

Accounting Methodology Statement 2016/17

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1 Introduction

1.1 Purpose

The purpose of this methodology statement (the 'Statement') is to explain the systems, processes and allocation methods used to report costs in the following tables in the Annual Performance Report (APR) for the year ended 31 March 2017:

Section 2: Price review and other segmental reporting:

- 2A Segmental income statement
- 2B Totex analysis wholesale water and wastewater;
- 2C Operating cost analysis Retail; and
- 2D Historic cost analysis of tangible fixed assets wholesale and retail

Section 4: Additional regulatory reporting:

- 4D Totex analysis wholesale water;
- 4E Totex analysis wholesale wastewater; and
- 4F Operating cost analysis Retail Household

These are referred to as the 'Section 2 tables' and 'Section 4 tables' throughout this document and are prepared in accordance with Regulatory Accounting Guidelines (RAGs).

This methodology statement should be read in conjunction with the APR for the year ended 31 March 2017.

1.2 Scope

This document relates to Thames Water Utilities Limited appointed business only and focuses only on costs relating to that business. This statement should be read in conjunction with the following guidance:

- IN17/03 'Expectations for monopoly company annual performance reporting 2016-17'
- RAG 2.06 'Guideline for the classification of costs across the price controls';
- RAG 3.09 'Guideline for the format and disclosures for the annual performance report;
- RAG 4.06 'Guideline for the table definitions for the annual performance report'; and
- RAG 5.06 'Guideline for transfer pricing in the water and sewerage sectors'

1.3 Governance

We have a robust governance framework around the production of the APR, which includes the Section 2 and 4 tables. This framework supports our commitment to our customers and stakeholders to publish information that is accurate, reliable and transparent.

The specific governance processes that accompany the production of Section 2 and Section 4 tables are outlined below:

Figure 1 - Governance Process

Regulatory Reporting Team provides the business with RAG training, specifically how to populate Section 2 and 4 tables, following Ofwat RAGs 3.09 and 4.06; Table templates, prepared by the Regulatory reporting team, are sent out to business areas for population at year end; • Thames Water's finance systems are set up and structured so as to capture cost centre codes Step 1 that then allow information to flow up to populate the tables Section 2 and 4 tables are populated by the information providers from the business and Information Integrity Declaration (IID) forms signed by the information provider confirming that the data has been prepared in accordance with Ofwat guidance and with an approved documented methodology Step 2 Review of table information is performed by the following and evidenced by signed IID forms: manager/reviewer • senior accountable manager/director • Operating Company ("OpCo") Chief Financial Officer ("CFO"); Step 3 • reviewed by the Regulatory Reporting Team, Group Financial Controller, and Group CFO Section 2 tables are audited by an external assurance provider • Section 4 tables are reviewed by an external assurance provider who performs agreed upon procedures (detailed testing performed on allocations by Price Control and Upstream Service Step 4 using tests agreed between the company and external assurance provider) • The external assurance provider reports to the Audit, Risk and Regulatory Committee (ARRC) and the Board • The APR, which includes the Section 2 and Section 4 tables, is approved by the Board Step 5

Step 6

• The external assurance provider provides an independent opinion on Section 2 of the APR in line with the audit opinion format set by Ofwat

The APR for the year ended 31 March 2017 can be found on our website www://corporate.thameswater.co.uk/About-us/Our-business/Our-performance.

2 Operating Systems, Structure and Outsourced Contracts

2.1 Operating Systems

There are two key systems used for the population of Section 2 and Section 4 tables:

- SAP; the primary financial accounting and management tool used by the business and the source of the data used in Anaplan
- Anaplan; (implemented in 2015) is the system used for allocating operating expenditure (opex) to upstream service ("US") levels¹

2.2 Operating Structure

The Company is divided into operating companies (OpCos) to align with Ofwat's existing price controls, supported by a central group services function, against which operational performance is monitored:

Figure 2 - Operating Companies

Wholesale water

• Responsible for all aspects of water abstraction, treatment and distribution

Wholesale waste

- · Responsible for all aspects of wastewater collection and treatment
- Includes Thames Tideway Tunnel ('TTT') operations (interface works) which, for regulatory reporting, is disclosed separately as it is a separate price control

Retail Household

· Household customer facing activities

Retail Non-household

· Non-household customer facing activities

Group Services

- Responsible for shared services across the wider organisation for regulatory reporting purposes
 these costs and assets are fully recharged to the above Opcos
- · After group service recharge, the OpCos are aligned with the price controls established at PR14

For 2016/17 reporting RAG 3.09 Section 2 requires disaggregation for both Water and Wastewater to the following Price Control units:

- Water Resources
- Water Network +
- Wastewater Network +
- Sludge

¹ Upstream services are a further disaggregation of the value chain and are used in Section 4 of the APR. These upstream services, when aggregated, form the price controls against which our operating structure is closely aligned.

Table 1 below, details the Wholesale regulatory reporting structure as defined by Ofwat, which is reflected in the Anaplan regulatory model

Table 1 – Price Control unit and Upstream Service levels

Price Control Unit	Upstream Service Unit
Water Resources	Abstraction licenceRaw water abstraction
Water Network +	 Raw water transport Raw water storage Water treatment Treated water distribution
Wastewater Network + Sewage collection	FoulSurface drainageHighway drainage
Wastewater Network + Sewage treatment	Sewage treatment and disposalSludge liquor treatment
Wastewater Sludge	Sludge transportSludge treatmentSludge disposal

Our main systems, SAP and Anaplan (Section 2.1), use cost centres (CC) as a way to capture costs at the lowest possible level by service area. For AMP6 management revised the SAP CC hierarchy to align it to the regulatory structure down to upstream service level where possible following the boundary definitions in RAG 4.06, Section 2: Disaggregation of wholesale activities – Upstream Services. Hence, where the activity of a CC is 100% attributable to one of the units listed above, and allocation of costs is not required, the cost centre is mapped, within SAP and Anaplan, directly to that unit.

Where the activity of a CC is not 100% attributable to any of the above, the operating expenses of those cost centres are allocated based on the underlying activity of the cost centre, based on management judgement and the use of cost drivers, across the units listed above.

Typically the costs that are required to be allocated are either:

- costs that are held at a water treatment or sewerage treatment site level, where the activity straddles more than one of the units: or
- Group Services costs, which are all general & support ("G&S") requiring allocation using the most appropriate methodology outlined in section 6 of this methodology statement.

Where possible, Group Services operating expenses are directly attributed to the individual OpCos (and hence Price Controls). All other operating expenses are allocated by expenditure type using suitable cost drivers following RAG 2.06 Section 2 guidance. The allocation process and cost drivers are detailed in Section 5 below.

The allocation process is further described in section 5 below.

2.3 Cost categories

Each CC is flagged in SAP and Anaplan as direct, indirect, overhead or non-appointed as defined below:

- Direct costs are defined as costs which can be clearly traced to a cost object. A cost object can be a product, contract, project or site. For example, the employment costs of a Site Manager associated with his/her site, chemicals, site maintenance and power.
- Indirect Costs are defined as costs which cannot be traced directly to one cost object or activity. For example, the employment costs of a Regional Manager who has several sites under his/her remit that relate to the OpCo.
- Overhead costs are defined as costs not directly related to the operational element of the OpCo. For example;
 Head Office costs, Senior Managerial costs, and administration.
- Non-appointed costs are those incurred in the delivery of our non-appointed services such as billing commissions, rental income from non-appointed assets, property searches and others as defined in RAG 4.06.

