

Business retail price review 2016

Wessex Water PR16 submission – review of
non-household price limits
June 2016



Executive summary

Our approach to this review of default tariffs for 2017 to 2020 remains within the cost and net margin envelope allowed by Ofwat for the equivalent years in the 2014 price determination.

Within this we have made the following key changes in our submission for the 2016 business retail price review, compared to our PR14 determination.

1. Our PR14 determination assumed that from 2017 onwards we would differentiate charges to mixed domestic/commercial use customers to take account of their greater bad debt risk. Following engagement with customers we have now removed this differentiation in our revised proposals.
2. We have revised our methodology for net margin allocation by allocating the residual margin left unallocated after our bottom-up risk analysis evenly across customer groups rather than allocating this in proportion to the bad debt cost.
3. We have reviewed and revised our cost allocation to customer groups using 2015-16 cost data, while keeping within the overall PR14 determined cost allowance. Overall this process has not led to material changes in costs allocated to default tariff bands.
4. We have updated customer numbers after a substantive review following the publication of revised eligibility guidance for market opening. This uncovered some customers (predominantly single flats in our neighbouring water company areas where we provide sewerage services) which had previously been incorrectly coded to non-household under the price control definitions.

The changes above have the following consequences:

- Default tariffs that continue to comply with our legal obligations and Ofwat guidance
- The incidence effects in customer bills that would otherwise have arisen from 2017 with the introduction of mixed use tariffs are avoided
- Our changes in cost and margin allocation mean no customer group will see price increases of >1.4%, and the vast majority of customers using <5Ml will see small bill reductions. The majority of default tariff groups that will see small bill increases use >5Ml per annum. 0.6% of our total non-household customer base will see incidence effects greater than 0.5%
- Our default tariffs in aggregate remain within the cost and margin envelope determined by Ofwat at the PR14 Final Determination

We also note that, in common with our PR14 determination, our default tariffs would be below the gross margin caps that Ofwat is minded to set for customers that use >5Ml per annum. This in part reflects the comparative efficiency of our non-household retail operations.

Our approach is supported by our customer research and other engagement with our customers.

The Wessex Water Services Board has approved our proposals after considering technical and methodological audit, engagement with customers and support for our proposals from the Wessex Water Partnership which acts as our Customer Challenge Group.

Board Assurance Statement

On 23 May 2016 the Wessex Water Services Board meeting approved the proposed approach and process that had been taken to review the appropriate default tariffs for customers, along with the policy changes, the associated customer engagement and the approach to assurance in the light of Ofwat's draft method statement.

At the meeting the Board was notified of the content of Ofwat's final statement of method and that it was expected there would be no material consequence for the submission compared to the draft method statement.

There being no further Board meeting before the required submission date, the Board approved the approach and delegated authority to the Wessex Water Audit Committee to approve and provide assurance on the final submission, subject to the successful completion of the agreed assurance processes and there being no material changes compared to that which it agreed.

On 17 June 2016 Wessex Water Audit Committee were informed that the internal assurance processes, including certification had been undertaken and reviewed the submission itself. The Audit Committee also considered reports from:

- Mott McDonald, which detailed that the calculations had been completed correctly and Ofwat's methodology had been followed, and
- Frontier Economics, which gave assurance that the relevant legislation and Competition Law had been complied with.

Having considered these reports, and there being no material changes in approach taken, the Audit Committee is able to approve the submission and assure on behalf of the full Wessex Water Board that to the best of its knowledge:

- The information provided is consistent with the company's legal obligations (including, where relevant, the prohibitions on undue discrimination or preference in licence condition E, licence condition R and the charging scheme rules issued by Ofwat under section 143B of the Water Industry Act 1991) and with competition law.
- The allocation and attribution of costs and margins to the default tariff caps are reasonable and robust (with costs and margins attributed by appropriate drivers and activities, and the proportion of costs subject to broader allocation rules kept to the minimum that is reasonably practicable).
- The company's proposals have been reasonably informed by customer engagement, and research and discussion with the Wessex Water Partnership (our CCG) – in particular, where there are proposals for changes to default tariffs that will change tariffs and have significant incidence effects.
- Data tables have been completed accurately and are consistent with any guidance that Ofwat has provided.



David Barclay
Senior non-executive director

Contents

1.	Introduction	5
2.	Process, approach and assurance.....	6
	Engagement with Partnership and WWSL Board	6
	<i>Wessex Water Partnership</i>	6
	<i>Wessex Water Services Board</i>	7
	<i>Wessex Water Audit Committee</i>	7
	Assurance	7
3.	Summary of policy changes	9
	Differentiated tariffs for mixed use customers	9
	Residual allocation of retail margin	10
	Cost and margin attribution and allocation	10
4.	Base data	11
	Customer numbers	11
	Volumes and wholesale revenues	12
5.	Assessment of incidence effects	15
	Method	15
	Results	15
	Avoided incidence effects from not introducing mixed use tariffs	18
	Engagement with customer groups	19
	Conclusion	19
6.	Margin assessment	20
	Bottom up assessment of appropriate margins	20
	<i>Increased cost risk</i>	21
	<i>Cost of contingent capital</i>	22
	<i>Working capital requirement</i>	23
	<i>Return on assets</i>	24
	Return on risk	24
	<i>Principles for allocating the margin</i>	25
	<i>PR14 approach</i>	25
	<i>Risks associated with bad debt and bill disputes</i>	26
	<i>Conclusion</i>	27
7.	Cost allocation.....	30
	2015-16 costs	30
	Cost drivers	30
	Reconciliation to PR14 allowed cost	32
	<i>Mixed use customers</i>	32
	Comparison with PR14 unit costs and cost allowances	34
	<i>Comparison of cost allocation results</i>	35
	<i>Comparison of cost allowances</i>	36
8.	Ofwat data table commentary.....	39
9.	Supporting information – Default tariff code classification	41
	Appendix 1 – Non-household retail price control research debrief: Blue Marble	42
	Appendix 2 – PR16 non-household retail price review assurance statement for Wessex Water’s Board: Frontier Economics.....	52

1. Introduction

1. This document presents Wessex Water's submission for Ofwat's 2016 business retail price review, carried out in advance of the non-household retail market opening in 2017. It outlines the approach and process underpinning the values contained within the completed Ofwat data tables, which are submitted alongside this document. The submission has been completed working in partnership with internal stakeholders and customer groups, utilising expert advice from third parties.
2. Section 2 outlines the process of engagement with:
 - the Wessex Water Partnership (acting as our Customer Challenge Group), ensuring that our proposals reflected customer views, and
 - the Wessex Water Services Board, allowing it to assure that this submission complies with Ofwat's guidance and relevant legislation. It also covers the assurance processes carried out to assure the Board of the accuracy of the submission.
3. Section 3 outlines the policy changes for the 2016 review that were developed alongside our stakeholders, utilising customer research.
4. Section 4 outlines the base data, including revised forecasts of customer numbers, volumes and wholesale revenues.
5. Section 5 performs an impact assessment calculating the most likely incidence effects resulting from the changes in policy and cost and margin allocations utilising most recent data.
6. Section 6 details the margin allocation and explains how an appropriate bottom-up margin was reassessed based on most recent data. Different methodologies for allocating the return on risk are then discussed and the method for this submission detailed, and variances compared to PR14 analysed.
7. Section 7 details the approach to cost allocation and attribution that results in up-to-date cost allowances for each default tariff group that are consistent in aggregate to those determined at PR14.
8. Section 8 provides a commentary on how we have completed the Ofwat data tables.
9. Appendix 1 outlines the detailed customer research carried out underpinning much of our changes to policy.
10. Appendix 2 contains a report from Frontier Economics assessing the compliance of our submission.

2. Process, approach and assurance

11. Our business plan for the business retail price review has been completed working in partnership with internal stakeholders and customer groups, utilising expert advice from third parties. The Wessex Water Board have taken an active role to ensure the resulting proposals are robust, in line with guidance and legislation and supported by customer views.
12. The approach to reassessing the non-household retail controls was undertaken with full disclosure of information from the internal non-household retail business to understand the levels of service to different customer groups. In order to ensure the costs and margins were appropriate for the remaining period up to 2020, a full bottom-up reassessment of costs and margins for the 2015-16 year using up-to-date cost and margin drivers for different customer groups was carried out.
13. Support for the approach taken was sought and received from the Wessex Water Partnership; approval was sought from the Wessex Water Services Board, which delegated final sign-off to the Wessex Water Audit Committee.
14. Customer research completed by Wessex Water was utilised in formulating and guiding the proposals.
15. Technical assurance to the Wessex Water Board was provided by third parties. The company reporter, Mott McDonald, was commissioned to provide a full technical audit assessing calculation and data consistency and accuracy with the final methodology. Frontier Economics provided a methodology audit to give assurance on the Competition Act, legislative and regulatory compliance.

Engagement with Partnership and WWSL Board

16. The following section describes the engagement with the Wessex Water Partnership to ensure customer support of the approach and the Wessex Water Services Board to gain overall approval and assurance of the plan.

Wessex Water Partnership

17. The Wessex Water Partnership acts as our Customer Challenge Group. It has an independent Chair and diverse membership, which will ensure appropriate challenge and assurance on the quality of our customer engagement and the use of this engagement in our decision making. The independent Chair is Dan Rogerson, former MP and Parliamentary Under Secretary of State for water, forestry, rural affairs and resource management.
18. A paper was taken to the March 2016 Partnership meeting outlining our proposed approach based on Ofwat's draft statement of method. It included:
 - the requirement to fully reassess appropriate default tariffs in order to ensure we comply with our obligations for the remainder of the period up to 2020;
 - the material policy changes for the Partnership to consider (further discussed in section 3);

- the approach to customer engagement, and
- the proposals for assurance.

The Partnership agreed the paper and the approach.

19. In June 2016 we updated the Wessex Water Partnership confirming the outcome of the review, the resulting incidence effects to customers and completion of successful assurance activities. The Partnership agreed with the approach.

Wessex Water Services Board

20. In May 2016 the Wessex Water Services Board meeting was informed of the process taken to review the appropriate default tariffs for customers, the policy decisions agreed with the Wessex Water Partnership in March, and assurance requirements, including the endeavours taken to assure the review, and the content of the Assurance Statement. The Board was notified of the content of Ofwat's final statement of method (such as confirmation of margin caps for larger customers) and that there was no material impact for us compared to the draft method statement.
21. The Board approved the approach taken for the review of non-household price controls, delegated authority to the June 2016 Audit Committee to approve the final submission and approved the proposed Assurance Statement.

Wessex Water Audit Committee

22. The June 2016 Wessex Water Audit Committee were provided a paper which described the process to reach the final submission to Ofwat. The submission to the Audit Committee included this document and table submissions, and also included audit reports from:
23. Mott McDonald, which detailed that the calculations had been completed correctly and Ofwat's methodology had been followed, and
24. Frontier Economics, which gave assurance that the relevant legislation and Competition Law had been complied with.
25. The Audit Committee then signed off the Assurance Statement for submission to Ofwat.

Assurance

26. External assurance was sought from two external bodies. The company reporter, Mott McDonald, was commissioned to provide a full technical audit assessing calculation and data consistency and accuracy with the final methodology. Frontier Economics provided a methodology audit ensuring Competition Act, legislative and regulatory compliance. Both provided reports detailing the scope of their analysis which were made available as part of the literature submitted to the June 2016 Audit Committee, and also made available to the Wessex Water Partnership.

27. All contributors to the submission were required to provide certification that they were aware of the content of MD209 as to the reliability of regulatory information and the offences relating to s207 of the Water Industry Act 1991. These were also made available to the Audit Committee.

3. Summary of policy changes

28. This section outlines the material policy decisions which impacted on the proposals for the review. These were formulated internally, with full information from our non-household retail business and utilising bespoke customer research on the default tariffs carried out in 2014 by an independent market research company. The proposals were then agreed at the March 2016 Partnership meeting.

29. The following sections outline the rationale for the proposed policy changes.

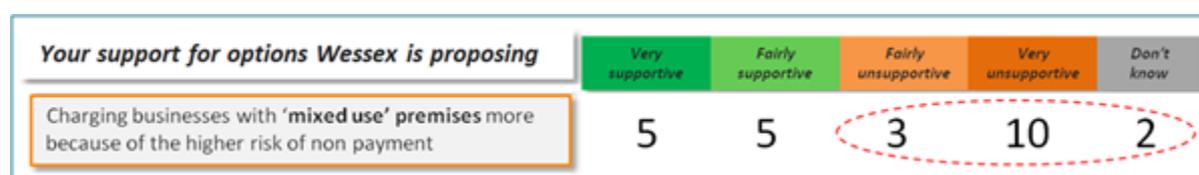
Differentiated tariffs for mixed use customers

30. Our PR14 determination assumed that from 2017 onwards we would differentiate charges to mixed domestic/commercial use customers to take account of their greater bad debt risk. Following engagement with customers we have now removed this differentiation in our revised proposals.

31. Analysis undertaken for PR14 suggested that mixed-use customers (customers whose usage contains an element of domestic as well as commercial usage at a single premise, such as shops with flats above) have a higher bad debt risk than standard commercial customers. As a result our default tariffs set at PR14 contained separate tariffs for mixed use customers from 1 April 2017. These tariffs had higher costs to serve due to more bad debt and debt management cost being allocated to these customers.

32. Our default tariff customer research in September 2014 asked customers whether they supported higher charges for mixed-use customers based on their higher debt risk. Customers were unsupportive as many mixed-use customers are good payers; they were also concerned it gave the wrong incentives to Wessex to manage its bad debt. From a Wessex Water perspective it is often hard to identify these customers. The figure below shows the results of the customer research – the full results of the customer research is available in Appendix 1.

Figure 1: Customer views on higher charges for mixed-use customers



33. From the results of the customer research, we did not apply the proposed higher charge for mixed-use customers in 2015 or 2016 while customers had not been able to switch suppliers.

34. Further engagement with our internal non-household business identified that in practice it was difficult to identify mixed-use premises in advance of debt recovery action being required and that therefore the differentiated charges may not actually fall on those with the greatest real risk of non-payment.

