



Methodology Statement

Upstream services appendix to accounting separation
tables in the regulatory accounts
For the year ended 31 March 2015

June 2015

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1. Introduction

Ofwat have been undertaking a three year pilot study (2012/13 to 2014/15 regulatory periods) requiring Water and Sewerage Companies (WaSC's) and Water only companies (WoC's) to produce a table of wholesale upstream services ("US") costs. This methodology statement covers the final year, 2014/15, of the pilot study.

Table 1 below shows the accounting separation table ("AS") units and the equivalent US unit:

Table 1 AS unit	US unit
Water services	
Water resources	Abstraction licence Raw water abstraction
Raw water distribution	Raw water transport Raw water storage
Water treatment	Water treatment
Treated water distribution	Trunk treated water distribution Local treated water distribution
Sewerage services	
Sewage collection	Foul Surface water drainage Highway drainage
Sewage treatment and disposal	Sewage treatment and disposal
Sludge treatment	Sludge transport Sludge treatment Liquor treatment
Sludge disposal	Sludge disposal

This US table can be found on pages 6 and 7 of this methodology statement.

In February 2013, Ofwat published their guidance for the production of an US table as an appendix to the AS tables published in the Company's regulatory accounts.

In February 2014, Ofwat issued Information Notice (IN 14/05) confirming that the definitions for each data item within each table remain unchanged from the prior period. In addition, IN 14/05, also requires that companies should report a cost driver for each US. The cost driver should be the main factors causing changes to costs for each of the US. Each company has the flexibility to choose the cost driver it considers to be the most appropriate for each service, but should explain why this cost driver was used in their methodology statements.

IN 14/05 also requires companies to submit a year on year comparison of significant movements in costs within each unit (that is movements in excess of 10%). A table of significant movements is provided in section 4 of this methodology statement.

In February and March 2015, Ofwat issued IN 15/01 and IN 15/02 respectively, confirming that the requirements for US reporting remain unchanged from the prior period.

2. Changes to methodology

2.1 Changes to methodology as a result of management review

2.1.1. General and support activities

During the period, management have reviewed the basis of cost allocation for the following areas of expenditure as detailed in table 1 below.

Table 1

General and support activity	2014/15 methodology	2013/14 methodology
General management	FTE's	Pro-rata to total direct costs
Finance	FTE's	Pro-rata to total direct costs
Human resources	FTE's	Pro-rata to direct employment costs

The Company consider that the change in the basis of cost allocation more appropriately reflect the nature of the costs incurred and is consistent with the Company's methodology used in its Price Review ("PR") 14 business plan submission to Ofwat in June 2014.

3 Process

A regulatory model has been developed in Anaplan, which the Company is now using as the system solution to produce the regulatory tables; the AS tables reported within the regulatory accounts and the US appendix attached to this methodology statement.

Prior to the development of the regulatory model, the Company had used the final AS tables produced from the SAP assessment cycle process, as the basis of producing the US tables. The AS data from SAP was analysed using rules and assumptions required to conform to Ofwat's guidance in manually preparing the US tables. The Anaplan regulatory model now produces the US tables as part of the regulatory outputs.

For more information regarding the methodology and allocation process, please refer to section 4.1 of the AS methodology statement, which should be read in conjunction with this methodology statement.

Tables 3 and 4 below for water services and sewerage services respectively, provides for each individual US unit a summary of the methodology and assumptions used, split between operating costs, IRC and CCD, and the cost driver that management considered to be the most appropriate.

Table 3 – water services

US unit and parent	Operating cost	IRC, CCD and amortisation of deferred grants	Cost driver
Water resources			
➤ Abstraction licence	Direct costs: specifically identified costs Indirect costs: small amount of IT, legal and senior management support cost	Not applicable	Mega litres ("Ml") that can be abstracted within each licence
➤ Raw water abstraction	All other costs not associated with abstraction licence	All IRC, CCD and deferred grants associated with storage reservoirs or	Average mega litre per day ("Ml/d") extracted

		their associated above ground assets	
Raw water distribution			
➤ Raw water transport	All operating costs	All IRC, CCD and amortisation of deferred grants	Length of mains ("Km") of the raw water transport pipeline from abstraction site to the intake valve at the WTW
➤ Raw water storage	The Company does not have any raw water storage facilities as defined by Ofwat		
Water treatment		There are no US units below this level	MI/d distribution input
Treated water distribution ("TWD")			
➤ Trunk TWD	<p>Direct costs: Identified sites and number of maintenance jobs incurred.</p> <p>Indirect costs: G&S costs allocated in line with methodology outlined in section 5.3 of the Company's AS methodology statement.</p>	<p>IRC: Based on purpose code associated with the corresponding IRE.</p> <p>CCD and deferred grants: allocated pro-rata to operating costs of each unit.</p>	Total length of mains ("Km") based on pipes with a diameter of 320mm and above.
➤ Local TWD	<p>Direct costs: All network activity with the exception of specific costs identified with size C mains.</p> <p>Indirect costs: G&S costs allocated in line with methodology outlined in section 5.3 of the Company's AS methodology statement</p>		Total length of mains ("Km") based on pipes with a diameter of less than 320mm.

