Strategy & Regulation

Name Nick Fincham
Phone 0203 577 4989
E-Mail nick.fincham@thameswater.co.uk

Andrew Walker
Ofwat
City Centre Tower
7 Hill Street
Birmingham
B5 4UA

28 October 2016

Dear Andrew

PR16 Draft Determination response from Thames Water

Please find enclosed Thames Water's response to Ofwat's PR16 Draft Determination. The response accompanies our revised set of data tables.

It has been very helpful for us since the Draft Determination to have engaged with Ofwat outside of the formal process and we hope that our revised proposals – which will result in lower bill impacts for our smaller customers relative to our original submission – will address the concerns we have discussed.

As mentioned in our response – and as we have indicated already to Ofwat – we are undertaking further customer research in light of our revised proposals and to assure Ofwat that our engagement with customers on this issue is robust. We will share the results and conclusions of this engagement with Ofwat by Friday 11 November 2016 at the latest.

As with our original PR16 submission, we have engaged and apprised Castle Water throughout the development of our response, as it is Castle Water that will provide retail services to all business in our region from 1 April 2017. We confirm that Castle Water supports the proposals contained within our response.

We look forward to Ofwat's Final Determination in December 2016. In the meantime, we would be very happy to provide any additional information or clarification required by Ofwat to assess fully our revised proposals.

Yours sincerely

Nick Fincham
Director of Strategy & Regulation

Thames Water Utilities Limited

Clearwater Court, 2nd East
Vastern Road
READING
RG1 8DB

T 0203 577 4989
F 0118 3738918
I www.thameswater.co.uk

Thames Water's response to Ofwat's PR16 Draft Determination

1. Introduction

On 15 September 2016 Ofwat published its PR16 Draft Determinations for retail non-household ("RNHH") default tariffs. This document sets out Thames Water's response to that Draft Determination. It accompanies our re-submitted data tables and is structured as follows:

- Section 2 sets out our understanding of why Ofwat rejected our original PR16 proposals;
- Section 3 explains our revised proposals and how they address Ofwat's concerns; and
- Section 4 outlines the additional assurance we have undertaken to support our revised proposals.

The overall implication of our revised proposals is to reduce on average the bill impact for our lowest volume customers (<5Ml), relative to our original PR16 submission.

As we have already indicated to Ofwat,[1] and explain in detail in Section 3, we are awaiting the results of additional customer engagement we are undertaking relating to our revised proposals. We will share this with Ofwat as soon as possible, and in any event no later than Friday 11 November, along with our conclusions on whether – as we expect – it supports our proposals, or if in fact adjustments would be appropriate in light of our customers' views.

2. Our understanding of Ofwat's decision

As part of our original PR16 submission we assessed whether or not there were good reasons to adjust:

- retail cost-to-serve across default tariff caps (either amending the cost drivers or updating to reflect more up to date information);
- net margin allocation across default tariff caps (whether our flat 2.5% allocation remained appropriate with the introduction of competition); and/or
- the overall number and structuring of default tariffs.

In our PR16 submission we proposed:

- no changes to the overall number and structure of default tariffs;
- no change to overall retail cost to serve but a reallocation of costs across tariff bands due to updated cost information and an improvement to the methodology used to apportion debt management costs; and

[1] Email from Peter Trafford to Andrew Walker, 19 October 2016.

- no overall increase in aggregate net margin (which remains at 2.5%) but a rebalancing of net margin across tariff bands.

In its Draft Determination Ofwat considered that these proposed changes were significant and that we had not provided sufficient evidence to support them. We are grateful for the conversations we have been able to have with Ofwat since the Draft Determination, which have given us a greater understanding of the concerns Ofwat had with our submission.

We believe Ofwat's concerns can be grouped into three areas:

- the allocation of net margin across tariff bands;
- the allocation of updated retail costs; and
- customer acceptability of overall bill impacts of our proposals.

Our response focusses on these key areas, and we explain in the following section how our proposals seek to address these concerns.

3. Our revised proposals

A. Overview

Our revised proposals seek to address the concerns raised by Ofwat in its Draft Determination. As set out below, we consider that these proposals – supported by the additional customer engagement we have carried out – will result in a fairer and more transparent set of default tariffs for our RNHH customers.

In summary, we are proposing:

- A revised methodology to allocate net margin across the tariff bands, linked to the working capital costs incurred across each tariff band. As well as being a more robust methodology linked to actual costs, our revised proposals have the added benefit of on average lowering the bill impacts for our lowest volume customers relative to our original PR16 submission.
- To retain the cost allocation included in our original submission, which updates them relative to PR14 to be more cost reflective.
- To undertake further customer engagement for small and medium customers to verify the acceptability of total bill impacts.

These are explained in turn in the remainder of this section. This section also explains the impact on customers relative to our original submission, sets out our revised proposals in the context of other companies' tariffs, and demonstrates that our proposals meet Ofwat's proposed gross margin caps.

B. A more robust methodology for net margin allocation

In its Draft Determination Ofwat was concerned that our proposal to re-allocate net margin increased prices for lower volume RNHH customers and advised that our proposal lacked clarity as to the underlying drivers for the re-allocation. In order to address these concerns we have simplified our approach, which has, as a consequence, reduced the impact on our lowest volume customers.

Our revised approach is driven by the impact of differences in working capital requirements on the costs of the retail business. It simply takes the average debtor days for each tariff band (derived from billing data) to calculate a working capital cost[2] for each band, which is then expressed as a net margin for each tariff band. This cost accounts for 0.7% of the average net margin of 2.5%. The net margin derived from this approach is then scaled up to the overall 2.5% net margin on a pro-rata basis. In undertaking the scaling up we have made two additional policy decisions:

- We have fixed the assessed tariffs to the equivalent measured tariff net margin, for example the net margin for the assessed water 0-0.5Ml tariff is set equal to the net margin for the measured water 0-0.5Ml tariff. This is because our assessed tariffs are set by reference to the average cost of an equivalent measured customer (because customers are usually only on the assessed tariff, rather than a measured tariff, for particular site-related issues) and hence it would seem fair to apply the same approach to the net margin.
- We have fixed the net margin for unmeasured water and wastewater customers at 2.5% as we did with our original PR16 submission. There are very few customers in these tariff bands and using the average 2.5% net margin seems appropriate.

The approach is set out in more detail in Appendix A, which outlines the debtor days, net margin and scaled up net margin values for each tariff band; Appendix B shows the changes in the net margin allocation from our original PR16 submission to our revised proposals.

Compared to our original PR16 submission this approach reduces the net margin allocation to our lowest volume customer bands, as set out in Table 1 below.

[2] A short-term borrowing rate of 3.2% has been used for these purposes although the rate used is not material to the overall allocation of net margin.

