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Andrew Walker
PR16: Business retail price controls
Ofwat
21 Bloomsbury Street
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26th October 2016

Dear Andrew

Business retail price review 2016: Draft Determination

On 15th September Ofwat published its draft determination of our PR16 price controls, which stated that it did not accept our proposals and that the tariff caps set at PR14 would be retained. In the draft determination Ofwat raised four key concerns which are summarised below, together with our response to each:

1. Cost allocation

Ofwat expressed concern about the reduction of costs allocated to large water companies and the lack of information to support these changes. In response to this we have provided greater detail on our approach to cost allocation, in particular utilising the improved reporting capabilities within our new billing system which now allows us to allocate a greater proportion of costs directly to different customer groups (*please see Appendix A for the supporting explanatory note*). We have also provided a comparison betweem our detailed cost allocations at PR14 and those used in our PR16 default tariff caps. (*This spreadsheet is provided in Appendix B*).

2. Allocation of net margins

Ofwat did not support our proposals for alternative margins for non-contestable and contestable groups, which were based on our observations of the market behaviour of English companies. We acknowledge that Ofwat's proposals to introduce gross margin caps to the contestable segment may address our concerns, but at this time it is unclear how this will change future market behaviour. (*A full summary of our position is included in the explanatory note in Appendix C*). We have resubmitted our default tariffs with margins at 2.5% for contestable customers and 1% for non-contestable customers.

3. Bill impacts

Ofwat was unable to determine the impact of our proposed changes to cost and margin allocation on bills, particularly for smaller customers. In response to this we have provided an overview of the impact of our proposals on current (2016/17) non-household charges and provided assurances that there will be no material impact on bills for any individual group of customers when we set tariffs for 2017/18. (*Appendix D contains our explanatory note on this matter*).

4. Customer numbers

The final area of concern raised by Ofwat was the lack of convincing supporting explanation as to why the reduction in customer numbers should not be accompanied by a reduction in overall cost allowances. In response, we have outlined how we derive the number of customers for the purposes of reporting and how this information was used to develop our original forecasts at PR14. Since that time we have replaced our billing system, with the result that we have more detailed income information. This in turn impacts on our income derived customer numbers and we have updated our forecasts of customer numbers for this. However, our cost projections are unchanged as our plans were not based on an assessment of the transactional cost of serving each customer. (*Please refer to Appendix E for our explanatory note on this matter*).

Finally, we have also taken this opportunity to reconsider default tariff caps for our non-household customers. We are proposing that aggregated default tariff caps be set by Ofwat for:

- water customers using less than 50ML per annum;
- water customers using more than 50ML per annum; and
- all wastewater customers.

We are of the view that this will minimise the impact of unanticipated shifts in relative costs between price reviews, as well as allowing tariff innovation (*A summary of our position is included in Appendix F*). We have included our restated data tables with this letter.

If you have any questions in relation to these representations please contact Samantha James (07786 258393 or Samantha.james@dwrcymru.com).

Yours sincerely

pp Samantha James

Mike Davis
Director of Strategy and Regulation

Appendix A: Dwr Cymru Retail Non-household Cost and Bad Debt Allocation (2016 Price Review)

Explanatory Note

Introduction

The purpose of this note is to provide a detailed explanation of, and justification for, the changes made in DCWW's allocation of non-household retail costs between PR14 and PR16. The note should be read in conjunction with the attached spreadsheet ("*Dwr Cymru_PR16 cost allocation comparison.xlsx*").

General

The standout factor in driving the difference between the work carried out for PR14 and the updated allocation work carried out for PR16 is the change in the company's billing system that was implemented during 2014/15, which facilitated much greater use of direct cost allocation and reduced our reliance upon cost appointment and assumptions.

At PR14 we had limited, if any, visibility of the operational information that was needed to attribute costs between the different customer groups. This was due to the age and restricted reporting capability of our legacy billing system (CAS). Therefore costs were mainly apportioned on the basis of customer numbers, with some adjustments for the different number of bills issued to different customer groups.

In our review of default tariff caps for PR16, we developed a new approach to allocating costs across different customer groups. Our new billing system, RapidXtra, has a much improved reporting capability which allows us to extract and analyse operational information in greater deal. This has manifest itself in a number of ways, as demonstrated in the detailed line commentary below. First, for several categories of cost we have been able to allocate expenditures directly to each customer group based on the specific customer record to which the cost applies, rather than rely upon assumed apportionments. Second, now that we have more detailed information on costs it has been possible to use a more granular set of cost drivers where apportionments are made. For example, non-network contacts are made up of the staff costs of dealing with telephone and written contacts, as well as the postage and stationery costs of responding to written contacts - the drivers across the different customer classes will not be the same for each of these cost elements, but we are now in a position to reflect this, whereas at PR14 we had to take a more high level, broad-brush approach.

There are some activities where customer numbers continues to be the most appropriate basis of allocation. These activities account for less than 15% of costs.

The 2015-16 retail costs were then allocated across our entire customer base (household and non-household) using (i) Ofwat guidance on household and non-household allocation, and (ii) the methodology agreed as a result of the review above. The output of this exercise was used to set the allocation percentages for apportioning our PR14 allowed costs for our revised default tariffs.

Spreadsheet Commentary

The attached spreadsheet presents, side by side, our cost allocation for PR14 and for PR16, broken down, in the first instance, into the activities set down by Ofwat for PR14 (Billing, Payment handling, Network and non-network contacts, etc), but these have been further sub-divided for the purposes of the PR16 cost allocation exercise where more granular information is available (e.g we have separated out network and non-network costs).

