

Water Supply Authority

Regulatory Accounting
Guidelines

Edition 2

February 2004

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Amendments to guidelines from edition 1

1. Section 2.3.2 Sources of Finance: Correction to status of Nam Papa Vientiane Prefecture with respect to debt, paragraph deleted.
2. Table 2.2 Ring-fenced sources of finance: minor corrections.
3. Section 3.3 Requirements: reference to report format in Annex 1 in last paragraph
4. Section 5.2 Definitions: Correction to MEA formula and correction to example
5. Annex 1 form 3 Fixed asset Register: Correction to Adjusted value formula
6. Annex 1: Addition of cost centre report format.

1 General

1.1 Background and introduction

Ultimate responsibility for water tariffs adopted by the provincial Nam Papa State Owned Enterprises (NPSE) is vested in the provincial governments and other local authorities. However, WASA has a mandate as the Regulator for the Water Supply and Sanitation Sector for Laos to undertake detailed tariff analyses and provide recommendations and advice to the appropriate authorities. Our analyses and advice does depend upon the timely and accurate submission of data provided by the NPSEs.

Although the accounts for the NPSEs, with one or two exceptions, are maintained in accordance with the government accounting structures as required by their regulations we have discovered that there are various problems associated with this format that fail to deliver the information necessary for detailed tariff analysis. The primary areas of concern are:

- The accounts for the NPSEs tend to include income and expenditure for non-core activities such as bottled water plants, hire of equipment, financial services etc. The accounts need to be separated between non-core (unregulated) and core (regulated) activities
- The accounts do not permit detailed activity analysis within the core activities, necessary for comparative purposes, e.g. abstraction, treatment and storage; distribution; house connections; customer services; and overheads. Although it may be difficult to separate the accounts into all of these categories for 2004 it is hoped that detailed comparisons will be possible by 2005.
- The accounts include a very high proportion of bad or doubtful debts that should be written off. Retention of these accounts on the balance sheets seriously distorts the real status of the enterprises.
- The accounts record assets as being valued at their historic (original purchase) cost and fail to capture the effects of inflation, recently very high in the Lao PDR. In order to determine an appropriate return on capital it is necessary for the assets to be re-valued on a current cost basis at regular intervals.
- Similarly, depreciation is calculated on the basis of historic cost basis and is not sufficient to provide the funds necessary for capital maintenance.

The guidelines do not replace the government accounting system. Maintenance of the accounts in accordance with government regulations is

required by law and necessary for the determination of tax liabilities. These guidelines set out a specific additional reporting requirement for WASA to enable it to carry out its mandated tariff regulation responsibilities.

To ensure that all NPSEs provide the required data in the most appropriate format we have prepared these guidelines for adoption in the financial year 2004 and to be continued thereafter. These guidelines have been prepared for the use by those suppliers falling under the regulatory remit of WASA, currently only the 18 NPSEs. WASA, however, has no objection to other water supplier (or supplier in any other sector) adopting these guidelines for their own management purposes.

For this first set of guidelines we have tried to keep the deviations from the government accounting system to a minimum but we do expect to modify these guidelines in the future to incorporate more detailed information as the regulatory process develops.

The following chapters address five key areas:

- Ring-fencing of core activities
- Cost centre analysis
- Debt management
- Asset registers and asset valuation
- Current cost depreciation

1.2 General Requirements

These regulatory accounting requirements are essential for fair and effective economic regulation of the water supply sector. The principal required annual outputs for the core activities are:

- Profit and loss statements
- Balance sheets
- Asset registers and depreciation schedules
- Cash flow statements
- Cost centre analyses

All of these statements and reports shall differ from the statutory reports in order to comply with the regulatory needs of WASA. These guidelines set out the specific requirements of WASA for regulatory financial reporting.

It is required that the finance directors of the NPSEs make the necessary adjustments to their accounting structures by the start of financial year 2004 and that the above regulatory financial statements be made available within three months of the year end, i.e. by 31 March 2005.

2 Ring fencing of core activities

2.1 Principle

All income and expenditure, including capital investment, operational costs, overheads, cost of capital and non-cash expenditure items shall be separated between core (regulated) activities and non-core (unregulated) activities.

2.2 Definition

Core activities for the provision of water supply services are defined in Table 2.1.