Table 1: Revised net margins for our lowest volume customers

Tariff band	Tariff description	Original PR16 Submission	Revised PR16 submission	Change
1	0 - 0.5 Ml Water measured	3.86%	2.88%	-0.98%
2	0.5 - 1 Ml Water measured	3.21%	2.85%	-0.36%
3	1 - 5 Ml Water measured	2.63%	2.65%	0.02%
8	0 - 0.5 Ml Waste measured	3.61%	3.15%	-0.46%
9	0.5 - 1 Ml Waste measured	3.03%	3.10%	0.07%
10	1 - 5 Ml Waste measured	2.52%	2.89%	0.37%

Source: Thames Water PR16 submission and Thames Water calculations.

Table 2 below shows the impact on our lower volume customers of our proposed changes in net margin.

Table 2: Bill impacts related to net margin changes (for combined customers) from PR14

Combined customer band	Overall combined bill in 16/17 (£)	Impact of change in net margin allocation (£)	Impact as a % of 16/17 bill
1 & 8 (0-0.5 Ml)	353	2	0.5%
2 & 9 (0.5-1 Ml)	1,613	8	0.5%
3 & 10 (1-5 Ml)	4,144	11	0.3%

Source: Thames Water calculations.

As shown in the table, the bill impact relating to net margin changes for our lower volume customers is small. Appendix C sets out the impact of the change in allocation of net margin for all combined customer tariff bands.

In addition to net margin, there are other changes to retail tariffs that affect customers, and these are discussed in Section C below.

C. Explanation of the changes to our underlying cost drivers and allocation methodology for debt management

Overview

As we set out in our original PR16 submission, our engagement with customers has shown that they support the principle that tariffs should be cost-reflective. Accordingly, we retain the cost allocation approach included in our original PR16 submission, which set out our most up to date view on the actual costs being incurred to serve each tariff band. As with our original submission, we are not seeking any increase in overall costs, although we have updated for 2015/16 cost and activity levels. This sub-section provides additional detail on why we updated these costs and what it means for customers' bills.

Costs were apportioned across the tariff bands using the cost drivers set out in Table 3 below.

Table 3: Cost drivers for RNHH default tariffs

Activity Cost Group	Cost Driver
Billing	Bills
Payment handling	Payment transactions
Debt management	Debt overdue after >30 days
Doubtful Debts	Consumption capped 1Ml
Non-network customer enquiries and complaints	Non-network contacts
Meter reading	Meter reads
Network customer enquiries and complaints	Network contacts
Disconnections	Bills
Demand side water efficiency initiatives	Number of properties
Customer side leakage	Number of properties
Other direct costs	Number of properties

Source: Thames Water.

More recent data on these cost drivers allowed us to update costs to make them more reflective, without changing the overall costs.

As explained in our original PR16 submission, there were two changes in cost allocation, with the aim of improving cost reflectivity:

- change in the approach for apportioning debt management costs; and
- updating activity levels for the cost drivers from 2013/14 to 2015/16.

Further explanation of these changes is set out in turn below.

Debt Management

As we explained in our original PR16 submission, our revised methodology for debt management has been updated to align with Ofwat's guidance.[3] It now:

- measures the value of customer bills that remain unpaid 30 days after standard payment terms have been exceeded. Previous methodology did not apply the company's standard payment terms but only measured 30 days against the bill date; and
- removes outstanding debt for customers who are on stage payment terms, whose debts are therefore not in arrears.

This revision ensures that the allocation of debt management costs more closely reflects the incidence of debt arrears, and is therefore more reflective of the costs we actually incur in serving each tariff band.

Update to Cost & Activity levels

In order to ensure that charges remain cost-reflective it is important that the costs and activity levels for the cost drivers are kept up to date. Accordingly, in line with our original PR16 submission we have updated the mix of costs and activity levels for the cost drivers (bills issued, customer numbers etc.) to reflect actual 2015/16 levels (with overall costs scaled back to the PR14 total). These updates have consequential impacts on the cost allocations through the interaction of changes in costs, customer numbers and activity levels.

The table below summarises the impact on the average cost per customer for each cost category for all tariff bands.

[3] "2014 Price Review Cost Allocation for Retail and Wholesale Price Controls" (pg11). Ofwat, March 2014.

Table 4: Change in average cost per customer from 2016/17 to 2017/18 due to changes in retail costs (£)