35. Based on our customers' strong views in this area and the practical difficulties in targeting the increased charges on those who are most likely not to pay, we now propose not to introduce the default tariffs with higher charges for mixed-use customers for the period 2017-20 and have aggregated mixed-use and pure commercial customers into a single default tariff.
36. This approach was taken to the Wessex Partnership in March 2016 who supported the revised approach.

Residual allocation of retail margin

37. The approach to calculating the margin across tariff groups at PR14 was reviewed by an independent economic consultancy, to assess whether they were appropriate for the remaining years of the price control up to 2020.
38. The PR14 methodology of assessing the bottom-up margin was found to be sound.
39. Alternative methods of allocating the residual margin were assessed, and while the method we used at PR14 (using the deviation of risk around bad debt) was found to be defensible, an alternative method of allocating the residual as a percentage across all tariff groups was deemed more robust as it:
 - allows the risks associated with bad debt and bill dispute to be included,
 - involves a simpler, more transparent calculation, and
 - is consistent with new policy consultations on the collateral requirement for retailers.

Further detail is contained in section 6.

Cost and margin attribution and allocation

40. To fully assess the impact of the proposals and to ensure the default tariffs for the remainder of the period up to 2020 remain fair and cost reflective, a full bottom-up assessment of the appropriate allocation and attribution of costs and margins for different customer groups has been undertaken.
41. Costs and margins in aggregate have been constrained to those allowed at the PR14 determination, with due alteration for changes in customer numbers attributed to the non-household determination.
42. Again the Wessex Water Partnership supported this approach.
40. Further detail is contained in section 7.

4. Base data

43. We have updated customer numbers after a substantive review following the publication of revised eligibility guidance for market opening. This uncovered some customers (predominantly single flats in our neighbouring water company areas where we provide sewerage services) which had previously been incorrectly coded to non-household under the price control definitions.
44. Up to date data for the base year (2015-16) and forecast years up to 2020 were used as the basis for further calculations for each tariff group. The base year of 2015-16 was assured as part of the technical audit to the extent that all data reconciled to that reported in the 2016 APR.

Customer numbers

45. Customer numbers for the 2015-16 year were collated from billing data for each default tariff for the 2016 APR. To forecast customer number for the years up to 2020, the internal Wessex Water income forecasting model was used. Customer numbers are displayed in the table below. The type of customer contained within the default tariff codes are described in section 9 for information. The technical audit assuring the Board encompassed audits of the calculations.

Table 1: Customer numbers for the period 2017-20

Default tariff	Customer nrs (000s)		
	2017-18	2018-19	2019-20
UM-W	3.988	3.887	3.790
M-W-0	39.933	40.027	40.116
M-W-1	3.497	3.505	3.513
M-W-5	0.512	0.512	0.512
M-W-25	0.039	0.039	0.039
M-W-50	0.023	0.023	0.023
M-W-100	0.016	0.016	0.016
M-W-250	0.002	0.002	0.002
M-W-500	0.001	0.001	0.001
UM-S	4.912	4.709	4.515
M-S-0	50.571	50.759	50.938
M-S-1	4.264	4.279	4.293
M-S-5	0.571	0.571	0.571
M-S-25	0.044	0.044	0.044
M-S-50	0.023	0.023	0.023
M-S-100	0.009	0.009	0.009
M-S-250	0.002	0.002	0.002
M-TE-0	0.346	0.347	0.349
M-TE-1	0.242	0.243	0.244
M-TE-5	0.089	0.089	0.089
M-TE-25	0.022	0.022	0.022
M-TE-50	0.016	0.016	0.016

Default tariff	Customer nrs (000s)		
	2017-18	2018-19	2019-20
M-TE-100	0.010	0.010	0.010
M-TE-250	0.003	0.003	0.003
Total water	48.011	48.012	48.012
Total sewerage	60.396	60.396	60.395
Total trade effluent	0.728	0.730	0.733

46. The main changes compared to the PR14 submission are:

- The decision to not charge mixed-use customers differently from 2017. Therefore these tariffs that existed at PR14 have been discontinued and mixed-use customers subsumed within the respective non mixed-use tariff.
- The single customer in the largest trade effluent tariff closed over the course of the 2015-16 year. Therefore the M-TE-500 tariff is not required moving forward; our PR16 submission reflects this.
- The overall customer numbers have decreased markedly since PR14. This is due to a legacy issue, mainly within our area of supply in the Bristol Water region, whereby the internal classification “other domestic” which we believed were properties such as flat blocks and classified as non-household for regulatory reporting purposes were, in fact, primarily domestic in nature, and within this primarily single flats. The volumes, wholesale revenues and cost allocations reflect this change. As a result 3,029 water customers and 21,257 sewerage customers moved out of the non-household price control and into the household price control. The majority of these customers were small users. The following table shows the proportion of customers that were moved from each default tariff band to the household price control.

Table 2: Customers reallocated to household price control

Tariff volume band	Water	Sewerage
0-1 MI	84%	96%
1-5 MI	14%	3%
5-25 MI	2%	0%

47. We identified these premises in the 2015-16 reporting year and have ensured that the affected customers have been paying household charges rather than non-household charges.

Volumes and wholesale revenues

48. Non-household volumes and wholesale revenues used for the PR16 submission are described as follows.

49. 2015-16 non-household volumes and wholesale revenues are consistent with 2015-16 APR values.

50. Underlying 2017-20 volumes are consistent with those submitted for the PR14 business plan, with adjustments for the reallocation of customers from the non-domestic to the domestic price control. This adjustment has reduced volumes, and also therefore wholesale revenues.
51. The allocation of these volumes to default tariffs has been recalculated based on the updated customer numbers.
52. 2017-20 wholesale revenues have been recalculated to take account of the updated customer numbers and the revised allocation of volumes to default tariffs as well as the wholesale price determination including the wholesale price determination K factors. November RPI assumptions have been updated from those in the Final Determination, reflecting most recent official forecasts. The forecast values used are shown in the following table.
53. The wholesale revenues used for this analysis and submitted as part of the Ofwat data tables are therefore consistent with the PR14 Business Plan but updated for the most recent customer data and up to date November RPI forecasts.

Table 3: RPI values used to forecast wholesale revenues

Year	November RPI	
2015-16	1.98%	Actual
2016-17	1.05%	Actual
2017-18	2.00%	Forecast
2018-19	2.25%	Forecast
2019-20	2.75%	Forecast

54. It is important to note that there is a material drop in the wholesale revenues (and thus the retail net margins when displayed as absolute values) in the Ofwat data tables when comparing company submitted values for PR16 and the automatically populated wholesale revenues based on the PR14 Final Determination. This is due to the decrease in customer numbers described above, but additionally the PR14 Final Determination revenues are, in fact, overstated.
55. This is because modelled non-household wholesale revenues were not updated between companies' submitted business plans and the final determination in Ofwat's financial model – the wholesale revenues stated by Ofwat in its final determination associated with non-household retail are those before Ofwat made cuts to the wholesale revenue in our submitted plan.
56. This should be taken into account when comparing gross retail margins as absolute values – for example in table A5.2¹ of the Wessex Water Final Determination it states total non-household retail revenue is forecast to be £6.2m rising to £6.4m over the course of AMP6 – we believe these values were calculated from the product of the default tariff net margin (as a %) and business plan revenues, not

¹ Ofwat (2014) Final price control determination notice: company specific appendix – Wessex Water, p.55

final determination wholesale revenues. Applying the Final Determination wholesale revenues to our allowed retail margins results in a revised non-household revenue allowance of £5.9m in 2015-16. Therefore we estimate the impact is approximately a £0.3m reduction.

57. The table below shows forecast non-household volumes and wholesale revenues for the period 2017-20.

Table 4: Non-household volumes and wholesale revenues for the period 2017-20

Default tariff	Volume (MI)			Wholesale revenue (£m)		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
UM-W	1,299	1,258	1,218	2.016	2.007	2.005
M-W-0	6,698	6,632	6,571	15.205	15.560	15.979
M-W-1	5,933	5,876	5,822	13.307	13.614	13.976
M-W-5	3,732	3,696	3,662	8.344	8.539	8.769
M-W-25	1,223	1,211	1,200	2.507	2.565	2.634
M-W-50	1,406	1,392	1,379	2.715	2.778	2.853
M-W-100	2,308	2,286	2,265	4.166	4.263	4.378
M-W-250	512	507	502	0.832	0.851	0.874
M-W-500	858	850	842	1.066	1.091	1.121
UM-S	1,612	1,497	1,405	2.189	2.077	1.994
M-S-0	7,577	7,489	7,403	16.953	17.277	17.651
M-S-1	7,276	7,195	7,115	14.446	14.702	14.996
M-S-5	4,257	4,208	4,161	8.240	8.385	8.551
M-S-25	1,518	1,500	1,483	2.353	2.395	2.444
M-S-50	1,714	1,694	1,675	2.176	2.215	2.259
M-S-100	951	940	929	1.124	1.143	1.166
M-S-250	494	489	483	0.488	0.497	0.506
M-TE-0	69	68	67	0.143	0.145	0.147
M-TE-1	434	429	424	0.722	0.734	0.748
M-TE-5	826	816	806	1.676	1.705	1.739
M-TE-25	641	634	626	1.363	1.387	1.414
M-TE-50	862	852	842	1.813	1.845	1.881
M-TE-100	1,154	1,140	1,127	2.150	2.188	2.231
M-TE-250	1,060	1,048	1,036	1.699	1.729	1.762
Total water	23,969	23,707	23,461	50.157	51.270	52.589
Total sewerage	25,399	25,013	24,653	47.970	48.692	49.568
Total trade effluent	5,045	4,987	4,929	9.565	9.732	9.922

5. Assessment of incidence effects

58. Our changes in cost and margin allocation mean no customer group will see price increases of >1.4%, and the vast majority of customers using <5MI will see small bill reductions. The majority of default tariff groups that will see small bill increases use >5MI per annum. 0.6% of our total non-household customer base will see incidence effects greater than 0.5%.
59. Ofwat's statement of method requires that where companies propose to rebalance default tariffs then this must be supported by evidence from customer engagement and support from CCGs. In order to assess the possible incidence effects of the policy changes outlined in section 3 and detailed in section 6 and 7, a full and detailed assessment was carried out at all possible levels of consumption within each default tariff group.

Method

60. While companies have a variety of tools available to them when setting prices to smooth any incidence effects (such as rebalancing between fixed and variable charge elements), an assessment can be made at this stage to estimate the impact of price change for every customer group at all possible consumption points. One difference when making an assessment of this nature compared to setting charges in practice is that there are always a multitude of factors to take into account when setting charges – often different changes oppose each other resulting in less overall change to customer bills. In order to make an assessment of this nature it is necessary to make some assumptions:
- Customer numbers, volumes and wholesale revenues for each tariff group were as per the rest of the PR16 modelling – when setting charges the most up to date forecasts are used in order to recover the correct revenue
 - Fixed charges were assumed constant – when setting charges this may not be the case as more up to date data on cost reflectivity may be available
 - Variable charges were made up of the remainder of the non-household revenue allowance
61. Two sets of non-household retail revenues were calculated using the cost and margin allowances set at PR14 for 2017-18 and the proposals calculated for the PR16 review, detailed above. The base data mentioned above was the same for the two methods, and fixed charges were assumed to be constant compared to current (2016-17) Wessex Water charges. Incidence effects were calculated at the minimum, median and maximum points of each consumption or Rateable Value for every default tariff.

Results

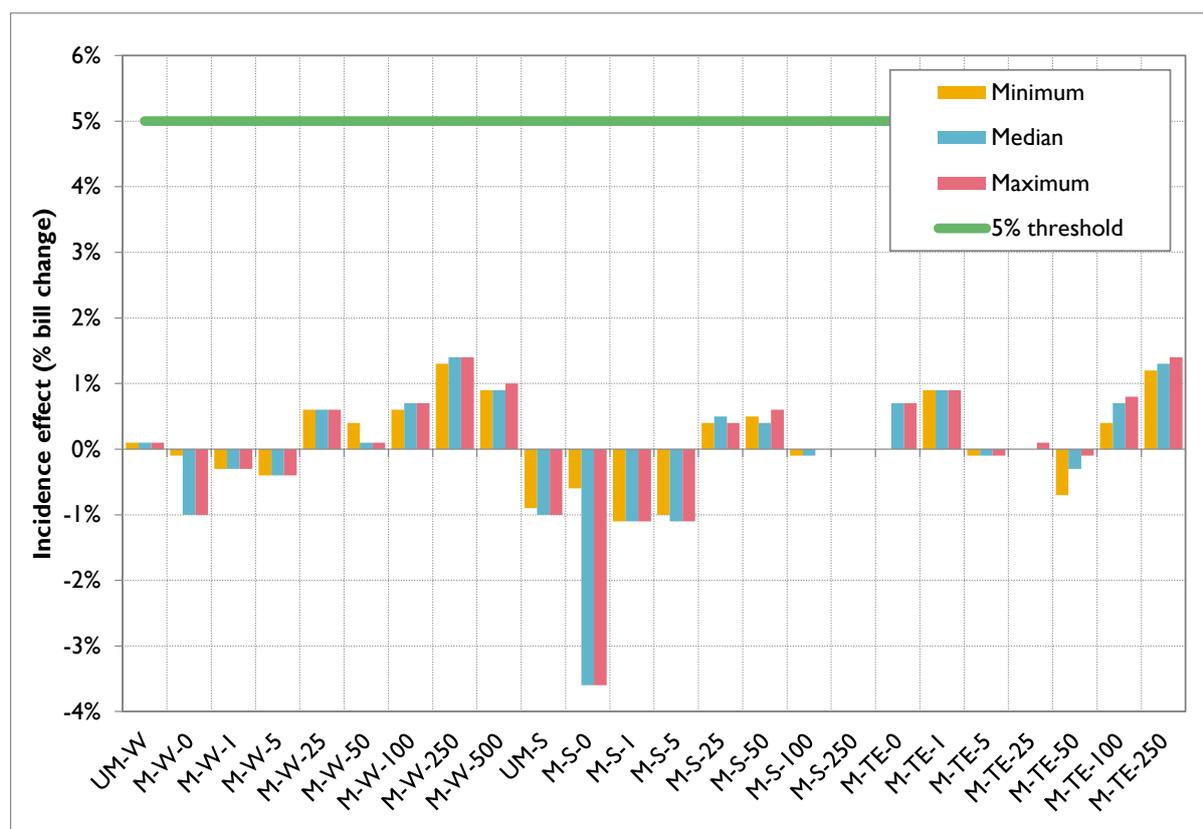
62. The table below shows the resulting incidence effects. The results are in line with the magnitude of the changes detailed in the rest of this document, i.e. the incidence effects presented as percentage change are similar to the magnitudes of

the changes in the cost allocation and margin allocation. The differences in margin at different consumption points within each band reflect the different proportions of non-household retail revenue allowances between the fixed and variable charge elements and also in some cases different wholesale tariffs and charge elements impacting on the resulting incidence effect.