The total costs to be allocated for each line are shown in the "total" column at the right edge of the spreadsheet. These represent the figures on which our last PR14 submission was based, scaled down by the percentage by which Ofwat reduced allowed expenditures in the final determination. The grand total of £6,636,371 reconciles to Ofwat's pre-populated PR16 data tables [cell K319 in tab "PR14 FD Calculations"]. Where we have further broken a cost category into sub-categories we have used the analysis for 2015/16 costs (considered a "normal" year) and scaled the resulting figures accordingly to fit with the PR14 cost basis.

Details for each line item are provided below.

Line 1: Billing costs (£114,136)

At PR14 these were apportioned by customer number. For PR16 we have been able to revise the basis of apportionment to the actual number of bills raised for each group.

Line 2: Payment handling, remittance and cash handling (£19,007)

At PR14 these were apportioned by customer number. For PR16 we have been able to revise the basis of apportionment to the number of payments made by each group.

Line 3: Non-network customer enquiries and complaints (£185,579)

At PR14 these were apportioned by customer number. For PR16 we have been able to break down this category into further sub-categories, and to allocate each on the basis of actual cost drivers, viz:

Sub-category	Cost driver
Correspondence	Mail/emails
Offshore	Mail/emails
Customer relations	Compensation payments
Postage	Non-billing postage charges
Call centre and training	Call centre contacts

Line 4: Network customer enquiries and complaints (£598,935)

At PR14 these were apportioned by customer number. For PR16 we have been able to break down this category into further sub-categories, and to allocate each on the basis of actual cost drivers, viz:

Sub-category	Cost driver
Operational call centre (OCC)	OCC Contact Call Time
Postage	Non-billing postage charges
Waste: schedulers	OCC Contact Call Time
Waste: aborted jobs	OCC Contact Call Time
Waste: call resolution	OCC Contact Call Time
Water: schedulers	OCC Contact Call Time
Water: aborted jobs	OCC Contact Call Time
Water: call resolution	OCC Contact Call Time

Line 5: Debt Management (£226,976)

At PR14 these were apportioned by customer number. For PR16 we have been able to break down this category into further sub-categories, and to allocate each on the basis of actual cost drivers, viz:

Sub-category	Cost driver
Cash collections	Collections work
Debt collection agency charges	Accounts referred
Postage	Non-billing postage charges
Water company commission	Customer numbers (with dual service weighting). Note that this is an apportionment.

Line 6: Bad debt (£4,292,647)

At PR14 we allocated our forecasted bad debt charge as follows:

- Firstly, we replicated the approach taken to allocating bad debt between household and non-household customers in the 2013 regulated accounts, using the breakdown of debt over 12 months at March 2013. This allowed us to split our forecasted charge between measured and unmeasured customers;
- We then looked at how we could further allocate the charge between our different default tariffs that was cost reflective. In the first instance we split the charge for unmeasured and measured customers between water and sewerage services, according to our forecast of customer numbers. These charges were then allocated across individual default tariffs according to the revenue billed to those customer groups in 2012/13, with some degree of management judgement.

However this suggested that there was no difference in risk between customers and resulted in a large allocation of bad debt to a relatively small number of customers (our >50ML water and >100ML sewerage). Our analysis of costs and write-off over the last 6 years has shown that bad debt write-off has been concentrated within our <50ML customer group. However it would be wrong to conclude that the >50ML customer group does not have any element of bad debt risk. Whilst the credit status of our largest customers is good, and we have not had any history of any of these companies defaulting within the last 6 years, there have been notable individual large company insolvencies within our customer base over the last 10 – 15 years. It would be wrong not to reflect this risk in our allocation of bad debt.

Furthermore, reviewing the activity within our debt management systems we can now see that our small customers present a higher risk, for the following reasons:

- Smaller limited companies have a greater propensity to commence insolvency proceedings (being quickly replaced by a new company under the same management)
- Sole traders often have high levels of personal debt (using personal secured and unsecured debt to support business)
- Smaller businesses tend have a shorter tenure at any one address, a characteristic which is more likely to result in default
- The businesses operating in sectors with a higher risk of default – entertainment, car washes, private landlords, agriculture – are largely in our <50ML customer group.

To recognise that the greater likelihood of default lies with our smaller customers, but that large customer insolvencies do occur and have a significant impact, we have revised our methodology for charging bad debt as follows:

- Allocate a charge based on aggregated wholesale and retail costs to >50ML, based on a one in ten year probability of a write on the scale of the last large customer write off in 2009. This was £194,000.
- Apportion the remaining bad debt costs to <50ML water customers and wastewater customers on the basis of aggregate wholesale and retail costs.

Line 7: Meter Reading (£196,024)

At PR14 these were apportioned by customer number. For PR16 we have been able to revise the basis of apportionment to the number of meters, distinguishing between internal and external units.

Line 8: Disconnections (£75,184)

At PR14 these were apportioned by customer number. For PR16 we have been able to allocate these costs directly between customer groups.

Line 9: Customer side leaks (£156,789)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 10: Other direct costs (£33,288)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 11: Other general and support (£154,055)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 12: Business customer team (£174,000)

At PR14 these were apportioned by customer number. For PR16 we have been able to allocate costs based on timesheet analysis.

Line 13: Business customer team trade effluent (£30,000)

At PR14 these were apportioned by customer number. For PR16 we have been able to allocate costs based on timesheet analysis.

Line 14: Trade effluent billing and collections (£49,776)

At PR14 these were apportioned by customer number. For PR16 we have been able to allocate costs based on numbers of trade effluent bills.

Line 15: Other business activities (£6,635)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 16: Local authority rates (£10,071)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 17: Depreciation of assets included in RCV (£200,260)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 18: Depreciation of assets not included in RCV (£84,763)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 19: Pension deficit repair (£15,335)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 20: Re-charge from wholesale (£40,918)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Line 21: Income from wholesale (£28,010)

At PR14 these were apportioned by customer number, and this continues to be the basis of apportionment at PR16.

