Methodology Statement

Upstream services appendix to accounting separation tables in the regulatory accounts
For the year ended 31 March 2014

June 2014

Contents

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 second year, 2013/14, 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 14 and 15 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 6 of this methodology statement.

1.1 Changes to methodology

1.1.1 Changes to methodology as a result of latest Ofwat guidance

IN 14/05 clarified the treatment of scientific services and regulation costs to be used in producing the AS tables as detailed below:

- **Scientific services**: sampling of drinking water at customers' taps is now treated as a wholesale activity; in 2012/13 these costs were allocated to retail.

- **Regulation costs**: costs are now split equally across all nine AS units; in 2012/13 we allocated regulation costs pro-rata to the direct costs incurred by each of the nine AS units.

This clarification also extends to the production of the wholesale US costs.

For the US tables, the Company has allocated scientific services and regulation costs as follows:

- **Scientific services:** sampling of drinking water at customers taps is wholly allocated to Local treated water distribution.

- **Regulation costs**: equally split across all US.

The purpose of this methodology statement is to explain the systems, processes and allocation methods used to populate the US tables. Within each section below describing the US methodology used to allocate costs to each individual service and an explanation of the cost driver used.

1.1.2 Changes to methodology as a result of management review

In addition to the changes to methodology as a result of the latest Ofwat guidance detailed above, the Company has reviewed its allocation of the following types of costs, with the result that the allocation of these costs in the US table for 2013/14 is different to that used in preparing the tables in the year ending 31 March 2013. The following changes resulted from this review:

- **Raw water storage:** we have undertaken a review of what constitutes a raw water storage asset as defined by Ofwat in their US guidance. Management have concluded that all our reservoirs have abstraction licences; therefore costs for these have been reported within Raw water abstraction. The Company does not have any reservoirs without an abstraction licence; therefore all Raw water distribution costs have been reported within Raw water transport within the water services US table. This is a change in methodology from the previous period, where costs were allocated to Raw water storage on the basis that some reservoirs were fed from other reservoirs nearer to the point of abstraction and were therefore considered to be raw water storage assets. As all reservoirs have abstraction licences, management consider that the methodology applied in the prior period is no longer valid.
- **Local authority rates, including cumulo rates, within Treated water distribution**: have been allocated to trunk and local treated distribution based on length of mains. Previously these costs were wholly attributed to trunk treated distribution. Management consider that this change is more appropriate as it better aligns with the cost drivers for these two US units.
- **General and support costs:** Management have reviewed the process of allocating general and support costs used in the US tables for the year ended 31 March 2014. Section 2 outlines the review management had undertaken, with an explanation of any changes compared to the prior year being noted in sections 3 and 4, describing the methodology used against each US unit.
- **Current cost depreciation ("CCD") within Sewage collection:** these costs are reported within the Foul US unit in this year's US tables. In the prior period, these costs were allocated pro-rata to the direct costs of the three US units within Sewage collection. As there is no identifiable Surface water drainage or Highway drainage assets, allocating CCD based on direct costs is no longer considered appropriate.

2. Process

The Company has used the final AS tables produced from the SAP assessment cycle process, as the basis of producing the US tables. Please refer to the AS methodology statement, which should be read in conjunction with this US methodology statement.

The AS data from SAP was analysed using rules and assumptions required to conform to Ofwat's guidance in preparing the US tables. These rules reflect the activity undertaken by each cost centre and have been allocated accordingly across the various US categories. There has been no material changes in the rules and assumptions used in this year's US tables from those used in the prior year. Accordingly, the cost allocation % of direct costs allocated to each US within its total AS unit used for the 2012/13 tables, have been used for the production of this year's tables, with the exception of Water resources as described in section 3.1 below.

A further analysis of general and support costs allocated into the AS tables was undertaken to enable allocation of these costs into the respective US units. The total general and support costs from SAP was downloaded into excel for each activity, i.e. Finance, Human Resources, External Affairs etc. and allocated to the US units using the appropriate direct cost driver outlined in the AS methodology statement. Specific changes made to methodology where appropriate, have been outlined in each respective US section below.