Table 5: Incidence effects analysis results

Default tariff	Minimum consumption / RV	Median consumption / RV	Maximum consumption / RV
UM-W	0.1%	0.1%	0.1%
M-W-0	-0.1%	-1.0%	-1.0%
M-W-1	-0.3%	-0.3%	-0.3%
M-W-5	-0.4%	-0.4%	-0.4%
M-W-25	0.6%	0.6%	0.6%
M-W-50	0.4%	0.1%	0.1%
M-W-100	0.6%	0.7%	0.7%
M-W-250	1.3%	1.4%	1.4%
M-W-500	0.9%	0.9%	1.0%
UM-S	-0.9%	-1.0%	-1.0%
M-S-0	-0.6%	-3.6%	-3.6%
M-S-1	-1.1%	-1.1%	-1.1%
M-S-5	-1.0%	-1.1%	-1.1%
M-S-25	0.4%	0.5%	0.4%
M-S-50	0.5%	0.4%	0.6%
M-S-100	-0.1%	-0.1%	0.0%
M-S-250	0.0%	0.0%	0.0%
M-TE-0	0.0%	0.7%	0.7%
M-TE-1	0.9%	0.9%	0.9%
M-TE-5	-0.1%	-0.1%	-0.1%
M-TE-25	0.0%	0.0%	0.1%
M-TE-50	-0.7%	-0.3%	-0.1%
M-TE-100	0.4%	0.7%	0.8%
M-TE-250	1.2%	1.3%	1.4%

63. The figure below shows the estimated incidence effects in the table above graphically, including Ofwat's 5% threshold.

Figure 2: Incidence effects analysis results

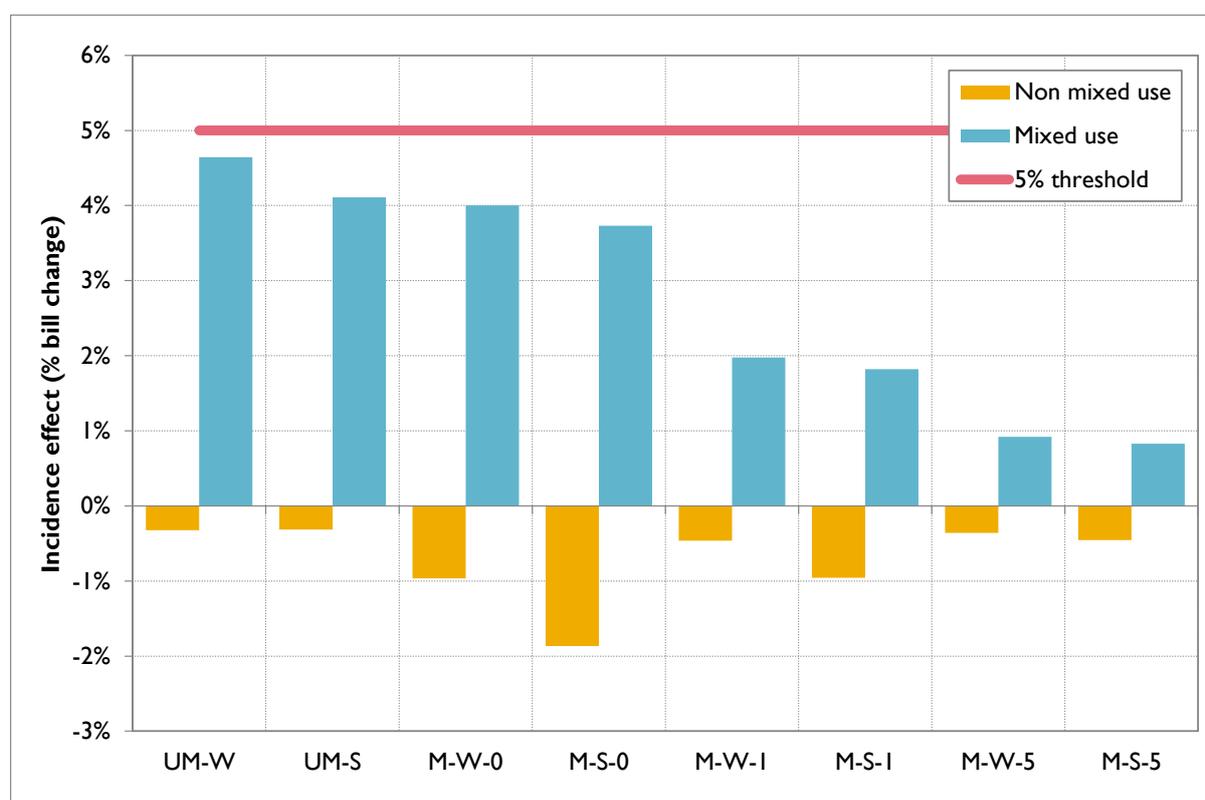
64. The change in the methodology for allocating the residual margin has the largest impact on the analysis. Generally the tariff groups at higher consumptions have positive incidence effects (bill rises) – this reflects the increased margin allocated to these customers. Customers using over 25Ml per annum (tariff groups M-W/S/TE-25 upwards) are in the main the most negatively affected (i.e. will see a price rise), whereas smaller using customers and unmeasured customers are positively impacted (i.e. will see a price drop).
65. Concerning the largest changes, there are two default tariff groups with incidence effects over 1%, and seven tariff groups with incidence effects over 0.5%. There are a number of reasons why this could be considered to be reasonable:
- the overall magnitude of percentage impact is small
 - the affected two tariff groups with effects over 1% (M-W-250 and M-TE-250) contain only 5 customers in total, and the seven bands with effects over 0.5% (M-W-25, M-W-100, M-W-500, M-S-50, M-TE-0, M-TE-1, and M-TE-100) contains 675 customers – which is a small proportion (0.6%) of the overall non-household customer base
 - the protection afforded by the overall incidence effect cap of 5% remains in Ofwat’s charging rules which will require impact assessments and potential mitigating measures to be employed should the end user bill change be greater than 5%

- when setting charges companies can use different tools to smooth the impact
- the proposals will only apply once the market opens in 2017-18; the customers impacted will have the opportunity to switch supplier if they so choose and the largest customers are likely to be fully engaged in the market from day one.

Avoided incidence effects from not introducing mixed use tariffs

66. We have also avoided significant incidence effects by not introducing separate tariffs for mixed use customers. These tariffs allocated increased bad debt and debt management costs to mixed use customers due to their greater bad debt risk. The estimated incidence effects from introducing these tariffs have been calculated from the PR14 final determination cost and margin allowances. The graph below shows the average avoided incidence effects for mixed use customers and non mixed-use customers.

Figure 3: Avoided incidence effects



67. The above graph shows that unmeasured customers and measured customers using less than 1 MI per annum would have experienced incidence effects of 4-5% when holding all other things equal. Had we continued with the proposed mixed use tariffs, these customers would have experienced material incidence effects before any reallocation of cost and margin as part of this review, or any changes to wholesale or retail charging policy encountered when setting charges.

68. Therefore we conclude that the proposal to not introduce separate mixed use tariffs is reinforced when analysing the probable incidence effects.

Engagement with customer groups

69. The results of the impact assessment were also shared with the Wessex Water Partnership, They agreed that the incidence effects were acceptable – more detail on engagement with the Partnership is described in section 2.

Conclusion

70. In conclusion, the results of the impact assessment suggest the incidence effects from our proposals for the 2016 business retail price review are low. A small proportion (0.6%) of the overall customer base is impacted by more than 0.5%. There are a number of reasons why this is acceptable as we will have the ability to mitigate the impact through their charge setting processes, and customers will have the opportunity to switch supplier if they choose. It is notable that the larger incidence effects are felt by the largest customers which evidence suggests are most likely to engage with the new retail market from day one. The results were shared with the Wessex Water Partnership and they agreed that the magnitude of the incidence effects were within reasonable tolerances.

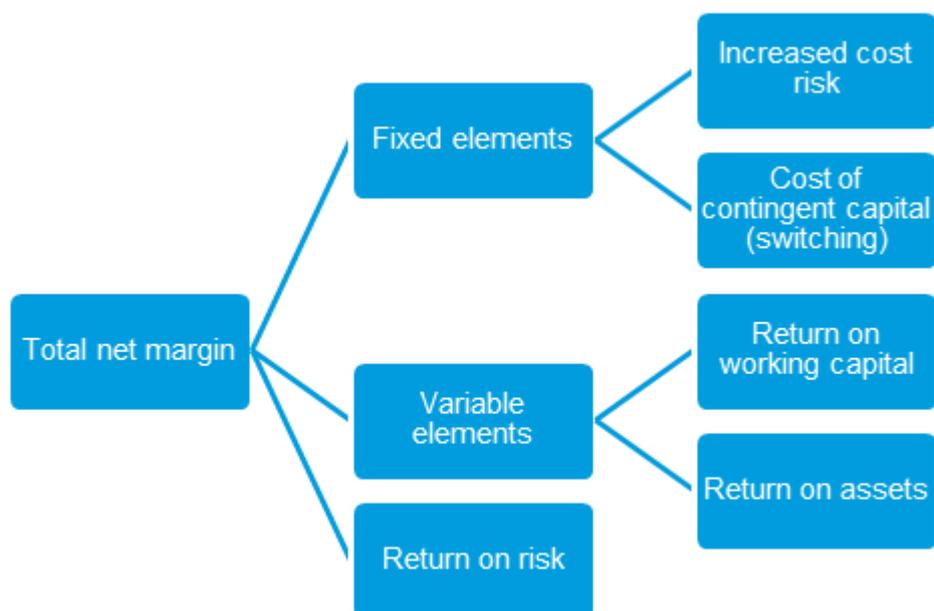
6. Margin assessment

71. We have revised our methodology for net margin allocation by allocating the residual margin left unallocated following our bottom-up risk analysis evenly across customer groups rather than allocating this in proportion to the bad debt cost.
72. We consider it a critical element of default tariffs that margins reflect different costs and risks from different customer groups, consistent with Ofwat's PR14 methodology². The following principles are particularly important when designing a net margin allocation methodology.
- No undue discrimination between customers, between or within tariff groups – net margin allocation should reflect the difference in risks across customers and the opportunity cost of capital required to deal with these risks.
 - An efficient retailer could enter and compete fairly – that is, the margin offered in each tariff group should be sufficient to enable an efficient entrant to earn a reasonable return.
 - The allocation method should be proportionate and transparent.
73. The approach to assessing non-household retail margin for PR16 is similar to that calculated for PR14. Initially a bottom-up margin assessment was carried out for each tariff group. The residual was then allocated to result in an overall 2.5% net margin consistent with Ofwat's methodology.

Bottom up assessment of appropriate margins

74. A bottom up assessment of the appropriate margin for each non-household tariff group was performed at PR16, taking advantage of the most up to date data in the non-household retail business. The elements that make up this assessment is made up of fixed components, variable components, and the return on risk.

² Ofwat (2014) Setting price controls for 2015-20 – guidance for companies on producing default tariffs, p.18

Figure 4: Elements of the net margin**Increased cost risk**

75. The cost risk for each tariff group has been reflected in the fixed component of the margin, in the same way as the approach taken at PR14. The rationale for this is to account for the risk of unavoidable increases in costs such as inflation. We consider that a reasonable value for this cost risk is 10% of each tariff group's total fixed retail costs, excluding costs associated with account management.
76. Increased cost risk should be reflected in the margin since Ofwat has not allowed for any cost risk (from retail cost inflation or other risks) in the Average Cost to Serve. Our estimate of the magnitude of cost risk is based on an estimate of retail cost inflation that could occur in the relevant time period and this estimate is only applied to costs where there is considered to be a genuine cost risk. For example, costs associated with account management are not included in this calculation, as account management costs are fixed – it would take a large external shock to the retail business to increase or decrease the number of account managers.
77. We changed our calculations to take account of cost risk slightly since PR14. In particular, the new approach reduced the estimate of the scale of retail inflation from 25% to 10%, and excluded costs associated with account management from the calculation. We reduced its estimated level because inflation has generally been lower than expected since the PR14 Final Determination and because the calculation now reflects fewer years of inflation in a reduced time frame compared to that at PR14 (i.e. PR16 will only span three years, not five).
78. The change in approach compared to PR14 has a minor effect of increasing the size of the total residual margin, and therefore allocate more of the overall margin in proportion to total costs, as opposed to in proportion to fixed retail costs. The impacts of the changes are as follows.

- Reducing the level of expected inflation. The largest impact of this change on gross margins for any given tariff group is in the region of 0.4 percentage points, and is generally around 0.2 percentage points for most tariff groups. This change reduces the margin for unmeasured customers and customers that use less than 5MI, and increases the margin for larger customers.
- Excluding account management costs. The largest impact of this change on gross margins for any given tariff group is in the region of 0.3 percentage points, but the size of the change is less than 0.1 percentage points for almost all tariff groups.

