NORTHUMBRIAN WATER (iving water

# ACCOUNTING SEPARATION STATEMENT 2015-16

Analysis of Operating and Fixed Asset Costs by Business Unit

## 1. PURPOSE OF METHODOLOGY

The purpose of this methodology statement is to explain how the totex and operating cost analysis tables in sections 2 and 4 of the Northumbrian Water Limited (NWL) Annual Performance Report 2015-16 (the APR) have been produced, specifically the operating cost analysis.

The methodology complies with the Regulatory Accounting Guidelines and is consistent with the detailed guidance given in RAG2 and RAG4.

The methodology contains the following sections:

- 2. Background to NWL
- 3. Operating cost analysis
- 4. Commentary on changes to costs
- 5. Fixed asset analysis
- 6. Capitalisation policies

The methodology was last updated on 8 June 2016.

#### 2 BACKGROUND TO NWL

NWL operates in the north east of England, providing water and wastewater services, and in Essex and Suffolk in the south east of England, providing water services only. NWL's appointed business is structured with water, wastewater and customer directorates, supported by a number of corporate support directorates and departments.

The water services directorate comprises Production (Resource & Treatment) and Distribution departments in each of the three operating areas, Northumbrian, Essex and Suffolk. There are further smaller geographic regions within each area.

The wastewater services directorate operates in the Northumbrian area only and comprises Sewerage (Collection) and Sewage Treatment departments. There are further smaller geographic regions.

The customer directorate aligns closely with the RAG4 definitions of retail services, comprising billing, payment centre, contact centre, debt recovery and meter reading teams.

Corporate support functions include Information Services (IS), Financial Services, Human Resources, Scientific Services and Facilities. All corporate support departments operate across all of NWL's operational areas. No functions are outsourced overseas.

## **3 OPERATING COST ANALYSIS**

Tables 2A to 2D of the APR analyse the operating costs and capital expenditure of the wholesale (water and wastewater) and retail services of the appointed business. The following section explains how the operating costs are allocated and apportioned to the different services.

## 3.1 SOURCE DATA

NWL uses Oracle financial systems, including general ledger (GL), accounts payable, accounts receivable (miscellaneous income), i-procurement and project accounting.

All operating costs are recorded in GL against an account code (expense type) and a cost centre code (department). The account codes have been directly aligned to the row headings within the operating expenditure excluding third parties of the wholesale business in table 2B in the APR. The cost centre structure in GL reflects the way the business is managed by directorate, department and location.

## 3.2 OVERVIEW OF PROCESS

Costs are allocated to the appropriate activity categories (table columns) by the following stages:

- Cost centres are separated between direct departments, typically operational and customer functions, and non-direct departments, typically support functions, based upon their function in the company;
- Direct departments are allocated directly to activity categories based on the nature of the function, with some exceptions which require apportionment between activities;
- Direct costs are allocated to the appropriate cost category (table rows) based upon the account code;
- A small number of support departments are apportioned directly to water, sewerage and retail activities;
- Other support departments are apportioned to wholesale water/sewerage or retail based either on a specific analysis of the costs or by apportionment by an appropriate cost driver; and
- Once allocated to the appropriate price control the wholesale costs are then allocated to activity categories by full time equivalent (FTE) headcount. The retail costs are split using appropriate cost drivers as per RAG2.

Sections 3.4 and 3.5 provide a more detailed explanation of these stages and of the allocation bases used for allocating costs.

#### 3.3 CHANGES TO THE METHODOLOGY FROM 2014-15

Pumping – borehole costs have been reviewed and allocated to raw water pumping as well as water resources, water treatment and treated water distribution.

Cumulo rates, in accordance with RAG 2.05 these have been allocated based on GMEAV.

Third party services costs have been fully loaded and include an allocation of general and support costs.

Income from the treatment and disposal of sludge from other WaSCs is reported in the nonappointed business. An appropriate full loaded cost transfer has been made to the nonappointed business.