This allocation was applied consistently across all US units with the exception of Abstraction licence, where due to the small team involved in this activity, the allocation was based on the FTE's of this unit. This is a departure from the previous year, which was an estimate of general and support costs that this US unit would incur. This difference in assumption, using FTE's rather than an estimate, has no material impact on the allocation of general and support costs; costs allocated in the year ended 31 March 2014 was £0.3m compared to £0.2m in the prior period.

It should be noted that the costs reported in the tables contained within this methodology statement, are indicative of the cost of providing each service. The Company's operating structure is not structured on the upstream service units; the sewerage network, for instance, is not split into the three services within the network.

The following section provides for each individual US, a summary of Ofwat's guidance, the methodology and assumptions used, split between operating costs and fixed assets and the cost driver that management considered to be the most appropriate.

Where an AS unit has no further split into separate US units, no further commentary is provided, other than the cost driver used to provide the average unit cost for this AS unit.

3. Service: Water

3.1 AS unit: Water resources

This AS unit is subdivided into 2 US services; Abstraction licence and Raw water abstraction.

3.1.1 US unit: Abstraction licence

Guidance

This service has been identified separately from the Raw water abstraction US unit because of the potential for a market in abstraction licenses to emerge in the future. This would enable abstraction licences to generate a separate income stream.

This service includes activities related to negotiating with third parties to obtain abstraction rights and to agree charges, as well as the annual cost of the licence itself. This service should not include activities that are incurred in choosing abstraction sites, optimising abstraction or ensuring compliance with licence conditions. All such abstraction planning activities and licence administration activities should be included in the Raw water abstraction unit.

Methodology and assumptions

Operating costs

The Company records the cost of the abstraction licence itself within a separate general ledger code in SAP shown within the Water resources AS table as service charges.

Direct costs associated with the negotiation of the licences have been obtained from the Company's Environmental business unit, who have assessed the time spent on the negotiation and procurement of these licences'. The value of these costs could fluctuate year on year depending on the number of licences that are required to be renewed in any given year.

A proportion of general and support costs applicable to this service have been allocated to this upstream activity reflecting regulation, legal, IT support costs and an element of senior management cost. The team responsible for negotiating and managing the abstraction licence is small; therefore the amount of general and support costs allocated to this service is in proportion to the number of staff within that team.

Regulation costs, which were allocated pro rata to direct costs in the 2012/13 US submission, have been split equally to both US units within Water resources; Abstraction licence and Raw water abstraction, in accordance with IN 14/05 for 2013/14.

Fixed assets

Allocation of current cost depreciation ("CCD") and Infrastructure Renewals Charge ("IRC") between **Abstraction licence** and **Raw water Abstraction** is based on asset class. Assets within Water resources include storage reservoirs or their associated above ground assets. Therefore they all relate to Raw Water Abstraction and there are no assets considered to be attributable to abstraction licences. Abstraction Licence gets no allocation of CCD or IRC.

Cost driver

Each abstraction licence obtained includes the volume of water in numbers of mega litres ("Ml") that can be abstracted within the licence. This information is retained in a spreadsheet supporting our abstraction licences, which details each licence and amount that can be extracted. Management consider that the amount of Ml that can be abstracted according to the licence is the most appropriate unit cost measure to use. For the purposes of calculation a unit cost for this US unit, Ml was converted to Ml/d.

The number of licences held was considered but this has the disadvantage of not reflecting their usage during the year as unused licences held would not be a significant cost driver.

3.1.2 US unit: Raw water abstraction

Guidance

The water abstraction service includes activities related to the identification of new sources, including catchment management, licence management, and the abstraction infrastructure.

Pre-treatment processes can vary, from a relatively simple physical separation of the largest impurities, to more complex chemical treatments, depending on the source of abstraction and on the type of treatment plant to which the raw water is transferred. Therefore, it seems appropriate to combine activities related to abstraction and pre-treatment within the same service. Moreover, any transport from the water abstraction site is included within the abstraction service, although these costs are expected to be very small. For example, transport between reservoirs where both reservoirs have an abstraction licence is considered to be part of the Raw water abstraction service. However, transport which occurs between a reservoir with an abstraction licence and a reservoir/storage tank without an abstraction licence would be considered to be part of the Raw water transport service. The activities relating to the inspections, operation and maintenance of impounding reservoirs are included in this service.

All activities related to planning are to be included in "water abstraction" and it is only the administrative costs involved in obtaining the licence and the cost of the licence itself that should be included in the "water licence" service.