Appendix B: Dwr Cymru - Retail Non-Household Cost Allocation Basis (PR16)

	PR14 Cost Allocation Basis					PR16 Cost Allocation Basis				Sub allocation between Water and Sewerage based on customer numbers						Allocation to match PR14 tariff groups				
Activity	**Cost driver/allocation basis**	**<50ML Water**	**>50ML Water**	**<100 ML Sewerage**	**>100ML Sewerage**	**Cost driver/allocation basis**	**< 5ML**	**5 - 50ML**	**> 50ML**	**<5ML Water**	**5-50ML Water**	**>50ML Water**	**<5ML Sewerage**	**5-50ML Sewerage**	**>50ML Sewerage**	**<50ML Water**	**> 50ML Water**	**<100ML Sewerage**	**>100ML Sewerage**	**17/18 Costs**
Billing		57.01% 65,069	0.84% 959	40.12% 45,791	0.17% 194	Bills raised	91.02% 103,890	7.40% 8,441	1.58% 1,805	53.92% 61,545	3.73% 4,262	0.76% 865	37.10% 42,345	3.66% 4,179	0.82% 939	57.66% 65,807	0.76% 865	41.03% 46,835	0.55% 629	114,136
Payment handling, remittance and cash handling		57.01% 10,836	0.84% 160	40.12% 7,626	0.17% 32	Number of payments	96.49% 18,341	2.90% 552	0.60% 115	57.16% 10,865	1.47% 279	0.29% 55	39.33% 7,476	1.44% 273	0.31% 60	58.63% 11,144	0.29% 55	40.91% 7,775	0.18% 34	19,007
Non network customer enquiries and complaints	Customer numbers and bills	57.01% 105,798	0.84% 1,559	40.12% 74,454	0.17% 315	Blended: Contact Volumes, offshore volumes, compensation payments, printing and postage charges	93.67% 173,828	5.27% 9,773	1.07% 1,978	55.49% 102,976	2.66% 4,935	0.51% 949	38.18% 70,852	2.61% 4,838	0.55% 1,030	58.15% 107,910	0.51% 949	41.00% 76,089	0.34% 631	185,579
Network customer enquiries and complaints		57.01% 341,453	0.84% 5,031	40.12% 240,293	0.17% 1,018	Blended: Call time, printing and postage charges	97.03% 581,165	2.70% 16,197	0.26% 1,573	57.48% 344,283	1.37% 8,178	0.13% 754	39.55% 236,881	1.34% 8,019	0.14% 819	58.85% 352,462	0.13% 754	40.96% 245,326	0.07% 393	598,935
Debt management		57.01% 129,399	0.84% 1,907	40.12% 91,063	0.17% 386	Blended: Debt team time, accounts managed by debt collection agencies, printing and postage costs	88.92% 201,817	8.59% 19,507	2.49% 5,652	52.67% 119,557	4.34% 9,850	1.19% 2,710	36.24% 82,260	4.25% 9,657	1.30% 2,942	57.01% 129,406	1.19% 2,710	41.02% 93,109	0.77% 1,751	226,976
Doubtful debts	12/13 Reg account debt analysis and then customer numbers	48.78% 2,093,953	3.56% 152,818	34.73% 1,490,836	6.25% 268,290	Write off history and revenue	71.96% 3,089,197	27.93% 1,199,075	0.10% 4,375	32.96% 1,414,676	14.11% 605,899	0.07% 3,175	39.01% 1,674,521	13.82% 593,177	0.03% 1,200	47.07% 2,020,574	0.07% 3,175	52.83% 2,267,805	0.03% 1,288	4,292,647
Meter reading	Customer numbers	56.92% 111,577	1.54% 3,019	41.06% 80,487	0.47% 921	Number of internal/external meters	96.86% 189,876	2.87% 5,616	0.27% 532	57.38% 112,483	1.45% 2,836	0.13% 255	39.48% 77,393	1.42% 2,781	0.14% 277	58.83% 115,319	0.13% 255	40.96% 80,300	0.08% 150	196,024
Disconnections	Customer numbers and bills	57.01% 42,863	0.84% 632	40.12% 30,164	0.17% 128	Disconnection volumes	99.26% 74,626	0.74% 558	0.00% 0	58.80% 44,209	0.38% 282	0.00% 0	40.46% 30,417	0.37% 276	0.00% 0	59.18% 44,491	0.00% 0	40.82% 30,694	0.00% 0	75,184
Demand side water efficiency initiatives	Customer numbers	57.69% 0	0.07% 0	37.97% 0	0.02% 0	Water efficiency audits	91.48% 0	8.52% 0	0.00% 0	91.48% 0	8.52% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	100.00% 0	0.00% 0	0.00% 0	0.00% 0	-
Customer side leaks	Customer numbers	57.69% 90,452	0.07% 110	37.97% 59,533	0.02% 31	Customer Numbers	98.56% 154,538	1.25% 1,967	0.18% 285	98.56% 154,538	1.25% 1,967	0.18% 285	0.00% 0	0.00% 0	0.00% 0	99.82% 156,505	0.18% 285	0.00% 0	0.00% 0	156,789
Other direct costs	Customer numbers	57.69% 19,204	0.07% 23	37.97% 12,640	0.02% 7	Customer Numbers	98.56% 32,810	1.25% 418	0.18% 60	58.39% 19,437	0.63% 211	0.09% 29	40.17% 13,373	0.62% 207	0.09% 31	59.02% 19,648	0.09% 29	40.84% 13,594	0.05% 18	33,288
Other General + Support	Customer numbers	57.68% 88,859	0.07% 108	37.97% 58,495	0.02% 31	Customer Numbers	98.56% 151,843	1.25% 1,933	0.18% 280	58.39% 89,952	0.63% 976	0.09% 134	40.17% 61,891	0.62% 957	0.09% 146	59.02% 90,928	0.09% 134	40.84% 62,911	0.05% 82	154,055