Table 2.1 – Definition of core activities

Activity	Includes	Excludes
Water abstraction	The abstraction of water for treatment and delivery into the piped water network	The abstraction of water for other purposes such as irrigation
Water treatment	The treatment of water prior to its delivery into the piped water network	The treatment and bottling of bottled water for resale to the public
Water storage	The storage of treated and untreated water prior to ultimate delivery to the piped water network	The storage of water for bottling
Water distribution	The distribution of water within the network	The distribution of bottled water
House connections	The installation of new and repair of existing house connections	Domestic plumbing
Customer services	Meter reading, billing and revenue collection; public awareness and advertising campaigns insofar as they relate to the piped water system, etc.	The advertising, distribution and sale of bottled water
Overheads	Pro-rata the overhead activities associated with the above core-activities	All other overhead activities

Where resources are shared between core and non-core activities the costs shall be split to reflect impact on the core activities, e.g. vehicles and equipment used for network operations and non-core activities such as the distribution of bottled water.

Any activity that cannot easily be defined by the NPSE as core or non-core shall be referred to WASA for definition.

2.3 Requirements

It is required that the NPSEs restructure their accounting system into two principal categories: core (regulated) activities and non-core (unregulated) activities. To achieve this objective it may be necessary for the NPSEs to modify their charts of accounts. WASA will provide assistance in this regard.

2.3.1 Banking

To ensure transparency of operations it is required that the NPSEs open separate bank accounts for the core activities. These bank accounts shall be established by the beginning of financial year 2004. The opening balance shall reflect the cash balance of the core activities at that time. It is accepted that a degree of management judgement is required as to what this opening balance should be but as a minimum it should reflect the working capital requirements of the core activities.

The statements from these bank accounts shall form the basis for cash flow analysis.

2.3.2 Sources of finance

The sources of finance for the NPSEs generally comprise grants and loans from the government, although much of it is originally from development agencies channelled through the government. In most cases the investment is for core activities but in some cases finance is raised for non-core activities such as the investment in bottled water plants. Finance raised and the assets purchased for non-core activities shall be excluded from the core activity regulatory balance sheets, including any accumulated profits (losses) attributable to these investments.

Table 2.2 defines the separation of finance between core and non-core activities.

Table 2.2 – Ring-fenced sources of finance

Source of finance	Includes	Excludes
Loans	Loans received for investment in the core activities only. Debts inherited from Nam Papa Short-term loans received to alleviate short-term core activity cash flow shortfalls	Loans received for investment in non-core activities, e.g. bottled water plants Short-term loans received to alleviate short-term non-core activity cash flow shortfalls
Grants and equity investment	Grants and equity funding received for investment in the core activities only. Equity Investment by private investors in core-activities	Grants and equity funding received for investment in non-core activities.
Repayment of capital	Income from bond repayment of principal	Income from repayment of principal from other enterprises, e.g. repayment of NP Vientiane loans to NPSEs
Accumulated profits	Accumulated profits (losses) attributable to the core activities only.	Accumulated profits (losses) attributable to all non-core activities.

2.3.3 Income

The NPSEs currently generate income from various sources and it is not always possible to determine how much is from core activities and how much is from non-core activities. It is now required that all income is clearly separated accordingly as indicated in Table 2.3.

Table 2.3 – Ring-fenced sources of income

Source of income	Includes	Excludes
Water sales	Income from the metered and un-metered sales of water from the piped distribution system.	Income from the sale of bottled water. Income from the sale of water supply services other than the piped network, e.g. irrigation
Connection fees	Income received for the installation of new and the repair/replacement of existing water supply connections to the network.	Income received for the provision of additional services to connected customers downstream of the meter, e.g. domestic leakage detection.
Contract services	Income received for undertaking works related to the core activities, e.g. re-routing a pipeline to accommodate road works etc.	Income received for undertaking works not related to the core-activities, e.g. construction of a pipeline for a private operator.
Disposal of assets	Income received for the sale of assets employed for the core activities	Income received for the sale of assets employed for the non-core activities
Equipment hire	None	Income received for the hire of the NPSEs equipment to outside parties.
Interest receipts	Income from surplus funds invested in deposit accounts and issued bonds	Income from interest payments from other enterprises indebted to the NPSE, e.g. NP Vientiane receives income from several NPSEs through inheriting the debt after decentralisation.

