

Business Retail Price Control Business Plan

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1. Executive summary

Since April 2016, we - Yorkshire Water Business Services ('YWBS'), a discrete division of the appointed business - have undertaken Business Retail price control activities independently from the Wholesale and Residential Retail price control activities.

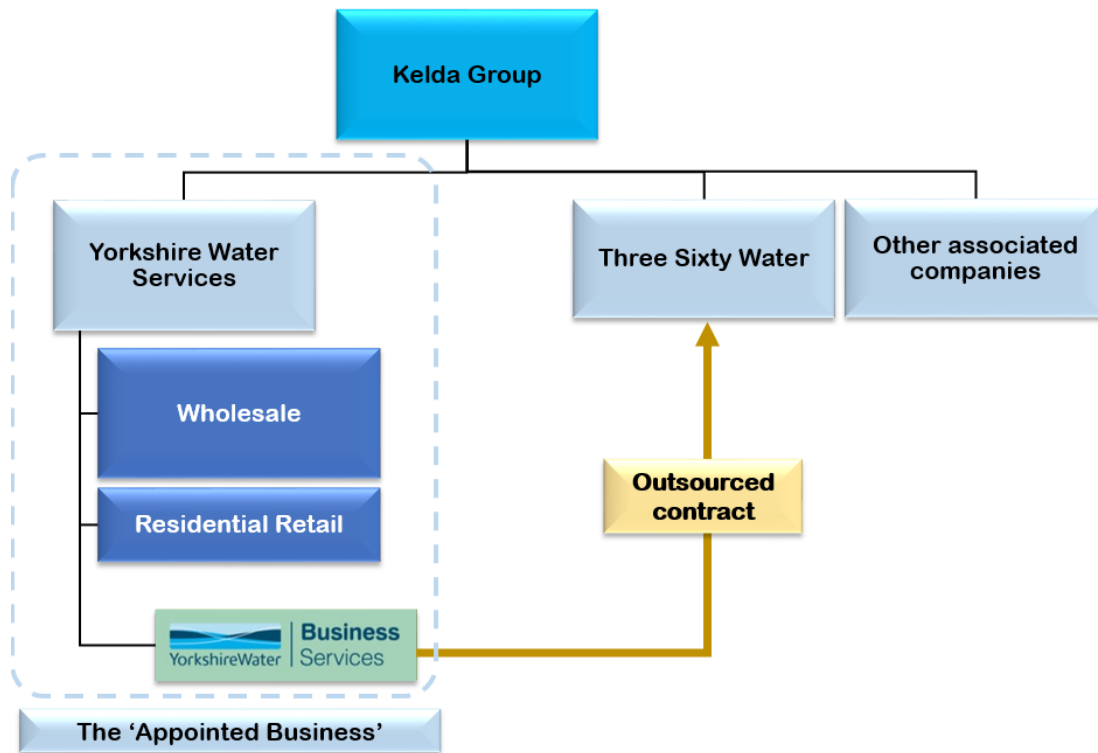
To allow us to focus on the needs of our Business Retail customers during the transition into the competitive market, without the distraction of undertaking legal separation and retail exit, we remained part of the appointed business at market opening.

We still remain part of the appointed business and therefore, in accordance with our obligations and the PR19 final methodology, we have prepared this Business Retail price control business plan as part of the appointed business submission.

While we remain part of the appointed business, our separation from Wholesale and Residential Retail, to ensure a level playing field in the retail market, includes:

- Trading as YWBS, to distinguish from the Wholesale and Residential Retail functions.
- All YWBS activities have been outsourced under formal contract to an associated Kelda Group company - Three Sixty Water (see Figure 1.1) - which operates from separate premises to the Wholesale and Residential Retail functions.
- Governance is undertaken via the Non-Household Retail Committee (a separate committee of the Yorkshire Water Board) with appropriate terms of reference and delegated authority from the Board, exclusively for YWBS matters.
- All market and non-market transactions between Wholesale and Three Sixty Water are undertaken on an arm's length basis, in accordance with the market codes, and consistent with the way Wholesale transacts with all non-associated retailers.

Figure 1.1 Yorkshire Water Services summary group structure



We want our business customers to have a refreshingly positive experience every time they deal with us and to notice we are different. We believe that this is already emerging in the reported Market Performance standards. Our main focus will be ensuring that we continue to provide our customers with this high level of performance at low cost. In addition, continuous improvement initiatives will be undertaken to further enable achievement of this operational vision:

To deliver a refreshing and exceptional service through our friendly people and expert knowledge.

We want to provide our Yorkshire business customers with the level and type of services which best suits their needs, assist in minimising the adverse impact of any service failure to which they may be vulnerable and keep their bills affordable. Acceptability testing of the services we plan to provide, and the cost of those services, has shown that 87% of customers support our proposals.

14 default tariffs will continue to be offered, which have been calculated in accordance with the PR19 final methodology guidance by rolling forward, from the PR16

determination, the 2019/20 retail margins for customer group 1 and increasing the customer group 2 gross margins to the uniform caps. This results in an average annual aggregated business retail margin of 3.6% across the 2020-2025 price control period which, after additional costs not included in the build-up of the default tariffs, reduces to a 1.3% average annual profit before interest and tax.

We have demonstrated the stand-alone financeability of this price control primarily by testing and evidencing that we are able to generate sustainably positive cash flows. The business plan is financeable in the round because the gross margin returns will be sufficient to fund all costs, including interest and tax. In addition, resilience has been demonstrated by undertaking testing as part of the appointed business RoRE assessments.

