United Utilities Water
Response to “Setting price controls for 2015-20 – framework and approach

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Text enclosed with scissors [✂….✂] is confidential and should be removed before publication.

1. INTRODUCTION

This document is our response to the questions posed by Ofwat in its consultation document "Setting price controls for 2015-20 – framework and approach."

In addition to those questions, we have also provided comments on two issues related to the household retail control, which Ofwat has described (in section 5.1) as "preferred options for consultation", but where there are no relevant questions posed in the consultation.

In particular, we have provided comments on Ofwat's view that "RPI indexation would not be appropriate for the household retail control" and Ofwat's proposal to "use a unique customer measure to calculate company ACTS (Average Cost to Serve)".

For RPI indexation, we have covered its application to both the household and non-household controls in our response to question 28 which, as posed, solely relates to the non-household control.

For the "unique customer" denominator, we have provided summary comments within section 5 of this response, and further provided a more detailed exposition of the related issues in Appendix B. We note that "unique customer" was not an option consulted on in last year's retail consultation. Given the material significance of this proposed change, a proper examination of the full range of consequences is required.

2. DELIVERING WHAT MATTERS – AN OUTCOMES-FOCUSED APPROACH

Q1 Do you agree with the process for deciding on the nature of the incentive (non-financial, one- or two-sided and for allowing trade-offs where appropriate)?

We support the overall approach to determining the nature of incentives, as proposed in the consultation.

Q2 Do you agree with our proposal to consider delivery incentives for the next five years? If not, how should we use longer-term delivery incentives?

We agree with Ofwat that for the 2014 price review, a five year horizon is appropriate. As companies and customers adjust to the new regulatory framework, we would support the future development of this approach to encompass a longer term view of outcomes.

Q3 Under what circumstances do you think we should set consistent performance commitments and incentives across all companies? Are there particular examples where consistent incentives would be beneficial?

We support Ofwat taking a consistent approach to performance incentives on SIM, AIM and meeting the company's leakage target. We further support the use of consistent incentives across companies where the nature of outcomes is common, including outcomes in relation to meeting environmental obligations.

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3. DEFINING RETAIL (AND WHOLESALE) SERVICES

Q4 Do you agree with our definition of retail? Specifically, do you agree with our preferred option for demand-side water efficiency services, customer-side leaks and developer services?

We welcome the greater clarity on the definition of retail services which the consultation document provides.

There are some areas where the retail definition requires additional clarifications; these are principally disconnections, metering and trade effluent.

There are also three areas where we wish to express views on the options preferred or chosen by Ofwat. These are:

- developer services – which we believe should be kept wholly and ideally be a wholesale activity, reflecting the views of our developer customers;
- demand-side water efficiency services and customer side leaks – which we believe need to be driven by strong wholesaler-led incentives; and
- network calls – where the choice made by Ofwat will need to be supported by robust service level agreements and protocols covering interactions between wholesaler, retailer and customer.

Our comments on all these points are attached as Appendix A, which should be treated as incremental to our responses to Ofwat's July 2012 retail consultation.

4. SETTING WHOLESALE CONTROLS

Q5 Do you agree with our proposed scope for the wholesale water and wastewater controls, given the proposed scope of the retail business we have defined in chapter 3? Are there any revenues of the regulated wholesale business you think should be excluded from this scope – if so, please give your reasons?

We agree with the proposed scope of the controls, but do not believe that connection charges and infrastructure charges should be included in the revenue cap. This is because such charges are tied to incremental levels of activity, to directly recover the associated costs.

Whilst it is appropriate to assume a level of connection charges and infrastructure charges (and their associated costs) when setting the wholesale control, they should be excluded from the revenue cap in order to ensure that outturn variations in costs from these activities are appropriately recovered through their (cost reflective) charges. As a rule, capital income should not be treated as revenue income, particularly under a total revenue cap.

Q6 Do you agree with our proposal for a mixed revenue and revenue yield form of water wholesale control, including our proposed adjustment mechanisms to smooth allowed revenues within the control period? Are there any adjustments you would suggest?

We support the revenue control approach, but do not support industry-wide application of a revenue yield adjustment. This is because volume variances cannot reliably be used as a predictor of changes in cost, and to make an adjustment would also duplicate incentives present under totex.

We also note that a consequence of the proposed revenue control is that certainty of future prices will be reduced compared to the current regime.

Revenue yield

The purpose of a revenue yield adjustment would be to amend the revenue cap to account for changes in costs arising from variations in volumes. We estimate that less than 5% of our water wholesale income relates to short-run variable costs. This means that an adjustment for a variation of (say) 1% of water volumes would result in a yield adjustment of less than 0.05% of the water wholesale revenue cap.

Furthermore, given that changes in total costs will be incentivised through totex, a revenue yield approach is duplicative.

Variations in volumes also cannot reliably be used to predict changes in cost. In drought conditions, for example, volumes will reduce whereas costs would increase.

We do not therefore support the proposed revenue yield adjustment. We note that companies in areas of more volatile property growth may see more value in this adjustment, and hence suggest Ofwat target this mechanism on those companies that request it, rather than imposing it uniformly on all companies.

Impact on prices

Under a revenue cap, variations in company income would be offset in subsequent years through compensatory adjustments in prices, in order that the company complies with the revenue control overall. The effect of this is that wholesale prices, and hence customer bills, will be less predictable over the price control period than they would have been under a price cap.

It is our understanding that the potential for annual price uncertainty and volatility was one of the main reasons why Ofwat chose to smooth the impact over the following price control period when it developed the current Revenue Correction Mechanism ("RCM".)

Q7 Do you agree with our proposed simple revenue control for wastewater wholesale services? Do you have any evidence that suggests a revenue yield element should also be included?

We agree with Ofwat that a revenue yield approach would not be appropriate for wholesale wastewater services. This is consistent with our view that a revenue yield approach should not be used for wholesale water services. A greater proportion of wastewater costs relate to fixed capital and costs to manage surface water, neither of which are affected by short run variations in customer usage.

Q8 How do you suggest we incentivise companies to prepare and update accurate demand assumptions to apply our proposed forms of wholesale control?

We support the package of tools proposed by Ofwat (caps, tapers, provision of assurance and a residual RCM) to incentivise accurate demand forecasting and see them as reasonable and proportionate. In particular, a residual RCM seems certain to be necessary to ensure that the correct amount of revenue is recovered overall over the five year period.

Q9 Do you agree with our draft process for developing baselines? If not, how might it be improved?

We suggest that Ofwat should provide better transparency of its modelling approach before setting baselines. As we understand that Ofwat does not wish to share details of its models with stakeholders ahead of companies submitting their business plans, we recommend it should take further action to build confidence in the reasonableness and robustness of its approach to setting baselines.

Firstly, it should demonstrate clearly how its modelling approach will adequately reflect the differences in costs resulting from company-specific outcomes and legal requirements and projected future changes in costs (e.g. for pensions and rates.) We do not believe that the currently published report from CEPA is adequate for this purpose.

Secondly, it should undertake to share its models immediately after companies have submitted business plans. This sharing should include an opportunity for companies to highlight any material issues they are able to identify with Ofwat's proposed approach ahead of a baseline being set.

Finally, Ofwat should ensure that the introduction of totex does not manifest an "opex bias", which would be more damaging to customers than the historic capex bias.

In principle, we believe it would be preferable for Ofwat to share its totex models before companies submit business plans. We recognise that Ofwat has concerns that this could open the way to "gaming" opportunities on the part of companies and that these would need to be mitigated; however, in not sharing its totex models Ofwat may not successfully encourage better customer engagement. In fact, it makes customer engagement a more difficult task since companies lack confidence that customer preferences and specific legal obligations will be adequately reflected in Ofwat's model and, therefore, the draft baseline.

We are also concerned about the evident preference for a top down approach to determining company baselines. Given the degree of specificity associated with individual companies there is a significant risk that any comparative assessment will result in a misallocation of costs across the industry. The correction of this would require a large number of adjustments. Better transparency of Ofwat's modelling approach will reduce the risk of making a serious error or omission in this regard.

The triangulation approach seems sensible, given that totex modelling to date has proven problematic and the large number of company-specific issues and legal obligations. However, it seems likely that Ofwat will need to make greater use of company business plans in forming its baseline than is apparent from the consultation.

We also note that Ofwat's timetable anticipates that companies and Customer Challenge Groups ("CCGs") will wish to make representations in relation to draft baselines. Companies and CCGs will only be capable of making informed responses if baselines are accompanied by sufficient explanation and exposition of the assumed costs, outputs and outcomes which have been incorporated into Ofwat's analysis. The importance of sharing this detailed information will be magnified if Ofwat has not shared its modelling approach in advance of business plan submission.

With reference to the work on totex modelling which has recently been undertaken by CEPA, we have a number of observations which we believe merit further investigation.

<u>Opex bias</u>

In general, it is in the interests of consumers that water company total expenditure is minimised over the life of any assets involved. As such, when deciding between "opex solutions" and "capex solutions", total benefit to consumers is maximised when the NPV of total expenditure over the life of the solution is lowest. We would agree that, in the past, the regulatory regime provided a marginal bias towards choosing capex solutions – albeit that this may have been an appropriate incentive immediately post privatisation, given the need to finance substantial investment.

The approach to building totex models and menus advocated in CEPA's paper is based on 5 year totex cash expenditure. As such this generates strong incentives to minimise total expenditure over a 5 year time horizon – not over the life of water company assets, which are typically much longer lived.

We consider that this approach creates a new "opex bias" within the regulatory regime. Given the long term nature of the water industry, we are concerned that the short termism incentivised

by an opex bias will be far more damaging to long term outcomes for consumers and other stakeholders, than the extant capex bias. In both circumstances, an imbalance in incentives may lead to higher bills to customers – however, risks to service would be greater with an opex bias.

This issue is not insurmountable. Minor variations to Ofwat's totex cost assessment and recovery models can be applied to more appropriately distribute incentives between opex and capex, such as applying different weights to opex and capex or utilising annualised capex (i.e. depreciation values, or a suitable surrogate).

CEPA totex variables

It is very difficult to definitively comment on the suitability of individual variables in CEPA's paper, as it is the combination of variables within a model that determines its explanatory power. However, even without access to specific models, it appears that a number of important cost drivers for water and sewerage services may either have not been considered or have been included in a manner which would not be intuitively appropriate.

One approach to addressing this problem would be to reveal the totex model design and seek feedback from companies. This could take place after company business plans have been submitted in order to assuage any concerns that companies might respond inappropriately to model design if these were revealed before business plan submissions.

Activity and quality variables

Enhanced level of service proposals within company business plans which do not link into a totex model variable risk being underfunded within the proposed approach to setting baselines. This would be the case even when such proposals have resulted from customer preferences.

CEPA's modelling appears to have a limited scope for activity and quality variables. Only seven such variables are included in the CEPA report for water services, and only one for sewerage networks.

Approach to cost assessment for elements of the value chain not covered by totex models

The consultation does not set out how Ofwat intends to conduct cost assessments for sludge treatment and disposal, newly adopted private sewers, wastewater treatment, or wastewater network enhancements. Information on how the results of opex models for wastewater treatment will be integrated into a total wastewater wholesale totex assessment is also limited. In areas where totex models will not be applied, more information is needed on Ofwat's intended approach.

Masking poor quality relationships

CEPA appears to have stated that the proposed water wholesale totex model (opex + base capex + enhancement capex) is less robust than the equivalent base water totex model (opex + base capex).

One explanation for the variance in model performance is that the Water wholesale model is not correctly reflecting cost drivers of enhancement capex requirements, but rather that the high strength of modelling of base spend is masking the inaccuracies.

Tellingly CEPA seems to state that the specification of the base and total wholesale water models are very similar. It is important that Ofwat investigates the quality of the proposed water

wholesale totex models further and provides reassurance that proposed variables are enabling reliable estimation of future enhancement totex requirements.

Regional wage and COPI adjustments

We disagree with the use of regional wage and regional COPI data within Ofwat's totex assessment. Water companies are large entities, operating in a sector where input prices are largely subject to national pricing for materials and services.

Independence of the baseline

CEPA's report suggests that company baselines could be the lesser of the totex modelled estimated value and a company's values forecast in their business plans. This would clearly breach the principle of company baselines being set independently of company business plans.

We note that when this issue was raised at Ofwat's workshop on 12 March 2013, an Ofwat representative confirmed that Ofwat would definitely not overwrite its cost assessment in the event of the company submitting a lower value in its business plan.

Q10 What areas of expenditure do you consider we should exclude from the general cost assessment methodology (that is, advanced econometric models and econometric models)? How should we assess these costs?

A general cost assessment should incorporate areas of expenditure where robust industry-wide cost drivers can be identified and exclude areas of expenditure where they cannot be appropriately reflected in Ofwat's cost models.

It is unclear to what extent Ofwat's approach will succeed in going beyond reflecting historic average industry costs. Absent visibility of Ofwat's models, it is difficult to make observations on which expenditure categories should be excluded.

However, where the models are unable to reflect future changes in costs related to pensions, rates, energy, Environment Agency charges and the costs of competition, then these items should also be excluded from the general cost assessment methodology and assessed separately. It is plausible that some of these factors could be adequately reflected in a totex model. Ofwat should make this clear where it has sought to do so.

We also see it as unlikely that any totex model would be capable of properly reflecting company specific costs associated with quality regulation and costs related to company specific outcomes.

Where Ofwat utilises separate assessments, whether these are performed on a company-specific or industry-wide basis should be determined on the basis of the extent to which cost items are controllable by management.

Q11 What special factors should we consider for your company as part of our cost assessment? What criteria should we use to assess whether we need to take account of these in our view of your costs?

Special factors for the wholesale control should use criteria consistent with those applied to the retail control. In UUW's case, our initial review indicates that special factors should be applied to reflect company specific factors such as:

a) the impact of providing water in West Cumbria, which has specific local environmental issues constraining our ability to supply water;

b) rainfall and population equivalent relative to the dispersion capacity of receiving waters in the North West, which results in significant cost increases to sewage treatment and intermittent discharges; and

c) land availability for sludge disposal, whereby the North West region has the lowest level of land available for sludge disposal (nearly 70% less than the industry average), resulting in higher costs for treatment and disposal of sludge

Unless it is accounted for in Ofwat's totex approach, it should also be recognised that large regional WaSCs face the costs of delivering services in diverse and complex regional operating environments. Therefore they should not be benchmarked against small water only companies with much simpler operations.