2.3.4 Capital investment

All capital investment activities shall be clearly separated between core and non-core activities as illustrated in Table 2.4.

Where assets are shared, e.g. head office facilities, an appropriate proportion shall be allocated to the core activity asset base and the balance to the non-core asset base.

Table 2.4 – Ring-fenced capital investment

Investment type	Includes	Excludes
Fixed assets	Investment in water supply infrastructure for the network supply system, e.g. abstraction, treatment, storage, pumping, distribution and support facilities	Investment in non-core business activities, including water supply infrastructure not for the use of the network supply system, e.g. irrigation facilities.
Other assets	Financial investments, e.g. deposit accounts, from the proceeds of the core activities only.	Financial investments from the proceeds on con-core activities

2.3.5 Operational expenditure

Operational costs shall be clearly separated between core and non-core activities as illustrated in Table 2.5.

Where costs are shared, e.g. management salaries, they shall be apportioned appropriately between core and non-core activities. For instance, if an NPSE director spends 80% of his time devoted to core activities and 20% to non-core activities then 80% of the salary charge shall be considered as a core expense. Similarly, other charges such as head office overhead costs shall be apportioned in the same manner. It is accepted that a degree of management judgement is required in the separation of costs but the NPSEs shall ensure that the separation of costs appropriately reflects the true situation as closely as possible.

Table 2.5 – Ring-fencing of operational expenditure

Expenditure category	Includes	Excludes
Personnel	Salaries and other associated staff costs for those staff dedicated to the core activities. The relative proportion of salaries and associated staff costs for those staff employed on both core and non-core activities	Salaries and other associated staff costs for those staff dedicated to the non-core activities. The relative proportion of salaries and associated staff costs for those staff employed on both core and non-core activities
Power	Energy costs for core activities only	Energy costs for non-core activities
Chemicals and fuel	Costs of chemicals and fuel consumed for core activities only	Costs of chemicals and fuel consumed for non-core activities
Maintenance	Maintenance costs of assets dedicated to core activities only	Maintenance costs of non-core assets
Office and administration	The relative proportion of administration costs required by the core activities	Administration costs for non-core activities
Interest and finance charges	Interest and finance charges related to borrowing for core activities only	Interest and finance charges related to borrowing for non-core activities only

2.3.6 Depreciation

Depreciation is a special case and is dealt with separately in Chapter 6.

2.3.7 Taxation

At this stage in the regulatory process it is considered appropriate for taxation to be excluded from the regulatory accounting process due to the many potential complications that may arise. However, it cannot be ignored

totally as it does affect the cash flow status of the NPSEs. In this instance it is considered appropriate to apportion taxes paid (or due) between core and non-core activities on a simple basis relative to turnover or some other suitable parameter subject to the discretion of the directors of the NPSEs. The regulatory accounts shall specify the method of apportionment adopted.

3 Cost centre analysis

3.1 Principle

Currently, the NPSE accounting structures, at best, present financial details of the operation of the NPSEs core activities as a whole. It is not possible to separate costs into defined cost centres for more detailed analysis and comparison. As part of the remit of WASA as the regulator it is essential that more detailed analyses of costs are undertaken with a view to identifying inefficiencies to be addressed by the management of the NPSEs.

Cost centre analysis is central to the concept of comparative competition allowing WASA to compare the performance of the NPSEs at every stage of the water supply process as opposed to the overall picture.

3.2 Definition

Cost centres are defined as identifiable operational units or activities within the core business. These can be based upon geo-political criteria, e.g. different towns within the area of supply, or operational criteria, e.g. treatment, distribution etc.

3.3 Requirements

It is recognised that the relatively unsophisticated accounting systems in place within the NPSEs are inadequate for detailed and complex cost centre analysis. WASA has therefore chosen to keep the requirements to a minimum on the basis as illustrated in Figure 3.1.

It is not essential at this stage of the regulatory process that all costs must be allocated a cost centre as they are entered into the accounts, a task that is not considered feasible with the existing accounting software in use by most NPSEs.