Business Customer team	Customer numbers	57.68% 100,363	0.07% 122	37.97% 66,068	0.02% 35	Staff effort	6.23% 10,843	74.77% 130,100	19.00% 33,057	3.69% 6,423	37.75% 65,691	9.11% 15,851	2.54% 4,420	37.02% 64,408	9.89% 17,206	41.45% 72,115	9.11% 15,851	46.01% 80,057	3.44% 5,977	174,000
Business Customer team (TE)	Customer numbers	57.69% 17,307	0.07% 21	37.97% 11,391	0.02% 6	Staff effort	0.00% 0	75.90% 22,771	24.10% 7,229	0.00% 0	0.00% 0	0.00% 0	0.00% 0	75.90% 22,771	24.10% 7,229	0.00% 0	0.00% 0	91.19% 27,357	8.81% 2,643	30,000
Trade Effluent	Customer numbers	57.69% 28,716	0.07% 35	37.97% 18,900	0.02% 10	Number of bills	36.24% 18,040	46.76% 23,276	16.99% 8,459	0.00% 0	0.00% 0	0.00% 0	36.24% 18,040	46.76% 23,276	16.99% 8,459	0.00% 0	0.00% 0	87.02% 43,315	12.98% 6,461	49,776
Other Business Activities	Customer numbers	57.69% 3,828	0.07% 5	37.97% 2,519	0.02% 1	Customer Numbers	98.56% 6,540	1.25% 83	0.18% 12	58.39% 3,874	0.63% 42	0.09% 6	40.17% 2,666	0.62% 41	0.09% 6	59.02% 3,916	0.09% 6	40.84% 2,710	0.05% 4	6,635
Services to developers	Customer numbers	57.69% 0	0.07% 0	37.97% 0	0.02% 0	Customer Numbers	98.56% 0	1.25% 0	0.18% 0	58.39% 0	0.63% 0	0.09% 0	40.17% 0	0.62% 0	0.09% 0	59.02% 0	0.09% 0	40.84% 0	0.05% 0	-
Local authority Rates	Customer numbers	57.69% 5,810	0.07% 7	37.97% 3,824	0.02% 2	Customer Numbers	98.56% 9,927	1.25% 126	0.18% 18	58.39% 5,881	0.63% 64	0.09% 9	40.17% 4,046	0.62% 63	0.09% 10	59.02% 5,944	0.09% 9	40.84% 4,113	0.05% 5	10,071
Exceptional Item	Customer numbers	57.69%	0.07%	37.97%	0.02%	Customer Numbers	98.56% 0	1.25% 0	0.18% 0	58.39% 0	0.63% 0	0.09% 0	40.17% 0	0.62% 0	0.09% 0	59.02% 0	0.09% 0	40.84% 0	0.05% 0	-
Total depreciation of assets, principally used by retail, included in RCV (assets existing before AMP6)	Customer numbers	57.69% 115,530	0.07% 140	37.97% 76,039	0.02% 40	Customer Numbers	98.56% 197,384	1.25% 2,512	0.18% 364	58.39% 116,931	0.63% 1,268	0.09% 174	40.17% 80,453	0.62% 1,244	0.09% 189	59.02% 118,199	0.09% 174	40.84% 81,780	0.05% 107	200,260 -
Total depreciation of assets, principally used by retail, that are not included in RCV (AMP6 or later assets)	Customer numbers	57.69% 48,900	0.07% 59	37.97% 32,185	0.02% 17	Customer Numbers	98.56% 83,546	1.25% 1,063	0.18% 154	58.39% 49,493	0.63% 537	0.09% 74	40.17% 34,053	0.62% 526	0.09% 80	59.02% 50,030	0.09% 74	40.84% 34,615	0.05% 45	84,763
Pension deficit repair costs	Customer numbers	57.69% 8,847	0.07% 11	37.97% 5,823	0.02% 3	Customer Numbers	98.56% 15,115	1.25% 192	0.18% 28	58.39% 8,954	0.63% 97	0.09% 13	40.17% 6,161	0.62% 95	0.09% 14	59.02% 9,051	0.09% 13	40.84% 6,262	0.05% 8	15,335
Recharge from wholesale for legacy assets principally used by wholesale (assets existing before AMP 6)	Customer numbers	57.69% 23,606	0.07% 29	37.97% 15,537	0.02% 8	Customer Numbers	98.56% 40,331	1.25% 513	0.18% 74	58.39% 23,892	0.63% 259	0.09% 36	40.17% 16,439	0.62% 254	0.09% 39	59.02% 24,151	0.09% 36	40.84% 16,710	0.05% 22	40,918
Income from wholesale for legacy assets principally used by retail (assets existing before AMP 6)	Customer numbers	57.69% 16,159	0.07% 20	37.97% 10,635	0.02% 6	Customer Numbers	98.56% 27,608	1.25% 351	0.18% 51	58.39% 16,355	0.63% 177	0.09% 24	40.17% 11,253	0.62% 174	0.09% 26	59.02% 16,532	0.09% 24	40.84% 11,438	0.05% 15	28,010
Recharge from wholesale for AMP 6 or later assets principally used by wholesale	Customer numbers	57.69% 0	0.07% 0	37.97% 0	0.02% 0	Customer Numbers	98.56% 0	1.25% 0	0.18% 0	58.39% 0	0.63% 0	0.09% 0	40.17% 0	0.62% 0	0.09% 0	59.02% 0	0.09% 0	40.84% 0	0.05% 0	-
Income from wholesale for AMP 6 or later assets principally used by retail	Customer numbers	57.69% 0	0.07% 0	37.97% 0	0.02% 0	Customer Numbers	98.56% 0	1.25% 0	0.18% 0	58.39% 0	0.63% 0	0.09% 0	40.17% 0	0.62% 0	0.09% 0	59.02% 0	0.09% 0	40.84% 0	0.05% 0	-
	Total Costs	**3,419,930**	**166,713**	**2,402,316**	**271,465**	**Total Costs**	**5,126,049**	**1,444,322**	**66,000**	**2,673,614**	**707,455**	**25,350**	**2,452,436**	**736,868**	**40,649**	**3,381,069**	**25,350**	**3,209,917**	**20,232**	**6,636,371**
								Forecast of customer numbers		97,012 163,761	1,216 2,408	117 244	66,748	1,192	127					

