presents our main findings on WTA for reduced satisfaction.

### 7.2 Analysis Methodology

The questions used to measure customers' WTP and WTA for improvements and reductions in satisfaction consisted in a single choice per respondent, per outcome measure, between either two or three options depending on their current satisfaction rating for the outcome in question. These questions did not directly provide data on respondents' WTP and WTA; instead, it was necessary to make assumptions regarding the shape of the full distribution of WTP and WTA in order to estimate the mean, and confidence intervals, from the data.

Our approach to deriving mean WTP and WTA estimates from the raw choice data was to use the Turnbull algorithm<sup>11</sup>. This method is commonly adopted in contingent valuation studies as a way of obtaining lower bound estimates of mean WTP based on dichotomous choice response data. The figure below illustrates the calculation of the Turnbull lower bound estimate.

In Figure 7, the left hand side graph illustrates the WTP calculation and the right hand side illustrates the WTA calculation. On the left hand side graph, two statistics from the data are plotted, each indicated by an "x", where these statistics are the proportions choosing increased satisfaction at each of the two cost levels  $s_1$  and  $s_2$  shown in the survey. These proportions are indicated on the graph as  $1-F_1$  and  $1-F_2$ , where  $F_i$  is the cumulative distribution of WTP at  $s_i$ , ie the proportion whose maximum WTP is less than or equal to  $s_i$ . At  $s_i=0$ ,  $F_i=0$ ; and at  $s_i=\infty$ ,  $F_i=1$ .

To estimate mean WTP, one needs to make assumptions regarding how the distribution of WTP is shaped around these two statistics. The most conservative assumption that can be made, ie the one that leads to the lowest WTP estimate, but that is still consistent with the principle that the proportion willing to pay above a certain cost amount is decreasing in that cost amount, is shown by the shaded area on the graph. This shading embodies three assumptions: (i) that the proportion willing to pay for improved satisfaction falls to zero for costs immediately above  $s_2$ , the highest cost amount shown.; (ii) that the proportion willing to pay any amount between  $s_1$  and  $s_2$  is equal to the proportion willing to pay  $s_2$ , the higher of the two amounts; and (iii) that the proportion willing to pay any amount less than  $s_1$  is equal to the proportion willing to pay  $s_1$  itself.

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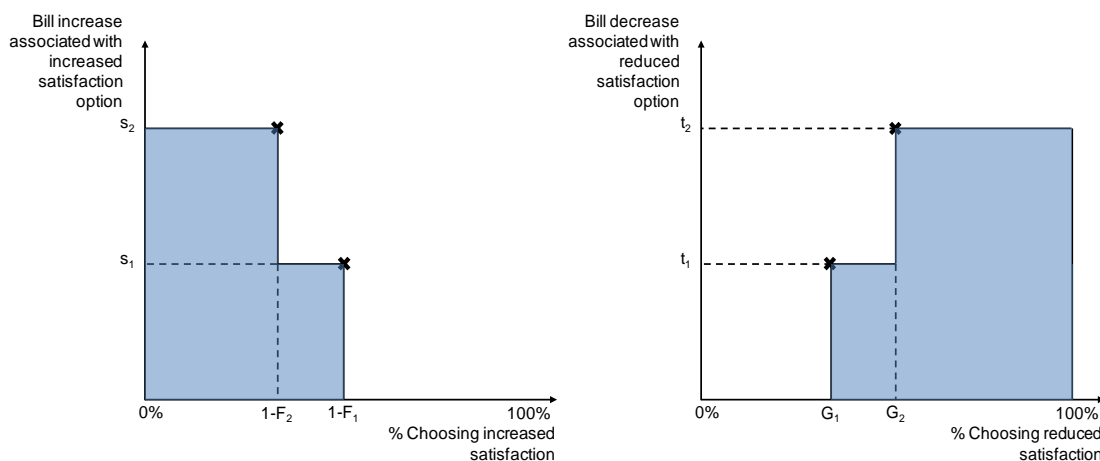
<sup>11</sup> Turnbull, B. W. (1976), The empirical distribution function with arbitrarily grouped, censored, and truncated data, *J. R. Stat. Soc.*, **38**, 290–295.

Given these assumptions, a lower-bound estimate of mean WTP can be obtained using the standard formula for a mean:  $E[WTP] = \int_{-\infty}^{\infty} sf(s)ds$ , where  $f(s)$  is the probability of choosing the increased satisfaction option given bill increase  $s$ . The solution to this formula can be seen geometrically to be the area of the shaded region in the graph, and it is thereby also seen that the assumptions employed which determined the shape of that region did so in such a way as to minimise its area, given the constraint that the proportion willing to pay above a certain cost amount is decreasing in that cost amount. Alternative assumptions such as drawing a line through the two points on the graph would have led to a larger shaded area, and hence a larger estimate of mean WTP.

A similar approach can be taken to obtaining a lower bound estimate of mean WTA. In this case, as shown in the right-hand graph of Figure 7, for bill reductions  $t_1$  and  $t_2$ , the relevant cumulative distribution function  $G_i = G(t_i)$  indicates the proportion whose minimum WTA is less than or equal to  $t_i$ .

The corresponding assumptions needed to generate a lower bound estimate of mean WTA in this case are: (i) that all respondents would choose the reduced satisfaction option at any amount greater than  $t_2$ ; (ii) that the proportion willing to accept any amount between  $t_1$  and  $t_2$  is equal to the proportion willing to accept  $t_2$ , the greater of the two bill reduction amounts; and (iii) that the proportion willing to accept any amount less than  $t_1$  is equal to zero. Given these assumptions, the shaded region of the graph is as small as it could be given the constraint that the proportion willing to accept above a certain cost amount is increasing in that cost amount. Hence, this algorithm results in a lower-bound estimate of mean WTA.

**Figure 7: Illustration of Turnbull estimator for the lower bound on mean WTP and WTA**



Confidence intervals can be generated for the Turnbull estimates using a standardised formula, (see Haab and McConnell, 2003, for details<sup>12</sup>.)

The advantages of the Turnbull analysis are that it is assured to give lower bound estimates of mean WTP and WTA, and that it does not require an econometric model to generate the estimates. The disadvantage of the method is that these estimates may be well below the true mean WTP and WTA in the population. In particular, if there are any individuals in the population that would never choose the lower satisfaction,

<sup>12</sup> Haab, T. and McConnell, K. (2003) *Valuing Environmental and Natural Resources: The Econometrics of Non-market Valuation*, Edward Elgar, Cheltenham, UK.

regardless of the cost reduction on offer, then the true WTA estimate would be infinite, and hence undefined. Our estimate of WTA as a consequence may be substantially lower than true WTA on account of the assumptions employed in the Turnbull analysis.

In order to apply the Turnbull procedure in the present case, given that a three-way choice was offered rather than a two-way choice, it has been necessary to make one further pair of assumptions. We have assumed that all those choosing the improved satisfaction option would have chosen to maintain the status quo, with no change to their bills, if faced with just a two-way choice between this option and the reduced satisfaction option; and that all those choosing the reduced satisfaction option would have chosen to maintain the status quo, with no change to their bills, if faced with just a two-way choice between this option and the improved satisfaction option. These assumptions were necessary to ensure that the Turnbull procedure could be applied, and are the only reasonable assumptions that could have been made in the context to translate the responses from a three-way choice into the dichotomous choice data required by the Turnbull algorithm.

### 7.3 Descriptive Findings on Responses to Choice Questions

Table 9 shows the frequency of household choices for reducing, maintaining and improving satisfaction, by initial satisfaction rating and cost range for the options. For those that stated their initial satisfaction was 1/5, there were only two options: maintain or improve satisfaction; hence, the 'reduce satisfaction' column shows "N/A" for this group. Likewise, for those that stated their initial satisfaction was 5/5, there were again only two options: maintain or reduce satisfaction; hence, the 'improve satisfaction' column shows "N/A" for this group.

The table shows that there was a tendency for respondents to prefer to maintain current satisfaction levels rather than switch to either improved or reduced levels. Focussing on the middle satisfaction band, where respondents had the choice between all three options, around two thirds tended to prefer to maintain current satisfaction levels, with the remaining third being split between improve and reduce satisfaction options.

Comparing the "Low cost" and "High cost" sections of the table, still within the middle satisfaction band, we see a tendency for more "Reduce satisfaction" choices and fewer "Improve satisfaction" choices in the "High cost" group than in the "Low cost" group, which is as expected. For example, for the 'Pressure' outcome measure, the proportion choosing the "Reduce satisfaction" option is 14% in the "Low cost" group, but 15% in the "High cost" group; and the proportion choosing the "Improve satisfaction" option is 25% in the "Low cost" group, but only 12% in the "High cost" group.

Comparisons of this sort for the "Satisfaction =1" group are not reliable due to the small number of respondents reporting that they were completely dissatisfied for any of the outcome measures. For the "Satisfaction =5" group, the comparison of choices between "High cost" and "Low cost" groups appears counter-intuitive in some cases. For example, the proportion choosing the reduce satisfaction option for the Leakage outcome measure is higher for the "Low cost" group than for the "High cost" group.

Table 10 shows the same set of results for businesses, and a similar set of findings emerges from these results as in the case of households. The table shows that there was



again a tendency for respondents to prefer to maintain current satisfaction levels than to switch to either improved or reduced levels. Furthermore, when comparing across the “Low cost” and “High cost” groups there was no uniform tendency for more “Reduce satisfaction” choices and fewer “Improve satisfaction” choices in the “High cost” group than in the “Low cost” group, which was to be expected.

Overall, these results suggest that the decision over which option to choose is not uniformly sensitive to the cost of the option in the expected direction. Further investigation would be needed to explore why this was the case.

**Table 9: Household choice frequencies, by satisfaction rating and cost levels**

Service measure	Low cost {-5%,0%,+0.5%}(1)			High cost {-10%,0%,+1%}(1)		
	Reduce satisfaction (%)	Maintain satisfaction (%)	Improve satisfaction (%)	Reduce satisfaction (%)	Maintain satisfaction (%)	Improve satisfaction (%)
<b>Satisfaction=1</b>						
Pressure	N/A	50	50	N/A	46	54
Interruptions	N/A	88	13	N/A	0	0
Discolouration	N/A	83	17	N/A	67	33
Taste & smell	N/A	69	31	N/A	68	32
Leakage	N/A	63	37	N/A	63	38
Hosepipe bans	N/A	67	33	N/A	75	25
Cust. service	N/A	86	14	N/A	60	40
<b>Satisfaction=2,3,4</b>						
Pressure	14	60	25	15	73	12
Interruptions	15	76	9	20	75	5
Discolouration	13	71	17	20	71	10
Taste & smell	13	60	26	13	70	17
Leakage	13	58	28	17	62	21
Hosepipe bans	17	67	16	18	61	20
Cust. service	27	62	11	21	75	4
<b>Satisfaction=5</b>						
Pressure	18	82	N/A	18	82	N/A
Interruptions	15	85	N/A	15	85	N/A
Discolouration	14	86	N/A	11	89	N/A
Taste & smell	12	88	N/A	10	90	N/A
Leakage	20	80	N/A	9	91	N/A
Hosepipe bans	38	62	N/A	38	62	N/A
Cust. service	30	70	N/A	32	68	N/A

Base: all households in each category except those stating ‘don’t know’ when asked to choose between the options. (1) Cost ranges show the percentage impact on customers’ current bill associated with the choice of reduce satisfaction, maintain satisfaction, or improve satisfaction respectively.

**Table 10: Business choice frequencies, by satisfaction rating and cost levels**

Service measure	Low cost {-5%,0%,+0.5%}(1)			High cost {-10%,0%,+1%}(1)		
	Reduce satisfaction (%)	Maintain satisfaction (%)	Improve satisfaction (%)	Reduce satisfaction (%)	Maintain satisfaction (%)	Improve satisfaction (%)
<b>Satisfaction=1</b>						
Pressure	N/A	80	20	N/A	50	50
Interruptions	N/A	80	20	N/A	100	0
Discolouration	N/A	60	40	N/A	67	33
Taste & smell	N/A	50	50	N/A	33	67
Leakage	N/A	66	34	N/A	62	38
Hosepipe bans	N/A	67	33	N/A	67	33
Cust. service	N/A	60	40	N/A	71	29
<b>Satisfaction=2,3,4</b>						
Pressure	9	74	17	18	68	14
Interruptions	12	71	17	16	72	12
Discolouration	18	67	16	10	70	20
Taste & smell	11	65	25	10	67	23
Leakage	15	52	33	8	65	27
Hosepipe bans	13	65	22	11	74	16
Cust. service	14	70	16	14	69	16
<b>Satisfaction=5</b>						
Pressure	16	84	N/A	22	78	N/A
Interruptions	15	85	N/A	14	86	N/A
Discolouration	13	87	N/A	12	88	N/A
Taste & smell	12	88	N/A	13	87	N/A
Leakage	12	88	N/A	22	78	N/A
Hosepipe bans	16	84	N/A	32	68	N/A
Cust. service	15	85	N/A	12	88	N/A

Base: all businesses in each category except those stating 'don't know' when asked to choose between the options. (1) Cost ranges show the percentage impact on customers' current bill associated with the choice of reduce satisfaction, maintain satisfaction, or improve satisfaction respectively.

## 7.4 WTP for Improved Satisfaction

Table 11 shows our main results on WTP for improved satisfaction, by customer type, which are generated from the data in Table 9 and Table 10 following the approach described in section 7.2 above. Choice data from respondents who were completely satisfied (5/5) with the outcome were excluded from these calculations because they were not offered a choice of an improved level of satisfaction. The table shows mean WTP values and the 95% confidence interval around this mean.

The results in Table 11 show a similar ordering for households and businesses, with household mean WTP per one-point improvement in satisfaction ranging from £0.15 per household, in the case of 'Interruptions', to £0.54 per household in the case of 'Leakage'. For businesses, mean WTP ranged from £1.31 per business, in the case of 'Interruptions', to £2.92 per business in the case of 'Leakage'.

**Table 11: WTP for improvements in satisfaction levels, by customer type**

Service measure	Households (£/hh/year/satisfaction point)		Businesses (£/bus/year/satisfaction point)		
	Mean	95% Conf. interval	Mean	95% Conf. interval	
	Pressure <sup>(1)</sup>	£0.41	(£0.32, £0.49)	£1.57	(£1.11, £2.02)
Interruptions <sup>(2)</sup>	£0.15	(£0.07, £0.22)	£1.31	(£0.81, £1.80)	
Discolouration <sup>(3)</sup>	£0.27	(£0.19, £0.35)	£1.74	(£1.23, £2.25)	
Taste & smell <sup>(4)</sup>	£0.46	(£0.37, £0.54)	£2.45	(£1.95, £2.94)	
Leakage <sup>(5)</sup>	£0.54	(£0.44, £0.64)	£2.92	(£2.41, £3.43)	
Hosepipe bans <sup>(6)</sup>	£0.37	(£0.29, £0.45)	£1.82	(£1.30, £2.34)	
Customer service <sup>(7)</sup>	£0.17	(£0.10, £0.24)	£1.67	(£1.20, £2.15)	
<b>Sum</b>	<b>£2.36</b>	<b>(£1.79, £2.93)</b>	<b>£13.48</b>	<b>(£10.02, £16.93)</b>	

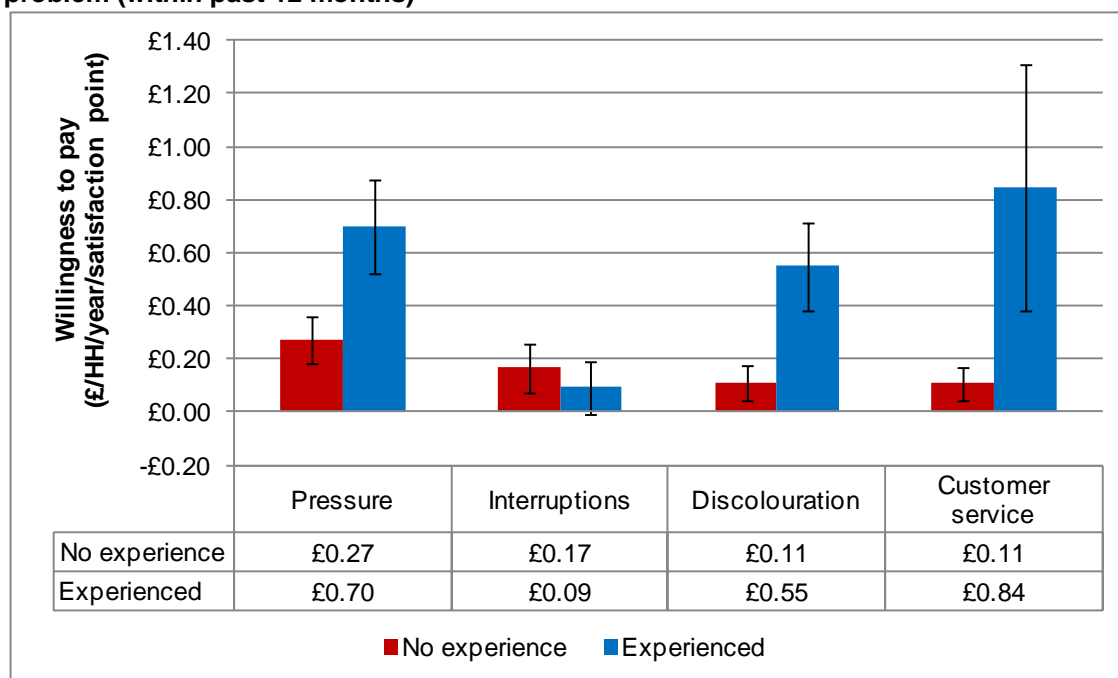
Figures are calculated from WTP estimates obtained in percentage terms, by multiplying the estimates by current average bill levels (£201 for households; £929 for businesses). The base for each service measure includes all except those saying "don't know" when asked their satisfaction with current service. Household bases: (1) 988; (2) 857; (3) 992; (4) 990; (5) 538; (6) 735; (7) 714; (8) 997. Business bases: (1) 586; (2) 541; (3) 586; (4) 571; (5) 404; (6) 431; (7) 502; (8) 603.

Figure 8 and Figure 9 show WTP values for households and businesses respectively for a 1-point improvement in satisfaction, by whether or not the customer experienced a service problem of the corresponding kind within the preceding 12 months. The charts show 95% confidence intervals as well as mean WTP estimates.

For households, the differences between those that have, and have not, experienced the corresponding service problem were statistically significant at the 1% level for pressure, discolouration and customer service. For interruptions, the differences were not statistically significantly different at the 10% level.