There are a number of other factors which we are currently reviewing in advance of submitting our business plan. We will assess these against Ofwat's criteria and only include those which we consider are outside of management control and result in material net additional costs relative to others in the industry. On the latter of these criteria, it is important to note that totex special factors should only qualify where there is a material additional cost relative to that assumed within Ofwat's cost assessment. Given this, providing transparency of which factors are already being accounted for in totex models is likely to reduce the proliferation of (potentially spurious) special factor claims across the industry.

Q12 Do you agree with our criteria for excluding costs from the general cost performance incentive framework? What types of costs should we exclude from the general framework? Please explain how these meet the cost exclusion criteria and how we should incentivise cost performance for these costs.

We do not agree with the cost exclusion criteria proposed by Ofwat. They are dominated by "uncertainty" criteria and are so broad that they could potentially be applied to almost any output or future expenditure included in forward looking business plans.

Ofwat should only exclude estimates of expenditure if there is a reasonable expectation that the cost will not materialise at all in the period under review; otherwise it should use a best estimate of uncertain costs and subsequently adjust for outturn variations.

The presence of uncertainty alone should not result in a symmetric outcomes for the industry and its stakeholders or there will be a systematic bias against properly financing companies' functions. The assumptions made on private sewer adoption at the last price review should be considered a failure on this basis.

During the next price control period, companies will commence with the adoption of private pumping stations. As there is no reasonable expectation that these costs will not materialise in

the period under review, they should not be excluded from the price control. Ofwat should use a best estimate of uncertain costs and subsequently adjust for outturn variations.

Likewise, Ofwat will need to consider the ramifications of any eventual Water Bill (eg: the costs associated with any potential proposals for the adoption of customer supply pipes.)

Q13 At what point should we take the MEA values to split the 2015 RCV in order to set water and wastewater price controls?

Given that a split of water and wastewater RCV already exists, it would be better to use these values rather than re-cast the RCV based on MEAV. This is because a split based on MEAV would result in incidence effects and the rebalancing of prices (and therefore customer bills) between water and wastewater. It would also place WaSC water RCVs in an inconsistent position relative to WoC RCVs.

Since privatisation, MEAVs and RCVs between water and sewerage have not changed in a consistent and uniform manner. For example:

- Water: Since privatisation, one of the most substantial elements of enhancement expenditure has been the s19 mains rehabilitation programme. For UUW alone, we estimate that the total cost of this (in current prices) was almost £1bn. Given that this expenditure was infrastructure enhancement, this will have been added in full to our RCV (which is currently just over £3bn for the water service). However, given that this expenditure related to replacement and relining of existing infrastructure, in principle it should have had no impact on the water MEAV. Therefore, water RCVs would be expected to have increased relative to water MEAVs.

- Wastewater: In contrast, at privatisation much of sewerage infrastructure was under the control of local authorities. Following privatisation, and following transfer of local authority control to the water undertakers, MEAVs for the sewer network have increased substantially, as a result of companies gaining better information about the assets under their control. Such increases did not result from actual expenditure, and therefore this will have had no impact on RCVs. As such, we would expect wastewater MEAVs to have increased relative to wastewater RCVs.

We estimate that Ofwat's proposal would effectively transfer RCV from water to wastewater, and hence impact the balance of customer bills. Furthermore, in the consultation document Ofwat states that depreciation would be calculated as a simple "run off rate" on the RCV. This means that any redistribution of RCV would also effectively redistribute depreciation charges, and presumably taxation. Taxation has historically been allocated between water and wastewater in proportion to returns, hence RCVs.

In total, we estimate the impact of Ofwat's proposal on UUW bills would be as set out in the table below:

Impact on UUW customer bills	Water	Wastewater
Using 2009 MEAV	-16%	+12%
Using 2012 MEAV (incl. private sewers)	-29%	+22%

We believe that price rebalancing on this scale, and for this reason, would likely be unacceptable to our customers. It would particularly disadvantage customers served by separate companies for water and wastewater services as this rebalancing effect will have no impact on water only companies. Such customers would simply see their wastewater bills increase, with no corresponding decrease in their water bills.

Further details of our calculation of the impact of this change are provided as Appendix B.

Q14 Do you agree that it is possible to simplify our approach to calculating tax?

We do not support a simplified approach to calculating tax. It would result in an increased risk of Ofwat making inaccurate tax calculations leading to incorrect benchmarking between companies and the risk of simplistic (incorrect) tax assumptions in final determinations. Ofwat's approach would also increase, rather than reduce, the data burden for companies. This is because they would need to model Ofwat's simplified basis alongside the actual, non-simplified basis and maintain reconciliations between the two.

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5. RETAIL CONTROLS FOR HOUSEHOLD CUSTOMERS

Introduction

In addition to Ofwat's consultation questions, we have also provided responses to two specific areas of the household retail control, which Ofwat has described (in section 5.1) as "preferred options for consultation", but where no relevant questions were posed in the consultation.

In particular, we have provided comments on Ofwat's view that "RPI indexation would not be appropriate for the household retail control" and Ofwat's proposal to "use a unique customer measure to calculate company ACTS".

RPI indexation of household retail costs

For RPI indexation, we have covered its application to both the household and non-household controls in our response to question 28 which, as asked, solely relates to the non-household control.

It is unclear from the consultation, and meetings before and since its publication, whether or not Ofwat intends to make a forward looking estimate for inflationary changes in input prices with no ex-post adjustment to reflect actual RPI or whether Ofwat intends to fix retail costs in nominal terms and hence expect companies to absorb inflationary changes in input prices in full.

If it is the latter, then this would seem to not be justified given that the fact that many input costs have a strong historic relationship with RPI and that observed retail costs in the water industry have historically risen above RPI, despite strong financial and regulatory incentives to minimise cost increases.

Furthermore, we disagree with Ofwat's assertion that application of RPI indexation would be out of line with "the experience of most retail businesses, across the economy." To the contrary, we have found no example of a competitive retail market where prices are fixed in advance for a five year period with no possibility of reflecting inflationary pressures to input prices. Even in the current difficult trading environment, such conditions cannot be said to generally hold.

Cost to serve denominator

We note that a "unique customer" denominator was not an option consulted on in last year's retail consultation. Given the material significance of this proposed change, a proper examination of the full range of consequences is required.

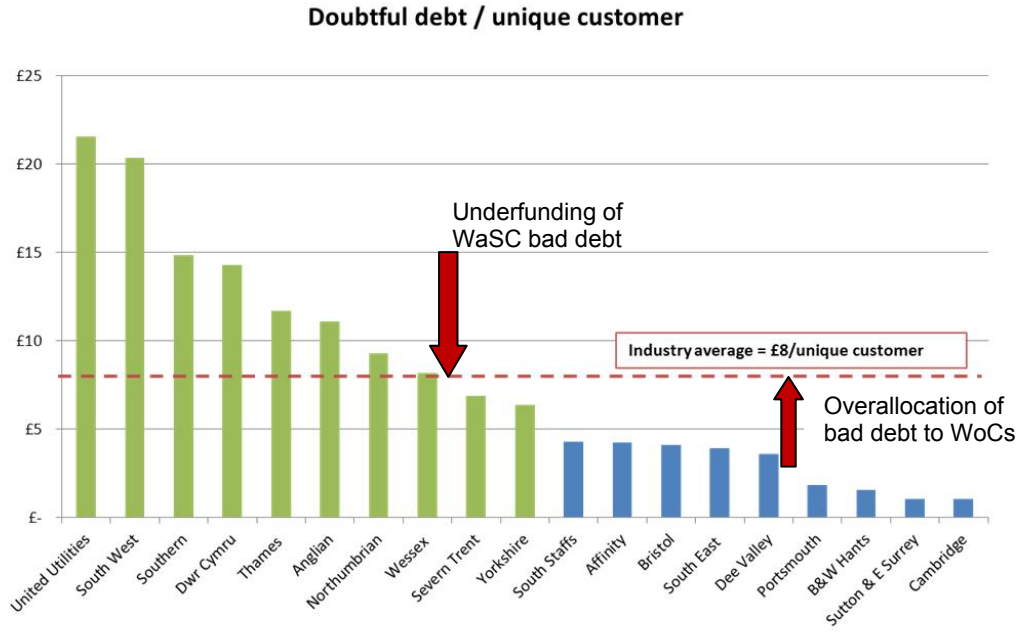
We have provided an exposition of the key issues in Appendix C. This identifies that:

1. The unique customer denominator systematically underfunds companies with dual service customers in favour of companies with single service customers.

2. A unique customer approach fails to properly incentivise efficient billing arrangements and leaves customers facing a higher cost to be served.

3. The unique customer denominator ignores the scaling of bad and doubtful debts to bill size.

The last of these provides the most obvious inequity of the "unique customer" denominator which imputes that the average bad debt of a single service customer is the same as a combined service customer. This leads to an indisputable misallocation between WaSCs and WoCs as shown below.



Sources: June Return 2010-2011; Regulatory Accounts 2011/12.

"Fixing" the denominator to scale the result appropriately for bad debt is not a sufficient remedy. This is because it does nothing to address the fundamental flaws inherent in the "unique customer" approach.

- The use of a "unique customer" denominator fails to adequately finance the functions of companies – such as UUW – that provide a combined service to the vast majority of their customers.

- It further fails to protect the interests of consumers in areas served by separate wholesale services by failing to promote efficient combined retail operations.

- It further fails to promote competition for retail markets, as it negates any benefit resulting from a merger between two retail operations that presently provide separate retail services.

The "unique customer" denominator allocates costs between companies on the presumption that all WoCs bill for a water only service separately from the WaSC in their region. This is rarely the case in practice – hence those additional costs are (largely) not present to be fairly allocated on this basis. This results in an undue detriment to companies with a high proportion of combined service customers.

The only justification Ofwat has provided for the use of a "unique customer" approach is that "the incremental cost of providing the additional retail service is marginal". However, given that there is no legal or regulatory barrier to exploiting this economy of scope across all companies, WoC or WaSC, it is perverse that Ofwat should state a preference for a denominator that eliminates any incentive for companies to minimise their combined retail costs by doing so.

This is to the detriment of their customers, and to the companies (such as UUW) who will bear the burden of this inequitable cross-subsidy.

Given that the economies of scope associated with joint retailing are available to all companies, the average cost to serve should reflect this, and hence provide incentives for companies to enter into, and retain, efficient combined retail operations. From the perspective of a customer, there is no reason why the average retail "cost to be served" should be different between customers based on the organisation of their wholesale services.

The "unique customer" denominator represents a company-centric approach which over-prices the retail cost to individual customers unfortunate enough to receive wholesale services from more than one provider. It inappropriately compensates companies with inefficient separate billing arrangements.

Furthermore, it risks encouraging companies currently operating joint ventures (or other combined retail arrangements) to abandon them. This is because they would be fully compensated for separate retailing, without having to maintain co-operative arrangements with another company.

As stated above, a "unique customers" approach fundamentally misallocates bad debt, by assuming that the average bad debt of a single service customer is the same as a combined service customer. Whilst it is relatively straightforward to correct this particular effect, it only corrects for about one third of the fundamental misallocation of retail costs resulting from the use of unique customers rather than unique services, which more effectively treats each customer equitably

A "unique customer" denominator would act to disincentivise retail mergers. This is because any merger that combines water only with sewerage only retail activities would result in a 50% reduction in retail income.

Finally, the "unique customer" denominator cannot be consistent with Ofwat's approach to non-household retail. Otherwise a combined service non-household customer switching for a single service could not result in any reduction in the incumbent's total income, as – from the company's perspective – the number of unique customers will have remained the same.

Ofwat should reinstate the use of "billed services" as the denominator. This would be consistent with its non-contentious historic approach to cost assessment. It would also more fairly allocate bad debt costs, ensure that all companies are appropriately financed for the function of supplying an efficient, combined retail operation, and would further incentivise companies to retain the existing efficient joint retailing arrangements currently in place across the industry.

Q15 Should the ACTS be calculated on the basis of historic cost data or forecast cost data?

Average cost to serve should be calculated from historic costs, on the basis of the number of "billed services", not the number of "unique customers". The proposed "unique customers" approach has not previously been consulted upon, and as such the full unintended consequences of this approach have not been explored.

Please refer to Appendix C of this document, which covers our view on the appropriate definition of the Average Cost to Serve denominator.

Q16 Do you agree with our proposed criteria for assessing other adjustments to the ACTS? Are there other factors we should take into account, and (if so) how?

We support Ofwat's criteria, based on the exposition in the worked example in the consultation document.

We consider that retailing in an area of high socio-economic deprivation meets these qualifying criteria, as it demonstrably results in higher costs relative to companies operating in other areas, and is strongly supported by evidence from other sectors and by independent external data.

UUW has persistently had one of the highest levels of retail costs and bad debt in the water industry. At the same time the North West region contains many areas with the highest levels of deprivation, as measured by the Department for Communities and Local Government's Indices of Multiple Deprivation Statistics.

In the past UUW has sought to analyse the levels of customer debt within its area, and compare these to deprivation statistics. We have shown that levels of customer debt and other retail costs are higher in more deprived areas, and that the relationship between retail costs and deprivation is strong and consistent throughout our region.

Using the relationship obtained from this analysis, UUW has been able to show how much lower its retail costs would be expected to be if its level of deprivation were equal to the industry average. As such, UUW has never sought to abdicate responsibility for the efficient management of its retail activities, nor sought an adjustment for all of its deprived customers – UUW's proposed adjustment factors have always been estimated relative to industry average levels of deprivation.

UUW is currently conducting further work investigating the costs of providing retail services across different regions, and how these are affected by regional factors such as deprivation. This project is considering not only water industry specific relationships, but is also looking across a range of essential services, including gas retailing, council tax collection, and TV licencing.

In this response we present some of the emerging analysis from this project. We intend to share further results with Ofwat in the coming months.

Levels of deprivation are clearly higher in UUW's area

It is clear from a simple regional comparison based on official government statistics that the North West contains a particularly high proportion of the country's most deprived areas.