Appendix C: DCWW's position on Ofwat's decisions on allowed EBIT margins at PR16

Explanatory Note

At the "risk-based review" for PR14 Ofwat proposed a "net (EBIT) retail margin" of 2.5% for contestable non-household customers, and 1% for non-contestable (mainly) household customers.

For undertakers wholly or mainly in Wales the restriction of the forthcoming retail market to customers using in excess of 50Ml per annum prompted Ofwat to set a margin of 1% for customers using below that threshold, with 2.5% applying to those using more, the clear inference being that 1.5% was the additional margin that was required for customers that were open to competition.

In our response to Ofwat's "Consultation on the review of non-household retail price controls" published in November 2015 we explained why, on reflection, what had perhaps appeared to be an obvious decision in 2014 to set the margins for contestable and non-contestable customers in Wales at 2.5% and 1% respectively was open to question. We included, in our response, a detailed analytical note that we had prepared for internal discussion and board briefing purposes. It suggested that, "*in equilibrium….it might be expected that EBIT would bear a more proportionate relationship to retailers' own costs rather than total turnover as such.*" [A copy of our response, including the note, is appended for your convenience.]

The implication of this analysis was that the allowed EBIT margin of 1% for non-contestable customers in Wales might actually have been too low, and the margin of 2.5% for contestable customers might have been too high. This is because the retail cost to serve generally rises less than proportionately with the size of the customer in terms of turnover. In our submission for PR16 in June of this year, we provided evidence from the market behaviour of the English companies that appeared to confirm that this was, indeed, the case, and proposed alternative margins for our non-contestable and contestable groups based on what we now believed to be a more sound approach.

In its draft determination document published on September 15th Ofwat states that "*Dŵr Cymru has made a proposal to smear the recovery of the competitive margin across its contestable and non-contestable customer bases*". We believe that this mis-represents our position. It may be that the outcome of what we proposed could be construed as being similar to the effect of "smearing" margin from contestable to non-contestable, but we believe that putting it that way unfairly impugns our motives. We acknowledge that Ofwat's proposals to introduce gross margin caps to contestable customer default tariff groups may address our concerns, but at this time is unclear how this will change future market behaviour.

We would ask Ofwat to reconsider our position on margin. We continue to believe that it is coherent and fair, and in particular that persisting with the 1% EBIT margin cap on non-contestable customers could put us in a position where, had we freely elected to set prices on this basis, we could be open to accusations of margin squeeze.

However, in the event that Ofwat is not persuaded to change its approach, we request that it includes in the final determination public document an explanation that clarifies what we did propose, and explains why Ofwat has rejected it.

Appendix D: Dŵr Cymru - The likely impact on bills arising from changes between PR14 and PR16

Explanatory Note

Our PR16 projections differ from PR14 in two respects, namely:

- a revised cost allocation; and
- updated customer numbers.

The effect of these changes is presented in the following tables for each of our three proposed default tariff groups:

<50ML	**2017/18**	**2018/19**	**2019/20**
Retail costs per PR14 FD (£m)	3.358	3.099	3.099
Changes in bad debt allocation	(0.073)	(0.069)	(0.071)
Changes in cost allocation	0.096	0.100	0.100
Retail cost PR16 (£m)	**3.381**	**3.130**	**3.129**
Change in total cost allocation	0.022	0.031	0.029
Changes as % of overall revenues	0.04%	0.05%	0.05%

>50ML	**2017/18**	**2018/19**	**2019/20**
Average retail cost per customer PR14 FD (£m)	0.513	0.513	0.507
Changes in bad debt allocation	(0.149)	(0.141)	(0.139)
Changes in cost allocation	(0.338)	(0.348)	(0.342)
Retail cost PR16 (£m)	**0.025**	**0.025**	**0.025**
Change in total cost allocation	**(0.487)**	**(0.488)**	**(0.482)**
Changes as % of overall revenues	**(1.95%)**	**(1.90%)**	**(1.84%)**

Sewerage	**2017/18**	**2018/19**	**2019/20**
Average retail cost per customer PR14 FD (£m)	2.766	2.553	2.553
Changes in bad debt allocation	0.223	0.210	0.210
Changes in cost allocation	0.241	0.248	0.243
Retail cost PR16 (£m)	**3.230**	**3.010**	**3.006**
Change in total cost allocation	**0.464**	**0.457**	**0.453**
Changes as % of overall revenues	**0.58%**	**0.57%**	**0.55%**

The final line in each table also shows the average bill impact for each group compared with PR14.

The table overleaf shows our modelling of the impact on the current (2016/17) non-household charges which have been recalculated using the PR16 submitted numbers. This shows that the incidence effects on the average bill for the current default tariff bands range from -2% to +1.2%. This modelling has been undertaken at a high level as a check that the submission does not give rise to untoward incidence effects.