2.4 Expense line items

In Anaplan, general ledger account codes are further grouped into the operating expense line items in the RAG 3.09 Proforma tables 2B, 2C, 4D and 4E.

2.5 Outsourced contracts

We are required to disclose any outsourcing arrangements, including agreements with other water companies and local authorities. Table 2 below lists the outsourced contracts, which the Company had in place for the year ended 31 March 2017.

Table 2- Outsourced Contracts

Outsourced contract	Nature of contract	Managing Operating company
IT support	Offshore and office based support from Wipro MSA	Group Services
Transformation and Technology Alliance	Offshore and office based support from October 2016 from Deloitte, IBM, Accenture and Bilfinger	Group Services
Legal services	Legal services from BLP 1	Group Services
Facilities	Facilities and maintenance – EMCOR UK Property services – Savills	Group Services
Property Searches	Property searches supplied by HCL	Group Services
Payroll and recruitment	Payroll, recruitment and contractor payment services supplied by Pertemps	Group Services
Metering	Meter installation/management by MGJV ⁴ ; Meter reading by MeterU	Retail
Capital delivery ²	Delivering the capital programme	Waste
eight ₂ O	Costain, Black and Veatch, Atkins, Skanska, MWH Global, MWH Treatment Ltd, Balfour Beatty and IBM - support for major projects	Waste
Customer Field Services ("CFS")	Reactive and planned network maintenance and sewerage services - Lanes	Waste
Infrastructure Alliance	KCD ⁵ and Agility ⁶ – infrastructure maintenance	Water
Local authorities and Housing Associations	Billing and cash collection	Retail
Other water companies	Billing and cash collection	Retail
Customer contacts	Non-network contacts supplied by Capita Customer Management Ltd and WNS Global Services (UK) Ltd	Retail

3 Guidance

3.1 Regulatory Accounting Guidelines (RAGs)

Ofwat issued revised RAGs in October 2016, of which RAG 4.06 'Guideline for the table definitions in the annual performance report' and RAG 2.06 'Guideline for the classification of costs across the price controls' are the primary guidance used in producing the regulatory tables.

The following cost allocation principles have been applied when allocating costs to the relevant price controls, Price Control units and upstream services (as outlined in RAG 2.06):

a) Transparency: the attribution methods applied within the accounting separation system need to be transparent. This requires that the costs and revenues apportioned to each service and business unit should be clearly identifiable. The cost and revenue drivers used within the system should also be clearly explained to enable a review of their appropriateness.

Costs apportioned to each business unit are identifiable by CC and can be traced back to our SAP ledger. This methodology statement, including our cost allocation tables (Tables 4, 5, 6, 7, 8, and 9), provide further transparency.

b) **Causality:** cost causality requires that costs (and revenues) are allocated to those activities and services that cause the cost (or revenue) to be incurred. This requires that the attribution of costs and revenues to activities and services should be performed at as granular a level as possible

¹ BLP – Berwin Leighton Paisner LLP ² There are various contractors involved in delivering the capital programme for programmes that started prior to AMP6 which are now at the final accounting stage, including; Optimise, GBM, B&V and MGJV. For programmes commencing from the start of AMP6, this task is now performed by Eight20. ⁴MGJV - Morrisons Utility services and Galliford Try joint venture ⁵ KCD – Kier Clancy Docwra ⁶ Agility – J. Murphy & sons and Morrison Utility Services

Wherever possible, costs are directly attributed to a price control. Some costs are less easily attributed (for example the costs of regulation). Where possible we have taken an activity based costing approach. The method applied to allocating indirect costs is described in this methodology statement, Section 6.

c) Non-discrimination: the attribution of costs and revenues should not favour any business unit within the regulated company and it should be possible to demonstrate that internal transfer charges are consistent with the prices charged to external third parties.

Costs allocated are objective and do not favour any OpCo, business unit or service within the regulated company and are undertaken at an arm's length.

d) No cross subsidy between price controls: Following the introduction of separate binding price controls at the 2014 price review, companies cannot transfer costs between the price control units in setting prices and preparing regulatory accounting statements. In accordance with RAG 5, transfer prices for transactions between price control units should be based on market price unless no market exists, in which case transfer prices should be based on cost.

In line with the separate binding price controls introduced from April 2015, costs are not transferred between price control units and are compliant with RAG 5.06 'Guideline for transfer pricing in the water and sewerage sectors'.

e) **Objectivity:** the cost and revenue attribution criteria need to be objective and should not intend to benefit any business unit or service

Costs are allocated objectively and do not favour any OpCo, business unit or service within the regulated company.

f) Consistency: the cost and revenue attribution criteria should be consistent from year to year to enable meaningful comparison of information over time. Changes to the attribution methodology from year to year should be clearly justified and documented.

Cost allocation methods are kept as consistent as possible. Where changes are required, these are documented in Section 4.

g) **Principal use:** capital expenditures and depreciation should be directly attributed to one of the five³ services for which price limits have been set for 2015-20. Where this is not possible as the asset is used by more than one service, it should be reported in the service of principal use with recharges made to the others services that use the asset reflecting the proportion of the asset used by the other services.

Where possible we have directly attributed capital expenditure and the corresponding depreciation to the price control units and applied the principle use guidance for shared assets (Section 7).

Section 7 below details the allocation assumptions outlining how the above principles have been applied.

4 Changes to methodology from 2015/16

As a result of management review and to align more closely with RAG 2.06, the cost drivers for the following costs have changed from prior year:

Table 3 - Changes to Methodology from 2015/16

Expenditure line	Cost driver 2015/16	Cost driver 2016/17
Scientific Services	Allocated to Treated Water Distribution	Allocated based on tests performed per US Unit
High lift pumps	High lift pumps within water treatment works allocated to Water Treatment	Following Ofwat clarification all High lift pumps are allocated to Treated Water Distribution

Following clarification from Ofwat we have revised our calculations for the Bulk Supplies/discharge and Third party lines in tables 2B and 4D/E.

5 Operating expenses - allocation assumptions

The following sections describe the allocation assumptions used in the production of the operating expense line items of table 2A, 2B, 2C, 4D and 4E reported in the APR.

Recharges between OpCos are allocated using the cost drivers described in tables 4, 5, 6 and 7 below.

³ There are five binding price controls for AMP6 being Wholesale Water, Wholesale Waste, Retail Household, Retail Non-household and Thames Tideway Tunnel.

5.1 Wholesale

The following are the cost drivers used for all expenditure lines listed in tables 4D and 4E. For general and support expenditure, the appropriate allocation basis is provided in section 6.

Cost Driver A: costs can be attributed directly to the relevant US process.

Cost Driver B: costs can be directly attributed to a price control (water, wastewater) but a specific cost driver is required to allocate the cost to the appropriate Price Control unit and US process within the price control.

