



# **WATER INDUSTRY COMMISSION FOR SCOTLAND**

## **RULES AND GUIDELINES FOR ACCOUNTING FOR CURRENT COSTS AND REGULATORY CAPITAL VALUES**

### **REGULATORY ACCOUNTING RULE 1**

**2010-11**



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## **PART ONE - EXPLANATORY NOTE**

### **1.1 Introduction**

1.1.1 This explanatory note discusses the objectives of the requirements for current cost ('CC') accounts, the rationale behind the form of modified real terms accounting required and the limitations on the uses and interpretation of the accounts in their present form.

1.1.2 It also flags various simplifications being adopted in these rules for application of the principle in the Scottish water industry. Most of the simplifications are based on an assumption of immateriality. If for a particular entity any of these simplifying assumptions are not immaterial, then more accurate profit adjustments may be appropriate. Some of the simplifications may be refined after further research; in these cases future guidance will be given on the treatment of the effect of refining the simplifying assumptions.

1.1.3 Also included in this section, is an explanation of the regulatory capital value ('RCV') that should be disclosed by way of a note to the current cost accounts. Although the asset valuation used in the CC accounts is that of Modern Equivalent Assets, the disclosure of RCVs is important since the calculation of the RCV is an essential element in the Water Industry Commission for Scotland's price determination process.

1.1.4 Part 2 defines terminology. The formal rules on Current Cost Accounting ('CCA') are set out in Part 3. Appendix 1 sets out an illustrative example of the application of the rules. Appendix 2 lists the simplifying assumptions being made and Appendix 3 contains a recommended statement of CCA policies. Appendices 4 and 5 give acronyms used and a short bibliography.

1.1.5 The regulatory accounts consist of historic cost and current cost accounts. This RAR defines treatment of particular items (eg IRC and audit reports) where the Commission's requirements differ from those normally required under UK GAAP and Companies Act legislation.

### **1.2 Requirements**

1.2.1 Scottish Water is required to prepare CCA statements in addition to historical cost accounting statements in accordance with rules notified by the Water Industry Commission for Scotland ('WICS' or 'the Commission').

1.2.2 These rules may:

- specify the form and content of CCA statements;
- require reconciliations between the CCA statements and the historical cost statements;
- specify the accounting principles and the basis of calculation to be used in preparing CCA statements; and
- specify the nature of the auditor's report required in respect of CCA statements.

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### **1.3 Objectives**

1.3.1 The general objective of WICS in issuing these rules is for Scottish Water to publish accounting statements, which will be consistent with the economic framework in which it is regulated. More specifically, WICS is seeking to achieve the following objectives:

- to provide a comparable measure of the real costs of supply, including the cost of capital, across the water industry in Scotland and England and Wales;
- to provide realistic measures of asset values and the trends in the returns earned on these assets;
- to promote transparency of regulation by publishing regulatory capital values (RCVs); and
- to promote transparency of costs.

1.3.2 These rules on CCA will provide WICS with measures of total real costs and of trends in the real rates of return that are suitable for comparative purposes. Limitations upon the interpretation and uses of the CC accounts in the water industry are the subject of paragraph 1.13 below. Basically a form of modified real terms accounting is adopted. Profit is measured in real terms but initial assets are valued at replacement cost. This replacement cost will be above the economic value (the present value of the net revenues arising from these assets) and hence the "fair" value, such as would be used in acquisition accounting. Accordingly the absolute rates of return shown are of very limited significance. The rate of increase in profit reflects the cost of capital on new investment and the total costs of output have to be adjusted to include the normal costs of capital. The rate of return allowed by WICS in setting price limits is a return on the RCV and is reflected in the revenues which Scottish Water charges. The RCV is often used by the investment community and others as an indication of the market value for listed water companies in England and Wales. The rate of return on the RCV is therefore more widely used and a better understood measure than the return on the replacement cost of the assets. The inclusion of the RCV in the accounts will allow users to assess this return themselves.

### **1.4 Infrastructure renewals accounting**

1.4.1 Historical cost accounts ('HCA') are recognised universally as a legitimate method of financial reporting but have a variety of limitations, in particular in regard to the return on capital earned in capital intensive industries with long asset lives such as the water industry. In the presence of inflation these limitations typically lead to:

- understated asset values;
- overstated profit measures; and consequently
- overstated returns on capital and distorted measures of total costs which persist even if inflation falls to zero.

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1.4.2 The adoption of infrastructure renewals accounting by the industry overcame only in part such limitations of traditional HCA for infrastructure assets. Infrastructure renewals accounting is used for long-life network assets (called infrastructure assets). It effectively regards the whole quantum of individual assets as a single infrastructure asset. Infrastructure renewals accounting is based on an operational assessment of activity needed to maintain the serviceability of the underground infrastructure over a reasonably medium to long period (typically in excess of 15 years).

1.4.3 These rules on infrastructure renewals accounting will provide WICS with measures of total real costs of maintaining the infrastructure network.

UKGAAP does not allow for full infrastructure renewals accounting. The FRS 15 requires all fixed assets to be depreciated but recognises that renewals accounting can be used as a method for estimating the depreciation charge under certain circumstances. Paragraphs 97 to 99 of FRS15 set out how the infrastructure renewals charge can be used as an estimation of the depreciation charge for infrastructure assets under FRS15. In addition, these paragraphs explain how the charge should be presented in the statutory accounts in a way which is very different to that required by infrastructure renewals accounting and the RARs. The RARs require the difference between the infrastructure renewals charge and infrastructure renewals expenditure to be held as an accrual or prepayment within the balance sheet. FRS15 however, requires the infrastructure renewals expenditure to be treated as the depreciation charge for the period, which is to be deducted from the carrying amount of the asset. Actual expenditure is capitalised as incurred.

FRS12 - Provisions, contingent liabilities and contingent assets and FRS15 – Tangible Fixed Assets does not allow provisions for future maintenance. However, infrastructure renewals accounting requires the difference between the infrastructure renewals charge and the expenditure in the year to be accumulated in the balance sheet.

FRS12 'Provisions, contingent liabilities and contingent assets' (effective from March 1999) and FRS 15 'Tangible fixed assets' (effective from March 2000) should be dis-applied for infrastructure assets for regulatory account purposes (both historic and current cost). A full reconciliation between the statutory accounts and the historic cost accounts should be included with the regulatory accounts in accordance to Appendix 2 of RAR 3.

Scottish Water is responsible for determining its IRC policy and ensuring that it is in accordance to the RARs. The Commission does not necessarily expect Scottish Water to apply its price setting methodology for calculating the infrastructure renewals charge for regulatory accounts. Rather Scottish Water should develop and apply a policy for calculating its infrastructure renewals charge that meets the requirements of the RARs. A key component is to link Scottish Water's own medium to long-term maintenance planning.

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Scottish water should ensure that any significant changes in its long-run IRE forecasts are incorporated in the calculation of the IRC.

### 1.5 Profit measurement

1.5.1 The ASC Handbook on 'Accounting for the effects of changing prices' (1986) discusses two alternative measures of an entity's profits which can be summarised as follows:

- Real Financial Capital Maintenance ('FCM') is concerned with maintaining the real financial capital of an entity and with its ability to continue financing its functions. Under real FCM, profit is measured after provision has been made to maintain the purchasing power of opening financial capital. This involves the use of a general inflation index such as the RPI. Real FCM therefore addresses the principal concerns of the providers of capital to an entity. In the absence of general inflation real FCM is equivalent to conventional HCA, with the exception of the treatment of unrealised holding gains (paragraph 1.8.11).
- Operating Capability Maintenance ('OCM') is concerned with maintaining the physical output capability of the assets of an entity. Under OCM, profit is measured after provision has been made for replacing the output capability of an entity's physical assets which involves the use of specific inflation indices such as the Construction Output Price Index (COPI) or the Baxter index. This will typically be a major concern for the management of an entity and was the approach used in Statement of Standard Accounting Practice ('SSAP') 16 – Current Cost Accounting (this standard was withdrawn).