Our retail tariffs are two part tariffs, with both a fixed and volumetric element, which have been designed to allow us to manage distributional impacts of this nature amongst other things. When setting tariffs we are very conscious of the distributional effects of any changes to the level of tariffs on different types of customers; both between different customer classes and amongst customers with different characteristics within the same class, be that consumption or meter size for example. So typically we would review the impacts of both wholesale and retail charges on customers' end bills and use a mixture of the fixed and variable elements of the tariff to ensure that appropriate revenue is recovered without causing undue pressure on any customer type. We have also, of course, recently reviewed the potential for material changes in end-bill as part of our work in producing the indicative wholesale access charges which were not developed in isolation. Therefore, we are confident that any change in the retail charge arising from our reassessment of costs will be reviewed alongside changes in wholesale charges to ensure that there is no material impact on any of our customers.

We are mindful that there may be some pressure on the smaller sewerage customers' bills from the submission and will work to ensure that these are mitigated in the way we have outlined above when we set tariffs for 2017/18.

Table showing the impact of the PR16 proposals on the current tariffs

	16/17 tariffs		PR14 Methodology	PR16 Methodology		
		Average bill	Average retail charge	Average retail charge	Change in average retail charge	
PR16 tariff groups	PR14 tariff groups	£	£	£	£	% of avg bill
Water <50ML						
	Raw <50 Ml	530	37	36	(2)	-0.3%
	Partial < 50Ml	1,648	60	58	(2)	-0.1%
	Measured NHH <50ML	634	44	43	(1)	-0.1%
	Unmeasured NHH <50ML	283	22	22	0	0.1%
	Ships water	189	13	12	(0)	-0.2%
Water >50ML						
	Raw >50 Ml	200,745	5,011	2,329	(2,683)	-1.3%
	Partial >50 Ml	689,901	9,288	6,021	(3,268)	-0.5%
	LIT Band 1 Potable 50Ml - 99Ml	85,679	1,787	1,137	(650)	-0.8%
	LIT Band 2 Potable 100Ml - 249Ml	166,648	2,854	1,913	(941)	-0.6%
	LIT Band 3 Potable 250Ml - 499Ml	286,916	4,841	2,637	(2,204)	-0.8%
	LIT Band 4 Potable 500Ml - 1000Ml	482,674	7,426	4,815	(2,611)	-0.5%
	LIT Band 5 Potable > 1000Ml	834,460	13,360	8,487	(4,873)	-0.6%
Sewerage						
	Measured NHH Sewerage < 100ML	831	47	58	10	1.2%
	Unmeasured NHH Sewerage < 100ML	391	21	25	4	0.9%
	Measured NHH Sewerage > 100ML	354,657	7,770	9,653	1,884	0.5%
	Sewerage Trade effluent < 100 ML	13,124	325	317	(9)	-0.1%
	Sewerage Trade effluent >100 ML	384,541	7,569	7,631	62	0.0%
	Outfall Tariff	89,481	2,206	1,224	(982)	-1.1%

Appendix E: Dŵr Cymru - Change in Customer Numbers between PR14 and PR16

Explanatory Note

At PR14 our forecast of non-household customer numbers was based on reported out-turn figures for a base year of 2012/13, and various assumptions regarding new connections, etc. The resulting forecast was as follows:

PR14 customer forecast	15/16	16/17	17/18	18/19	19/20
Non-household (000s)	175.07	174.56	174.06	173.58	173.11
Annual decrease	(0.52)	(0.51)	(0.50)	(0.48)	(0.47)
% decrease	(0.30%)	(0.29%)	(0.28%)	(0.27%)	(0.26%)

At PR16 our forecast was based on reported out-turn figures for a base year of 2015/16. This gave a total of 166,720, which was 8,345 *lower* than the number we had forecast for that year in PR14. The PR16 forecast for the remainder of the period followed the same methodology regarding changes from year to year, and was as follows:

PR16 customer forecast	15/16	16/17	17/18	18/19	19/20
Non-household (000s)	166.72	166.24	165.78	165.32	164.88
Annual decrease		(0.48)	(0.47)	(0.46)	(0.44)
% decrease		(0.29%)	(0.28%)	(0.27%)	(0.26%)

We believe that the step change in customer numbers is overwhelmingly the result of better information, and in particular the more detailed data that is now available from the new billing system.

Both the new billing system and the one it replaced are property-based rather than customer-based billing systems. That means that the database is structured around records of supply points (properties). In producing a count of customers from our billing system, we have a list of supply points at the point in time that the count is taken (i.e. it is not a calculation of the number of customers over the course of a year). Within this list will be supply points serving the same customer, as well as supply points with a non-chargeable status (for example, void properties, properties billed by local authorities and registered social landlords, private supplies and insets). We will also hold details of properties where we bill sewerage on behalf of other companies (Severn Trent) but we will not have properties where our service charges are billed by other companies (UU, Dee Valley, Severn Trent).

We therefore derive, rather than measure directly, figures for the number of customers for the purposes of reporting. We consider that the best methodology for achieving this is to infer customer numbers from income data, essentially by dividing income figures by the tariffs applicable. For the purposes of deriving customer numbers for 2012/13 from the old billing system assumptions had to be made about variables such as meter sizes, and the distribution of assessed measured charges and uniform service charges across the different customer groups, due to limitations in the reports produced by the system.

With the new billing system we are exploring options for deriving customer numbers directly from the system, but in the meantime, continue to derive the figures from income. The figures for 2015/16, however, are considered to be more accurate than the corresponding results for 2012/13 for two reasons. First, a major data cleansing exercise took place in the transition from the old to the new billing system, and second, Rapid Xtra provides more detailed information on income, with the results that the need to make assumptions is correspondingly diminished.

For the avoidance of doubt, the lower figure for the number of non-household customers in 2015/16 does not represent a re-classification of customers from non-household to household. Our PR14 forecast for household customer numbers was as follows:

PR14 customer forecast	**15/16**	**16/17**	**17/18**	**18/19**	**19/20**
Household (000s)	1,366.28	1,372.80	1,379.73	1,387.07	1,394.82
Annual increase	6.11	6.52	6.93	7.34	7.75
% increase	0.45%	0.48%	0.50%	0.53%	0.56%

The out-turn figure for 2015/16, as reported in the Annual Performance Report, was 1,364,067, just 2,112 lower than forecast, a variance of -0.16%.