Cost of contingent capital

79. We estimated the cost of contingent capital for each tariff group in a similar way to that completed for PR14. This element of the net margin allows for the cost of customers switching to competitors. It is reasonable to assume that we will continue to incur fixed retail costs, excluding costs associated with account management, for customers that have switched away for an additional three months after switching. It is further assumed that 25% of customers will switch (or churn) to another retailer.
80. For PR16 we have slightly amended our approach to estimating the scale of costs that are at risk. In particular, costs associated with account management have been excluded. This is because, as described above, we consider account management costs are more fixed.
81. The amount of cost at risk is then multiplied by the return on capital. For PR14 the value used was 7.6%, consistent with Ofwat's Risk and Reward guidance³. In light of new evidence since PR14, to infer what a reasonable range for the WACC of a retail business might be, recent regulatory precedent on returns was considered. In particular:
- the WACC allowed by Ofwat for the appointed business of 3.74% in real vanilla terms, which can be translated to 7.3% in pre-tax nominal terms;⁴
 - the recent regulatory precedent set by the CMA in its Energy Market Investigation where it estimated the WACC of a stand-alone energy retailer to be 10% in pre-tax nominal form;⁵ and
 - the fact that regulators in other jurisdictions have estimated the WACC of energy retailers to be slightly higher than 10% in pre-tax nominal forms.
82. Given that the WACC for a standalone retail business is likely to be higher than the allowed WACC for the appointed business, due to the asset-light nature of the business and the operational risks associated with it, a reasonable level for a retail water business could be higher than 7.3%. Following discussion with external advisors we concluded the assumption for the returns on capital should be changed

³ Ofwat (2014) Risk and reward guidance, p.32

⁴ Ofwat (2014) Final price control determination notice policy chapter A7; risk and reward, p.42

⁵ CMA (2016) Energy market investigation, Provisional findings report, p.411

to 10%. This could be expected to be around the mid-point of the reasonable range based on recent precedent and is consistent with the recent CMA findings in the Energy Market investigation.

83. The impacts of the changes discussed above are as follows.

- Excluding account management costs. This change will increase the size of the total residual margin, and allocate more of the overall margin in proportion to total costs.
- The total cost of contingent capital is relatively low (in the region of £10,000), and as such the impact of this change is small. The largest impact of this change on gross margins for any given tariff group is in the region of 0.1 percentage points.
- Changing the return on assets. This change will reduce the size of the total residual margin, and allocate more of the overall margin in proportion to retail costs. The total cost of contingent capital is relatively low (in the region of £10,000), and as such the impact of this change is small. The largest impact of this change on gross margins for any given tariff group is in the region of 0.004 percentage points, and is generally around 0.002 percentage points for most tariff groups.

Working capital requirement

84. For each tariff group, we estimated working capital requirements, and multiplied the total requirement by its assumed return on capital.

85. For the working capital requirements relating to wholesale revenue, we calculated the average number of customer debtor days for each tariff group from its billing data, consistent with its approach at PR14. This was assessed as the average length of time between the customer receiving the service and the retail business being paid. For wholesale creditor days, we used the current value defined by Open Water of 1.5 months (or 45.66 days).⁶

86. Summing customer debtor days and wholesale creditor days for each tariff group gives the net required days for credit relating to wholesale revenue. The corresponding net days of credit requirements are then multiplied by the wholesale charge for each tariff group to estimate working capital requirements. The information on customer debtor days has been updated slightly since PR14 to reflect the most up-to-date information, but is not materially different.

87. We also calculated the working capital requirements for the retail business. This is calculated in a similar way, by considering retail costs and trade creditor days. The assumption on trade creditor days is consistent with standing creditor terms of 30 days, and is consistent with the PR14 approach.

⁶ Open Water (2015) Wholesale-retail code part 2: Business terms, section 9.2.5.

88. The total working capital requirements (i.e. for the wholesale and retail parts of the business) are then multiplied by the return on capital. The value used for PR16 is 4%, which is slightly above what was assumed at PR14. This change was made to reflect the information given in the Ofwat workshop that was facilitated by KPMG in February 2016. This assumption of 4% appears to be within the reasonable range for an assumption on the return on capital.
89. The incidence effects of the changes discussed above are as follows:
- As the cost of the total working capital requirement amounts to around 15% of the total net margin, this change does not have a significant impact on the allocation of the margin. The largest impact of this change on gross margins for any given tariff group is in the region of 0.2 percentage points, and is generally around 0.007 percentage points for most tariff groups.

Return on assets

90. We calculated the required return on assets by applying the required return on assets to the value of the assets, calculated from the depreciation charge for each tariff group. As highlighted above, the assumption on the return on assets has been updated for PR16 to be more in-line with regulatory precedent. This change also impacts this part of the margin allocation.
91. The largest impact of this change on gross margins for any given tariff group is in the region of 0.03 percentage points, and is generally around 0.02 percentage points for most tariff groups.

Return on risk

92. Having estimated the fixed and variable elements of the margin for each tariff group, the remainder of the margin is effectively treated as a residual, such that the total retail margin across the tariff groups is equal to 2.5% of total revenue (wholesale revenue plus retail cost). This residual component is considered to reflect the return on risk. Given the importance of this issue, the PR14 approach has been fully reviewed, and alternative options have been considered.
93. The bottom up margin assessment for each tariff group results in a total margin of £0.742m. Each element is displayed in the table below.

Table 6: Bottom-up margin elements

BU margin element	Margin (£m)
Increased cost risk	0.180
Cost of contingent capital	0.011
Working capital requirement	0.441
Return on assets	0.110
Total bottom up margin	0.742

94. The residual margin is then calculated by subtracting the bottom up margin from the total net margin of 2.5%. This calculation is displayed in the table below.

Table 7: Residual margin calculation

Element	£m
Wholesale revenue	113.812
Retail cost	3.360
Net margin	3.004
Residual margin	2.262

Principles for allocating the margin

95. Allocating the residual margin amounts to allocating additional margin to customers' bills above the margin that is allocated on the basis of the other four elements of the margin. There are three main reasons why an additional margin could be allocated to customers.
- Competitive margin. The four components of the margin excluding the residual element represent the margin that might be set in a competitive market (i.e. fully reflective of costs). It could be logical to set default tariffs at a level that includes an uplift relative to this competitive level to allow for and to help generate competition in a newly competitive market.
 - Cost of collateral. At this point there is no allowance for any collateral that retailers are required to provide to wholesalers.
 - Other risks. There may be other risks that we incur in operating the retail business that are not reflected in the four key components of the margin. This residual risk may be largely unknown but could be assumed to cover lumpy bad debt risk at the individual customer level, any cashflow risk of bill disputes or potentially risks associated with unknown costs such as regulatory risk including the costs of failing to comply with regulations.
96. In terms of the competitive margin, there is no clear economic reason to allocate this to tariff groups in a particular way. However, it does not seem unreasonable to allocate this across the tariff groups in an equi-proportional way. Additionally because Ofwat's consultation on payment terms between wholesalers and retailers assumes retailers must hold 60 days of collateral, this would potentially support a margin allocated equi-proportionally.

PR14 approach

97. The PR14 approach to estimating the appropriate return on risk for each tariff group was based on the variation of bad debt. This involved the following steps.
- Allocating the residual to each tariff group on the basis of the variation in bad debt. This involves estimating a relationship between the variation in bad debt (measured as the standard deviation) and average wholesale revenue per customer based on the available historical data. This relationship was then extrapolated to estimate the standard deviation in bad debt for the highest-volume customers. Finally each tariff group's relative share in the standard deviation of total bad debt was estimated, and using these shares the residual was allocated.

- Applying uplift factors to margins for some tariffs groups to adjust the backward-looking estimate to reflect forward-looking risk. This involved defining uplift factors for some tariff groups to be applied to the margins estimated by following the approach outlined in step 1. The margins for other tariff groups were then adjusted accordingly such that the total margin across all tariff groups equals 2.5% in total.

Risks associated with bad debt and bill disputes

98. Further consideration was given to two of the residual risks that are easier to quantify historically and for which it is therefore clearer how to best allocate these risks: bad debt risk; and bill disputes. In terms of allocating these risks across tariff groups, one option would be to consider the probability of these events happening in future and their scale. While we have information on the number and the scale of these events that have happened in the past, it is difficult to accurately estimate what will happen in the future. As such, any approach will necessarily be based on assumptions about how this residual risk should be allocated across customers. Also, as these two risks are only part of the residual margin, this thought process will not provide a clear indication of how the total residual margin should be allocated.
99. The two approaches each make an implicit assumption about how the residual risk (which is reflected in the residual margin) should be allocated across the tariff groups. A consideration of these implicit assumptions and which seem most reasonable, should help draw a conclusion on which approach is the most appropriate. The table below shows what implicit assumptions are made in each of the four options.

Table 8: Assumptions of different residual margin allocations

Option	Implicit assumptions
PR14 method: Based on bad debt risk	Our PR14 approach assumed that the residual risk was defined by bad debt risk. It estimated bad debt risk for each tariff band, and allocated the residual margin on this basis.
Alternative method: Equal proportion of total revenue	This method implicitly assumes that the residual risk is proportional to the size of the total bill and therefore allocates it proportionately to the total revenue per tariff band. This method allocates a larger margin, in absolute terms, to larger customers. This is in line with the 'equi-proportional mark-up principle', and leads to a tariff structure with less differentiated margin allocation.

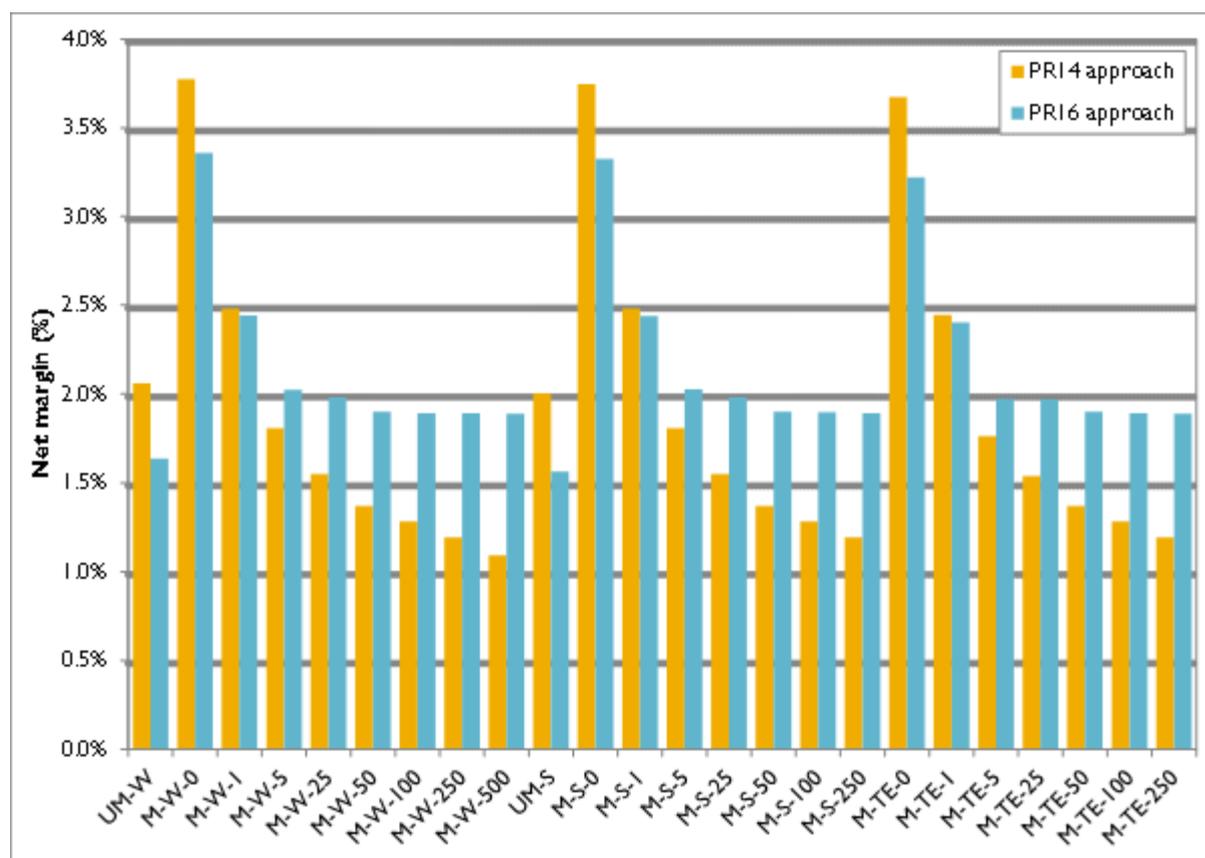
100. The alternative method implicitly assumes that the probability of bad debt and bill disputes are the same across customers – it implicitly assumes that the impact of any residual risk is related to the size of the total customer bill. It seems most likely that the impact of bad debt and bill disputes is related to the scale of customers' total bills.
101. Out of the two remaining options, the alternative method reflects the scale of customers' total bills, and implicitly assumes that the probability of bad debt and bill

disputes is the same across customers. The PR14 method estimates the probability and scale of future bad debt based on historic bad debt but does not take account of any other risks such as bill disputes. The implicit assumption in the alternative method that the probability of future bad debt and bill disputes is the same across all tariff groups may not seem realistic. However, the estimate of the probability of future bad debt risk in the PR14 method is not necessarily accurate, as it is based on limited historic information about bad debt. Therefore, it is not unambiguously clear that the PR14 method provides additional information that would result in a more reasonable allocation of residual risk compared to the alternative method.

Conclusion

102. Taking into account the principles of residual margin allocation and the risks associated with two specific issues, the alternative method appears the most reasonable to use for the following reasons.
- While there is no clearly superior way of allocating the residual margin, it seems most likely that the two key elements of the residual margin are likely to be proportional to a factor somewhere in-between retail costs and total costs. On this basis, the alternative method is not an unreasonable approach.
 - If only the risks associated with bad debt and bill disputes are taken into account, it would seem most reasonable to adopt the alternative method.
 - The PR14 approach involves multiple steps, with many technical assumptions made at each step. It may not be necessary to adopt such a complex approach. In contrast, the alternative approach is simpler and may therefore be easier to explain.
 - The recently published principles of collateral provision aims to equalise the costs for retailers as a percentage of wholesale costs – this is consistent with an even allocation of the residual margin.
103. The figure below shows the net margins for the two options. This shows that in moving to the alternative method, we would be increasing the margins for larger customers, and reducing the margins for smaller customers. The variation in net margins across tariff groups would be reduced if we were to change from using the PR14 method (with net margins ranging from 1.10% to 3.77%) to the alternative method (with net margins ranging from 1.56% to 3.36%).