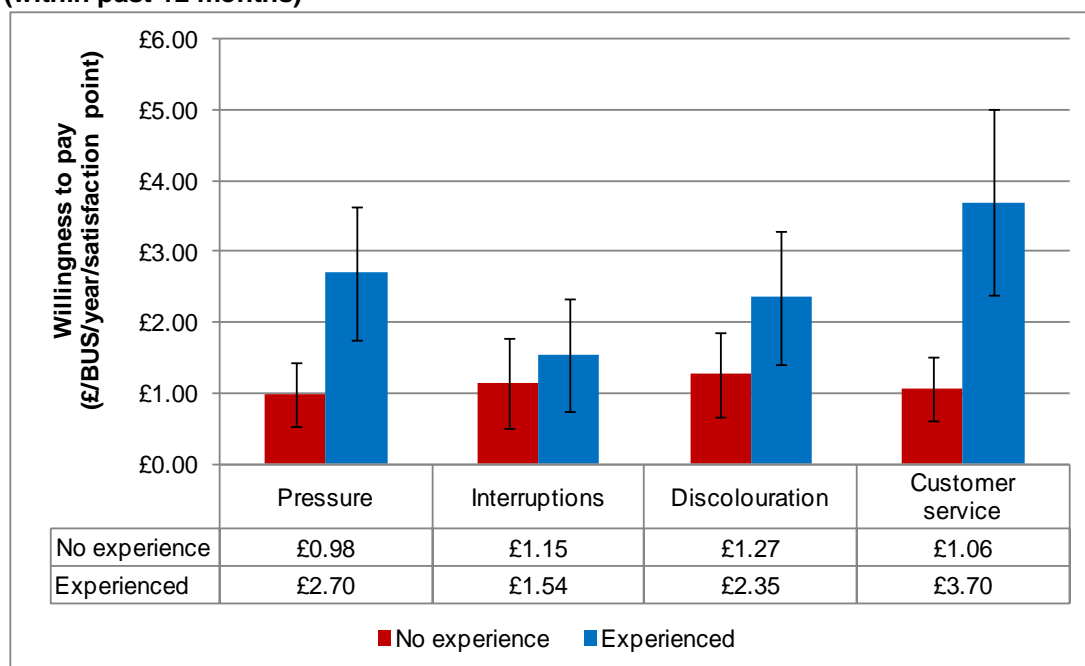
For businesses, the differences were statistically significant at the 1% level for pressure and customer service, and at the 5% level for discolouration. For interruptions, the differences were not statistically significantly different at the 10% level.

**Figure 8: Household mean WTP for improved satisfaction, by experience of service problem (within past 12 months)**



Main figures presented are the mean WTP values for the corresponding group for a 1-point increase in satisfaction. The “I” bars show the 95% confidence interval. “Experienced” means the respondent had experienced the corresponding service problem within the last 12 months; “No experience” means they had not experienced the corresponding service problem within the last 12 months. Bases include all households in the corresponding group except where respondent answered “Don’t know” or “5/5” to their current satisfaction with the service measure. Bases: No experience, pressure (227); No experience, interruptions (135); No experience, discolouration (185); No experience, customer service (207); Experienced, pressure (114); Experienced, interruptions (65); Experienced, discolouration (109); Experienced, customer service (30).

**Figure 9: Business mean WTP for improved satisfaction, by experience of service problem (within past 12 months)**



Main figures presented are the mean WTP values for the corresponding group for a 1-point increase in satisfaction. The “I” bars show the 95% confidence interval. “Experienced” means the respondent had experienced the corresponding service problem within the last 12 months; “No experience” means they had not experienced the corresponding service problem within the last 12 months. Bases include all businesses in the corresponding group except where respondent answered “Don’t know” or “5/5” to their current satisfaction with the service measure. Bases: No experience, pressure (151); No experience, interruptions (89); No experience, discolouration (110); No experience, customer service (171); Experienced, pressure (76); Experienced, interruptions (68); Experienced, discolouration (71); Experienced, customer service (46).

## 7.5 WTA for Reduced Satisfaction

Table 12 shows our main results on WTA for reduced satisfaction, by customer type, which are generated from the data in Table 9 and Table 10 following the approach described in section 7.2 above. Choice data from respondents who were completely dissatisfied (1/5) with the outcome were excluded from these calculations because they were not offered a choice of a reduced level of satisfaction. The table shows mean WTA values and the 95% confidence interval around this mean.

The results in Table 12 do not vary greatly by outcome measure, with household mean WTA per one-point reduction in satisfaction ranging from £14.30 per household, in the case of ‘Customer service’, to £17.76 per household in the case of ‘Taste & smell’. For businesses, mean WTA ranged from £76.01 per business, in the case of ‘Hosepipe bans’, to £82.22 per business in the case of ‘Taste & smell’.

**Table 12: WTA for reductions in satisfaction levels, by customer type**

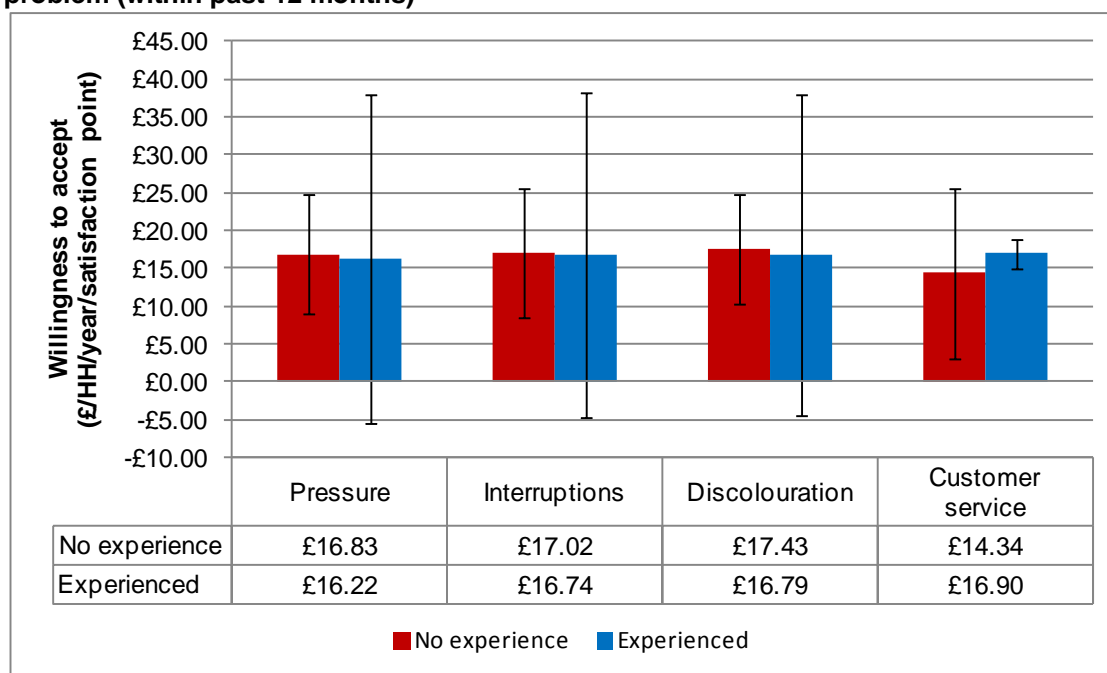
Service measure	Households (£/hh/year/satisfaction point)		Businesses (£/hh/year/satisfaction point)		
	Central	Range	Central	Range	
	Pressure <sup>(1)</sup>	-£16.73	(-£24.13, -£9.34)	-£77.19	(-£127.95, -£26.43)
Interruptions <sup>(2)</sup>	-£17.00	(-£24.88, -£9.13)	-£79.59	(-£124.78, -£34.40)	
Discolouration <sup>(3)</sup>	-£17.36	(-£24.19, -£10.53)	-£81.03	(-£118.66, -£43.40)	
Taste & smell <sup>(4)</sup>	-£17.76	(-£23.98, -£11.54)	-£82.22	(-£122.23, -£42.22)	
Leakage <sup>(5)</sup>	-£17.13	(-£26.86, -£7.40)	-£80.65	(-£135.90, -£25.40)	
Hosepipe bans <sup>(6)</sup>	-£14.45	(-£24.98, -£3.92)	-£76.01	(-£135.28, -£16.74)	
Customer service <sup>(7)</sup>	-£14.30	(-£25.40, -£3.21)	-£80.18	(-£126.69, -£33.66)	
<b>Sum</b>	<b>-£114.73</b>	<b>(-£174.41, -£55.05)</b>	<b>-£556.88</b>	<b>(-£891.50, -£222.26)</b>	

Figures are calculated from WTA estimates obtained in percentage terms, by multiplying the estimates by current average bill levels (£201 for households; £929 for businesses). The base for each service measure includes all except those saying “don’t know” when asked their satisfaction with current service. Household bases: (1) 988; (2) 857; (3) 992; (4) 990; (5) 538; (6) 735; (7) 714; (8) 997. Business bases: (1) 586; (2) 541; (3) 586; (4) 571; (5) 404; (6) 431; (7) 502; (8) 603.

Figure 10 and Figure 11 show WTA values for households and businesses respectively for a 1-point reduction in satisfaction, by whether or not the customer experienced a service problem of the corresponding kind within the preceding 12 months.

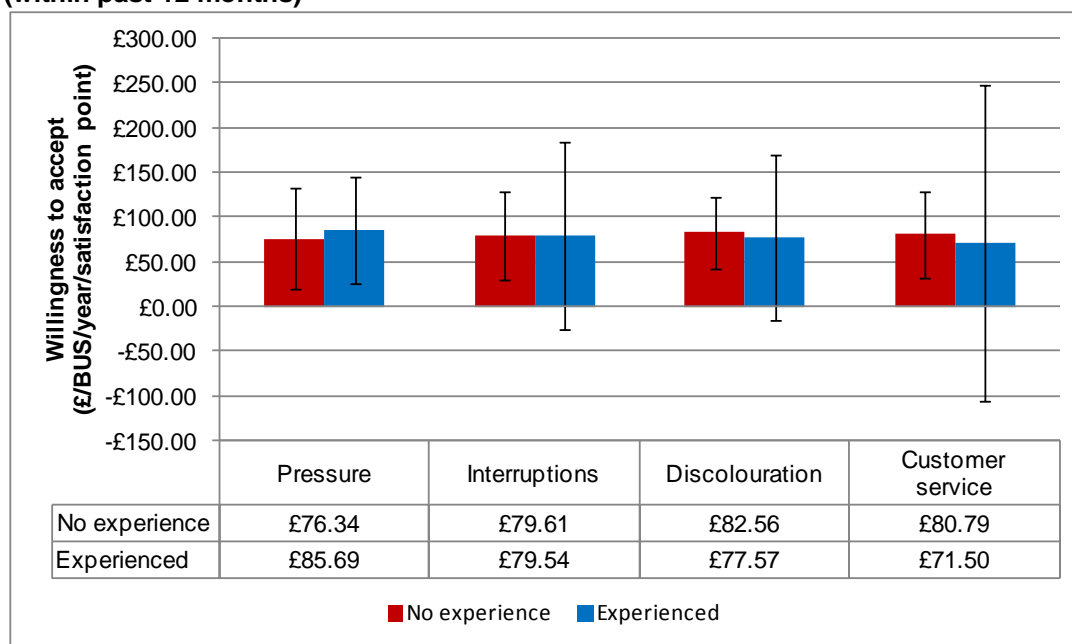
For households and businesses, none of the differences were statistically significant at the 10% level

**Figure 10: Household mean WTA for reduced satisfaction, by experience of service problem (within past 12 months)**



Main figures presented are the mean WTA values for the corresponding group for a 1-point reduction in satisfaction. The “I” bars show the 95% confidence interval. “Experienced” means the respondent had experienced the corresponding service problem within the last 12 months; “No experience” means they had not experienced the corresponding service problem within the last 12 months. Bases include all households in the corresponding group except where respondent answered “Don’t know” or “1/5” to their current satisfaction with the service measure. Bases: No experience, pressure (816); No experience, interruptions (726); No experience, discolouration (805); No experience, customer service (635); Experienced, pressure (119); Experienced, interruptions (102); Experienced, discolouration (149); Experienced, customer service (25).

**Figure 11: Business mean WTA for reduced satisfaction, by experience of service problem (within past 12 months)**



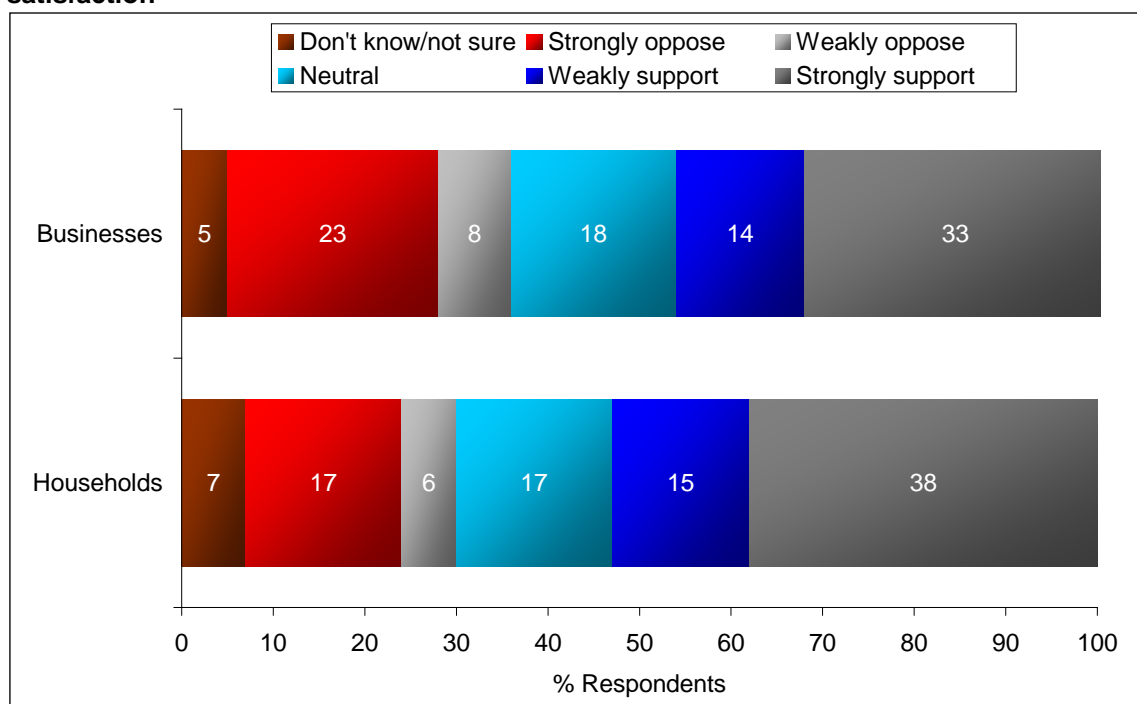
Main figures presented are the mean WTA values for the corresponding group for a 1-point reduction in satisfaction. The “I” bars show the 95% confidence interval. “Experienced” means the respondent had experienced the corresponding service problem within the last 12 months; “No experience” means they had not experienced the corresponding service problem within the last 12 months. Bases include all businesses in the corresponding group except where respondent answered “Don’t know” or “1/5” to their current satisfaction with the service measure. Bases: No experience, pressure (466); No experience, interruptions (419); No experience, discolouration (459); No experience, customer service (406); Experienced, pressure (73); Experienced, interruptions (87); Experienced, discolouration (84); Experienced, customer service (35).

## 8. ATTITUDES TOWARDS LINKING BILLS TO CUSTOMER SATISFACTION

### 8.1 Attitudes towards Lowering Customer Bills if Satisfaction Falls

South East Water is considering linking future bills to average customer satisfaction. More households (53%) and businesses (47%) supported the proposal to charge customers lower bills if customer satisfaction falls than opposed the proposal (23% of households and 31% of businesses). Moreover, 17% of households and 23% of businesses strongly opposed the proposal. Figure 12 shows the full breakdown of responses.

**Figure 12: Support for lower customer bills, implemented as a result of falling customer satisfaction**

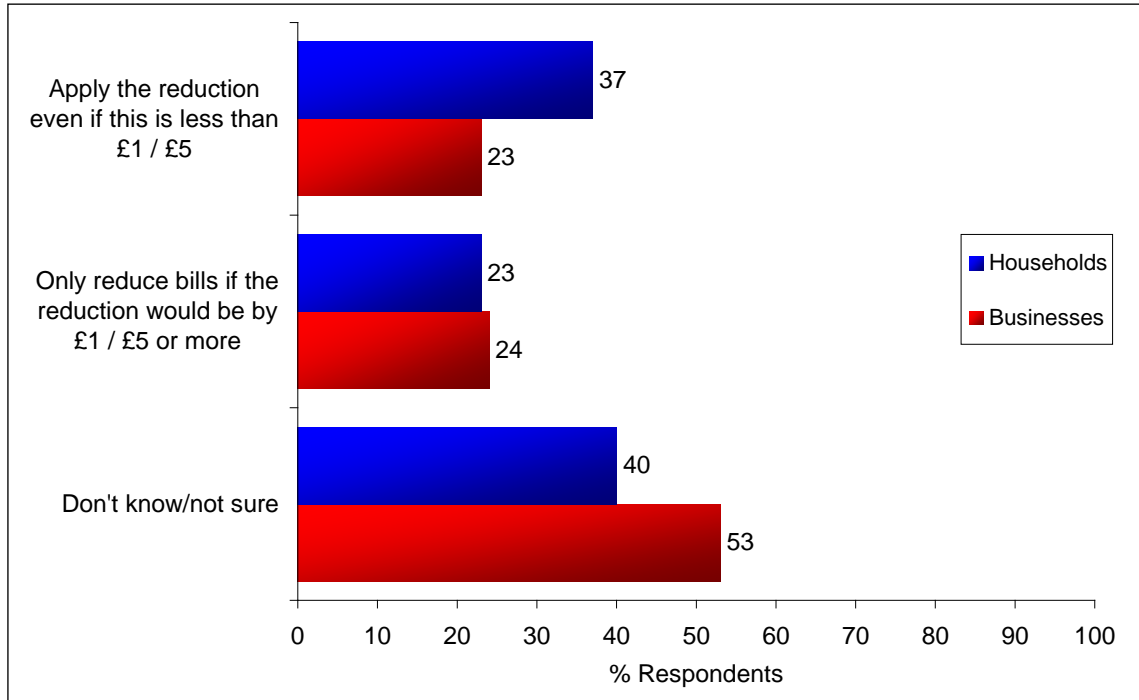


Base: Household = 1,000; Business = 608

Respondents were asked about the threshold they thought South East Water should set if they customer satisfaction were to fall. 37% of households and 23% of businesses stated they would like to see a reduction to their bill, even if it was less than £1 or £5. Similar proportions of households (23%) and businesses (24%) thought that a reduction should only be implemented if the decrease was £1 or £5 more.