Methodology and assumptions

Operating costs and fixed assets
The balance of the AS Water resources costs, after attributing costs to the US Abstraction licence unit, are recorded within Raw water distribution. This assumption remains unchanged from that used in the prior period.

Fixed assets
IRC and CCD for this unit have been discussed above in section 3.1.1.

Cost driver
The average mega litre per day ("Ml/d") extracted has been used as the appropriate cost driver. This information is readily available and is collated in our internal Annual Return process. The process is subject to governance procedures to ensure the data is accurate, including external review arrangements by Halcrow. This cost driver has the advantage that it can be used as a cross industry comparator.

3.2 AS unit: Raw water distribution

This AS unit is subdivided into 2 US services; Raw water transport and Raw water storage.

3.2.1 US unit: Raw Water Transport

Guidance
This service includes the activities related to transporting the raw water from the boundaries of the abstraction site to a treatment plant, a raw water storage facility, or to large industrial customers that require untreated water in their production processes.

The activities allocated to this service relate to the development and maintenance of the physical Raw water transport network.

Methodology and assumptions

Operating costs
All Raw water distribution costs are considered to be Raw water transport costs as the Company does not have any raw water storage assets.

Fixed assets
Allocation between **Raw water transport** and **Raw water storage** is based on asset class.

For IRC the entire amount is assigned to Raw water transport as assets within this category relate to the renewal of aqueducts or raw water tunnels. All CCD allocation has been allocated to Raw water transport.

Cost driver
Management believe that the most appropriate cost driver is length of mains (Km) of the Raw water transport pipeline from the abstraction site to the intake valve at the Water Treatment Works ("WTW"). This will include the transportation within network between sites/plant. This information was extracted from the Company's Geographic Information System ("GIS"). It should be noted that there are disadvantages in using this measure as any comparison of Raw water transport unit costs with other companies within the industry, would not take into account the demographics of each company.

Other cost drivers were considered such as average pumping head; however, this also has its flaws as it may be seen to place companies using gravity systems at a disadvantage compared to those that are more reliant on pumping activity.

Management consider that despite the disadvantage of using length of mains as the appropriate cost driver, this measure provides a more appropriate cross industry comparator.

3.2.2 US unit: Raw water storage

Guidance

This service includes activities related to the construction, operation and maintenance of raw water storage facilities. In general, no transport costs should be allocated to this service, since the cost of transport should be included within the Raw water transport service.

Reservoirs that do not have an abstraction licence attached to them and are used to store raw water should be included under Raw water storage. Associated activities, such as control of the inflow to prevent overfilling and outflow (which ensures continuity of availability of supply) and planned and emergency drawdown and discharge facilities (with associated permitting) should also be included in this service. Activities related to determining losses due to leakage and to ensuring security of the site from contamination are also expected to be included.

Methodology and assumptions

Operating costs, fixed assets and cost driver

Management have reviewed its methodology and consider that the Company does not have any raw water storage facilities as defined by Ofwat in their US guidance. Please see section 1.1.2 on page 4 detailing our change in methodology.

3.3 AS unit: Water treatment – no US units

Cost driver

Management consider that the distribution input measure – Ml/d - as the most appropriate cost driver to use. The distribution input measure is the volume that is treated and enters the Treated water distribution network. This information is readily available as part of our internal Annual Return process, which is externally reviewed by Halcrow and would be a consistent industry measure.

3.4 AS unit: Treated water distribution

This AS unit is subdivided into 2 US services; Trunk treated water distribution and Local treated water distribution.

3.4.1 US unit: Trunk treated water distribution

Guidance

Trunk treated water transport includes activities related to transporting treated water from the treatment works to District Metered Areas (“DMAs”). This service includes all trunk network repair and maintenance activities, as well as activities associated with any new network development. In addition to directly attributable costs, other activities that might need to be considered within this service may include the provision and maintenance of storage towers and reservoirs and ancillaries such as booster pumps, pressure reduction, hydrants, air release valves, washouts and flow measurement.

Methodology and assumptions

Operating costs

Within the Finance System – SAP – sites relating to Trunk treated water distribution are recorded within identified cost centres within the company’s management structure and have therefore been 100% allocated to Trunk water distribution. The percentage allocation used in 2013/14 has been applied consistently compared to the prior period, as there has been no material change in assumption.