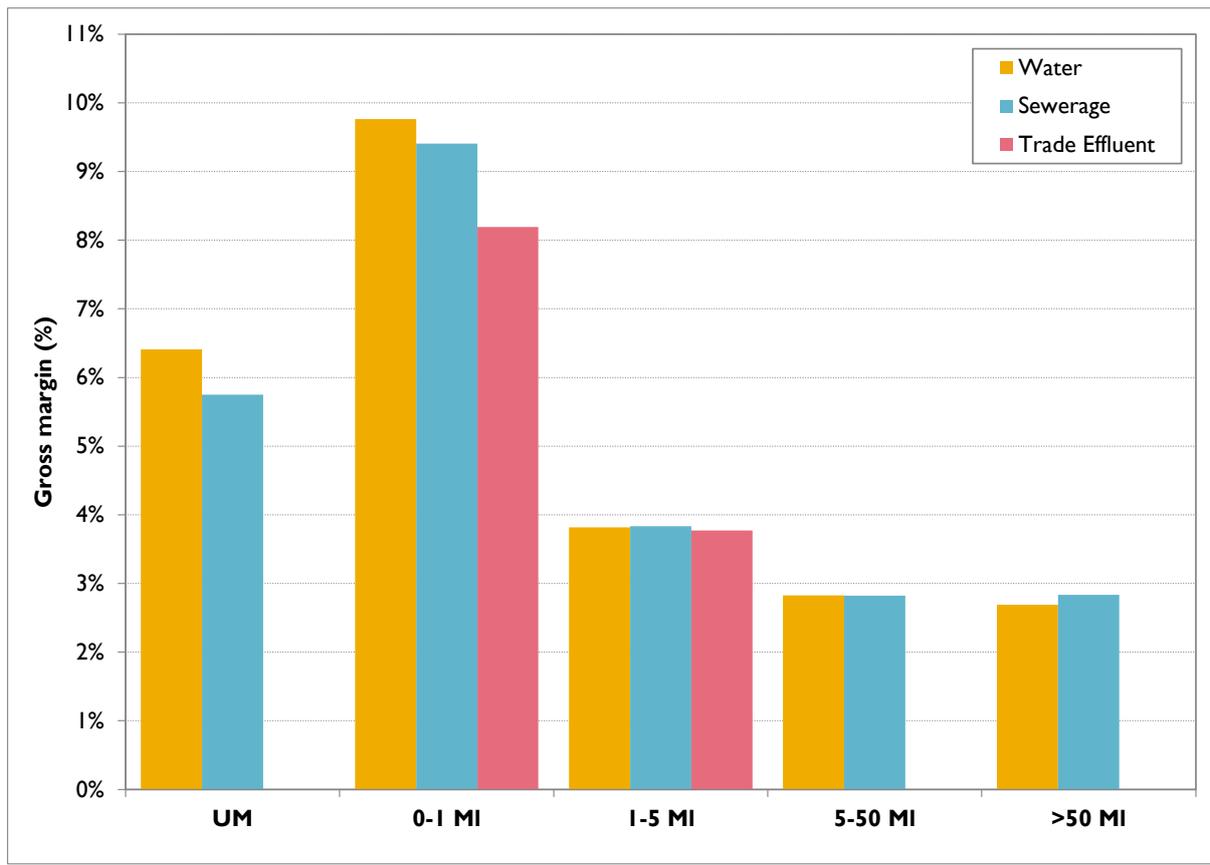
Figure 5: Net margins comparison



104. Incumbent companies are required to provide a clear justification for any changes made to their PR14 approaches to setting default tariffs. The reasons set out in the previous section suggest that the alternative method is a more appropriate approach to allocate the residual margin compared to our PR14 approach. The previous section also highlighted that using the alternative method would allocate more of the total 2.5% net margin to larger customers and reduce the margin allocated to smaller customers.

105. Finally as the margins would not increase significantly for the larger customers, this change should not result in any undue concerns in relation to the resulting tariffs meeting Ofwat’s proposed uniform caps for medium and large customers. The figure below shows proposed gross margins for default tariffs. Trade effluent gross margins above 5 MI per annum are shown integrated with sewerage tariffs as per Ofwat’s methodology for the gross margin caps. Potential incidence effects from the proposed changes are discussed in section 5.

Figure 6: Default tariff gross margins



7. Cost allocation

106. We have reviewed and revised our cost allocation to customer groups using 2015-16 cost data, while keeping within the overall PR14 determined cost allowance. Overall this process has not led to material changes in costs allocated to default tariff bands. In order to assure the Board that non-household default tariffs will be as accurate as possible for the period up to 2020, a full reassessment was performed using 2015-16 costs from the non-household retail business. This involved using the costs reported as part of the APR, disaggregated at a lower level, and applying cost drivers to the data to result in revised cost allocations for each default tariff group.

2015-16 costs

107. The non-household retail business' relative cost efficiency was detailed at PR14. The cost reporting and allocation has been well established for a number of years and has been consistent over time, giving confidence that the costs are correctly allocated and robust.
108. The costs used to calculate revised cost allowances for default tariffs are the same that were reported, audited and submitted for the 2016 APR (table 2C). We allocated the 2016 APR costs to the more disaggregated level for the default tariffs using the same data and calculation methodology as used at PR14.
109. One adjustment was made compared to the reported 2016 APR operating cost values. Over the course of the 2015-16 year, members of the account management team were assigned to the internal market readiness programme and these costs will be seen in future years' depreciation charges rather than in-year operating expenditure. This is clearly an exceptional activity for 2015-16 and post April 2017 we expect account management costs to rise back to the pre-existing level once the business returns to normal operation. The rationale for this necessary step from a cost allocation perspective is that if these costs are not included in the assessment, then:
- the customer charges for account management will not be reflective as the cost allowances will be incorrect, and
 - as larger customers receive much greater account management services, cost would be reallocated towards smaller customers.

Cost drivers

110. At PR14 Ofwat provided guidance to companies on the cost drivers that should be used to allocate retail costs across tariff groups by setting minimum requirements on the use of some cost drivers. In particular, Ofwat set the cost drivers that companies must use for six cost categories. When it confirmed its minimum requirements, Ofwat did not provide any specific guidance on the cost drivers that companies needed to use for the other cost categories. At that time, Ofwat more generally reiterated that companies should allocate all costs in a cost reflective way, and that compliance with its minimum requirements would not necessarily be

sufficient to ensure that the cost allocation approach overall was reasonable from a legal perspective. However, prior to setting these minimum requirements for the use of certain cost drivers, Ofwat had provided more general guidance on the cost drivers that it thought were appropriate to use in allocating total retail costs to the household and non-household retail price controls for regulatory reporting purposes.

111. The table below shows the cost drivers that Ofwat requires incumbent companies to use for the cost allocation of six cost categories.

Table 9: Ofwat PR14 guidance on cost drivers⁷

Cost type	Cost driver
Billing	Number of bills raised
Contacts	Customer numbers
Debt management	Customer numbers
Doubtful debt	Directly attributable
Meter reading	Number of meter reads
Depreciation	Proportioned in line with billing and contact costs

112. As Ofwat has highlighted that companies should also ensure their cost allocation approaches are reasonable in general (i.e. in addition to following the minimum requirements), the other cost drivers that we used were reviewed. As a starting point, the cost drivers that we used were compared to the longer list of cost drivers that Ofwat suggested companies should use earlier in the PR14 process. The table below shows the three cost categories where we have used a different cost driver.

Table 10: Alternative cost drivers used to allocate costs

Cost item	Driver used	Driver recommended by Ofwat	% of costs
Non-network enquiries and complaints	Customer numbers	In order of preference 1) Time spent on non-network customer enquiries and complaints 2) Volume of network customer enquiries and complaints	11.40%
Network customer enquiries and complaints	Customer numbers	In order of preference 1) Time spent on network customer enquiries and complaints 2) Volume of network customer enquiries and complaints	1.40%
Debt management	Customer numbers	Debt outstanding for more than 30 days	8.30%

113. These three cost items (network and non-network enquiries and complaints, and debt management) are only allocated to the lower volume tariff groups (customers

⁷ Ofwat (2014) Setting price controls for 2015-20 – guidance for companies on producing default tariffs, Table 4, p.23

that use less than 5Ml). Costs associated with these activities for the higher volume tariff groups are categorised under the cost item 'account management', as the costs incurred for larger customers are contained within the account management activities and are allocated across tariff groups using a bespoke cost allocation approach than using customer numbers. The rationale for allocating these three cost items for lower volume tariff groups on the basis of customer numbers, rather than account management activity, is that there is no evidence that these costs vary substantially between the lower volume tariff groups.

114. There have not been any changes to the approach adopted compared to that at PR14. As a result, there are no additional justifications required to explain changes between PR14 and PR16.

Reconciliation to PR14 allowed cost

115. An important part of the review of the default tariffs is to ensure that the overall cost allowances set by Ofwat at PR14 for the non-household retail control is unchanged. In the final statement of method, Ofwat confirmed that no adjustments to the overall level of business retail cost allowances are required at present.⁸
116. Our approach to calculating the total allowed cost for the three years (2017-20) covered by the PR16 review has been:
- Step 1: for each of the three years, multiply the cost allowance per customer set by Ofwat at PR14 for each tariff group with the PR16 forecast customer number of the tariff group of that year,
 - then to sum the resulting cost allowance for each tariff group to give an aggregated total cost allowance for each year.
 - Step 2: the resulting overall cost allowance was then applied to results of the new cost allocation by scaling each tariff by the same factor in order to result in revised cost allowances for the years 2017-20. This is shown in the table below.

Mixed use customers

117. Additional complexity was involved in the calculation, due to the proposed change to not charge mixed-use customers differently from 2017. This was required to be unwound from the cost allowances set at PR14 in order to calculate a new total cost allowance for the non-household retail price control that would not be above or below that set at PR14. To do this the proportion of mixed-use customers at PR14 for each tariff group was applied to the new customer forecasts for each year of 2017-20, resulting in the same proportional cost allowance compared to that assumed at the PR14 Final Determination. This approach was audited and confirmed by technical audit.

⁸ Ofwat (2016) Business retail price review 2016: Statement of method and data table requirements, p.10

118. The table below shows cost allowances based on the above method for each tariff group set at PR14. The total cost allowances were then applied to the new cost allocations calculated for this review to result in revised cost allowances for each tariff group.

Table 11: Step 1 – calculation of allowed cost

Default tariff	PR14 allowed retail cost (£ per customer)			Forecast customer numbers (000s)			Allowed retail cost (£m)		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
UM-W	15.88	15.75	15.58	3.727	3.633	3.542	0.059	0.057	0.055
UM-W-MX	27.50	28.09	25.16	0.261	0.254	0.248	0.007	0.007	0.006
UM-S	11.53	11.50	11.46	4.562	4.374	4.194	0.053	0.050	0.048
UM-S-MX	23.51	21.76	22.44	0.350	0.335	0.321	0.008	0.007	0.007
M-W-0	19.40	19.29	19.18	32.165	32.241	32.313	0.624	0.622	0.620
M-W-0-MX	28.07	27.93	27.77	7.768	7.786	7.803	0.218	0.217	0.217
M-S-0	13.62	13.55	13.47	33.702	33.827	33.946	0.459	0.458	0.457
M-S-0-MX	22.28	22.16	22.03	16.869	16.932	16.992	0.376	0.375	0.374
M-TE-0	20.23	19.67	19.11	0.346	0.347	0.349	0.007	0.007	0.007
M-W-1	39.84	39.41	39.24	2.833	2.839	2.845	0.113	0.112	0.112
M-W-1-MX	76.25	76.74	75.98	0.664	0.666	0.668	0.051	0.051	0.051
M-S-1	33.32	33.04	32.75	2.798	2.808	2.817	0.093	0.093	0.092
M-S-1-MX	69.56	69.42	69.22	1.466	1.471	1.476	0.102	0.102	0.102
M-TE-1	40.64	44.03	42.92	0.242	0.243	0.244	0.010	0.011	0.010
M-W-5	156.02	154.28	152.48	0.368	0.368	0.368	0.057	0.057	0.056
M-W-5-MX	231.12	230.86	225.04	0.144	0.144	0.144	0.033	0.033	0.032
M-S-5	137.78	138.61	137.20	0.369	0.369	0.369	0.051	0.051	0.051
M-S-5-MX	183.11	182.42	181.61	0.202	0.202	0.202	0.037	0.037	0.037
M-TE-5	181.51	176.99	182.68	0.089	0.089	0.089	0.016	0.016	0.016
M-W-25	349.06	340.37	331.80	0.039	0.039	0.039	0.014	0.013	0.013
M-S-25	408.40	398.23	409.77	0.044	0.044	0.044	0.018	0.018	0.018
M-TE-25	567.23	553.10	539.17	0.022	0.022	0.022	0.012	0.012	0.012
M-W-50	948.82	965.40	941.09	0.023	0.023	0.023	0.022	0.022	0.022
M-S-50	1,014.34	1,041.12	1,014.90	0.023	0.023	0.023	0.023	0.024	0.023
M-TE-50	1,694.12	1,710.91	1,725.34	0.016	0.016	0.016	0.027	0.027	0.028
M-W-100	1,021.01	1,050.88	1,024.42	0.016	0.016	0.016	0.016	0.017	0.016
M-S-100	1,270.59	1,327.43	1,294.00	0.009	0.009	0.009	0.011	0.012	0.012
M-TE-100	1,732.63	1,769.90	1,725.34	0.010	0.010	0.010	0.017	0.018	0.017
M-W-250	907.57	884.95	862.67	0.002	0.002	0.002	0.002	0.002	0.002
M-S-250	1,512.61	1,474.92	1,437.78	0.002	0.002	0.002	0.003	0.003	0.003
M-TE-250	1,815.13	1,769.90	1,725.34	0.003	0.003	0.003	0.005	0.005	0.005
M-W-500	907.57	884.95	862.67	0.001	0.001	0.001	0.001	0.001	0.001
M-TE-500	1,815.13	1,769.90	1,725.34	0.000	0.000	0.000	0.000	0.000	0.000
Total							2.547	2.538	2.522

119. For consistency the totals calculated in the table above can be seen in the total cost allowances line in the “Output summary” section of the Ofwat data tables.
120. The resulting overall cost allowance was then applied to results of the new cost allocation by scaling each tariff by the same factor in order to result in revised cost allowances for the years 2017-20. This is shown in the table below.