While we have completed the Business Retail Ofwat Tables, please note:

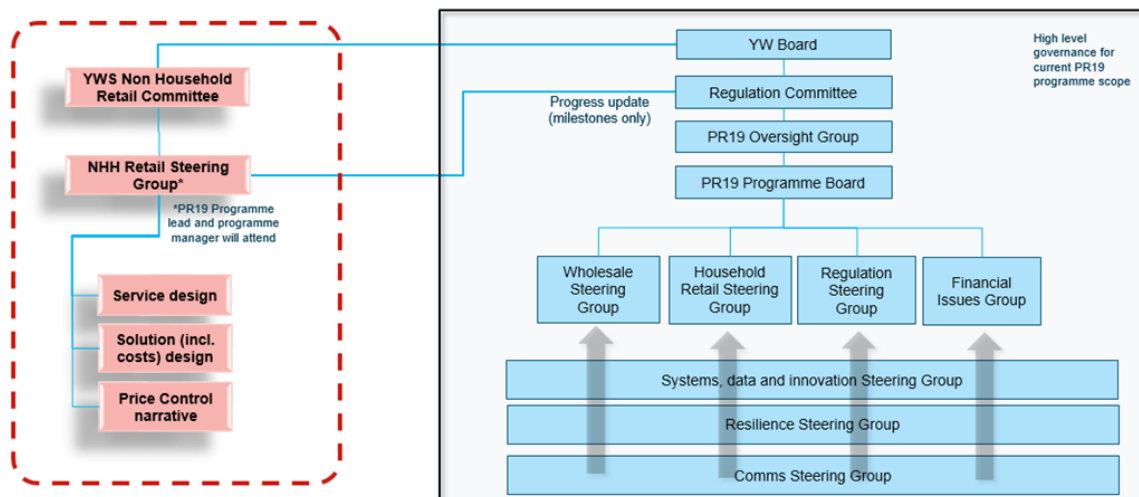
- Line 14 of Table R5 is a calculation intended to derive the aggregate net margin from the default tariff information in the subsequent blocks of R5. The line, however, is actually calculating the aggregate accounting gross profit margin. The values we have included on Line 2 of Table R8 are the aggregate net margins we would have expected the Ofwat calculation on Line 14 of Table R5 to produce.
- The Ofwat model had limitations in appropriately using its data sources, for example because YWBS remains part of the appointed business, but is not the only retailer in the Yorkshire region. As a result, the outputs from the Ofwat model have not been used to assess the financeability of the Business Retail price control – this has been tested outside of the model.

2. Securing confidence and assurance

The role of the YW Board in the governance and assurance of our PR19 business plan is described in Chapter 3 “Yorkshire Water Board Assurance Statement” of the appointed business submission.

The development, governance and assurance of this Business Retail price control has been undertaken independently from, but in parallel to the other five price controls (see Figure 2.1) to ensure no exchange of commercially advantageous information could take place which could provide us with an unfair advantage over our competitors.

Figure 2.1 Yorkshire Water Services PR19 governance structure



The assurance applied to our business plan has followed YW standard methodology using a process called the “three levels of assurance”. This is a risk-based approach to assurance and is recognised as best practice. This approach applies assurance on a proportionate basis and is based on a number of factors including the degree of risk as associated with individual elements of our data. The assurance we have applied to our business plan has made sure the data in our submission is accurate.

The YW Board was engaged in the development of the Business Retail plan and kept updated on progress by the Non-Household Retail Committee, which had delegated responsibility for the governance and assurance of the plan.

3. Key objectives of the business plan

3.1. Business strategy

We recognise our obligation, under the YW Instrument of Appointment, as being the primary provider of good quality, reliable and affordable retail services to our customers. Because business customers can now freely choose their retailer, we must deliver the range and level of services our customers have consistently said they want from their retail provider.

The customer insight we have gained, from: our micro-businesses and small to medium enterprises (via a third-party product called ServiceTick), our account managers, market studies, and direct customer feedback, is that customers want:

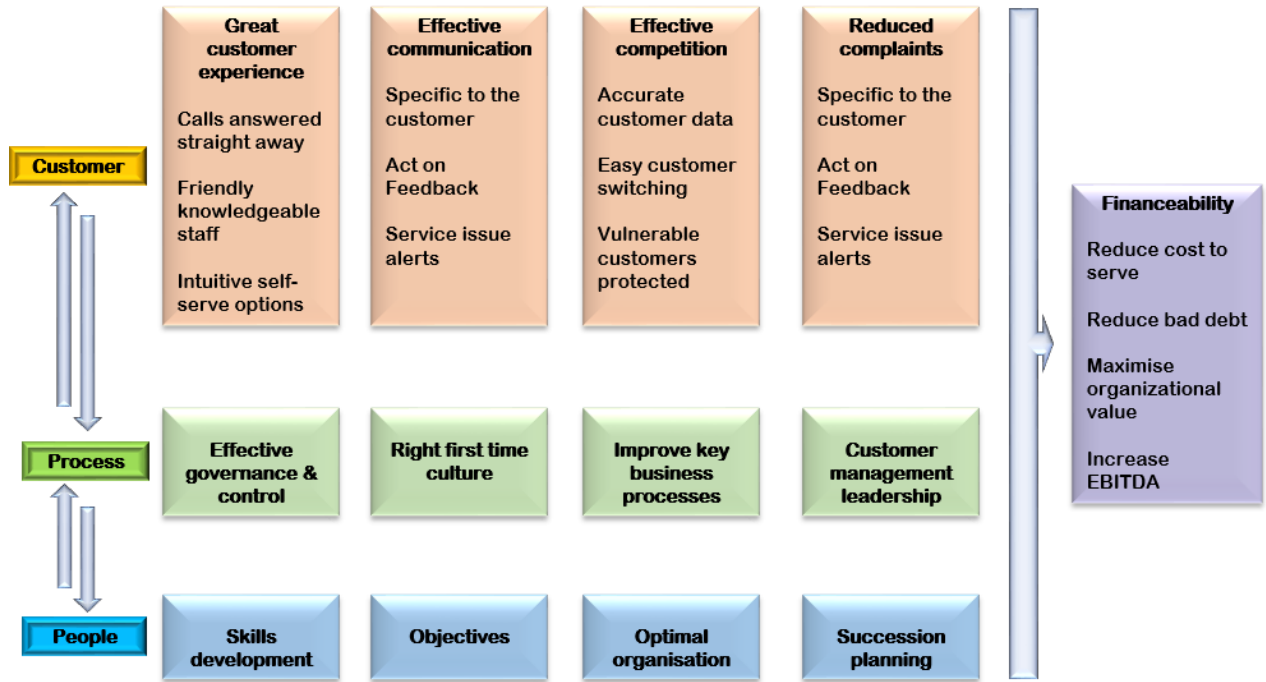
- Regular, accurate bills based on actual meter readings;
- Simple easy to understand billing information;
- Easy access to self-service facilities;
- Knowledgeable, easy to deal with staff; and
- Prompt resolution when issues do occur.