Service costs within Treated water distribution have been equally split between Trunk and Local treated water distribution as this cost was not specific to either of these two US units.

Regulation costs, which were allocated pro rata to direct costs in the 2012/13 US submission, have been split equally to the two US within Treated water distribution, in accordance with IN 14/05 for 2013/14.

Local authority rates have been allocated pro-rata to the length of mains in the Trunk treated water distribution and Local treated water distribution networks. This is a change in methodology from 2012/13

where all local authority rates were attributed to Trunk water distribution. Management consider that this is more cost reflective assumption to use.

General and support costs allocation follow the allocation treatment outlined in the 'AS methodology statement'.

Fixed assets

For IRC the allocation between **Trunk treated water distribution** and **Local treated water distribution** is based on the purpose code associated with the corresponding Infrastructure Renewals Expenditure (IRE).

CCD allocation is based on the proportion of the operating expenditure relating to each AS service unit.

Cost driver

The total length of trunk mains in kilometres, based on pipes with a diameter of 320mm and above, has been used as the appropriate cost driver for this US unit. Alternative measurements had been considered, such as pumping head activity. However, this measurement will not provide an industry wide comparison because of the different demographics of each company. Total pipe length does have the advantage of a standard industry diameter, as the basis of industry comparison.

This cost driver is reported within our internal Annual Return process and is externally reviewed by Halcrow and is therefore readily available.

3.4.2 Local treated water distribution

Guidance

Local treated water distribution includes the activities related to distributing treated water to customers within DMAs. This service includes all distribution network repair and maintenance activities, as well as the activities associated with any new network development.

Other activities that may be considered within this service include the provision and maintenance of district and customer meters, storage towers and reservoirs and ancillaries such as booster pumps, pressure reduction, hydrants, air release valves, washouts and flow measurement.

Methodology and assumptions

Operating costs

All network activity with the exception of the specific costs identified with size C mains has been allocated to Local treated water distribution. Within the company's management reporting structure, costs can be identified as Local treated water distribution activity and have therefore been reported in this upstream category. The percentage allocation used in 2013/14 has been applied consistently compared to the prior period, as there has been no material change in assumption

Service costs within Treated water distribution have been equally split between Trunk and Local treated water distribution as this cost was not specific to either of these two US units.

Regulation costs, which were allocated pro rata to direct costs in the 2012/13 US submission, have been split equally to the two US within Treated water distribution, in accordance with IN 14/05 for 2013/14.

General and support costs allocation follow the allocation treatment outlined in the 'AS methodology statement' and is unchanged from the prior period.

Third party costs incurred have been allocated to this category based on the nature of the activity undertaking.

Fixed assets
For IRC the allocation between **Trunk Treated Distribution** and **Local Treated Water Distribution** is based on the purpose code associated with the corresponding Infrastructure Renewals Expenditure (IRE).

CCD allocation is based on the proportion of the operating expenditure relating to each AS service unit.

Cost driver
The total length of trunk mains in kilometres, based on pipes with a diameter of 320mm and below, has been used as the appropriate cost driver for this US unit. This measure is consistent with the Trunk treated water distribution measure and has the same advantages.

This cost driver is reported within our internal Annual Return process and is externally reviewed by Halcrow.

4. Service: Sewerage

4.1 AS unit: Sewage collection

This AS unit is subdivided into 3 US services; Foul, Surface water drainage and Highway drainage.

4.1.1 US unit: Foul

Guidance
This service includes the activities related to collection of foul sewage from customers' properties. The activities included in this service relate to the development, repair and maintenance of the sewage collection infrastructure. Other activities that should be considered within this service may include the provision and maintenance of ancillaries such as overflows, screens, on-line and off-line retention tanks, rising main wells and pumps and flow measurement.

Methodology and assumptions

Operating costs
The allocation of sewerage collection into the US was based on the total network sewer analysed into sewer lengths; foul, combined and surface/highway drainage. This data was extracted from the Company's Asset Data management team's GIS system in April 2013. Any combined sewers have been allocated proportionately to the lengths of the foul and surface/highway drainage pipe lengths, taking into consideration pipe capacity and impermeable areas. The surface/highway drainage proportion was further allocated individually to surface and highway allocation percentages.