Table 12: Step 2 – recalibration of allowed cost

Default tariff	Customer nrs (000s)			Allowed cost (£m)		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
UM-W	3.988	3.887	3.79	0.077	0.075	0.072
M-W-0	39.933	40.027	40.116	0.918	0.916	0.912
M-W-1	3.497	3.505	3.513	0.163	0.162	0.162
M-W-5	0.512	0.512	0.512	0.052	0.052	0.052
M-W-25	0.039	0.039	0.039	0.012	0.012	0.012
M-W-50	0.023	0.023	0.023	0.02	0.019	0.019
M-W-100	0.016	0.016	0.016	0.015	0.015	0.015
M-W-250	0.002	0.002	0.002	0.002	0.002	0.002
M-W-500	0.001	0.001	0.001	0.001	0.001	0.001
UM-S	4.912	4.709	4.515	0.076	0.073	0.069
M-S-0	50.571	50.759	50.938	0.869	0.869	0.866
M-S-1	4.264	4.279	4.293	0.171	0.171	0.17
M-S-5	0.571	0.571	0.571	0.051	0.051	0.05
M-S-25	0.044	0.044	0.044	0.012	0.012	0.012
M-S-50	0.023	0.023	0.023	0.018	0.018	0.018
M-S-100	0.009	0.009	0.009	0.007	0.007	0.007
M-S-250	0.002	0.002	0.002	0.002	0.002	0.002
M-TE-0	0.346	0.347	0.349	0.008	0.008	0.008
M-TE-1	0.242	0.243	0.244	0.011	0.011	0.011
M-TE-5	0.089	0.089	0.089	0.009	0.009	0.009
M-TE-25	0.022	0.022	0.022	0.01	0.01	0.01
M-TE-50	0.016	0.016	0.016	0.024	0.024	0.024
M-TE-100	0.01	0.01	0.01	0.015	0.015	0.015
M-TE-250	0.003	0.003	0.003	0.005	0.005	0.005
Total				2.547	2.538	2.522

Comparison with PR14 unit costs and cost allowances

121. The results of the unit cost analysis resulted in some changes compared to that carried out at PR14. In order to compare unit costs, two methods are presented here:
- firstly to look at the unit costs at the cost allocation stage, based on APR values compared to that submitted as part of the PR14 business plan, and

- secondly to analyse the final cost allowances compared to those set at the PR14 final determination.

Comparison of cost allocation results

122. The resulting unit costs from the revised cost allocation compared to the similar method performed at PR14 are shown in the table below. These are shown as the percentage of unit cost for each tariff group compared to the other unit costs calculated at this stage.
123. When comparing the results at the tariff group level, the results appear of a similar order of magnitude apart from a few areas. These are discussed below.
- Costs have risen for smaller customers. This is due to an increase in costs for the non-household business incurred as part of separating it. For example more call centre staff are required, increasing the unit for smaller customers by significantly more as a proportion of total cost to serve compared to larger customers.
 - The tariffs with usage of 5-25 Ml per annum have decreased by a material amount. This is because the reassessment of the appropriate split of account management activities resulted in less allocation of time, and therefore cost, compared to the equivalent analysis carried out at PR14. The PR14 allocation estimated £133 per customer of account management cost per year; the revised estimation is £74 per customer. The assessment was updated by the appropriate teams in the non-household retail business, and is therefore an improvement in allocation compared to the previous assessment.

Table 13: Comparison of PR16 unit cost attribution to PR14

Default tariff	PR14 unit cost (£)	PR16 unit cost (£)	Difference
UM-W	0.10%	0.13%	0.03%
M-W-0	0.13%	0.15%	0.02%
M-W-1	0.27%	0.31%	0.04%
M-W-5	1.15%	0.77%	-0.38%
M-W-25	2.94%	2.88%	-0.07%
M-W-50	8.67%	8.74%	0.07%
M-W-100	8.66%	8.79%	0.13%
M-W-250	8.77%	8.86%	0.09%
M-W-500	8.82%	8.86%	0.05%
UM-S	0.08%	0.11%	0.03%
M-S-0	0.11%	0.13%	0.02%
M-S-1	0.27%	0.29%	0.02%
M-S-5	1.14%	0.75%	-0.39%
M-S-25	2.92%	2.85%	-0.07%
M-S-50	8.65%	8.72%	0.07%
M-S-100	8.64%	8.77%	0.13%
M-S-250	8.75%	8.84%	0.09%
M-TE-0	0.10%	0.13%	0.03%

Default tariff	PR14 unit cost (£)	PR16 unit cost (£)	Difference
M-TE-1	0.22%	0.25%	0.04%
M-TE-5	0.91%	0.61%	-0.30%
M-TE-25	2.75%	2.71%	-0.04%
M-TE-50	8.53%	8.72%	0.19%
M-TE-100	8.64%	8.77%	0.13%
M-TE-250	8.75%	8.84%	0.09%

Comparison of cost allowances

124. Once the overall cost allowances were calculated for each default tariffs, based on the revised cost allocation, customer numbers and the overall cost allowance set at the PR14 Final Determination it was possible to compare the new cost allowances per customer for each default tariff. The original PR14 cost allowances for mixed and non-mixed customers were merged to give a weighted average cost allowance, to allow comparison between the old and the new methods. The table below shows this for 2017-18.

Table 14: Comparison of PR14 and PR16 cost allowances in 2017-18

Default tariff	PR14 cost allowance (£)	Proposed PR16 cost allowance (£)	Difference (£)
UM-W	16.64	19.32	2.68
M-W-0	21.09	22.99	1.9
M-W-1	46.76	46.52	-0.23
M-W-5	177.08	102.04	-75.05
M-W-25	349.06	300.47	-48.59
M-W-50	948.82	849.47	-99.35
M-W-100	1,021.01	932.75	-88.26
M-W-250	907.57	805.28	-102.29
M-W-500	907.57	805.29	-102.28
UM-S	12.38	15.45	3.07
M-S-0	16.51	17.19	0.68
M-S-1	45.78	40.07	-5.71
M-S-5	153.85	89.06	-64.79
M-S-25	408.4	266.87	-141.53
M-S-50	1,014.34	780.86	-233.48
M-S-100	1,270.59	789.22	-481.37
M-S-250	1,512.61	801.47	-711.14
M-TE-0	20.23	22.97	2.74
M-TE-1	40.64	44.36	3.72
M-TE-5	181.51	106.13	-75.38
M-TE-25	567.23	473.72	-93.51
M-TE-50	1,694.12	1,526.09	-168.03
M-TE-100	1,732.63	1,534.46	-198.17
M-TE-250	1,815.13	1,546.71	-268.42

Default tariff	PR14 cost allowance (£)	Proposed PR16 cost allowance (£)	Difference (£)
Average	23.34	23.34	0

125. Similarly to the previous unit cost analysis, there are some differences between the new and the previous cost allowances, but for different reasons. These are discussed below.

- Overall, the cost allowance is unchanged and has been calculated based on the same number of customers so the overall allowed cost per customer is the same between the two approaches - £23.34 in 2017-18.
- The cost allowances have increased for smaller customers and decreased proportionately for larger customers. This is because the non-household retail business is starting to incur the costs of a separate retail business, for example requiring increased call centre staff to deal with incoming queries – these costs as a proportion of overall cost to serve are greater for smaller customers.
- There are however some large drops for specific tariffs, specifically the M-S-100 and M-S-250. It appears that the composition of customer within these tariffs have changed since the PR14 submission. Our tariffs incorporate dual service discounts reflecting the economies of scope from providing two services instead of one. The magnitude of the discount for a dual service customer is approximately 45%. Therefore, in higher consumption tariff bands, which have only a very few customers in them, when these allocations change the cost to serve them varies significantly. The forecast of the number of dual service customers entering these bands has decreased for PR16 compared to PR14 therefore the allowed cost, when based on the new customer numbers for these tariff groups has also decreased significantly.

126. While the analysis above has resulted in some changes in cost allowance for some tariff groups, it is proposed that these are carried forward to be used for 2017-20 for the following reasons:

- When looking at some of the cost allowances in isolation, their magnitudes may appear large. But the overall cost change is small when comparing to total customer bill.
- The impact for smaller customers of differences in cost allowances compared to those set at PR14 are more than counterbalanced by the change in the approach to allocating the residual margin. The incidence effects analysis suggests minor incidence effects for customers overall when taking the proposals into account.
- Any incidence effects will not automatically translate onto end customer bills as companies have different tools to smooth charges and allow costs to be

recovered through the variable charge, smoothing incidence effects for lower users.

- The new cost allowances are based on most recent data and therefore can be considered to be more robust than that carried out for PR14, which was based on 2013-14 base data.

8. Ofwat data table commentary

127. Data tables have been completed in conjunction with the Ofwat final method. Two versions of the tables are provided:
- one which is consistent with our historical default tariff structure (“Tariff caps”), in that it provides our proposals in our fully disaggregated tariff groups, and
 - one where the disaggregated tariffs for larger customers have been summed to give aggregated tariffs which conform to Ofwat’s margin caps (“Margin caps”).
128. Data entered was audited as part of the technical audit carried out to assure the submission, and confirmed that the data entered was identical to that resulting from calculation sheets. The sole difference between the two tables are that the “margin caps” set of tables has those individual tariff groups summed to the margin cap level – i.e. all tariffs between the 5 and 50 MI have been summed and all the tariffs over 50 MI have been summed and the average net margin as a percentage computed.
129. The table below shows the difference in structure in Ofwat table structure of tables (i.e. which default tariffs are still in use) for the two tables submitted for this review compared to the original submission in table R4 for the PR14 default tariffs. This is included for reference.

Table 15: Overview of tariffs submitted in Ofwat data tables

PR14 table R4	PR16 Ofwat data table	PR16 Ofwat data table with margin caps
UM-W	Used	Used
UM-S	Used	Used
UM-W-MX	Not used - mixed use tariffs not progressed	Not used - mixed use tariffs not progressed
UM-S-MX	Not used - mixed use tariffs not progressed	Not used - mixed use tariffs not progressed
M-W-0	Used	Used
M-S-0	Used	Used
M-TE-0	Used	Used
M-W-0-MX	Not used - mixed use tariffs not progressed	Not used - mixed use tariffs not progressed
M-S-0-MX	Not used - mixed use tariffs not progressed	Not used - mixed use tariffs not progressed
M-W-1	Used	Used
M-S-1	Used	Used
M-TE-1	Used	Used
M-W-1-MX	Not used - mixed use tariffs not progressed	Not used - mixed use tariffs not progressed
M-S-1-MX	Not used - mixed use tariffs not progressed	Not used - mixed use tariffs not progressed
M-W-5	Used	Used - now margin cap for water 5-50 MI, M-W-5-MC

PR14 table R4	PR16 Ofwat data table	PR16 Ofwat data table with margin caps
M-S-5	Used	Used - now margin cap for sewerage 5-50 MI, M-S-5-MC
M-TE-5	Used	Not used - collated into M-S-5-MC
M-W-5-MX	Not used - mixed use tariffs not progressed	Not used - mixed use tariffs not progressed
M-S-5-MX	Not used - mixed use tariffs not progressed	Not used - mixed use tariffs not progressed
M-W-25	Used	Not used - collated into M-W-5-MC
M-S-25	Used	Not used - collated into M-S-5-MC
M-TE-25	Used	Not used - collated into M-S-5-MC
M-W-50	Used	Used - now margin cap for water >50 MI, M-W-50-MC
M-S-50	Used	Used - now margin cap for sewerage >50 MI, M-S-50-MC
M-TE-50	Used	Not used - collated into M-S-50-MC
M-W-100	Used	Not used - collated into M-W-50-MC
M-S-100	Used	Not used - collated into M-S-50-MC
M-TE-100	Used	Not used - collated into M-S-50-MC
M-W-250	Used	Not used - collated into M-W-50-MC
M-S-250	Used	Not used - collated into M-S-50-MC
M-TE-250	Used	Not used - collated into M-S-50-MC
M-W-500	Used	Not used - collated into M-W-50-MC
M-TE-500	Not used - no customers remain in this band	Not used - no customers remain in this band

130. The wholesale revenues, cost allowances and net margins stated in the tables are consistent with those stated in this report. The drop in total allowed cost in 2017-20 is due to the drop in customer numbers reported in 2015-16. The drop in the net margin (stated as an absolute value) and wholesale revenue is due to the drop in customer numbers and the overstating of the PR14 allowed wholesale revenues as discussed in section 3.
131. While the total non-household charge decreases overall compared to that at PR14, the wholesale revenue per customer increases. This is due to the average customer profile changing due to the drop in customer numbers. As stated in section 4, the customers reallocated to the household price control are in the main of low consumption, so the average customer is larger than that assumed at PR14, hence the increase in consumption for the remaining customers.

9. Supporting information – Default tariff code classification

The following table is included for information and describes the customer definitions within the default tariff codes.