It is however a requirement to sub-divide the totals of each cost code into the various cost centre components for reporting to WASA. Refer Example 3.1 as to how cost items can be relatively easily sub-divided.

Although this sub-division is required by WASA on an annual basis the NPSEs are well advised to undertake this exercise on a monthly or quarterly basis as a tool for management operations.

When undertaking this sub-division process it is important to make sure that all costs entered on a cost centre basis add up to the costs as entered in the regulatory accounts.

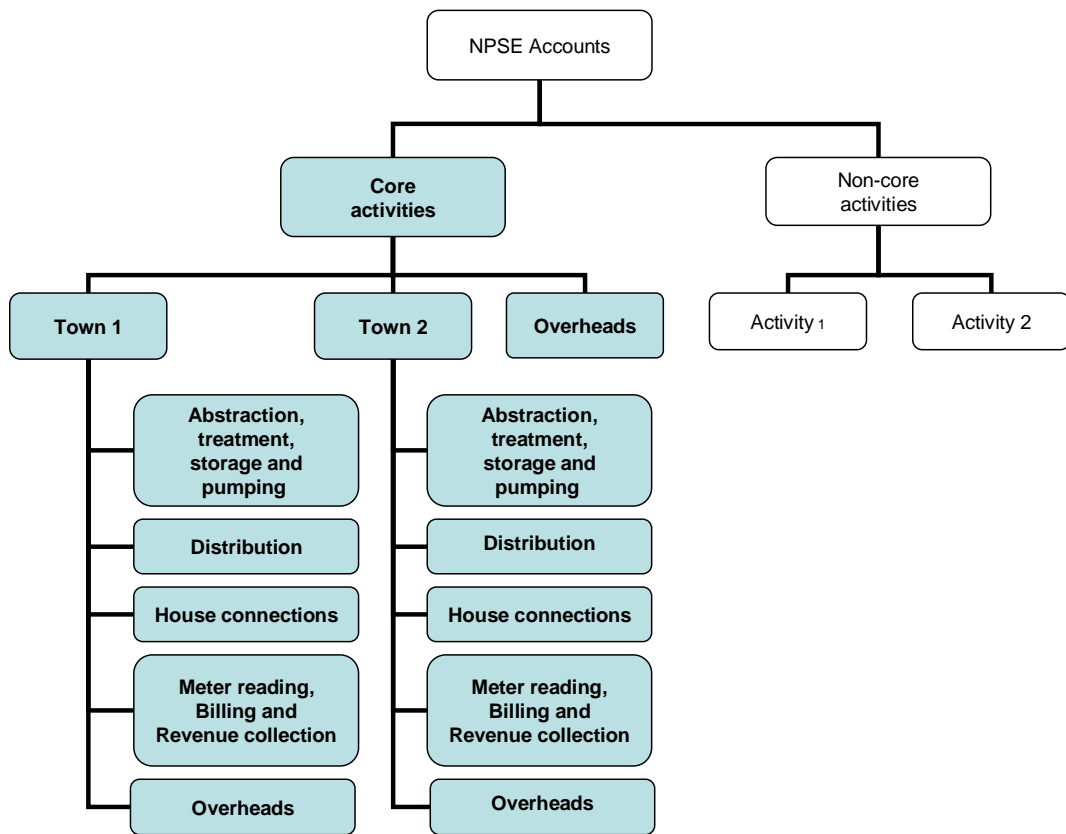


Figure 3.1 – Cost centres for NPSE core activities

Example 3.1 – Sub-division of labour costs between cost centres

An NPSE has a total staff compliment of 32 distributed as below. The annual labour cost amounted to 600 million kip. Using the table this amount is sub-divided into the various cost centres as illustrated.

Cost centre	Town 1			Town 2			Overheads		
	No	%	Amount Kip mil	No	%	Amount Kip mil	No	%	Amount Kip mil
Abstraction, treatment, etc	7	22	131	3	9	56			
Distribution	3	9	56	1	3	19			
House cons	2	6	38	1	3	19			
Meter reading etc.	4	13	75	2	6	38			
Overheads	2	6	38	1	3	19	6	20	112

All cost items with the exception of interest charges shall be allocated to a respective cost centre. This includes depreciation as determined on a current cost basis as described in Chapter 6. Interest charges shall be a separate cost centre. Cost centre reports shall be prepared in accordance with the schedule in Annex 1 – Pro-forma regulatory accounting reports.