To ensure customers want to stay with us or to win back those who have switched, we must deliver the services they value, to an exceptional standard, and at the right price – as such, our vision is:

To deliver a refreshing and exceptional service through our friendly people and expert knowledge.

Prerequisites for achieving the vision include having highly engaged, suitably trained and motivated people, along with suitable supporting processes and systems – all of which need to adapt to new or changing market requirements and the use of emerging technologies. The strategy map, shown in Figure 3.1.1, summarises our approach to delivering the service improvements and outcomes our customers expect.

Figure 3.1.1 Strategy map to achieve vision



Targets

To ensure our efforts remain focussed on delivery of the above customer outcomes, the specific measures and performance targets that we will be internally monitoring are tabled in Table 3.1.2. The performance of these measures will be influenced by all elements of our strategy map.

Table 3.1.2 Measures and performance targets

Measure	Description	Target
Customer complaints	Number of written and/or telephone complaints received per month	Reduced numbers of complaints overall, with improved resolution time and reduced escalations
Calls answered	Percentage of calls received in the customer contact centre, during hours of operation, being answered before the customer hangs up	Current performance level maintained/enhanced
Speed of answer	Time taken to answer calls received in the customer contact centre, during hours of operation	Current performance level maintained/enhanced
CSAT	Score, provided by customers contacting us, to say how satisfied they were with how the purpose for their contact had been handled	Improved satisfaction scores
Ease of use	Opinion, provided by customers contacting us, to say how easy we are to interact with	Improved ease of use scores
Occupied 'void' properties	Number of occupied premises incorrectly being treated as vacant and therefore not being billed the correct amount	Reduced number of occupied 'void' premises, from proactive customer data management
Gap sites	Number of premises consuming water and/or wastewater services but not registered in the market and therefore not being billed	Reduced number of gap sites, from proactive customer and usage data management

3.2. Key service themes

Inputs to deliver the four key customer outcomes, shown in Figure 3.1.1, include inter-related projects described in the four sub-sections below.

Great customer experience

We want our customers to have a refreshingly positive experience every time they deal with us and to notice we are different. Knowledgeable, friendly staff and intuitive self-serve systems are what customers can expect when they contact us.

We are going to enhance colleague skills and knowledge through learning and development programmes including improved induction, refresher and specialist courses, to ensure we deliver the best customer service and handle all contacts right first time. Enhanced resource planning will help maximise the number of calls answered quickly, by a real person.

We want to offer more and better consolidated billing for multi-site customers, and intend to expand the number of sensitive customer plans to include smaller customers.

We will encourage the wholesaler to create accredited entity schemes, which will allow us through our suppliers to replace or fix customer meters more effectively, and we expect to work with the wholesaler to provide: further deployment of automated meter reading and logging technology, options for proactive meter replacement, and more innovative metering solutions.

Effective communication

We intend to introduce alternative methods of engaging with our customers in more meaningful and innovative ways to enable us to understand, keep pace with, and react to changing customer needs.

By appropriately segmenting our customers, we will be able to tailor communications to reflect the information and services they are most interested in and communicate with them via their preferred channels.

We are developing an improved website and online portal and will implement other channels for our customers to access information, self-serve and contact us 24/7. These developments will allow customers to: make on-line payments, view their bill history, obtain copy bills, provide their own meter readings, access on-line forms for queries and service requests, and access water efficiency advice.

Our capability to communicate network resilience issues to our customers will enhance. This will improve our ability to engage with, and respond to large numbers of customers in the event of a major event affecting customer supplies.

We want to listen and act on customers' feedback, so we will be implementing a survey tool making it easy for customers to pass on their feedback, and which provides us with an enhanced reporting suite to really understand what our customers are saying.

Effective competition

Accurate data is fundamental to accurate billing, market settlement processes, customer switching efficiency, and to the provision of a great retail service. We will continue to invest in our ongoing data improvement programme to ensure customer and premises

data is complete and accurate, and we will continue to improve on our industry leading achievements in complying with standards for both market performance and our guaranteed service standards scheme.

Micro businesses have special status under the Customer Protection Code of Practice. We will continue to seek additional data sources which allow more reliable identification and maintenance of information related to this customer group.

We will work with the wholesaler to identify gap sites and voids in the market. Where feasible, we will increase automation to assist with the detection of voids and gap sites and react to them accordingly to reduce the adverse impact they have on customers' bills.

Despite being licenced to operate only in Yorkshire, we plan to increase our participation in market forums to improve communication with wholesalers of our customers' issues and concerns, in a fair and transparent way.

Reduced complaints

Following the introduction of a new billing system for market opening, customer feedback tells us we need to further enhance our billing processes, bill information and layouts, so they are customer friendly and easy to understand. To reduce customer account balance queries, we will also improve payment receipt and allocation to invoices processes.

We will be improving our 'SWIM-pool' bi-lateral communications interface with the wholesaler to more effectively manage customer work orders and queries. This will reduce the need for repeat customer contacts and minimise complaints.

To improve the accuracy of customer bills, we will be reviewing and optimising our meter reading frequencies, and are developing a programme with the wholesaler to resolve historical issues of some customers' meters being very difficult to access to read or replace. These changes will enable all metered customers to receive up-to-date consumption data on which their bills will be based.

4. Supporting our customers

Key priorities of our 2020-25 business plan are that our customers should continue to receive value for money services which they are able to pay for. Two areas where, as a retailer, we can most assist with this are to minimise the adverse impact of any service failure to which our customers may be vulnerable, and to keep customers' bills affordable. These are discussed in more detail in the two following sub-sections.