			Customer No.s	Billing	Customer Side Leakage	Debt Management	Demand side water efficiency initiatives	Disconne-ctions	Doubtful Debts	Meter Reading	Network Customer enquiries & complaints	Non Network Customer enquiries & complaints	Other Direct Costs	Payment Handling	Total
1	Water metered	0 - 0.5 ML	38	-1.82	-0.15	2.55	-0.04	-0.03	-0.88	0.08	-0.17	0.04	0.03	-0.02	-0.41
2	Water metered	0.5 - 1 ML	-581	0.68	-0.15	0.99	-0.04	-0.01	0.36	1.53	0.10	0.32	0.05	0.09	3.92
3	Water metered	1 - 5 ML	-387	-0.48	-0.20	2.71	-0.06	-0.02	-1.15	1.61	-0.25	-0.11	-0.06	0.00	1.99
4	Water metered	5 - 20 ML	86	-1.24	-0.20	-9.85	-0.06	-0.04	0.87	3.95	-1.08	-1.81	-0.05	-0.04	-9.54
5	Water metered	20 - 50 ML	-2	-1.78	-0.20	-25.35	-0.06	-0.05	1.52	8.74	-2.41	-0.59	-0.05	0.00	-20.23
6	Water metered	50 - 250 ML	30	-3.16	-0.18	-63.20	-0.05	-0.07	1.36	16.59	-7.77	-1.15	-0.03	0.04	-57.63
7	Water metered	250+ ML	2	-10.02	-0.24	-455.11	-0.07	-0.15	-3.32	5.19	-27.15	-40.69	-0.12	-0.07	-531.73
8	Sewerage metred	0 - 0.5 ML	3,300	-1.25	-0.07	3.47	-0.02	-0.02	-1.72	-0.71	0.04	0.14	0.19	-0.15	-0.12
9	Sewerage metred	0.5 - 1 ML	-120	3.13	0.00	0.61	0.00	0.03	2.45	1.76	0.68	1.13	0.31	0.10	10.19
10	Sewerage metred	1 - 5 ML	52	2.08	-0.07	1.92	-0.02	0.02	0.18	1.73	0.33	0.73	0.19	-0.05	7.05
11	Sewerage metred	5 - 20 ML	36	2.58	-0.06	-22.39	-0.02	0.02	3.82	4.74	-0.23	-0.33	0.19	-0.12	-11.79
12	Sewerage metred	20 - 50 ML	78	2.50	-0.06	-55.73	-0.02	0.02	5.23	11.20	0.32	3.92	0.20	-0.06	-32.47
13	Sewerage metred	50 - 250 ML	85	1.82	-0.05	-133.48	-0.02	0.01	4.72	21.57	-0.54	8.43	0.21	0.00	-97.33
14	Sewerage metred	250+ ML	15	-2.20	-0.04	-875.54	-0.01	-0.04	0.81	7.12	-14.30	-21.76	0.23	-0.03	-905.77
15	Trade Effluent	0 - 0.5 ML	-373	-1.63	-0.09	3.52	-0.03	-0.02	-1.93	-0.90	-0.01	0.05	0.16	-0.19	-1.07
16	Trade Effluent	0.5 - 1 ML	-99	1.28	-0.08	0.21	-0.03	0.01	-1.62	0.87	0.33	0.38	0.15	-0.05	1.46
17	Trade Effluent	1 - 5 ML	66	2.03	-0.07	1.90	-0.02	0.02	0.02	1.70	0.33	0.70	0.18	-0.05	6.73
18	Trade Effluent	5 - 20 ML	165	2.45	-0.07	-22.55	-0.02	0.02	3.55	4.69	-0.25	-0.45	0.19	-0.13	-12.57
19	Trade Effluent	20 - 50 ML	96	2.94	-0.04	-54.62	-0.01	0.02	6.01	11.34	0.53	4.60	0.22	-0.03	-29.05
20	Trade Effluent	50 - 250 ML	25	2.18	-0.04	-131.89	-0.01	0.01	5.22	21.68	-0.16	9.40	0.22	0.02	-93.38
21	Trade Effluent	250+ ML	4	-3.78	-0.07	-917.23	-0.02	-0.05	-1.16	6.81	-16.32	-29.92	0.18	-0.10	-961.67
22	Water assessed	0 - 0.5 ML	-525	-1.80	-0.15	2.53	-0.04	-0.03	-0.87	0.07	-0.16	0.04	0.03	-0.02	-0.40
23	Water assessed	0.5 - 1 ML	-40	0.52	-0.16	0.98	-0.05	-0.01	0.11	1.48	0.07	0.27	0.03	0.08	3.32
24	Water assessed	1 - 5 ML	84	-0.52	-0.20	2.70	-0.06	-0.02	-1.22	1.60	-0.26	-0.13	-0.06	0.00	1.82
25	Water assessed	5 - 20 ML	-3	-1.86	-0.22	-10.19	-0.06	-0.05	0.12	3.78	-1.20	-2.23	-0.09	-0.06	-12.05
26	Sewerage assessed	0 - 0.5 ML	-12,624	-0.58	-0.03	3.45	-0.01	-0.01	-1.38	-0.37	0.12	0.32	0.24	-0.09	1.65
27	Sewerage assessed	0.5 - 1 ML	-502	2.90	-0.02	0.56	-0.01	0.03	1.85	1.65	0.64	1.03	0.29	0.08	9.00
28	Sewerage assessed	1 - 5 ML	-337	2.14	-0.06	1.95	-0.02	0.02	0.35	1.75	0.34	0.76	0.19	-0.04	7.38
29	Sewerage assessed	5 - 20 ML	-22	3.75	-0.03	-21.03	-0.01	0.03	6.07	5.19	-0.02	0.71	0.25	-0.04	-5.14
30	Water unmeasured	0 - 0.5 ML	-155	-2.15	-0.17	2.49	-0.05	-0.04	-0.97	-0.06	-0.22	-0.04	-0.01	-0.04	-1.24
31	Sewerage unmeasured	0 - 0.5 ML	247	-0.30	-0.02	3.42	-0.01	-0.01	-1.24	-0.23	0.15	0.39	0.26	-0.07	2.36

Source: Thames Water RNHH costs.
Note: the change in average costs per customer in the table above do not equal those in Table 5 because they exclude the impact on net margin of changes in cost allocation.

There are a number of positive and negative movements for each tariff band across the range of activity costs. The key drivers for these changes are:

- the change in debt management approach outlined above, which accounts for debt overdue for more than 30 days, results in a greater proportion of costs to be allocated to customers consuming less than 5Ml;
- increases in billing volumes has shifted some costs from assessed customers to metered customers; and
- changes in customer numbers as a result of the transfer of billing of sewerage customers from WOCs (and re-categorisation of customers by WOCs in preparation for market opening) has affected the balance of cost allocation.

As part of our revised submission, wholesale costs have also been adjusted to reflect the changes in customer numbers. We have reworked the wholesale charges by keeping unit wholesale charges constant and then scaling down so that total wholesale charges remain the same as at PR14. In estimating bill impacts we have removed the impact of the change in wholesale charges (including them would in general result in lower bill impacts).

The updates to both changes in activity levels and cost driver methodology for debt management will result in tariffs that are more cost-reflective than those set at PR14.

Bill impacts of changes in cost allocation

The bill impact of the updates to the cost driver activity levels for our lower volume non-household customers is summarised in Table 5 below, in the context of the overall bill impact.

Table 5: Bill impacts due to updates in cost drivers

Combined customer band	Overall combined bill in 16/17 (£)	Impact of change in cost allocation (£)	Impact as a % of 16/17 bill
1 & 8 (0-0.5 Ml)	353	-1	-0.2%
2 & 9 (0.5-1 Ml)	1,613	14	0.9%
3 & 10 (1-5 Ml)	4,144	9	0.2%

Source: Thames Water calculations.

As shown by the table above, the impact of changes in cost allocation are relatively small, with an impact on bills of less than one percent for combined tariffs and in general significantly less than one percent. It should be noted that where there are larger movements in bill impact (for example, tariff bands 2 and 9 combined have an increase of £14.47) the PR14 Final Determination also had an increase for this combined category (£11.26 in this case in 2017/18). The change is therefore broadly consistent with the 2014 Final Determination and not a material new consequence of our PR16 proposals.

D. Customer engagement

Having established a more transparent allocation of net margin to the tariff bands, and having shown that the resultant bill impacts are moderate (and lower than our original PR16 submission), we are left to consider whether the level of customer engagement and customer support we have gained to date is adequate.

To support our original PR16 submission we engaged the research agency Populus to undertake independent customer research. The overall approach selected for the PR16 research was a qualitative approach to iteratively explore responses to a range of stimulus material setting out key features of Thames Water's default tariff proposals. The research explored participants' attitudes towards:

- understanding of the concept of competition for the 'retail' part of their water and wastewater services;
- the concept of default tariffs as protection for customers who choose not to switch;
- how default tariffs should be allocated (for example by usage);
- how retail costs should be allocated between tariffs; and
- Thames Water's proposals, focussing on the rebalancing of net margins.

Our research obtained customer support for the principle that segmentation of tariffs on a cost to serve (reflective) basis was fair. We did not consider it appropriate or necessary to discuss with customers the exact nature of these costs, nor the detailed methodology used to allocate

them. We considered that this could confuse customers in what were already complex discussions.

We considered that the different allocation of net margin was a much more significant issue to discuss with our customers, given the discretion we have and the potential move away from the methodology and prices set at PR14. Customers thought that allocating net margin on the basis of underlying cost drivers was commercially fair and reasonable. When testing the bill impacts of our proposed changes, customers concluded that the resultant impacts were insignificant in practice.

In simplifying our engagement approach to focus on net margin, however, we recognise and accept Ofwat's concerns that the bill impacts presented did not reflect the real increases that customers would see from 2016/17 to 2017/18. In particular, Ofwat raised concern with our 0.5 – 1 Ml tariff bands, for which we presented a £10 increase in bills as part of engagement but would in fact result in a c. £20 increase when cost changes were included.