4 Debt management

4.1 Principle

The NPSEs, in general, suffer from poor payment performance from their customers. Although WASA considers debt management to be a responsibility of the management of the NPSEs, certain aspects of debt management do impact upon the regulatory process.

The nature of and scale of accounts receivable is distorted by a major shortcoming in the current accounts system, i.e. there is no facility for debts to be written off. The net result is that the debts are maintained on the accounts indefinitely even if there no hope whatsoever of a significant proportion of them being repaid. In November 2002, WASA prepared an outline plan for the NPSEs to improve this situation¹. The first activity was to determine the level of bad or doubtful debts and to write them off, followed by other activities such as the employment of enforcement measures (disconnection etc.). The regulatory accounting guidelines are only concerned with the first activity, the writing off of bad debts.

The regulatory principle is to establish in the regulatory accounts a provision for bad and doubtful debts to be written off.

4.2 Definition

Bad debts are those where the management of the NPSE has reached the conclusion that no payment can be expected even with the employment of enforcement measures. Examples include businesses that have gone insolvent or customers who have left the area without settling their accounts and cannot be traced. Although subject to management discretion a guiding principle could be all debts that are more than 12 months overdue.

Doubtful debts are those where the management of the NPSE has reached the conclusion that quite probably, but not for certain, that no payment can be expected even with the employment of enforcement measures. A guiding principle could be those debts between 6 and 12 months overdue although.

In both cases the management of the NPSEs can employ their best judgement as to what are bad and doubtful debts.

4.3 Requirements

The regulatory accounts shall, at the end of each fiscal year, be adjusted to record bad debts by converting them to an operating cost.

¹ *Project Bulletin 7*, November 2003, Capacity Building for the Water Supply and Sanitation Sector Project, Interconsult International AS.

It is recognised that in the first year this amount could be relatively large as it may capture bad debts retained on the accounts for several years. In subsequent years the level of bad debts is expected to fall through improved debt management of the NPSEs.

5 Asset registers and asset valuation

5.1 Principle

The NPSEs record assets on their accounts based upon historical costs (original purchase prices) with no provisions for revaluing these assets to take account of inflation (very high in recent years). The current process is in accordance with statutory accounting obligations and for taxation calculations. However, from a regulatory perspective, it is necessary to revalue these assets in order to determine a more appropriate regulatory capital value upon which a fair return on capital is calculated, and also to determine depreciation allowances that are sufficient to meet long term capital maintenance obligations. This does not require the replacement of the existing system but rather a separate calculation for the regulatory accounts.

In addition it is recognised that the NPSEs retain many assets on their accounts when those assets have been disposed of, no longer in use or have fallen into an irreparable state of disrepair. The regulatory accounts call for these assets to be removed from the balance sheets.

5.2 Definitions

All assets are to be re-valued to their modern equivalent asset (MEA) values. The MEA value is defined as:

$$\text{MEA value} = \frac{P \times f^x (L-Y)}{L}$$

Where: P = Original asset purchase price (kip)

f = inflation multiplication factor

Y = age of asset (years)

L = useful life of asset (years)

The inflation factor is for the revaluation of assets to the end of 2003 is scheduled in Annex 2. These figures are based upon published inflation indices from the Department of Statistics. As inflation statistics before 1988 are not available it is assumed that inflation prior to this date was zero. The impact of this assumption is minimal as the NPSEs had very few assets prior to this date and any inaccuracies as a result of this assumption are considered to make negligible difference in the regulatory process.

Every year WASA will publish a schedule of inflation factors for the determination of MEA values.

Example 5.1 – Calculation of MEA values

An NPSE has an asset originally purchased in June 1997 for 150 million kip. The useful life of the asset is 30 years. What is its MEA value at the end of 2003?

$$\begin{aligned} \text{MEA} &= \frac{150\,000\,000 \text{ kip} \times 7.77 \times 23.5 \text{ years}}{30 \text{ years}} \\ &= 912\,975\,000 \text{ kip} \end{aligned}$$

5.3 Requirements

At the end of each fiscal year the NPSEs shall produce a modified asset register with all core assets re-valued to their MEA values in accordance with the above formula.