Vulnerability

Prolonged or frequent loss of supply to a water-dependent business (large or small) can seriously impact on its success. Significant numbers of our customers' business premises also incorporate domestic or residential living accommodation for vulnerable customers.

To assist the wholesale business in protecting the most vulnerable customers, we:

- Are developing processes to reliably identify our business customers who are vulnerable to a loss of, or change in their water supply service. To do this we:
 - Have an ongoing programme of data cleansing activity which will continue to support the identification of vulnerable customers; and
 - Will encourage customers to make us aware of their needs and specific supply related vulnerabilities.
- Will educate customers about their obligations relating to storage requirements and other back-up supply requirements – providing customers with information on how they can mitigate the adverse impacts of an emergency.

Affordability

Customers have told us they have no appetite for reduced service levels at lower cost, and are not willing to pay more to simply maintain current service levels. For this reason, we plan to provide gradual, continuous improvements to our already good service quality, while keeping bills at affordably low levels which are acceptable to our customers.

We will also continue helping businesses to reduce consumption as this gives rise to a significant proportion of their overall bills. When requested by customers, we will

facilitate discussions with suppliers regarding leakage detection and repair, flow and pressure monitoring, water efficiency advice, and drainage connection surveys.

With a large and diverse customer population, however, at any point in time some customers will be, or at risk of, struggling to pay their bills and may need easy access to assistance. We encourage these customers to contact us as our skilled Commercial Debt Team is dedicated to helping business customers who are struggling to manage their bills. This team works with our customers, to provide bespoke, suitable solutions to make payments more manageable.

5. Customer acceptability

To confirm the services we plan to provide, and the cost of those services are in-line with our customers' expectations, we tested our proposal with 346 customers as part of the development of this plan.

The aggregated result from the 346 customers (93% of which are either unmeasured or consume less than 5Ml per annum) was that 87% supported the plan (see Table 5.1) and 70% said it represented good value for money (see Table 5.2).

Table 5.1 Support for the YWBS retail plan

Which of the following best describes how much you support Yorkshire Water Business Services' Retail Plan, based on the improvements mentioned and the forecast for future retail bills?	
Very supportive	36%
Supportive	51%
Unsupportive	5%
Very unsupportive	3%
Not sure	5%

87% were either supportive or very supportive of the plan.

Table 5.2 Value for money

Given the plan that you have seen, to what extent would you say that the Yorkshire Water Business Services Retail Business Plan represents value for money?	
Very good value for money	22%
Good value for money	48%
Neither good nor poor value for money	19%
Poor value for money	3%
Very poor value for money	2%
Don't know	6%

70% said the plan was either good or very good value for money and a further 25% were undecided.

Further details of the process undertaken to assess customer acceptability can be read in the separate appointed business submission appendix "Approach to customer and stakeholder participation and engagement".

6. Financing the plan

6.1. Our financial strategy

Our core financial strategy, is to balance providing industry leading retail services to our customers at competitive rates which are acceptable to them, and the need to secure adequate net and gross retail margins to sustainably finance efficient service delivery costs and provide appropriate shareholder return.

6.2. Default tariff proposals

We will continue to offer 14 default tariffs as shown in Appendix 1, which have a fixed charge to recover some retail costs, and a variable charge, based on the size of the wholesale bill, to recover the retail margins. Our default tariffs have been influenced by:

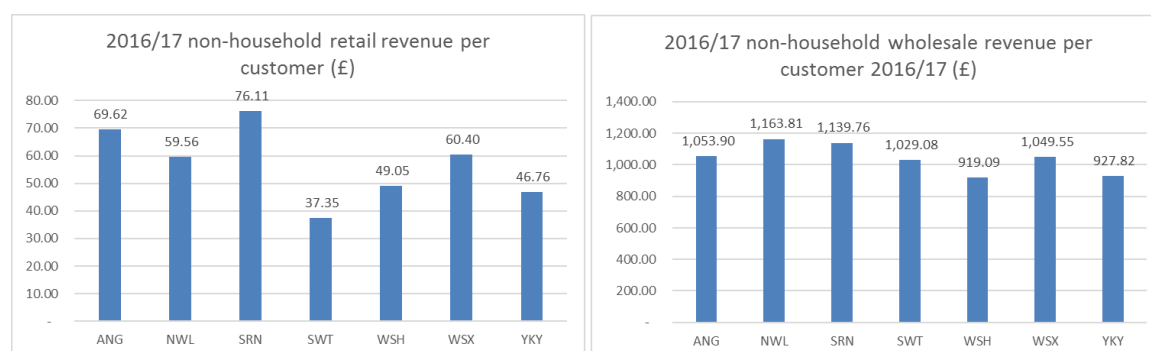
- Considering the likely acceptability to customers;
- Rolling forward net margins from our current default tariffs and continuing to move towards the uniform gross margin caps set in 2016;

- Minimising incidence effects of customer bills moving significantly in any one year; and
- Ensuring sufficient revenues are generated to fund efficient operating costs, and provide appropriate post interest and tax returns.

Retail costs within the customer group 1 default tariffs

Information compiled from the 2016/17 industry datashare (see Figure 6.2.1) shows that YW remains one of the lowest wholesale and retail cost Water and Sewerage companies in England.

Figure 6.2.1 Revenue per customer (compiled from 2016/17 datashare)



Severn Trent, Thames Water and United Utilities have been excluded from the above due to incomparable data.

Our customer group 1 default charges for 2020-2025 include a retail cost per customer consistent with the PR16 determination for 2019/20, adjusted only to exclude pension deficit contributions beyond 2021/22 (when we expect the deficit to be cleared), and to include the impact of input price pressures (see Appendix 4).

This cost recovery approach should allow our business customers to continue to benefit from our position as one of the most efficient and best value retailers in the industry.

Net and gross margins within the default tariffs

Our net and gross margins are set out in Appendix 2. Customer group 1 tariffs (unmeasured and less than 5Ml per annum) will have fixed net margin percentages equal to the PR16 determination for 2019/20. Customer group 2 tariffs (at least 5Ml per annum) will have gross margin percentages which increase across 2020-2025, where there is headroom to do so, towards the uniform gross margin caps, while ensuring

year-on-year retail revenue price increases remain within the supplementary cap 1% tolerance.