As in previous years tankered effluent waste revenue is reported in the non-appointed business and a cost transfer has been done based on the Mogden formula. The sludge element of this has been netted off sludge treatment costs (in 14/15 the full cost was netted off sewage treatment).

Liquor Treatment - fully loaded costs have now been allocated, these include power, employment, materials, hired and G&S.

Local Authority rates, allocation now includes a proportion to sludge treatment as well as sewage treatment, the allocation has been based on GMEAV.

Water Efficiency costs have been allocated to water resources as the primary purpose is to support our wholesale business outcome 'we provide a reliable and sufficient supply of water'.

Customer side leaks have been allocated to treated water distribution as the primary purpose is to support our wholesale business outcome 'we provide a reliable and sufficient supply of water'.

The costs of the property integrity team, who maintain the customer database and their classifications, has been allocated to wholesale services.

We have adopted FRS 101 for the first time this year, which requires certain costs to be charged as opex which have previously been capitalized, in accordance with IAS16. This particularly relates to infrastructure maintenance expenditure. The costs have been allocated to the appropriate activities.

General & support costs have been initially allocated to wholesale water, wholesale sewerage or retail either directly or using an appropriate cost driver or by FTEs if there is not a more appropriate driver. The costs for each of the wholesale services as split further across the activities using FTEs.

#### 3.4 DIRECT DEPARTMENTS

This section explains how the costs of direct departments are allocated to water service activities (water resources and treatment and water distribution), wastewater service activities (sewerage, sewage treatment, sludge treatment and disposal) and retail activities.

Most operational and customer departments can be allocated directly to a single activity reflecting their function in the company. Where this is not possible, the allocation must be calculated. The main bases for these allocations are summarised below.

## 3.4.1 WATER SERVICES

- Power costs are identified for each site and allocated to the appropriate service. Where the assets on a site are used for more than one activity, the cost is reviewed by operational managers to allocate between the resource, treatment and distribution categories, based on flows and lift.
- There are two main sources of income treated as negative expenditure:
  - income from short term operating reserve contracts with National Grid is allocated to water treatment;
  - $\circ\;$  income from hydro generation feed in tariffs and export is allocated to raw water distribution.
- The cost of a bulk supply agreement with Thames Water is allocated to water resources. An element of this charge relates to Environment Agency (EA) abstraction charges and is reported on the service charge line.
- Other operating expenditure comprises:
  - employment (£29.9m), hired services (£18.7m), materials and consumables (£11.0m) and other direct costs (£1.3m).which are mostly allocated according to their direct cost centre. A small proportion of these costs relate to more than one activity and are allocated based upon managers' estimates, whilst operational management and support costs are apportioned based upon managers' estimates;
  - scientific services direct costs (£4.2m) which are allocated by the number of determinants and samples. Samples taken at customers' taps are allocated to water distribution;
  - general and support costs (£26.7m), for which the basis of allocation is explained in section 3.5.
  - Pension credit -£19.7m
  - IAS16 expensed £10.7m
- Water cumulo rates costs are allocated across the activities using GMEAV.
- Third party services are directly attributable to business activities. The cost of supplying non-potable water to industrial customers on Teesside is reported as services to third parties and includes an element of abstraction charges, water cumulo rates and general & support costs.

#### 3.4.2 WASTE WATER SERVICES

- The majority of sludge costs, such as dewatering, digestion and disposal at the larger sites, are identified directly at source. Some sewage treatment work costs require apportionment between sewage treatment and sludge activities. This is done using managers' estimates.
- Sludge transportation costs are captured in a separate cost centre.
- Sludge liquor costs are estimated based on average loads at the sludge treatment sites. The sewage treatment costs for each of the sites is allocated on a pro-rata basis between sewage treatment and liquor treatment.
- Skip hire for the disposal of grit and screenings is allocated to sewage treatment.