1.5.2 The Statement of Principles for Financial Reporting (December 1999) discusses measurement in financial statements (Chapter 6) of assets or liabilities. The Statement recognises that whilst the financial capital maintenance ('FCM') concept approach is satisfactory under conditions of stable prices it is open to criticism when there are substantial general or specific price changes. There is no evidence looking over a period of time that the industry has experienced specific price changes, accordingly the RPI remains the best measure of price changes overall. The linkage for the water industry between revenues charged under the RPI+K regime and general price increases in costs negates the criticism about the FCM approach where there are substantial general price increases.

1.5.3 Following the consultation document 'Our work in regulating Scottish water industry' issued by WICS in 2004, it was decided that the regulatory CC accounts should be prepared on a real FCM basis since this provides a measure of profit that is well suited to achieving a balance between the providers of capital and customers.

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1.5.4 The Annual Returns to the Commission, on the level of service and capital expenditure, are however specifically designed to monitor operating capability plans against required service standards, and the Commission has therefore concluded that there is no need to reflect OCM concepts in the CC accounts.

### 1.6 Real financial capital maintenance

1.6.1 In a normal competitive environment, it is usual for the accounts to focus on the returns to providers of capital. Under real financial capital maintenance, profit is defined to be the increase in purchasing power of capital and reserves, allowing for the introduction and withdrawal of capital, including customer-retained earnings. The RPI is generally used as a measure of the change in the purchasing power of the unit of account, partly because of availability and stability in the estimates. Over a period, the RPI does not usually diverge greatly from other measures of general inflation, though for particular classes of providers of capital other measures of purchasing power trends may be more relevant. In the Scottish water industry, the RPI is already built into the price control formula as a measure of general inflation, and this reinforces the relevance of using this index in measuring real financial performance.

1.6.2 Normally, to identify the real gains to providers of capital, it will be sufficient to estimate the change in nominal value to the business of all assets and liabilities allowing for distributions etc. such as customer-retained earnings, and make a single adjustment for the impact of inflation on capital and reserves. As further discussed in paragraph 1.13 below, for regulatory purposes the focus of interest is on the real return on net operating assets, whether these were financed by debt or by capital or by Government funds. This requires the separate identification of a financing adjustment; this is broadly the real gain which providers of capital make from the impact of inflation on nominal debt liabilities.

### 1.7 Asset valuation principles

1.7.1 FRS15 – tangible fixed assets sets out the principles of accounting for the initial measurement, valuation and depreciation of tangible fixed assets. The principles for initial measurement and depreciation set out in FRS15 must be applied to the CC accounts in determining costs, which may be classified as asset additions. FRS 15 is specifically dis-applied for infrastructure assets (paragraph 1.4.3) for classification and disclosure of the infrastructure renewal charge and related expenditure for regulatory accounting purposes. In respect of valuation the principles set out below should be applied to the CC accounts.



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- 1.7.2 In passing all real changes in asset values through the profit and loss account, the definition of profits under FCM places stress on appropriate methods of asset valuation. In an ongoing business, the most relevant basis of valuation is current value to the business. Using the net recoverable value of assets (from immediate, if orderly, sale) can lead to instability in the timing of recognition of profits especially where specialised assets are significant, as in the water industry. Economic valuation (NPV of gross profit flow) is both too subjective and clearly circular in reasoning in an environment in which prices are being regulated.
- 1.7.3 The CCA value of tangible assets to a business means what potential competitors would find it worth paying for them in the absence of barriers to entry and exit from the business, even if the competition is hypothetical. This will be the cost of an asset of equivalent productive capability to satisfy the remaining service potential of the asset being valued - a Modern Equivalent Asset ('MEA') - if the asset would be worth replacing, or the recoverable amount if it would not.
- 1.7.4 The gross MEA value is what it would cost to replace an old asset with a technically up to date new asset with the same service capability allowing for any difference both in the quality of output and in operating costs. The net MEA value is the depreciated value taking into account the remaining service potential of an old asset compared with a new asset, and is stated gross of third party contributions.
- 1.7.5 The CCA value of assets to a regulated business may however be affected by the nature of the regulation. In the water industry the requirement that regulation should allow for Scottish Water to operate in efficient and sustainable manner means that new investment can be valued on normal CCA principles ignoring potential restrictions imposed by the Commission. However the constraint on price levels means that the true value to the business of initial assets is actually the recoverable amount. This would normally be the present value of the associated cash flows, discounted at the cost of capital, i.e. the economic value. However the estimation of the future cash flows is subjective and could be circular since the Commission sets price limits.
- 1.7.6 Accordingly, in valuing initial operational assets used in the core business, existing at 1 April 2005, it is assumed that the effect of regulatory constraints can be disregarded. The value to the business under such circumstances will generally be the MEA. Furthermore initial assets are to be valued at their full MEA, whether or not they were originally, or would now be, paid for by third parties. These modifications to pure real terms accounting principles are discussed further in paragraph 1.13.

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### **1.8 Valuing new investment**

1.8.1 Although the principles of CC asset valuation described above were set out in SSAP 16 and the ASC Handbook, these rules generally require the use of the RPI in restating net asset values (and hence the CC depreciation adjustment) rather than the use of specific indices as illustrated in the Notes to SSAP 16 and the Handbook. The rationale for this goes beyond the simplicity of the adjustment and can most easily be seen in relation to new investment, by considering the appropriate treatment of general inflation, expected relative price movements and unexpected relative price movements separately.

#### **General inflation**

1.8.2 If there is no general inflation and no relative price movements, HC accounts will correctly measure FCM profits. The timing of the recognition of the real profits will be affected by judgement on depreciation profiles due to physical wear, rising maintenance costs etc., but over the life of an asset the total original (real) cost of a new asset will be recognised as an expense.

1.8.3 The correct FCM method of dealing with general inflation (changes in the value of the unit of account) is Constant Purchasing Power ('CPP') Retail Price Indexation (RPI) of historical costs.

#### **Expected relative price movement**

1.8.4 If, in the absence of general inflation, there is expected to be a relative movement in the price of an asset, this should in principle be reflected, even in HCA, in the shape of the depreciation profile and the judgement of asset lives. In particular, where rapid technical progress is expected, it may be appropriate to use some form of accelerated depreciation (sum of digits, reducing balance etc). In aggregating depreciation over assets of different ages, however, sophistication in depreciation profiling may not produce a material improvement in the timing of the recognition of profits.

1.8.5 If general inflation is superimposed on the expected relative price movement in asset values, again CPP indexation of the HC accounts is the relevant extra adjustment. In these rules it is assumed that HC (and therefore CC) depreciation profiles adequately reflect judgements about expected relative price movements and other relevant factors determining depreciation.

#### **Unexpected relative price movement**

1.8.6 In the absence of inflation, conventional HC accounting deals with the effect of unexpected relative price movements on asset values by strategic reviews of asset lives and in principle, depreciation profiles (as required under FRS15). The relative 'price' of the net value of an old asset does not necessarily move pro rata with the price of a new MEA, for example, if the unexpected price movement leads to a revision of the depreciation profile.

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The change in the net book value is put through the profit and loss account and generally smoothed over remaining asset lives.

- 1.8.7 For revaluation losses other than those caused by a clear consumption of economic benefits FRS15 permits recognition in the statement of total recognised gains and losses (STRGL). Revaluation gains are generally recognised in the STRGL. In the CC accounts revaluation gains resulting from unexpected relative price movements should be recognised in the profit and loss account. A separate STRL is not required for the current cost element of the regulatory accounts. These are the principles, expressed in real terms to deal with general inflation, which are required to deal with unexpected relative price movements in these rules.
- 1.8.8 The CC methodology for estimating net asset values is illustrated in the Guidance Notes to SSAP 16 and the Handbook. This is derived from attempts to measure profit after operating capability maintenance, and does not distinguish between expected and unexpected price movements in the use of specific indices. One consequence is that if all the real change in net assets values so estimated is immediately put to the profit and loss account, the estimate of real profit can be unstable. Although this only affects the timing of the recognition of real profit, this is a significant reason why these rules require the use of RPI in annual asset revaluation, focusing specific price changes on the strategic reviews at which the latest investment plan information can be taken into account. At these reviews special consideration can be given to how far net book values need changing (i.e. in theory, depreciation profiles changed) and the appropriate treatment in the regulatory accounts.
- 1.8.9 FRS15 allows, but does not require, entities to carry their fixed assets at revalued amounts. If the valuation route is chosen it should be applied consistently to all fixed assets of the same class. The revaluations need to be regularly updated. This means full valuation at least once every five years with a less detailed interim valuation in the third year and in other years if there is evidence that the value has changed significantly or, valuations can be carried out on a rolling basis over a five-year cycle with an interim valuation on the remaining assets in the class where there has been indication of a material change in value.
- 1.8.10 For the purposes of the regulatory accounts, the asset revaluation using RPI should be carried out on an annual basis. Revaluations arising from specific price changes should be carried out once every four years to coincide with the production of the investment plan. Scottish Water will be notified in advance by WICS letter which year of each four-year period this revaluation should be incorporated into the regulatory accounts.