The 2020-2025 annual average aggregate retail margin is 3.6%. This is higher than the initial 2.5% aggregate margin from the PR16 determination because of the allowed increase in customer group 2 gross margins, towards the uniform gross margin caps. However, the percentage reduces to 1.3% after costs not included in the build-up of the default tariffs, and further reduces after interest and tax.

These low percentages are consistent with KPMG's finding, in its June 2018 Review of credit arrangements for the non-household retail market, that "Virtually all of the consultees at the workshop and interviews commented that the gross margins (allowed costs plus net margins under the PR16 price caps) in the market were thin and that credit and collateral requirements further reduce the available margins."

6.3. Business Retail costs

The cost forecast in Appendix 3 shows our costs will reduce each year, excluding input price pressures, because of:

- Operating efficiency initiatives to reduce headcount (e.g. better trained staff, self-service and right first-time approach);
- Costs directly linked to reducing customer numbers (e.g. reduced meter reads, billing costs and payment handling);
- Depreciation reducing to 2023/24, when capitalised market opening programme costs would have been fully depreciated; and
- Pension deficit contributions ceasing after 2021/22.

While no regulated cost performance incentive mechanisms to drive further efficiencies are proposed for the Business Retail price control, customers who believe they are not receiving value for money are free to switch retailers. This is a significant incentive for us to continually look for efficiencies, and to share benefits with customers.

Despite our expected costs being efficient and reducing, they are still higher than we have included within the customer tariffs. Reasons for this include the methodology requiring miscellaneous costs, which include MOSL fees of £0.494M per annum, to be excluded from default tariffs. The business plan is financeable in the round, however, because we expect the margin returns will be sufficient to support the actual costs.

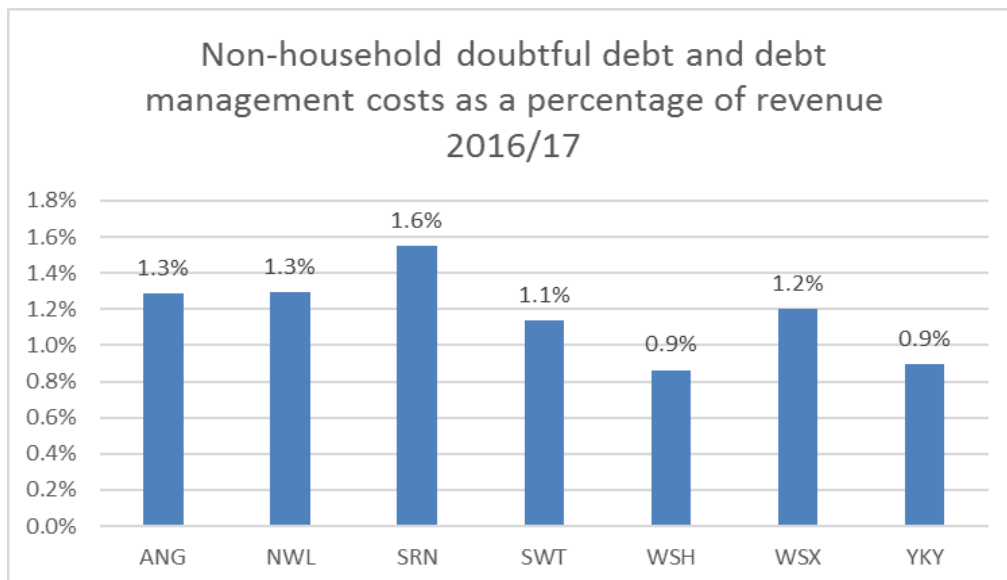
Appendix 5 provides a bridge between the annual costs recovered from default tariffs and the forecast of costs to be incurred.

Managing bad debt

Debt management and doubtful debt combined is our second largest cost, even though our business customers rarely miss payments. When they do, it is usually because they are genuinely struggling with their finances and in these instances, we will work with them to reach arrangements that are mutually acceptable. Where all options become exhausted, or where customers are not making efforts to resolve issues, cut-off and court action are used as last resorts. This is infrequent, but ensures bad debt is kept to a minimum and reduces the cost burden of unpaid debts on other customers' bills.

We expect customers switching to new retailers are likely to be those who require less credit control intervention. The cost of debt management and doubtful debt as a proportion of revenue, therefore, is forecast to increase from 0.9% in 2016/17 to 1.0% on average across 2020-2025. By reference to the 2016/17 industry datashare information shown in Figure 6.3.1, we believe this is likely to continue to rank us one of the top performing retailers in this area.

Figure 6.3.1 Doubtful debt and debt management costs as a percentage of revenue 2016/17



Severn Trent, Thames Water and United Utilities have been excluded from the above due to incomparable data.

6.4. Approach to assessing financeability

In accordance with Ofwat's methodology, we have assessed the financeability of our Business Retail price control, by ensuring we are able to generate sustainably positive cash flows, see Table 6.4.1. In addition, financial resilience scenario testing has been undertaken as part of the appointed business RoRE assessments described in Chapter 14 "Financeability risk and return".