- The costs of Bran Sands and Howdon advanced anaerobic digestion (AAD) sites are allocated as follows:
  - power generated by AAD is predominantly used on site. All of the generation is allocated to sludge treatment;
  - there is a net export of power from sludge treatment which is shown as a negative power cost;
  - the sewage treatment power cost reflects the full use on sewage treatment activities including the use of power generated by AAD;
  - all income generated from sludge digestion, which is mainly from renewable energy certificates (ROC's) or renewable heat incentive (RHI) plus occasional export, is shown as income treated as negative expenditure under sludge treatment.
- Power costs are identified by site and allocated accordingly. At sewage treatment works where there is sludge treatment, an allocation is made to sludge activities. For the two large sludge sites, Bran Sands and Howdon, the allocation uses sub-metering data. For other sites the apportionment is based on managers' estimates.
- Bran Sands sewage treatment works receives waste from industry on Teesside via a number of dedicated pipelines under special agreements as well as other municipal waste. The costs of treating the waste received under special agreements is allocated to services to third parties.
- Other operating expenditure includes the same items as the water service, described in section 3.4.1 above and is allocated on the same bases. The costs comprise employment (£19.5m), hired services (£16.2m), materials and consumables (£6.3m), other direct (£0.1m), scientific services (£1.6m) and general and support costs (£14.5m). Pension credit (£10.0mm) and IAS16 expensed (£8.2m).
- Non-domestic rates charges are directly attributable on a site by site basis in the first instance and then allocated on GMEAV.

## 3.4.3 RETAIL

Allocations to direct cost rows of the retail table are primarily captured by cost centre within the customer directorate, however, some department costs need to be apportioned.

- The debt recovery process is supported by other teams in the customer directorate, therefore, a proportion of billing and contact centre costs are allocated to line 2, debt management, based on managers' estimates.
- Customer contact centre costs are allocated between network and non-network enquiries based on the number of calls received.
- The cost of network calls in retail includes an allocation of scheduler and distribution technician costs for investigatory work which is not a result of a network issue and the associated cost of internally generated calls which is based on managers' estimates.
- Specific members of the development control team work full time on pre-development queries from developers, therefore, their costs have been allocated to retail services.
- Non-domestic rates costs are allocated by location, therefore, the cost of sites where customer teams are based is allocated to retail based on FTE headcount numbers at each location. An element of water cumulo rates costs has been allocated to retail based on gross fixed asset current cost.

• Decision making and administration of disconnections and reconnections are performed by customer teams and allocated directly to retail services.

Each retail activity is allocated between household and non household services using an appropriate driver as follows:

- Billing based on the number of bills;
- Payment handling based on the number of receipts;
- Vulnerable customer schemes and charitable trust donations allocated fully to household;
- Debt management costs analysis provided by the debt recovery manager;
- Doubtful debts based on actual debts used in calculation of the bad debt provision and customer specific write offs;
- Network customer enquiries based on the number of network contacts;
- Non-network customer enquiries based on the number of non-network contacts;
- Meter reading based on number of meter reads;
- Other direct costs comprises the customer systems team which provides support and analysis across the directorate and is allocated by the number of bills raised and IAS16 expensed costs and is allocated to household;
- Services to developers are allocated fully to non household services;
- Customer account management is allocated fully to non household.

NWL has agreements with a number of local authorities and housing associations to bill and collect income. The properties for each local authority are invoiced on one or two schedule bills each year. The risk of collection is transferred to the local authority and a commission is paid to reflect this. Around 9.5% of income is collected in this way. The commission charge is allocated between bad debt and customer services. The billing and debt recovery costs are estimated based on NWL's own costs of billing customers directly. The balance is assumed to represent the bad debt risk and is allocated to doubtful debts.

The company does not issue bills to 'the occupier'. The company does not issue credit notes or cancel unpaid amounts where a customer has vacated a property leaving amounts unpaid.