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### **Non depreciating assets**

1.8.11 To be consistent with the above treatment of depreciating assets, non-depreciating (and possible appreciating) assets should be valued at value to the business (generally market values) and real increases taken to income. The initial valuation should be indexed for general inflation using the RPI, unless further revaluation is incorporated in the HC accounts. The rule follows the normal HC practice of only recognising, in the profit and loss account, holding gains on realisation when they may need to be identified as exceptional.

### **Goodwill**

1.8.12 It is assumed that no implicit goodwill is created by the regulatory process, except that arising from differential efficiency so that changes in the real value of tangible and monetary assets in the balance sheet are a suitable measure of financial performance. FRS10 – Goodwill and Intangible Assets only allows purchased goodwill to be capitalised in the balance sheet. Therefore, internally generated goodwill should not be capitalised. Purchased goodwill is the difference between the cost of the acquired entity and the aggregate of the fair values of that entity's identifiable assets and liabilities. It is assumed that there will be no goodwill in the core business as the parent company usually acquires new companies and takes any purchased goodwill to its balance sheet.

## **1.9 Assets existing at 1 April 2006**

1.9.1 The above discussion sets out the principles to be followed in valuing new investment. The value of existing assets has been a major factor in the balance sheet of the Scottish water industry for many years. In applying the same valuation principles to old depreciable assets as to new, the initial estimates of net asset value clearly accumulate at one time. Where there are revisions to depreciation profiles, these would have been spread over a long period if real terms accounts had been kept from the start of the business. Furthermore, especially in the absence of full historical cost records, the initial net values will be derived from gross MEA estimates rather than being depreciated real historical cost.

1.9.2 The investment plan prepared for price setting purposes is the obvious basis for the new gross MEA estimates. The general assumption (see paragraph 1.10.6) is that in the longer term there will be no significant relative movement between the PPI (Producer Price Index) and the RPI.

1.9.3 It has already been explained in paragraph 1.7.6 above that the valuation of initial operational assets is to disregard the impact of the regulatory regime, which would otherwise imply that the value to the business was the recoverable amount. Surplus land however is to be treated as an investment

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for this purpose as its value to the business taking into account any proceeds that are passed on to customers. Initial assets are defined to be those in place at the beginning of the first accounting period under the present regime, i.e. 1 April 2006.

1.9.4 The MEAs of the existing system in use, estimated on a plant-by-plant basis may seem an overestimate in that, starting from scratch, the system would probably be designed quite differently for example, with fewer, larger plant. However, except where there is a clear definition to redesign and rebuild the system in 'optimum' configuration, the MEAs should be based on the actual system. The MEAs of individual components, where necessary, should nevertheless be based on expected capacity in use. As systems expand and change, a degree of sub-optimality at any one time is inevitable and part of the total cost of output. If rebuilding is introduced in future investment plans, care will have to be taken over the treatment of the NBV of redundant assets; again a significant part may be refinement of the initial valuation rather than cost incurred in the subsequent period.

1.9.5 In principle net MEAs of existing assets should be adjusted for the different operating costs of the actual assets compared with their modern equivalent. It is assumed that this has been done, for example, by deducting the present value of the difference in operating costs from the unadjusted MEA values.

### 1.10 Infrastructure assets

1.10.1 The valuation of existing assets in the water industry is, of course, heavily influenced by the value of infrastructure assets. Various factors have led to the adoption of infrastructure renewals accounting, in which the measure of the consumption of capital is based on the expected actual level of renewals expenditure. Given that most infrastructure assets are worth replacing, even if replacement is not a foreseeable eventuality, the adoption of infrastructure renewals accounting has led to a reconsideration of the principles to be adopted in identifying the value to the business of existing infrastructure assets. FRS15 allows renewals accounting to the extent that the renewal charge may be used as a substitute for depreciation. The classification of the renewal charge and associated expenditure as required by the FRS should be disapplied for regulatory accounting purposes.

### Gross MEAs

1.10.2 The gross MEAs of infrastructure assets should usually be based on the replacement cost of assets delivering to modern standards, defined as the standards upon which initial investment plans were based.

### Abatement factors

1.10.3 The Rules require that no abatement factor is applied and any former

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accumulated current cost depreciation charge is not to be deducted. The new gross value is then to be indexed only by the RPI between strategic reviews at which new investment plan information will be taken into account. The rationale for this and the implicit simplifications are discussed below.

### **Redundancy**

- 1.10.4 It is assumed that redundant assets have now been appropriately reflected in the length, diameter etc. of MEAs. As noted above in paragraph 1.9.4, it is the existing system in use which is to be valued including the existing suboptimality of layout. It is assumed that writing off further redundancies as they are recognised will not so materially distort profit recognition that a depreciation provision for accruing redundancy in the system will be required.

### **Technical progress**

- 1.10.5 'Technical progress' is used here as shorthand for relative price movements affecting the value to the business of infrastructure assets. Some prices for example, of labour, will almost certainly rise in real terms but it is assumed that technical progress affecting infrastructure assets is not so rapid that overall, replacement costs fall in real terms. Accordingly, no further depreciation obsolescence is required from present gross MEAs.
- 1.10.6 In the past, one aspect of technical progress has been the development of 'no - dig' relining techniques. In extremes, this could mean that all renewals expenditure relates to relining the 'pipe' and the 'hole' does not depreciate at all. Accordingly, like land, the 'hole' element would retain its original real cost value to the business although in the absence of this historical cost information, initial MEA costs of hole (and pipe) are to be used instead and indexed for RPI.

### **Third party contributions**

- 1.10.7 In assessing the opening value of assets at 1 April 2006 in the regulatory accounts, the extent of third party financing affects the worth to the business. WICS has concluded that, for the purposes to which the CC accounts of Scottish Water will be put, the amount of the deduction for third party contributions on initial assets is essentially arbitrary; any deduction will lead to an automatic adjustment of the initial rate of return being earned on these assets. A revision in the initial deduction will be offset by a revision in the rate of return which will be ignored for the purposes of monitoring the trends in real profit rates. For the purpose of monitoring the real cost efficiency it is in any case the cost gross of third party contributions which are most relevant.
- 1.10.8 Accordingly it is assumed that assets in place at 1 April 2006 would not have been subject to third party contributions and so the rules require that no deduction be made for third party finance. Any deductions made in existing

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CCA gross asset values, should be removed notably by using unit replacement costs from investment plans. Future (actual) third party contributions are to be treated like grants and carried forward (in real terms) as deferred income deducted in net operating assets. Consequently for example, adopted assets are to be brought in as an asset in the year of adoption at their MEA cost with a corresponding credit to third party contributions.

- 1.10.9 Future government grants on infrastructure assets are assumed to be negligible. No deduction from existing infrastructure assets to allow for this form of finance is therefore required. If such grants occur in future they will be treated as windfalls reducing the cost of particular assets. However to maintain consistency with the treatment of grants on other assets, they are to be shown separately as deferred income deducted in calculating net operating assets. Unlike the equivalent grants for non - infrastructure assets, this deferred income is not written (in real terms) to the profit and loss account over time. This is consistent with the assumption above of no depreciation on infrastructure assets. The accrued grants are only indexed by the RPI.