Cost Driver C: allocations are worked out using appropriate estimates and judgements based on available data and management understanding of the business.

Power costs and Other Operating costs are directly allocated for 21% and 30% of costs respectively.

5.1.1 Wholesale water

Most costs can be directly attributed at source to a Price Control unit and US process within water services or to water treatment sites and allocated to the relevant process. Table 4 below details the allocation basis and assumption for each expenditure line.

Table 4 – Water service allocation basis

Expenditure line	Cost driver	Cost driver for allocation to price controls, Price Control units and US level
Power	В	Direct allocation by use of specific expenditure codes and cost centres to site else allocated based on assessment of activities and sub-metering where available
Income treated as negative expenditure	В	Direct allocation by use of specific expenditure codes and cost centres to site else allocated based on assessment of activities and sub-metering where available
Service charges/discharge consents	А	Actual charge from the Environment Agency directly coded to process through cost centres and expenditure codes
Bulk supply/Bulk discharge	А	Directly coded to process through cost centres and expenditure codes
Other operating expenditure		
- Employment costs	A/C	Directly coded to process using operational system based work orders for direct costs, else allocated based on assessment of time spent
- Hired and contracted	А	Directly coded to process
- Materials and consumables	А	Directly coded to process
- Other direct costs	В	Direct cost to site else management judgement
- General and support	See section 6	
- Scientific services	В	Allocated to wholesale US unit using samples/tests performed
- Other business activities	С	Regulatory costs equally allocated across all units
Cumulo rates	В	Gross Modern Equivalent Asset Value ("GMEAV") based on US values
Third party services	В	Allocated to US unit based on activity analysis

Further assumptions:

Power: High lift pumps have been reported as treated water distribution following Ofwat clarification this year which is a change from 2015/2016 when they were reported within Water Treatment.

Scientific services: All tap sampling at water customers premises are allocated to treated water distribution.

5.1.2 Wholesale wastewater

Most costs can be directly attributed at source to a Price Control unit and US process within waste services or to sewage treatment sites and allocated to the relevant process. Table 6 below details the allocation basis and assumption for each expenditure line.

Table 5 – Wastewater service allocation basis

Expenditure line	Cost driver	Cost driver for allocation to price controls, Price Control units and US level
Power	A/B	Direct cost to process by sub metering where it exists, else allocated based on assessment of site activity by site management and Energy Management Department. Oil and gas allocated based on assessment by Energy Management Department. All savings from self-generation of power in the sludge process are allocated to Sludge Treatment.
Income treated as negative expenditure *	А	All ROC income reported in Sludge treatment, and all sludge cake sales reported in Sludge Disposals.
Service charges/discharge consents	А	Actual charge from the Environment Agency for discharge consents directly coded to process
Bulk supply/Bulk discharge	Α	N/A
Other operating expenditure		
- Employment costs	A/C	Directly coded to process where possible, else allocated based on assessment of time spent
- Hired and contracted	A/C	Directly coded to process where possible, else allocation based on assessment of site activity by site management. Sludge disposal costs fully allocated with exception of ash disposal which is directly coded
- Materials and consumables	A/C	Directly coded to process, else coded to site and allocated between sewage and sludge treatment based on site activity by site management
- Other direct costs	A/B	Direct cost to site, else allocated based on management judgement depending on the type of cost reported in this category
 General and support 		
- General and support	See section 6	
- Scientific services	В	Allocated to wholesale US units based on samples/test performed
- Other business activities	С	Regulatory costs equally allocated across all units
Local authority rates	В	GMEAV for non-infrastructure assets. Sewer networks and pumping stations are not rateable.
Third party services	В	Allocated to US unit based on activity analysis

^{*} Income treated as negative expenditure; includes income from sludge cake sales and Renewable Obligation Certificates (ROC), levy exemption certificates and the national grid reserve, in line with guidance provided in RAG 4.06.

5.2 Retail

The Retail OpCo reports the customer facing costs of water and waste services. These are reported in APR table 2C.

5.2.1 Allocation of CCs to retail activities

The allocation of operating expenditure between Retail household ('HH') and Retail Non-household ('NHH') is an automated process through Anaplan.

The following sections provide the basis for the production of APR table 2C.

Table 6 - Retail ad	ctivities by expense			Cu	stome	r servi	ces										
Retail activities by cost centre	Basis of allocation	Billing	Payment, remittance and cash handling	Charitable Trust donations	Vulnerable customer schemes	Non-network customer enquiries & complaints	Network customer enquiries and complaints	Investigatory/first time visits to customers	Other customer services	Debt management	Doubiful debts	Meter reading	Services to developers	Disconnections and reconnections	Demand-side water efficiency initiatives	Customer side leaks	Other direct costs
Revenue Contact Centre Agents	Based on average Full Time Equivalent ("FTE") requirements for Work Baskets/Work streams as per Agents Workload Planning (Long Term Plan)	•	•		•	•				•							
Operational Contact Centre Agents	Specific to Network /Operational Enquiries & Complaints						•										
Training	Pro-rata to FTE split between Revenue and Operational Contact Centre	•	•		•	•				•							
Business Intelligence Team	Pro-rata to FTE split between Revenue and Operational Contact Centre	•	•		•	•				•							
Outsourced Office Agents	Based on Analysis of Calls Taken, and Work streams / Workbaskets for Outsource providers.	٠	•			٠				٠							
Mail house & Post room	Based on volumes of type of bills/mail Based on Managers Activity Summary for	•	•							•							
NHH agents Head of Revenue	key accounts agents Based on FTE allocation relating to	•	•			•	•			•		•					
Debt Recovery Agents	Manager's roles/duties Specific to Debt Management									•							
Cash & Debt Staff & Other Operating costs	Specific to Payment Handling & Debt Management, allocation based on managers FTE assessment.		•							•							
Cash & Debt - Payment Commissions	Specific to Payment Handling																
Cash & Debt - DCA commissions	Specific to Debt Management									•							
Cash & Debt - Charitable Donations	Specific to Charitable Donations																
Cash & Debt - LA/HA Commissions (all HH)	Management judgement based on TW relative costs for the activities covered, and historical discussions with LA/HA's.	•	•			•				•							
Finance	General & Support																•
Other	General & Support																•
Meter reading	Specific to meter reading											•					
Customer Assistance Fund	Specific to Vulnerable Grps				•												
Metering Back Office		•										•					•
Sales Investigation	Specific to Sales Investigation	•										•					
Cash & Debt - Office Services	Specific to Debt Management									٠	_						
WOC Bad Debt	Specific to Doubtful Debts Allocation across activities covered by										•						
WOC Commissions Bad Debt Provision & Excess	WOCs pro-rata to their Retail Costs submissions	•	•			٠				•		•					
Credits	Specific to Doubtful Debts										•						
Customer Insight & Resolution - RCC	Specific to Non-Network Customer Enquiries & Complaints					•											
Customer Insight & Resolution Ops	Specific to Network Customer Enquiries & Complaints, including GSS payments allocated to other operating expenditure						•										•
Customer experience and engagement - Staff costs	Based on Managers assessment of FTE's supporting customer non-network and network activities																•
Customer experience and engagement - Non-Staff costs	Specific costs relating to customer non- network, network activities and billing with some costs shared across these activities (based on managers assessment)																•
Brand Team	Based on Managers assessment of FTE's	•			٠												•
Digital Communications	Based on Managers assessment of FTE's	•	•														•
Affordability	Specific to Vulnerable Grps				•												
Regulation	General and support cost																•
IT & Change -Transformation General and support cost																	•
Senior Management Team	General and support cost	•	•		•	•	•			•		•					•
Water Efficiency (Retail)	Specific to Water Efficiency												•		•		
Developer Services Recharged from Wholesale	Specific to Developer services Services To Developers												•				
Recharged from Wholesale Recharged from Wholesale	Services To Developers Customer Side Leakage												•			•	
	Customer Side Leakage					1		1									
Recharged from Wholesale	Calls found not to be a network issue																

The majority of costs reported within table 2C are directly attributable and reported within the Retail OpCo.