To calculate a provision for doubtful debts, all debt is segmented into different categories, such as current and previous occupiers. All segments are profiled according to the age of the debt and a range of percentages is allocated to debt of different ages, based upon analysis of historical debt, with higher percentages applied to categories of debt which are considered to be of greater risk and to debt of greater age. The value of the bad debt provision is sensitive to the specific percentages applied. All debt outstanding for 48 months or more is fully provided for.

#### 3.5 NON-DIRECT DEPARTMENTS

This section explains how the costs of non-direct departments are allocated across water, wastewater and retail activities.

A small number of departments can be allocated directly to activity categories, as follows:

- Regulation costs, including the Licence fee, are allocated equally between the nine service activities, four water, four sewerage and one retail.
- Scientific Services direct cost allocation based on number of determinants and samples.
- Insurance premiums are allocated by applying a relevant cost driver for each premium, e.g. vehicle insurance premium by vehicle numbers.

Where costs cannot be directly allocated to activities, departmental costs are apportioned to wholesale water, wholesale sewerage or retail, based on either a specific analysis of the costs or by an appropriate cost driver, and then allocated to activity categories by FTE. The allocation basis for each support department is outlined below. Where no appropriate cost driver can be identified, functions are classified as 'corporate overhead' and allocated as a block at the end by FTE.

- Information Services a separate allocation model has been produced. In the first instance costs, where possible, are directly attributed to water, wastewater, wholesale and retail with an appropriate driver eg number of users. The costs within each of the initial allocations eg water are then allocated into the individual business units on FTE basis Any costs deemed to be corporate/company wide are collated and classified as 'corporate overhead'.
- Facilities costs are analysed by location and the cost of each location is allocated to departments on a FTE headcount basis.
- Estates rental costs are directly allocated to the responsible area of the wholesale business. The remaining departmental costs are allocated in proportion to rent, unless a specific allocation is identified.
- Finance (Management Accounts) costs are allocated in accordance with time spent on supporting retail departments the remainder is allocated to corporate overhead
- Directorate costs are summarised by director, including an apportionment of personal assistants' costs. Each director's cost is allocated according to their areas of responsibility and the FTE headcount in each area.
- Strategic Asset Planning regulation personnel costs are allocated directly across the nine business units the remainder of costs are allocated to the wholesale business only.
- Leisure statutory recreation activities are allocated directly to water resources
- Corporate overhead includes those items identified above plus the remainder of the Finance department, Human Resources, Security & Emergency, Health & Safety, Procurement Conservation, Corporate Affairs, Communications and Legal and Secretariat. The total cost is then allocated by FTE basis.

#### 3.6 **REVIEW PROCESS**

The cost allocation methodology and tables are prepared by a senior management accountant. They are reviewed by the management accounting manager and financial controller.

## 4. COMMENTARY ON CHANGES TO COSTS

Costs in the operating cost analysis table for 2015-16 have been compared to the equivalent costs for 2014-15, inflated by the average year RPI of 1.05%.

#### 4.1 OPERATING EXPENDITURE

#### 4.1.1 WHOLESALE WATER

Total operating expenditure excluding third party services has increased by £3.7m, in real terms, compared to 2014-15. The main changes are:

- IAS16 expensed costs £10.7m
- Pension credit -£19.7m
- Reclassification of property integrity, customer side leak and water efficiency costs; total £5.3m.
- Employment costs are up by £3.1m (including current service pension £1.6m).
- Service charges have increased as prior year included £2.6m refunds of abstraction charges paid in respect of Environmental Improvement Unit Charge in prior years.

#### 4.1.2 WHOLESALE WASTE WATER

Total operating expenditure excluding third party services has reduced by £5.0m, in real terms, compared to 2014-15. The main changes are:

- IAS 16 expensed £8.2m.
- Pension credit -£10.0m.
- Power costs, net of renewable income, are down by £2.5m, reflecting the full year impact of the benefit of injecting biomethane into the gas distribution network at our Howdon site.