### 1.11 Current cost profit and loss account

- 1.11.1 In reconciling the HC and CC profit and loss accounts, it is convenient to adopt the notation that:

$$\text{RPI} = \frac{\% \text{ change in RPI in financial year} = (\text{Closing RPI} - \text{Opening RPI})}{\text{Closing RPI}}$$

- 1.11.2 It follows from the definition of real FCM profit in paragraph 1.5 that:

$$\text{Real FCM retained profit} = \text{increase in reserves less RPI} \times \text{opening capital and reserves}$$

where:

$$\text{increase in reserves} = \text{HC retained profit} + \text{nominal gains on assets not recognised in HC profit less nominal gains recognised in HC profit in this period not previously so recognised (for example, on disposals).}$$

and

$$\text{RPI} \times \text{opening capital and reserves} = \text{RPI} \times \text{opening fixed assets plus RPI} \times \text{opening working capital less RPI} \times \text{opening net finance, where fixed assets are net of third party contributions.}$$

### Fixed asset adjustments

- 1.11.3 With the above assumptions and simplifications, the fixed asset adjustments can be derived as follows:  
Nominal gains not recognised in HC profit

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- nominal gains recognised in HC profit in the period not previously so recognised
- RPI x opening fixed assets
  
- = (closing CC fixed assets less opening CC fixed assets) less closing HC fixed assets less opening HC fixed assets) less RPI x opening CC fixed assets.
  
- = (opening CC NBV + RPI x opening CC NBV + investment plan adjustment + additions less CC NBV of disposals less CC depreciation less opening CC NBV) less (opening HC NBV + additions less HC NBV of disposals less HC depreciation less opening HC NBV) less RPI x opening CC NBV.
  
- = investment plan adjustment less (CC depreciation less HC depreciation) less (CC NBV of disposals less HC NBV of disposals).

1.11.4 In the absence of an investment plan adjustment, this equals the depreciation adjustment plus the disposal of fixed asset adjustment described in paragraph 3.3.1. If real unrealised gains or losses have been taken to the current cost reserve then a more sophisticated disposal of fixed assets adjustment will be needed. Adjustments to asset values arising from future investment plan revisions will only be taken into account at the time of strategic price reviews. A distinction is then likely to have to be drawn between revision to the value of existing assets at the time of the introduction of the new regulatory regime and that of assets subsequently introduced. It will also be necessary to ensure consistency with assumptions and revisions on depreciation charges and renewals charges.

1.11.5 It has also been assumed for fixed assets that RPI indexation is immaterial, in other words all additions occur at the year-end; and assets in use with an HC net book value of zero have been valued at net MEA value.

### Working capital adjustment

1.11.6 The working capital adjustment is the adjustment for the impact of general inflation on the real value of the working capital of the business.

1.11.7 RPI x opening working capital in paragraph 1.11.2 equals the working capital adjustment in paragraph 3.3.1. The need to identify a working capital adjustment separately in measuring real term profits is a by-product of the need to identify the financing adjustment as discussed in paragraph 1.6.2. Theoretically, whether or not an asset or liability should be included in the working capital or financing adjustments depends on whether the corresponding, nominal income stream is (implicitly or explicitly) above or below operating profit. In these rules, it has been assumed for working



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capital that holding gains on stock during the year are immaterial. In other words, the CC valuation of closing stock equals the HC valuation of closing stock. All cash balances should be excluded from the working capital balance.

### Financing adjustment

1.11.8 The financing adjustment is the real gain or loss arising for providers of capital from the impact of general inflation on monetary assets and liabilities.

1.11.9 RPI x opening net finance in paragraph 1.11.2 equals the financing adjustment in paragraph 3.3.3. It has been assumed for net finance that:

- the CC valuation of closing investments equals the HC valuation of closing investments;
- the CC capitalisation of interest during construction equals the HC capitalisation of interest during construction in real terms; and
- the impact of changes in interest rates on the value to the business of financing liabilities can be ignored. Since this would only affect the division of profits between providers of capital and debt holders, it is not a matter of immediate significance for regulatory purposes anyway.

1.11.10 The financing adjustment should be refined if capital is issued during the year for cash as follows:

Financing adjustment = opening net finance x RPI less capital injection x RPI  
after injection;

where RPI after injection denotes the percentage increase in the RPI between the date of the capital injection and the date of the closing balance sheet. This refinement is itself an approximation and can be explained as follows.

1.11.11 If capital is issued during the year, it is assumed that most of this capital will be in the form of cash at the year-end and will not have been converted into fixed assets. This cash will earn interest at nominal interest rates and it is therefore appropriate to reduce the financing adjustment, which is concerned in part with converting nominal interest to real interest.

1.11.12 If instead, loans have been raised during the year, it is again assumed that most of these loans will not have been converted into fixed assets at the year-end. However, in this instance, the loans will be automatically offset against the associated cash because of the definition of net finance and so no explicit refinement of the financing adjustment is required.

## PART ONE - EXPLANATORY NOTE

- 1.11.13 The financing adjustment should also be refined where Scottish Water has index-linked debt (the value of which will not be eroded by inflation) for any customer retained earnings creditor and for the deferred tax liability.
- 1.11.14 Appendix 1 of RAR 1, shows an example calculation of the financing adjustment

### Infrastructure renewals charge (IRC)

- 1.11.15 This appears in both the regulatory HC and CC profit and loss accounts but is not included in the HC statutory accounts. The basis of the infrastructure renewals charge has to be conceptually consistent with the above assumptions on asset valuation. For accounting purposes the IRC should reflect Scottish Water's assessment of its medium to long-term capital maintenance needs for its infrastructure assets. As a measure of capital consumption, it contains no provisions for redundancy or obsolescence, or allowance for renewals holidays on new investment. We expect that the same basis of calculation is used for calculating the IRC in both the historic and current cost regulatory accounts
- 1.11.16 To maintain this element of consistency with the assumptions on asset valuation, it is appropriate to index the renewals charge by RPI, as measured by the average inflation rate over the year. This basis of calculation applies in the first instance, to the current cost accounts but Scottish Water should use the same basis for its regulatory historical cost accounts.
- 1.11.17 The infrastructure renewals accrual or prepayment is included in the balance sheet. The renewals accrual may indicate that Scottish Water will need to carry out higher levels of maintenance sometime in the future which it has not yet charged in the regulatory accounts.. The renewals prepayment indicates that Scottish Water is ahead of the original plan and there will be a likelihood of lower levels of maintenance in the short term.

### 1.12 Regulatory capital values

- 1.12.1 As discussed in paragraph 1.9.3, the valuation of initial operating assets should disregard the impact of the regulatory regime, which would otherwise imply that the value to the business was the recoverable amount. In England and Wales, over time analysts and investors have increased their focus on the RCV, using it as a proxy for market values. Therefore the regulatory capital value will be included in a note to the regulatory accounts. This will enable readers of the accounts to assess the value of the assets used for regulatory purposes (the RCV) relative to the largely replacement value of the assets (the MEA value).
- 1.12.2 The RCV is rolled forward to take account of new capital investment, net of depreciation. The calculation of RCVs is an essential element in WICS's price determination process.

## PART ONE - EXPLANATORY NOTE

- 1.12.3 The WICS methodology is effectively a regulatory hybrid to provide equitable treatment between customers and Scottish government. It is based on acquisition costs to ensure that there is no windfall gain to government. Consumers incur depreciation charges based on current replacement (MEA) costs, so that each period, consumers pay for the asset value used in the services supplied.
- 1.12.4 The value is adjusted each year to take account of net investment. Capital expenditure to enhance and maintain the network, which has been assumed in setting price limits, [and which complies with the valuation principles in paragraph 1.7.1] is added to the value. This is after deducting the amount of depreciation (based on the MEA values of the assets) which is assumed in setting price limits. Any grants and contributions and associated amortisation are also taken into account.
- Infrastructure renewals expenditure is not added to the RCV but the movement in the infrastructure renewals accrual or prepayment is included. Adjustments are also made in respect of disposals of land to remove the value of this from the RCV.
- 1.12.5 The RCV is adjusted each year by RPI to take account of inflation.
- 1.12.6 By setting out clear guidance on RCV methodology and publishing the values of the RCV in the regulatory accounts, transparency will be aided and there will be consistency between the Scottish and English and Welsh water industries. The figures in the reconciliation will be those determined by WICS at Strategic Reviews. The proforma for the RCV is illustrated in RAR 3, appendix 2 and also in section 3.5 of this rule.