The company also took into consideration an exercise that was prepared some year's previously that analysed costs into Surface water drainage and Highway drainage. Management considered that this exercise was still relevant to the apportionment of costs into the sewerage collection US units.

The percentage allocation used in 2013/14 has been applied consistently compared to the prior period, as there has been no material change in assumption

Regulation costs, which were allocated pro rata to direct costs in the 2012/13 US submission, have been split equally to all three US within sewerage collection, in accordance with IN 14/05 for 2013/14.

General and support costs allocation follow the allocation treatment outlined in the 'AS methodology statement' and is unchanged from the prior period.

Fixed assets

IRC allocation between **Foul; Surface water drainage** and **Highway drainage** is based on asset class. As the asset class data is not split between these categories, all Sewage collection IRC is allocated to Foul which is deemed appropriate and reasonable.

In the prior year the CCD allocation was based on the proportion of the operating expenditure relating to each US unit. In the US tables for the year ending 31 March 2014, all Sewage collection CCD has been allocated to Foul on the basis that all assets attracting CCD will be pumping foul sewage within the network.

Surface water drainage and Highway drainage is gravity driven and therefore does not have any associated above ground assets.

Cost driver

Management consider that the total effluent load entering into the Sewage Treatment Works ("STS"), expressed as Biochemical Oxygen Demand ("BOD") /year, and has the advantage over other cost drivers in that it is measurement that can also be used in measuring the cost of sewage treated. It also overcomes the difficulty of the company having combined sewers as well as dedicated foul sewers.

The Company also considered; total length of mains, but this does not differentiate between the types of sewers in use and the area served.

The BOD/year cost driver used for this upstream service is reported within our internal Annual Return and is externally reviewed by Halcrow.

4.1.2 US unit: Surface water drainage

Guidance

This service includes the activities related to the collection of surface water from exterior areas of customers' properties. The activities included in this service relate to the development, repair and maintenance of the sewage collection infrastructure. Other activities that should be considered within this service may include the provision and maintenance of ancillaries such as overflows, screens, on-line and off-line retention tanks, rising main wells and pumps and flow measurement.

Methodology and assumptions

Operating costs and fixed assets

See comment above for Foul in respect of the allocation of direct cost and regulation costs.

General and support costs allocation follow the allocation treatment outlined in the 'AS methodology statement' and is unchanged from the prior period.

Cost driver

Surface water drainage and Highway drainage are particularly difficult to measure as the Company does not currently collect peak flow data or any other cost driver that it considers appropriate. Therefore, we have not provided any reliable cost driver for these services for this year's submission. We will consider cost drivers for these services as part of our continuing improvements in regulatory reporting.

4.1.3 US unit: Highway drainage

Guidance

This service includes the activities related to collection of surface water that runs off roads and pavements. The activities included in this service relate to the development, repair and maintenance of the sewage collection infrastructure. Other activities that should be considered within this service may include the provision and maintenance of ancillaries such as overflows, screens, on-line and off-line retention tanks, rising main wells and pumps and flow measurement.

Methodology and assumptions

Operating costs and fixed assets, and cost driver
See comment above for Foul in respect of the allocation of direct cost and regulation costs.

General and support costs allocation follow the allocation treatment outlined in the 'AS methodology statement' and is unchanged from the prior period.

Cost driver
See comment above for Surface water drainage above in section 4.1.2.

4.2 AS unit: Sewage treatment and disposal – no US units

Cost driver
We have used total load receiving secondary treatment, expressed as BOD/year, as the appropriate cost driver as this reflects the sewage treated at the Company's STW. This cost driver is reported within our Annual Return and is externally reviewed by Halcrow.

4.3 AS unit: Sludge treatment

This AS unit is subdivided into 3 US services; Sludge transport, Sludge treatment and Liquor treatment.

4.3.1 US unit: Sludge Transport

Guidance
This service includes the transport of sludge from the sewage to the STW. All types of transport, and associated fuel costs, are included within this service. However, internal transportation within the treatment plant is not included in this service. This is considered an activity of the STW.

Methodology and assumptions

Operating costs
The company does not record costs into the three US categories as costs are recorded at a STW level.