Table 7 – Retail opex allocation bases

Expenditure line	Allocation basis	Cost driver
Services to developers – managed by the Wholesale OpCos, the cost of supporting developers in administration function is recharged to Retail	Direct	n/a
Investigatory / first time visits where it is found that it is not a network issue – this cost is managed by the Wholesale team	Direct	n/a
Doubtful debts – wholesale only if relate to wholesale revenue eg bulk supplies	Direct	n/a
Demand side water efficiency - recharged to Retail unless spend incurred to meet Wholesale outcome	Direct	n/a
Disconnections / Reconnections - administration recharged to Retail	Direct	n/a
Customer side leakage – recharged to Retail unless spend incurred to meet Wholesale outcome	Direct	n/a
Other direct costs	Direct	n/a
Other business activities – regulation costs	Per Final Determination	Allocate1/9 th to Retail
General and support costs	Direct for Retail overheads; for Group Services G&S allocations see Section 6 below	See Section 6

5.3 Household (HH) and non-household (NHH) retail

The Company's allocation of costs into HH and NHH is compliant with the definitions below as stated in RAG 2.06.

Households: These are properties used as single domestic dwellings (normally occupied), receiving water for domestic purposes which are not factories, offices or commercial premises. These include cases where a single aggregate bill is issued to cover separate dwellings having individual standing charges. (In some instances, the standing charge may be zero.) The number of dwellings attracting an individual standing charge and not the number of bills should be counted. Mixed/commercial properties and multiple household properties – for example, blocks of flats having only one standing charge – should be excluded.

Non-households: These are properties receiving water for domestic purposes but which are not occupied as domestic premises, or where domestic dwellings are combined with other properties, or where properties are in multiple occupation but only have one standing charge. In this case, it is the number of bills that should be counted.

5.4 Allocation of costs to HH/NHH

Table 8 overleaf details for each activity the methodology used to allocate costs to HH and NHH cost driver and the rationale used. This table also provides the percentage allocation for each activity to HH/NHH.

Table 8 - Household/Non-household allocation

Expenditure line and	Directly retail or allocated			НН %	NHH
activity		Driver	Rationale		%
Customer services					
Billing	Direct	Number of bills issued to HH/NHH customers	Ofwat guidance	87.25	12.75
Payment handling,	Direct	Level of payment	Transaction	83.96	16.04
remittance and cash handling		transaction processed and commissions paid by HH/NHH customer	tion processed and sions paid by customer eparately identified All HH		
Charitable trust donations	Direct	Costs separately identified and allocated 100% to HH	All HH	100.00	-
Vulnerable customer schemes	Direct	All HH	All HH	100.0	-
Non-network customer enquiries and complaints	Direct	Pro rata to number of customer network HH/NHH contacts received	Ofwat guidance	89.39	10.61
Network customer enquiries and complaints	Direct	Pro rata to number of customer operational HH/NHH contacts	Ofwat guidance	93.08	6.92
Investigatory visits	Allocated from Wholesale	HH/NHH contacts Based on number of engineer customer visits at a fixed call out rate		93.37	6.63
Debt management	Direct	Pro-rata to HH/NHH Outstanding Debt with DCA commissions specific to HH/NHH.	Ofwat guidance	82.25	17.75
Doubtful debts	Direct	Pro-rata to average HH/NHH % for cost of 5 years' debt write-offs.	Based on actual history of debt write-offs by HH/NHH	88.10	11.9
Meter reading	Direct	Allocation to HH/NHH based on time spent	Ofwat guidance	63.75	36.25
Services to developers	Recharged from Wholesale and allocated to HH/NHH	Customer facing enquiries allocated 100% to NHH	Costs identified within a wholesale cost centre used wholly in this activity	-	100.00
Disconnections/ reconnections	Allocated from Wholesale	No of disconnections managed - all NHH	Ofwat guidance	-	100.00
Demand side water efficiency	Direct	HH/NHH Activity cost analysis.	Ofwat guidance	82.94	17.06
Customer side leaks	Recharged from Wholesale and allocated HH/NHH	Analysis of number of jobs split HH/NHH	Ofwat guidance	95.37	4.63
Other direct costs	Direct	Pro rata to billing	Small value costs	87.25	12.75
General and support	See section 6			93.37	6.63
Other retail costs	Regulatory costs recharged from Group Services	Costs allocated equally across 9 ASUS units	Pro rata to number of customers billed into HH/NHH	87.25	12.75
Payment commission			Transaction analysis	96.94	3.06
DCA commission	Direct	Analysis of actual commissions paid to debt collection agencies in the year	Ofwat guidance	66.62	33.38
Local authority rates	Direct	Desks occupied at Retail offices	Ofwat guidance	93.37	6.63

5.5 Allocation of Household costs by customer type

Following the production of APR table 2C, the Household costs are further manually allocated by customer type (APR table 4F) in proportion to average property numbers, which are reported in APR table 4A. An adjustment is made to exclude any costs that are specifically related to Water only Companies (WOCs), when calculating the cost of water only customers. Similarly, an adjustment is made to exclude any costs that specifically do not relate to WOCs, when calculating the cost of waste only customers.

5.6 Billing and collection

5.6.1 Percentage of income

The percentage of income that the Company outsourced for billing and collection is based on the revenue billed on behalf of the company by Local Authorities/ Housing Associations (LA/HA), who bear the risk of any non-collection of any outstanding debt. The billed value is taken from year-end LA/HA Commissions Report. During the year ended 31 March 2017, LA/HA billing percentage of turnover billed was 6.5%.

5.6.2 Bills to occupier policy

The Company only raises bills in the name of the "occupier" when it has evidence that the property is occupied but cannot confirm the name of the occupier. When the occupant is identified the bill is cancelled and rebilled in the customer's name. If the Company has not identified an occupant within 6 months the bill is cancelled and the property is classified as empty. The value of bills issued in the name of the occupier included in turnover is obtained from the 'Occupier Billing report' run by our Billing Analysts. No specific doubtful debt provision is made for bills issued in the name of the occupier at the year-end. A bad debt provision is applied to all outstanding debt, at the year-end a provision of 17.8% is applied to all debt less than one year old, which would include any debt in the name of the occupier.