Regional breakdown of Local Super Output Areas at various levels of overall deprivation				
Region	**1% most deprived**	**5% most deprived**	**10% most deprived**	**20% most deprived**
North East	12%	10%	9%	8%
North West	**52%**	**35%**	**28%**	**22%**
Yorkshire and The Humber	17%	18%	17%	14%
East Midlands	5%	5%	6%	7%
West Midlands	9%	17%	17%	15%
East of England	2%	2%	3%	4%
London	0%	7%	12%	19%
South East	3%	4%	4%	6%
South West	2%	3%	4%	4%

Source: The English Indices of Deprivation 2010, Department for Communities and Local Government, 24 March 2011

We have commissioned work to re-analyse these statistics on the basis of company service areas, rather than simply by generic geographic region. This presents a much more accurate assessment of the degree of socio-economic deprivation facing each company's retail operations than has previously been presented.

The table below demonstrates that UUW's service area has by far the most pronounced incidence of socio-economic deprivation in England. This effect is particularly noticeable at the highest levels of deprivation; half of the 1% most deprived areas in England are in UUW's area. In contrast, despite Thames Water having a similar proportion of the 20% most deprived customers in its region (compared with UUW), none of the 1% most deprived areas are located in its region.

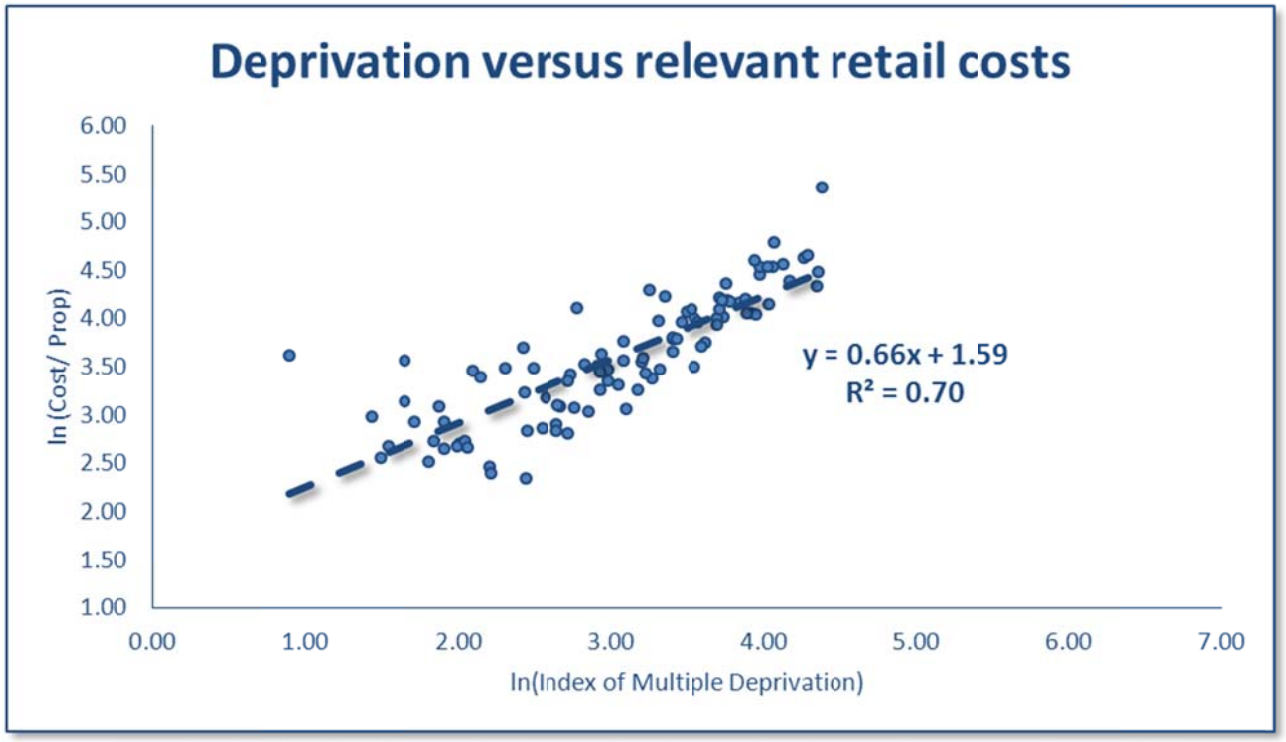
Company breakdown of Local Super Output Areas at various levels of overall deprivation				
Region	**1% most deprived**	**5% most deprived**	**10% most deprived**	**20% most deprived**
Anglian	5%	4%	5%	6%
Northumbrian	12%	10%	9%	9%
Southern	3%	3%	3%	4%
Severn Trent	13%	20%	21%	19%
South West	0%	1%	1%	2%
Thames	0%	6%	12%	18%
United Utilities	48%	31%	24%	19%
Wessex	1%	1%	2%	2%
Yorkshire	14%	15%	14%	12%
Bristol	1%	1%	1%	1%
Cambridge	0%	0%	0%	0%
Portsmouth	1%	1%	1%	1%
Bournemouth	0%	0%	0%	0%
Sutton	0%	0%	0%	1%
South East	0%	0%	0%	1%
South Staffs	1%	3%	3%	3%
Veolia Central	0%	1%	2%	3%
Veolia East	1%	0%	0%	0%
Veolia South East	0%	0%	0%	0%

Source: The English Indices of Deprivation 2010, Department for Communities and Local Government, 24 March 2011

UUW has 48% of the 1% most deprived, 31% of the 5% most deprived, 24% of the 10% most deprived and 19% of the 20% most deprived areas of the country. The level of deprivation in a company's household customer base is something that is inarguably outside of management control.

Higher levels of deprivation result in higher retail costs

We have demonstrated that there is a clear relationship between different levels of deprivation, and the cost of providing retail services within our area. The chart below shows the clear correlation of retail costs to deprivation.



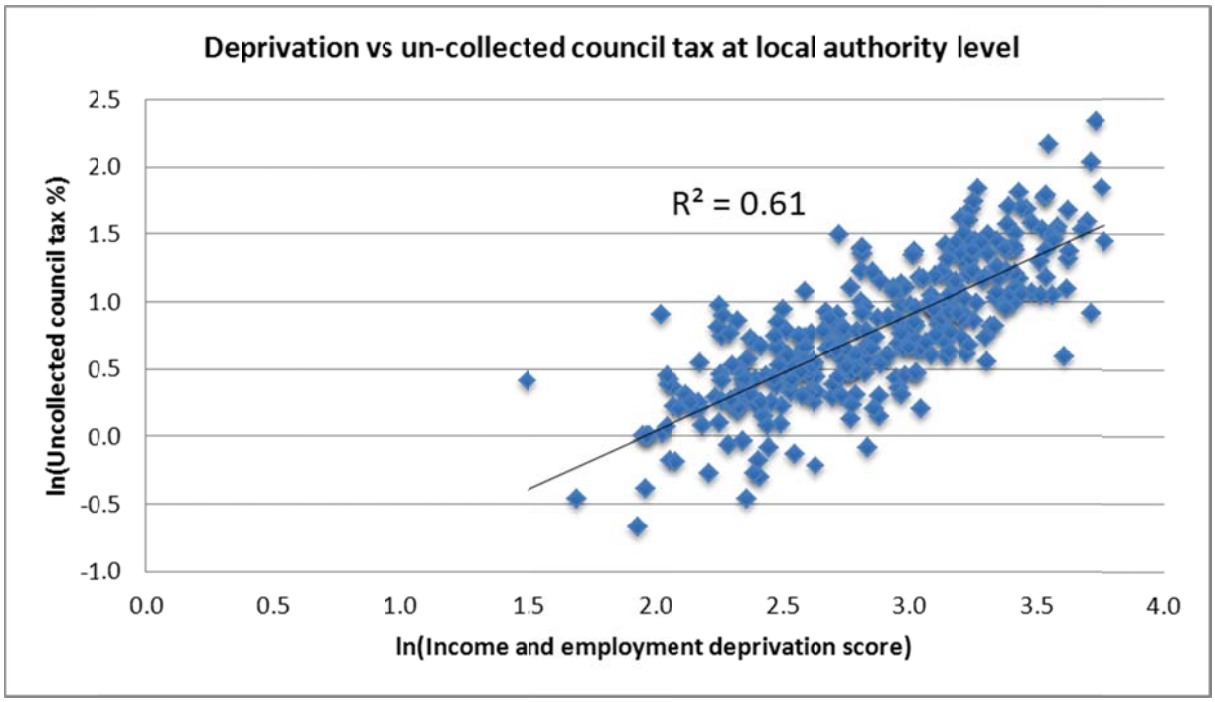
Sources: The English Indices of Deprivation 2010 and United Utilities data on costs impacted by deprivation (c80% of total retail costs)

It is also important to recognise that socio-economic deprivation manifests in higher retail costs other than bad debt. Typically, customers in areas of high socio-economic deprivation generate additional retail activity, and utilise more expensive payment methods.

This is demonstrated in the following charts which have previously been shared with Ofwat.

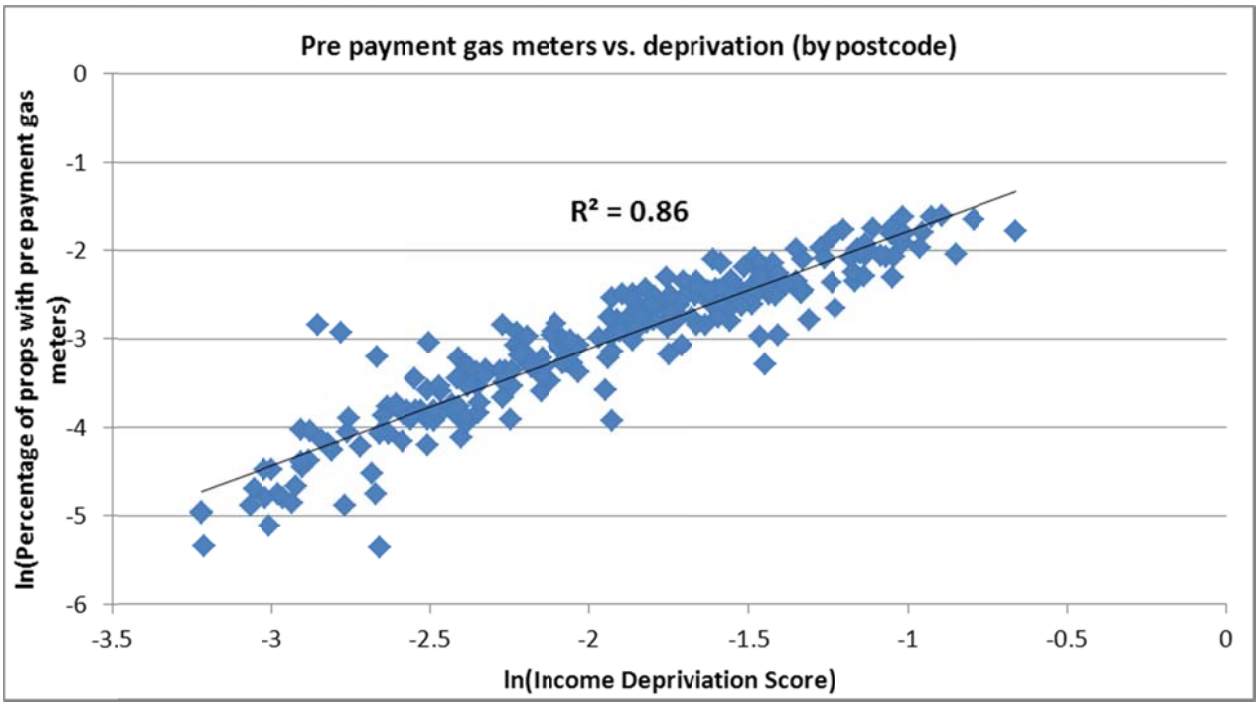
Source: The English Indices of Deprivation 2010 and United Utilities data on costs

We have further identified other sectors where the link between deprivation and debt collection (or related activities) appears equally significant and where deprivation levels are likely to drive higher costs. For example, the following chart shows how council tax collection rates vary with increased levels of deprivation.



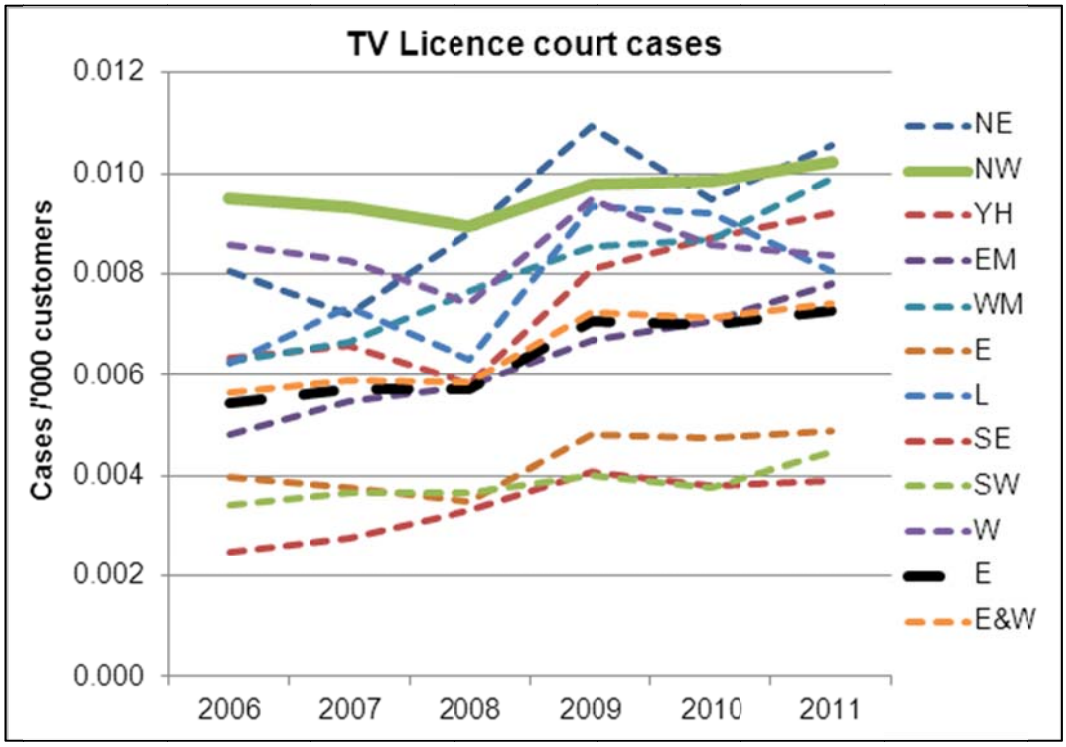
Sources: The English Indices of Deprivation 2010; Collection rates for Council Tax and non-domestic rates in England 2011 to 2012

The prevalence of prepayment meters in the gas retail sector is also clearly correlated to deprivation scores. Prepayment meters are installed for customers who are most at risk of having difficulty paying their bills. They are a debt management tool that is not available to water companies, allowing customers to "self-disconnect" without any resultant bad debt.