The modified asset register will exclude all assets that are no longer in use for whatever reason.

Any asset disposed of prior to the expiry of its useful life shall have a written down value of zero and the balance of the asset value (on a current cost basis) shall become a depreciation charge for the year it was disposed of. Any proceeds from the sale of the asset shall be treated as income.

The re-valued assets shall be carried forward the regulatory balance sheets of the NPSEs.

6 Current cost depreciation

6.1 Principle

The statutory accounting regulations determine depreciation provisions on the basis of historic cost (original purchase price). Although this process is a legal requirement for the determination of tax obligations it fails to reflect the true state of the NPSEs finances. In particular, historic cost depreciation, if used as a basis for pricing (tariffs), will deliver cash reserves well below capital maintenance requirements (refer following subsection for definition), especially in a relatively high inflation environment as experienced by the Lao PDR in recent years. Ideally, in a steady state condition the depreciation allowances (in the long-term) should equate to long term capital maintenance expenditure. This concept is known as 'Broad Equivalence'²

In accordance with standard commercial accounting practices depreciation must still be calculated on a historic cost basis for taxation calculations but an alternative mechanism, current cost accounting, is generally adopted for pricing purposes and reporting the state of the business to shareholders.

Consequently, as with re-valuing assets to account for inflation, the depreciation allowances also have to be re-valued on a regular basis.

6.2 Definitions

Capital maintenance is the replacement of assets at the end of their useful lives. With a large asset base and a steady state condition the annual depreciation charges, as measured on a current cost basis, should approximately equal the capital maintenance costs, thereby maintaining the overall value of the assets.

Although there is some evidence to suggest that the asset lives as defined in the statutory accounting regulations do not always reflect the actual asset lives it is not considered appropriate at this stage to provide an alternative approach for regulatory accounts. In future years, however, and in the light of improved data, WASA may prescribe alternative asset lives for the regulatory accounts.

The current cost depreciation (D_{current}) of an asset is given by:

$$D_{\text{current}} = \frac{P \times f}{L}$$

Where: P = Original asset purchase price (kip)

² Developed by OFWAT, the water and wastewater regulator for England and Wales.

f = inflation multiplication factor

L = useful life of asset (years)

Example 6.1 – Calculation of current cost depreciation

An NPSE has an asset originally purchased in June 1997 for 150 million kip. The useful life of the asset is 30 years. What is the depreciation charge for 2003?

$$\begin{aligned} D_{\text{current}} &= \frac{150\,000\,000 \text{ kip} \times 7.77}{30 \text{ years}} \\ &= 38\,850\,000 \text{ kip /year} \end{aligned}$$

6.3 Requirements

At the end of each fiscal year the NPSEs shall produce a modified depreciation schedule with all core assets depreciated in accordance with current cost accounting as set out in the above formula.

Depreciation shall not be charged on assets that are no longer in use except for the remaining allowance in their final year of use. Depreciation charges shall not be applied to any asset still in service if it has already exceeded its defined useful life.

The determined current cost depreciation charges are then carried forward to the annual profit and loss account.

Annex 1 – Pro-forma regulatory accounting reports

1. Profit and loss statement

Item	
1. Revenue (excluding turnover tax)	
Water sales	Income from metered and un-metered water sales
Connection charges	
Meter rental	
Other income (excluding subsidies)	Contracted services, interest etc.
2. Expenditure	
Personnel	Salaries, wages and associated costs, includes contract labour
Power	Electricity charges
Chemicals	
Fuel	Diesel
Maintenance	Routine maintenance activities, <u>not</u> capital maintenance
Office and administration	
Installation costs	Costs of installing connections
3. Gross income (excluding depreciation, finance charges and tax)	
Depreciation	Calculated on a current cost basis
4. Net operating income	
Net interest and finance charges	
Provision for bad debts	
Net income from disposal of assets	
Increase (decrease) in inventory	
5. Net profit (loss) before tax	
Profit taxes	
6. Net profit (loss) after tax	
Add government subsidies	
7. Net profit (loss)	

2. Balance sheet

Fixed Assets	
Land	Purchase value of land and other assets increased by inflation factors to MEA values.
Buildings Plant & Equipment	
Work in Progress	Fixed assets under construction.
Current assets	
Inventory	
Debtors	
Advance	
Cash	
Current Liabilities (amounts falling due within 1 year)	
Creditors	
Net current assets	
Total assets less current liabilities	
Liabilities	
Long term loan	
Equity	
Capital - Government	Adjusted to balance
Accumulated Profit/Losses	Determined in accordance with regulatory accounting
Reserves	
Total Liabilities (equity + debt)	

3. Fixed asset register

The fixed asset register shall be maintained on the basis of the schedules prepared by WASA and distributed to the NPSEs in 2001 in compliance with the statutory accounting procedures.