**Figure 13: Options for reducing bills implemented as a result of low customer satisfaction**



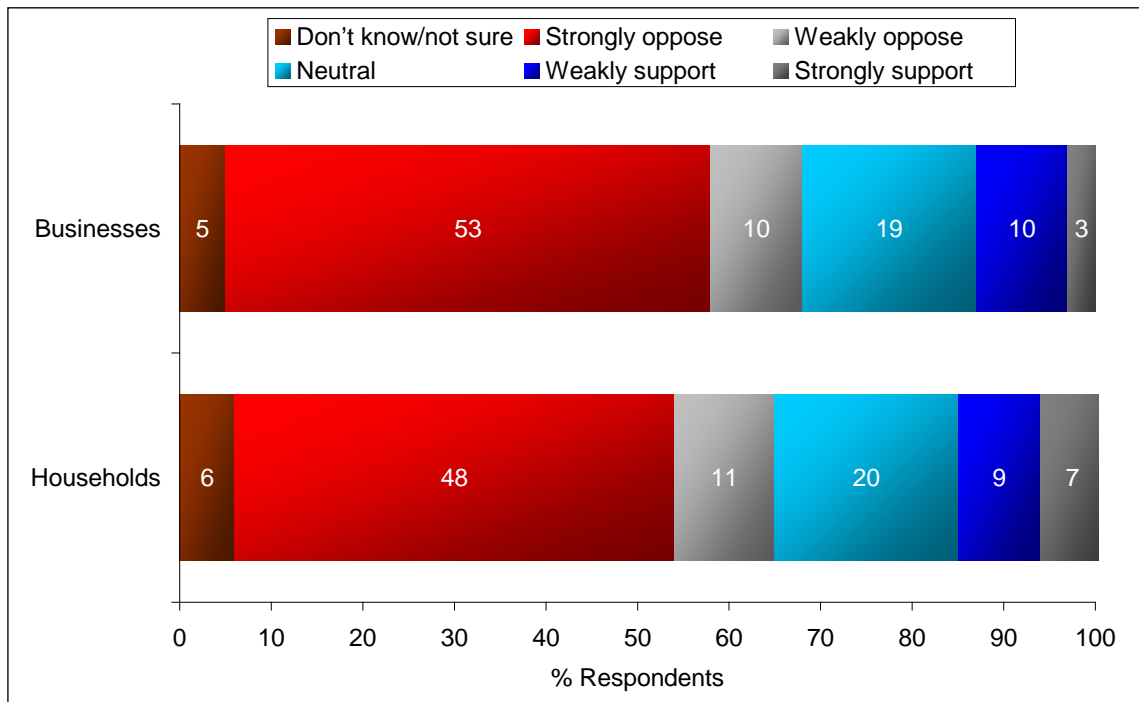
Base: Household = 1,000; Business = 608

## 8.2 Attitudes towards Increasing Customer Bills if Satisfaction Rises

Figure 14 highlights that 59% of households and 63% of businesses opposed the idea of increasing customer charges, in response to South East Water achieving increased customer satisfaction. Around one in five (20% of households; 19% of businesses) were neutral in their opinion while a lower proportion supported the proposal (16% of households and 13% of businesses).

These findings suggest that SEW may have a job to persuade customers that it is in their interests for its proposed policy to be implemented.

**Figure 14: Support for higher customer bills, implemented as a result of increased customer satisfaction**



Base: Household = 1,000; Business = 608

## 9. CONCLUSIONS AND RECOMMENDATIONS

The study presented in this report has responded to an innovative proposal by SEW to link customers' bills to levels of satisfaction. This proposal was itself motivated by an innovative feature of Ofwat's price review methodology for PR14.

The study involved careful development work, and critical review, to produce a survey instrument capable of generating customer satisfaction ratings against a set of previously determined outcome measures, and estimates of customers' WTP for improved satisfaction and WTA for reduced satisfaction.

Following two phases of cognitive testing and a pilot survey of households and businesses, the main survey was implemented on a large sample of 1000 household customers and 608 business customers. The household sample matched the population profile well by age, SEG and sewerage area; and the business sample matched the population profile well by bill size and sewerage area.

Respondent and interviewer feedback suggested that the survey overall was successful, in the sense that respondent understanding, effort, concentration and perceived ability to rate were all very good. However, for some of the outcome measures, in particular the 'leakage' outcome, a substantial number of respondents, albeit still a minority, were unable to rate their current satisfaction, and answered 'don't know' when asked to rate their current satisfaction. The respondents who answered in this way were excluded from the subsequent analysis of WTP and WTA for improved and reduced satisfaction, and as a consequence the main results for these outcome areas will only be fully representative of that part of the customer base that feels able to rate how satisfied they are currently.

The results for customer satisfaction suggested that the majority of household and business respondents were satisfied with current service levels. Mean satisfaction was highest for the frequency and duration of interruptions (household mean=4.7/5; business mean=4.5/5); and lowest for leakage from South East Water pipes (household mean=3.6/5; business mean=3.1/5). Further analysis showed that those who had experienced a problem gave significantly lower satisfaction ratings for each service measure than those who had no experience of this problem, as expected.

Our analysis of WTP for improved satisfaction, and WTA for reduced satisfaction, encountered a tendency for the majority of respondents to prefer to maintain current satisfaction levels rather than to switch to either improved or reduced levels. Additionally, the choices made by respondents between options to improve, maintain or reduce satisfaction were not uniformly sensitive to the cost of the options in the expected direction. That is, it was not always the case that higher costs of the improved satisfaction option led to fewer people choosing it, and that higher bill reductions for the reduced satisfaction option led to more people choosing that option. Taken together, these findings suggest that some caution needs to be applied in interpreting and applying the WTP and WTA results.

Our main results showed that mean household WTP per one-point improvement in satisfaction ranged from £0.15 per household, in the case of 'Interruptions', to £0.54 per household in the case of 'Leakage'. For businesses, mean WTP ranged from £1.31 per business, in the case of 'Interruptions', to £2.92 per business in the case of 'Leakage'

For all outcome areas except for interruptions, WTP for improved satisfaction was significantly higher, for both households and businesses, amongst respondents that experienced the corresponding service problem than amongst those that had not. For interruptions, for both households and businesses, the differences were not statistically significantly different at the 10% level.

Mean WTA for a one-point reduction in satisfaction ranged from £14.30 per household, in the case of 'Customer service', to £17.76 per household in the case of 'Taste & smell'. For businesses, mean WTA ranged from £76.01 per business, in the case of 'Hosepipe bans', to £82.22 per business in the case of 'Taste & smell'. Experience of a corresponding service problem had no significant impact on WTA for reduced satisfaction for any of the outcome areas.

Notwithstanding the need for caution in interpreting and applying the WTP and WTA results, there is strong evidence from the survey that WTP for improved satisfaction is substantially smaller than WTA for reduced satisfaction.

In the final component of the survey analysis, we explored the extent to which customers supported SEW's proposal to link bills to customer satisfaction levels. The results showed that more households (53%) and businesses (47%) supported the proposal to charge customers lower bills if customer satisfaction falls than opposed the proposal (23% of households and 31% of businesses).

In respect of increased bills for improved satisfaction, however, 59% of households and 63% of businesses opposed the idea while only 16% of households and 13% of businesses supported the proposal. These findings suggest that SEW may have a job to persuade customers that it is in their interests for its proposed policy to be implemented.

Overall, the study has generated several useful insights into customers' attitudes and satisfaction levels, and should hopefully be helpful to SEW in developing its proposed outcome delivery incentives for PR14. The study design was novel, and hence the methods were not tried and tested to an ideal extent. The methods may therefore benefit from further review and development if the overall approach is to play a central role in SEW's business model going forward.

APPENDIX A  
Household Questionnaire

Interviewer name:  Date:   Time:

**Screening Section**

Good morning/afternoon/evening. My name is ..... Could I please speak to the person who pays the household’s water bills? **IF QUERIED: PERSON COULD BE SOLELY OR JOINTLY RESPONSIBLE (WHEN SPEAKING TO APPROPRIATE CONTACT CONTINUE WITH EXPLANATION)**

My name is ..... from Accent, an independent research consultancy, and we are carrying out an important research study for South East Water to ask its customers how satisfied they are with the supply of their water. This is a *genuine* market research exercise. It is being conducted under the Market Research Society Code of Conduct which means that any answers you give will be treated in confidence. Could you please spare a couple of minutes to see if you are the type of customer we need to speak to for this research?

Q1. Can I just check that you are the person, or one of the people, in your household who pays the water bills?

- 1. Yes
- 2. No **THANK & CLOSE**

Q2. Do you or does any of your close family work, or have you worked in the past five years in any of the following professions: marketing, advertising, public relations, journalism, market research or the Water Industry (including working for South East Water)?

- 1. Yes **THANK & CLOSE**
- 2. No

Q3. What is the job title of the chief wage earner of your household or, if you are the chief wage earner, your own job title?

**IF SELF-EMPLOYED: ASK IF MANUAL/NON-MANUAL, SKILLED/QUALIFIED OR NOT, NUMBER OF EMPLOYEES – THEN LOOK UP SELF EMPLOYED TABLE**  
**IF MANAGER/EXEC: ASK FOR INDUSTRY SECTOR, NUMBER OF EMPLOYEES IN COMPANY AND MANAGEMENT STATUS**  
**IF RANK/GRADE (CIVIL SERVANT, NURSING, MILITARY, NAVY, POLICE ETC.) RECORD RANK/GRADE SPECIFICALLY**  
**IF PENSIONERS: ASK IF STATE (GRADE "E") OR PRIVATE/OCCUPATIONAL PENSION (GRADE ON PREVIOUS OCCUPATION)**  
**IF UNEMPLOYED: IF MORE THAN 6 MONTHS AGO (GRADE "E"), IF LESS THAN 6 MONTHS AGO (GRADE ON PREVIOUS OCCUPATION)**

**WRITE IN AND CODE SEG .....**

- 1. A
- 2. B
- 3. C1
- 4. C2
- 5. DE
- 6. Not stated **THANK & CLOSE**

**CHECK QUOTA**

---

Q4. Which of the following age groups do you fall into? Are you...

- |             |             |            |
|-------------|-------------|------------|
| 1. 16 to 24 | 4. 50 to 64 | 7. Refused |
| 2. 25 to 34 | 5. 65 to 75 |            |
| 3. 35 to 49 | 6. 75+      |            |

---

Q5. Does your property have a septic tank or cess pit? **IF REQUIRED** If you do have one, this would mean that your property is not connected to the main sewer and you would periodically arrange to have the septic tank emptied.

1. Yes
2. No
3. Don't Know

---

Q6. What is your postcode? We will use this to check which sewerage area you are in.

1. First part
2. Second part

---

Q7. **Hidden question**

**PROGRAMMER: LOOKUP POSTCODE TO IDENTIFY:**

1. Thames Water area
2. Southern Water area
3. Not on postcode look up

---

Q8. **IF Q5=1 OR Q7=3, SKIP TO Q9 ELSE IF Q7=1** According to our records, your water bills are sent from South East Water, but they include the cost of your sewerage services on behalf of Thames Water

**ELSE IF Q7=2** According to our records, you receive a bill from South East Water for your water services and a separate bill from Southern Water for sewerage services **END IF**

Is that correct?

1. Yes
2. No **CHECK POSTCODE, IF STILL NO, CLOSE**
3. Don't know

---

Q9. **ASK IF Q7=3 ELSE SKIP** Is South East Water your water supplier, or is it supplied by someone else?

1. Yes, South East Water supplies my water
2. No, somebody else supplies my water **THANK AND CLOSE**
3. Don't know/Not sure **THANK AND CLOSE**

---

Q10. **ASK IF Q7=3 AND Q5=2 or 3 ELSE SKIP** Do you know whether Thames Water or Southern Water supplies your sewerage services?

1. Thames Water
2. Southern Water
3. Don't know/Not sure **THANK AND CLOSE**

---

Q11. **Hidden question – TO DEFINE AREAS (FINAL)**

1. **IF Q7=1 OR Q10=1 CODE AS** Thames Water area
2. **IF Q7=2 OR Q10=2 CODE AS** Southern Water area
3. **IF Q7=3 AND Q5=1 CODE AS** Not on lookup and has septic tank





**IF Q11=1 AND Q5=1 (Thames and Septic tank) then FINAL ANNUAL BILL = Q12D OR Q12F (ONLY USE Q12D IF NO RESPONSE AT Q12F)**

**IF Q11=2 (Southern) then FINAL ANNUAL BILL = Q12D OR Q12F (ONLY USE Q12D IF NO RESPONSE AT Q12F)**

**IF Q11=3 (Not on lookup but has septic tank) then FINAL ANNUAL BILL = Q12D OR Q12F (ONLY USE Q12D IF NO RESPONSE AT Q12F)**

**THIS WILL BE USED TO CALCULATE THE £% INCREASE/DECREASE**

---

**Q13. Do not ask – note gender**

1. Male
2. Female

---

I'm going to read out a list of four problems that sometimes happen with people's water supply. For each I'd like you to tell me whether this has happened to you in the past 12 months.

**PROGRAMMING NOTE – PUT Q14-Q14D ON ONE PAGE**

**Q14A** Firstly, has the water from your tap looked discoloured, milky or cloudy at any time during the last 12 months?

1. Yes
2. No
3. Don't know

**CHECK QUOTA**

**Q14B** Has the tap water supply to your property been interrupted for any period of time in the past 12 months?

1. Yes
2. No
3. Don't know

**CHECK QUOTA**

**Q14C** Do you have, or have you had in the past 12 months, persistent low water pressure, where the water does not flow very fast from the tap?

1. Yes
2. No
3. Don't know

**CHECK QUOTA**

**Q14E** Have you had poor customer service from South East Water at any time in the past 12 months?

1. Yes
2. No
3. Don't know

**CHECK QUOTA**

## Recruitment

**RECRUITMENT** Thank you for answering those questions. As I mentioned, we are carrying out an important research study for South East Water asking customers how satisfied they are with the service they receive from South East Water. I would be very grateful if you could spare another **10-15** minutes – to run through some questions with me. Your views are very important as South East Water will take them into account when trying to improve their services. **IF REQUIRED** If now is not convenient, can we make an appointment for a more convenient time?

Continue now **PROCEED**

Cannot continue with interview now **RECORD APPOINTMENT ON NEXT SCREEN**

No **ATTEMPT TO REASSURE & PERSUADE; IF STILL NO, THANK & CLOSE**

Date: ..... Time:.....

Name: .....

Address:.....

Email Address:.....

Tel No.

## Introduction to Main Survey

Thank you for agreeing to take part in this survey. As I said previously, we are conducting research for South East Water looking at how satisfied customers are with their water supply services.

The questionnaire will take 10-15 minutes. You do not have to answer any questions that you don't want to and you can stop the interview at any point.

## Background Questions

Q14F Firstly, how much impact would a hosepipe ban - have on your household? Would it have: **[READ OUT – SINGLE CODE]**

1. No impact
2. A small impact
3. A moderate impact
4. A big impact
5. Don't know

## Satisfaction – ROTATE THESE QUESTIONS

Q1.Now, we are going to ask you to rate how satisfied you are with some key measures of South East Water's service related to your household. Please do not try and answer on behalf of other people since all types of customers' perspectives will be obtained in the course of this research.

On a scale of 1 to 5, where 1 is 'Completely dissatisfied' and 5 is 'Completely satisfied', how satisfied are you with the following:

		1	2	3	4	5	Don't Know
a	The water pressure at your property (by this we mean the rate at which water flows from the taps)	1	2	3	4	5	6
aa	The frequency and duration of interruptions to your water supply	1	2	3	4	5	6
b	The appearance of the water supplied to you	1	2	3	4	5	6
bb	The taste and smell of the water supplied to you	1	2	3	4	5	6
c	The amount of water that leaks from South East Water's pipes across their region	1	2	3	4	5	6
d	The frequency of hosepipe bans in your area	1	2	3	4	5	6
e	South East Water's customer service? When considering your rating, think of things such as contact with South East Water either through a phone call, or by letter or email or when reading your bill.	1	2	3	4	5	6

## Improvements and Deteriorations – DISPLAY IN ORDER OF EARLIER ROTATION

### INTRO

We are now going to explore your ratings in a little more detail. We are also going to ask whether you would choose increases or decreases in your bill if it meant improvements or deteriorations in the service you get from South East Water. Keep in mind that the increases and decreases will be tallied up and you will be told your overall bill impact at the end of the questions, note, your bill will also increase by inflation each year.

You will then get the chance to adjust your choices if you want to.

### START ROTATION

**PROGRAMMING NOTE: SHOW ALL % AMOUNTS IN £ BUT ROUND UP OR DOWN TO THE NEAREST 10p. FROM 'FINAL ANNUAL BILL'**

## The water pressure at your property

Q15Z REMOVED

### Q2. ASK IF Q15a=1 or 2 or 3 or 4, ELSE IF Q15a=5 GO TO Q16A

Earlier, when we asked you to rate your satisfaction with the water pressure at your property, you said 'INSERT RESPONSE at Q15a' out of 5. What improvements might move your satisfaction from a score of [INSERT RESPONSE FROM Q15a] to a score of [INSERT RESPONSE FROM Q15a+1] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

### Q16A ASK IF Q15a= 2 or 3 or 4 or 5, ELSE IF Q15a=1 GO TO Q17

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the water pressure at your property, you said 'INSERT RESPONSE at Q15a' out of 5.

What reduction in service might move your satisfaction with the water pressure at your property from a score of [INSERT RESPONSE FROM Q15a] to a score of [INSERT RESPONSE FROM Q15a-1] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

Q3. Now, consider two different options concerning your satisfaction with the water pressure at your property.

[IF Q15a=1 or 2 or 3 or 4 INSERT In one option you would be more satisfied and would rate your satisfaction at [INSERT Q15a+1] out of 5]. **PAUSE**

[ELSE IF Q15a=5 INSERT In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE**

AND

[IF Q15a=2 or 3 or 4 or 5 INSERT In the other option you would be less satisfied and would rate your satisfaction as [INSERT Q15a-1] out of 5]. **PAUSE**

[ELSE IF Q15a=1 INSERT In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

NOTE TO DP – WE NEED TO DISPLAY A % BASED ON WHAT THEY TOLD US THEIR BILL WAS AND ROUND TO THE NEAREST 10p. IF AN AVERAGE IS USED (£201) WE USE £1 or £2 FOR IMPROVEMENTS and £10 and £20 for DETERIORATIONS

NOTE: WE ARE SHOWING DIFFERENT AMOUNTS FOR IMPROVEMENTS AND DETERIORATIONS

IMPROVEMENTS: THESE WILL BE EITHER 0.5% or 1% of THE BILL

DETERIORATIONS: THESE WILL BE EITHER 5% or 10% of THE BILL

IF THE LOWER FIGURE IS USED FOR THE IMPROVEMENT THEN THE LOWER FIGURE IS USED FOR THE DETERIORATION ie if 0.5% is used for the improvement then 5% is used for the deterioration. Conversely, if 1% is used for the improvement then 10% is used for the deterioration.