Though we do not believe that the difference in these costs would result in materially different views from customers (£10 impact on a £1600 total bill), we are undertaking additional customer research with small and medium customers to test acceptability under our new proposals (which on the whole result in smaller bill increases than our original submission) and with the inclusion of cost-related bill impacts. The bill impacts presented to customers as part of our additional research are shown in the table below and shown in more detail in Appendix D. The overall bill impact on lower volume customers is 0.68%.

Table 6: Overall bill impacts presented to combined customers

Tariff Band (combined water and waste)	Average bill 2016/17 (£)	PR16 revised submission average bill impact 2017/18 (£)	PR16 revised submission average bill impact (%)
1 & 8 (0-0.5 Ml)	353	1	0.4%
2 & 9 (0.5-1 Ml)	1,613	22	1.4%
3 & 10 (1-5 Ml)	4,144	20	0.5%

Source: Thames Water calculations.

Subject to customers retaining similar views to our original research, we consider that this strengthening of our customer engagement will provide additional assurance around our new proposals. If customers express different views as a result of the changes, we would want to be able to adjust the proposed net margins to reflect the updated customer engagement.

We will seek to share the conclusions of this research no later than Friday 11 November 2016.

E. Our proposals reduce the bill impact for small customers relative to our original PR16 submission

The effect of revising our methodology for net margin allocation is to reduce the increase to bills for our lowest volume customers,[4] relative to our original PR16 submission. This is summarised in the table below. The total benefit to lower volume customers is around £0.5m from the change over the three years to 2020.

Table 7: Overall bill impacts of revised proposals relative to PR16 submission

Combined customer band	PR16 original submission average bill 2017/18 (£)	PR16 revised submission average bill 2017/18 (£)	Change in proposed PR16 average bill impact 2017/18 (£)
1 & 8 (0-0.5 Ml)	356	354	-3
2 & 9 (0.5-1 Ml)	1,637	1,635	-2
3 & 10 (1-5 Ml)	4,156	4,164	8

Source: Thames Water PR16 submission and Thames Water calculations.

We believe that this reduced impact for our lowest volume customers is a welcome consequence of our revised proposals.

F. Comparison with other companies' proposals

Though we consider that our revised methodology is robust on its own merit, as an additional check we have compared our revised net margin with those proposed by other companies that were accepted by Ofwat in the Draft Determinations. This is summarized in the Table below.

[4] In calculating the impact on customer bills, we have excluded any movement in wholesale charges shown in the data tables as these do not reflect actual expected wholesale changes. They result from the requirement to maintain total wholesale charges at FD levels, in the data tables, even though customer numbers have changed. If the wholesale charges were included the impact on customer bills would be smaller.

Table 8: Thames Water's revised net margin proposals compared to accepted proposals from other WaSCs

Company	Consumption band	2017-18		2018-19		2019-20	
		water	wastewater	water	wastewater	water	wastewater
Severn Trent	0-5ML	3.79%	2.79%	3.86%	2.82%	3.73%	2.85%
South West	0-5ML	3.14%	2.77%	3.15%	2.76%	3.13%	2.74%
Southern	0-1ML	6.30%	3.62%	6.31%	3.62%	6.32%	3.62%
	1-5ML	2.83%	1.98%	2.84%	1.98%	2.84%	1.98%
Thames Water	0-0.5ML	2.88%	3.15%	2.88%	3.15%	2.88%	3.15%
(revised PR16 proposal)	0.5-1ML	2.85%	3.10%	2.85%	3.10%	2.85%	3.10%
	1-5ML	2.65%	2.89%	2.65%	2.89%	2.65%	2.89%
United Utilities	0-5ML	2.87%	2.87%	2.85%	2.85%	2.84%	2.84%
Wessex	0-1ML	3.32%	3.39%	3.31%	3.40%	3.30%	3.41%
	1-5ML	2.39%	2.47%	2.38%	2.47%	2.37%	2.48%
Yorkshire	0-5ML	3.54%	2.95%	3.55%	2.94%	3.55%	2.93%

Source: Ofwat PR16 Draft Determination and Thames Water calculations.

Though it is difficult to compare on a like for like basis given companies' different tariff bands, the table demonstrates that our new proposals are comfortably within the range of those provisionally accepted by Ofwat.

G. Our proposals are compliant with Ofwat's gross margin caps

Finally, as shown in the table below, we confirm that our revised proposals are comfortably within the gross caps for the above 5Ml customers as set out in Ofwat's Draft Determinations.

Table 9: Comparison of proposed gross margins to gross margin caps

Broad tariff band	Gross Margin cap (%)	PR16 Revised submission gross margin (average over period) (%)
Water 5-50 Ml	5.0%	2.75%
Wastewater 5-50Ml	5.3%	3.53%
Water >50 Ml	3.3%	2.02%
Wastewater >50Ml	2.8%	2.48%

Source: Ofwat PR16 Draft Determinations and Thames Water calculations.

4. Assurance

This section outlines the additional assurance we have undertaken in support of our revised PR16 proposals.

A. Assurance of net margin calculations

✂

B. Assurance of our data tables

✂

C. Competition Law

In our PR16 submission we provided extracts from a report produced by Charles River Associates that concluded that our proposals were compliant with competition law and in particular any margin squeeze issues.

We have not undertaken a refresh of that analysis for our Draft Determination response because:

- the changes in tariffs are not sufficiently material to affect the overall result of the previous analysis;
- we have increased the net margin in the limited specific tariff bands where margins were tight; and
- Castle Water has not indicated any competition law concerns relating to our revised proposals.

D. Engagement with our CCG

As explained in our original PR16 submission, we engaged with our CCG throughout the development of our proposals and the testing of these with customers. We additionally briefed the CCG at its meeting of 26 October 2016 on our revised proposals, including further proposals on customer engagement and revised bill impacts on customers.

Appendix A

Debtor days by tariff band

The table below sets out the debtor days and net margin for all RNHH default tariffs.