In addition the NPSEs shall produce the following adjusted register for regulatory accounting purposes.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Ref no.	Description	Date of purchase/ commission	Original purchase price	Age (years/ months)	Useful life	Inflation factor	Adjusted value before dep.	MEA value
From asset register				Calculated	From asset register	Annex 2 of these guidelines	(4) x (7)	$\frac{(8) \times ((6)-(5))}{(6)}$

4. Cash flow statement

Opening balance
Add:
- Net profit / loss
- Depreciation
- Net increase in accounts payable
- Loans and grants
Deduct:
- Net increase in accounts receivable
- Capital investment
Closing balance

5. Cost centre analysis

The cost centre analysis shall be presented in the following format:

(1) Cost centre level 1	(2) Cost centre level 2	(3) Annual costs (kip)	(4) Analysis unit	(5) Number of units	(6) Unit cost (3) / (5)
Town 1	Abstraction, treatment etc.		m ³ of production / year	 kip/ m ³ of production per year
	Distribution		km of pipe	 kip / km of pipe
	House connections		Number of connections	 kip / Number of connections
	Meter reading billing etc.		Number of connections	 kip / Number of connections
	Overheads		Total costs for Town 1	 % of total costs
Total for Town 1					

A separate analysis shall be undertaken for each town and an overall combined analysis for the NPSE as a whole.

Annex 2 – Inflation factors

The following inflation factors are to be applied to asset valuations and the determination of current cost depreciation.

For all assets commissioned before January 1988 the inflation factor to be used shall be 42.00.

Month/ Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1988	41.35	42.34	39.94	40.29	37.73	36.90	36.79	37.08	36.28	35.02	34.34	34.58
1989	35.35	33.82	32.22	28.80	25.43	22.50	21.70	19.82	19.32	19.54	19.37	18.99
1990	19.79	19.12	18.78	18.14	17.44	16.86	16.41	16.44	16.37	16.48	16.59	16.13
1991	17.21	17.32	16.48	15.96	15.06	14.64	14.45	14.52	14.44	14.66	14.80	14.61
1992	15.29	15.36	14.93	14.72	14.07	13.66	13.03	12.81	12.84	13.27	13.80	13.79
1993	14.37	14.43	14.07	13.68	13.38	12.99	12.48	12.18	12.05	12.44	12.89	12.66
1994	13.37	13.44	12.87	12.67	12.47	12.15	11.88	11.60	11.38	11.82	12.04	11.85
1995	12.39	12.39	11.64	11.04	10.30	10.21	9.93	9.30	8.96	9.31	9.49	9.43
1996	9.78	9.60	9.39	9.22	9.05	9.01	8.92	8.91	8.70	8.81	8.87	8.79
1997	8.78	8.57	8.35	8.21	7.79	7.77	7.45	7.09	6.82	6.94	7.09	6.94
1998	6.68	5.93	5.73	5.06	4.78	3.86	3.66	3.55	3.30	3.27	3.00	2.87
1999	2.66	2.37	2.15	1.95	1.87	1.72	1.55	1.48	1.48	1.48	1.54	1.54
2000	1.51	1.51	1.50	1.47	1.45	1.43	1.42	1.41	1.37	1.38	1.41	1.41
2001	1.38	1.39	1.38	1.36	1.34	1.34	1.34	1.33	1.30	1.30	1.30	1.30
2002	1.28	1.29	1.29	1.27	1.26	1.23	1.19	1.16	1.13	1.13	1.14	1.14
2003	1.11	1.12	1.09	1.07	1.07	1.06	1.04	1.01	0.99	0.99	1.00	1.00