**IF [Q15a= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] or [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be **[USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER]** lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15a=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] or [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15a=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] or [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15a=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill  
**[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15a=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill  
**[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

### The frequency and duration of interruptions to your water supply

Q16Z REMOVED

#### Q17A **ASK IF Q15aa=1 or 2 or 3 or 4, ELSE IF Q15aa=5 GO TO Q17B**

Earlier, when we asked you to rate your satisfaction with the frequency and duration of any water supply interruptions at your property, you said '**INSERT RESPONSE at Q15aa**' out of 5. What improvements might move your satisfaction from a score of [**INSERT RESPONSE FROM Q15aa**] to a score of [**INSERT RESPONSE FROM Q15aa +1**] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

#### Q17B **ASK IF Q15aa= 2 or 3 or 4 or 5, ELSE IF Q15aa=1 GO TO Q17C**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the frequency and duration of any water supply interruptions at your property, you said '**INSERT RESPONSE at Q15aa**' out of 5.

What reduction in service might move your satisfaction with the frequency and duration of any water supply interruptions at your property from a score of [**INSERT RESPONSE FROM Q15aa**] to a score of [**INSERT RESPONSE FROM Q15aa-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

Q17C Now, consider two different options concerning your satisfaction with the supply interruptions at your property.

**[IF Q15aa=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at **[INSERT Q15aa+1]** out of 5. **PAUSE**

**[ELSE IF Q15aa=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE**

AND

**[IF Q15aa=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as **[INSERT Q15aa-1]** out of 5]. **PAUSE**

**[ELSE IF Q15aa=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15aa= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be **[EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER]** lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15aa=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15aa=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15aa=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15aa=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

## The appearance of the water supplied to you

Q17Z REMOVED

### Q4. ASK IF Q15b=1 or 2 or 3 or 4 ELSE SKIP TO Q18A

Earlier, when we asked you to rate your satisfaction with the appearance of the water supplied to your property, you said 'INSERT RESPONSE at Q15b' out of 5. What improvements might move your satisfaction from a score of [INSERT RESPONSE FROM Q15b] to a score of [INSERT RESPONSE FROM Q15b+1] out of 5? ie you would receive a slightly better service than you get now.

1. RECORD VERBATIM
2. Don't know/Not sure

### Q18A ASK IF Q15b= 2 or 3 or 4 or 5, ELSE IF Q15b=1 GO TO Q19

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the appearance of the water supplied to your property, you said 'INSERT RESPONSE at Q15b' out of 5.

What reduction in service might move your satisfaction with the appearance of the water supplied to your property from a score of [INSERT RESPONSE FROM Q15b] to a score of [INSERT RESPONSE FROM Q15b-1] out of 5? ie you would receive a slightly worse service than you get now.

1. RECORD VERBATIM
2. Don't know/Not sure

Q5. Now, consider two different options concerning your satisfaction with the appearance of the water supplied to your property.

[IF Q15b=1 or 2 or 3 or 4 INSERT In one option you would be more satisfied and would rate your satisfaction at [INSERT Q15b+1] out of 5]. **PAUSE**

[ELSE IF Q15b=5 INSERT In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE**

AND

[IF Q15b=2 or 3 or 4 or 5 INSERT In the other option you would be less satisfied and would rate your satisfaction as [INSERT Q15b-1] out of 5.] **PAUSE**

[ELSE IF Q15b=1 INSERT In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

#### IF [Q15b= 2 or 3 or 4] DISPLAY

If the option where you are more satisfied meant that your annual water bill would be [0.5%] or [1%] [RANDOMISE] higher, and the option where you are less satisfied meant that your annual water bill would be [USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER] lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

ELSE

IF [Q15b=5] DISPLAY

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15b=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15b=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15b=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

### The taste and smell of the water supplied to you

Q18Z REMOVED

**Q19A ASK IF Q15bb=1 or 2 or 3 or 4 ELSE GO TO Q19B**

Earlier, when we asked you to rate your satisfaction with the taste and smell of the water supplied to your property, you said '**INSERT RESPONSE at Q15bb**' out of 5. What improvements might move your satisfaction from a score of [**INSERT RESPONSE FROM Q15bb**] to a score of [**INSERT RESPONSE FROM Q15bb+1**] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

**Q19B ASK IF Q15bb= 2 or 3 or 4 or 5, ELSE IF Q15bb=1 GO TO Q19C**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the taste and smell of the water supplied to your property, you said '**INSERT RESPONSE at Q15bb**' out of 5.

What reduction in service might move your satisfaction with the taste and smell of the water supplied to your property from a score of [**INSERT RESPONSE FROM Q15bb**] to a score of [**INSERT RESPONSE FROM Q15bb-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure



---

Q19C Now, consider two different options concerning your satisfaction with the taste and smell of the water supplied to your property.

**[IF Q15bb=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at **[INSERT Q15bb+1]** out of 5]. **PAUSE**

**[ELSE IF Q15bb=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE**

AND

**[IF Q15bb=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as **[ INSERT Q15bb-1]** out of 5]. **PAUSE**

**[ELSE IF Q15bb=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15bb= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be **[EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER]** lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15bb=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15bb=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15bb=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15bb=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual bill
4. Don't know/Not sure

**The amount of water that leaks from South East Water's pipes**

---

Q19Z REMOVED

---

**Q6.ASK IF Q15c=1 or 2 or 3 or 4 ELSE SKIP TO Q20A**

Earlier, when we asked you to rate your satisfaction with the amount of water that leaks from South East Water's pipes, you said '**INSERT RESPONSE at Q15c**' out of 5. What improvements might move your satisfaction from a score of [**INSERT RESPONSE FROM Q15c**] to a score of [**INSERT RESPONSE FROM Q15c+1**] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

**Q20A ASK IF Q15c= 2 or 3 or 4 or 5, ELSE IF Q15c=1 GO TO Q21**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the amount of water that leaks from South East Water's pipes, you said '**INSERT RESPONSE at Q15c**' out of 5.

What reduction in service might move your satisfaction with the amount of water that leaks from South East Water's pipes from a score of [**INSERT RESPONSE FROM Q15c**] to a score of [**INSERT RESPONSE FROM Q15c-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

**Q7.**Now, consider two different options concerning your satisfaction with the amount of water that leaks from South East Water's pipes.

**[IF Q15c=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at [**INSERT Q15c+1**] out of 5]. **PAUSE**

**[ELSE IF Q15c=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5] . **PAUSE**

AND

**[IF Q15c=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as [**INSERT Q15c-1**] out of 5]. **PAUSE**

**[ELSE IF Q15c=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15c= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be [**USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER**] lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15c=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15c=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15c=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15c=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

### The frequency of hosepipe bans in your area

Q21Z REMOVED

**Q8.ASK IF Q15d=1 or 2 or 3 or 4 ELSE SKIP TO Q22A**

Earlier, when we asked you to rate your satisfaction with the frequency of hosepipe bans in your area, you said '**INSERT RESPONSE at Q15d**' out of 5. What improvements might move your satisfaction from a score of [**INSERT RESPONSE FROM Q15d**] to a score of [**INSERT RESPONSE FROM Q15d+1**] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

**Q22A ASK IF Q15d= 2 or 3 or 4 or 5 ELSE SKIP TO Q23**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the frequency of hosepipe bans in your area, you said '**INSERT RESPONSE at Q15d**' out of 5.

What reduction in service might move your satisfaction with the frequency of hosepipe bans in your area from a score of [**INSERT RESPONSE FROM Q15d**] to a score of [**INSERT RESPONSE FROM Q15d-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

Q9. Now, consider two different options concerning your satisfaction with the frequency of hosepipe bans in your area.

**[IF Q15d=1 or 2 or 3 or 4 INSERT In one option you would be more satisfied and would rate your satisfaction at [INSERT Q15d+1] out of 5]. PAUSE**

**[ELSE IF Q15d=5 INSERT In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. PAUSE**

AND

**[IF Q15d=2 or 3 or 4 or 5 INSERT In the other option you would be less satisfied and would rate your satisfaction as [INSERT Q15d-1] out of 5]. PAUSE**

**[ELSE IF Q15d=1 INSERT In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].**

**IF [Q15d= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be **[USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER]** lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15d=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15d=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15d=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15d=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

**South East Water's customer service**

**Q23Z REMOVED**

---

**Q10. ASK IF Q15e=1 or 2 or 3 or 4 ELSE SKIP TO Q24A**

Earlier, when we asked you to rate your satisfaction with South East Water's customer service, you said '**INSERT RESPONSE at Q15e**' out of 5. What improvements might move your satisfaction from a score of [**INSERT RESPONSE FROM Q15e**] to a score of [**INSERT RESPONSE FROM Q15e+1**] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

**Q24A ASK IF Q15e= 2 or 3 or 4 or 5 ELSE SKIP TO Q25**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with South East Water's customer service, you said '**INSERT RESPONSE at Q15e**' out of 5.

What reduction in service might move your satisfaction of South East Water's customer service from a score of [**INSERT RESPONSE FROM Q15e**] to a score of [**INSERT RESPONSE FROM Q15e-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

**Q11.** Now, consider two different options concerning your satisfaction with South East Water's customer service.

**[IF Q15e=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at [**INSERT Q15e+1**] out of 5]. **PAUSE**

**[ELSE IF Q15e=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE**

AND

**[IF Q15e=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as [**INSERT Q15e-1**] out of 5]. **PAUSE**

**[ELSE IF Q15e=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15e= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be [**USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER**] lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15e=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15e=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] or [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15e=5** Improve satisfaction with a [0.5%] or [1%] increase to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15e=1** Reduce satisfaction with a [5%] or [10%] decrease to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

### **Overall Bill Impact**

**Q25Z IF [Q15a=6 + Q15aa=6 + Q15b=6 + Q15bb=6 + Q15c=6 + Q15d=6 + Q15e=6] OR [Q17=4 + Q17C=4 + Q19=4 + Q19C=4 + Q21=4 + Q23=4 + Q25=4] SKIP TO Q28 ELSE ASK I would now like to discuss the effect that these changes might have on your overall water bill.**

If this happens, your annual bill would **[INSERT BILL CHANGE RELATED TO OPTIONS]** Additionally, your bill increase by inflation each year.

Would you like to change any of your choices from the previous questions?

- Yes  
No **GO TO Q14**

**INTERVIEW INSTRUCTION – TELL RESPONDENT THE INDIVIDUAL BILL IMPACTS IF THEY NEED THEM** You have chosen:

**[IF Q17=1]** To improve “the water pressure at your property” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q17=2]** To lower “the water pressure at your property” which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q17=3]** To keep “the water pressure at your property” as it is now with no change to your satisfaction or to your annual bill OR

**[IF Q17=4] DO NOT DISPLAY ANY TEXT**

**[IF Q17C=1]** To improve “the frequency and duration of interruptions to your water supply” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q17C=2]** To let “the frequency and duration of interruptions to your water supply” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q17C=3]** To keep “the frequency and duration of interruptions to your water supply” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q17C=4] DO NOT DISPLAY ANY TEXT**

**[IF Q19=1]** To improve “the appearance of the water supplied to you” which increases your satisfaction at an extra cost to you of [0.5%] **or** [1%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q19=2]** To let “the appearance of the water supplied to you” diminish which decreases your satisfaction at a reduced cost to you of [5%] **or** [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q19=3]** To keep “the appearance of the water supplied to you” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q19=4] DO NOT DISPLAY ANY TEXT**

**[IF Q19C=1]** To improve” the taste and smell of the water supplied to you” which increases your satisfaction at an extra cost to you of [0.5%] **or** [1%]

**[IF Q19C=2]** To let “the taste and smell of the water supplied to you” diminish which decreases your satisfaction at a reduced cost to you of [5%] **or** [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q19C=3]** To keep “the taste and smell of the water supplied to you” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q19C=4] DO NOT DISPLAY ANY TEXT**

**[IF Q21=1]** To reduce “the amount of water that leaks from South East Water’s pipes” which increases your satisfaction at an extra cost to you of [0.5%] **or** [1%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q21=2]** To let “the amount of water that leaks from South East Water’s pipes” increase which decreases your satisfaction at a reduced cost to you of [5%] **or** [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q21=3]** To keep “the amount of water that leaks from South East Water’s pipes” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q21=4] DO NOT DISPLAY ANY TEXT**

**[IF Q23=1]** To reduce “the frequency of hosepipe bans in your area” which increases your satisfaction at an extra cost of [0.5%] **or** [1%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q23=2]** To let “the frequency of hosepipe bans in your area” increase which decreases your satisfaction at a reduced cost to you of [5%] **or** [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q23=3]** To keep “the frequency of hosepipe bans in your area” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q23=4] DO NOT DISPLAY ANY TEXT**

**[IF Q25=1]** To improve “South East Water’s customer service” which increases your satisfaction at an extra cost of [0.5%] **or** [1%] **[DISPLAY AS PER QUESTION]** per year. **OR**

**[IF Q25=2]** To let “South East Water’s customer service” diminish which decreases your satisfaction at a reduced cost to you of [5%] **or** [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q25=3]** To keep “South East Water’s customer service” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q25=4] DO NOT DISPLAY ANY TEXT**

Q12. Which ones would you like to change? **INTERVIEWER NOTE, THE RESPONSES GIVEN EARLIER ON ARE POPULATED BELOW IN RED. TAKE THE RESPONDENT THROUGH EACH ONE AND CHECK IF THEY WANT TO STAY THE SAME OR MAKE A CHANGE.**

		<b>[DO NOT DISPLAY IF Q15a or Q15aa or Q15b or Q15bb or Q15c or Q15d or Q15e = 5] 1 Improve satisfaction with a x% increase in annual water bill</b>	<b>[DO NOT DISPLAY IF Q15a or Q15aa or Q15b or Q15bb or Q15c or Q15d or Q15e = 1] 2 Reduce satisfaction with a x% decrease annual water bill</b>	<b>3 Keep levels of satisfaction as they are now with no bill change</b>	<b>4 Don't Know</b>
a	The water pressure at your property (by this we mean the rate at which water flows from the taps)				
aa	The frequency and duration of interruptions to your water supply				
b	The appearance of the water supplied to you?				
bb	The taste and smell of the water supplied to you?				
c	The amount of water that leaks from South East Water's pipes				
d	The frequency of hosepipe bans in your area?				
e	South East Water's customer service? When considering your rating, think of things such as contact with South East Water either through a phone call, or by letter or email or when reading your bill.				

Q13. Now with the options you have chosen, your annual bill would **[INSERT BILL CHANGE RELATED TO OPTIONS]**

Additionally, your bill would increase due to inflation each year.

Would you like to change any of your choices from the previous questions?

1. Yes **GO TO Q12**
2. No

**INTERVIEW INSTRUCTION – TELL RESPONDENT THE INDIVIDUAL BILL IMPACTS IF THEY NEED THEM** You have chosen:

**[IF Q12a=1]** To improve “the water pressure at your property” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12a=2]** To lower “the water pressure at your property” which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12a=3]** To keep “the water pressure at your property” as it is now with no change to your satisfaction or to your annual bill OR

**[IF Q12a=4] DO NOT DISPLAY ANY TEXT**

**[IF Q12aa=1]** To improve “the frequency and duration of interruptions to your water supply” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12aa=2]** To let “the frequency and duration of interruptions to your water supply” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year



OR

**[IF Q12aa=3]** To keep “the frequency and duration of interruptions to your water supply” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q12aa=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q12b=1]** To improve “the appearance of the water supplied to you” which increases your satisfaction at an extra cost to you of [0.5%] **or** [1%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q12b=2]** To let “the appearance of the water supplied to you” diminish which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q12b=3]** To keep “the appearance of the water supplied to you” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q12b=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q12bb=1]** To improve” the taste and smell of the water supplied to you” which increases your satisfaction at an extra cost to you of [0.5%] **or** [1%]

**[IF Q12bb=2]** To let “the taste and smell of the water supplied to you” which decreases your satisfaction diminish at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q12bb=3]** To keep “the taste and smell of the water supplied to you” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q12bb=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q12c=1]** To reduce “the amount of water that leaks from South East Water’s pipes” which increases your satisfaction at an extra cost to you of [0.5%] **or** [1%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q12c=2]** To let “the amount of water that leaks from South East Water’s pipes” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q12c=3]** To keep “the amount of water that leaks from South East Water’s pipes” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q12c=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q12d=1]** To reduce “the frequency of hosepipe bans in your area” which increases your satisfaction at an extra cost of [0.5%] **or** [1%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q12d=2]** To let “the frequency of hosepipe bans in your area” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q12d=3]** To keep “the frequency of hosepipe bans in your area” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q12d=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q12e=1]** To improve “South East Water’s customer service” which increases your satisfaction at an extra cost of [0.5%] **or** [1%] **[DISPLAY AS PER QUESTION]** per year. **OR**

**[IF Q12e=2]** To let “South East Water’s customer service” diminish which decreases your satisfaction at a reduced costs to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**

**[IF Q12e=3]** To keep “South East Water’s customer service” as it is now with no change to your satisfaction or to your annual bill **OR**

**[IF Q12e=4]** **DO NOT DISPLAY ANY TEXT**

**Follow-up Questions (To be revised following cognitive interviews)**

I would now like to ask you a few questions about the choices you have just made.

---

Q14. Did you feel able to rate how satisfied you were with each of the service measures we talked about?

1. Yes
2. No

---

Q28A Did you feel able to choose between the different options?

1. Yes
2. No

---

Q15. REMOVED

---

Q16. Did you feel able to imagine what a higher satisfaction score than the one you gave us would entail for each of the service measures?

1. Yes
2. No

---

Q17. REMOVED

---

Q31A Did you feel able to imagine what a lower satisfaction score than the one you gave us would entail for each of the service measures?

1. Yes
2. No

---

Q31B REMOVED

---

Q18. You were then asked to choose whether you would prefer an improved service with a higher bill, a deterioration in service for a lower bill, or for your service to stay as now, with no change in your bill.

With respect to these questions:

Did the bill changes we talked about seem realistic?

1. Yes
2. No

---

Q19. REMOVED

---

Q20. Did you understand that the amount your bill would change would be in addition to increases due to general inflation which would happen even with no change to your service levels?

1. Yes
2. No

---

Q34Y Overall, how satisfied are you with your water supply service from South East Water? Using of scale of 1 to 5 when 1 is very dissatisfied and 5 is very satisfied. How would you rate them?

- Very dissatisfied
- Dissatisfied
- Neither dissatisfied nor satisfied
- Satisfied
- Very satisfied

**DO NOT READ** Don't know/Not sure

---

Q34Z **SKIP IF Q34Y=6 ELSE ASK** You said your overall satisfaction with your water supply service from South East Water is **INSERT RESPONSE FROM Q34Y** – what is the main reason for this?

**OPEN RESPONSE**

South East Water is considering linking future bills to average customer satisfaction so that if satisfaction increases customers will get an increase in their bill the following year, and if satisfaction falls there will be a lower bill charged. It is possible, however, that the link may be just one-way so that if average customer satisfaction increases customers' bills will stay the same, but if it falls then bills will still be reduced.