### Logging up of capital expenditure

- 1.12.7 The net additional capital expenditure included in the RCV at strategic reviews is the amount determined by WICS as necessary for Scottish Water to meet new obligations, improve service levels and maintain the existing asset base. Between strategic reviews, if Scottish Water is required to meet additional statutory obligations the capital costs associated with this work are 'logged up' and are added to the RCV at the next review. The level of cost associated with those assets which is incorporated into the RCV, is subject to challenge by WICS as it would be at a strategic review.
- 1.12.8 Any investment over and above the levels projected at strategic reviews, which does not meet the definition of a new statutory requirement, is not as a matter of course, included in the RCV for future remuneration. Exceptions to this may be made.

## PART ONE - EXPLANATORY NOTE

### 1.13 Limitations on use

- 1.13.1 This section identifies various limits which can be placed on the interpretation and uses of the CC accounts in the Scottish water industry for regulatory purposes, given the assumptions and simplifications set out above.
- 1.13.2 The most important assumption was that the effect of the regulatory regime on the value to the business of initial assets could be ignored. This amounted to avoiding the adoption of acquisition accounting, with premature judgement about economic values including the relevant cost of capital. The MEA values to be used also assumed that there would have been no third party contributions on initial assets which would have been taken into account in an economic value. These assumptions represent the principle modification to real terms accounting required by these rules.
- 1.13.3 Given the adoption of MEA initial values, rather than real acquisition costs, the initial absolute level of rate of return on CC capital employed would be abnormally low. Furthermore, the differences in this rate between the predecessor entities to Scottish Water will be an accident of history reflecting where each entity happened to have reached in the process of determining prices in the previous regulatory regimes, whether statutory or in the nationalised industry control framework. There is no implication from the existing regulatory framework that the rate of return on initial assets should be either equalised or brought up to normal profit rates overall in the near future.
- 1.13.4 Although MEA valuation is the most appropriate method of asset valuation for the purposes of the regulatory accounts, the RCV is an essential element in WICS's price determination process. It is to be included in the regulatory accounts as a separate note.
- 1.13.5 Nevertheless there are considerable uncertainties identified above in the MEA valuation of initial assets, particularly the third party financing assumption and the extent of initial depreciation. The principles adopted are designed to monitor correctly the return being earned on new investment in satisfaction of the obligation to ensure financial viability. Adjustments to the value of initial assets from subsequent investment plan reviews, and the effect on overall rates of return, will largely be discounted for regulatory purposes. For comparing cost efficiency, the costs without any deduction for third party finance also seem more relevant.
- 1.13.6 In conclusion the form of current cost accounts required by these rules will be used for the purposes of monitoring:
- the trend in real rates of return between English and Welsh companies and Scottish Water;
  - the comparative cost levels of different services between the Scottish and

## **PART ONE - EXPLANATORY NOTE**

English and Welsh water industry including the cost of capital on the capital employed.

The trend in profit rates will need to be monitored to allow for a reasonable return on new investment. The analysis of the real cost levels of different services will contribute to the required judgements about efficiency levels. The inclusion of the RCV's in the regulatory accounts will ensure consistency of approach by the Scottish and English and Welsh water industry and also aid transparency for our stakeholders with regard to the publishing of future RCVs.

## PART TWO – DEFINITION OF TERMS

<b>Investment plan adjustment</b>	The revision in the MEA valuation of the fixed assets as a result of the most up to date information Scottish Water has on its asset base. Valuations generally take place when Scottish Water prepares its business plan as part of the price review process..
<b>Current cost operating profit</b>	Calculated on a real terms basis at the pre tax, pre interest level.
<b>Financing adjustment</b>	The impact of general inflation on the real value of net finance for the business.
<b>Infrastructure assets</b>	Mainly underground systems of mains and sewers, impounding and pumped raw storage reservoirs, dams, sludge pipelines and sea outfalls. Information about infrastructure assets is also to be regarded as an infrastructure asset.
<b>Infrastructure charge</b>	The initial charge for connecting premises to the water and sewerage system for domestic purposes
<b>Infrastructure renewals accrual/prepayment</b>	The cumulative difference between the infrastructure renewals charge and the actual infrastructure renewals expenditure. A prepayment indicates that more expenditure has been incurred than charged, whereas an accrual indicates that less expenditure has been incurred than charged. The accrual/prepayment is recorded in the balance sheet.
<b>Infrastructure renewals charge</b>	The annual accounting provision for expenditure on the renewal of infrastructure assets charged to the profit and loss account. It should reflect Scottish Water's assessment of its medium to long-term infrastructure renewals expenditure needs.
<b>Initial assets</b>	Those in place at 1 April 2006
<b>Modified real terms accounting</b>	Real terms accounting modified by the exclusion of unrealised gains and the inclusion of initial operational assets at their value to the business ignoring the impact of the regulatory regime and the extent of third party contributions.

## PART TWO – DEFINITION OF TERMS

<b>Net finance</b>	<p>All monetary assets and liabilities other than to Scottish government, which are not included net operating assets. It therefore includes:</p> <ul style="list-style-type: none"><li>• Borrowings</li><li>• non-trade debtors and creditors,</li><li>• investments and</li><li>• corporation tax payable,</li></ul> <p>but excludes proposed dividends.</p>
<b>Operational assets</b>	<p>Assets including those of a specialised nature employed for operational purposes, namely:</p> <p>Intake works, pumping stations, treatment works, boreholes and operational land.</p> <p>Land which is not currently in operational use but is expected to be in operational use in the foreseeable future should also be included in this category, as should plant and machinery inherent in the nature of the works.</p> <p>Offices, depots, workshops, residential properties directly connected with water and sewerage services and land held for the purpose of protecting the wholesomeness of water supplies.</p>
<b>Other assets</b>	<p>Non-specialised, non-operational plant, machinery, vehicles, surplus land and all other assets not listed in the categories above.</p>
<b>Real</b>	<p>After allowing for the impact of general inflation on the purchasing power of the unit of account.</p>
<b>Real financial capital maintenance</b>	<p>The measurement of profit after allowing for maintaining the real value of capital and reserves.</p>
<b>Real terms accounting</b>	<p>The combination of valuing assets at value to the business with the inclusion of all realised and unrealised gains in the measurement of profit after real financial capital maintenance.</p>
<b>Recoverable amount</b>	<p>The greater of the net realisable value of an asset and where applicable, the amount recoverable from its further use, discounted as appropriate.</p>
<b>Regulatory capital value</b>	<p>The capital base used in setting price limits. The value of the core business which earns a return on investment.</p>

## **PART TWO – DEFINITION OF TERMS**

### **Third party contributions since 1 April 2006**

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

### **Value to the business**

Net current replacement cost or if a permanent diminution below net current replacement cost has been recognised, recoverable amount.

### **Working capital**

The aggregate of:

- stocks,
- trade debtors,
- trade creditors
- measured income accrual
- capital creditors
- deferred income (related to advance receipts only) and,
- any other debtor and creditor balances relating to expenditure which is charged to the profit and loss account before operating profit.

It should exclude the infrastructure renewals prepayment or accrual

### **Working capital adjustment**

The adjustment for the impact of general inflation on the real value of working capital to the business.



## **PART THREE – ACCOUNTING RULES**

### **3.1 Scope**

- 3.1.1 Scottish Water is responsible for publishing audited CCA statements in accordance with these rules. CCA statements are required only for the core business of Scottish Water.
- 3.1.2 Scottish Water is also required to submit audited HCA and CCA information on a charging year basis for the purpose of assessing possible interim K adjustments. The procedure for submitting this actual data is set out in WICS letters.
- 3.1.3 These rules require that the CCA statements be prepared on the basis of modified real terms accounting in accordance with paragraphs 3.2 and 3.3. CCA statements should contain a profit and loss account and balance sheet together with supplementary notes and information in the form set out in Appendix 2 of RAR 3.