It is also evident that debt collection in the North West region is more problematic than in other regions. In the case of TV licencing, the North West region has historically seen a higher

proportion of court cases than in other regions.



Sources: Ministry of Justice response to FOI request dated 13 Feb 2013

Taken together, this evidence demonstrates that the impact of socio-economic deprivation is something which is beyond management control. Retail costs – in particular bad debt and debt collection – are higher in areas of high deprivation, and hence higher in the North West. These relationships are clear and observable across a number of sectors – not just water, and not just UUW.

Furthermore, socio-economic deprivation is indisputably more pronounced in the UUW service area, compared to other areas of the country. As such, it leads to unavoidably higher operating costs to retail in the North West compared to other companies' service areas.

Adjusting for the impact of socio-economic deprivation in the North West

We have previously made several suggestions to Ofwat about how it could look to develop the evidence base for an industry-wide adjustment to reflect socio-economic deprivation.

We have been continuing to develop this work over the past few months and are currently engaged on an on going project to examine the evidence and identify suitable approaches to making an adjustment. In addition to this analysis, we are also progressing work on the extent to which it is feasible to estimate an appropriate adjustment by using data which is independent of the water industry.

We will be happy to discuss further details of our work in all of these areas with Ofwat as it develops.

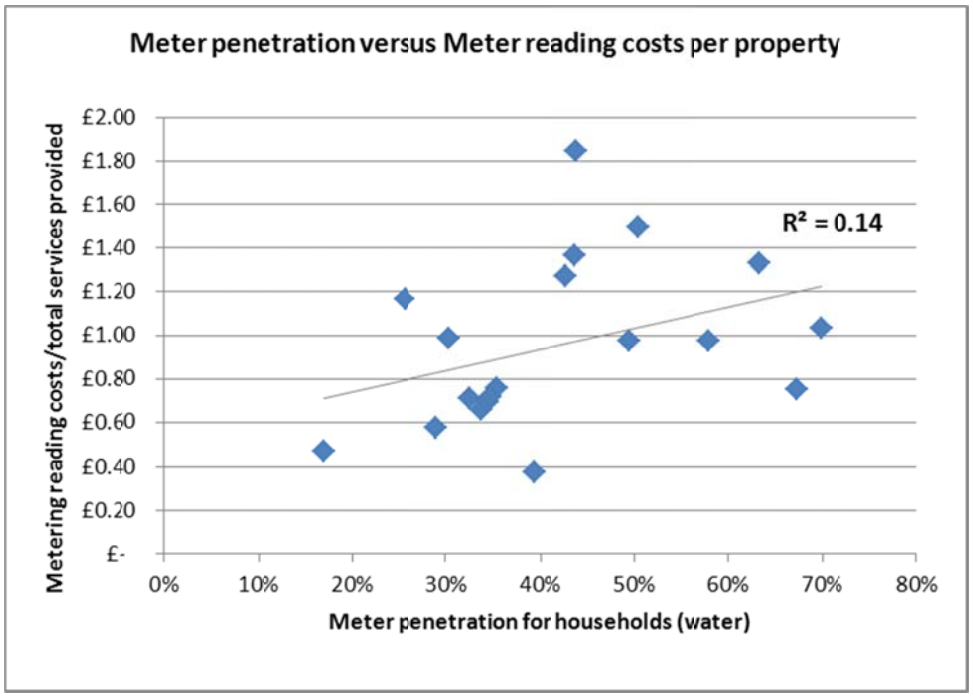
Q17 Do you agree with our preferred option of applying an industry-wide adjustment to the ACTS for levels of metering?

Metering is a simple adjustment to make to the average cost to serve, as the quantity data is readily available. However, metering also confers benefits to the retail operation – in terms of debt management and propensity to pay – as well as additional costs. Our analysis suggests that the impact of differences in meter penetration on retail costs is substantially lower than the range of values stated in Ofwat's consultation.

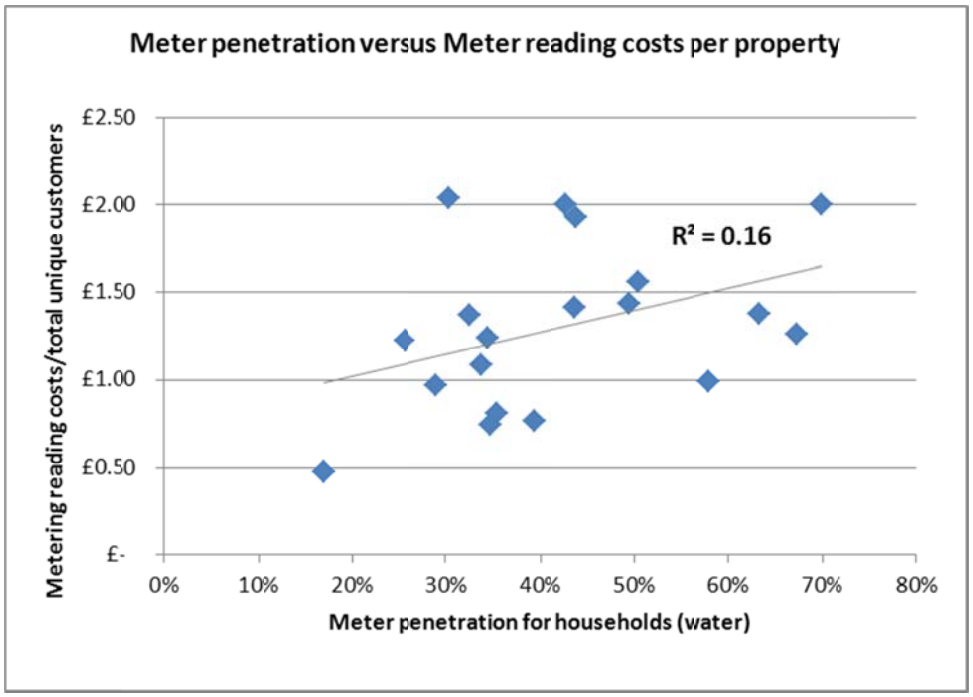
Furthermore, we note that differences in retail costs due to metering are less material than those arising from differences in socio-economic deprivation.

In its consultation, Ofwat states that metering costs represent between 7% and 30% of companies' retail costs. This assessment appears to incorrectly include metering capital costs, which Ofwat intends to transfer to the wholesale price control. Considering metering opex costs alone, our analysis indicates that the percentage of total retail spend associated with metering drops significantly, to 4% to 11% of total costs. This only accounts for the gross additional costs associated with metering, and takes no account of benefits to the retailer (relative to unmetered customers), especially in the area of debt management.

We have sought to investigate the relationship between meter penetration and some related costs. The charts below illustrate the relationship between meter reading costs and meter penetration using, alternatively, a billed services style approach and a unique customer approach. They both show total meter reading costs compared to company household meter penetration rates for its water service customer base. The analysis spreads costs across all customers, whether metered or not, so that it can reveal the relationship (if any) between increasing meter penetration and a company's observed Average Cost to Serve.



Sources: June Return 2010-2011; Regulatory Accounts 2011/12.



Sources: June Return 2010-2011; Regulatory Accounts 2011/12.

In both cases, only a weak statistical relationship between the explanatory variable and costs is apparent. Further more, the relationship, such as it is, is highly dependent on a single observation. If this company, Portsmouth Water (the data point on the bottom left of each chart), were to be removed then the statistical relationship weakens further ($R^2 < 0.1$) and the gradient of the regression line – which determines the size of each company's adjustment factor – reduces by up to a third.

Extrapolating these relationships (with Portsmouth included) to account for all other metering related operating costs implies gross adjustments – before taking account of the benefits of metering to retailers – which are set out in the tables below, based on a billed services style approach and a unique customers approach.

In order to demonstrate the full range of potential gross adjustments, we have simply shown those companies with the highest and lowest levels of meter penetration in the industry, as well as UUW.

	Company meter penetration rate	Variance from industry average penetration rate	Modelled impact on company average cost to serve (£/prop)	Number of services provided ('000)	Modelled variance in meter reading costs due to company meter penetration (£m)	Uplift costs to include account management costs (£m)*	Metering adjustment as % of total retail household operating costs
Portsmouth	17%	-22%	-£0.21	285	-0.06	-0.16	-4.2%
Thames	29%	-10%	-£0.10	8,750	-0.85	-2.16	-1.8%
UUW	30%	-9%	-£0.08	6,052	-0.51	-1.29	-0.9%
Anglian	67%	28%	£0.28	4,522	1.26	3.22	4.8%
South West	70%	31%	£0.30	1,372	0.416	1.062	3.8%

** additional account management unit costs for metered customers is estimated as 1.55 times meter reading unit costs, source: UUW principle statement 2012/13*

	Company meter penetration rate	Variance from industry average penetration rate	Modelled impact on company average cost to serve (£/prop)	Number of unique household customers ('000)	Modelled variance in meter reading costs due to company meter penetration (£m)	Uplift costs to include account management costs (£m)*	Metering adjustment as % of total retail household operating costs
Portsmouth	17%	-22%	-£0.28	278	-0.08	-0.20	-5.3%
Thames	29%	-10%	-£0.13	5,185	-0.65	-1.66	-1.4%
UUW	30%	-9%	-£0.11	2,927	-0.32	-0.81	-0.6%
Anglian	67%	28%	£0.36	2,677	0.97	2.48	3.7%
South West	70%	31%	£0.39	708	0.28	0.71	2.5%

** additional account management unit costs for metered customers is estimated as 1.55 times meter reading unit costs, source: UUW principle statement 2012/13*

The range of these gross adjustme nts is subst antially smaller in magnitude than the 7%-30% range set out by Ofwat in its con sultation. Further, it is evident once again that utilising a unique customer denominator rebalances value from WaSCs to WoCs.

It appears that the magnitude of a metering adjustment factor will be far smaller than the impact of regional retailing costs resu lting from differences in socio-economic deprivation. It a lso appears that evaluation of any industry-wide approach is likely to be based on a weak statistical relationship between the explanatory variable and its impact on cost.

We note that the proposed adjustment to UUW appears to fall far short of Ofwat's test that adjustments should be material, even before these gross costs are offset against the benefits of metering to the retailer.

Q18 How do you think we should apply the ACTS for those above the industry ACTS? Do you think that we should use a glide path and (if so) of what form?

Ofwat is right to utilise a glidepath approach when setting assumptions for retail costs, recognising that management cannot reasonably be expected to generate instantaneous cost reductions. Given that it is untested whether companies with above average costs will be able to achieve Ofwat's target by the end of the price control period, a straight line glide path over the five year period – as outlined at Ofwat's retail workshop – is the most appropriate approach.

Our support for the use of a glidepath is independent of Ofwat's decisions on how to calculate the target cost level. However, the application of a glidepath should not be assumed to mitigate, or insure against, the application of an inappropriate cost target or denominator.

Q19 How should we set a forward-looking efficiency challenge for those companies below the industry ACTS?

The most obvious inefficiency embedded in Ofwat's approach to average cost to serve is that its proposed denominator provides very poor efficiency incentives for retailers to minimise the costs of supplying customers served by more than one wholesaler. Ofwat can provide much better incentives through use of a billed services approach to its denominator, as set out in Appendix C. In all other respects, we consider that the five year price control alone, with retail costs set at the company's actual cost in the base year, provides adequate incentives for companies to improve efficiency.

Q20 Do you think we should use a net margin to remunerate household retail invested capital and risk over the period 2015-20? How can we avoid over-recovery of returns and take into account any implicit margin that exists in the difference between efficient retail costs and the retail price?

A net margin should be used to remunerate a) working capital, b) new investment and c) risk in household retail. For transparency Ofwat should ensure that it makes separate assessments of costs and financing requirements when setting the retail margin. This is particularly important given that reliable evidence on the "efficient" level of retail costs will be relatively limited at this early stage of price control separation.

In setting the net margin, Ofwat will need to recognise that the margin exists to provide the retailer with a financing stream, from which it will need to fund working capital, new investment and risk. Depending on the means by which the retailer procures investments, the investment profile may be relatively "lumpy." In any case, the timing and amount of investment in any period is unlikely to exactly match the amount provided for in the margin set in the same period.

Ofwat will need to take care to ensure that the lumpiness inherent in the investment expenditure profile is not confused with "over recovery of returns." This is why it should ensure that its

assessment of costs and financing requirements are separated when determining the appropriate margin.

The margin should also reflect the uncertainties associated with:

- SIM outcome, and the magnitude of this impact on the overall outcome of the household retail price control; and
- Other retail business risks, such as changes in bad debt, resulting from changes in the local or national economy.

Our assumption is that existing retail assets will be remunerated through the wholesale control (having been allocated to the RCV) and we agree that this should not be double-counted in the retail control.

Q21 Do you agree that we should retain the service incentive mechanism (SIM), in a modified form, to encourage good customer service for households?

We support Ofwat's proposal to retain the SIM. It incentivises the right behaviours for serving the household retail market. Given the magnitude of the incentive in the context of the household retail control, there are some modifications which Ofwat may wish to consider making to the mechanism as it applies to the next period.

If applied to the household retail price control at the same cash values as AMP 5, then the SIM outcome could potentially dominate all other financial incentives in the household retail control. Companies, CCGs and Ofwat will need to carefully consider the impact of this as it is possible that the retailer's focus on SIM could outweigh any other alternative or additional priorities identified by customers.

Given the magnitude of the SIM's impact on the household retail control, the risks associated with uncertainty of the SIM outcome need to be recognised as part of the calculation of the retail margin.

Also, given the materiality of the SIM to company performance on the household retail control, the distribution of SIM outcomes should be based on an absolute assessment rather than force-fit to the range. If outcomes were determined via strict ranking criteria, it is likely that many retail controls would fail financeability tests due to the scale of the potential penalty, even where this resulted from only marginal differences between company SIM scores.

There may need to be further adjustments to SIM criteria to reflect the definition of wholesale and retail activities. One example of this is set out in Appendix A, where we set out our view that if network calls are a retail activity, the retailer needs to be incentivised through the SIM for its performance in delivering both network and non-network calls.