Note:

Regulation costs have been equally split across all US within water and sewerage services.
Local authority rates have been allocated pro-rata to the length of mains within the trunk and local TWD.

Table 4 – sewerage services

US unit and parent	Operating cost	IRC and CCD	Cost driver
Sewerage collection			
➤ Foul	Allocation is based on the total network analysed by sewer lengths; foul, combined and surface/highway drainage.	<p>IRC – all foul.</p> <p>CCD and deferred grants – all foul based on all assets will be pumping foul sewage within the network.</p>	Total sewer length including private sewers (<i>i</i>)
➤ Surface water drainage	Combined sewers have been allocated pro-rata to the foul and		<p>IRC – none.</p> <p>CCD and</p>

	surface/highway drainage pipe lengths.	deferred grants – none	sewers (i)
➤ Highway drainage		IRC, CCD and deferred grants – none	Total sewer length including private sewers (i)
Sewage treatment and disposal	There are no US units below this level		Population equivalent (ii)
Sludge treatment			
➤ Sludge transport		IRC - none	Sludge inter-site volume in cubic metres (“m3”) transported.
➤ Sludge treatment		CCD and deferred grants: - allocated pro-rata to operating costs of each unit	Sludge produced in tonnes (“ttds”).
➤ Liquor treatment			Sludge disposed (“ttds”) (iii)
Sludge disposal	There are no US units below this level		Sludge disposed (“ttds”)

Note:

Regulation costs have been equally split across all US within water and sewerage services. **G&S costs** allocated in line with methodology outlined in section 5.3 above.

- (i) The cost driver used for these upstream services is a change from the previous year, which used total load entering the network for foul and none for surface water and highway drainage.
- (ii) The cost driver used for 2014/15 is a change from the previous year, which used total load receiving secondary treatment. Management consider that this change in cost driver better reflects the consumption of costs and is consistent with the majority of the other WaSC's.
- (iii) This is a new cost driver, 2013/14 regulatory accounts did not include any cost driver information for this upstream services unit. Management consider that liquor treatment is a by-product of the sludge to be disposed and therefore should reflect the same cost driver as sludge disposal.

4 Year on year comparison

The following table's for water and sewerage services show the year on year percentage movement for each US unit. Where the percentage movement is in excess of 10% an explanation is provided below each table.

Water services

Service		Abstraction licence	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Trunk treated distribution	Local treated water distribution
Total operating costs	£m	(15.7)	(1.5)	(7.3)	0.0	(2.6)	(42.7)	68.2
Total operating costs	%	-101.7%	-3.3%	-23.2%	0.0%	-1.4%	-36.6%	30.5%

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

Explanation of movements above 10%

Abstraction licence

The lower abstraction licence costs include a one off refund of Environmental Improvement Unit Charges paid to the Environment Agency in prior periods.

Raw water transport

The year on year movement of £7.3m, principally reflects a reduction in IRC of £10.4m; IRC in 2014 included a higher than normal level of expenditure incurred on replacement of raw water pipes.

Trunk treated water distribution

The reduction in operating costs of £42.7m compared to the prior period is principally due to a reduction in the IRC attributed to this upstream services unit (£11.9m) and lower CCD (£11.3m). This reduction in costs has been offset by increased IRC and CCD costs within local treated water distribution. In addition operating expenditure was £19.6m lower principally reflecting the improved process for allocating costs between trunk and local treated water distribution using Anaplan as the system solution to produce the regulatory tables.

Local treated water distribution

Increased operating costs of £68.2m reflect increased level of IRC (£17.9m) and CCD (£10.8m). In addition, operating expenditure increased by £39.7m, of which £19.6m is primarily due to the improved allocation process in using Anaplan as mentioned above and £20.1m due to increased local distribution network detection and leakage expenditure as well as increased contractor rates.