5.6.3 Doubtful debt policy where the customer has vacated a property

Where a customer has vacated a property leaving unpaid debt, this is handled within our debt management process, credit notes are not issued to cancel any such uncollectable debt, and it is written-off as bad debt.

5.6.4 Bad debt provision policy

The bad debt provision is charged to operating costs to reflect the company's assessment of the risk of non-recoverability of debtors. It is calculated by applying expected erosion rates to debts outstanding at the end of the accounting period. These collection rates take into account the age of the debt and type of debt. Higher provisioning percentages are applied to older categories of debt. Bad debt provisioning rates are updated annually to reflect the latest collection performance data from the company's billing system. All debt greater than four years old is fully provided for.

The bad debt provision also takes into account the recoverability of debts which will ultimately be cancelled and may or may not be rebilled, and of debts which have not yet been billed, but are part of the metered sales accrual.

Future expected performance (taking into account historic trends) is also used to validate our bad debt provisions to ensure that use of historic performance will not result in a material misstatement.

We also provide for debts from Water Only Companies (WOCs), who bill for our sewage service on our behalf. Since detailed information about the debt is unavailable to us, we provide for the debt based on the historical write-offs.

5.6.5 Contact centre and outsourced costs

Contact centre agents' costs and outsourced costs are allocated to activities on the basis of the FTE requirement planning and the work packs and work streams issued to outsource partners.

WOC commissions are allocated across activities in accordance with the previous year's Retail submission.

LA/HA commissions are allocated across the activities they undertake, i.e. billing, payment handling, debt management and customer (non-network) queries based on the relevant weighting of those activities within the Retail operating expenses, factored for the relative costs for the LA/HAs based on management analysis and judgement.

5.6.6 Further assumptions

The following revised assumptions have been applied in the period.

Doubtful debts split into HH/NHH based on an analysis of write-offs in the year and the movement in the closing Doubtful Debt provision, split between HH and NHH customer accounts. Further adjustment is made for movements in other provisions which impact the final Doubtful Debt charge – principally Cancel Rebill and Excess Credits. RAG 2.06 states that companies should directly attribute costs on a customer specific basis, however, our systems do not currently enable us to report on this basis.

The following assumptions have been applied consistently with the prior period.

Demand side water efficiency initiatives within Retail refer to the Base Line Programme ("BSWE") costs identified.

Local authority rates are allocated to Retail based on office occupancy of the Retail OpCo for Walnut Court in Swindon, and Kemble Court in Reading where the Operations contact centre is based. These costs are shown within the Local authority rates caption in APR table 2C.

Third party costs – there are no costs incurred within Retail that are classed as third party costs, therefore no costs have been reported within this line.

6 Group Services expenditure

These costs reflect the support services functions within the company, which are detailed below in Table 9 with an explanation of cost driver used. All of these costs are classified as General and Support overheads (G&S). The costs allocated to the price controls are net of any recharges of costs that the Group Services functions provide to associate companies of the group and recharges to the non-appointed business of the Company. All Group Services costs are shown within the 'Other operating expenditure' line in APR tables 2B/4D&E; none are shown as direct expenditure.

Included in G&S are also specific provisions for costs such as tax on benefits, pensions, fines and penalties. These are allocated directly where possible or by FTE where appropriate.

Management considers that the allocation assumptions and cost drivers used are appropriate and are compliant with the cost allocation principles contained in RAG 2.06.

Table 9 - Group Services

Group Services function	Activity and type of expenditure incurred	Cost driver for allocation to price controls, Price Control units and US level	House hold	Non- house hold	Water Resources	Water Network	Waste- water Network	Sludge
Executive remuneration	Total remuneration including bonuses, pensions and other benefits of Executive Directors	Direct for executives of price controls; for other executives including CEO and CFO allocated based on full time equivalent (FTE) number of employees	28%	4%	5%	32%	24%	7%
Non-executive remuneration	Total remuneration of Non-Executive Directors	Allocated based on FTE	28%	4%	5%	32%	24%	7%
General Management	Consultancy costs managed within the Chairman, CEO and CFO's offices	Allocated based FTE	28%	4%	5%	32%	24%	7%
Finance	Internal audit, taxation, financial control, corporate finance and treasury functions. Costs include employment, audit fees and subscription fees	Allocated based on FTE	16%	3%	5%	32%	28%	16%
Supply Chain	Management of outsourced supply chain provider and other supply chain related costs	Purchase –to-pay costs allocated to price controls based on estimated number of POs per business; Contract Management ("CM") allocated to price controls based on percentage of time. Then allocated to Price Control unit and US based on FTE	9%	2%	6%	41%	27%	15%

Group Services function	Activity and type of expenditure incurred	Cost driver for allocation to price controls, Price Control units and US level	Retail House hold	Retail Non- house hold	Water Resources	Water Network	Waste- water Network	Sludge
Fleet	Fleet management costs and fuel costs	Allocated to price control and cost centre in which the vehicle is used. Further allocated to Price Control unit and US based on % split of direct costs for those cost centres.	0%	0%	8%	48%	28%	15%
Legal & secretariat	Management of outsourced legal service provider, management of board and related committees	Directly allocated to price control, Price Control unit and US by case, where possible. Otherwise allocated based on FTE	19%	5%	6%	37%	22%	11%
Human Resources	Employment costs, training costs and other HR business support costs	Allocated based on FTE	20%	4%	6%	41%	19%	10%
IS	Employment and telephony costs All other costs including management of outsourced IT support costs	Allocated based on FTE	19%	4%	6%	44%	17%	10%
External Affairs (excluding Customer Assistant Fund)	This activity includes corporate communications and corporate and social responsibility.	Allocated based on FTE	20%	4%	6%	41%	19%	10%
Facilities and Maintenance	This function includes office supplies, security, facilities and building maintenance costs.	Allocated to price control based on building and desk usage then allocated to Price Control unit and US based on FTE	4%	1%	5%	37%	34%	19%
Health and safety	Cost of the advisors providing support to Company employees and contractors	Allocated based on FTE	14%	3%	6%	43%	22%	12%
Insurance premiums	Costs include public liability, employers' liability, construction and property damage	Directly allocated to price control and US by type of insurance, where possible. Otherwise allocated based on FTE	1%	0%	11%	74%	9%	5%
Local Authority Rates (Offices)	Office rates	Allocated to price controls based on desk occupancy, then to Price Control unit and US based on FTE	0%	0%	3%	56%	33%	8%

This table represent the allocation across the appointed Price Controls

7 Capex

7.1 Allocation to Price Control and segment

The following section describes the methodology used in the production of the Fixed Assets (capital expenditure) lines in APR table 2D, including attributing spend across the price controls in table 2D. This follows the guidance in RAG 2.06 Section 2.3.

Table 2D excludes intangible assets, non-appointed assets, and borrowing costs. It also excludes assets held for sale. 2D does include assets held at fair value.

Historic cost fixed asset data is maintained in SAP. Every capital project is assigned a purpose code and every asset is assigned to an asset class. Our purpose code and asset class structures have been rebuilt in AMP6 to reflect the regulatory 'Upstream Services' structure, so the data can be assigned to upstream service directly based on the Asset classes/Purpose codes entered in SAP for all additions since the start of AMP6.