**ASK ALL FOLLOWING QUESTIONS BUT ROTATE THE ORDER IN WHICH EACH ARE ASKED IN BLOCKS [Q34AA & A34AA & Q34AAA & Q34AAAA & Q34AAAAA] and [Q34B] HALF GET ASKED THE 'A' BLOCK FIRST, AND HALF GET ASKED THE 'B' BLOCK FIRST**

---

Q34A On a scale of 1 to 5, where 1 is strongly oppose and 5 is strongly support, to what extent do you support or oppose the idea of there being a lower bill charged if customer satisfaction falls?

1. Strongly oppose
2. Weakly oppose
3. Neutral
4. Weakly support
5. Strongly support
6. Don't know/not sure.

---

Q34AA Why do you think this? **[DO NOT PROMPT - MULTICODE]**

- This would be fair
- I would like a bill reduction
- I think bills should be linked to satisfaction
- It won't help improve the service
- I don't think bills should be linked to satisfaction

**Other RECORD VERBATIM**

---

Q34AAA If satisfaction falls which of the following should South East Water do?

**DP: NOTE THE AMOUNTS SHOWN SHOULD BE THE SAME FOR ALL CODES BELOW**

1. Only reduce bills if the reduction would be by **FOR HALF SHOW '£1' FOR HALF SHOW '£5'** or more
2. Apply the reduction even if this is less than **FOR HALF SHOW '£1' FOR HALF SHOW '£5'**
3. Don't know/not sure.

---

**Q34AAAA ASK IF Q34AAA=2** Would you set a lower threshold than 'INSERT AMOUNT SHOWN IN Q34AAA' ?  
If so, what would it be? [**SHOULD BE LOWER THAN AMOUNT SHOWN IN Q34AAA**]

1. Yes £ ENTER AMOUNT
2. Don't know/not sure.
3. No

---

**Q34AAAAA ASK IF Q34AAA=1** Would you set a higher threshold than 'INSERT AMOUNT SHOWN IN Q34AAA'? If so, what would it be? [**SHOULD BE HIGHER THAN AMOUNT SHOWN IN Q34AAA**]

1. Yes, £ ENTER AMOUNT
2. Don't know/not sure.
3. No

---

**Q34B** On a scale of 1 to 5, where 1 is strongly oppose and 5 is strongly support, to what extent do you support or oppose the idea of there being a higher bill charged if customer satisfaction rises?

1. Strongly oppose
2. Weakly oppose
3. Neutral
4. Weakly support
5. Strongly support
6. Don't know/not sure.

---

**Q34BB** REMOVED

## **Demographics**

---

**Q35.** Which one of these statements best describes your current employment status? Stop me when I've reached the category which best describes you.

- 1 Self employed
- 2 Employed full-time (30+ hrs)
- 3 Employed part-time (up to 30 hrs)
- 4 Student
- 5 Unemployed – seeking work
- 6 Unemployed – other
- 7 Looking after the home/children full-time
- 8 Retired
- 9 Unable to work due to sickness or disability
- 10 Other (please specify).....

---

**Q36.** What is the highest educational qualification you have? If still studying, which level best describes the highest level of education you have got until now? Stop me when I've reached the category which best describes you.

- 1 No qualifications
- 2 O levels / CSEs / GCSEs (any grades)
- 3 A levels / AS level / higher school certificate

- 4 NVQ (Level 1 and 2). Foundation / Intermediate / Advanced GNVQ / HNC / HND
- 5 Other qualifications (e.g. City and Guilds, RSA/OCR, BTEC/Edexcel)
- 6 First degree (e.g. BA, BSc)
- 7 Higher degree (e.g. MA, PhD, PGCE, post graduate certificates and diplomas)
- 8 Professional qualifications (teacher, doctor, dentist, architect, engineer, lawyer, etc.)

Q37. Thinking about all the people in your household, including yourself, how many people live here each of these age groups:

Up to 15 years..... 0 ..... 1 ..... 2 ..... 3 ..... 4 ..... 5+  
 16 to 60 years ..... 0 ..... 1 ..... 2 ..... 3 ..... 4 ..... 5+  
 61+ ..... 0 ..... 1 ..... 2 ..... 3 ..... 4 ..... 5+

Q38. To help us analyse your responses can you tell me which of the following bands best describes the total annual income of your household, before tax and other deductions? **[PROGRAMMER: Please show the letters of each band on screen]**

	Per Week	Per Year
A	Up to £300	Under £15,600
B	£301-£1000	£15,601 - £52,000
C	£1001+	£52,001+
D	Prefer not to say	

Q39. REMOVED

Q40. How long have you lived at your current address?

- 1. Less than one year
- 2. One to three years
- 3. Three or more years

Q40A Do you, or does anyone in your household consider themselves to have a disability or an increased reliance on your water supply? MULTICODE

- 1. No
- 2. Respondent has disability
- 3. Someone in household has disability
- 4. Respondent has increased reliance on water supply
- 5. Someone in household has increased reliance on water supply

Q41. We really appreciate the time that you have given us today. Would you be willing to be contacted again for clarification purposes or be invited to take part in other research for South East Water?

- Yes, for both clarification and further research
- Yes, for clarification only
- Yes, for further research only
- No

**ONLY FOR COG. INTERVIEWS TAKE OUT FOR PILOT** Q41b. And would you be happy for a recording of this interview to be passed to South East Water and a consultant working with them so that the can hear your views on the questionnaire?

Yes

No

---

That was the last question. Thank you very much for your help in this research. Please can I take a note of your name and telephone number for quality control purposes?

Respondent name: .....

Telephone: Home: .....

**Thank you**

I confirm that this interview was conducted under the terms of the Market Research Society code of conduct and is completely confidential

Interviewer's signature: .....

**Debriefing Questions – to be completed by the interviewer when interview is over**

---

Q42. In your judgement, did the respondent understand what he/she was being asked to do in the questions?

- Understood completely
- Understood a great deal
- Understood a little
- Did not understand very much
- Did not understand at all

---

Q43. Which of the following best describes the amount of thought the respondent put into making their choices?

- Gave the questions very careful consideration
- Gave the questions careful consideration
- Gave the questions some consideration
- Gave the questions little consideration
- Gave the questions no consideration

---

Q44. Which of the following best describes the degree of fatigue shown by the respondent when answering the questions?

- Easily maintained concentration throughout the survey
- Maintained concentration with some effort throughout the survey
- Maintained concentration with a good deal of effort throughout the survey
- Lessened concentration in the later stages
- Lost concentration in the later stage

# APPENDIX B

## Business Questionnaire

Interviewer name:

Date:     Time:

**Recruitment Section**

Good morning/afternoon/evening. My name is ..... Could I please speak to whoever is responsible for paying your business/organisation's water bills and for liaising with your water company? **(INTERVIEWER PLEASE TARGET SOMEONE WHO KNOWS HOW MUCH THE BUSINESS/ORGANISATION PAYS BUT ALSO HAS AN UNDERSTANDING OF THE BUSINESS/ORGANISATION EG. OPERATIONS MANAGER, FACILITIES MANAGER, UTILITIES MANAGER ETC – IN SMALL BUSINESSES MIGHT BE MD/OWNER. WHEN SPEAKING TO APPROPRIATE CONTACT CONTINUE WITH EXPLANATION)**

My name is ..... from Accent, an independent research consultancy, and we are carrying out an important research study for South East Water to ask its customers how satisfied they are with the supply of their water. This is a *bona fide* market research exercise. It is being conducted under the Market Research Society Code of Conduct which means that any answers you give will be treated in confidence. This is your opportunity to influence the company's future plans. Could you please spare a couple of minutes to see if you are the type of customer we need to speak to for this research?

Q1. Can you confirm that you are the person who is responsible for paying your business/organisation's water bills and for liaising with your water company?

Yes

No **ASK FOR REFERRAL**

---

Q2. And what business sector best defines the main activity of your company?

1. Agriculture, Forestry and Fishing
2. Mining and Quarrying
3. Manufacturing
4. Energy
5. Water service & supply **THANK AND CLOSE**
6. Construction
7. Wholesale and retail trade (incl motor vehicles repair)
8. Transport and storage
9. Hotels & catering
10. IT and Communication
11. Finance and insurance activities (incl real estate activities)
12. Business services
13. Government, health & education
14. Arts, entertainment and recreation
15. Other service activities
16. Other **SPECIFY**

---

Q3. Do you have more than one site in the South East Water area?

No, one site only

Yes, more than one site **SPECIFY NUMBER**





- 4. Yes
- 5. No
- 6. Don't know

**CHECK QUOTA**

Q14C Do you have, or have you had in the past 12 months, persistent low water pressure, where the water does not flow very fast from the tap?

- 4. Yes
- 5. No
- 6. Don't know

**CHECK QUOTA**

Q14E Have you had poor customer service from South East Water at any time in the past 12 months?

- 4. Yes
- 5. No
- 6. Don't know

**CHECK QUOTA**

**Recruitment**

**RECRUITMENT** Thank you for answering those questions. As I mentioned, we are carrying out an important research study for South East Water asking customers how satisfied they are with the service they receive from South East Water. I would be very grateful if you could spare another **10-15** minutes – to run through some questions with me. Your views are very important as South East Water will take them into account when trying to improve their services. **IF REQUIRED** If now is not convenient, can we make an appointment for a more convenient time?

Continue now **PROCEED**

Cannot continue with interview now **RECORD APPOINTMENT ON NEXT SCREEN**

No **ATTEMPT TO REASSURE & PERSUADE; IF STILL NO, THANK & CLOSE**

Date: ..... Time:.....

Name: .....

Address: .....

Email Address: .....

Tel No.

**Introduction to Main Survey**

Thank you for agreeing to take part in this survey. As I said previously, we are conducting research for South East Water looking at how satisfied customers are with their water supply services.

The questionnaire will take 10-15 minutes. You do not have to answer any questions that you don't want to and you can stop the interview at any point.

## Background Questions

Q14F Firstly, how much impact would a temporary use ban – also known as a hosepipe ban - have on your business? Would it have: **[READ OUT – SINGLE CODE]**

6. No impact
7. A small impact
8. A moderate impact
9. A big impact
10. Don't know

## Satisfaction – ROTATE THESE QUESTIONS

Q15. Now, we are going to ask you to rate how satisfied you are with some key measures of South East Water's service. We want to understand how satisfied you are with each of these service measures in the context of your business. Please do not try and answer on behalf of other people since all types of customers' perspectives will be obtained in the course of this research.

On a scale of 1 to 5, where 1 is 'Completely dissatisfied' and 5 is 'Completely satisfied', how satisfied are you with the following:

	1	2	3	4	5	DK
(a) The water pressure at your property (by this we mean the rate at which water flows from the taps)						
(aa) The frequency and duration of interruptions to your water supply						
(b) The appearance of the water supplied to you						
(bb) The taste and smell of the water supplied to you						
(c) The amount of water that leaks from South East Water's pipes across their region						
(d) The frequency of temporary use bans in your area, also known as hosepipe bans						
(e) South East Water's customer service? When considering your rating, think of things such as contact with South East Water either through a phone call, or by letter or email or when reading your bill.						

## Improvements and Willingness to Pay– DISPLAY IN ORDER OF EARLIER ROTATION

### INTRO

We are now going to explore your ratings in a little more detail. We are also going to ask whether you would choose increases or decreases in your bill if it meant improvements or deteriorations in the service you get from South East Water. Keep in mind that the increases and decreases will be tallied up and you will be told your overall bill impact at the end of the questions, note, your bill will also increase by inflation each year.

You will then get the chance to adjust your choices if you want to.

### START ROTATION

#### The water pressure at your property

---

Q15Z REMOVED

---

**Q16. ASK IF Q15a=1 or 2 or 3 or 4, ELSE IF Q15a=5 GO TO Q16A**

Earlier, when we asked you to rate your satisfaction with the water pressure at your property, you said 'INSERT RESPONSE at Q15a' out of 5. What improvements might move your satisfaction from a score of [INSERT RESPONSE FROM Q15a] to a score of [INSERT RESPONSE FROM Q15a+1] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM [FOR COG. INTERVIEWS EXPLORE IN SOME DEPTH INCLUDING WHAT DROVE THE SCORE/IMPROVEMENT]**
  2. Don't know/Not sure
- 

**Q16A ASK IF Q15a= 2 or 3 or 4 or 5, ELSE IF Q15a=1 GO TO Q17**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the water pressure at your property, you said 'INSERT RESPONSE at Q15a' out of 5.

What reduction in service might move your satisfaction with the water pressure at your property from a score of [INSERT RESPONSE FROM Q15a] to a score of [INSERT RESPONSE FROM Q15a-1] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM [FOR COG. INTERVIEWS EXPLORE IN SOME DEPTH INCLUDING WHAT DROVE THE SCORE/IMPROVEMENT]**
  2. Don't know/Not sure
- 

**Q17.** Now, consider two different options concerning your satisfaction with the water pressure at your property. **[IF Q15a=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at [INSERT Q15a+1] out of 5]. **PAUSE [ELSE IF Q15a=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE [IF Q15a=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as [INSERT Q15a-1] out of 5]. **PAUSE [ELSE IF Q15a=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

NOTE: WE ARE SHOWING DIFFERENT AMOUNTS FOR IMPROVEMENTS AND DETERIORATIONS

IMPROVEMENTS: THESE WILL BE EITHER 0.5% or 1% of THE BILL

DETERIORATIONS: THESE WILL BE EITHER 5% or 10% of THE BILL

IF THE LOWER FIGURE IS USED FOR THE IMPROVEMENT THEN THE LOWER FIGURE IS USED FOR THE DETERIORATION ie if 0.5% is used for the improvement then 5% is used for the deterioration. Conversely, if 1% is used for the improvement then 10% is used for the deterioration.

**IF [Q15a= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] or [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be **[USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER]** lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15a=5] DISPLAY**

---

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15a=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15a=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15a=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

## The frequency and duration of interruptions to your water supply

---

Q16Z REMOVED

---

**Q17A ASK IF Q15aa=1or 2 or 3 or 4, ELSE IF Q15aa=5 GO TO Q17B**

Earlier, when we asked you to rate your satisfaction with the frequency and duration of any water supply interruptions at your property, you said '**INSERT RESPONSE at Q15aa**' out of 5. What improvements might move your satisfaction from a score of [**INSERT RESPONSE FROM Q15aa**] to a score of [**INSERT RESPONSE FROM Q15aa +1**] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
  2. Don't know/Not sure
- 

**Q17B ASK IF Q15aa= 2 or 3 or 4 or 5, ELSE IF Q15aa=1 GO TO Q17C**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the frequency and duration of any water supply interruptions at your property, you said '**INSERT RESPONSE at Q15aa**' out of 5.

What reduction in service might move your satisfaction with the frequency and duration of any water supply interruptions at your property from a score of [**INSERT RESPONSE FROM Q15aa**] to a score of [**INSERT RESPONSE FROM Q15aa-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
  2. Don't know/Not sure
- 

**Q17C** Now, consider two different options concerning your satisfaction with the supply interruptions at your property. **[IF Q15aa=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at [**INSERT Q15aa+1**] out of 5. **PAUSE [ELSE IF Q15aa=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE [IF Q15aa=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as

[INSERT Q15aa-1] out of 5]. **PAUSE** [ELSE IF Q15aa=1 INSERT In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15aa= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] [RANDOMISE] higher, and the option where you are less satisfied meant that your annual water bill would be [USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER] lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15aa=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15aa=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15aa=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill [DISPLAY AS SHOWN IN THE QUESTION]
2. **DO NOT DISPLAY IF Q15aa=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill [DISPLAY AS SHOWN IN THE QUESTION]
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

## **The appearance of the water supplied to you**

---

Q17Z REMOVED

---

**Q18. ASK IF Q15b=1 or 2 or 3 or 4 ELSE SKIP TO Q18A**

Earlier, when we asked you to rate your satisfaction with the appearance of the water supplied to your property, you said 'INSERT RESPONSE at Q15b' out of 5. What improvements might move your satisfaction from a score of [INSERT RESPONSE FROM Q15b] to a score of [INSERT RESPONSE FROM Q15b+1] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

**Q18A ASK IF Q15b= 2 or 3 or 4 or 5, ELSE IF Q15b=1 GO TO Q19**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the appearance of the water supplied to your property, you said '**INSERT RESPONSE at Q15b**' out of 5.

What reduction in service might move your satisfaction with the appearance of the water supplied to your property from a score of [**INSERT RESPONSE FROM Q15b**] to a score of [**INSERT RESPONSE FROM Q15b-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

**Q19.** Now, consider two different options concerning your satisfaction with the appearance of the water supplied to your property. [**IF Q15b=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at [**INSERT Q15b+1**] out of 5]. **PAUSE** [**ELSE IF Q15b=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE** and [**IF Q15b=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as [**INSERT Q15b-1**] out of 5.] **PAUSE** [**ELSE IF Q15b=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15b= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] [**RANDOMISE**] higher, and the option where you are less satisfied meant that your annual water bill would be [**USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER**] lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15b=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15b=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15b=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill [**DISPLAY AS SHOWN IN THE QUESTION**]
2. **DO NOT DISPLAY IF Q15b=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill [**DISPLAY AS SHOWN IN THE QUESTION**]
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

## The taste and smell of the water supplied to you

---

Q18Z REMOVED

---

### Q19A ASK IF Q15bb=1 or 2 or 3 or 4 ELSE GO TO Q19B

Earlier, when we asked you to rate your satisfaction with the taste and smell of the water supplied to your property, you said ‘INSERT RESPONSE at Q15bb’ out of 5. What improvements might move your satisfaction from a score of [INSERT RESPONSE FROM Q15bb] to a score of [INSERT RESPONSE FROM Q15bb+1] out of 5? ie you would receive a slightly better service than you get now.

1. RECORD VERBATIM
  2. Don't know/Not sure
- 

### Q19B ASK IF Q15bb= 2 or 3 or 4 or 5, ELSE IF Q15bb=1 GO TO Q19C

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the taste and smell of the water supplied to your property, you said ‘INSERT RESPONSE at Q15bb’ out of 5.

What reduction in service might move your satisfaction with the taste and smell of the water supplied to your property from a score of [INSERT RESPONSE FROM Q15bb] to a score of [INSERT RESPONSE FROM Q15bb-1] out of 5? ie you would receive a slightly worse service than you get now.