Table 10: debtor days and net margin for all RNHH default tariffs

Tariff Band	Description		Debtors days	Net margin to cover working capital	Scaled up Margin
1	Water metered	0-0.5Ml	89.9	0.79%	2.88%
2	Water metered	0.5-1 Ml	88.8	0.78%	2.85%
3	Water metered	1-5Ml	82.8	0.73%	2.65%
4	Water metered	5-20Ml	63.5	0.56%	2.04%
5	Water metered	20-50Ml	62.4	0.55%	2.00%
6	Water metered	50-250Ml	57.3	0.50%	1.84%
7	Water metered	250Ml+	60.3	0.50%	1.84%
8	Wastewater metered	0-0.5Ml	98.1	0.86%	3.15%
9	Wastewater metered	0.5-1 Ml	96.7	0.85%	3.10%
10	Wastewater metered	1-5Ml	90.1	0.79%	2.89%
11	Wastewater metered	5-20Ml	71.6	0.63%	2.30%
12	Wastewater metered	20-50Ml	69.1	0.61%	2.21%
13	Wastewater metered	50-250Ml	62.8	0.55%	2.01%
14	Wastewater metered	250Ml+	78.4	0.55%	2.01%
15	Trade Effluent	0-0.5Ml	105.8	0.93%	3.39%
16	Trade Effluent	0.5-1 Ml	103.5	0.91%	3.32%
17	Trade Effluent	1-5Ml	100.1	0.88%	3.21%
18	Trade Effluent	5-20Ml	81.6	0.82%	3.02%
19	Trade Effluent	20-50Ml	88.1	0.77%	2.82%
20	Trade Effluent	50-250Ml	80.2	0.70%	2.57%
21	Trade Effluent	250Ml+	75.9	0.67%	2.43%
22	Water assessed	0-0.5Ml	163	1.43%	2.88%
23	Water assessed	0.5-1 Ml	163	1.43%	2.85%
24	Water assessed	1-5Ml	163	1.43%	2.65%
25	Water assessed	5-20Ml	163	1.43%	2.04%
26	Wastewater assessed	0-0.5Ml	163	1.43%	3.15%
27	Wastewater assessed	0.5-1 Ml	163	1.43%	3.10%
28	Wastewater assessed	1-5Ml	163	1.43%	2.89%
29	Wastewater assessed	5-20Ml	163	1.43%	2.30%
30	Water unmeasured		163	1.43%	2.50%
31	wastewater unmeasured		163	1.43%	2.50%
	Total				2.50%

Source: Thames Water calculations from internal debtor day information following methodology outlined in Section 3.

Notes:

- Debtor days established from billing data.
- Net margin for tariff bands 7 & 14 set to be no higher than 6 &13 as difference in debtor days likely to be due to small sample size.
- Scaling up to achieve overall 2.5% net margin undertaken pro-rata apart from tariff bands 22-31 which followed the following rules:
    - Water assessed scaled up net margin set to be equal to equivalent metered tariff consistent with approach to setting tariffs for assessed customers e.g. tariff band 22 (water assessed 0-0.5Ml) set equal to tariff band 1 (water metered 0-0.5Ml)
    - Tariff bands 30 &31 (unmeasured customers) set equal to average rate of 2.5%

Appendix B

Net margins by tariff band, comparing PR16 submission and PR16 revised proposals

The table below sets out the changes in net margin from our original PR16 submission to our revised proposals.

Table 11: Change in net margins from original PR16 submission to revised proposals

Tariff band	Tariff description	PR16 Submission	Revised PR16 submission	Change
	Metered Water			
1	0 - 0.5 Ml	3.86%	2.88%	-0.98%
2	0.5 - 1 Ml	3.21%	2.85%	-0.36%
3	1 - 5 Ml	2.63%	2.65%	0.02%
4	5 – 20 Ml	2.21%	2.04%	-0.17%
5	20 - 50 Ml	1.98%	2.00%	0.02%
6	50-250 Ml	1.71%	1.84%	0.12%
7	250+ Ml	1.57%	1.84%	0.27%
	Metered Sewerage			
8	0 - 0.5 Ml	3.61%	3.15%	-0.46%
9	0.5 - 1 Ml	3.03%	3.10%	0.07%
10	1 - 5 Ml	2.52%	2.89%	0.37%
11	5 – 20 Ml	2.14%	2.30%	0.15%
12	20 - 50 Ml	1.94%	2.21%	0.28%
13	50-250 Ml	1.70%	2.01%	0.31%
14	250+ Ml	1.58%	2.01%	0.44%
	Trade Effluent			
15	0 - 0.5 Ml	4.10%	3.39%	-0.71%
16	0.5 - 1 Ml	4.03%	3.32%	-0.71%
17	1 - 5 Ml	3.36%	3.21%	-0.15%
18	5 – 20 Ml	2.86%	3.02%	0.15%
19	20 - 50 Ml	2.59%	2.82%	0.24%
20	50-250 Ml	2.28%	2.57%	0.29%
21	250+ Ml	2.11%	2.43%	0.32%
	Business Assessed - Water			
22	0 - 0.5 Ml	2.82%	2.88%	0.07%
23	0.5 - 1 Ml	2.34%	2.85%	0.51%
24	1 - 5 Ml	1.91%	2.65%	0.74%
25	5 – 20 Ml	1.61%	2.04%	0.43%
	Business assessed - Sewerage			
26	0 - 0.5 Ml	2.75%	3.15%	0.40%
27	0.5 - 1 Ml	2.28%	3.10%	0.82%
28	1 - 5 Ml	1.87%	2.89%	1.02%
29	5 – 20 Ml	1.57%	2.30%	0.73%
30	**Unmeasured water**	2.50%	2.50%	0.00%
31	**Unmeasured sewerage**	2.50%	2.50%	0.00%

Source: Thames Water's PR16 submission and Thames Water calculations.

Appendix C

Impact of change in net margin relative to PR14

The table below sets out the bill impacts resulting from our revised allocation of net margin on 2017/18 tariffs, relative to 2016/17.

Table 12: Bill impacts related to revised net margin methodology

Type of bill	Band	Volume	Bill impact of change in net margin	
			£	%
Metered	1 & 8	0 - 0.5 Ml	1.80	0.5%
	2 & 9	0.5 - 1 Ml	7.57	0.5%
	3 & 10	1 - 5 Ml	10.94	0.3%
	4 & 11	5 – 20 Ml	-58.16	-0.4%
	5 & 12	20 - 50 Ml	-210.21	-0.4%
	6 & 13	50 - 250 Ml	-840.93	-0.6%
	7 & 14	250+ Ml	-2680.36	-0.6%
Trade effluent	15	0 - 0.5 Ml	2.48	0.8%
	16	0.5 - 1 Ml	5.78	0.7%
	17	1 - 5 Ml	13.96	0.8%
	18	5 – 20 Ml	41.64	0.5%
	19	20 - 50 Ml	99.36	0.3%
	20	50 - 250 Ml	84.61	0.1%
	21	250+ Ml	-261.37	-0.1%
Assessed	22 & 26	0 - 0.5 Ml	1.40	0.5%
	23 & 27	0.5 - 1 Ml	6.84	0.5%
	24 & 28	1 - 5 Ml	6.92	0.2%
	25 & 29	5 – 20 Ml	-53.21	-0.4%
Unmeasured	30 & 31	n/a	0.00	0.0%

Source: Thames Water calculations.

Note: In calculating the impact on customer bills, we have excluded any movement in wholesale charges shown in the data tables as these do not reflect actual expected wholesale changes. They result from the requirement to maintain total wholesale charges at PR14 levels, in the data tables, even though customer numbers have changed.

Appendix D

Overall bill impacts of revised methodology

The table below sets out the overall bill impacts of our revised PR16 proposals on 2017/18 tariffs relative to 2016/17.