#### 4.1.3 RETAIL

Total operating expenditure excluding third party services have reduced by £7.9m, in real terms, compared to 2014-15. Household costs have decreased by £8.5m and non-household cost have increased by £0.6m. The main changes are:

- Pension credit -£8.4m (HH £7.6m and NHH £0.8m).
- Reclassification of property integrity, customer side leak and water efficiency costs to wholesale business; a total cost of £5.3m of which £5.0m is HH and £0.3m NHH.
- Doubtful debts have increased by £2.7m, comprising HH £0.9m and NHH £1.9m. The NHH increase all relates to the loss of a major industrial customer.

#### 5. FIXED ASSETS ANALYSIS

Tables 2B and 2D analyse capital expenditure / fixed asset additions of the wholesale business. Depreciation of wholesale and retail capex is reported within line 3 of tables 2A and on line 10 of table 2C. The following section explains how the assets are allocated between the activities.

## 5.1 SOURCE DATA

Total capital expenditure is recorded in a range of accounts within the general ledger. The expenditure detail by project is captured in a supporting project accounting system.

#### 5.2 ALLOCATION OF ASSETS BY ACTIVITY

Assets have been allocated to activities in accordance with the definitions in RAG4.

Each project is analysed and costs are;

- allocated to a location, where possible
- split into asset types
- allocated to an appropriate cost driver

This analysis is held in the project accounting system.

The location analysis is used to allocate the expenditure to the principal use service. See note below on shared assets.

The asset type split is used to allocate costs to infrastructure or non-infrastructure. The costs driver detail is used to allocate costs to maintenance or enhancement.

#### 5.3.1 RECHARGES

Recharges between business units relate to fixed assets utilised in more than one business unit. The asset value and depreciation for these assets have been recorded in the business unit of principal use. Recharges have been made to the other units using the assets based upon the annual depreciation charge and proportion of use.

#### 5.3.2 SHARED ASSETS

Shared assets primarily comprise offices and IT systems.

- The principal use of our Northumbria House Customer Centre is the household retail service.
- The principal use of offices at Howdon is sewage treatment.
- Other shared assets have multiple users and no single dominant user. In these cases, the largest single user has been determined as treated water distribution.

#### 5.4 **RETAIL ASSETS**

Retail assets comprise the following:

- Billing system;
- Other retail assets, primarily comprising our Lowestoft Customer Centre, including furniture, fixtures & fittings, call centre telephone system, office equipment and IT, plus vehicles; and
- Shared assets allocated to retail principally relate to our Northumbria House Customer Centre, for which a cost is recharged to the wholesale business reflecting proportional occupation of the premises.

Retail assets are allocated to the primary business area of use, being Household and recharged to Retail and Wholesale activities on consistent bases to those applied for the operating cost analysis.

## 5.5 CURRENT COST DEPRECIATION

NWL does not maintain a full current cost asset register. The CCD reported in section 4 has been calculated by applying an indexation increase to 2014/15 adding depreciation for the 2015/16 additions and adding the equivalent of the infrastructure renewals charge (net of costs now expensed under IAS16).

## 6. CAPITALISATION POLICIES

#### 6.1 ACCOUNTING POLICIES

The capitalisation policies applied in the Regulatory Financial Statements comply with IAS16 Property, Plant and Equipment.

The key capitalisation principles within IAS16, which are applied in NWL's capitalisation policies, are that:

- assets must have an expected useful life of greater than one year (applied as a minimum expected useful life of two years);
- the company must own the asset;
- costs can only be capitalised up to the point at which the asset is ready for use, including an initial commissioning period;
- only costs directly attributable to bringing the asset into working condition for its intended use can be capitalised.

#### 6.2 BELOW GROUND ASSETS

The key elements of capitalisation policies for activities relating to the below-ground network are summarised below:

#### 6.2.1 WATER NETWORK

- repair of mains using a clamp or replacement of a length of pipe not spanning a joint is charged to opex.
- replacement pipe lengths spanning at least one joint are capitalised; bends and Tjoints are also considered to be individual assets and are capitalised.
- replacement of street furniture, such as meter chambers and stoptap covers, is capitalised.
- replacement of stoptaps and valves is capitalised.