1. RECORD VERBATIM
  2. Don't know/Not sure
- 

Q19C Now, consider two different options concerning your satisfaction with the taste and smell of the water supplied to your property. [IF Q15bb=1 or 2 or 3 or 4 INSERT In one option you would be more satisfied and would rate your satisfaction at [INSERT Q15bb+1] out of 5]. **PAUSE** [ELSE IF Q15bb=5 INSERT In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE** [IF Q15bb=2 or 3 or 4 or 5 INSERT In the other option you would be less satisfied and would rate your satisfaction as [ [INSERT Q15bb-1] out of 5]. **PAUSE** [ELSE IF Q15bb=1 INSERT In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

#### IF [Q15bb= 2 or 3 or 4] DISPLAY

If the option where you are more satisfied meant that your annual water bill would be [0.5%] or [1%] [RANDOMISE] higher, and the option where you are less satisfied meant that your annual water bill would be [USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER] lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

ELSE

#### IF [Q15bb=5] DISPLAY

If the option where you are less satisfied meant that your annual water bill would be [5%] or [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

ELSE

#### IF [Q15bb=1] DISPLAY



If the option where you are more satisfied meant that your annual water bill would be [0.5%] or [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15bb=5** Improve satisfaction with a [0.5%] or [1%] annual increase to your water bill  
**[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15bb=1** Reduce satisfaction with a [5%] or [10%] annual decrease to your water bill  
**[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual bill
4. Don't know/Not sure

### The amount of water that leaks from South East Water's pipes

---

Q19Z REMOVED

---

Q20. **ASK IF Q15c=1 or 2 or 3 or 4 ELSE SKIP TO Q20A**

Earlier, when we asked you to rate your satisfaction with the amount of water that leaks from South East Water's pipes, you said '**INSERT RESPONSE at Q15c**' out of 5. What improvements might move your satisfaction from a score of [**INSERT RESPONSE FROM Q15c**] to a score of [**INSERT RESPONSE FROM Q15c+1**] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
  2. Don't know/Not sure
- 

Q20A **ASK IF Q15c= 2 or 3 or 4 or 5, ELSE IF Q15c=1 GO TO Q21**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the amount of water that leaks from South East Water's pipes, you said '**INSERT RESPONSE at Q15c**' out of 5.

What reduction in service might move your satisfaction with the amount of water that leaks from South East Water's pipes from a score of [**INSERT RESPONSE FROM Q15c**] to a score of [**INSERT RESPONSE FROM Q15c-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
  2. Don't know/Not sure
- 

Q21. Now, consider two different options concerning your satisfaction with the amount of water that leaks from South East Water's pipes. **[IF Q15c=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at [**INSERT Q15c+1**] out of 5]. **PAUSE** **[ELSE IF Q15c=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE** **[IF Q15c=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as [**INSERT Q15c-1**] out of 5]. **PAUSE** **[ELSE IF Q15c=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15c= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] or [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be **[USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER]** lower,

---

would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15c=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15c=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15c=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill  
**[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15c=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill  
**[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

## The frequency of temporary use bans in your area

---

Q21Z REMOVED

---

**Q22. ASK IF Q15d=1 or 2 or 3 or 4 ELSE SKIP TO Q22A**

Earlier, when we asked you to rate your satisfaction with the frequency of temporary use bans in your area, you said '**INSERT RESPONSE at Q15d**' out of 5. What improvements might move your satisfaction from a score of [**INSERT RESPONSE FROM Q15d**] to a score of [**INSERT RESPONSE FROM Q15d+1**] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
  2. Don't know/Not sure
- 

**Q22A ASK IF Q15d= 2 or 3 or 4 or 5 ELSE SKIP TO Q23**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with the frequency of temporary use bans in your area, you said '**INSERT RESPONSE at Q15d**' out of 5.

What reduction in service might move your satisfaction with the frequency of temporary use bans in your area from a score of [**INSERT RESPONSE FROM Q15d**] to a score of [**INSERT RESPONSE FROM Q15d-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

Q23. Now, consider two different options concerning your satisfaction with the frequency of temporary use bans in your area. **[IF Q15d=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at **[INSERT Q15d+1]** out of 5]. **PAUSE [ELSE IF Q15d=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE [IF Q15d=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as **[INSERT Q15d-1]** out of 5]. **PAUSE [ELSE IF Q15d=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15d= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] **[RANDOMISE]** higher, and the option where you are less satisfied meant that your annual water bill would be **[USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER]** lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15d=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15d=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15d=5** Improve satisfaction with a [0.5%] **or** [1%] annual increase to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
2. **DO NOT DISPLAY IF Q15d=1** Reduce satisfaction with a [5%] **or** [10%] annual decrease to your water bill **[DISPLAY AS SHOWN IN THE QUESTION]**
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don't know/Not sure

## South East Water's customer service

---

**Q23Z REMOVED**

---

**Q24. ASK IF Q15e=1 or 2 or 3 or 4 ELSE SKIP TO Q24A**

Earlier, when we asked you to rate your satisfaction with South East Water's customer service, you said 'INSERT RESPONSE at Q15e' out of 5. What improvements might move your satisfaction from a score of [INSERT RESPONSE FROM Q15e] to a score of [INSERT RESPONSE FROM Q15e+1] out of 5? ie you would receive a slightly better service than you get now.

1. **RECORD VERBATIM**
2. Don't know/Not sure

---

**Q24A ASK IF Q15e= 2 or 3 or 4 or 5 ELSE SKIP TO Q25**

**REPEAT 1<sup>st</sup> SENTENCE IF NOT READ IN PREVIOUS QUESTION** Earlier, when we asked you to rate your satisfaction with South East Water’s customer service, you said ‘**INSERT RESPONSE at Q15e**’ out of 5.

What reduction in service might move your satisfaction of South East Water’s customer service from a score of [**INSERT RESPONSE FROM Q15e**] to a score of [**INSERT RESPONSE FROM Q15e-1**] out of 5? ie you would receive a slightly worse service than you get now.

1. **RECORD VERBATIM**
2. Don’t know/Not sure

---

Q25. Now, consider two different options concerning your satisfaction with South East Water’s customer service. [**IF Q15e=1 or 2 or 3 or 4 INSERT** In one option you would be more satisfied and would rate your satisfaction at [**INSERT Q15e+1**] out of 5]. **PAUSE** [**ELSE IF Q15e=5 INSERT** In one option you would have the service you have now worth a satisfaction score of 5 out of 5]. **PAUSE** [**IF Q15e=2 or 3 or 4 or 5 INSERT** In the other option you would be less satisfied and would rate your satisfaction as [**INSERT Q15e-1**] out of 5]. **PAUSE** [**ELSE IF Q15e=1 INSERT** In the other option you would have the service you have now worth a satisfaction score of 1 out of 5].

**IF [Q15e= 2 or 3 or 4] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would be [0.5%] **or** [1%] [**RANDOMISE**] higher, and the option where you are less satisfied meant that your annual water bill would be [**USE EITHER 5% or 10% BUT WHICH DEPENDS ON WHAT IS SHOWN EARLIER**] lower, would you prefer to have the higher satisfaction option with the higher bill, the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15e=5] DISPLAY**

If the option where you are less satisfied meant that your annual water bill would be [5%] **or** [10%] lower, would you prefer to have the lower satisfaction option with the lower bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

**ELSE**

**IF [Q15e=1] DISPLAY**

If the option where you are more satisfied meant that your annual water bill would [0.5%] **or** [1%] higher, would you prefer to have the higher satisfaction option with the higher bill, or would you prefer things to stay as they are now, with no change to your annual water bill?

1. **DO NOT DISPLAY IF Q15e=5** Improve satisfaction with a [0.5%] **or** [1%] increase to your water bill [**DISPLAY AS SHOWN IN THE QUESTION**]
2. **DO NOT DISPLAY IF Q15e=1** Reduce satisfaction with a [5%] **or** [10%] decrease to your water bill [**DISPLAY AS SHOWN IN THE QUESTION**]
3. Keep levels of satisfaction as they are now with no change to your annual water bill
4. Don’t know/Not sure

---

**Overall Bill Impact**

---

Q25Z IF [Q15a=6 + Q15aa=6 + Q15b=6 + Q15bb=6 + Q15c=6 + Q15d=6 + Q15e=6] OR [Q17=4 + Q17C=4 + Q19=4 + Q19C=4 + Q21=4 + Q23=4 + Q25=4] SKIP TO Q28 ELSE ASK I would now like to discuss the effect that these changes might have on your overall water bill.

If this happens, your annual bill would [INSERT BILL CHANGE RELATED TO OPTIONS] Additionally, your bill increase by inflation each year.

Would you like to change any of your choices from the previous questions?

1. Yes
2. No **GO TO Q14**

**INTERVIEWER INSTRUCTION – TELL RESPONDENT THE INDIVIDUAL BILL IMPACTS IF THEY NEED THEM**

You have chosen:

[IF Q17=1] To improve “the water pressure at your property” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] [DISPLAY AS PER QUESTION] per year OR

[IF Q17=2] To lower “the water pressure at your property” which decreases your satisfaction at a reduced cost to you of [5%] or [10%] [DISPLAY AS PER QUESTION] per year OR

[IF Q17=3] To keep “the water pressure at your property” as it is now with no change to your satisfaction or to your annual bill OR

[IF Q17=4] DO NOT DISPLAY ANY TEXT

[IF Q17C=1] To improve “the frequency and duration of interruptions to your water supply” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] [DISPLAY AS PER QUESTION] per year OR

[IF Q17C=2] To let “the frequency and duration of interruptions to your water supply” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] [DISPLAY AS PER QUESTION] per year OR

[IF Q17C=3] To keep “the frequency and duration of interruptions to your water supply” as it is now with no change to your satisfaction or to your annual bill OR

[IF Q17C=4] DO NOT DISPLAY ANY TEXT

[IF Q19=1] To improve “the appearance of the water supplied to you” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] [DISPLAY AS PER QUESTION] per year OR

[IF Q19=2] To let “the appearance of the water supplied to you” diminish which decreases your satisfaction at a reduced cost to you of [5%] or [10%] [DISPLAY AS PER QUESTION] per year OR

[IF Q19=3] To keep “the appearance of the water supplied to you” as it is now with no change to your satisfaction or to your annual bill OR

[IF Q19=4] DO NOT DISPLAY ANY TEXT

[IF Q19C=1] To improve” the taste and smell of the water supplied to you” which increases your satisfaction at an extra cost to you of [0.5%] or [1%]

[IF Q19C=2] To let “the taste and smell of the water supplied to you” diminish which decreases your satisfaction at a reduced cost to you of [5%] or [10%] [DISPLAY AS PER QUESTION] per year OR

[IF Q19C=3] To keep “the taste and smell of the water supplied to you” as it is now with no change to your satisfaction or to your annual bill OR

[IF Q19C=4] DO NOT DISPLAY ANY TEXT

**[IF Q21=1]** To reduce “the amount of water that leaks from South East Water’s pipes” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year **OR**  
**[IF Q21=2]** To let “the amount of water that leaks from South East Water’s pipes” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**  
**[IF Q21=3]** To keep “the amount of water that leaks from South East Water’s pipes” as it is now with no change to your satisfaction or to your annual bill **OR**  
**[IF Q21=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q23=1]** To reduce “the frequency of temporary use bans in your area” which increases your satisfaction at an extra cost of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year **OR**  
**[IF Q23=2]** To let “the frequency of temporary use bans in your area” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**  
**[IF Q23=3]** To keep “the frequency of temporary use bans in your area” as it is now with no change to your satisfaction or to your annual bill **OR**  
**[IF Q23=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q25=1]** To improve “South East Water’s customer service” which increases your satisfaction at an extra cost of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year. **OR**  
**[IF Q25=2]** To let “South East Water’s customer service” diminish which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**  
**[IF Q25=3]** To keep “South East Water’s customer service” as it is now with no change to your satisfaction or to your annual bill **OR**  
**[IF Q25=4]** **DO NOT DISPLAY ANY TEXT**

**Q26. Which ones would you like to change? INTERVIEWER NOTE, THE RESPONSES GIVEN EARLIER ON ARE POPULATED BELOW IN RED. TAKE THE RESPONDENT THROUGH EACH ONE AND CHECK IF THEY WANT TO STAY THE SAME OR MAKE A CHANGE.**

	<b>[DO NOT DISPLAY IF Q15a or Q15aa or Q15b or Q15bb or Q15c or Q15d or Q15e = 5] 1 Improve satisfaction with a x% increase in annual water bill</b>	<b>[DO NOT DISPLAY IF Q15a or Q15aa or Q15b or Q15bb or Q15c or Q15d or Q15e = 1] 2 Reduce satisfaction with a x% decrease annual water bill</b>	<b>3 Keep levels of satisfaction as they are now with no bill change</b>	<b>4 Don't Know</b>
(a) The water pressure at your property (by this we mean the rate at which water flows from the taps)				
(aa) The frequency and duration of interruptions to your water supply				
(b) The appearance of the water supplied to you?				
(bb) The taste and smell of the water supplied to you?				
(c) The amount of water that leaks from South East Water's pipes				
(d) The frequency of temporary use bans in your area?				
(e) South East Water's customer service? When considering your rating, think of things such as contact with South East Water either through a phone call, or by letter or email or when reading your bill.				

Q27.

Now, with the options you have chosen, your annual bill would **[INSERT BILL CHANGE RELATED TO OPTIONS]**

Additionally, your bill would increase due to inflation each year.

Would you like to change any of your choices from the previous questions?

3. Yes **GO TO Q12**
4. No

**INTERVIEWER INSTRUCTION – TELL RESPONDENT THE INDIVIDUAL BILL IMPACTS IF THEY NEED THEM**

You have chosen:

**[IF Q12a=1]** To improve “the water pressure at your property” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12a=2]** To lower “the water pressure at your property” which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12a=3]** To keep “the water pressure at your property” as it is now with no change to your satisfaction or to your annual bill OR

**[IF Q12a=4] DO NOT DISPLAY ANY TEXT**

**[IF Q12aa=1]** To improve “the frequency and duration of interruptions to your water supply” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12aa=2]** To let “the frequency and duration of interruptions to your water supply” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12aa=3]** To keep “the frequency and duration of interruptions to your water supply” as it is now with no change to your satisfaction or to your annual bill OR

**[IF Q12aa=4] DO NOT DISPLAY ANY TEXT**

**[IF Q12b=1]** To improve “the appearance of the water supplied to you” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12b=2]** To let “the appearance of the water supplied to you” diminish which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12b=3]** To keep “the appearance of the water supplied to you” as it is now with no change to your satisfaction or to your annual bill OR

**[IF Q12b=4] DO NOT DISPLAY ANY TEXT**

**[IF Q12bb=1]** To improve” the taste and smell of the water supplied to you” which increases your satisfaction at an extra cost to you of [0.5%] or [1%]

**[IF Q12bb=2]** To let “the taste and smell of the water supplied to you” which decreases your satisfaction diminish at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12bb=3]** To keep “the taste and smell of the water supplied to you” as it is now with no change to your satisfaction or to your annual bill OR

**[IF Q12bb=4] DO NOT DISPLAY ANY TEXT**

**[IF Q12c=1]** To reduce “the amount of water that leaks from South East Water’s pipes” which increases your satisfaction at an extra cost to you of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12c=2]** To let “the amount of water that leaks from South East Water’s pipes” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year OR

**[IF Q12c=3]** To keep “the amount of water that leaks from South East Water’s pipes” as it is now with no change to your satisfaction or to your annual bill **OR**  
**[IF Q12c=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q12d=1]** To reduce “the frequency of temporary use bans in your area” which increases your satisfaction at an extra cost of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year **OR**  
**[IF Q12d=2]** To let “the frequency of temporary use bans in your area” increase which decreases your satisfaction at a reduced cost to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**  
**[IF Q12d=3]** To keep “the frequency of temporary use bans in your area” as it is now with no change to your satisfaction or to your annual bill **OR**  
**[IF Q12d=4]** **DO NOT DISPLAY ANY TEXT**

**[IF Q12e=1]** To improve “South East Water’s customer service” which increases your satisfaction at an extra cost of [0.5%] or [1%] **[DISPLAY AS PER QUESTION]** per year. **OR**  
**[IF Q12e=2]** To let “South East Water’s customer service” diminish which decreases your satisfaction at a reduced costs to you of [5%] or [10%] **[DISPLAY AS PER QUESTION]** per year **OR**  
**[IF Q12e=3]** To keep “South East Water’s customer service” as it is now with no change to your satisfaction or to your annual bill **OR**  
**[IF Q12e=4]** **DO NOT DISPLAY ANY TEXT**

### Follow-up Questions

I would now like to ask you a few questions about the choices you have just made.

---

Q28. Did you feel able to rate how satisfied you were with each of the service measures we talked about?

1. Yes
2. No

---

Q28A Did you feel able to choose between the different options?

1. Yes
2. No

---

Q29. REMOVED

---

Q30. Did you feel able to imagine what a higher satisfaction score than the one you gave us would entail for each of the service measures?

1. Yes
2. No

---

Q31. REMOVED

---

Q31A Did you feel able to imagine what a lower satisfaction score than the one you gave us would entail for each of the service measures?



1. Yes
2. No

---

Q31B REMOVED

---

Q32. You were then asked to choose whether you would prefer an improved service with a higher bill, a deterioration in service for a lower bill, or for your service to stay as now, with no change in your bill.

With respect to these questions:

Did the bill changes we talked about seem realistic?

1. Yes
2. No

---

Q33. REMOVED

---

Q34. Did you understand that the amount your bill would change would be in addition to increases due to general inflation which would happen even with no change to your service levels?

1. Yes
2. No

---

Q34Y Overall, how satisfied are you with your water supply service from South East Water? Using of scale of 1 to 5 when 1 is very dissatisfied and 5 is very satisfied. How would you rate them?

Very dissatisfied  
Dissatisfied  
Neither dissatisfied nor satisfied  
Satisfied  
Very satisfied

**DO NOT READ** Don't know/Not sure

---

Q34Z **SKIP IF Q34Y=6 ELSE ASK** You said your overall satisfaction with your water supply service from South East Water is **INSERT RESPONSE FROM Q34Y** – what is the main reason for this?

**OPEN RESPONSE**

---

South East Water is considering linking future bills to average customer satisfaction so that if satisfaction increases customers will get an increase in their bill the following year, and if satisfaction falls there will be a lower bill charged. It is possible, however, that the link may be just one-way so that if average customer satisfaction increases customers' bills will stay the same, but if it falls then bills will still be reduced.

**ASK ALL FOLLOWING QUESTIONS BUT ROTATE THE ORDER IN WHICH EACH ARE ASKED IN BLOCKS [Q34AA & A34AA & Q34AAA & Q34AAAA & Q34AAAAA] and [Q34B + Q34BB] HALF GET ASKED THE 'A' BLOCK FIRST, AND HALF GET ASKED THE 'B' BLOCK FIRST**

---

Q34A On a scale of 1 to 5, where 1 is strongly oppose and 5 is strongly support, to what extent do you support or oppose the idea of there being a lower bill charged if customer satisfaction falls?

1. Strongly oppose
2. Weakly oppose
3. Neutral
4. Weakly support
5. Strongly support
6. Don't know/not sure.

---

Q34AA Why do you think this? [DO NOT PROMPT – MULTICODE]

This would be fair  
I would like a bill reduction  
I think bills should be linked to satisfaction  
It won't help improve the service  
I don't think bills should be linked to satisfaction

**Other RECORD VERBATIM**

---

Q34AAA If satisfaction falls which of the following should South East Water do?