The majority of assets are operational assets that can be assigned directly to a price control. The price controls now require an additional split of wholesale waste and wholesale water assets. Waste assets are allocated to either 'Sludge' or 'Network Plus' (i.e. non-sludge) price controls. Sludge asset values have been established by using initial analysis of sludge sites from the Waste Finance Projects Team. The remaining Waste assets are all categorised as 'Network Plus'. Water assets are identified and split using the hierarchy of cost centres being charged depreciation (for example Water 'Network Plus' assets are mapped from the 'Water - Below Ground' Cost Centre group in SAP).

A number of assets included in the table have a fair value assigned as we have not incurred any cost to acquire them. This includes assets adopted, (for example Self-Lay Sewers typically installed by property developers, or Private Sewer Pumping Stations which we are now responsible for). These are directly attributed to the relevant price controls. Also included is the uplift in fair value as a result of adopting IFRS accounting standards. This is directly attributable to wholesale waste and water but is allocated to the relevant price controls based on the proportional split of the rest of the asset base for Waste or Water.

The remaining assets are largely management & general (M&G) assets. Examples include Fleet and IT assets as well as office buildings on non-operational sites. These assets are reviewed manually in order to assign them where possible to the most appropriate price control on a principal user basis in accordance with RAG 2.06. In some cases such assets are used by multiple price controls and so are deemed 'shared use assets'.

In accordance with RAG 4.06, such shared use assets have been wholly allocated in table 2D to the price control of principal use, which in almost all cases for the Company is the wholesale wastewater price control. The main examples of such assets are, as per above, IT systems and office buildings on non-operational sites. RAG 2.06

In table 2D cost, depreciation and net book value are shown in the price control of principal use only. Likewise, in accordance with RAG 4.06 line item definitions, Retail depreciation is shown recorded in the price control of principal use.

Where assets are used by more than one price control, a recharge is made from the principal user to the other price controls to reflect the usage of the asset. The recharge is calculated as an allocation of the depreciation charge since this represents the charge for using the underlying assets. The cost driver and basis for the allocations follow the same basis as operating expenses allocations per Table 7 above. These recharges are reported in APR table 2A.

7.2 Allocation to US level

The following documents the process adopted by the Company to comply with Ofwat's guidance for allocation of capital expenditure across US units. The methodology detailed in this section covers the assumptions, adjustments and method of analysis applied to populate the capital expenditure sections of tables 4D and 4E.

As the relevant sections of these two tables require the allocation of capital expenditure to US units, the primary driver for allocation is the asset class in use on the capital project. Our asset class structure has been renewed for AMP6 to align more readily with the US structure, which means a significant amount of data can be assigned to US units immediately from the asset class entered into SAP.

A number of asset classes however do not map directly to the US units. An example of such an asset class would be 'Treatment works plant & machinery – 20 year life'. Depending on the specific asset in question, this could sit within any one of the following US units: Water Treatment, Sewage Treatment & Disposal or Sludge Treatment. In these cases we assign an US unit based on the purpose code(s) allocated to the project. Our purpose codes for AMP6 have similarly been rebuilt to reflect the US structure, so the vast majority of the data left unallocated from the asset class review can be assigned through the purpose codes recorded on the capital projects.

The data that then remains unallocated comprises largely management & general (M&G) assets. Examples include Fleet and IT assets as well as office buildings on non-operational sites. Assets produced from these projects are reviewed manually in order to assign them to the most appropriate US unit. In some cases such assets are used by multiple US units and so are deemed 'shared use assets'.

7.3 Allocation of shared use assets

As mentioned above, a number of these M&G assets are used by more than one US unit and indeed in a number of cases are used for the activities of more than one price control unit. In accordance with RAG 4.06, such assets have been wholly allocated in tables 4D and 4E to the price control of primary use, which in almost all cases for the Company is the wholesale wastewater price control (based on the total cost incurred by the OpCo as well the number of full time employees historically). The main examples of such assets are, as per above, IT systems and office buildings on non-operational sites.

Once allocated to the price control unit of primary use, these assets are allocated across the US units according to a suitable driver. In most cases the driver used is FTE of the directly attributable employees within each of the US units, as the M&G activities are supporting the rest of the business as carried out by the staff within each operational business unit. In some cases a more bespoke allocation is possible, e.g. our laboratory building is primarily carrying out sample testing of effluent from the sewage treatment process, and hence asset expenditure is allocated wholly to the 'Sewage Treatment & Disposal' US.

7.4 Data adjustments

A number of adjustments are made to the raw data as extracted from the SAP system to ensure correct allocations are made to the US units as well as to the categories of infrastructure and non-infrastructure assets and between capital maintenance and enhancement expenditure. A selection of the adjustments are explained below.

- Sludge centres adjustment: a manual review of all capital expenditure allocated to sludge-related US units is undertaken to ensure that only assets at our dedicated sludge centres (or assets involved in transporting sludge to our dedicated sludge centres) are allocated to these categories. Similarly, a review of allocations within the sludge-related US units is carried out to ensure correct assignment, for example, between sludge treatment and sludge disposal.
- Infrastructure at treatment works sites: a manual review is undertaken to ensure no infrastructure assets are coded to the Water Treatment or Sewage Treatment & Disposal US units as any underground pipework within treatment work sites should be classed as a civil structure.
- Raw water storage reservoirs: in accordance with RAG 4.06, only storage reservoirs without an abstraction license and with less than 15 days of storage should be coded to the 'Raw water storage' US unit. As all of the Company's storage reservoirs fulfil these criteria a manual check is carried out to ensure all assets associated with our storage reservoirs are allocated to the 'Raw water abstraction' US unit. As such there is no capital expenditure assigned to the 'Raw water storage' US unit.

Following completion of the manual data checks, a bulk adjustment is made to include unallocated capital overheads that cannot be allocated through the three steps mentioned in section 6.1 above. As in previous years this is done on the basis of a simple percentage uplift across the US units.

7.5 Population of tables 4D and 4E

Now that the data set has been fully allocated to US units it can be mapped into the capital expenditure sections of tables 4D and 4E by way of three specific data columns. These data columns distinguish between the following criteria in order to populate tables 4D and 4E:

- infrastructure and non-infrastructure;
- · capital maintenance and enhancement expenditure; and
- US units.

The additional lines for third party services are, for 2016/17, showing a nil value as there has been no capital expenditure on projects solely relating to bulk supplies, non-potable water supplies or rechargeable works for other monopoly suppliers.

7.6 Reconciliation

Once all of the data has been reviewed and the necessary adjustments made, a final reconciliation is carried out to ensure no capital expenditure has been omitted or included when it should not have been. There are a number of capital expenditure categories that are removed during the allocation process that form reconciling items between our initial data set from SAP and tables 4D and 4E. These are listed below:

- Thames Tideway Tunnel capital expenditure this is excluded from table 4E as it is included as a separate column of data in table 2B;
- · Non-appointed capital expenditure; and
- Retail capital expenditure.