### **3.2 Current cost balance sheet**

- 3.2.1 The current cost balance sheet should include all assets, which the core business owns or is responsible for operating except for those subject to operating leases.
- 3.2.2 Except as indicated below, assets and liabilities should be included on a basis consistent with the historical cost statements.
- 3.2.3 Assets originally funded, wholly or partly, by third parties such as adopted, lateral sewers and communication pipes from mains to stop taps, should be valued as for assets funded by Scottish Water itself.
- 3.2.4 Initial assets in operational use should be valued at net current replacement cost.
- 3.2.5 All other fixed assets including those not in operational use such as surplus land, should be included at their value to the business.
- 3.2.6 Assets under construction should be included in the appropriate asset category. Any interest capitalised in the HC accounts should also be capitalised in the CC accounts but using the equivalent real rate of return calculated by adjustment for the RPI.

## **PART THREE – ACCOUNTING RULES**

### **Infrastructure assets**

- 3.2.7 Infrastructure assets should be valued at their gross current replacement cost as follows, without being subject to depreciation.

Gross replacement cost

Opening balance  
Investment plan adjustment  
RPI adjustment  
Disposals  
Additions  
Closing balance

Each line in this calculation is discussed below.

### **Opening balance**

- 3.2.8 Opening balances will be the closing balance from the previous financial year carried forward.

### **Investment plan adjustment**

- 3.2.9 The investment plan adjustment is the revaluation adjustment required to bring the assets to the gross modern equivalent asset value. The increase to the MEA value arising from adjustments for general inflation through the RPI adjustment should be taken to the current cost reserve. All other increases or decreases should be reflected in the profit and loss account as a result of the consideration of the depreciation profile and asset lives. The adjustments are calculated at a strategic review and incorporated into the accounts generally in the first year of the following investment plan period. The period in which the adjustment should be incorporated into the accounts will be confirmed in advance by WICS in a WICS letter.

### **RPI adjustment**

- 3.2.10 The opening balance, after amendment by the investment plan adjustment, should be restated using the RPI. The amounts at which asset values are carried will therefore be frozen in real terms between investment plan reviews, subject to subsequent additions and disposals. In this RPI adjustment, RPI denotes the percentage change in the retail price index between the opening and closing balance sheet dates. This will be based on the RPI published in April and notified to Scottish Water by WICS immediately after its publication. RPI indexation on additions during the year may be assumed to be immaterial.

## PART THREE – ACCOUNTING RULES

### Disposals

- 3.2.11 In the event of the disposal of infrastructure assets, the opening balance should be reduced by the gross value of the disposed assets.

### Additions

- 3.2.12 Additions to the opening balance comprise expenditure on enhancement and asset maintenance of the base service of the asset base.
- 3.2.13 Additions should be stated gross of third party contributions such as grants and infrastructure charges.

### Operational assets

- 3.2.14 All operational assets including specialised and non-specialised operational properties should be valued in the current cost balance sheet at their net current replacement cost which is as follows.

#### Gross replacement cost

- Opening balance
- Investment plan adjustment
- RPI adjustment
- Disposals
- Additions
- Closing balance

#### Accumulated depreciation

- Opening balance
- Investment plan adjustment
- RPI adjustment
- Disposals
- Provision for year
- Closing balance

#### Net Book Value

- Closing balance
- Opening balance

Each line in this calculation is discussed below.

### Opening balance

- 3.2.15 The opening balances will be the closing balances from the previous financial year carried forward.

### Investment plan adjustment

- 3.2.16 The investment plan adjustment is the revaluation adjustment required to bring the assets to the gross modern equivalent asset value

## **PART THREE – ACCOUNTING RULES**

### **RPI adjustment**

3.2.17 The opening balance for gross replacement cost and accumulated depreciation after amendment by the investment plan adjustment should be restated using the RPI. The indexation of additions during the year may be assumed to be immaterial.

### **Disposals**

3.2.18 Asset disposals should be written off gross replacement cost and accumulated depreciation.

### **Additions**

3.2.19 Fixed asset additions should be stated gross of third party contributions such as grants and infrastructure charges.

### **Provision for year**

3.2.20 The depreciation charge for the year should be calculated using the same depreciation profiles and asset lives as for the historical cost depreciation charge. In principle the depreciation profiles should take account of technical progress, the cost of capital, variations in output and changing running costs.

### **Non specialised operational properties**

3.2.21 Non-specialised operational properties should be valued at estimated open market value on an existing use basis using the proforma set out above for specialised operational assets. The calculation of each line in this proforma is as described above. The estimates of open market value should generally be restated using the RPI between strategic reviews but revaluations in historical cost accounts should be incorporated in the current cost accounts with changes in real value identified separately in the current cost reserve.

### **Other tangible assets**

3.2.22 Other tangible assets include non-specialised plant, machinery, vehicles, surplus land and all other assets not included in the categories listed above.

3.2.23 These assets, with the exception of surplus land, should be valued at estimated net current replacement cost using the proforma in paragraph 3.2.14.

3.2.24 Surplus land should be valued at value to the business taking into account any proceeds that are to be passed to customers.

## **PART THREE – ACCOUNTING RULES**

### **Third party contributions since 1 April 2005**

3.2.25 Third party contributions received in 2005-06 and thereafter should be treated in the balance sheet as deferred income, indexed using RPI and credited to the profit and loss account in line with the depreciation charge on the assets financed. Accordingly contributions in respect of infrastructure assets should simply be accumulated in real terms subject to disposals.

### **Reserves**

3.2.26 Reserves in the current cost balance sheet should include revaluation surpluses or deficits and adjustments made to allow for the impact of price changes in arriving at current cost profit attributable to Scottish government.

### **3.3 Current cost profit and loss account**

#### **Adjustments to historical cost operating profit**

3.3.1 The current cost operating profit should be derived from the historical cost operating profit by deduction of the following adjustments:

- in relation to fixed assets, a depreciation adjustment equal to current cost depreciation less historical cost depreciation;
- in relation to the disposal of fixed assets, a disposal of fixed assets adjustment equal to the current cost net book value of disposed assets less the historical cost net book value of disposed assets; and
- in relation to working capital, a working capital adjustment.

The recommended proformas for the submission of the regulatory accounts are set out in RAR 3 and include an analysis of the current cost operating profit which contains the current cost depreciation charge and the current cost profit on the disposal of fixed assets rather than making the relevant adjustments to the historical cost operating profit.

3.3.2 The calculation of current cost depreciation on non-infrastructure assets is described in paragraph 3.2.21. No depreciation is charged on infrastructure assets in the regulatory accounting statements and there is therefore no current cost depreciation charge for infrastructure assets, FRS12 and FRS15 are to be dis-applied for infrastructure assets for the purposes of the regulatory accounts.

#### **Financing adjustment**

3.3.3 The calculation of current cost profit attributable to Scottish government before taxation needs to take account of real gains arising from the effect of inflation on net finance. The relevant adjustment is called a financing adjustment. Normally this should be calculated as opening net finance multiplied by the percentage change in the RPI during the financial year.

## **PART THREE – ACCOUNTING RULES**

- 3.3.4 The calculation may require modification if new finance is raised during the year. In particular, if capital is issued during the year for cash then this adjustment should normally be reduced by the impact of general inflation as measured by the percentage change in the RPI between the date of the capital injection and the date of the closing balance sheet, on the real value of the capital issued. Any more refined basis of adjustment for changes in net finance during the year should be disclosed.

### **Exceptional items**

- 3.3.5 Exceptional items should be disclosed as a separate item. An analysis of the type and amount of each item should be added to the notes.

### **Extraordinary items**

- 3.3.6 FRS3 Reporting Financial Performance states that extraordinary items are extremely rare as they relate to highly abnormal events or transactions that fall outside the ordinary activities of a reporting entity and which are not expected to recur. If extraordinary items do occur, they should be positioned on the P&L after profit on ordinary activities after tax and minority interests.