**DP: NOTE THE AMOUNTS SHOWN SHOULD BE THE SAME FOR ALL CODES BELOW**

1. Only reduce bills if the reduction would be by **FOR HALF SHOW '0.5%' FOR HALF SHOW '2.5%'** or more
2. Apply the reduction even if this is less than **FOR HALF SHOW '0.5%' FOR HALF SHOW '2.5%'**
3. Don't know/not sure.

---

Q34AAAA **ASK IF Q34AAA=2** Would you set a lower threshold than 'INSERT AMOUNT SHOWN IN Q34AAA' ?  
If so, what would it be? [SHOULD BE LOWER THAN AMOUNT SHOWN IN Q34AAA]

1. Yes £ ENTER AMOUNT
2. Don't know/not sure.
3. No

---

Q34AAAAA **ASK IF Q34AAA=1** Would you set a higher threshold than 'INSERT AMOUNT SHOWN IN Q34AAA'? If so, what would it be? [SHOULD BE HIGHER THAN AMOUNT SHOWN IN Q34AAA]

1. Yes, £ ENTER AMOUNT
2. Don't know/not sure.
3. No

---

Q34B On a scale of 1 to 5, where 1 is strongly oppose and 5 is strongly support, to what extent do you support or oppose the idea of there being a higher bill charged if customer satisfaction rises?

1. Strongly oppose
2. Weakly oppose
3. Neutral
4. Weakly support
5. Strongly support
6. Don't know/not sure.

---

Q34BB REMOVED

## Demographics

Q35. How many employees are there at your business/organisation's premises?

1. 0 – 4
2. 5 – 9
3. 10 - 19
4. 20 - 49
5. 50 - 99
6. 100 - 249
7. 250 - 499
8. 500 - 999
9. 1,000 +
10. Don't know/not stated

Q36. We really appreciate the time that you have given us today. Would you be willing to be contacted again for clarification purposes or be invited to take part in other research for South East Water?

- Yes, for both clarification and further research
- Yes, for clarification only
- Yes, for further research only
- No

Q37. That was the last question. Thank you very much for your help in this research. Please can I take a note of your name and telephone number for quality control purposes?

Respondent name: .....

Telephone: Business: .....

### Thank you

I confirm that this interview was conducted under the terms of the Market Research Society code of conduct and is completely confidential

Interviewer's signature: .....

## Debriefing Questions – to be completed by the interviewer when interview is over

Q38. In your judgement, did the respondent understand what he/she was being asked to do in the questions?

- Understood completely
- Understood a great deal
- Understood a little
- Did not understand very much
- Did not understand at all

Q39. Which of the following best describes the amount of thought the respondent put into making their choices?

- Gave the questions very careful consideration
- Gave the questions careful consideration
- Gave the questions some consideration
- Gave the questions little consideration
- Gave the questions no consideration

---

Q40. Which of the following best describes the degree of fatigue shown by the respondent when answering the questions?

Easily maintained concentration throughout the survey

Maintained concentration with some effort throughout the survey

Maintained concentration with a good deal of effort throughout the survey

Lessened concentration in the later stages

Lost concentration in the later stage

# APPENDIX C

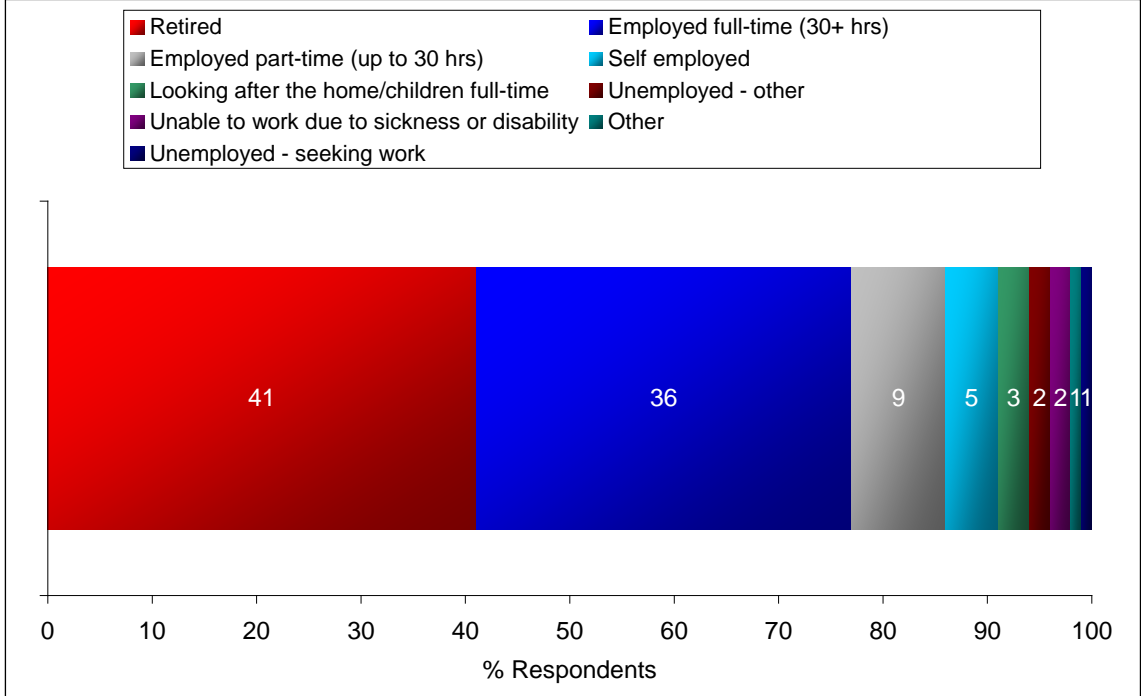
## Sample Characteristics

**APPENDIX C SAMPLE CHARACTERISTICS**

**Household Demographics**

Figure 15 indicates that two in five (41%) respondents were retired. Half of respondents were working full time (36%), part-time (9%) or were self employed (5%).

**Figure 15: Employment status of respondents**



Base: Household =1,000

Table 13 shows that approximately one in five (22%) households interviewed had either one or two children and around 3% had three or more children. However the vast majority (75%) of households had no children. Half of households had either one or two adults aged 16-60 while a similar proportion (47%) had either one or two adults aged 61+.

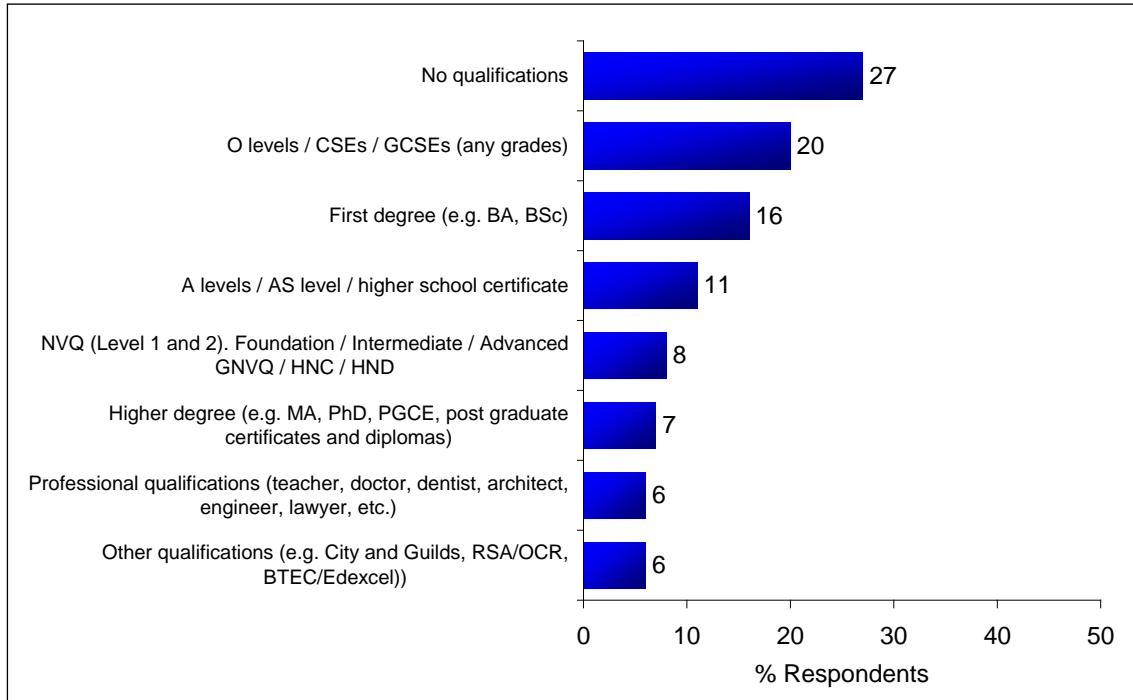
**Table 13: Household structure**

Age band	Frequency, by number in age band (%)					
	0	1	2	3	4	5+
0-15	75	12	10	2	1	*
16-60	34	18	32	11	4	1
61+	54	24	23	*	0	0

Base: Household =1,000. \* = <1%

Almost one quarter of respondents had either a first degree (16%) or higher degree (7%) while only 6% had a professional qualification (Figure 16). Three in ten (31%) of respondents held either O levels / CSEs / GCSES or A levels / AS level / higher school certificate. It is worth noting that over one quarter of respondents (27%) had no qualifications.

**Figure 16: Educational status of respondents**

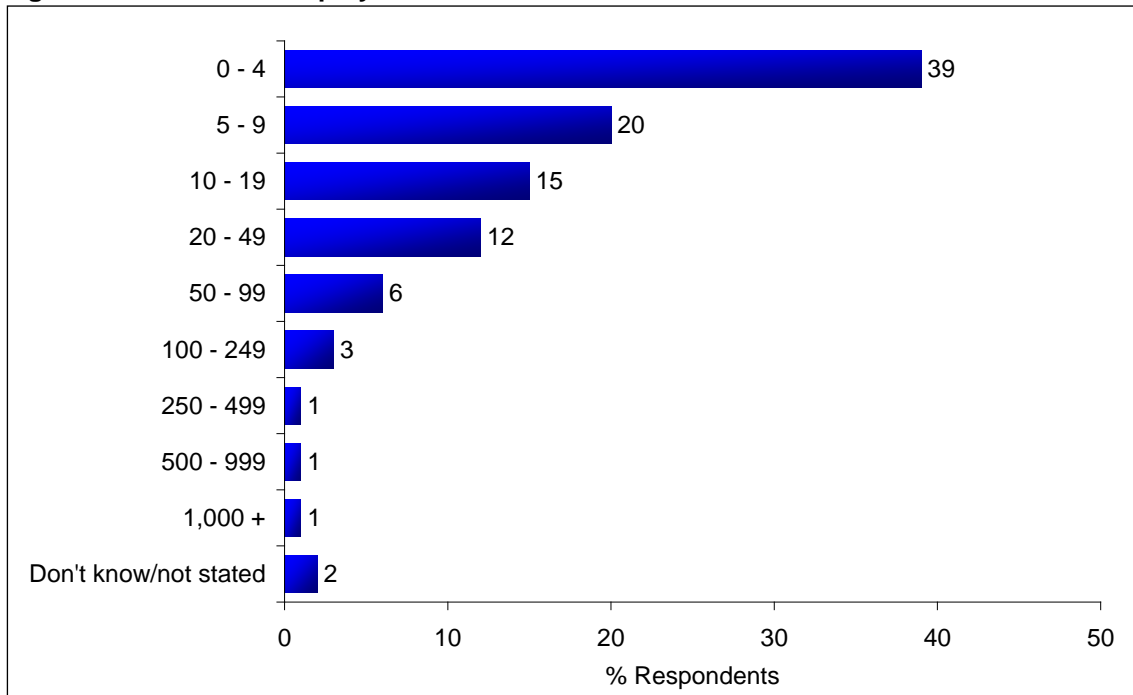


Base: Household = 1,000

### Business Demographics

Figure 17 indicates that the vast majority of businesses (86%) had fewer than 50 employees working at their business (59% had fewer than 10 employees). Only 9% of businesses had between 50 and 249 employees and 3% had 250 or more employees.

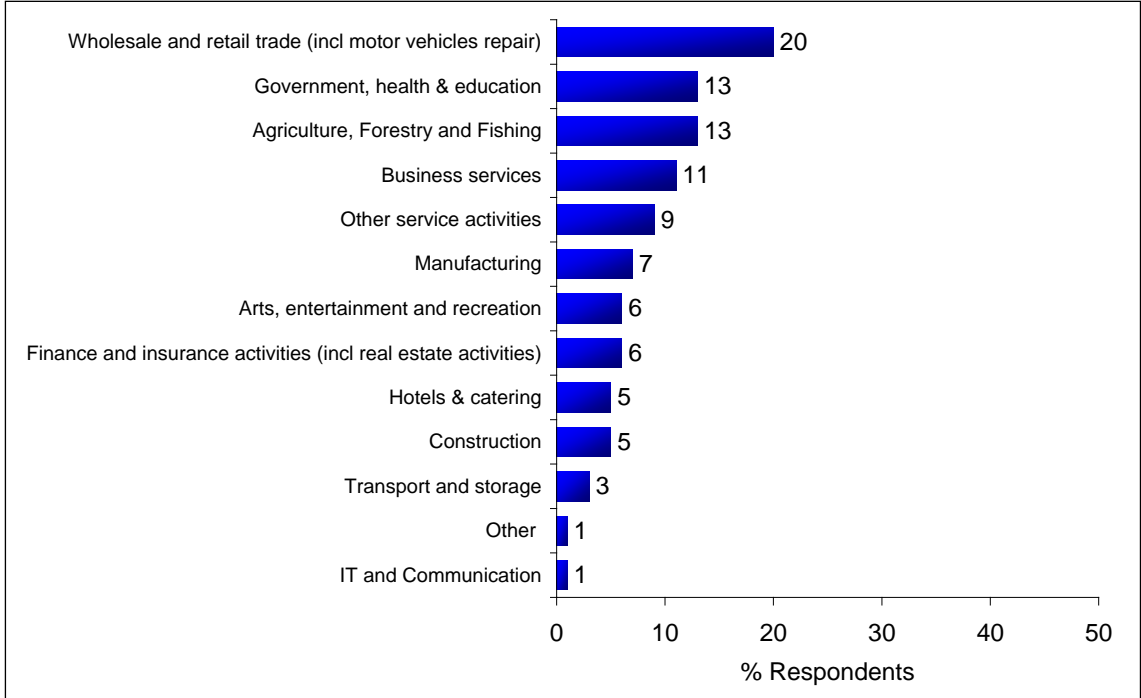
**Figure 17: Number of employees**



Base: Business = 608

Figure 18 indicates that business respondents worked across a wide range of business sectors. One in five worked in wholesale and retail trade, 13% in government, health and education and 13% in agriculture, forestry and fishing.

**Figure 18: Business sector**



Base: Business = 608



# APPENDIX D

## Peer Review

## APPENDIX D – PEER REVIEW

This appendix contains all comments made by reviewers during the development of the survey instrument, and our responses to those comments at the time. The questions referred to in this correspondence are not necessarily the same as those shown in Appendices A or B of this report since the comments relate to a series of interim versions of the questionnaires over the course of the survey's development.

### Email from Roger Darlington (CCG), 14 May 2013 (Accent response in bold)

In the Recruitment Section and Q1, there is some language that could be simpler. Instead of "jointly or solely" = "either on your own or with someone else". Instead of "bona fide" = "genuine". Also could we strengthen a little the assurance of confidentiality by talking of "complete confidence" rather than just "confidence"?

**We can make these changes.**

Q7 and Q11 - These are classed as "hidden" questions and I cannot see them! Sorry, but I don't know the nature or the purpose of these questions. Surely the post code should define the company supplying the water and sewage services respectively.

**These are instructions for programming – not asked of respondents.**

Q13 - Why does gender matter?

**It isn't key, but is useful to note who we spoke to.**

Again in the Introduction To The Main Survey, language could be simpler. Instead of "terminate" = "end" or "stop".

**We can change this.**

Q17 and similar - I understand where the first figure comes from but I don't understand where the second figure comes from.

**This is their rating plus 1.**

Also I don't understand the question "What would that service look like?"

**We want to understand what would improve the service. The phrasing would be explored in the cognitive interviews.**

Q18 and similar - Where do the figures £5 and £2.50 come from? I think that for clarity after the words "the improved service" one should add "with the higher bill".

**These figures are placeholders which we will review after the cognitive interviews to understand if we have set the boundaries correctly and how this works in the context of 'actual' bills. One of these amounts would be shown randomly. Yes, we can add in 'with the higher bill'.**

Overall bill impact - Surely in assessing the acceptability or otherwise of a bill increase, it is relevant to know or be reminded of the current bill level, so that there is a sense of proportion. When the customer is advised of the increase in the bill as a result of the choices made, should this not be in terms of: "Your bill would increase from £X now to £Y as a result of your choices"? If the current bill of the individual household is not known, could we use phraseology like: "At the moment, the average annual bill of a South East Water customer is

£XYZ although your own bill might be a bit higher or a bit lower. As a result of your choices, that average bill would increase to £ABC."

**Yes, we could include the current or average bill but we need to think carefully about this in light of the comment below.**

Q36 - I am a bit troubled by the question asking the customer to recollect or estimate (guess?) his or her current bill. What is the purpose of this question? How will we know the reliability of the answer? If one wants the most accurate possible answer, one should give the customer time to look for a bill. IF we are to retain this question, should it come before the customer is offered information on the overall bill impact of his or choices, so that he or she understands the proportionate increase that would be involved (on the doubtful assumption that the customer has an accurate recollection of the current bill).

**The purpose of this question is to explore the size of bill related to opinions expressed. However, there are issues with respondents recalling their bill which is why we ask a follow-up question if this is an estimate/exact amount. We will need to review the placement of when to collect the bill information to permit setting the context for the bill impact.**

Q41 - I am assuming that we are seeking the income of all in the household and not just the person answering the questions. In that case, I think the phraseology here could be clearer. Instead of "your total annual household income" = "the total annual income of your household".

**We can make this change.**

Q42 - Why are we asking this question? How would we use or interpret the answers?

**This gives us an indication of whether the person shows some consideration for environmental issues. It gives us an ability to explore any extreme ratings if required.**

Q44 - Could we offer a little something to the respondent for their trouble? An information pack on how to save water? A hippo bag?

**This would not be appropriate as it may be misconstrued.**

Thank you - The acronym MRS should be spelt out. Although this was done in the first minutes of the interview, that will have been about a quarter of an hour ago.