Sewerage services

Service		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge transport	Sludge treatment	Liquor treatment	Sludge disposal
Total operating costs	£m	(11.1)	5.3	(5.5)	28.2	11.4	(3.3)	(0.5)	0.4
Total operating costs	%	-6.5%	24.9%	-39.2%	9.3%	134.1%	-4.0%	-17.2%	1.7%

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

Explanation of movements above 10%Surface water drainage and highway drainage

The increase in operating expenditure within surface water drainage has been offset by a reduction in highway drainage costs. This movement is due to the improved allocation process in using Anaplan as the system solution to produce the regulatory tables.

Sludge transport

The increase of £11.4m (134%) compared to the prior period is primarily due to an increase in intersite tankering costs (£7.3m). This increase is largely due to the exceptional wet weather between January and March 2014 reducing the level of sludge intersite movements; tankers being used for increased sewerage collection activities. Increased CCD (£5.1m) reflecting improvements in Sludge treatment assets are the other major movement in costs within this upstream service unit.

Liquor treatment

Whilst costs have increased by 17.0% compared to the prior period, this equates to less than £1m year on year variance and is considered to be immaterial.

Water Services

Business Unit		Network plus			
		Water resources	Raw water distribution	Water treatment	Treated water distribution
Total operating expenditure	£m	26.4	16.7	72.3	187.3
IRC	£m	4.1	4.4	0.0	101.1
CCD	£m	11.7	3.2	106.8	78.7
Amortisation of deferred credits	£m	(0.1)	(0.1)	(0.3)	(1.3)
Total operating costs	£m	42.1	24.3	178.8	365.8

Service		Abstraction licence	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Trunk treated distribution	Local treated water distribution
Total operating expenditure	£m	(0.3)	26.6	16.7	0.0	72.3	38.1	149.2
IRC	£m	0.0	4.1	4.4	0.0	0.0	20.0	81.1
CCD	£m	0.0	11.7	3.2	0.0	106.8	16.0	62.7
Amortisation of deferred credits	£m	0.0	(0.1)	(0.1)	0.0	(0.3)	(0.3)	(1.0)
Total operating costs	£m	(0.3)	42.3	24.3	0.0	178.8	73.9	291.9

Cost driver		Reserved water	MI/d abstracted	Length of raw water pipeline		Distribution input	Length of main < 320 mm	Length of main > 320 mm
Unit		MI/d	MI/d	Km		MI/d	Km	Km
Source		EA data	EA data	Water mains activity		Water delivered	Water explan. Factors	
Value		4,009.78	2,878.20	243.77		2,572.51	3,000.64	28,147.09

Formulae		cost per day/MI/d	cost per day/MI/d	cost/Km		cost per day/MI/d	cost/Km	cost/Km
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Unit cost	£ -	0.18	40.30	99,490.63		190.44	24,626.94	10,370.53
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Sewerage services		Network plus			
Business Unit		Sewage collection	Sewage treatment	Sludge treatment	Sludge disposal
Total operating expenditure	£m	100.9	153.6	54.5	24.0
IRC	£m	48.9	0.0	0.0	0.0
CCD	£m	52.5	176.6	47.7	3.0
Amortisation of deferred credits	£m	(8.1)	(0.6)	(0.1)	(0.0)
Total operating costs	£m	194.2	329.6	102.1	27.1

Service		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge transport	Sludge treatment	Liquor treatment	Sludge disposal
Total operating expenditure	£m	65.9	26.5	8.5	153.6	10.6	42.7	1.2	24.0
IRC	£m	48.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CCD	£m	52.5	0.0	0.0	176.6	9.3	37.4	1.0	3.0
Amortisation of deferred credits	£m	(8.1)	0.0	0.0	(0.6)	(0.0)	(0.1)	(0.0)	(0.0)
Total operating costs	£m	159.2	26.5	8.5	329.6	19.8	80.0	2.2	27.1

Cost driver		Total sewer length including private sewers	Total sewer length including private sewers	Total sewer length including private sewers	Population equivalent	Total sludge iner-site volume (m3) transported	Total sewage sludge produced	Total sewage sludge and ash disposed	Total sewage sludge and ash disposed
Unit		Km	Km	Km	No.	m3/year	ttds	ttds	ttds
Source		Sewerage activity	Sewerage activity	Sewerage activity	Pop equivalent	ST&D	ST&D	ST&D	ST&D
Value		108,732.08	108,732.08	108,732.08	14,916,027.00	1,340,150.37	342.0	174.87	174.9

Formulae		Cost/Km	Cost/Km	Cost/Km	Cost/No.	Cost/m3 per year	Cost/ttds	Cost/ttds	Cost/ttds
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Unit cost	£	1,464.22	243.48	78.46	22.09	14.81	234.02	12.43	154.86
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