Table 6.4.1 Forecast cash flows – calculated separately from the Ofwat model

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	£M	£M	£M	£M	£M	£M
Revenue (R5 Line 13)	192.191	181.624	180.470	179.843	182.949	185.467
Wholesale charge (R5 Line 12)	(181.454)	(171.043)	(169.776)	(169.333)	(172.335)	(174.733)
Gross margin	10.737	10.581	10.694	10.510	10.614	10.734
Total operating expenditure (R5 Line 1)	(8.261)	(8.044)	(7.981)	(7.981)	(8.063)	(8.169)
Pension deficit contributions (R5 Line 5)	(0.411)	(0.420)	(0.429)	0.000	0.000	0.000
Exclude developer services (R5 Line 8)	0.667	0.682	0.698	0.714	0.732	0.750
Operating cashflows	2.733	2.799	2.982	3.243	3.283	3.315
Capex (R5 Line 7)	0.000	0.000	0.000	0.000	0.000	0.000
Financing costs	(1.466)	(1.382)	(1.372)	(1.368)	(1.393)	(1.412)
Tax	0.000	0.000	0.000	(0.243)	(0.321)	(0.323)
Net cashflow	1.266	1.417	1.610	1.632	1.569	1.579

Table 6.4.1 demonstrates the plan is financeable because it generates positive net cashflows each year. The cashflow calculations have assumed:

- Developer services revenue (to at least match costs) will be recovered separately from developers and so the costs have been excluded above;
- Post-pay of the monthly wholesale charge and posting of 50 days' worth of collateral;
- Net working capital cycle of 30 wholesale days;
- Receipts from customers who pay in advance will enable payment of non-wholesale charge operating costs;
- 4.37% cost of debt;
- Cost of collateral at 25% discount to the cost of debt, applied to 50 days of wholesale charge;
- 19% effective tax rate until 2020/21 and 17% thereafter;
- Depreciation can be used as proxy for in-year tax capital allowances;
- No credit for carried forward tax losses, just zero tax in the years of financial loss;
- Tax cash paid wholly in the financial year, not staggered across in year and the subsequent year; and
- Positive annual cashflows are distributed each year and therefore do not reduce future borrowing requirements.

Appendix 1 Average customer bills

Indicative average customer bills for each of the 14 default tariffs

Default tariff	Units	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
1. Water - unmetered	fixed retail element (£)	17.34	17.71	18.13	18.08	18.52	18.97
	variable retail element (£)	13.14	14.32	14.54	14.72	15.11	15.51
	wholesale element (£)	81.75	90.27	91.47	92.91	95.41	98.00
	total bill (£)	112.23	122.30	124.14	125.71	129.04	132.48
2. Sewerage - unmetered	fixed retail element (£)	17.47	17.85	18.27	18.22	18.66	19.11
	variable retail element (£)	12.93	12.20	13.06	13.65	14.39	14.87
	wholesale element (£)	153.47	143.55	154.49	162.29	171.62	177.51
	total bill (£)	183.87	173.60	185.82	194.15	204.67	211.49
3. Water < 5 MI	fixed retail element (£)	26.38	26.95	27.58	27.51	28.17	28.86
	variable retail element (£)	19.12	21.03	21.33	21.64	22.22	22.82
	wholesale element (£)	493.18	544.55	551.81	560.48	575.60	591.21
	total bill (£)	538.68	592.53	600.71	609.63	626.00	642.90
4. Sewerage < 5 MI	fixed retail element (£)	28.48	29.09	29.78	29.70	30.42	31.16
	variable retail element (£)	23.05	21.63	23.23	24.36	25.73	26.60
	wholesale element (£)	735.02	687.50	739.90	777.23	821.93	850.15
	total bill (£)	786.55	738.22	792.92	831.29	878.08	907.90
5. Trade effluent < 5 MI	fixed retail element (£)	22.74	23.23	23.78	23.71	24.29	24.88
	variable retail element (£)	66.73	62.47	67.20	70.56	74.60	77.15
	wholesale element (£)	2,750.22	2,572.42	2,768.48	2,908.15	3,075.41	3,180.98
	total bill (£)	2,839.70	2,658.11	2,859.46	3,002.42	3,174.30	3,283.01
6. Water 5 < 50 MI	fixed retail element (£)	26.38	26.95	27.58	27.51	28.17	28.86
	variable retail element (£)	527.26	689.15	857.35	871.33	894.93	919.28
	wholesale element (£)	15,818.43	17,465.90	17,698.77	17,976.85	18,461.98	18,962.79
	total bill (£)	16,372.07	18,182.00	18,583.71	18,875.69	19,385.08	19,910.93
7.1 Sewerage 5 < 50 MI	fixed retail element (£)	28.48	29.09	29.78	29.70	30.42	31.16
	variable retail element (£)	637.78	807.76	985.83	1,037.15	1,097.79	1,135.78
	wholesale element (£)	19,036.11	17,805.39	19,162.51	20,129.26	21,286.98	22,017.68
	total bill (£)	19,702.37	18,642.24	20,178.13	21,196.11	22,415.19	23,184.62
7.2 Trade effluent 5 < 50 MI	fixed retail element (£)	22.74	23.23	23.78	23.71	24.29	24.88
	variable retail element (£)	1,168.83	1,473.43	1,792.58	1,884.28	1,993.44	2,062.11
	wholesale element (£)	34,044.81	31,843.74	34,270.87	35,999.82	38,070.33	39,377.15
	total bill (£)	35,236.38	33,340.40	36,087.23	37,907.81	40,088.06	41,464.14
8.1 Water 50 < 250 MI	fixed retail element (£)	43.17	44.10	45.14	45.02	46.10	47.23
	variable retail element (£)	3,441.96	4,052.27	4,105.84	4,171.19	4,283.88	4,400.22
	wholesale element (£)	112,423.57	124,132.40	125,787.41	127,763.77	131,211.65	134,770.98
	total bill (£)	115,908.70	128,228.77	129,938.39	131,979.97	135,541.64	139,218.42
8.2 Water ≥ 250 MI	fixed retail element (£)	47.32	48.34	49.48	49.35	50.54	51.77
	variable retail element (£)	20,098.23	23,630.43	23,944.99	24,322.12	24,978.63	25,656.36
	wholesale element (£)	649,856.41	717,538.45	727,105.10	738,529.29	758,459.56	779,033.98
	total bill (£)	670,001.96	741,217.22	751,099.56	762,900.76	783,488.73	804,742.10
9.1 Sewerage 50 < 250 MI	fixed retail element (£)	43.17	44.10	45.14	45.02	46.10	47.23
	variable retail element (£)	3,412.81	3,188.44	3,433.79	3,609.42	3,818.51	3,950.05
	wholesale element (£)	123,427.79	115,447.93	124,247.36	130,515.60	138,022.14	142,759.93
	total bill (£)	126,883.77	118,680.47	127,726.29	134,170.04	141,886.75	146,757.20
9.2 Trade effluent 50 < 250 MI	fixed retail element (£)	19.03	19.44	19.90	19.84	20.32	20.82
	variable retail element (£)	7,353.29	6,876.25	7,401.37	7,775.83	8,223.71	8,506.21
	wholesale element (£)	263,297.13	246,274.44	265,045.46	278,416.91	294,429.91	304,536.60
	total bill (£)	270,669.45	253,170.13	272,466.73	286,212.59	302,673.95	313,063.63
9.3 Sewerage ≥ 250 MI	fixed retail element (£)	47.32	48.34	49.48	49.35	50.54	51.77
	variable retail element (£)	14,389.33	13,454.95	14,483.03	15,216.32	16,093.13	16,646.05
	wholesale element (£)	515,594.53	482,260.30	519,018.14	545,202.43	576,559.45	596,350.61
	total bill (£)	530,031.18	495,763.59	533,550.65	560,468.10	592,703.12	613,048.43
9.4 Trade effluent ≥ 250 MI	fixed retail element (£)	21.17	21.63	22.14	22.08	22.61	23.16
	variable retail element (£)	12,120.01	11,334.61	12,199.67	12,816.31	13,554.17	14,019.66
	wholesale element (£)	433,613.71	405,579.71	436,492.96	458,513.88	484,885.06	501,529.37
	total bill (£)	445,754.90	416,935.94	448,714.76	471,352.27	498,461.84	515,572.20