**We can make this change.**

## THROUGHOUT

- There is rather a lot of water industry jargon that I think lay people will either find difficult to understand or not understand as you intend them to understand it. Can it be replaced with more lay language? I'm thinking of for instance:
  - Q14 'service failures' (possibly reword as 'problems')
  - Q16 'engineering service failure' (possibly reword as 'problems')
  - Q18 'investment' (possibly reword as 'South East Water could improve xxx but it would cost a certain amount to do this')
  - Q34 and Q35 'bill impact' (possibly reword as 'how much your bill would change')
  - Q14 and other questions 'your water supply' (possibly reword as 'water we bring to your home')
  - Q18 'your annual water bill' (some people pay weekly or monthly - possible reword as 'the total amount you pay each year').

**Yes, we can change this language.**

## RECRUITMENT SECTION

- Just to check (as I got a bit confused with the routing)... If respondents aren't sure who their water or waste water company, they will be included, won't they? This is important as lots of customers are unsure so excluding them would bias the sample.  
**Respondents are checked initially by their postcode so don't need to recall their supplier. If they can't be found on this list (in a small number of cases) we ask them who their supplier is.**

## BACKGROUND QUESTIONS

- Q14 – This question is several questions rolled into one. (Did you experience it? Did you notice it? Were you aware of it? Did your relatives experience it? Did your relatives notice it? Were your relatives aware of it? Did your close friends experience it? Did your close friends notice it? Were your close friends aware of it? When – in the past year or more than a year ago?) Combining all these questions into one question is problematic for two reasons.

(1) Answering several questions at once makes it difficult for respondents to come up with an answer.

**The interviewer will take the person through step by step so it is clear what they are responding to. However, i think it would be worth adding this into the questionnaire to ensure it is done uniformly.**

(2) Might you want to distinguish between things that respondents experienced, noticed, or were aware of? Might you also want to distinguish between things that respondents experienced and things that friends or family experienced? I think so as they could have different impacts.

**No, this is about establishing if there has been some influence or not. The extent of this influence is subjective so really we are more interested to separate people into 2 categories, those who are influenced in some way, and those who are not.**

(I see very large water leaks about three or four times a year which take several days to be fixed. I'm likely to feel quite differently about water leaks from someone who

never sees water leaks but is just aware of them through reading about them in the newspaper.)

**This is very subjective – someone may feel very passionate about leaks just from reading the papers and it may drive their decisions even though they have never experienced which is why we group ‘influence’ together.**

- Q14 – ‘Leakage in the street or your property’ – Are you really interested in views about leakage in their property? That surprises me.  
**I think the wording ‘on your property’ needs to be clarified a little more – we are talking about external leaks but on a persons property ie outside.**
- Q14 – Will respondents understand what ‘persistent’ means or should it be defined (e.g. lasting for at least xx days)?  
**Yes, I think it would be useful to add some further information (and perhaps for other attributes as well). This would normally go in the briefing notes for the interviewer to explain to the respondent, but I think it would be a good idea to add directly into the questionnaire.**
- Q14 – Will respondents understand what ‘unsatisfactory customer service’ or should it be defined?  
**This is to be interpreted by the person in whatever way they choose. We want to capture if they are unhappy in any way by any of their interactions with SEW.**
- By asking Q14 before Q15, problems with the issues listed in Q14 will be front of mind when answering Q15. This will lead to more negative answers on Q15 than you would get if you had not asked Q14. This might not be a problem if you’re just comparing answers on Q15 over time. But question context effects are unpredictable. I’d be tempted to just ask Q14 later in the questionnaire.  
**We did ponder this at length and on balance we tend to prefer the existing order of q14 and q15 as the experience questions do give them a frame of reference for answering the satisfaction question. It is leading in the sense that the satisfaction rating is then conditioned on their experience to a certain extent, rather than purely top of mind, but that is not a bad thing as it avoids them potentially anchoring on something else totally arbitrarily that we have no knowledge of. We will review this after the pilot.**

## SATISFACTION

- Q15 – When you ask about ‘reliability of your water supply’, do you just want customers to think about ‘water supply interruptions’? When you ask about ‘the quality of water supplied to you’, do you just want customers to think about ‘discoloured, milky or cloudy water’? If so, I think it would be better to say so.  
**No, we are trying to explore how the customers sees their ‘water experience’ rather than asking them to rate potential things which may or may not happen (in the majority of cases).**
- As you’ve noted in the email accompanying the questionnaire, it would be preferable to ask about something other than satisfaction. There are two problems with asking about satisfaction. (1) It looks at the relationship between what people expect and what they get, so if people have low expectations, a service they think is poor will still be satisfactory because they expect poor service. (2) If people don’t care about something, they might rate it as satisfactory even if they think it’s not very good. I think asking about

acceptability might suffer from the same problems. To make things as simple as possible, I'd be tempted to ask how good or bad they think things are which will reduce both of these problems.

**This needs careful exploration in the cognitive interviews. You are right, it is about undestanding if there is a 'mismatch' between expectations and what they get. We must take care to ensure we ask the questions carefully to get to these opinions and not take an 'extrapolated' view.**

- Q16 – I think this is an extremely difficult question to answer reliably because people have very little insight into what influences their views. It would be much better just to get a clear view of whether they have had direct experience of the problem themselves by asking an improved version of Q14.

**This question was included to explore the relationship between the impacts of customer service and the impacts of 'engineering' issues as ultimately the business will set process standards for these two 'sides' of the business to respond to separately. We will be reviewing how respondents react to this in the cognitive interviews.**

## **IMPROVEMENTS AND WILLINGNESS TO PAY**

- I have serious concerns about these questions. They are really difficult questions to answer. I struggle to think what a score of [my score plus one] would look like. I'm not sure what would make this question easier. Possibly having fewer points on the scale? Does Accent have any thoughts?

**These questions (repeated across the survey) are to explore firstly what customers think would make things a bit better, hence we use the rating + 1 and we ask an open question to capture what this would mean to them, but then we follow up by asking about increasing bills to check if customers actually want improvements in the context of the required increased investment. We have used a finer scale (10 point) to permit respondents greater scope to indicate their feeling**

- I think you're going to come up against people saying 'I want it improved but I shouldn't have to pay for the improvements – it's SEW's responsibility so they should pay for it.' You're particularly likely to hear this for leakage. In other words, they won't like either of the response options. Is that OK? **Yes, if this is their view.**

## **FOLLOW UP QUESTIONS**

- In the cognitive interviews, rather than asking respondents if they felt able to rate satisfaction, imagine what a higher satisfaction score is etc, it would be preferable to ask them **how** they came up with their rating.  
**Yes, we can do this.**

## **DEMOGRAPHICS**

- Q36 – I agree with Roger that it would make sense to ask this question earlier in the questionnaire, before you start talking about increases or decreases to bills. Also it would be better to let respondents tell you their weekly and monthly bill if they pay weekly or monthly. (If you ask for their annual bill, respondents who pay weekly or monthly will just have to do the calculation themselves and are quite likely to get it wrong.)

**We will need to review the placement carefully if we are to use bill levels as a context. There are also implication about setting the amounts for the increase which will need to be discussed with SEW.**

## **DEBRIEFING QUESTIONS**

- As always, I worry about the value of Q45-Q47 in a phone survey. Can the interviewers really assess any of these things over the phone?

**Yes, the interviewers will be gauging how the respondent ‘dealt’ with the interview – eg. did they ask lots of questions, did their responses contradict in any way and need probing about this, did the ‘why’ responses match earlier fixed code responses, did they refer back to show material, how long did they take to respond etc. All of these things will inform the rating of Q45-Q47.**

**Initial Peer Review of Survey by Caroline Bryson, 4 June 2013  
(Accent response in bold)**

**Sent:** 04 June 2013 16:35  
**To:** Sephton, Tanya  
**Subject:** RE: Consultancy support

Hi Tanya

I have added comments and suggested track changes to the attached version of the questionnaire. Clearly you are trying to get respondents to engage with potentially unfamiliar issues, so it's a tricky interview to pull off. I've tried to suggest ways of simplifying the questions and clarifying things. However, I'm assuming that the basic construct of the willingness to pay questions is something the research agency has used in the past (I've seen similar, but slightly different exercises), so have not suggested major changes to the actual structure of that section.

I think it's great that you've got the opportunity to cognitively pilot the interview. I'm not sure if you're planning to do this face-to-face or by phone (as the main survey will be by phone) – but I think it would be great if at least a few could be done face-to-face, so there's a good opportunity to talk these issues through thoroughly with the respondents.

Please come back to me if you want me to clarify any of my points – or if it would be helpful for me to look at a revised version.

Very best  
Caroline

**We were pleased to receive the comments on our draft "outcomes" questionnaire from Carolyn Bryson. Overall, we felt they were extremely helpful and we have accepted almost all of them in full in the revised version of the questionnaire . The attached version of the questionnaire responds in detail to the comments (in blue font underneath the original comments).**

**I would like to point out one important area where we have decided to retain the existing wording rather than accept Carolyn's recommended revision. This is in respect of Q15, which concerns satisfaction ratings against five service outcomes. Carolyn is concerned with the use of a satisfaction rating because: "*Firstly, levels of satisfaction take into account customers' expectations of the service (so low expectations have the potential to inflate satisfaction and vice versa). So it's not quite clear what satisfaction measures provide (as you improve services, satisfaction may not increase if expectations also increase). Secondly, satisfaction measures don't really work for some of the issues listed - for instance, it's not clear what it means to be satisfied (eg) with the level of leakage.*"**

**We agree that levels of satisfaction take into account customers' expectations of the service, but it is the intention of the survey design to measure satisfaction directly in full knowledge of the fact that satisfaction is linked to expectations. This is key to our overall approach.**

**The principal underlying this approach is that satisfaction is a more customer-centric measure of performance than objective measures of service levels. This represents a departure from the usual way of doing things for a water company, but is a step forward**



**in our view, and is consistent with the outcomes-oriented approach encouraged by Ofwat for PR14 and beyond.**

**With respect to whether satisfaction measures work for all the various outcomes, we disagree with Carolyn and expect that the measures will work with respondents in the manner intended. We would expect most customers to be able to give us meaningful responses to these questions, even if they are based on a poorly informed understanding. The alternative text drafted by CB targets a very different set of performance metrics to the ones that are desired by SEW and so would not fulfil the aims of the research. It is very important that it is customer satisfaction that is measured, not their perceptions of more objective levels of service.**

**The overall approach put forward here is new, rather than tried and tested, and so we are aware there may be issues to overcome before the survey is finalised. For this reason, we are intending to test the instrument very carefully in the cognitive interviews, and will revise as appropriate following this testing before proceeding to the full pilot phase. There will then be another opportunity to revise, if necessary, before the main fieldwork phase begins.**

**Email from Kathryn Rathouse, 8 July 2013  
(Accent responses in bold)**

(1) I have serious concerns about Q16 to Q25 for several reasons. I listed some in my email of 20<sup>th</sup> May (e.g. if customers would like something improved but aren't willing to pay for it, how will they respond and how will this response be interpreted?)

**We ask if they would be willing to pay a set amount based on their bill for an increase in service, and also accept a reduction in service for a reduction in the bill. Note, this section has changed quite radically further to the latest requirements for questioning in 'both directions' (increase and decrease). Customers won't be offered improvements for free because this is not a realistic option - everyone would surely choose to have the improvements for nothing if that were on offer.**

but have other concerns too (e.g. I may have misunderstood but is SEW proposing to use answers on these questions to determine how much customers should have 'refunded' on their bills if service targets aren't met? **I think it would be useful to set out the mechanism SEW are planning to use for the incentive/penalty for the CCG.**

If so, do you know that customers would want a refund on their bills if service targets aren't met? Do you know that the amount of refunded should 'match' the amount they are prepared to pay? Etc.) **We could add this as a question at the end if required. Note, it is not in at the moment.**

(2) I have some general concerns about questionnaire design e.g.

- asking about satisfaction (see concerns in my email of 20<sup>th</sup> May)

**We have discussed this in detail and have agreed that it is better to frame the questions in the present survey around satisfaction rather than acceptability.**

- asking about very broad issues without defining what is meant i.e. 'reliability of water supply', 'customer service', and 'quality of water' (concern: will customers know what you mean?)

**The revisions to the questionnaire should assist here. We have also split out appearance, and, taste and smell.**

(3) How thoroughly did the cognitive interviews explore the way in which interviewees answered these questions? (We didn't get a feel for this on Friday.) Were the results from the cognitive interviews taken on board before revising the questionnaire for the pilot? (My understanding is that Accent won't have time to go through the full feedback before the pilot, including answers to the follow up questions, due to time constraints.)

**Participants are probed in some detail throughout the interview. We then compile a list of a list of issues raised from each interview (including the follow-up questions) as we go along (waiting for transcripts would not meet the timescales). These comments are taken on board and a revised version of the questionnaire is produced for the pilot. The pilot itself will collect open-ended responses as they are given and so we will be able to examine the performance of the survey in some more detail after this next stage.**

**Email from Kathryn Rathouse, 8 July 2013  
(Accent response in bold)**

As mentioned at the meeting, I think that Q16 to Q25 will be very difficult questions for respondents to answer for many reasons. For instance, will they have a clear sense of what a one point satisfaction improvement means (rather than a vague sense that it means fewer hosepipe bans etc), and will they be able to put a cost to it? Respondents will come up with answers to the questions (because respondents will answer almost any question you ask them to) but my suspicion is that their answers will have very little meaning. I very much hope to see some robust evidence from the cognitive interviews or the pilot that demonstrates that respondents do answer these questions in a meaningful way.

**Many people have said very similar things to this about standard willingness to pay questions over the course of the field's history. The method is now very widely accepted, with a vast literature on design issues, which builds on but is distinct from, the ordinary survey literature.**

**It does not really matter if customers have only a vague sense of what a one-point satisfaction improvement would look like in objective terms. This is because the intention is not to value the cause of the satisfaction increase, eg fewer hosepipe bans, but to value the satisfaction change itself. It may seem like satisfaction is a somewhat unclear concept, but it can be justified as a good target measure nonetheless when compared with more traditional, objective, alternatives. The rationale behind a 'customer satisfaction' approach for measuring performance is that this is the 'truest' measure of performance there is. Linking penalties and rewards to this metric would mean that South East Water was taking a truly customer centric approach. The lack of precision in the measure is a feature of the way the world is, and does not warrant switching to a more tightly defined objective measure if this is the wrong target. All we are asking of customers is to imagine any situation that would give rise to them offering a one-point higher satisfaction score on a survey. As long as they can imagine this, even if only vaguely, the survey is working sufficiently well.**

**- Respondents aren't being asked to put a cost on the alternative scenario, they are being asked which of two options they would prefer. This is a natural question to answer that we would expect to be fairly easy for most people. We will get stats on this coming from the pilot though.**

Caroline Bryson raised the same concern in her comments but did not make specific suggestions for improvements because she was under the impression that the questions were standard willingness to pay questions. If the cognitive interviews and pilot do not provide robust evidence that the questions work, are you able to go back to Caroline, explain that these are not standard questions, and ask her for suggestions for improvements?

**We are happy to take advice from Caroline Bryson, but the central purpose of the research is to obtain values for changes in satisfaction. Questions that target a different measure would not be consistent with the survey's objectives.**

Re customers wanting something improved but not be willing to pay for it – of course you can't give them what they want. My question was about how they will choose between the three response options and how you will interpret their responses. If respondents say they're not willing to pay for an improvement, will you take this to mean that they won't expect a

penalty if SEW does not meet their targets? As mentioned below, I don't think we can assume this symmetry.

**Following discussions since the last meeting at South East Water we have revised the questionnaire to include questions which look at decreases as well as increases in satisfaction as values for decreases in satisfaction are of interest to South East Water. We are therefore not assuming symmetry between increases and decreases in satisfaction.**

Thinking specifically about leakage, customers sometimes say that they would like leakage reduced but don't feel they should be paying for it because it's the fault of the water companies' that pipes are leaking. My guess (but we won't know til we ask) is that customers would expect a hefty penalty if water company targets are not met. I look forward to seeing the new questions about redress once they have been designed.

**These questions are included in the revised version of the survey.**

## SEW customer survey: post-cognitive pilot assessment of the use of satisfaction versus performance ratings

Accent conducted seven cognitive interviews, in part to test two approaches to asking survey respondents about their views on how well SEW is doing across a range of service areas. Three respondents were asked 'how satisfied' they were with each service area (from 'very dissatisfied' to 'very satisfied') and four were asked to rate SEW's performance on a scale from 'very poor' to 'very good'. In both approaches, respondents were asked to respond using a five-point scale, where the higher number equated to a better view of the service.<sup>13</sup> SEW and Accent now need to decide which approach to take in the main stage survey. Here, I provide some thoughts that might feed into that decision process.

- Although, in the main, respondents seemed to equate satisfaction with performance, there were occasions where respondents in the satisfaction arm appear to temper their scores based on their expectations. For instance, giving water pressure a score of 5 (very satisfied) although their bath takes a long time to run, as they live in an old property; and giving a score of 5 for the frequency and duration of interruptions, because they understand that it is sometimes necessary to do so to deal with repairs or upgrading.
- Respondents' ability to answer the performance questions were sometimes hampered by the actual question wording. They could get confused by using a 'very poor to very good' scale to answer about the frequency of a negative event. For instance, when asked about the frequency of water supply interruptions, it is cognitively quite tricky to translate having 'no interruptions', into the frequency of interruptions being 'very good'. If SEW/Accent decide to use this approach, the rating scales would need further tailoring/amending to the specific service area. (Indeed, there is scope to similarly improve some of the satisfaction questions, although respondents seemed to find it a little easier to translate having no interruptions, no bans, etc into satisfaction (although this difference may just be to do with small numbers).) The difficulties with the current wording of these questions make it difficult to assess whether the performance or satisfaction approach worked best in the pilot.
- Some respondents were giving a view on SEW's service based on no personal experience, sometimes drawing on media reports. There is some indication that respondents were more likely to do this when asked to rate their satisfaction with the issue, rather than the performance (but this might just be random due to the small numbers). Whichever approach is taken, it would help if the interviewer stressed that they should provide a rating based on their own experience, and that they can answer 'don't know' if they have no personal experience.

Overall, there are nuanced differences in the information that the two approaches would provide to SEW. The need for improvements in the piloted question/scale wording,

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<sup>13</sup> From the transcripts, it seems that respondents were given descriptions for the two end-points, but were asked to pick a number from the scale, without reference to how that translated into words (eg code 2 rather than 'poor'. But I am not quite clear on this.

particularly in the performance measures, and the small number of interviews makes it hard to come to a definitive viewpoint. However, with improvements to the current wording/ratings, the performance rating has the potential to provide a more concrete rating of customer opinion of SEW's service, based on their personal experience. Although the satisfaction rating appears to work in a similar way *in the main*, it appears that it can suffer from being affected by respondents' expectations about services and by what they hear in the press or on the grapevine. Overall, the decision to use either approach is probably defensible, and which one to use depends on SEW's information needs: whether it wants to try to pinpoint actual customer experience or whether it wants to capture customer perceptions of the services SEW provides.