Finally, as Ofwat is already aware, the denominator used for the quantitative SIM assessment detriments companies (such as UUW) with a predominance of combined service customers. Most of the SIM score results from billing contacts and water wholesale issues, and as such, the "unique customer" approach provides a substantial benefit to those companies with a significant

proportion of sewerage only customers, for whom there is a much smaller contribution to the quantitative SIM score. We would be happy to discuss this further with Ofwat.

Q22 Do you agree with our preferred option of funding additional water efficiency services and customer-side leaks through the wholesale control?

Investing in improvements to water efficiency and customer side leaks provides little benefit to a retailer. This is particularly the case with retail unmeasured household customers since neither customer nor retailer directly benefit from this activity.

However, the wholesaler does have an incentive to deliver water efficiency, in particular where it is of greater benefit, for lower cost, than alternative supply demand options. We have explored this issue further in Appendix A, on retail definition.

We do not feel that outcomes set by the retailer to deliver these activities would provide the best solution; the wholesaler is best placed to target activity. Therefore we believe that there should be a mechanism for the wholesaler to incentivise retailers in their area to deliver this activity on a regional or local basis.

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6. RETAIL CONTROLS FOR NON-HOUSEHOLD CUSTOMERS

Q23 Do you agree with our preferred option of rolling over existing tariff structures to form default tariffs?

We agree with this approach as it aims to minimise incidence effects. However, the majority of variation in end user tariffs results from differences in wholesale costs, and hence wholesale charges.

It seems likely that – at least initially – wholesale charging structures will also need to align to end user prices, not least because we expect that wholesale access prices would also align to existing tariff structures. However, it remains unclear how wholesale charges would be applied (and hence revenue recovered) between household and non-household.

Ofwat notes in section 4.3.1 of the consultation document that it intends to consult further on wholesale charges "later in 2013" – the outcome of this will have a more significant impact on the charges applied to individual non-household customers.

Q24 What are your views on our approach to customer churn under the proposed form of control for default tariffs?

Ofwat's approach to the non-household control is inconsistent with its approach to defining "unique customers" in the household retail control. We also believe that Ofwat should clarify how its proposed approach to customer churn and default tariffs interacts with a) the "costs principle" currently embedded in legislation and b) future decisions which may be taken on the costs principle and future access charges.

In the household retail control, Ofwat is proposing to define retail customers on a "unique customer" basis. The equivalent approach in non-household would imply that when a retail customer switches to a WSL for their water service only, and the company retains the customer for wastewater, then there should be no adjustment to the average revenue control. This is because the company will have retained the same number of "unique customers." Whilst we do not believe that such an approach acts in the best interests of customers, it is surprising that Ofwat has chosen to take a divergent approach in the two retail controls.

We are also unsure how Ofwat's approach interacts with the "costs principle" and how it would interact with any future decisions which may be taken in relation to the costs principle or setting access charges. We expect that it would normally be those arrangements which should dictate the overall impact on company revenues as a result of a customer switching. However, Ofwat's proposal on non-household churn, together with the wholesale revenue cap, fixes the amount of revenue lost by the company through switching at the level of the default tariff, regardless of any other arrangements which may be in place outside the price control. Given the significance of this, we would welcome further clarification from Ofwat and would raise the question of whether its proposal requires fuller consideration and consultation.

Q25 What approach should we take to determine the aggregate level of operating costs to include in the non-household retail control? For example, should we use historic costs or forward-looking costs?

We support an approach based on historic costs, with additional consideration given to the future investment that will be needed to support arrangements for increased levels of competition. We would expect these to be financed through the retail margin.

Q26 Do you think we should use a net margin to remunerate non-household retail capital employed and risk over the period 2015-20? How can we avoid over-recovery of returns and take into account any implicit margin that could exist in the difference between efficient retail costs and those used to set default tariffs?

A net margin should be used to remunerate a) working capital, b) new investment - including the investment required to facilitate competition - and c) risk in non-household retail. For transparency Ofwat should ensure that it makes separate assessments of costs and financing requirements when setting the retail margin. Ofwat will need to take care to ensure that it does not set the tariffs so low as to undermine the prospects for competition; competitive activity will act as a safeguard against any prospect of over-recovery.

In setting the net margin, Ofwat will need to recognise that the margin exists to provide the retailer with a financing stream, from which it will also need to fund working capital, new investment, and risk. Depending on the means by which the retailer procures investments, the investment profile may be relatively "lumpy." In any case, the timing and amount of investment in any period is unlikely to exactly match the amount provided for in the margin set in the same period. Ofwat will need to take care to ensure that the lumpiness inherent in the investment expenditure profile is not confused with "over recovery of returns." This is why it should ensure that its assessment of costs and financing requirements are separated when determining the appropriate margin.

In setting the retail margin for non-household default tariffs, Ofwat will need to take care to ensure that it does not set the tariffs so low that they undermine the prospects for competition for the contestable market. This is because competition which will be dependent in part on being able to offer attractive alternatives to the default tariff. In the event that a default tariff provided significant scope for over-recovery, this should be rapidly revealed and competed away, safeguarding customers' interests. An overemphasis on identifying the "efficient" level of default tariffs could limit the effectiveness of competition in providing alternative choices.

Q27 What constraints, if any, should we place on companies' ability to set the gross margin levels for individual default tariffs for non-household customers?

We believe it would be best for companies to set their own default tariff levels, based on high level guidance from Ofwat, and an overall assessment of the gross margin. Companies are best placed to do this and ensure consistency with existing tariffs. Compliance with competition legislation would be the safeguard against any inappropriate allocation of gross margins when companies set default tariffs.

Q28 Is there evidence that demonstrates that the costs of providing retail services to non-household customers are driven by uncontrollable changes in input prices? Are these difficult to predict? Given this, what is the appropriate approach in non-household retail controls for 2015-20 for uncontrollable changes in input prices?

It is unclear from the consultation, and meetings before and since its publication, whether or not Ofwat intends to make a forward looking estimate for inflationary changes in input prices with no ex-post adjustment to reflect actual RPI or whether Ofwat intends to fix retail costs in nominal terms and hence expect companies to absorb inflationary changes in input prices in full.

If it is the latter, then this would seem to be unjustified given that the fact that many input costs have a strong historic relationship with RPI and that observed retail costs in the water industry have historically risen above RPI, despite strong financial and regulatory incentives to minimise cost increases.

Furthermore, we disagree with Ofwat's assertion that application of RPI indexation would be out of line with "the experience of most retail businesses, across the economy." To the contrary, we have found no example of a competitive retail market where prices are fixed in advance for a five year period with no possibility of reflecting inflationary pressures to input prices. Even in the current difficult trading environment, such conditions cannot be said to generally hold.

Ofwat's consultation states that companies should be able to manage cost pressures without recourse to an RPI-indexed retail price control. In order to consider making allowances for future input price inflation, Ofwat sets out that input cost pressures must:

- Have a material impact on company costs
- Be beyond management control; and
- Impact the company in a materially different way to other companies.

The most significant costs for both household and non-household retail activities are bad debt and staff related costs.

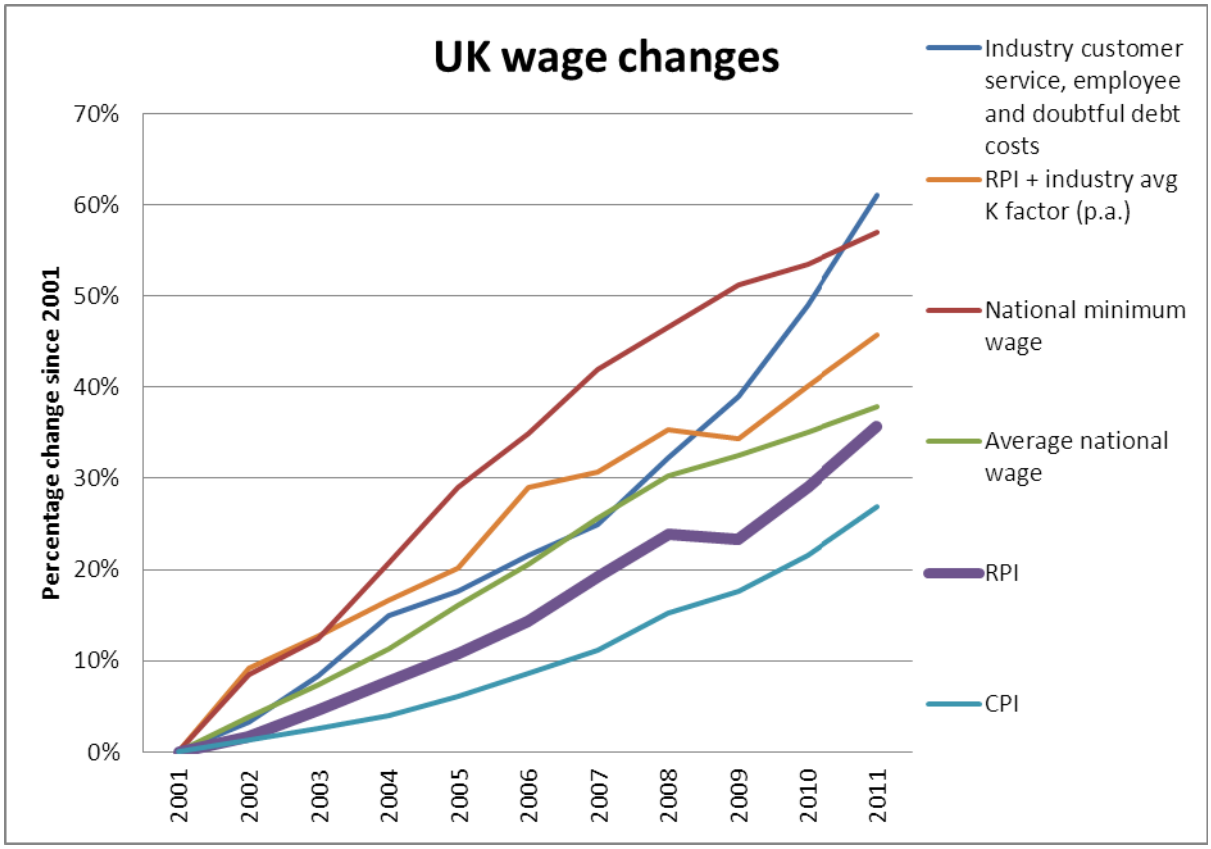
In UUW's case, bad debt made up 46% of operating expenditure reported in UUW's household retail business in 2011/12 (table 21b). It accounts for 16% of operating expenditures for UUW's non-household retail business in the same period. Bad debt charges are closely related to the size of customer bills. Bills are in turn dominated by wholesale activities, which will be linked to RPI.

Other material cost categories include non-network customer enquiries and complaints (12% of reported opex for the household retail business), debt management (10%) and billing (8%). The equivalent figures for the non-household retail business are 8%, 12% and 7% respectively. All these activities are driven by manpower costs.

The graph below shows that actual industry costs for customer service, employee costs and doubtful debt costs have consistently grown ahead of RPI over an extended timeframe, despite regulatory and financial incentives to minimise costs. This is not surprising given that the national minimum wage – a key benchmark for establishing staff costs and wage increases for call centre staff – has risen substantially in excess of RPI over the same period.

Likewise, average wage growth has historically outstripped the growth in RPI. In recent years, average wage growth has grown more slowly than RPI due to the exceptional economic conditions. However, unless the UK economy is now ex-growth, the likelihood is that incomes will revert to growth in real terms over the medium term. This will continue to exert upward pressure on wage input prices.

If Ofwat were not to take account of these pressures in its forecast, then it would be imposing an arbitrary implicit efficiency challenge which does not take account of industry costs.



Sources: June Return 2001-2011; FD99-09; low pay.gov.uk; average national wage, RPI and CPI: ons.gov.uk.

Ofwat's third criterion - that the input cost pressures must impact the company in a materially different way to other companies - appears incongruous when considering the material impact of RPI on costs across the industry.

Ofwat has asserted that "most retail businesses across the economy" do not increase prices to reflect RPI. However, we have failed to identify any retail business which fixes prices for five years in advance, with no consideration of input price inflation.

We note that in at least some cases, markets which are generally considered to be competitive and consumer focussed have explicitly contracted with customers on the basis that input price inflation will be passed on where necessary. For example, in 2012, all of the major UK mobile phone network providers increased the monthly tariffs on their "fixed" price contracts by 3.2 –

4.3% and attributed this increase to inflation. Despite the difficult current trading environment, Orange and T-Mobile are raising prices again in 2013.

This reflects that even in the most competitive markets, retailers and customers will sometimes contract on the basis that the consumer is best placed to manage this risk.

Whether or not this is the general case across the economy is difficult to establish, not least because adjustments for inflation are sometimes not explicit and are achieved through changing the attributes of the product supplied, rather than its price. The Bank of England has noted the tactic of varying output quantity or quality (September 2010 - Agents' summary of business conditions) whereby to avoid increasing costs in the face of supply chain price rises, some businesses are able instead to vary the quantity / quality of their products. An example of this would be the 'shrinking chocolate bar'. This enables businesses to maintain key pricing points (e.g. £1.99) and their profit margins, whilst managing input price inflation.

In conclusion, we consider that input price increases are a material factor for the majority of retail business cost drivers. The level of general price inflation is something that is outside of management control, and this tends to drive economy-wide wage increases. Likewise, wholesale charges, which drive bad debt, are also outside of the control of retail management.

Our examination of retail markets has failed to identify any example of a retailer which fixes prices to customers five years in advance without some sort of mechanism or adjustment to allow for input price inflation. Certainly, such circumstances cannot be said to generally hold. Given this, it is unclear why Ofwat would consider that retail activities in the water industry should reasonably be expected to ignore input cost inflation. However, if the risks of such increases are to be borne by the retailer, then this needs to be explicitly incorporated into retail margins and/or incorporated into the forecast company costs which underpin the price control.

Q29 Do you agree with our preferred option of setting the default tariff minimum service level using the existing GSS standards?

We support Ofwat's approach.

Q30 What aspects of service should we target in setting a service incentive for non-household customers in Wales?

Although it does not operate wholly or mainly in Wales, UUW does have a small number of customers in Wales. We therefore look forward to the opportunity to comment on Ofwat's proposed approach in due course.

Q31 Are there other options for setting an efficiency challenge for non-household retailers in Wales we have not considered? If so, what are they? Which approach do you think best meets our objectives?

Although it does not operate wholly or mainly in Wales, UUW does have a small number of customers in Wales. We therefore look forward to the opportunity to comment on Ofwat's proposed approach in due course.