8 Year on year comparison of operating expenditure

8.1 Wholesale water

Table 10 - Wholesale Water Opex and Units

	Water	Water Resources			Network Plus			
	Service Total	Abstraction Licence	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated Water Distribution	
Total Operating Expenses 2016/17 £m	392.9	13.8	46.4	7.1	0.0	67.2	258.4	
Total Operating Expenses 2015/16 £m	376.2	13.3	36.7	12.3	0.0	92.8	221.1	
Variance £m	16.7	0.5	9.7	(5.2)	0.0	(25.6)	37.3	
Variance %	4%)	4%)	21%)	(74%)	0%)	(40%)	10%)	
Unit		Licenced volume available	Volume abstracted	Volume transported	Average volume stored	Distribution input volume	Distribution input volume	
16/17 Volume (MI)		1,553,664	1,039,000	85,349	0	977,125	964,093	
16/17 Unit Cost (£/MI)		9	45	83	0	69	268	
15/16 Volume (MI) ¹		1,563,237	1,005,661	62,691	0	950,707	950,707	
15/16Unit Cost (£/MI) 1		9	37	199	0	0	0	
VarianceVolume (MI) 1		(9,573)	33,339	22,658	0	26,418	13,386	
Variance Unit Cost (£/MI) 1		0	7	(116)	0	69	268	

Key: lower year on year costs are shown as negative values.

Commentary

Table 11 below explains year on year movements in operating expenses by Upstream Service level:

Table 11 - Wholesale Water Opex explanations

	Water	Water Re	esources	Network Plus				
	Service Total £m	Abstraction Licence £m	Raw water abstraction £m	Raw water transport £m	Raw water storage £m	Water treatment £m	Treated Water Distribution £m	
Total Operating Expenses 2015/16	376.2	13.3	36.7	12.3	0.0	92.8	221.1	
Power and other opex reclass - primarily due to guidance clarification that highlift pumps are Treated Water Distribution	0.0		0.7	(1.0)		(14.4)	14.7	
Reclassification of ring main power costs and boreholes to Treated Water Distribution due to guidance clarification	0.0		(2.2)	(0.6)		(6.1)	8.9	
Power savings due to efficiency and rate reduction due to transfer to new provider	(3.2)		(0.5)	(1.3)		(0.3)	(1.1)	
Correcting reclass of Laboratories	0.0		1.0	(1.0)				
Increase in Water Resources Management Plan costs and correcting reclass to 100% Raw Water Abstraction	5.7		7.9	(0.1)		(0.3)	(1.8)	
	2.8		0.8	(0.1)		(0.3)	2.0	
Headcounts and payrises Bulk supply - correcting reclass of non- potable supply from Treated Water Distribution into Raw Water Distribution	0.0		2.2				(2.2)	
Indirect and Group Support increased costs, primarily in IT due to additional work required on transition to new provider	6.3		1.1	(0.8)		(1.7)	7.7	
Reclass of Employee, H&C and materials due to Ofwat clarification on Highlift pumps	0.0			(0.0)		(4.5)	4.5	
Increased emergency works	1.1					1.1		
Increase in Water Efficiency initiatives	1.5						1.5	
Other (<10%, hence not material)	2.5	0.5	(1.3)	(0.4)		0.6	3.1	
Total Operating Expenses 2016/17	392.9	13.8	46.4	7.1	0.0	67.2	258.4	

¹ The prior year volumes for Volume Abstracted and Volume Transported have been restated to exclude non-public water supply to comply with the Ofwat definition.

8.2 Wholesale wastewater

Table 12 - Wholesale Wastewater Opex and Units

	Waste	Waste		Sewage collection		Network + Sewage Treatment		Sludge		
	Service Total	Foul	Surface water drainage	Highway drainage	Sewage treatment & disposal	Liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
Total Operating Expenses 2016/17 £m	423.9	106	30.2	16.6	195.3	0.7	12.2	38.0	24.9	
Total Operating Expenses 2015/16 £m	392.4	99.8	28.8	16.3	189.8	0.4	12.1	28.2	17.0	
Variance £m	31.5	6.3	1.3	0.4	5.5	0.3	0.1	9.8	7.8	
Variance %	7.4%	5.9%	4.4%	2.2%	2.8%	42.5%	0.8%	25.8%	31.5%	
Unit Description		Volume collected		Volume collected	Biochemical Oxygen Demand (BOD)	Biochemical Oxygen Demand (BOD)	Volume	Dried solid mass treated	Dried solid mass disposed	
Unit measure		MI	MI	MI	Tonnes	Tonnes	m³	ttds	ttds	
16/17 Volume (MI)		736,962	309,888	170,958	350,609	8,385	936,103	383	388	
16/17 Unit Cost (£/MI)		144	97	97	557	83	13	99,330	64,224	
15/16 Volume (MI)		1,294,625	309,888	170,958	353,178	11,780	1,055,432	384	383	
15/16 Unit Cost (£/MI)		85	93	95	515	36	11	69,134	44,126	
VarianceVolume (MI)		(557,663)	0	0	(2,569)	(3,395)	(119,328)	(1)	4	
Variance Unit Cost (£/MI)		59	4	2	42	48	2	30,196	20,097	

Key: lower year on year costs are shown as negative values.

Commentary

The volume collected for foul has an improved methodology for 2016/17 using actual property counts compared to average property density in 2015/16 and has resulted in reduced MI. As a result the unit cost has increased in comparison to 2015/16.

Table 13 below explains year on year movements in operating expenses by Upstream Service level:

Table 13 - Wholesale Wastewater Opex explanation

	Waste Service Total £m	Network + Sewage collection			Network + Sewage Treatment		Sludge		
		Foul £m	Surface water drainage £m	Highway drainage £m	Sewage treatment & disposal £m	Liquor treatment £m	Sludge transport £m	Sludge treatment £m	Sludge disposal £m
Total Operating Expenses 2015/16	392.4	99.8	28.8	16.2	189.9	0.4	12.1	28.2	17.0
Reclass of fuel and gas due to more accurate methodology	0.0				(3.0)			3.0	
Power savings inc'd maintenance & commission of key Thermal Hydrolysis Plant	(3.5)	(0.4)	(0.1)		(2.5)		(0.5)		
Maintenance and materials including the commissioning of key Thermal Hydrolysis Plant	3.4							3.4	
ROC Income from power generation uplift	(1.7)							(1.7)	
Employment increase due to inflation, payrises and overtime	6.5	2.0		0.4	3.0			1.1	
Fines and Penalties 1	9.1	6.2			2.9			0.0	
Pension increase	7.7	1.7	0.5	0.2	3.4		0.2	1.6	0.1
Bulk supply - correcting reclassification of inset revenues to third party	1.4				1.4				
General and support cost increase due to IT transition to new provider	3.6	1.6	0.4	0.1	0.5	0.3		1.4	(0.7)
Ash disposal cost increase and provision for under payment	6.8								6.8
Other (<10%, hence not material)	(1.8)	(4.8)	0.5	(0.3)	(0.2)		0.3	1.1	1.6
Total Operating Expenses 2016/17	423.9	106.1	30.1	16.6	195.4	0.7	12.1	38.1	24.8

Commentary¹ The majority of the identified items are to be expected in the normal operation of the Waste business with the exception of the provision for fines and penalties. Please note that this expenditure is not passed on to the customer in line with Ofwat regulations.