Default tariff	Service supplied	Measured / Unmeasured	Consumption per annum
UM-W	Water	Unmeasured	N/A
M-W-0	Water	Measured	0-1 MI
M-W-1	Water	Measured	1-5 MI
M-W-5	Water	Measured	5-25 MI
M-W-25	Water	Measured	25-50 MI
M-W-50	Water	Measured	50-100 MI
M-W-100	Water	Measured	100-250 MI
M-W-250	Water	Measured	250-500 MI
M-W-500	Water	Measured	>500 MI
UM-S	Sewerage	Unmeasured	N/A
M-S-0	Sewerage	Measured	0-1 MI
M-S-1	Sewerage	Measured	1-5 MI
M-S-5	Sewerage	Measured	5-25 MI
M-S-25	Sewerage	Measured	25-50 MI
M-S-50	Sewerage	Measured	50-100 MI
M-S-100	Sewerage	Measured	100-250 MI
M-S-250	Sewerage	Measured	>250 MI
M-TE-0	Trade Effluent	Measured	0-1 MI
M-TE-1	Trade Effluent	Measured	1-5 MI
M-TE-5	Trade Effluent	Measured	5-25 MI
M-TE-25	Trade Effluent	Measured	25-50 MI
M-TE-50	Trade Effluent	Measured	50-100 MI
M-TE-100	Trade Effluent	Measured	100-250 MI
M-TE-250	Trade Effluent	Measured	>250 MI

Appendix 1 – Non-household retail price control research debrief: Blue Marble



Background & research objectives

2

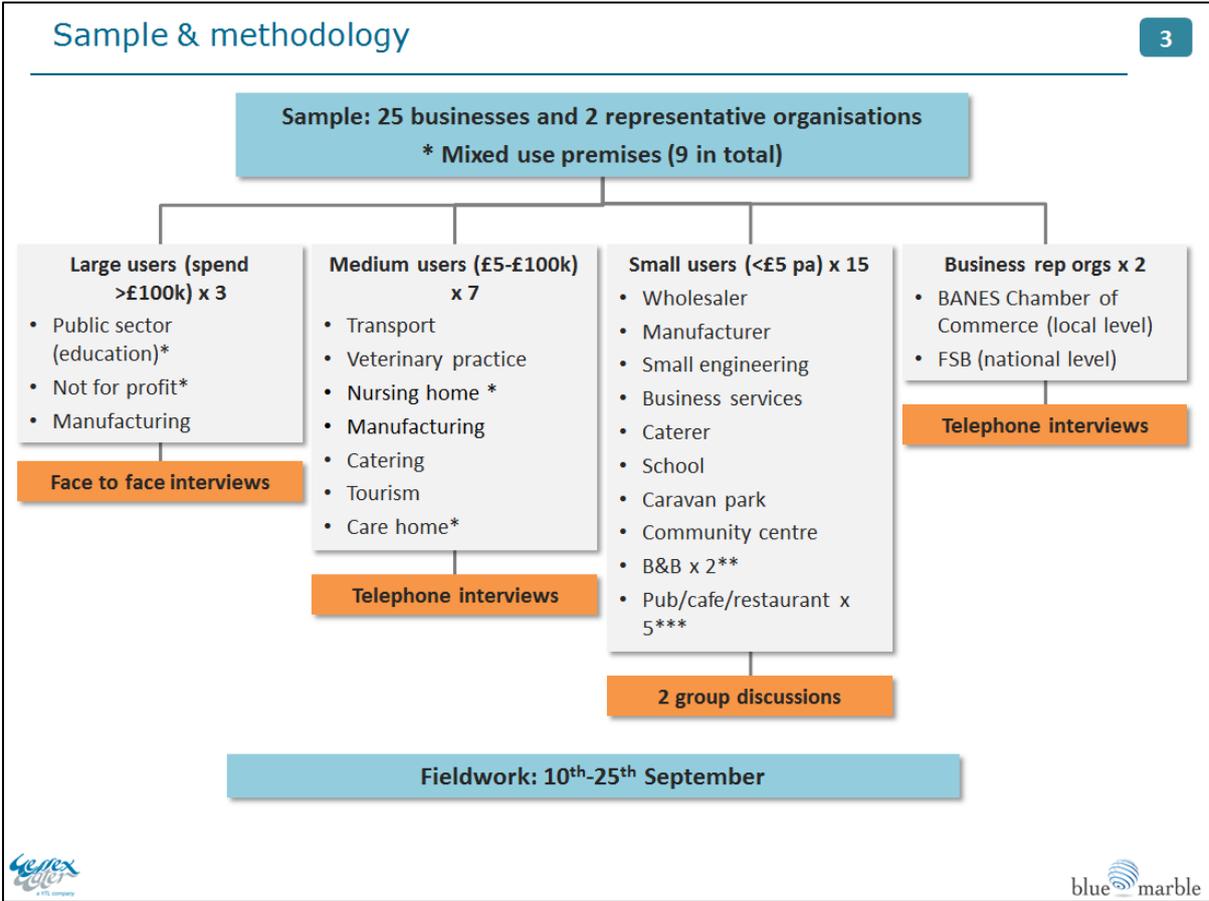
Research context

- Ofwat guidance on setting price controls includes the requirement for a 'back stop' level of protection for non-household customers when the market opens up in 2017.
- Wessex Water has proposed default tariffs as part of its Business Plan. The proposals include different tariffs for different types of business customer determined by volume usage, type of property and number of retail services supplied (i.e. acknowledging the varying cost and risk of serving different types of customers).



Research objectives

- To understand the views of a broad range of non-domestic customers in relation to the structure of Wessex Water's proposed default tariffs.
- Specifically, to assess how acceptable and fair non-domestic customers find the revenue levels and profit margins for the proposed tariffs.



Summary: large users

4

Context

- Familiarity with idea of water tariffs
- Some awareness of competition now

Relationship with Wessex Water

- Very positive: both personal contact and with BWSL
- Glad to be consulted: would expect further conversations with Wessex Water on the subject of new tariffs

Specific observations about large users

- Specifically, two have dwellings within their many sites but do not pose a non payment risk (in their view)
- These organisations are *'more excited about ways to save money'* than the tariff structures: cost control is paramount
- Mixed feelings about competition: they will scan the market and switch (as they do for gas and electricity) but service delivery is also hugely important
 - Will be looking for service enhancements, more services and for Wessex Water *'to sharpen its act'*

They are the best organisation to deal with.
Large user

This is the best relationship we have with any utility.
Large user

Response to tariffs

- Initial agreement with overarching principle of tariffs based on cost to serve, however:
- Want to see level charging for rural and urban as see difficulties in categorising businesses this way – and it appears fairer
- Think penalty for mixed use customers will be uncommercial as businesses will switch away: instead Wessex should manage its debt
- Dual service charge is fair, transparent and has precedents in other sectors
- See service charges as giving value for money for their business – but anticipate small users less happy with high % service charges
- All see their organisations as unique: hard to see how Wessex Water could categorise them for a default tariff




Review of non-household price limits – June 2016

44

Summary: medium users

5

Context

- Broadly familiar with own usage and spend
- Some actively reducing usage to reduce costs

Relationship with Wessex Water

- Little personal contact but call centre praised
- Problems dealt with positively (e.g. bill adjustment post leak)
- For some, bills not very clear
- Sketchy awareness of Ofwat and no awareness of competition

Specific observations about medium users

- Negative feelings about competition
 - Bombarded with sales calls for energy
 - Fear opaque charging systems and complex tariffs
 - Do not anticipate switching unless significant savings to be made (would need to save a significant % of the 5% service cost element)

If giving more help to some businesses that should be reflected in the cost.

Medium user

Response to tariffs

- Principle of tariffs based on cost to serve is sound, however some are initially confused between service and delivery costs
- Energy context makes businesses nervous: glad to see regulatory protection but still wonder if businesses will end up on wrong tariff (paying too much)
- Universal agreement for level charging for urban and rural businesses and for dual service discount
- Risk-based charging for mixed use premises:
 - Accepted by commercial-only businesses (who see it from WW's perspective)
 - Rejected by mixed use businesses who see it as Wessex Water's responsibility – not theirs
- Potential for alternative tariff designed for non-profit organisations (esp. schools who educate about water use)?



blue marble

Summary: small users

6

Context

- For many, water bills back of mind and just accepted: no sense of how businesses are charged
- For others, water use a significant business cost (guest houses, pubs etc)
- Some unmetered
- Minority monitor use and spend monthly (schools)

Relationship with Wessex Water

- For most, remote but agree good reputation
- Some positive experiences: e.g. bill reducing post meter installed and community involvement (school donation)

Specific observations about small users

- Negative feelings about competition
 - Anticipate service deterioration
 - Anticipate price increases
 - Anticipate increase on sales calls
 - And for 'such a small slice of the bill'

What a shame. It will become confusing when open to competition.

Small user

Response to tariffs

- Weak endorsement for the principle as not sure what types of business will cost more to serve
- Harder for small businesses to envisage service other than a bill – see difference in terms of volume used (and can only envisage volume discounts)
- For some, actual cost of service looks high: 'it will cost Wessex Water pennies to run my account'
- Agree with level charging for urban and rural and dual service discount
- Majority reject higher charging for mixed use (irrespective of whether they themselves are)



blue marble

Anticipating competition 7

**Many businesses fear increased costs and deterioration of service in new competitive world...
Fears couched in context of frustrations with energy market.**

This isn't going to excite many companies – a certain segment of the existing delivery market will clean up.
Medium user

It will depend on the efficiency of the service and the price variation – but I will shop around. We have to.
Medium user

Will they all have the same tariffs? If not it will become impossible to compare.
Small user

With energy you avoid change if you possibly can. They are playing with us – if this is how the water is going to be then no thanks.
Small user

I fear the service will fall to where it is with the electricity and gas companies.
Large user



Response to principle 8

Initially, the principle of tariffs that reflect the cost of service is accepted by the majority of businesses as it appears to be a fair and transparent way to treat business charging.

The Principles

- Tariffs must reflect the cost of the service provided, including a profit within the limits set by Ofwat, so that businesses that are cheaper to serve should pay less
- Tariffs must be simple and transparent for customers and efficient to administer

- However businesses are not used to considering service costs separately and many automatically assume cost of service is linked with volume of use
- Also, many anticipate that this principle will be applied to individual businesses rather than to a pre-ordained segment
- Clarity and transparency resonates with the majority of businesses bruised by their treatment from the energy sector

N.B. While at a theoretical level customers accept the principle, their responses to how the tariffs will be structured in practice reflects a more confused picture.
ACCEPTANCE DEPENDS ON HOW THE PRINCIPLE IS APPLIED IN PRACTICE



Response to rural vs. urban option 9

OPTION 1: Customers in rural areas are charged more as the cost of reading meters is greater.

Business A: urban Business B: rural Business A or B

OPTION 2: All customers are charged the same whatever location they are in.

23 out of 25 businesses support the option 2: to charge urban & rural businesses the same

- Simply unfair to disadvantage rural businesses (who need supporting)
- If they *use* the same they should be charged the same (mentioning equivalents e.g. BT, Post Office who don't discriminate)
- A political minefield to discriminate; practical difficulties defining rural/urban and could be costly with customer appeals
- The financial differential is small: not enough to worry about
- Wessex water should overcome the cost differential e.g. with smart meters
- To a minority, however, it conflicts with principle, hence choose option 1

Almost universal agreement here demonstrates that businesses do not always agree that it is fair to charge what it costs to serve.

Businesses can't help where they are; they need the same service.
Medium user

Why not have remote metering? Why should it cost them more.
Small user

Although it goes against us it does seem fairest. Businesses in rural areas provide food and so on.
Medium user

If everyone gets the same level of service then everyone should pay the same.
Small user

Response to mixed use vs. commercial-only option 10

OPTION 1: Commercial-only premises are charged less because the risks of non-payment are lower than average. Mixed use premises are charged more because the risks of non payment are greater than average.

Business A: Mixed Use water & sewerage Business B: Commercial-only water & sewerage Business A or B

OPTION 2: All premises pay the same and so are assumed to have the same likelihood of non payment.

10 out of 25 businesses support the option 2 while 15 do not support it: to charge mixed use customers more because of the risks of non payment

- Highly contentious: mixed-use customers who are 'good payers' see as especially unfair
- Risk seen to be responsibility of Wessex: why not sub meter mixed-use properties? Or manage debt better?
- Some assume this will trigger businesses to pay for sub meters (relieving Wessex Water of the cost burden)
- Large mixed-use customers do not see themselves as risky (formal procurement, government underwrites costs)
- Support comes from commercial-only customers who see this in same light as insurance where you pay according to risk profile
- However, also speculate that this could be uncommercial for Wessex: cost differential is high enough to trigger switching

Although the principle has been applied to this tariff, the majority see as unfair because 'good mixed use customers' are cross-subsidising 'bad mixed use customers'

We've been here since 1996, we've paid every bill in full – however now they will now penalise us because of [the actions] of others.
Medium user

This doesn't feel equitable. Smooth it out – there's only £5 between them. No one will leave for £5 but they might for £130.
Large user

But the debt is Wessex's problem – the resolution is to split the supply.
Small user

Quite fair, it's a higher risk – we know non payment is really hard on businesses.
Medium user

It's important that the cost of the service a business receives is reflected in the tariff, & that the supplier can manage its risks.
Small user

Response to dual service option 11

OPTION1: In reality it costs more than £52 to supply a single service to one customer but it costs less than £104 to supply two services to one customer – but this is currently ignored when setting charges.

£52 one service only	£52 waste	£52 water	£55 water
£52	£104	£55 waste	£55 one service only
Now: no dual service discount		Proposed: dual service discount	

OPTION2: This accounts for the efficiency savings of supplying two services but customers with only a single service now pay the full costs of providing a single service.

