Dŵr Cymru Cyfyngedig
Upstream services trial data - methodology statement
Year ended 31 March 2013

Introduction

Upstream service costs are being published on a trial basis in order to better understand the different approaches taken and methodologies applied in allocating costs to services.

Dŵr Cymru's allocation to upstream services uses regulatory accounting totals for wholesale services as the starting point and, while some costs for individual upstream services can be readily identified and therefore allocated directly, others rely on management estimate or a simple pro-rata approach where there is insufficient supporting information to facilitate a meaningful allocation of costs. As such, the costs reported in the supplementary upstream services table should only be relied upon as being indicative of the cost of providing each service.

Water Services: operating expenditure

Abstraction license
Total costs charged by the Environment Agency plus allocation of employment costs in relation to negotiation with third parties to obtain abstraction rights and to agree charges.

Raw water abstraction
Total water resources operating expenditure less abstraction license costs.

Raw water transport
This includes costs for transporting raw water from the boundaries of the abstraction site to a treatment plant, raw water storage facility or to a large customer. A majority of the costs included here relate to power, third party costs and local authority rates (split in line with the split of operating costs).

Raw water storage
These costs include scientific services costs and no transport costs have been included here as stated in the requirement.

Water treatment
Total operating expenditure as reported in the regulatory accounts.

Trunk and local treated water distribution
Costs for trunk treated water distribution have been arrived at by taking the costs from unique cost centres for trunk mains, service reservoirs and water pumping stations.
Costs for local treated water have been taken from cost centres relating to minor works, network inspectors, leakage inspectors, clerical and all associated costs.
General and support costs have been allocated over the direct costs split.
Third party services have been allocated over services based on the split of direct costs.
Local authority rates have been apportioned over the services based on the 2009 MEAV values.

Water Services: infrastructure renewals charge (IRC) and current cost depreciation (CCD)

No costs are attributable to abstraction licenses.

Raw water abstraction

This relates to the total costs as reported in the regulatory accounts under raw water abstraction.

Raw water transport

The CCD is split according to the 2009 MEAV values.

Raw water storage

The CCD is split according to the 2009 MEAV values.

Water treatment

Total IRC and CCD cost as reported in the regulatory accounts under water treatment.

Trunk and local treated water distribution

We currently have no meaningful way of splitting our mains assets between these headings, however we have based a split on the gross 2009 MEAV values of water mains lengths with water mains greater than 320mm treated as trunk water distribution. We have used this split for both IRC and CCD. Meters CCD amount to £6.9m and are included in local treated water distribution.

Sewerage Services: operating expenditure

Foul, surface water and highway drainage

Incident records allow the function of the sewer to be recorded. This field is not completed for all incidents but when complete the main divisions are foul, surface water and combined. The company has no responsibility for highway drainage and so it is not possible to use operational incidents to provide the correct apportionment of cost.

As an initial approach a review was made of the company's hydraulic wastewater models. Information from these provides a split by impermeable area into the categories of roof area and highway. The highway allocation within these models includes paved areas around properties and therefore was not appropriate to provide the surface water/highway drainage split. As an alternative a review has been made of performance data from 2012/13 year.

Excluding unassigned data the following split was derived:

Foul	-	10,061 jobs
Surface water (inc highway drainage)	-	1,333 jobs
Combined (inc foul, surface and some highway drainage)	-	15,969 jobs

Combined sewerage work was divided proportionally between the foul and surface water categories. A report was prepared by Hyder Consulting in 2001 which calculated that highway drainage accounted for 23% of surface water flows. This proportion is still used in Dŵr Cymru's billing calculations to derive the proportion of charges allocated to the drainage of highways. This leads to the following split (based on the number of jobs):

Foul	88%
Surface Water	8%
Highway Drainage	4%

Costs associated with the wastewater network have been apportioned according to these percentages for the purposes of this report.

Sewage treatment and disposal
Total cost as reported in the regulatory accounts.

Sludge transport
Costs of our internal and contracted sludge transport service are used to manage routine haulage work and these costs are separately identifiable.

Sludge treatment
Total sludge treatment costs as reported in the regulatory accounts less sludge transport and liquor treatment costs.

Liquor treatment
Liquor treatment occurs at our sewage treatment works where we also have sludge treatment processes. As there is no meaningful way of separating these costs we have used management's allocation of 7%.

Sludge disposal
Sludge disposal costs are already separately identified, captured and reported in the business and are generally directly allocated to this activity via our accounting system.

Sewerage services: infrastructure renewals charge (IRC) and current cost depreciation (CCD)

Foul, surface water and highway drainage
We currently have no meaningful way of splitting our collection assets between these headings and have therefore pro-rated the costs as reported under sewage collection in our regulatory accounts based on the ratio of operating expenditure between the services.

Sewage treatment and disposal
Total cost as reported in the regulatory accounts.

Sludge transport, sludge treatment and liquor treatment
For CCD we have split the costs to Liquor treatment based on 2009 MEAV splits. We do not currently have a meaningful way of splitting our sludge transport and treatment assets costs and have assumed an allocation of 2% sludge transport and 98% sludge treatment on the remaining costs based on managers' assessments.

Sludge disposal
Total costs as reported in the regulatory accounts.

Regulatory supplementary table- upstream services trial 2012-13

Business unit		Water resources	Raw water distribution	Water treatment	Treated water distribution
Total operating expenditure	£m	22.899	10.226	38.933	52.654
IRC	£m	2.633	0.043	0	35.666
CCD	£m	0.699	9.209	28.062	20.658
Total operating costs	£m	26.231	19.478	66.995	108.978

Service		Abstraction licence	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Trunk treated water distribution	Local treated water distribution
Total operating expenditure	£m	10.1	12.8	8.5	1.7	38.9	11.6	41.1
IRC	£m		2.6	0.0	0.0	0.0	7.1	28.5
CCD	£m		0.7	8.7	0.5	28.1	2.8	17.9
Total operating costs	£m	10.1	16.1	17.3	2.2	67.0	21.5	87.5

Business unit		Sewage collection	Sewage treatment	Sludge treatment	Sludge disposal
Total operating expenditure	£m	33.677	54.437	11.739	3.799
IRC	£m	29.154	0.379		
CCD	£m	18.079	46.278	9.911	
Total operating costs	£m	80.91	101.094	21.65	3.799

Service		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge transport	Sludge treatment	Liquor treatment	Sludge disposal
Total operating expenditure	£m	29.64	2.69	1.34708	54.437	2.28	8.63727	0.82173	3.799
IRC	£m	25.66	2.33	1.16616	0.379		0		
CCD	£m	15.91	1.45	0.72316	46.278	0.19822	9.01901	0.69377	
Total operating costs	£m	71.201	6.473	3.236	101.094	2.478	17.656	1.516	3.799