## **3.4 Contents of accounts**

- 3.4.1 Pro formas for the current cost regulatory accounting information are contained in Appendix 2 of RAR 3. The required proformas are set out in RAR 3.1.5.
- 3.4.2 All the tables (with the exception of regulatory capital value and the five year summaries) should disclose current year's figures alongside the previous year's figures.
- 3.4.3 The bases used for the allocation of general assets between water; sewerage and sewage treatment and disposal should be disclosed.
- 3.4.4 A further note to the CCA statements should analyse current cost net book value only by service and by asset type simultaneously.
- 3.4.5 The RCV should be disclosed in a separate note. This should reflect the value determined by WICS for price setting purposes and show the roll forward from the value of the start of the period to the closing value at the end of the period. The requirements for disclosure of the RCV are discussed further in Section 3.5 below.
- 3.4.6 A rolling five-year summary of the current cost profit and loss account and balance sheet should be included as a note to the CCA statements. All figures in this five-year summary should be restated into pounds of the final year using RPI indexation.

## APPENDIX 1 – Worked Example

### Introduction

This simplified worked example is based on a hypothetical water entity. It is intended to illustrate the preparation of CC accounts from HC accounts.

### 1 HC Profit and Loss account

	xxx7	xxx7	xxx7	xxx6	xxx6	xxx6
	Core	Non- Core	Total	Core	Non- Core	Total
	£m	£m	£m	£m	£m	£m
Turnover	672.9	6.9	679.8	634.6	6.3	640.9
Operating costs	(269.6)	(2.9)	(272.5)	(255.1)	(2.9)	(258.0)
PPP costs	(100.0)	-	(100.0)	(100.0)	-	(100.0)
Depreciation	(54.0)	-	(54.0)	(51.0)	-	(51.0)
Operating income	2.9	0.2	3.1	5.0	0.2	5.2
Operating profit	252.1	4.2	256.3	233.4	3.6	237.0
Other income	1.1	-	1.1	1.7	-	1.7
Net interest	(107.3)	-	(107.3)	(100.2)	-	(100.2)
Profit before taxation	146.0	4.2	150.2	134.8	3.6	138.4
Taxation						
-Current	(4.1)	-	(4.1)	(4.2)	-	(4.2)
-Deferred	(18.0)	-	(18.0)	(6.2)	-	(6.2)
Profit after taxation	123.8	4.2	128.0	124.4	3.6	128.0
Customer earnings	(110.6)	(4.2)	(114.8)	(113.6)	(3.6)	(117.2)
Retained profit	13.2	-	13.2	10.9	-	10.9

# APPENDIX 1 – Worked Example

## 2 HC Balance sheet

	Core £m	Non-Core £m	xxx7 Total £m	Core £m	Non-Core £m	xxx6 Total £m
<b>Fixed Assets</b>						
Tangible fixed assets	3,565.8	-	3,565.8	3,407.5	-	3,407.5
Investments						
-loan to group company	243.9	-	243.9	244.5	-	244.5
-other	3.0	-	3.0	3.0	-	3.0
	3,812.8	-	3,812.8	3,655.0	-	3,655.0
<b>Current Assets</b>						
Stocks	3.1	0.2	3.3	3.1	0.2	3.3
Debtors	249.8	2.2	252.0	212.1	2.1	214.2
Cash	37.1	-	37.1	27.2	-	27.2
Short term deposits	114.1	-	114.1	94.3	-	94.3
Gilts Reserve	10.0	-	10.0	10.0	-	10.0
Assets transferred to PPP contractors	30.0	-	30.0	30.0	-	30.0
Infrastructure renewals prepayment	10.1	-	10.1	8.1	-	8.1
	454.2	2.4	456.6	384.8	2.3	387.1
<b>Creditors: amounts falling due within one year</b>						
Creditors	(215.1)	(1.0)	(216.1)	(196.9)	(1.3)	(198.2)
Borrowings	(189.0)	(1.4)	(190.4)	(134.2)	(1.0)	(135.2)
Corporation tax payable	(54.2)	-	(54.2)	(54.2)	-	(54.2)
Dividends earnings payable	(42.2)	-	(42.2)	(33.7)	-	(33.7)
Net current assets	(46.2)	(2.4)	(46.2)	(34.1)	(2.3)	(34.1)
Total assets less current liabilities	3,766.5	-	3,766.5	3,620.9	-	3,620.9
<b>Creditors: amounts falling due after more than one year</b>						
Borrowings	(2,129.9)	-	(2,129.9)	(2,015.8)	-	(2,015.8)
Other creditors	(35.8)	-	(35.8)	(35.8)	-	(35.8)
	(2,165.7)	-	(2,165.7)	(2,051.6)	-	(2,051.6)
<b>Provisions for liabilities and charges</b>						
Deferred tax provision	(175.2)	-	(175.2)	(157.2)	-	(157.2)
Deferred income - grants and contributions	(39.3)	-	(39.3)	(39.3)	-	(39.3)
Post employment liabilities	(100.0)	-	(100.0)	(100.0)	-	(100.0)
Other Provisions	(10.3)	-	(10.3)	(9.9)	-	(9.9)
	(324.8)	-	(324.8)	(306.4)	-	(306.4)
<b>Net assets employed</b>	<b>1,276.1</b>	<b>-</b>	<b>1,276.1</b>	<b>1,262.9</b>	<b>-</b>	<b>1,262.9</b>
<b>Capital and reserves</b>						
Government loans	640.8	-	640.8	640.8	-	640.8
Profit and loss account	601.5	-	601.5	588.3	-	588.3
Other reserves	33.8	-	33.8	33.8	-	33.8
<b>Capital and reserves</b>	<b>1,276.1</b>	<b>-</b>	<b>1,276.1</b>	<b>1,262.9</b>	<b>-</b>	<b>1,262.9</b>



## APPENDIX 1 – Worked Example

### 3 CC Profit and Loss account

	xxx7	xxx6
	£m	£m
Turnover	672.9	634.6
Operating costs	(376.1)	(310.4)
PPP Costs	(100.0)	(100.0)
Operating income	2.7	4.3
Working capital adjustment	0.2	0.3
Current cost operating profit	199.7	185.7
Other income	1.1	1.7
Net interest	(107.3)	(100.2)
Financing adjustment	64.0	48.5
Current cost profit before taxation	157.5	135.6
Taxation		
-Current	(4.1)	(4.2)
-Deferred	(18.0)	(6.2)
Current cost profit	135.4	125.2
Dividends	(110.6)	(113.6)
Current cost profit retained	24.7	11.7

## APPENDIX 1 – Worked Example

### 3 CC Balance sheet

	xxx7	xxx6
	£m	£m
<b>Fixed Assets</b>		
Tangible Assets	20,922.7	19,954.0
Third party contributions	(367.4)	(336.7)
	<u>20,555.3</u>	<u>19,619.5</u>
Working capital	(20.7)	(7.7)
Cash	37.1	27.2
Short term deposits	114.1	94.3
Infrastructure renewals prepayment	10.1	8.1
<b>Net operating assets</b>	<b>20,735.9</b>	<b>19,781.3</b>
<b>Non-operating assets and liabilities</b>		
Borrowings	(189.0)	(134.2)
Gilts Reserve	(10.0)	(10.0)
Assets transferred to PPP contractors	(30.0)	(30.0)
Non-trade debtors	65.1	35.6
Non-trade creditors due within one year	(6.6)	(9.6)
Investments		
-loan to group company	243.9	244.5
-other	3.0	3.0
Corporation tax payable	(54.2)	(54.2)
Dividends payable	(42.2)	(33.7)
	<u>20.0</u>	<u>51.5</u>
<b>Creditors: amounts falling due after more than one year</b>		
Borrowings	(2,129.9)	(2,015.8)
Other creditors	(35.8)	(35.8)
	<u>(2,165.7)</u>	<u>(2,051.6)</u>
<b>Provisions for liabilities and charges</b>		
Deferred tax provision	(175.2)	(157.2)
Post employment liabilities	(100.0)	(100.0)
Other Provisions	(10.3)	(9.9)
	<u>(285.5)</u>	<u>(267.1)</u>
<b>Net Assets</b>	<b><u>18,304.8</u></b>	<b><u>17,514.1</u></b>
<b>Capital and reserves</b>		
Government Loans	640.8	640.8
Profit and loss account	(14.0)	(38.8)
Current cost reserve at 31 March	17,645.8	16,879.8
Other Reserves	32.3	32.3
<b>Total capital and reserves</b>	<b><u>18,304.8</u></b>	<b><u>17,514.1</u></b>