Finally, it is worth clarifying that the lower figure for customer numbers does not imply lower overall retail costs. Our cost projections were based on a forecast of the cost of operating the business in total from which a cost per customer was calculated based on the forecast of customer numbers provided at PR14. The plans were not based on an assessment of the transactional cost of serving each customer which then vary when customer numbers increase or decrease, so the total cost projections remain unchanged.

Appendix F: Dŵr Cymru - Choice of Aggregated Default Tariff Groups for PR16

Explanatory Note

At PR14 DCWW submitted proposed a bespoke default tariff for each of its actual individual tariff groups, and Ofwat accordingly make its determination using the same template.

For the purposes of PR16 DCWW proposes that aggregated default tariffs be set by Ofwat as follows:

- all water customers using less than 50Ml per annum (average retail cost plus allowed net margin);
- water customers using over 50 Ml per annum (gross margin of 3.3%);
- all wastewater customers (average retail cost plus allowed net margin).

There are two principal reasons why we consider that the use of aggregated caps is a preferable approach to the creation of bespoke default tariff caps for each individual tariff group.

First, at PR14 the relative levels for our proposed bespoke default tariffs were based on our view of relative costs over the course of the following six years. Inevitably, however, unanticipated shifts in relative costs do occur. Aggregate caps allow us to reflect such cost movements in changes to tariffs each year, whereas individual caps do not, building up cross-subsidies in our prices which then have to be unravelled "in one go" at the next price review. We do not think that this is in customers' interests.

Note that this factor is exacerbated by the fact that some of our individual tariffs are paid by just a few customers, sometimes fewer than 10. In these circumstances the addition or subtraction of a single customer, especially if it is an outlier in terms of consumption or revenue, can have a notable impact on the right level of each individual tariff.

Second, by overly specifying default tariffs at a price review there is a risk that any new tariff initiatives or innovations that would involve structural changes could not be accommodated and would have to wait for the next price review. The use of aggregate caps, within which structural components can be revised if there is a good case for so doing, allows the flexibility for actual tariffs to develop on an ongoing basis rather than at five year intervals.

We enclose a revised summary of our cost allocations which reflect our proposed default tariff groups ("*Dwr Cymru_Revised cost allocation arising from new default tariff groups.xlsx*")

Appendix F: Dwr Cymru Retail Non-Household Cost Allocation Basis (PR16) - Revised Default Tariff Groups (October 2016)