Appendix 3 Operating expenditure

Operating expenditure forecast excluding input price pressure effects

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	£M	£M	£M	£M	£M	£M
Customer services	1.978	1.890	1.831	1.767	1.732	1.706
Debt management	0.388	0.370	0.359	0.346	0.339	0.334
Doubtful debt	1.311	1.311	1.311	1.311	1.311	1.311
Meter reading	0.666	0.646	0.632	0.623	0.617	0.613
Other incl. support functions	2.268	2.087	1.998	1.935	1.929	1.928
Operating expenditure	6.610	6.304	6.131	5.984	5.930	5.893

Operating expenditure forecast including input price pressure effects and reconciliation to Ofwat table "R5" line items

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	£M	£M	£M	£M	£M	£M
Customer services	2.117	2.081	2.080	2.100	2.136	2.182
Debt management	0.415	0.408	0.408	0.412	0.419	0.428
Doubtful debt	1.311	1.311	1.311	1.311	1.311	1.311
Meter reading	0.697	0.691	0.692	0.699	0.709	0.722
Other incl. support functions	2.297	2.129	2.053	2.004	2.012	2.025
Operating expenditure	6.838	6.620	6.544	6.526	6.586	6.667
R5 line 8 "Services to developers (retail)"	0.667	0.682	0.698	0.714	0.732	0.750
R5 line 9 "Miscellaneous costs"	0.756	0.743	0.739	0.740	0.745	0.752
R5 line 1 "Total operating expenditure"	8.261	8.044	7.981	7.981	8.063	8.169
R5 lines 2-4 "Depreciation"	1.779	1.779	1.779	0.445	0.000	0.000
R5 line 5 "Pension deficit repair costs"	0.411	0.420	0.429	0.000	0.000	0.000
R5 line 6 "Total business retail costs (opex plus depreciation, excluding financing costs)"	10.451	10.243	10.189	8.426	8.063	8.169

Appendix 4 Input price pressures

Business Retail table submissions are in outturn (nominal prices). In accordance with the PR19 final methodology, our cost forecasts and revenue allowance proposals exclude general inflation, but do include input price pressures which are consistent with the findings of Economic Insight ('EI') – an independent expert, commissioned to advise us on underlying input price pressure forecasts for the 2020-2025 period.

The full EI report "Inflation Forecasting: Real Price Effects and Input Price Inflation at PR19" is included as a separate appointed business submission appendix.

Key cost categories were identified within each price control and, for each of these categories, forecasts were developed using various methods, for example: developing econometric forecasting models; extrapolating prevailing trends; and drawing on third party evidence. The resulting forecasts from the chosen methods for each category were then weighted, based on the composition of cost, to derive the blended rates for operating expenditure and depreciation on assets, as stipulated in the Ofwat table "App24a".

It is acknowledged that there are pros and cons of the various forecasting approaches, and for planning purposes it is credible to use any combination, as the extent to which any method is superior to another is finely balanced. A 'central' assumption for each cost category is presented in the EI executive summary, selected on the basis of:

- Using econometric modelling, based on economic fundamentals, to identify statistical relationships between our underlying input price pressures and wider measures of UK economic performance; and
- Of the different econometric modelling estimations, favouring the models that perform most robustly.

The following Table App4.1 shows that for each cost category we applied the same forecast method as EI's central assumption, except for customer service and skilled labour. Our plan assumes reducing headcount in our retail operations, which requires upskilling of staff to ensure no service detriment to our customers. As such, the independent forecasts approach (rather than econometrics based on wages in levels),

better reflects our expectations of likely pay awards considering the changes in responsibilities and our commitment to paying the living wage for our employees.