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7. MAKING BETTER USE OF WATER RESOURCES

Q32 Do you agree with our preferred option for implementing water trading incentives?

We agree with the approach to enhanced incentives for both importers and exporters.

A proportionate sharing of the benefits of an export between the exporting company and its customers is sensible.

It is not entirely clear who pays for the import incentive, and care should be taken to ensure enhanced incentives do not count against potential imports as and when importing companies develop their business plans.

A longer term commitment to water trading incentives would be better, as many of the trades currently under consideration by water companies may not be delivered by 2020, but preliminary work may be needed in AMP6

Q33 What are your views on the sharing of export profits that the incentive should aim to deliver? Please provide your reasons and supporting evidence where possible.

Export profits should be shared between the exporting company and its customers, and should recognise the need for extended payback periods for longer term trades (30 years or more).

This could be delivered via a fixed payback period which extends to multiple AMPs, or via a fixed proportion of the duration of the contract, such as half of the full term.

Q34 What evidence should we take into account in setting incentive rates for importers (buyers) of water?

Positive incentives for importers will be required.

In principle, the introduction of totex will remove the historic financial disincentives to import water. However, importer incentives will still be required to overcome non-financial disincentives to import, such as (i) the lower degree of management control available with imported water resources, and (ii) creating a positive incentive to import.

An approach similar to that used in Ofwat's 2010 study on the benefits of interconnection would be a good starting point for setting the incentive rate. Further work is needed to set out how this would work in practice (such as an increase to the wholesale revenue cap, e.g. by adjusting totex allowances).

Q35 Do you agree with our preferred approaches to securing efficient trades and protecting the interests of customers? Please provide your reasons and supporting evidence where possible.

We agree that export incentives should not be weakened by further adjustment.

A total threshold on import incentives may be an appropriate counterweight to the high-level approach to setting import incentive rates, but there should be an appeal mechanism. Companies that can robustly demonstrate that trades above the threshold are efficient should be able to earn an incentive.

We can see little benefit of increasing the reporting burden, as this would be similar in practice to a case-by-case assessment of trades and act as a procedural disincentive for companies to consider trades.

Q36 Do you agree with our preferred option for implementing the AIM?

We support Ofwat's preferred option.

Ofwat should also consider how AIM interacts with investment funded in price limits. Those sites assumed – and funded – to be resolved during the price control period should be excluded from the scope of AIM. Otherwise it would provide an additional, unnecessary, reward for delivery.

Q37 Do you agree with our preferred limit to the scope of the AIM?

We agree that it should be limited to abstractions from rivers classed as "band 3" for flow under the Water Framework Directive.

There are risks of unintended consequences from AIM, e.g. incentivising companies to abstract more from sites outside the mechanism, with the potential to cause deterioration in these waterbodies. Therefore limiting the scope of the incentive to a few of the most affected sites is sensible.

The Environment Agency uses various definitions for "band 3". Our understanding is that AIM is intended to cover rivers classed as "band 3" for flow.

Q38 What evidence should we take into account in calibrating the AIM?

It is essential to calibrate AIM based on "normal year" abstraction, and therefore any years with extreme events (e.g. 2012 in the South East) should be excluded from the baseline, to avoid companies receiving AIM rewards for operating under "normal" conditions.

Ofwat should ensure that baselines are set on a consistent and sensible basis. Years with abnormally dry or wet periods should not be used. Abnormal years should be identified on a regional basis and a suitably long average of at least five (ideally ten) "normal" years should be used to set the baseline, to ensure effects of demand fluctuations and system outage are averaged out.

We agree that the incentive rate should be based on a value from national willingness to pay assessments.

Q39 What are your views on our proposed phased implementation of the AIM?

Ofwat's proposal seems sensible and pragmatic. We agree its approach should be tested for a year prior to full implementation

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8. OVERALL INCENTIVES, RISK AND FINANCEABILITY

Q40 Do you agree we should develop the balance of our proposed incentives using initial quantitative analysis of notional companies, and refine the calibration of incentives to reflect individual companies' business plan proposals?

We do not consider that Ofwat could confidently predict how companies will behave in response to a novel and untested incentive framework. Second-guessing company responses to wide-ranging and ambitious changes to the regulatory regime – many of which currently remain work in progress – is unlikely to yield evidence which is sufficiently robust for Ofwat to rely upon when demonstrating that its determination allows companies to finance their functions.

Q41 Do you agree that we should evaluate the overall risks relevant to each price control in assessing the allowed returns?

Ofwat should evaluate the impact on companies of all risks relevant to each price control in assessing allowed returns.

We disagree with Ofwat's assertion that these risks are reduced overall under the new framework; Ofwat's price control reforms do not reduce the systematic risks for the industry.

There is substantial uncertainty about the ex-post impact of new and uncertain incentive mechanisms affecting the full range of company costs and revenues. In its final methodology statement, Ofwat should disclose details of its risk assessment, including the extent to which it has taken account of the impact of economic uncertainties over the forecast period.

Q42 Do you agree with our broad approach to setting the WACC for wholesale services, given our proposals for the remuneration of retail services in chapters 5 and 6?

We agree with this approach in principle, noting that Ofwat intends to approach financeability testing on the basis of the overall licenced entity. However, we urge Ofwat to expedite clarification on its approach to setting the WACC given the uncertainty arising from its recent communications.

Q43 In setting the WACC are there specific considerations we should bear in mind taking account of the profile of relevant risks to wholesale service provision?

The risks that should be taken into account when setting the WACC are 1) the potential for unforeseen increases in financing costs and 2) potential cost shocks arising from unforeseeable (and otherwise unfinanced) expenditure requirements. These risks overwhelmingly manifest themselves as a result of wholesale activities and would not be expected to reduce as a result of disaggregating price controls.

When considering the potential magnitude of these risks, the MEAV should be used, rather than the RCV. This is because it most appropriately reflects the replacement value of the underlying assets and so more accurately benchmarks the relevant costs.

The value of the MEAV is many times greater than the value reflected in the RCV and the scale of this difference is greater on the sewerage service than for water. As a consequence, the risks faced on the sewerage service tend to be greater in magnitude, which may suggest that a premium to the WACC would be justified.

In addition to a robust evaluation of the business risk profile of wholesale activities – including the significant changes to the regulatory regime at PR14 – Ofwat should also take account of future economic uncertainties. Given the unprecedented distortions in financial markets in recent years caused by the credit crunch and subsequent actions by policymakers, caution will need to be exercised when assessing market based evidence of the components of the cost of capital in setting an appropriate WACC (namely, the risk free rate, Equity Risk Premium, credit risk premia, and equity betas). Furthermore, the outlook for inflation and interest rates is highly uncertain with real risks associated with the continuation, supplementation or subsequent unwind of the current exceptionally loose monetary policy

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Q44 Do you agree with our broad approach to assessing financeability? Are there specific factors we should take account of in the next price control review?

We agree with Ofwat that it should assess financeability at the total company level and further support the commitment to assess the financeability of the retail price control. We believe that Ofwat should also undertake an explicit assessment of whether wholesale activities are financeable rather than treating this as a residual issue, as this would be inconsistent with the principle of separate binding price controls.

Ofwat states that financeability will be tested against a "comfortable investment grade" credit rating. Ofwat should specify precisely what credit rating is implied, and what financial ratio constraints will underpin this assessment. We consider that an A3/A- rating should be used, and further that ratio constraints should be consistent with those used by ratings agencies. Accordingly, they should be assessed on an IFRS basis.

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9. ASSESSING PERFORMANCE DURING 2010-15

Q45 Do you agree with our preferred option of implementing adjustments for legacy tools through wholesale controls?

We support Ofwat's approach.

Q46 What factors should we take into account when determining whether to spread adjustments over the price control period?

In our view, adjustments are best spread over the price control period in a way that minimises disruption to customer bills. This usually means spreading them evenly over the AMP period.

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10. DELIVERING PRICE CONTROLS IN 2014

Q47 What are your views on our emerging criteria for identifying high-quality business plans? Are there other criteria we need to consider?

and

Q48 What factors should we take into account in further developing our process for a risk-based review?

We believe that there are four tests which Ofwat could use to determine whether a company's business plan is of "high-quality":

- Does it promote outcomes which are in customers' interests?
- Does it fulfil the company's statutory duties and license obligations?
- Is the plan financeable, on a responsible and sustainable basis?
- Has the plan been submitted in compliance with Ofwat's prescribed requirements?

This represents a high level framework only; a more detailed set of assessment criteria will be needed to underpin this, and demonstrate fulfilment of these tests.

We do not support some of Ofwat's specific proposed criteria.

For example, if the quality of company business plans is judged by whether their totex falls within Ofwat's cost corridors, this will incentivise companies to second guess Ofwat's models. This does not appear consistent with Ofwat's stated reason for not sharing totex models with companies, (i.e. so that companies are not "second-guessing our cost assessment models and other tools for risk based review".)

Whatever specific assessment criteria are to be utilised to determine the quality of business plans, it is essential that Ofwat make clear any minimum criteria which will be applied.

We look forward to engaging further with Ofwat on this topic following publication of its business planning consultation.

Q49 Is the timetable we propose for introducing menus feasible? How could we improve it? What can we and the companies do to address the challenges of the timetable to allow companies to make a real effective menu choice?

UUW is committed to working with Ofwat and other stakeholders to ensure successful delivery on the PR14 timetable, including provision for a genuine menu choice. Whilst we are open to considering a range of potential options, we believe that the solution that provides the maximum benefit, at minimum of risk to the process would be to facilitate the deferral by Ofwat of the final determination for wholesale revenues to 30 January 2015 at the latest.

We believe that this would still provide sufficient time for companies to convert the determination into customer charges ahead of main billing for 2015/16. (UUW has historically completed its charges submission within one week of publication of November RPI .) This approach would assume that a risk based approach to charges approval is implemented by Ofwat in advance.

Importantly, this date would also provide for the full statutory 60 day period for companies to review and accept determinations prior to commencement of the next regulatory period.

We also suggest that Ofwat could further help address the challenges of the timetable by:

- Determining key dates (with day and month) now, whilst the company and other stakeholders still have the flexibility to schedule around them
- Identifying those areas of the methodology which are most crucial for successful execution and focussing resources on them – and determining whether there are other areas which can be more fully defined after business plan submission
- Working with companies to resolve outstanding questions on the business plan requirement, and the August submission of historic data, and cost base information.

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11. BUILDING FOR PRICE REVIEWS IN 2019 AND BEYOND

Response to questions 50 to 55

We support Ofwat's decision to focus delivery of these incentives on price reviews from 2019 and beyond.

In supporting the delivery of the upcoming price review in 2014, and given Ofwat's stated concerns regarding the timetable, we suggest that it should be possible for Ofwat and companies to postpone further development of these issues until companies have submitted their business plans.

We believe that this would serve the best interests of the price review overall.

APPENDIX A: Definition of retail (and wholesale) services

We welcome the greater clarity on the definition of retail services which the consultation document provides.

There are some areas where the retail definition requires additional clarifications; these are principally disconnections, metering and trade effluent.

There are also three areas where we wish to express views on the options preferred or chosen by Ofwat. These are:

- developer services – which we believe should be kept whole and ideally be a wholesale activity, reflecting the views of our developer customers;
- demand-side water efficiency services and customer side leaks – which we believe need to be driven by strong wholesaler-led incentives; and
- network calls – where the choice made by Ofwat will need to be supported by robust SLAs and protocols covering interactions between wholesaler, retailer and customer.

This response should be treated as incremental to the response we provided to the August 2012 consultation covering the same topic.

Views on the options preferred or chosen by Ofwat

Developer services

In its consultation Ofwat suggests splitting developer services between retail and wholesale, with customer facing activities in retail, and the physical connection in wholesale. In the previous consultation, developer services were identified as a wholesale activity.

We think that responsibility for developer services should not be split. Instead it should be solely held by one section of the business, and this should most appropriately be the wholesale business.

This is because new connections and reconnections to the wholesaler's network require both knowledge of and access to the network.

In recent years UUW has moved from separate teams dealing with mains laying and connections towards one unified team. We have also introduced locally based teams able to build close working relationships with individual developers in each area for mutual benefit.

Recognising the importance of ensuring developers receive good service we have, within our developer services team, carried out a series of interviews, on-line surveys and real time feedback sessions. We have seen improvements in satisfaction scores from the developers since all developer service activity has been integrated.

In our feedback sessions and surveys, developers consistently refer to "time" as being the most important factor to them when procuring utilities as this is the one construction element completely outside of their control. Developers often cite that: 'a house can be built in a shorter time frame

than it takes to procure a water supply'. At our most recent developer awareness day, when asked what the most positive step taken by United Utilities had been the following responses were given:

- "Removal of call centre" [redacted]
- "Offering help at design stage" [redacted]
- "Ability and willingness from UU to meet with developers and consultants in order to discuss options" [redacted]
- "Increasing visibility of Staff " [redacted]
- "Project Engineers being able to be contacted and several meetings arranged the next days" [redacted]

We have achieved considerable time savings for developers by transforming a 23 step process and ten different developer interfaces into one seamless operation. There are fewer contacts for the developer and less time lost during handovers. It is also imperative the people managing this process have good technical knowledge and understand the problems a developer will face. Each development site has varied and wide ranging technical issues; for this reason we think enquires should be handled directly by those with the technical knowledge.

United Utilities' method of centrally managing all developer lead activity is supported by the Home Builders Federation (HBF) which cited our approach as "leading the way in developer service" at their National Utilities Conference. [✂Ian Wilkinson, HBF National Utilities Chair, said," United Utilities are the Apex water company in providing a service to developers."✂]

We understand that the proposals set out within the PR14 consultation do not make it impossible to run a fully integrated team with responsibilities for both retail and wholesale activities. However, it does make it more complicated. In future, if there are to be further requirements in relation to demonstrating separation, then the integrated approach we have found to be beneficial to developers will have to change.

In summary, the key reasons why Ofwat should maintain developer services as a unified activity are:

- The relationship with a developer often involves dealing with complex questions about the design or build. The customer benefits from being able to interface directly with the water company engineer who, in turn, is then better able to understand and react to the developer's concerns. In our experience, providing this access has been key to improving levels of satisfaction among developers.

- The relationships between developer and water company are also important for the wholesaler in order to best drive long term plans regarding supply demand. This suggests that developer services should be a wholesale activity to maximise this benefit.