The company has therefore used management judgement to allocate costs accordingly. The judgement is based on discussions with sludge treatment work managers, who understand the costs incurred, to determine the appropriate allocation of costs as detailed below.

For direct costs, the percentage allocation used in 2013/14 has been applied consistently compared to the prior period, as there has been no material change in assumption.

Regulation costs, which were allocated pro rata to direct costs in the 2012/13 US submission, have been split equally to all three US within Sludge treatment, in accordance with IN 14/05 for 2013/14.

General and support costs allocation follow the allocation treatment outlined in the 'AS methodology statement' and is unchanged from the prior period.

Fixed assets
CCD allocation between **Sludge transport; Sludge treatment** and **Liquor treatment** is based on the proportion of the operating expenditure relating to each AS unit.

There is no IRC as there are no infrastructure assets within Sludge treatment.

Cost driver
Sludge inter-site volume in cubic metres (m3) transported, has been considered to be the appropriate cost driver to use. This information is readily available and is reported within our internal Annual Report and is externally reviewed by Halcrow.

4.3.2 US unit: Sludge treatment

Guidance
This service includes all the activities related to Sludge treatment. While different technologies exist for sludge treatment, sludge treatment is defined as a technology-neutral service for the purpose of AS.

Methodology and assumptions

Operating costs
For direct costs, the percentage allocation used in 2013/14 has been applied consistently compared to the prior period, as there has been no material change in assumption.

Scientific services have been allocated to Sludge treatment and Liquor treatment in these US tables. This is a change in assumption from the prior period where all scientific costs were reported within Sludge treatment.

General and support costs allocation follow the allocation treatment outlined in the 'AS methodology statement' and is unchanged from the prior period.

Fixed assets
See comment for Sludge transport above.

Cost driver
Management consider that the total of sludge produced in tonnes ("ttds"), which is readily available and can be used as an industry comparison, is the most appropriate cost driver. This measure is reported within our Annual Return and is externally reviewed by Halcrow.

4.3.3 US unit: Liquor Treatment

Guidance
Includes all activities in transporting and treating liquors generated during the sludge treatment process. The liquors may be treated either on site at a sludge treatment plant or at a STW.

Methodology and assumptions

Operating costs
A small proportion of direct costs are allocated to this activity as most of the liquor is gravity returned to the front in-let of a STW and therefore incurs very little cost other than chemicals used in the liquor treatment process.

Scientific services have been allocated to Sludge treatment and Liquor treatment in these US tables. This is a change in assumption from the prior period where all scientific costs were reported within Sludge treatment only.

General and support costs allocation follow the allocation treatment outlined in the 'AS methodology statement' and is unchanged from the prior period.

Fixed assets
See comment for sludge transport above.

Cost driver

The Company does not currently have an appropriate unit of measurement to be appropriately used as a cost driver for this US unit. Volume and strength (kg NH4-N/day) is Ofwat's guidance of the cost driver to use, which will require additional measurement equipment to accurately provide this data.

Management consider that as the cost for Liquor treatment is very small, no cost driver has been provided. Consideration will be given during 2014/15 to what would be the most appropriate cost driver to use based on internal systems and industry evidence.

4.4 AS unit: Sludge disposal – no US units

Cost driver

The total sewage sludge and ash disposed in ttds is a readily available metric that the Company reports within its internal Annual Return and therefore has been used as the most appropriate cost driver for this unit.

5. Further improvements

The Company is continuing to develop a software solution that will enable costs to be split into the US units, to be in place for reporting of US financial information for the year ended 31 March 2015. Whilst our operational structure is not set up in a way that easily aligns with the US units, we will be undertaking a thorough review our operational units to map these to the appropriate US unit's. This review will ensure that the underlying financial data in SAP is matched to each US unit.

As the reporting of US evolves, we need to ensure that we have the systems in place to provide accurate cost data and the appropriate cost driver information to enable meaningful comparison across the industry. In some US units within sewage services, we have been unable to determine an appropriate cost driver, primarily due to the US unit reporting requirements where we cannot readily identify costs; Surface water drainage and Highway drainage in Sewage collection, and Liquor treatment in Sludge treatment. For these US units we do not have a meaningful cost driver to provide a unit cost. During the forthcoming year we will be identifying what operational requirements need to be in place to enable cost driver information to be in place for US reporting for the year ended 31 March 2015.