Table 13: Overall bill impacts of revised PR16 proposals

Type of bill	Band	Water	Waste	Combined	
		£	£	£	%
Metered	1 & 8	0.28	0.99	1.27	0.4%
	2 & 9	6.76	15.28	22.04	1.4%
	3 & 10	5.73	14.48	20.21	0.5%
	4 & 11	-53.58	-26.46	-80.04	-0.5%
	5 & 12	-166.28	-97.98	-264.26	-0.5%
	6 & 13	-611.25	-388.61	-999.86	-0.7%
	7 & 14	-2520.12	-1634.86	-4154.98	-1.0%
Trade effluent	15		1.38	1.38	0.4%
	16		7.28	7.28	0.9%
	17		20.87	20.87	1.1%
	18		28.75	28.75	0.4%
	19		69.56	69.56	0.2%
	20		-11.17	-11.17	0.0%
	21		-1247.62	-1247.62	-0.3%
Assessed	22 & 26	0.22	2.46	2.68	1.0%
	23 & 27	6.59	12.88	19.47	1.5%
	24 & 28	5.09	11.26	16.35	0.6%
	25 & 29	-47.10	-23.74	-70.84	-0.6%
Unmeasured	30 & 31	-1.26	2.43	1.17	0.5%
0-5ML total increase					0.68%

Source: Thames Water calculations.

PR16 NHH Tariff

Populus Qualitative Research Summary Report

June 2016

Populus

Approach to the research

Qualitative approach adopted to iteratively explore response to range of stimulus material setting out key features of default tariff proposal (see Appendix)

- Focus groups with SMEs and Depth Interviews with larger users, as follows:

SMEs – 2-50 employees	Bill size	Importance of water to business	Location
Group 1	£1,500-3,000 p/a water and waste	Important to business	London
Group 2		Not important to business	Slough
Group 3	Under £1,500 p/a water and waste	Important to business	Slough
Group 4		Not important to business	London
Around 2 respondents in each group had multiple sites			
Depth 1-2	£3,000-5,000 p/a water and waste	Any	London, Slough, Reading
Depth 3-4	£5,000-10,000 p/a water and waste	Any	
Depth 5-6	Over £10,000 p/a water and waste	Any	
Depth 7-12	Key accounts with significant bills (e.g. 500k+)	Generally significant even it not core to processes	
A number of the depths had multiple sites			

A note on the method & sample

A qualitative method was used as customers needed to be walked through the stimulus material carefully to ensure they fully understood each aspect of the proposed default tariff and the building blocks and principles that underpinned it.

This discursive approach was particularly important because smaller business customers in particular have very little understanding of water tariffs and do not normally give much consideration to the way that Thames Water construct their charges, the effect of regulation on current and future tariffs etc.

Hence an exploratory qualitative approach (using focus groups and depth interviews) was the most reliable way to conduct the research.

The sample, was designed to be qualitatively representative of a wide range of Thames Water business customers including a range of different levels of bill spend, importance of water to the business, size of business, water/waste vs waste only customers, different industry sectors and location within the Thames Water region.

Key Headlines

1. Few smaller businesses were aware of competition; most larger businesses were. Many say they would consider switching, but generally (for SMEs) for a significant saving on their bill (10%+)
2. Whilst not all smaller businesses can immediately or easily appreciate the implications of competition being within the “retail” element of the bill, those that can are somewhat disappointed about the perceived “deals” that will therefore be available (i.e. as they see it less than 8%)
3. The concept of a default tariff is appreciated as a safety net for those who do not enter the market (immediately)
4. Banding tariffs on a volume basis is considered logical and commercially reasonable – businesses treat customers and are treated by suppliers differently based on volume
5. Segmenting on “cost to serve” basis is considered to be fair even though this means that a greater proportion of a smaller (vs larger) bill is for service
6. On the key point of re-allocating margin, the idea fits with accepted norms and is considered, therefore, to be commercially fair and reasonable
7. The resulting modest increase for smaller businesses is seen as insignificant in practice; even the larger absolute reductions for larger users are considered to be marginal gains given the size of their spend
8. A minority of smaller businesses felt that any increase compared to the gains of larger users could be seen as “unfair” – they “didn’t like” the contrast between their modest increase and larger users’ more significant gains rather than seeing it as commercially unfair per se

Few smaller businesses were aware of competition; most larger businesses were

Smaller Businesses

- Very low awareness of coming NHH competition
- Water is not, therefore on most businesses' switching radar
- Few baseline perceptions of how competition will work
- Minority using brokers expecting to hear about competition from them

Larger Businesses

- Majority aware of competition (especially larger users)
- Low knowledge of exactly how it will work (and even skepticism about whether it will happen on time)
- Larger businesses will explore switching but several indicated that they will wait and see how the market settles before making any decisions
- Some are part of larger groups, consortia or buying groups and will take lead from them
- Others mentioned that lots of processes involved in switching so would prefer to "wait and see"

Many say they would consider switching, but generally (for SMEs) for a significant saving on their bill (10%+)

Smaller Businesses

- Generally already switching energy providers, insurance companies etc.
- EITHER have a switching habit (e.g. insurance) OR switch for a reasonable gain (e.g. 10%+) with no loss of service
- Some “negatively” switch away from companies offering poor service, but rarely switch for service alone
- Would expect to switch water (and sewerage) provider ONLY for cost benefit and would expect 10% at least as a saving

Larger Businesses

- More entrenched systems and processes for reviewing suppliers
- Might be more likely to have de facto longer term relationships with product and service providers
- However have a responsibility (especially in non-commercial sector) to get best value so might switch for smaller % than SMEs
- SLAs likely to form a greater part of any competitive activity

Not all smaller businesses can immediately or easily appreciate the implications of competition being within the “retail” element of the bill

- Many businesses are surprised that the wholesale element of their bill is so high a proportion (92%) but are more able to understand once they consider what falls under wholesale vs retail
- A minority of smaller users and most larger users could see the implications for competition of the 8% retail proportion – they took this to imply that no more than 8% (on average) could be available as a competitive saving, and most likely far less
- But many smaller users took more time to process the information and consider the possible implications
- Some additionally concerned that the involvement of two companies might lead to mistakes or service would suffer because there would be an additional link in the chain compared with now
- Larger businesses were often more aware of the margins in the industry, had a better and more intuitive grasp of figures (often being specialists in their organisation) and thus this was less of a surprise

Those that understand are somewhat disappointed about the perceived “deals” that will therefore be available (i.e. as they see it, less than 8%)

- Once discussed, this realisation has the effect of dulling many smaller businesses’ appetite for switching
- As one business commented “*I have been paid more for coming here this evening than I would save if I switched*”
- Larger businesses reflected that competition was unlikely to initially attract lots of players from outside the industry
- Thus they often said they would (a) “wait and see” and (b) consider the potential risk to service levels as much as the potential financial gains to be made
- Some multi-site businesses who might previously have a local relationship with Thames Water, indicated that they might be “switched” as part of a group

The concept of a default tariff is appreciated as a safety net for those who do not enter the market (immediately)