- Developers do not require a relationship with a retailer when applying for a connection. Developers are customers for the functions delivered by the wholesaler, rather than the retailer. Again, this would point to developer services being more appropriately part of wholesale activities.

- The wholesaler has a strong incentive to ensure that what is constructed does not impact existing customers on the existing network. The wholesaler also has to operate and maintain

assets once they are constructed. In contrast, the retailer has limited incentives to ensure the developer correctly constructs their assets.

- End to end responsibility within one section of the business provides clear responsibility for issues arising in the performance of this duty.

If, contrary to our views, responsibilities for developer services are split between wholesale and retail there will need to be a clearer definition of the division of activities.

Demand side water efficiency services and customer side leaks

We recommend that strong incentive mechanisms are put in place to support the delivery of these activities.

Ofwat's consultation proposes that demand side water efficiency services and customer side leaks should sit with the retailer. We understand why the retailer is seen to be best placed to deliver demand management and customer side leaks services as these activities require a close working relationship with the customer which the retailer holds. Our understanding of demand management in this context is the services provided to customers to help them reduce their demand for water. However there are issues that this approach raises.

The retailer should have a duty to promote water efficiency to its customers. For those customers who are not metered there is very little incentive for the retailer to deliver water efficiency. Conversely the wholesaler is highly motivated to improve water efficiency with these customers since water saved equates to less water needing to be produced.

It is important that the wholesaler has methods to incentivise greater water efficiency to help alleviate local supply demand issues. Without this the wholesaler has a useful supply demand tool removed from its toolkit. The mechanism proposed within the wholesale section of this consultation could provide this.

The wholesaler should retain the right to access premises to repair leaks where identified and the customer does not effect any repairs. This is particularly important given that the customer and retailer have little incentive to resolve leaks that occur in a customer's pipe upstream of the meter.

The wholesaler should have meter data easily accessible to it in order to support action on both customer side leakage and leakage within the supply network.

Network calls

Ofwat has determined that the retailer will be responsible for network calls. This is in contrast to the views of most respondents to the consultation. We have previously recommended that this activity should sit with the wholesaler to benefit an efficient network operation and to avoid the duplication of costs.

If the retailer is to provide this service there will need to be a strict protocol to determine the nature and type of information that should be passed by the retailer from the customer to the wholesaler and the speed with which this must occur. Likewise, the retailer will need to receive timely and accurate information from the wholesaler, and be able to ascertain whether commitments are being met. Incident management protocols will also be required to ensure the timely and accurate

flow of information between wholesaler, retailer and customer. The retailer will also need to be capable of providing a 24 hour operation to respond to incidents.

Finally, if the retailer is to be responsible for taking network calls it is important that they should be incentivised by the SIM to deliver customer service for both network and non-network calls.

Areas which would benefit from further clarity

Disconnections

It should be made clear within the methodology that the retailer should only hold the responsibility for the decision to disconnect on a temporary basis for debt and at the customer's request; the wholesaler should hold the responsibility for all other activities including permanent disconnections.

The consultation states that the retailer will hold the decision to disconnect and reconnect, whilst the wholesaler will have responsibility for the physical activity. This arrangement will work for disconnections made in relation to debt. However, in practice, disconnections are sometimes required for other purposes.

The wholesaler will need to retain the ability to decide and carry out temporary disconnections on their own behalf in relation to operational work (WIA S60) and water fittings contraventions (WIA S75). This reflects the wholesaler's responsibility for ensuring that customers continue to receive a wholesome supply of water.

The retailer should also be able to request temporary disconnection at the request of the customer (WIA S61).

The ability to discharge these responsibilities should be made clear. It would also be helpful to set out the difference between permanent and temporary disconnections. A temporary disconnection involves the operation of valves to temporarily prevent the flow of water. A permanent disconnection reflects the removal of the connection itself.

Where a connection is unused, the retailer may have little incentive to permanently disconnect former customers; therefore the wholesaler should retain responsibility for the decision to permanently disconnect in these circumstances. Clear service standards will need to be established in order to ensure that the wholesaler provides the disconnection service appropriately and, where properties are vacant, that the retailer is bringing this to the attention of the wholesaler.

The retailer should also be required to check if the properties are connected and incentivised to bring unbilled properties to the attention of the wholesaler.

Metering

Further detail will need to be provided on the precise role the retailer plays in relation to the determination of meter functioning and capability.

The consultation states that the retailer will hold a role in determining meter functioning and capability. Since the wholesaler is responsible for meter maintenance and will have ownership of the meter, the wholesaler should be the agent that determines whether the meter requires replacement at their cost. If this is not the case then retailer may wish to replace meters where it is not appropriate. Therefore the role we feel the retailer should hold is to refer meters for testing to the wholesaler, at the retailer's expense where appropriate.

We recommend that an operational code be developed to support the delivery of this activity and clarify the roles and responsibilities in relation to metering. This might include the following items:

- A requirement that the retailer reads the meter at appropriate intervals and passes this information on to the wholesaler in a timely manner.

- A requirement that the wholesaler should make available an appropriate selection of meters that can be fitted to the network, balancing the needs for retailers to have a choice of meters and the avoidance of a vast array of different meter types being fitted to the network. In doing so, this will aid the wholesaler in the task of maintaining these meters.

- A requirement that the wholesaler is required to pass adequate asset information and billing details onto the retailer in relation to the meter to allow them to carry out their activities.

We would be pleased to provide further input in designing and implementing a clear operational code.

Trade effluent

It should be made clear that the responsibility for trade effluent billing sits with the retailer.

Page 46 of the consultation states that trade effluent is excluded from retail. However, billing has been identified as a retail activity. Our understanding is that Ofwat are envisaging that sampling for regulatory compliance should remain a wholesale activity, whilst the retailer should be responsible for billing for trade effluent. We would welcome explicit confirmation that this is the case.

Further areas for clarification

Whilst the consultation helpfully makes clear that all activities not identified within retail are the wholesaler's responsibility, we feel that the following matters require additional comment.

- The provision of firewater and fire mains best sit with the wholesaler. However the retailer would need to be involved in any calculation of reductions to bills according to use of firewater. Therefore clear guidance on responsibilities and interactions between the two needs to be in place.
- The identification of, and action to prevent, the theft of water is an activity where responsibility best sits with the wholesaler. However the retailer should have a responsibility to report where they suspect theft of water.
- Dewatering of construction sites often requires a very short term trade effluent discharge. This activity would best sit solely with the wholesaler since agreement to discharge and commencement of works can take place on the same day. This could require the wholesaler to bill for this activity.

APPENDIX B: Detailed calculation of impact assessment on RCV alignment with MEAV

The following table demonstrates how we ha ve calculate d the impa ct of Ofwat' s proposal on customer bills.

APPENDIX C: Impact of a "unique customer" denominator

Background

In February 2013 Ofwat published "Setting price controls for 2015-2020 – framework and approach: A Consultation" (the "February 2013 consultation".)

In that document, Ofwat set out that its preferred approach to calculating the retail costs for the domestic retail price control (the "Average Cost to Serve") was to use a "unique customer" measure.

This approach had not featured as an option in the forerunner to the February 2013 consultation published in July 2012 - "Consultation on retail price controls for the 2014 price review" (the "July 2012 consultation.")

In June and July 2012, UUW was engaged in joint work with Ofwat on the domestic retail price control, ahead of an industry workshop on the same topic. Although the merits of using a unique customer measure for the denominator was considered as part of that work, it wasn't considered to be a valid option for the final document, nor Ofwat's consultation. Likewise, it was not raised as an option during Ofwat's retail workshop.

Ofwat's change of approach in the February 2013 consultation is therefore difficult to understand and its rationale has not been fully explained. Ofwat has not published the responses it received to the July 2012 consultation, so there is no visibility of the arguments it received, nor the balance of responses in favour of one approach to the denominator or another.

In UUW's view, the unique customer approach:

- Leads to a distorted calculation which favours companies servicing single-service customers (principally WoCs)
- Is unable to appropriately allocate the single biggest element of retail costs - bad debt- between customers
- Fails to properly incentivise companies to commence – or even retain – efficient joint billing arrangements and it funds unnecessary and wasteful single billing arrangements
- Leaves customers of single-service companies facing costs of being served which are higher than necessary

The use of the unique customer denominator fails to adequately finance the functions of companies such as UUW who provide a combined service to the vast majority of its customers.

It further fails to protect the interests of consumers in areas served by separate wholesale services by failing to promote efficient combined retail operations.

It further fails to promote competition for retail markets, as it negates any benefit resulting from a merger between two retail operations that presently provide separate retail services.

Ofwat has already received many submissions and representations from UUW in relation to its choice of denominator. These include responses to consultations, presentations to Ofwat staff and Board members and the work that was shared throughout the period of joint work ahead of Ofwat's retail workshop – including unpublished drafts of the final document.

This paper represents a further attempt to demonstrate to Ofwat the serious drawbacks associated with a denominator based on "unique customers" and why a denominator based on "billed services" is not only more appropriate, but positively resolves all of the inherent failures associated with a "unique customer" approach. It is important to note that Ofwat's historic approach assessed the efficiency of retail operations separately for each service, and hence was directly analogous to a denominator based on billed services. This approach was not considered contentious.

The remainder of this document is in three sections, each of which demonstrates key failings of the "unique customer" approach.

1. The unique customer denominator ignores the scaling of bad and doubtful debts to bill size

2. The unique customer denominator systematically underfunds companies with dual service customers in favour of companies with single service customers.

3. A unique customer approach fails to properly incentivise efficient billing arrangements and leaves customers facing a higher cost to be served.

The unique customer denominator ignores the scaling of bad and doubtful debts to bill size

Ofwat has not yet recognised the most obvious issue associated with the use of a unique customer denominator. This is that it fails to predict that the level of bad and doubtful debts for each customer – the single biggest driver of retail costs – scales with the number of services provided to a customer, not with the number of companies providing the wholesale service.

It is a reasonably straightforward observation that when two services are provided to a customer, each with a roughly equivalent contribution to the overall bill, the predicted level of bad debt is likely to be approximately twice as much as when half as many services are provided to the same customer, with a bill that is half the size.

However, the unique customer denominator does not recognise this basic relationship. Instead, it implies that the amount of bad debt that should be expected is related to the number of wholesale suppliers who are serving the household, independent of the number of services being received.

Ofwat itself estimates that the average bad debt associated with each household bill is £15. This value is consistent with calculation as a weighted average on a "billed services" approach. Utilising Ofwat's now favoured unweighted average, the equivalent value is £11 per household.

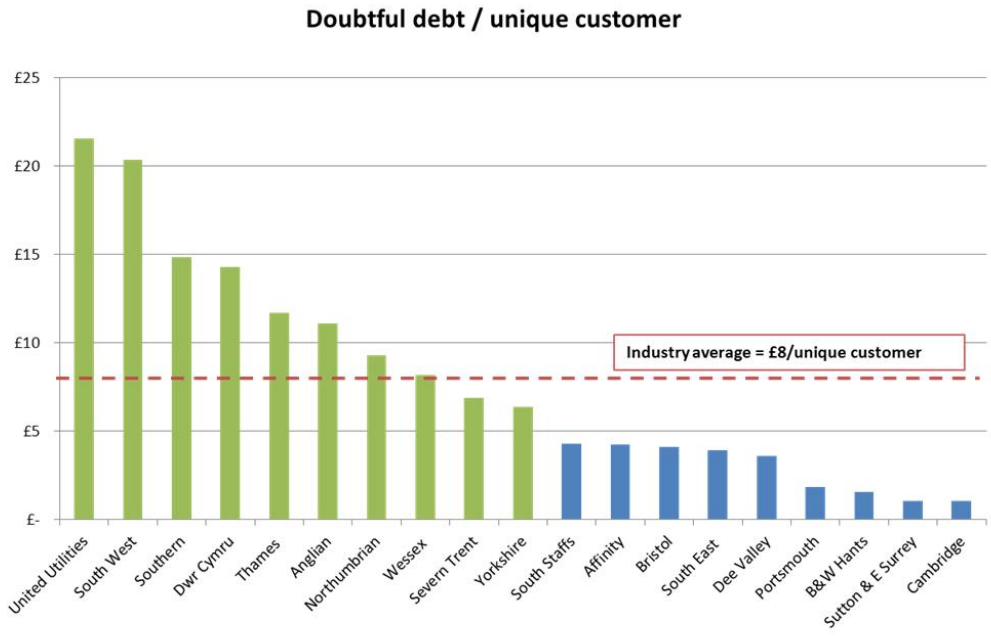
If the intention of the average cost to serve calculation is to arrive at an estimate of the average cost to serve a customer, then it would follow that application of the ACTS calculation should reveal an average £11 bad debt cost for each household, before taking account of any adjustments to the average cost to serve.

The unique customer denominator does not yield anything resembling this result. Our analysis of 2010/11 June Return data suggests that it would predict a bad debt cost of approximately £8 for households receiving a combined wholesale service and nearer £16 for households receiving their wholesale services from two providers.

To reiterate, the differentiator between the households for which the "unique customer" approach imputes a higher bad debt cost and the households which are imputed to have a lower bad debt cost is not any factor which might reasonably be expected to drive actual levels of bad debt – such as the number of services, the size of the bill or the creditworthiness of the household. Rather, the implied driver of the higher bad debt cost is that the customer receives wholesale services from two different wholesalers, whereas the lower bad debt cost is reserved for customers who receive their two wholesale services from a single provider.

There is no reason whatsoever to assume that customers who receive both water and waste water services from the same company have a lower bad debt profile compared to customers who receive water and waste water from two separate companies. The use of a unique customer denominator, however, embeds precisely such an assumption in the distribution of costs.

This is one of the reasons why WaSCs appear to have higher costs to serve than WoCs under the proposed methodology. It is also no surprise that WaSCs – who frequently provide two services to the same customer – have higher bad debt costs than WoCs – who provide one service to a customer – on a unique customer served basis.



Sources: June Return 2010-2011; Regulatory Accounts 2011/12.

The unique customer denominator therefore fails to allocate the single largest retail cost – bad debt – on the basis of anything approximating a realistic "average" cost to serve. Even those companies who offer Ofwat encouragement to use the unique customer basis for the denominator seem to recognise that it produces unreasonable results in relation to bad debt. At Ofwat's workshop on the retail price control, they advocated an adjustment should be made to scale bad debt.

It is possible to conceive that – if it were calculated correctly – this adjustment would "fix" the unique customer error in respect of its treatment of bad debt. However, applying this fix does nothing to address the shortcomings of the unique customer denominator in relation to all other retail costs.