	PR16 Cost Allocation Basis				Sub allocation between Water and Sewerage based on customer numbers						Revised PR16 Default Tariff Groups			
Activity	**Cost driver/allocation basis**	**< 5ML**	**5 - 50ML**	**> 50ML**	**<5ML Water**	**5-50ML Water**	**>50ML Water**	**<5ML Sewerage**	**5-50ML Sewerage**	**>50ML Sewerage**	**<50ML Water**	**> 50ML Water**	**Sewerage**	**17/18 Costs**
Billing	Bills raised	91.02% 103,890	7.40% 8,441	1.58% 1,805	53.92% 61,545	3.73% 4,262	0.76% 865	37.10% 42,345	3.66% 4,179	0.82% 939	57.66% 65,807	0.76% 865	41.59% 47,464	114,136
Payment handling, remittance and cash handling	Number of payments	96.49% 18,341	2.90% 552	0.60% 115	57.16% 10,865	1.47% 279	0.29% 55	39.33% 7,476	1.44% 273	0.31% 60	58.63% 11,144	0.29% 55	41.08% 7,809	19,007
Non network customer enquiries and complaints	Blended: Contact Volumes, offshore volumes, compensation payments, printing and postage charges	93.67% 173,828	5.27% 9,773	1.07% 1,978	55.49% 102,976	2.66% 4,935	0.51% 949	38.18% 70,852	2.61% 4,838	0.55% 1,030	58.15% 107,910	0.51% 949	41.34% 76,720	185,579
Network customer enquiries and complaints	Blended: Call time, printing and postage charges	97.03% 581,165	2.70% 16,197	0.26% 1,573	57.48% 344,283	1.37% 8,178	0.13% 754	39.55% 236,881	1.34% 8,019	0.14% 819	58.85% 352,462	0.13% 754	41.03% 245,719	598,935
Debt management	Blended: Debt team time, accounts managed by debt collection agencies, printing and postage costs	88.92% 201,817	8.59% 19,507	2.49% 5,652	52.67% 119,557	4.34% 9,850	1.19% 2,710	36.24% 82,260	4.25% 9,657	1.30% 2,942	57.01% 129,406	1.19% 2,710	41.79% 94,859	226,976
Doubtful debts	Write off history and revenue	71.96% 3,089,197	27.93% 1,199,075	0.10% 4,375	32.96% 1,414,676	14.11% 605,899	0.07% 3,175	39.01% 1,674,521	13.82% 593,177	0.03% 1,200	47.07% 2,020,574	0.07% 3,175	52.86% 2,268,897	4,292,647
Meter reading	Number of internal/external meters	96.86% 189,876	2.87% 5,616	0.27% 532	57.38% 112,483	1.45% 2,836	0.13% 255	39.48% 77,393	1.42% 2,781	0.14% 277	58.83% 115,319	0.13% 255	41.04% 80,450	196,024
Disconnections	Disconnection volumes	99.26% 74,626	0.74% 558	0.00% 0	58.80% 44,209	0.38% 282	0.00% 0	40.46% 30,417	0.37% 276	0.00% 0	59.18% 44,491	0.00% 0	40.82% 30,694	75,184
Demand side water efficiency initiatives	Water efficiency audits	91.48% 0	8.52% 0	0.00% 0	91.48% 0	8.52% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	100.00% 0	0.00% 0	0.00% 0	-
Customer side leaks	Customer Numbers	98.56% 154,538	1.25% 1,967	0.18% 285	98.56% 154,538	1.25% 1,967	0.18% 285	0.00% 0	0.00% 0	0.00% 0	99.82% 156,505	0.18% 285	0.00% 0	156,789
Other direct costs	Customer Numbers	98.56% 32,810	1.25% 418	0.18% 60	58.39% 19,437	0.63% 211	0.09% 29	40.17% 13,373	0.62% 207	0.09% 31	59.02% 19,648	0.09% 29	40.89% 13,612	33,288
Other General + Support	Customer Numbers	98.56% 151,843	1.25% 1,933	0.18% 280	58.39% 89,952	0.63% 976	0.09% 134	40.17% 61,891	0.62% 957	0.09% 146	59.02% 90,928	0.09% 134	40.89% 62,993	154,055
Business Customer team	Staff effort	6.23% 10,843	74.77% 130,100	19.00% 33,057	3.69% 6,423	37.75% 65,691	9.11% 15,851	2.54% 4,420	37.02% 64,408	9.89% 17,206	41.45% 72,115	9.11% 15,851	49.44% 86,034	174,000
Business Customer team (TE)	Staff effort	0.00% 0	75.90% 22,771	24.10% 7,229	0.00% 0	0.00% 0	0.00% 0	0.00% 0	75.90% 22,771	24.10% 7,229	0.00% 0	0.00% 0	100.00% 30,000	30,000
Trade Effluent	Number of bills	36.24% 18,040	46.76% 23,276	16.99% 8,459	0.00% 0	0.00% 0	0.00% 0	36.24% 18,040	46.76% 23,276	16.99% 8,459	0.00% 0	0.00% 0	100.00% 49,776	49,776
Other Business Activities	Customer Numbers	98.56% 6,540	1.25% 83	0.18% 12	58.39% 3,874	0.63% 42	0.09% 6	40.17% 2,666	0.62% 41	0.09% 6	59.02% 3,916	0.09% 6	40.89% 2,713	6,635
Services to developers	Customer Numbers	98.56% 0	1.25% 0	0.18% 0	58.39% 0	0.63% 0	0.09% 0	40.17% 0	0.62% 0	0.09% 0	59.02% 0	0.09% 0	40.89% 0	-
Local authority Rates	Customer Numbers	98.56% 9,927	1.25% 126	0.18% 18	58.39% 5,881	0.63% 64	0.09% 9	40.17% 4,046	0.62% 63	0.09% 10	59.02% 5,944	0.09% 9	40.89% 4,118	10,071
Exceptional Item	Customer Numbers	98.56% 0	1.25% 0	0.18% 0	58.39% 0	0.63% 0	0.09% 0	40.17% 0	0.62% 0	0.09% 0	59.02% 0	0.09% 0	40.89% 0	-
Total depreciation of assets, principally used by retail, included in RCV (assets existing before AMP6)	Customer Numbers	98.56% 197,384	1.25% 2,512	0.18% 364	58.39% 116,931	0.63% 1,268	0.09% 174	40.17% 80,453	0.62% 1,244	0.09% 189	59.02% 118,199	0.09% 174	40.89% 81,886	200,260 -
Total depreciation of assets, principally used by retail, that are not included in RCV (AMP6 or later assets)	Customer Numbers	98.56% 83,546	1.25% 1,063	0.18% 154	58.39% 49,493	0.63% 537	0.09% 74	40.17% 34,053	0.62% 526	0.09% 80	59.02% 50,030	0.09% 74	40.89% 34,660	84,763
Pension deficit repair costs	Customer Numbers	98.56% 15,115	1.25% 192	0.18% 28	58.39% 8,954	0.63% 97	0.09% 13	40.17% 6,161	0.62% 95	0.09% 14	59.02% 9,051	0.09% 13	40.89% 6,271	15,335
Recharge from wholesale for legacy assets principally used by wholesale (assets existing before AMP 6)	Customer Numbers	98.56% 40,331	1.25% 513	0.18% 74	58.39% 23,892	0.63% 259	0.09% 36	40.17% 16,439	0.62% 254	0.09% 39	59.02% 24,151	0.09% 36	40.89% 16,731	40,918
Income from wholesale for legacy assets principally used by retail (assets existing before AMP 6)	Customer Numbers	98.56% 27,608	1.25% 351	0.18% 51	58.39% 16,355	0.63% 177	0.09% 24	40.17% 11,253	0.62% 174	0.09% 26	59.02% 16,532	0.09% 24	40.89% 11,453	28,010
Recharge from wholesale for AMP 6 or later assets principally used by wholesale	Customer Numbers	98.56% 0	1.25% 0	0.18% 0	58.39% 0	0.63% 0	0.09% 0	40.17% 0	0.62% 0	0.09% 0	59.02% 0	0.09% 0	40.89% 0	-
Income from wholesale for AMP 6 or later assets principally used by retail	Customer Numbers	98.56% 0	1.25% 0	0.18% 0	58.39% 0	0.63% 0	0.09% 0	40.17% 0	0.62% 0	0.09% 0	59.02% 0	0.09% 0	40.89% 0	-
	Total Costs	**5,126,049**	**1,444,322**	**66,000**	**2,673,614**	**707,455**	**25,350**	**2,452,436**	**736,868**	**40,649**	**3,381,069**	**25,350**	**3,229,953**	**6,636,371**
		Forecast of customer numbers			97,012 163,761	1,216 2,408	117 244	66,748	1,192	127				