6. 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	(3.8)	(3.6)	24.6	(8.1)	4.1	(16.2)	45.0
Total operating costs	%	-20.1%	-7.7%	364.3%	-100.0%	2.3%	-12.3%	25.5%

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

Explanation of movements above 10%

Abstraction licence

The significant movement is that the cost of abstraction licences' is lower by £4.1m compared to the prior period.

Raw water transport and Raw water storage

The year on year movement of £24.6m, principally reflects the change in methodology, outlined in section 1.1.2 above, whereby management consider that the Company does not have any raw water storage assets, therefore all raw water abstraction costs have been reported within Raw water transport. This change in methodology increases Raw water transport costs by £8.1m. In addition IRC was £14.7m reflecting the IRE incurred on replacement of raw water pipes. There was no equivalent cost in 2013.

Trunk treated water distribution

The reduction in operating costs of £16.2m compared to the prior period is principally due to a change in the methodology in respect of the allocation of rates (£23.8m), as outlined in section 1.1.2 above. In addition, other direct costs, principally network costs, and general and support costs were in total £8.1m lower. These lower costs were partly offset by an increase in IRC (£15.7m) allocated to this US unit, reflecting the increased IRE on the treated water network in the period.

Local treated water distribution

The significant cost increase of £45.0m (25.5%) compared to the prior period is principally as a change in the methodology in respect of the allocation of rates (£23.8m), as outlined in section 1.1.2 above, an increase in IRC (£7.4m) allocated to this US unit, reflecting the increased IRE on the treated water network and an increase in CCA (£8.1m).

Sewerage services

Service		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge transport	Sludge treatment	Liquor treatment	Sludge dispoal
Total operating costs	£m	5.5	(4.9)	(5.4)	7.8	1.8	12.0	0.8	(1.5)
Total operating costs	%	3.3%	-19.0%	-27.8%	2.7%	26.5%	17.0%	47.0%	-5.4%

Explanation of movements above 10%

Surface water drainage

Lower costs of £4.9m (-19.0%) compared to the prior period is principally due to the change in CCD methodology outlined in section 1.1.2 above.

Highway drainage

Lower costs of £5.4m (-27.8%) compared to the prior period is principally due to the change in CCD methodology outlined in section 1.1.2 above.

Sludge transport

Costs have increased by £1.8m (26.5%) compared to the prior period, principally reflecting higher direct costs (£0.9m and increased CCD (£0.8m).

Sludge treatment

The increase of £12.0m (17%) compared to the prior period is primarily due to an increase in hired and contractor costs, employment costs, power and materials used in the Sludge treatment process (£6.5m) and increased CCD (£5.5m) reflecting improvements in the Sludge treatment process.

Liquor treatment

Whilst costs have increased by 47.0% compared to the prior period, this equates to less than £1m year on year variance and is considered to be immaterial.

Wholesale water

		Network plus						
Business Unit		Water resources		Raw water distribution		Water treatment	Treated water distribution	
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	15.3	22.6	13.3	0.0	76.5	57.2	108.5
IRC	£m	0.0	5.1	14.7	0.0	0.0	31.7	62.6
CCD	£m	0.0	15.7	3.3	0.0	103.4	26.6	50.6
Total operating costs	£m	15.3	43.4	31.3	0.0	179.8	115.5	221.7
Total BU operating cost	£m	58.7		31.3		179.8	337.2	

Volumes/drivers

Unit cost	£	10.45	42.12	125.77	-	191.90	38.60	7.88

Wholesale wastewater

		Network plus							
Business Unit		Sewage collection			Sewage treatment	Sludge treatment			Sludge disposal
Service		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge transport	Sludge treatment	Liquor treatment	Sludge dispoal
Total operating expenditure	£m	75.8	21.0	13.9	140.7	4.3	42.1	1.3	23.9
IRC	£m	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CCD	£m	44.0	0.0	0.0	158.0	4.1	40.5	1.3	2.5
Total operating costs	£m	168.8	21.0	13.9	298.7	8.4	82.6	2.6	26.4
Total BU operating cost	£m	203.7			298.7	93.6			26.4

Volumes/drivers

Unit cost	£	499.85			884.06	37.27	230.15		156.49