22 out of 25 businesses support option 2: to provide a dual service discount and charge the full costs for a single service

- No grey areas, easy to define
- Customers can choose to be single or dual user
- Mirrors energy sector & reflects convention to reward higher spend
- A selling point in competitive context
- No comments on reasons for non support

This example is where the principle accords with customers expectations: tariff seen as a reward for good custom (i.e. choosing both services)

We have the same with our other suppliers: the more we spend the greater the discount.
Medium user

I'm happy with this proposal, I can't really say why it just looks and feels fairer.
Large user

It brings water in line with other utilities.
Small user

Good idea. When we look around for energy we take this as a selling point.
Small user

I totally agree with this. And it's more applicable here than it is in the context of gas and electricity: in this case waste is worked out on consumption – no second meter to read.
Small user

Value for money 12

Total annual bill	Mixed use	Service charges as % of total bill
£500	£65	13%
£1,000	£100	10%
£10,000	£250	2.5%
£50,000	£600	1.2%
£100,000	£700	1.4%
£1,200,000	£1,200	1.2%
£5,400,000	£5,400	1.1%

- Ofwat's profit cap of 2.5% looks fair - even modest (though hard for many to judge and reflects a much lower margin than they would accept)
- Generally businesses see the service costs as good value and are surprised how small these are as a proportion of total bill
 - Comments, especially from larger users, set within context of positive service associations with Wessex Water
 - Others find it harder to judge value for money for a vital commodity
- Some smaller users, however, consider the finite amount (e.g. £100 of a £1000 bill) high for perceived minimal service (e.g. 2 bills a year paid by DD)
 - This is also reflected in FSB's comments who want to see much greater transparency of costs
 - Customers unclear about what service costs comprise – other than a bill

I guess it is [value for money]; it's hard to judge.
Medium user

Smaller businesses might feel this is punitive.
Large user

You just accept the commercial reality: there is a minimum cost of having a customer on the ledger and it won't go up to the same proportion as usage.
Medium user

It looks pretty fair for what you get – especially if you need help. It's not extortionate.
Medium user

Summary scores from self-completion exercise 13

Agreement with guiding principle

GUIDING PRINCIPLE

Tariffs must reflect the cost of the service provided, including a profit within the limits set by Ofwat, so that businesses that are cheaper to serve should pay less

Strongly agree 13

Slightly agree 9

Slightly disagree 3

- Principle remains sound **in theory**
- NB: some struggle to distinguish service (retail) and delivery (wholesale)

Your support for options Wessex is proposing

	Very supportive	Fairly supportive	Fairly unsupportive	Very unsupportive	Don't know
Charging rural and urban businesses the same amount despite the cost to serve being higher for rural businesses	15	8	1	1	-
Charging businesses with 'mixed use' premises more because of the higher risk of non payment	5	5	3	10	2
Charging businesses who have both waste and water services a dual service tariff that reflects the efficiencies of this; while charging businesses using a single service the full cost of doing so	14	8	1	1	1

- Most respondents weigh up all three examples and conclude that because they support at least 2 of the 3, their overall view is to say 'fair' – this is true of several of the mixed use businesses who are very unhappy about that tariff, but happy with the other two tariff options
- Some medium and larger users are more inclined to say the plans are fair for them but less so for small users

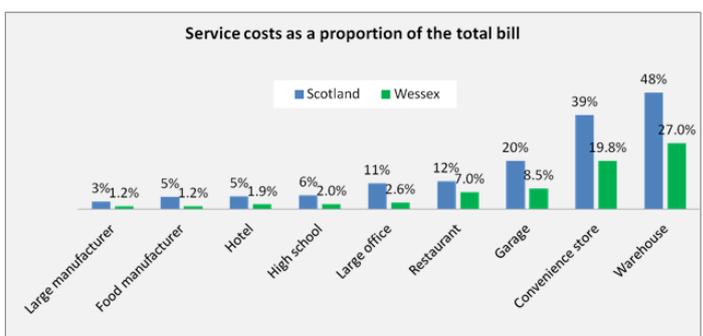
How fair is Wessex Water being to

	Very fair	Fair	Unfair	Very unfair	Don't know
Your business?	3	20	-	1	1
Its business customers as a whole?	4	16	3	-	2




Response to cost comparison with Scotland 14

Service costs as a proportion of the total bill



Business Type	Scotland (%)	Wessex (%)
Large manufacturer	3%	1.2%
Food manufacturer	5%	1.2%
Hotel	5%	1.9%
High school	6%	2.0%
Large office	11%	2.6%
Restaurant	12%	7.0%
Garage	20%	8.5%
Convenience store	39%	19.8%
Warehouse	48%	27.0%

Respondents not sure how to interpret this analysis:

- Do businesses in Scotland get more/better services?
- Does this mean prices will go up in a competitive market?
- Does geography and population distribution explain the higher service costs?
- Is it that water is more plentiful therefore service as a proportion of the bill is larger?




Business representative organisations

15



BANES Chamber of Commerce

- Has 150 members of all sizes
- Happy with principle and the example tariffs
- Happy with the rules around default tariffs incl. 2.5% profit cap
- Rural/urban: margin is so small urban businesses will not feel disadvantaged
- Mixed use: agreement with proposal as margin is big enough to warrant different tariff structures (acknowledges Guest Houses etc may not agree)
- Dual service: 'makes complete sense'
- Wants to see review in 2017



Federation of Small Businesses

- 250,000 members
- Principle is logical and right however tariffs need to be comparable between providers
- Concerns re. service charges esp. at lower end as small users do not make use of additional services
- Wants to see more transparency of service costs so customers pay only for the services they use
- Wants to see more emphasis on water companies empowering business to reduce their costs
- Rejects cross subsidising where cost is an industry issue (e.g. more expensive to read meters in rural areas because industry slow to adopt smart meters)

As the goal posts are going to shift significantly in 2017 I think it would be a sensible approach to review the tariffs before April of that year in order that everyone starts on a level playing field.
C of C

The principle is absolutely right. There will be a small company who says 'Why do I pay more pro-rata?', but it's reasonable to say that the cost is more to service you.
C of C

It can't represent value for money because you are not giving them anything.
FSB




Summary & Conclusions

16

On balance, non domestic customers agree that the default tariffs Wessex Water is proposing are fair

Acceptance, however, is conditional.

- Customers *accept the proposals* where the tariff structure is based the actions of the business – and therefore they can have some control over it e.g. choosing a dual service tariff
- Customers tend to *disagree with the tariff proposals* where they perceive they have no control over the way they have been allocated e.g. mixed use tariff

- Businesses want to see how they can 'earn their way' out of a tariff category; or that there will be exemptions for low risk customers who fall into higher risk categories
- Crucial for default tariffs to be transparent: to enable non domestic customers to check their own allocation and compare like for like in an open market

Generally non domestic customers see the revenue levels as acceptable

- Some smaller users are unclear about what is included in service costs - other than a bill – in which case the finite costs can look high

Things I can/will be able to control

- Volume used
- One or dual services

Things I can't/will not be able to control

- Non payment of other businesses
- Where my business is located
- Wessex Water's efficiency/ ability to collect debt

I don't want to be black-listed – I want to be able to earn my way out of this tariff. If I behave in a certain way I can get onto a lower tariff.
Small user

It'll all be about where we land, which segment we are put into.
Large user

I want to be seen as an individual rather than lumped into a [category].
Large user




Contact



E: enquiries@blumarbleresearch.co.uk

W: www.blumarbleresearch.co.uk

T: 01761 239329

Appendix 2 – PR16 non-household retail price review assurance statement for Wessex Water’s Board: Frontier Economics

PR16 NON-HOUSEHOLD RETAIL PRICE CONTROL REVIEW

Assurance statement for Wessex Water's Board

We were commissioned by Wessex Water to review its proposed default tariffs for the PR16 non-household retail price control review. This note sets out a brief summary of our work for the benefit of Wessex Water's Board.

Background and objective

In April 2017, the competitive non-household retail sector will be widened to encompass all non-households that are supplied by a water company operating wholly or mainly in England. Ofwat will continue to protect non-household retail consumers for at least the first three years after April 2017, and will provide this 'back-stop' protection through the use of default price caps that will be applied as part of PR16.¹ Companies operating wholly or mainly in England are required to respond to Ofwat by setting out their proposed default tariffs for PR16, with supporting justification for these proposals.

On 19 May 2016 Ofwat published its final statement of method for the PR16 price control, including confirmation that it will apply uniform caps to gross margins for medium and large customers. Ofwat has decided to introduce these uniform caps to help simplify tariff structures, and provided indicative levels of these caps in its final statement of method.

Frontier Economics was commissioned by Wessex Water to review the analysis underlying its proposed non-household default tariffs. Based on this assessment, Frontier Economics was asked to provide a view on whether Wessex Water's tariffs are consistent with Ofwat's stated policy for PR16, and with its legal obligations, including competition law.

The key objectives of this project therefore were to answer the following questions.

- Do Wessex Water's proposed default tariffs appropriately reflect the principles of competition law?
- To what extent are Wessex Water's proposed default tariffs consistent with Ofwat's final statement of method for PR16?

¹ PR16 is the name given to the non-household retail price control for the last few years of AMP6 (i.e. it will run from April 2017 for three years).

To consider these questions, we reviewed Wessex Water’s proposed default tariffs, alongside the licence requirements relating to competition law, and Ofwat’s final statement of method for PR16.²

It is important to highlight that our assessment only considered the methods used to allocate costs and margins across tariff groups. We did not assess the data inputs, including:

- customer numbers (in total, and in each tariff group);
- total retail revenue to be recouped;
- the split of costs / revenues between the household and non-household price controls;
- cost drivers; and
- other input data (such as the amount of income that is collected).

We understand that Wessex Water has commissioned a third party to assess these inputs to the calculations, and that Wessex Water has made any necessary updates to the PR14 inputs (e.g. updating customer numbers and wholesale revenues to take account of changes to customer eligibility).

Framework adopted

Competition law principles

In order to assess whether Wessex Water’s non-household retail tariffs are likely to be consistent with competition law, we first needed to establish the relevant competition law issues that could arise. The principles of competition law are reflected in the licence conditions that incumbent water companies must meet and in Ofwat’s charging scheme rules. For example, licence condition E states:

*“It shall be the duty of the Appointee in fixing or agreeing charges...that no undue preference is shown to, and that there is no undue discrimination against, any customer or potential customer”.*³

We further note that licence condition R more generally requires that incumbent companies do not engage in any anti-competitive behaviour. Since our work was specifically related to the design of charges, rather than Wessex Water’s behaviour more generally, we only assessed Wessex Water’s proposals against this licence condition insofar as they relate to the setting of charges.

We also note that competition law principles are reflected in the charging scheme rules issued by Ofwat.⁴ These rules mainly relate to the wholesale charges that incumbent companies set, which are outside the scope of our review. However, to the extent that these rules also apply to the retail charges that companies set, they are relevant to our review.

² Where relevant, we also referred to Ofwat’s previous publications in relation to PR16, for example, its draft statement of method and its November 2015 consultation on PR16.

³ Department of the Environment (2015): Instrument of Appointment by the Secretary of State for the Environment of Wessex Water Services Limited as a water and sewerage undertaker under the Water Act 1989, p. 63

⁴ Ofwat (November 2015), Charges scheme rules issued by the Water Services Regulation Authority under sections 143 (6A) and 143B of the Water Industry Act 1991

In reviewing whether Wessex Water's tariffs are consistent with licence conditions E and R, the charging scheme rules issued by Ofwat, and the underlying competition law principles, we identified the following aspects of tariff design that Wessex Water's proposals should meet.

- First, prices should be cost reflective, including a reasonable basis for the allocation of joint or common costs.
- Second, the profit level or margin should reflect the reasonable return expected by investors, taking account of the risks involved. A margin that is too high relative to this level could be considered to be excessive pricing. A margin that is too low relative to this level could be considered to be anti-competitive by restricting efficient entry (a margin squeeze).

If the proposed tariffs meet these two principles, then no one tariff group should be given undue preference, or be unduly discriminated against.

Ofwat's requirements

We reviewed the relevant Ofwat guidelines, including its most recent document on the method it will adopt for PR16 (the Ofwat final statement of method for PR16). We assessed Wessex Water's methodology against the specific Ofwat requirements for PR16 to test whether Wessex Water's approach is consistent with these requirements, and more general Ofwat guidelines for PR16.

Our approach

To inform our assessment we reviewed the following materials.

- Ofwat (November 2015), Consultation on the review of non-household retail price controls
- Ofwat (March 2016), Draft statement of method and data table requirements – Review of non-household retail price controls
- Ofwat (May 2016), Business retail price review 2016: Statement of method and data table requirements
- Spreadsheet with calculations: Default tariffs PR16 (received 1 June 2016)

In our review of Wessex Water's proposed default non-household retail tariffs, we carried out the following two tasks.

- **Reviewed the cost allocation.** We assessed Wessex Water's cost allocation process to test whether it appeared robust, cost-reflective, and consistent with Ofwat's guidelines on cost allocation. In particular, we assessed whether Wessex Water's approach met the minimum requirements that Ofwat has set on cost allocation, and whether the approach is consistent with Ofwat's more general guidance on cost allocation.
- **Reviewed the margin allocation.** We reviewed Wessex Water's margin allocation approach, and considered whether it is consistent with competition law principles and with Ofwat's final statement of method for PR16. We analysed the incidence effects of any changes that Wessex Water had made to its approach since PR14.

Conclusion

We employed an assessment framework based on fundamental economic principles relating to the design of a default tariff structure in a retail market newly open to competition. Our assessment considered whether the proposed default tariffs are cost-reflective and are likely to enable fair access to competition for different segments of the non-household market. Furthermore, our assessment framework paid attention to the principles of competition law and Ofwat's final statement of method for PR16, as well as incidence effects and general acceptability of the tariff structure.

Overall we found that Wessex Water's approach to determining non-household retail default tariffs is reasonable and robust. We found that the approach taken by Wessex Water to allocate costs and margins to the default tariffs is reasonable. We provide below a summary of our conclusions.

- The approach is robust in that it is evidence based, uses appropriate drivers, and makes a reasoned attempt at allocation according to cost-based principles. Overall it appears to us that any differences in tariffs across customers are based on sound cost and risk-based justification.
- We further note that the resulting changes to the tariffs that were proposed at PR14 are justified.
- It appears to us therefore that the resulting approach is consistent with competition law principles and our understanding of how it has been applied in case law. In particular the proposed default tariffs are consistent with licence condition E, which requires Wessex Water to show no undue discrimination against certain customer groups, or undue preference to particular customer groups.
- In addition, the consistent application of these default tariffs by Wessex Water in our view would not be inconsistent with the company's obligations under condition R, which requires it to show no undue discrimination between its customers and those of other licensed water suppliers in its provision of combined and wholesale water supplies.
- To the extent that charging scheme rules issued by Ofwat under section 143B of the Water Industry Act 1991 are relevant here, we consider that Wessex Water's approach is consistent with those particular rules.

Finally, we note that Wessex Water's proposed default tariffs are not inconsistent with the level of the uniform caps for medium and large users that Ofwat has indicated it is likely to use at PR16. If Ofwat sets these uniform caps at the levels suggested in its final statement of method, and the caps apply on an average basis for each tariff group, Wessex Water's proposed default tariffs would allow it to meet these uniform caps.