## APPENDIX 1 – Worked Example

### 4 Working capital

	xxx7	xxx6
	£m	£m
Stocks	3.1	3.1
Trade Debtors - household	51.0	49.8
- non-household (licensed businesses)	20.2	18.7
- Other trade debtors	8.5	10.0
-		
Measured income accrual	60.0	55.0
Prepayments and other debtors	55.0	53.0
Trade creditors	(0.2)	(0.5)
Wholesale Charge prepayment	(30.0)	(30.0)
Deferred income - customer advance receipts	(30.3)	(23.5)
Capital creditors	(59.7)	(60.4)
Credit note provisions	(10.0)	(10.0)
Accruals and other creditors	<u>(88.2)</u>	<u>(72.9)</u>
	<u>(20.7)</u>	<u>(7.7)</u>

### 5 Working capital adjustment

	xxx7
	£m
Opening working capital	(7.7)
RPI	3.1%
Adjustment : $-7.7 \times 3.1\% \times (-1)$	<u>0.2</u>

## APPENDIX 1 – Worked Example

### 6 Financing adjustment

	xxx7
	£m
Opening net assets	17,514.1
Opening net operating assets	19,781.3
Opening net finance	<u>(2,267.2)</u>
add back:	
Deferred tax	157.2
Customer earnings payable	33.7
index linked debt	168.0
Revised opening net finance	<u>(1,908.3)</u>
RPI	3.1%
Adjustment : $-1,908.3 \times 3.1\% \times (-1)$	<u><u>59.2</u></u>

## APPENDIX 2 - Assumptions made in RAR 1

The assumptions made in RAR 1 fall into two categories, those (here starred) which are mandatory in the present rules and those which are based on materiality considerations which may be refutable in specific cases.

	<b>Reference Paragraph</b>
*1 The effect of the regulatory regime on the value to the business of initial assets can be disregarded.	1.7.6
*2 Net MEAs are adjusted for the higher operating cost of initial assets.	1.9.5
*3 Modern standards are not below those to which assets were originally designed.	1.10.2
4 Redundant assets were appropriately reflected in MEAs.	1.10.4
5 Future immediate recognition of redundancies will not materially affect profits.	1.10.4
*6 Technical progress is not so rapid as to lead to falls in the MEA values of infrastructure assets.	1.10.5
*7 Initial infrastructure assets would not have been subject to third party contributions.	1.10.8
8 Future government grants on infrastructure assets are negligible.	1.10.9
9 In - year RPI indexation of fixed asset additions is immaterial.	1.11.5
10 Assets in use with zero HC net book value have been valued at net MEA.	1.11.5
11 Holding gains on stock during the year are immaterial.	1.11.7
12 The CC and HC valuations of closing investments are equal.	1.11.9
13 The CC capitalisation of interest during construction equals the HC capitalisation in real terms.	1.11.9
14 The impact of changes in interest rates on the value to the business of financing liabilities can be ignored.	1.11.9
15 If capital is issued during the year, the proceeds will still be held as cash at the year end.	1.11.11

## APPENDIX 2 - Assumptions made in RAR 1

16 If loans are raised during the year, the proceeds will still be held as cash at the year-end.

1.11.12

## **APPENDIX 3 - Current cost accounting policies**

WICS has prepared the following statement of current cost accounting policies. It is recommended that Scottish Water adopt this statement to the extent that it is applicable.

### **Current cost accounting policies**

These accounts have been prepared for the Core Business of Scottish Water in accordance with guidance issued by the Water Industry Commission for Scotland for modified real terms financial statements suitable for regulation in the water industry. They measure profitability on the basis of real financial capital maintenance in the context of assets which are valued at their current cost value to the business.

The accounting policies used are the same as those adopted in the statutory historical cost accounts except as set out below.

### **Tangible fixed assets**

Assets acquired in operational use are valued at the replacement cost of their operating capability. To the extent that the regulatory regime does not allow such assets to earn a return high enough to justify that value, this represents a modification of the value to the business principle. Also, no provision is made for the possible funding of future replacements of pre – 31 March 2006 assets by contributions from third parties and to the extent that some of those assets would on replacement be so funded, replacement cost again differs from value to the business. Redundant assets are valued at their recoverable amounts.

### **Modern equivalent asset (MEA) valuation**

A review of the MEA valuation and asset stock is undertaken as part of the Strategic Review. The revised values arising from this review provide the basis for calculating the MEA in the current cost financial statements. The process of continuing refinement of asset records has produced adjustments to existing values. The current cost depreciation figures included in the current cost operating costs are based upon the revised MEA values.

### **Land and buildings**

Non - specialised operational properties were valued on the basis of open market value for existing use at {date} and have been expressed in real terms by indexing using the Retail Price Index ('RPI') since that date.

Specialised operational properties are valued at the lower of depreciated replacement cost and recoverable amount, restated annually between strategic reviews by adjusting for inflation as measured by changes in the RPI. The

## **APPENDIX 3 - Current cost accounting policies**

unamortised portion of third party contributions received is deducted in arriving at net operating assets (as described below).

### **Infrastructure assets**

Mains, sewers, impounding and pumped raw water storage reservoirs, dams, sludge pipelines and sea outfalls are valued at replacement cost determined principally on the basis of data provided by the investment plan.

A process of continuing refinement of assets records is expected to produce adjustments to existing values when strategic reviews of the investment plan takes place. In the intervening years, values are restated to take account of changes in the general level of inflation as measured by changes in the RPI over the year.

### **Other fixed assets**

All other fixed assets are valued periodically at depreciated replacement cost. Between strategic reviews, values are restated for inflation as measured by changes in the RPI.

### **Surplus land**

Surplus land is valued at recoverable amount taking into account that part of any proceeds to be passed onto customers.

### **Grants and other third party contributions**

Grants, infrastructure charges and other third party contributions received since {date} are carried forward to the extent that any balance has not been credited to revenue. The balance carried forward is restated for the change in the RPI for the year and treated as for deferred income.

### **Real financial capital maintenance adjustments**

These adjustments are made to historical cost profit in order to arrive at profit after the maintenance of financial capital in real terms.

### **Working capital adjustment**

This is calculated by applying the change in the Retail Price Index ('RPI') over the year to the opening working capital balance.



## **APPENDIX 3 - Current cost accounting policies**

### **Financing adjustment**

This is calculated by applying the change in the RPI over the year to the opening balance of net finance which comprises all monetary assets and liabilities in the balance sheet apart from:

- those included in working capital,
- deferred tax,
- customer earnings payable, and
- index linked debt

## APPENDIX 4 - Acronyms

ASB	Accounting Standards Boards
ASC	Accounting Standards Committee
CC	Current Cost
CCA	Current Cost Accounting
COPI	Construction Output Price Index
CPP	Constant Purchasing Power
ENGE	Enhancement, New, Growth and Efficiency Capital Expenditure
FCM	Financial Capital Maintenance
FRS	Financial Reporting Standard
HC	Historical Cost
HCA	Historical Cost Accounting
IRC	Infrastructure Renewals Charge
IRE	Infrastructure Renewals Expenditure
MEA	Modern Equivalent Asset
NBV	Net Book Value
NPV	Net Present Value
OCM	Operating Capability Maintenance
P&L	Profit and Loss Account
PPI	Producer Prices construction output Index
RAR	Regulatory Accounting Rules
RCV	Regulatory Capital Value
RPI	Retail Price Index
SSAP	Statement of Standard Accounting Practice
STRGL	Statement of Total Recognised Gains and Losses

## APPENDIX 5 - Bibliography

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