By way of comparison, our analysis of 2010/11 June return data suggests that a billed services denominator would predict an estimate of bad debt per household very close to the £15 per household which Ofwat would expect, given its estimates of the average. This is without the need for any "fixing" adjustments. The billed service approach is therefore a much better predictor of average bad debt levels than the unique customer approach.

The unique customer denominator systematically underfunds companies with dual service customers in favour of companies with single service customers.

We will now use a simple example to demonstrate the way in which a unique customer denominator acts to over-allocate retail costs to companies providing single services to customers, and achieves this by under allocation of costs to companies who serve dual service customers.

The example assumes there are five companies, A, B, C, D and E.

- Company A provides water and waste water services to 100 dual service customers.
- Company B provides water services only to 50 customers.
- Company C provides wastewater services only to the same 50 customers as Company B.
- Company D provides water services only to 50 customers.
- Company E provides wastewater services only to the same 50 customers as Company D.

If each company counted its own customers, they would report that there are 300 unique customers. In total, however, there are only 200 households (or actual customers.) The discrepancy between the figures arises because the company-centric measure of "unique customers" double counts those households which receive wholesale services from more than one provider.

Because each customer receives two services each there are 400 billed services.

Company	Dual service customers	Water only customers	Wastewater only customers	Number of unique customers	Number of households
A	100	0	0	100	100
B	0	50	0	50	
C	0	0	50	50	50
D	0	50	0	50	
E	0	0	50	50	50
Total	**100**	**100**	**100**	**300**	**200**

In this example we will assume that the costs of retailing two services are the same as retailing one service. This is a strong form of the assumption that Ofwat has made in its February 2012 consultation where it states that the reason a unique customer denominator is justified is that the costs of retailing two services is only marginally higher than the cost associated with retailing a single service. We assume that companies reporting this to Ofwat were referring to costs other than bad debt. For the purposes of this example, we are considering retail costs excluding bad debt.

We will further assume that all companies in the example have succeeded in obtaining all available cost efficiencies. Just as happens in practice, companies which supply only a water service are able to combine operations with a company which provides a waste water service in order to achieve joint retailing and billing arrangements. Therefore, companies B and C use combined billing arrangements for their 50 households, and companies D and E use combined billing arrangements for their 50 households.

Because companies B&C and D&E are exploiting scope efficiencies via combined retail operations, and because the marginal cost of selling a second service is zero, each one of the 200 customers has the same efficient cost of being served of £20 per customer. For the purposes of this example, this is simply allocated on an equal basis of £10 each to the single service companies.

Company	Dual service customers	Water only customers	Wastewater only customers	Cost to serve per customer	Total cost to serve
A	100	0	0	20	2000
B	0	50	0	10	500
C	0	0	50	10	500
D	0	50	0	10	500
E	0	0	50	10	500
					4000

Now assume that the regulator in this example has decided not to allow each company to recover its own costs, but instead to totalise the costs across the industry and then remunerate each company based on the average costs of all companies.

If the regulator did this based on the basis of a number of billed services then each company would be allocated an amount which exactly equals their actual costs. There are 400 billed services and each household receives two services each. Across the industry, costs to serve are £4,000. Therefore each household has a £20 cost of being served which is equal to the efficient cost of serving the household. In a world where all companies are operating efficiently, this is the ideal outcome from the regulator's redistribution as every company exactly recovers the efficient level of costs as a result of the regulator's action.

Now consider the outcome if the regulator instead distributed costs based on a unique customer measure. Company A has half the actual customers and so is incurring half the actual retail costs of the industry. However, it only has one third of unique customers, as counted by the companies.

Companies B&C and D&E have only have half the number of actual customers between them and incur only half the actual retail costs of the industry. However, they have two thirds of the unique customers, as counted by the companies.

Company	% of industry costs	% of billed services	% of unique customers
A	50.0%	50.0%	33.3%
B	12.5%	12.5%	16.7%
C	12.5%	12.5%	16.7%
D	12.5%	12.5%	16.7%
E	12.5%	12.5%	16.7%

It is clear, then, that counting customers under the unique customer denominator will under-represent dual service customers and over-represent single service customers. It may already be apparent to the reader what this implies if some companies have more dual service customers than others and industry costs were to be allocated on a basis which under recognises them.

In a world where all companies are acting to minimise costs to the efficient level and where the marginal costs of billing an additional service are zero (or close to zero), an average cost to serve approach based on a unique customers denominator will systematically reallocate costs from Company A – which has only dual service customers – to other companies which have single service customers. Company A would therefore be underfunded for its costs, whereas Companies B&C and D&E would be overfunded. The results in this example are set out below.

Company	Actual costs	Predicted costs (billed services)	Predicted costs (unique customers)
A	2000	2000	1333
B	500	500	667
C	500	500	667
D	500	500	667
E	500	500	667
Total	**4000**	**4000**	**4000**

There are two inequities of the "unique customer" prediction. Firstly, Company A's functions would not be adequately funded. Secondly, Companies B, C, D and E would all be overfunded, beyond their actual costs.

No regulator would want to see companies be allocated a cost allowance which is higher than its actual costs. Like Ofwat the regulator may therefore act to cap the cost allowance to the lower of the predicted level or the actual level. This means that companies B-E would only be able to recover their actual costs and would not receive a windfall under the unique customer denominator.

As shown in the table below, this acts to correct for the second inequity we identified. But it does nothing to correct the initial misallocation to Company A, which remains underfunded.

Company	Actual costs	Predicted costs (unique customers)	Predicted costs (unique customers) limited to actual costs
A	2000	1333	1333
B	500	667	500
C	500	667	500
D	500	667	500
E	500	667	500
Total	**4000**	**4000**	**3333**

This example shows clearly why the unique customer approach to calculating the average cost to serve over-allocates costs to companies who serve large numbers of single service customers at the expense of companies with large numbers of dual service customers.

However, the objective of the price control is not merely to ensure that existing costs are appropriately allocated across companies. It also needs to incentivise companies and promote efficiency in their operations.

In the preceding example, such incentives were not necessary because all companies were acting efficiently, by cooperating to minimise their costs. We will relax that assumption in the following example in order to examine the incentive properties associated with the unique customer approach versus the billed services approach when companies can choose whether or not to seek out scale economies from joint billing.

A unique customer approach fails to properly set incentives for efficient billing arrangements and leaves customers facing a higher cost to be served.

In this second example, we assume that Companies D and E do not utilise joint billing arrangements; instead they each serve the same 50 customers independently, without seeking out the available cost savings.

Because the cost of retailing one service is the same as retailing two services, Companies D and E – each retailing one service per customer – have a retail cost per customer which is the same as Company A – which retails two services per customer.

Company	Dual service customers	Water only customers	Wastewater only customers	Cost to serve per customer	Total cost to serve
A	100	0	0	20	2000
B	0	50	0	10	500
C	0	0	50	10	500
D	0	50	0	20	1000
E	0	0	50	20	1000
Total	100	100	100		**5000**

Overall costs of the industry, at 5000, are now higher than in the first example. This reflects the inefficiencies introduced by the failure of Companies D and E to act efficiently and combine billing arrangements.

Compared with the first example, Companies D and E now account for more of the total industry costs, but have the same proportion of billed services and unique customers. Company A now accounts for a lower proportion of the total industry costs than in the first example.

Company	% of industry costs	% of billed services	% of unique customers
A	40.0%	50.0%	33.3%
B	10.0%	12.5%	16.7%
C	10.0%	12.5%	16.7%
D	20.0%	12.5%	16.7%
E	20.0%	12.5%	16.7%

We will now consider the impact of the alternative approaches to calculating the average cost to serve – unique customers and billed services – on the predicted costs for each company. First, we examine the unique customers approach.

Company	Actual costs	Predicted costs (unique customers)	Predicted costs (unique customers) limited to actual costs
A	2000	1667	1667
B	500	833	500
C	500	833	500
D	1000	833	833
E	1000	833	833
Total	**5000**	**5000**	**4333**

Under the unique customer approach, Company A remains underfunded compared to its actual costs. Companies B and C would both be allocated costs which are in excess of their actual costs; no doubt the regulator would cap these at the actual cost of 500.

Companies D and E are both allocated costs which are lower than their actual costs. However, unlike Companies A, B, and C, the actual costs being incurred by Companies D and E are higher than they need to be. This is because there is no legal or regulatory impediment to them achieving the same level of cost as companies B and C, which have utilised joint billing arrangements to lower costs. Companies D and E incur 1000 of cost each, when they could deliver retail arrangements for the same amount shared between them.

Companies D and E are each recovering 333 more than the level of costs they would incur if they co-operated to minimise their costs. The sources of that extra funding are twofold.

Firstly, the redistributive effect of the unique customers approach – which was set out in the previous example – means that Companies D and E benefit directly through the underfunding of Company A, which is left unable to recover its actual costs.

Secondly, the customers of Companies D and E are paying higher charges than customers of companies with efficient dual billing arrangements. Each household receiving services from Companies D and E are paying an effective cost of 33.3 to be served. This compares with a cost to serve of 20 for each household served by Companies A, B and C.

Note that whilst Company A's customers have a cost of being served of 20, the redistributive effects of the unique customer denominator leave Company A only able to recover 16.7 from each.

We now turn to examine how costs would be allocated between companies based on a billed services approach.

Company	Actual costs	Predicted costs (billed services)	Predicted costs (billed services) limited to actual costs
A	2000	2500	2000
B	500	625	500
C	500	625	500
D	1000	625	625
E	1000	625	625
Total	**5000**	**5000**	**4250**

Under a billed services approach, the predicted costs for Companies A, B and C would all be greater than actual costs. This is because the total costs in the system – being 5000 - are 1000 higher than the efficient level of cost if all companies minimised costs. However, as before, the regulator can limit the recovery of costs for companies A, B and C to their actual level of costs in order to avoid customers paying more than the actual amount of cost incurred.

Companies D and E receive less under the billed services approach than under the unique customers approach. The allocation of costs under the billed services approach is a better approximation of the efficient costs that could be achieved through combined billing.

The total over recovery (compared to minimum achievable cost) by Companies D and E is 125 each – significantly lower than under the unique customers approach.

Households served by Companies D and E face a cost of being served of 25. This is still above the level of 20, which could be achieved if the companies achieved the same cost savings achieved by Companies B and C. However, it is considerably less than the 33.3 cost of being served that customers experience under the unique customer method.

Furthermore, because the funding received by Companies D and E is much closer to the efficient level of cost which could be achieved through joint billing arrangements, the incentives to achieve these efficiencies are greater under the billed services approach than under the unique customer approach.

Conclusion

We would concede that neither the unique customer approach nor the billed services approach provide a perfect solution to calculating the average cost to serve denominator. However, the properties of the billed services approach are far superior to those of the unique customer approach currently preferred by Ofwat.

A unique customer approach to calculating the average cost to serve:

- Scales bad debt based on the driver of whether the customer receives services from one or two wholesalers rather than whether they receive one or two services
- Systematically over-allocates costs to companies serving single service customers at the expense of companies serving dual service customers
- Over-remunerates companies who decline to enter into efficient joint billing arrangements
- Provides poor incentives for companies to obtain or retain these efficiencies
- Leads to customers paying higher costs in order to be served than would be the case under a billed services approach

A billed services approach to calculating the average cost to serve:

- Scales bad debt based on the number of services received by a customer, which more correctly reflects actual bad debt cost
- Reduces or avoids the systematic over-allocation of costs to companies serving single service customers
- Remunerates companies on a basis which more accurately reflects efficient joint billing arrangements
- Provides stronger incentives for companies to obtain these efficiencies
- Reduces costs to customers by more closely estimating the efficient cost of being served

Although we are not aware of any legal or regulatory impediment to companies providing single services combining their billing operations to obtain scale economies, it is possible that in a handful of cases there may plausibly be reasons why this would be outside management control. In these limited circumstances, a billed services approach may be overly punitive for a company serving single-service customers.

However, any company in this – rather unusual – situation should be able to persuade Ofwat that the detriment is a) material, b) results from factors outside management control and c) affects it in a different way to the generality of companies who are able to utilise combined billing arrangements. In doing so the company will demonstrate that its particular circumstances mean that it faces cost inefficiencies due to issues outside of management control rather than a lack of management action.

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26 March 2013

Dear Stephen

Re: "Setting price limits for 2015-2020 - framework and approach"

On behalf of United Utilities Water, I am pleased to enclose our response to Ofwat's consultation on the methodology for setting prices from 2015.

We welcome many aspects of Ofwat's proposals, including:

- the broad approach to water trading incentives;
- the approach to outcome incentives;
- the use of a household vs. non-household split for the retail price controls;
- the use of a revenue cap for the water and waste water wholesale controls;
- the use of a glide path to the household retail average-cost-to-serve;
- the use of the SIM mechanism; and
- the use of GSS standards in setting the default tariff minimum service level.

Ofwat's proposal to not share its totex models with stakeholders ahead of the submission of business plans raises some issues in relation to the transparency of its approach and the degree of confidence that companies can have in the outcome. However, as we set out in more detail in our response, we believe that there are options available to Ofwat and companies to manage through this issue whilst avoiding any perceived risk of "gaming" outcomes.

We also recognise Ofwat's concerns about the need for it to meet a challenging timetable. UUW remains committed to working constructively to ensure that the timetable for the review is achievable, including provision for a genuine menu choice. At this late stage it seems to us that the approach which minimises execution risk, whilst providing Ofwat with the extra time it needs to deliver its determinations, would be to move the deadline for determinations on the wholesale controls to 30 January 2015 at the latest. Our response sets out more detail of our thinking on this issue.

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Finally, our response also expresses our considerable concern at some of the other proposals put forward in the consultation, especially in relation to the household retail control - the "average cost to serve."

In particular, the use of a "unique customer" approach to calculating the average would represent a significant and surprising departure from Ofwat's previous consultations and past practice. Our view is that the unique customer method has significant drawbacks which may not yet have been fully considered by Ofwat and which could lead to determinations which are skewed against some companies and some customers. Further, it does not appear to provide the right incentives for companies to achieve efficient, combined, billing arrangements. A "billed services" approach could substantially resolve these issues.

We look forward to the opportunity to further discuss with you the issues arising from our response as well as our project investigating the impact of socio-economic deprivation on the costs of retail operations in the North West.

Yours faithfully

James Bullock
Director of Economic Regulation