- All businesses felt positively about the idea of a default tariff that protects them by providing a “cap”
- This was especially appreciated by those businesses who were previously unaware of competition and/or felt that they would be unlikely to switch given the likely modest savings available
- However larger businesses also felt reassured that there would be arrangements in place to continue a “business as usual” tariff should they not immediately enter into a new contract with Thames Water or switch to another provider

Banding tariffs on a volume basis is considered logical and commercially reasonable – fits businesses' own experience

- An axiom of business is that volume is a key variable in businesses' relationships with customers and suppliers
- Generally the more you buy (of a product or service) the better the deal you enjoy
- Thus segmenting the default tariff in terms of volume bands is both readily understandable and immediately acceptable for businesses
- Whilst smaller businesses know that they do not benefit from this compared to larger users, they see it as commercially fair – "It's business"

Segmenting on “cost to serve” basis is considered to be fair even though this means that a greater proportion of a smaller (vs larger) bill is for “service”

- Allocating costs to different volume bands is less immediately intuitive and commercially familiar as a volume based tariff, but once considered it is largely fair & acceptable for businesses of all sizes
- This idea fits the principle that “you should pay for what you use” which operates in and outside business
- Not all businesses are themselves able to charge on this principle (some operate on more of a swings and roundabouts basis for ease of pricing) but they see it as fair that they are charged this way
- Businesses can understand and accept the apparent “anomaly” of the higher percentage of costs in the lower bands as the “fixed” actual cost of service remains consistent – thus they are still “paying for what they use”

On the key point of re-allocating margin, the idea fits with accepted norms and is considered, therefore, to be commercially fair and reasonable

- The proposed difference in margin allocation, as a concept, fits the key business axiom that the greater the volume of a product or service bought, the better the deal that the customer should get (or be given)
- Thus for larger users to “pay” a lower margin on their bills makes commercial sense to businesses
- It is also seen as “commercially fair” i.e. reasonable behaviour on the part of the supplier who has a right to “favour” the customers who are most important to them, by virtue in this case of their higher usage/spend

The resulting modest increase for smaller users/businesses in particular is seen as insignificant in practice

- The actual changes in average bills (no more than a £10 increase) were felt by almost all customers to be insignificant in practice
- Businesses said that they would not really notice such an increase, especially if it were part of a “normal” annual change
- Even the larger absolute reductions for larger users are considered to be marginal gains given the size of their spend “Their £7,000 saving is the same as our £4 increase”
- One effect of this “insignificance” is that smaller users felt that such small changes would NOT stimulate them to look at alternative suppliers

Whilst they felt the actual increases were not significant, a minority of smaller businesses felt that any increase for them, compared to the gains of larger users could be seen as “unfair”

- A minority of smaller users based in London objected to what they acknowledged to be insignificant actual increases, on principle (in research we often see London based customers expressing more negative responses than those outside the City)
- They felt that as a community, smaller businesses are the driving force of the economy yet do not attract as favourable deals as larger businesses
- Thus they “didn’t like” the contrast between their modest increase and larger users’ more significant gains rather than seeing it as commercially unfair
- On this basis it is not unreasonable to frame their objection as being more directed at the wider forces that inevitably drive markets than this change per se
- It is also the case that whilst objecting they tended not to focus on their potential ability to get a better deal with Thames Water or by switching
- Finally, however some customers pointed out that they would probably not be aware of the changes in other bands and so would not be in a position to compare

Group and Depth Interview Stimulus Material

In 2017 competition will be introduced in the non-household water market which will mean that businesses can “shop around” for water and sewerage service providers.

(This situation already exists for very large water users in England and Wales and a fully competitive water market for all business customers has existed in Scotland for some years).

Your water (and sewerage) bill is made up of a “retail” and a “wholesale” part

Retail proportion - average of 8%
(Servicing customers)

Wholesale proportion - average of 92%
(Infrastructure and processing)

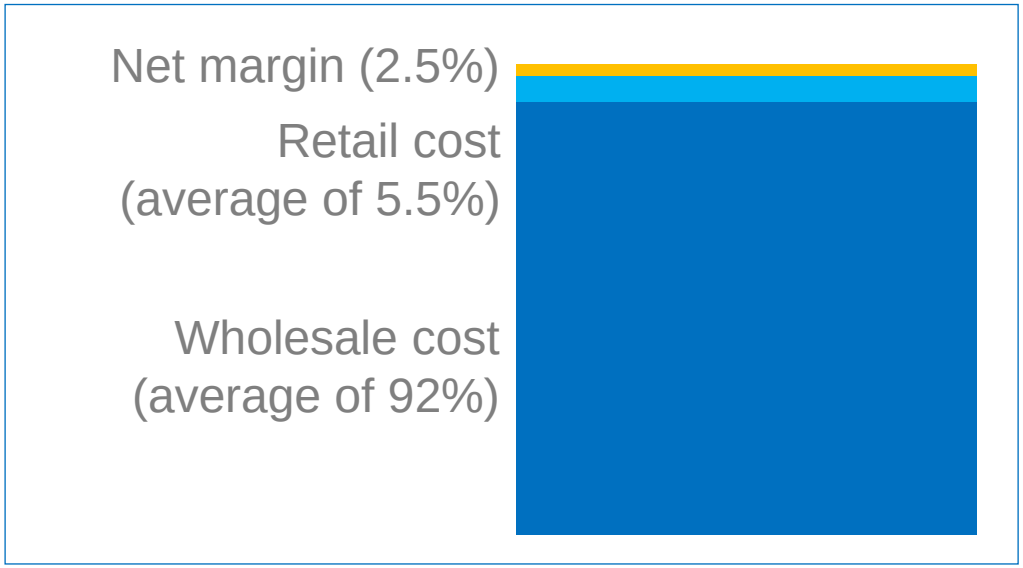
OFWAT has asked water companies to create a DEFAULT TARIFF for non-household customers for the 2017-2020 period.

When competition arrives in 2017, businesses will be able to switch suppliers or negotiate a different “deal” with their existing supplier.