Table App 4.1 Annual average input price effects across the 2020-2025 period

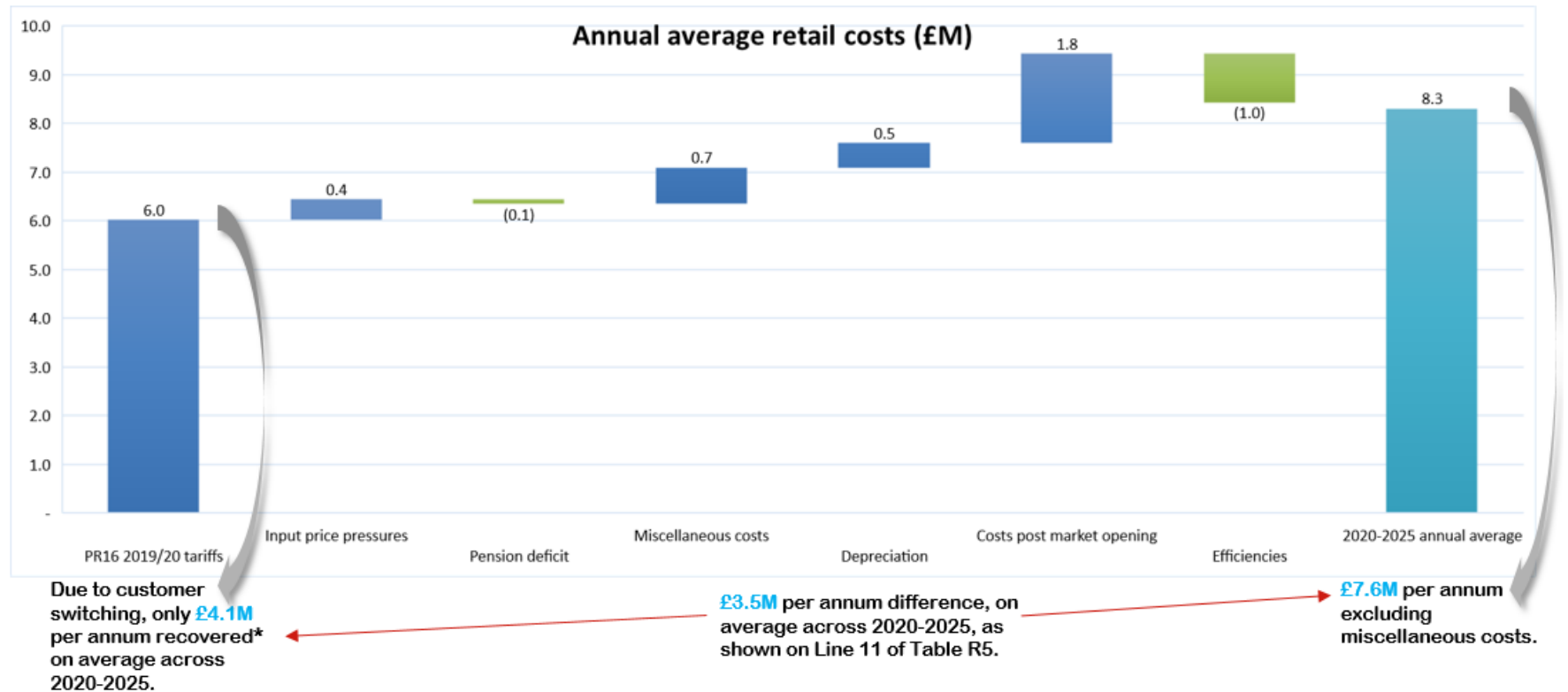
Cost category	Annual average composition of opex	Forecast ranges:			'Central' assumption forecast method	Applied forecast method	Applied annual average increase
		Lowest annual average increase	'Central' annual average increase	Highest annual average increase			
Customer service and skilled labour	41.2%	1.5%	2.5%	2.9%	Econometrics based on wages in levels	Independent forecasts	2.9%
Meter reading	9.0%	1.4%	2.3%	2.9%	Econometrics based on wages in levels	Econometrics based on wages in levels	2.3%
Bad debt	17.0%	1.2%	1.3%	1.9%	Econometrics - national approach	Econometrics - national approach	1.3%
IT	5.2%	0.7%	0.7%	1.7%	Wedge versus CPI	Wedge versus CPI	0.7%
Postage	3.1%	6.7%	6.7%	8.8%	Wedge versus CPI	Wedge versus CPI	6.7%
Other	24.4%	2.0%	2.0%	2.0%	CPI	CPI	2.0%
Depreciation on assets (new capital spend)	-	0.7%	2.7%	2.7%	Average of opex rates or IT inflation	Average of opex rates	2.7%

The applied increases, shown in the right-hand column above, gave rise to:

- a blended opex weighted average increase of 2.4% (average annual increase across 2020-2025); and
- new capital spend average annual increase of 2.7% (across 2020-2025).

Appendix 5 Cost recovery vs cost forecasts

Bridging the difference between the annual costs recovered from default tariffs and the cost forecasts



* Default tariffs include a £ per customer component to recover variable and fixed retail costs. As customer numbers reduce, the customer contributions to variable and fixed costs will be lost. The fixed costs will still be incurred, however, as will elements of the variable costs where there is not a one-for-one direct correlation.

Explanations of the above bridging blocks are provided on the next page.

Appendix 5 continued

- The PR16 determination for 2019/20 assumed £6.0M of retail costs would be recovered from within the customer default tariffs.
- Input price pressures cause the cost base within the 2019/20 start point to increase across 2020-2025.
- Pension deficit contributions are within the 2019/20 start point, but cease after 2021/22, following clearance of the deficit.
- Miscellaneous costs of £0.5M MOSL fees and £0.2M market performance penalties are not in the 2019/20 start point.
- Depreciation within the 2019/20 start point is £0.3M. The average across 2020-2025 is £0.5M higher due to depreciation of capitalised market opening programme costs which were not funded at PR16.
- Costs post market opening are not in the 2019/20 start point. They include: key account managers to assist with customer retention / win-back; individuals to undertake market settlements, interactions with YW Wholesale, and data enhancement activities; licence and support costs of standalone billing system; and senior management team of standalone entity.
- Efficiencies include initiatives to reduce headcount (e.g. better trained staff, self-service and right first-time approach), and lower costs directly linked to reducing customer numbers (e.g. reduced meter reads, billing costs and payment handling).
- As a result of the above bullets, our annual average forecast cost for 2020-2025 is £8.3M.

Line 10 of Ofwat table “R5” shows that our cost forecast excluding miscellaneous costs (and developer service costs which have been excluded throughout this analysis) averages c£7.6M per annum across 2020-2025. Line 11 of Ofwat table “R5” shows that on an annual basis this value is c£3.5M more than the c£4.1M retail costs expected to be recovered within the proposed default tariffs. The business plan is financeable in the round, however, because of the level of gross margin returns.

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