## 6.2.2 SEWERAGE NETWORK

• replacement of any length of sewers is capitalised.

- replacement of street furniture, such as manhole covers, is capitalised.
- repairs to sewer ancillaries are charged to opex.
- clearing sewer blockages, including sewer cleaning, jetting and root cutting, is charged to opex, unless it forms part of a larger capital rehab scheme.
- CCTV surveys are allocated to opex by default but will be capitalised if the output leads directly to a capital job.
- sewer flooding investigations are charged to opex unless the output is a capex solution.

## 6.3 ABOVE GROUND ASSETS

- the construction or purchase of new assets is capitalised.
- subsequent expenditure for repairs and maintenance will be opex if it is to maintain the expected standard of performance or necessary to prevent the useful life or residual value of the asset from decreasing.
- subsequent maintenance expenditure is treated as capex where it provides an enhancement of economic benefits in excess of the expected standard of performance, eg. an extension in the estimated useful life, an increase in capacity, or where the asset being replaced or overhauled has been depreciated over an appropriate asset level which reflects the maintenance requirement.
- replacement of an entire asset or a significant component of a larger asset is capitalised.
- refurbishment of an asset to extend its useful life is capitalised but given an appropriate shorter life.
- GAC media replacement is capitalised.

#### 6.4 NON-CAPITALISED COSTS

All find and fix leakage costs are charged to opex.

Increases in operating costs incidental to a capital project are not capitalised, for example, higher treatment costs resulting from a treatment works being taken out of service for refurbishment.

Periodic cleaning costs of, for example, service reservoirs, filter beds or wet wells, are charged as opex.

Water and sewer network flushing is opex. This includes the acceptability of water programme even though it is a funded regulatory output associated with upgrading the serviceability of the network.

## 6.5 OVERHEADS AND DIRECT LABOUR RECHARGES

Capital costs are charged directly to a capital scheme wherever possible.

Direct labour costs are initially charged as operating costs and, for staff working on capital schemes, time is allocated by timesheets and recharged to the capital project based on an hourly trade rate.

Trade rates are calculated for each distinct trade group and incorporate basic pay, pension costs, national insurance, transport, personal equipment and direct supervision costs. The rates are recalculated on an annual basis to reflect the annual salary review and, by exception, recalculated during the year if a significant change has occurred.

Some functions, such as asset planning and asset accounting, work entirely in support of the capital programme. However, as their activities are spread across all projects, it is not cost-effective to allocate time directly to individual projects, therefore, the full cost of these functions is charged to a separate capital overhead project.

For other functions which support the capital programme a cost allocation exercise is carried out, using appropriate activity cost drivers, to calculate the proportion to be recharged to capital. This is also charged to the capital overhead project. This allocation exercise is carried out in detail annually at the end of the financial year. Where possible a system measured physical driver such as number of invoices processed or value of stock issued is used to apportion costs. Alternatively, estimates are provided by managers but these are done per individual employee to increase their robustness.

For reporting purposes, capital overheads are proportionally allocated across all capital schemes pro rata to the annual spend.

## 6.6 **PROCEDURES & CONTROL CHECKS**

The financial systems record operating and capital expenditure separately and the allocation of costs to opex or capex is determined in the source systems and reflects the nature of the activity being carried out. Where the accounting treatment of an unusual activity cost is unclear then guidance is provided by the finance department based upon interpretation of the accounting standards.

Both opex and capex are subject to monthly budgetary monitoring and control and variations from expectations are investigated. Where an incorrect allocation is identified the costs are transferred. In the event that a cost in incorrectly charged to capital and not identified through budgetary control, it will be identified when the asset is financial commissioned and the cost written off to the profit and loss account.

The capitalisation policies reflect statutory and regulatory accounting standards and therefore are only fundamentally reviewed when these standards change. However, as either new activities arise or the nature of existing activities changes, the accounting treatment of these activities is assessed taking account of the standards.