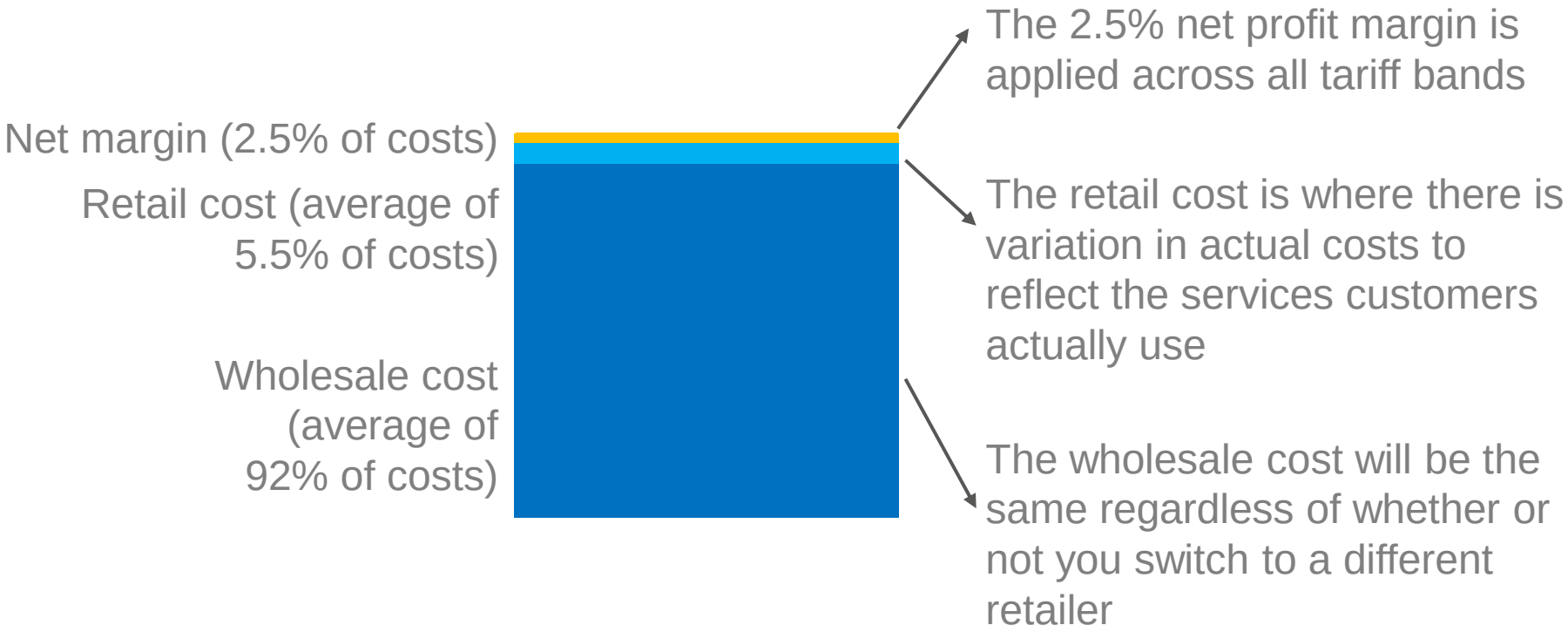
Those who choose not to switch will stay on the default tariff. This tariff is the standard price that non-household customers will pay, unless they negotiate a different deal, and is designed as a “safety net”.

The building blocks of the default tariff include the following elements:

Wholesale cost (i.e. the cost of providing and treating water and waste water)
Retail cost (i.e. the cost of serving customers – meter reading, billing, payment handling, customer enquiries, the cost of debt)
Net margin (i.e. the profit which OFWAT allows Thames Water to make)



Current default tariff



It costs Thames Water less to serve a smaller business – so the retail charge is lower than for a large business. This is reflected in your bill.

However, the retail element is a higher percentage of the total bill for smaller business.

Consumption Band	Average annual bill 2016/17 (excl. TE)	Retail element (£)	Retail element (%)
0 - 500m3 per year	£326	£63	19.4%
500-1,000m3 per year	£1,551	£143	9.2%
1,000-5,000m3 per year	£4,442	£255	5.7%
5,000-20,000m3 per year	£18,080	£667	3.7%
20,000-50,000m3 per year	£57,521	£1,754	3%
50,000-250,000m3 per year	£179,621	£5,047	2.8%
250,000m3 + per year	£779,309	£21,375	2.7%

Proposed changes to default tariff

Thames Water is not proposing to change the number of default tariffs or the tariff bands – so the tariff you are on now won't change unless you switch retailer

The total amount of money Thames Water will charge all of its customers put together will also not change

At the moment, Thames Water makes a 2.5% net margin across every type of customer. The net margin is the profit water companies are allowed to make once the costs of serving customers are taken into account.

Next year, Thames Water will change how it collects this net margin across the tariff bands, though the average will still be 2.5%

The reason Thames Water is adjusting the net margin is to bring it more in line with what is seen in competitive sectors such as energy, where companies generally make a larger % net margin on smaller customers

Combined clean and wastewater customers

This is how the proposed changes to the default tariffs would affect the net margin component of your bill:

Consumption Band	Net margin 2016/17	Net margin 2017/18	% Change
0 - 500m3 per year	2.5%	3.8%	1.3%
500-1,000m3 per year	2.5%	3.1%	0.6%
1,000-5,000m3 per year	2.5%	2.6%	0.1%
5,000-20,000m3 per year	2.5%	2.2%	-0.3%
20,000-50,000m3 per year	2.5%	1.9%	-0.6%
50,000-250,000m3 per year	2.5%	1.7%	-0.8%
250,000m3 + per year	2.5%	1.6%	-0.9%

Combined clean and wastewater customers

This is how the proposed changes to the default tariffs would affect your total bill:

Consumption Band	Average annual bill 2016/17 (excl. TE)	Average annual bill 2017/18 * (excl. TE)	% Change	£ Change
0 - 500m3 per year	£326	£330	1.3%	£4
500-1,000m3 per year	£1,551	£1,561	0.6%	£10
1,000-5,000m3 per year	£4,442	£4,446	0.1%	£4
5,000-20,000m3 per year	£18,080	£18,021	-0.3%	-£59
20,000-50,000m3 per year	£57,521	£57,205	-0.6%	-£316
50,000-250,000m3 per year	£179,621	£178,179	-0.8%	-£1,442
250,000m3 + per year	£779,309	£771,976	-0.9%	-£7,333

* Excludes inflation and any other changes

Wastewater only customers

This is how the proposed changes to the default tariffs would affect the net margin component of your bill:

Consumption Band	Net margin 2016/17	Net margin 2017/18	% Change
0 - 500m3 per year	2.5%	3.6%	1.1%
500-1,000m3 per year	2.5%	3%	0.5%
1,000-5,000m3 per year	2.5%	2.5%	0.0%
5,000-20,000m3 per year	2.5%	2.1%	-0.4%
20,000-50,000m3 per year	2.5%	1.9%	-0.6%
50,000-250,000m3 per year	2.5%	1.7%	-0.8%
250,000m3 + per year	2.5%	1.6%	-0.9%

Wastewater only customers

This is how the proposed changes to the default tariffs would affect your total bill:

Consumption Band	Average annual bill 2016/17 (excl. TE)	Average annual bill 2017/18 * (excl. TE)	% Change	£ Change
0 - 500m3 per year	£175	£177	1.1%	£2
500-1,000m3 per year	£703	£707	0.5%	£4
1,000-5,000m3 per year	£1,943	£1,943	0.0%	£0
5,000-20,000m3 per year	£7,466	£7,439	-0.4%	-£27
20,000-50,000m3 per year	£23,578	£23,442	-0.6%	-£136
50,000-250,000m3 per year	£70,024	£69,457	-0.8%	-£567
250,000m3 + per year	£373,050	£369,550	-0.9%	-£3,500

* Excludes inflation and any other changes

Thank you

Thames Water