8.3 Retail

Table 14 - Retail Opex - Household

	2015/16	Impact of Inflation	Year on Year change	2016/17	
Customer Services Expenditure	£m	£m	£m	£m	
Network & Non network, Investigatory calls	20.3	0.5	4.8	25.6	
Customer donations	5.0	0.1	(0.2)	4.9	
Billing, payment handing, remittances and cash handling	21.1	0.5	0.7	22.3	
Demand side water efficiency	1.1		0.0	1.1	
Bad debt charge	54.5	1.2	(7.9)	47.8	
Debt Management	21.9	0.5	(3.3)	19.1	
CSL	2.9	0.1	0.7	3.7	
G&S	24.1	0.6	2.6	27.3	
Meter reading	9.2	0.2	0.3	9.7	
Total	160.1	3.7	(2.3)	161.5	

Commentary

After taking into account the impact of inflation, net operating expenditure has fallen by £2.3m

The increase in Network and Non-network and investigatory call costs of £4.8m reflects the continued investment in new teams to improve customer enquiries.

Expenditure has also increased by £0.7m to provide better focus and monitoring of the billing process.

Increased investment in customer services during this AMP has resulted in improved cash collections which caused bad debt charges to fall by £7.9m, and Debt management costs to fall by £3.3m in the same period.

The increase in Customer Side Leakage costs by £0.7m reflects investment in additional Response teams to address the incidence of customer leaks.

General & Support costs increased by £2.6m reflecting investment in IT systems, Customer Awareness and Change Initiatives

A reduction in metering contract rates has been offset by provision of additional services during the year

Table 15 - Retail Opex -Non-Household

	2015/16	Impact of Inflation	Year on Year change	2016/17
Customer Services Expenditure	£m	£m	£m	£m
Network & Non network, Investigatory calls	1.9	0.0	1.4	3.3
Customer donations	0.0	0.0	0.0	0.0
Billing, payment handing, remittances and cash handling	3.0	0.1	(0.2)	2.9
Demand side w ater efficiency	0.6	0.0	(0.4)	0.2
Bad debt charge	10.4	0.2	(6.6)	4.0
Debt Management	2.8	0.1	(0.4)	2.5
Services to Developers	0.9	0.0	0.0	0.9
CSL	0.2	0.0	0.0	0.2
G&S	3.6	0.1	13.3	17.0
Meter reading	4.3	0.1	(0.5)	3.9
Total	27.7	0.6	6.6	34.9

Commentary

After taking into account the impact of inflation, net operating expenditure has increased by £6.6m to £34.9m

The increase in Network and Non-network and investigatory call costs by £1.4m reflects wider investment in improving the customer experience.

Increased investment in customer services during this AMP has resulted in improved cash collections of prior year debt which caused bad debt charges to fall by -£1.6m. In addition a specific provision that had been made in 2015-16 has been released in 2016-17, after a re-assessment of risk following the decision to transfer the NHH accounts to Castle Water. This generated a movement year on year of £-5.0m.

General & Support costs have increased by £13.3m which includes provision of services by Castle Water totalling £10.3m to manage accounts during the transition phase; accounts preparation prior to market opening totalling £1.5m; increased assistance from Regulations team related to the transition totalling £0.8m and IT systems support totalling £0.7m.

A reduction in metering contract rates is reflected in overall cost in the year of £0.5m.

8.4 Glossary of Terms

Appointed Business — The appointed business comprises the regulated activities of the Company which are activities necessary in order for the Company to fulfil the function and duties of a water and sewerage undertaker under the Water Industry Act 1991.

Cost - The actual cost to the supplier, of the goods, works or services, including a reasonable rate of return on capital employed. Unless the circumstances of the transaction provide a convincing case for the use of an alternative measure, the return on capital should be consistent with the cost of capital/net retail margin as set out in Ofwat's final determination of 12 December 2014 (or any other determination applicable in the 2015-20 period).

Cost allocation - Cost allocation is the means by which all costs are allocated to appointed and non-appointed businesses, price control units, or specific supplies, works and services, ensuring a fair share of overheads, even where costs cannot be directly attributed to specific activities and associated services.

Cost driver - A cost driver is the factor or factors which cause cost to occur. This can be further divided between the driver that causes an activity to occur, and a driver that determines how often it occurs. Costs may vary in relation to the cost driver over the short or longer term, depending on the nature of cost concerned.

Customer side leakage ('CSL') — leakage from customer side pipes.

FTEs - For the purposes of cost allocation, FTEs (or 'full-time equivalents') should include all full-time staff, and contractors/temporary staff directly employed. Where there is an existing contractual arrangement in place with an associate or third party for example a third party billing arrangement, FTEs will include all full-time staff, and contractors/temporary staff directly employed by the associate or third party involved in providing that service to the appointee.

Household - These are properties used as single domestic dwellings (normally occupied), receiving water for domestic purposes which are not factories, offices or commercial premises. These include cases where a single aggregate bill is issued to cover separate dwellings having individual standing charges. (In some instances, the standing charge may be zero.) The number of dwellings attracting an individual standing charge and not the number of bills should be counted. Mixed/commercial properties and multiple household properties – for example, blocks of flats having only one standing charge – should be excluded.

Non-appointed business — The non-appointed business activities of the Company are activities for which the Company as a water and sewerage undertaker is not a monopoly supplier (for example, the sale of laboratory services to an external organisation) or involves the optional use of an asset owned by the Company (for example, the use of underground assets for cable television).

Non-household - These are properties receiving water for domestic purposes but which are not occupied as domestic premises, or where domestic dwellings are combined with other properties, or where properties are in multiple occupation but only have one standing charge. In this case, it is the number of bills that should be counted.

Ofwat – The name used to refer to the Water Services Regulation Authority (WSRA). The WSRA acts as the economic regulator of the water industry.

Operating Expenditure ('Opex') - Payments for the day-to-day operations of our business, such as operating and maintaining our network and treatment works, paying our staff and our energy bills. This is known as operational expenditure or OPEX.

Price control units - At the 2014 price review Ofwat introduced separate binding price controls. These include wholesale water, wholesale wastewater, retail household and retail non household.

Regulatory Accounting Guidelines ('RAG') - The accounting guidelines for regulatory accounts issued, and amended from time to time, by Ofwat.

Retail - This term refers to any water company activities that take place once water has passed to the customer's side of a property boundary. These include billing, payment handling, debt management, meter reading and handling billing related calls.

Third-party contributions— Grants and third-party contributions received in respect of infrastructure assets and any deferred income relating to grants and third-party contributions for non-infrastructure assets.

Water Resources Management Plan (WRMP) – A plan that sets out how water companies aim to meet predicted demand for water over the next 25 years, ensuring enough water is available to meet customers' needs. This is published every five years.

Wholesale - This term covers all water company activities that take place before water passes the customer's property boundary – resources management, abstraction, treatment, distribution (water and sewer networks), sewage collection, transportation, sewage treatment, sludge disposal and energy from waste.