Tasmania

GUIDELINES FOR IMPLEMENTING FULL COST ATTRIBUTION PRINCIPLES IN GOVERNMENT AGENCIES

Department of Treasury and Finance

September 1997

GUIDELINES FOR IMPLEMENTING FULL COST ATTRIBUTION PRINCIPLES IN GOVERNMENT AGENCIES

Department of Treasury and Finance

September 1997

Any enquiries can be directed to:

Department of Treasury and Finance
GPO Box 147B
HOBART TAS 7001

Telephone: (03) 6233 3100
Facsimile: (03) 6223 2755
E-mail: reception@tres.tas.gov.au

ISBN 0-7246-3965-9

Contents

1: Introduction

Purpose of the Guidelines

These Guidelines have been prepared to assist Agencies in the implementation of the Full Cost Attribution (FCA) principles which are outlined in the *Application of Competitive Neutrality Principles under National Competition Policy*, published in June 1996 (the Application Statement). The Guidelines focus on the steps that Agencies need to follow to ensure that they are complying with the FCA model under the National Competition Policy (NCP).

The application of NCP competitive neutrality principles, as outlined in the Application Statement, requires Agencies to identify and place their significant business activities (SBAs) on a competitively neutral basis so that they recognise all the costs which would normally be borne by the private sector.

The Government has adopted two approaches to achieving competitive neutrality for government business activities, being:

- the corporatisation model, which applies to Government Business Enterprises (GBEs) and is beyond the scope of this paper; and

- the full cost attribution model, which applies to Agencies and is the subject of this paper.

The Guidelines are neither definitive, all encompassing nor prescriptive. Rather, they are illustrative, such that Agencies are able to apply the concepts to their individual circumstances.

It is recognised that the process of fully attributing costs involves some element of estimation (eg. in the approach recommended for the calculation of income tax). However, it should also be understood that at times there may need to be a trade-off between accuracy and the cost of implementation. In some instances, the recommended approach may have some shortcomings in reflecting what may otherwise be the true cost, but the method adopted may be simple and easier to implement, with a corresponding saving in resources invested in the calculation.

The Guidelines are not intended to reiterate papers and guidelines which have already been issued by Treasury on similar or related matters and should be read in conjunction with:

- *Application of the Competitive Neutrality Principles under National Competition Policy,* issued by the Government of Tasmania in June 1996;

- *Guidelines for the Costing of Outputs*, issued by the Department of Treasury and Finance, Tasmania in June 1996;

- *Accrual Accounting Manual*, issued by the Department of Treasury and Finance, Tasmania in December 1995;

- *National Competition Policy - Guidelines for Considering the Public Benefit under the National Competition Policy*, issued by the Department of Treasury and Finance in March 1997; and

- *National Competition Policy - Competitive Neutrality Principles Complaints Mechanism Statement of Processes*, to be issued by the Department of Treasury and Finance (currently in draft format).

Other documentation to which reference should be made are detailed in Appendix 1.

Costing versus Pricing

FCA does not impose pricing obligations on Agencies but assists in the recognition of what is the fully attributed cost of an activity or function so that pricing decisions can be made in light of the full facts. Pricing decisions are dependent on a number of managerial assessments regarding the desired profit margin or rate of return which is required from a contract and prevailing market prices as well as the full cost of performing the activity or function or providing the service.

Case Study

To assist with the comprehension of the principles contained in these Guidelines, a case study has been included to demonstrate their application. The case study commences on page 19 of this paper.

Future Reviews of the Guidelines

Costing is an evolving process. Treasury will continue to review these Guidelines and, as issues relating to aspects of the implementation arise (eg. if it is decided to introduce capital charging), the Guidelines will be updated to reflect such developments.

2: National Competition Policy Requirements

Terms of NCP

At the April 1995 Council of Australian Governments (COAG) meeting, all Australian Heads of Government signed a number of Agreements designed to boost the competitiveness and growth prospects of the national economy. The Agreements give effect to many of the recommendations contained in the Report into National Competition Policy (the Hilmer Report) which was released in August 1993.

One of the NCP Agreements, the "Competition Principles Agreement" (CPA), requires:

- consideration to be given to the introduction of a regime to oversee prices charged by government businesses that are monopoly, or near monopoly, suppliers of goods or services;
- government businesses to operate within a framework that ensures that they do not enjoy any net competitive advantage simply as a result of their public ownership (competitive neutrality);
- an independent review to be undertaken before either privatising, or introducing competition to, a traditional Government monopoly;
- the review and, where the Government considers it appropriate, the reform of all legislation that restricts competition by the year 2000; and
- consideration to be given to introducing a legislated right for third parties to negotiate access to essential infrastructure facilities.

Competitive Neutrality Principles

The competitive neutrality principles under the CPA relate to removing any advantages a government business might otherwise enjoy as a result of its government ownership and any disadvantages which similarly may be imposed. The objective of the competitive neutrality principles is the elimination of resource allocation distortions arising out of public ownership of entities engaged in Significant Business Activities (SBAs).

Presently, there is a range of potential advantages and disadvantages that can arise from public ownership. These include:

Potential Advantages

- Exemptions from Commonwealth, State and Local taxes;
- No requirement to return a profit, a return on investments or interest on borrowings;
- Tied clients and the opportunity to cross-subsidise commercial operations from Government funded departmental activities;
- Exemptions from various Commonwealth and State legislation applicable to private sector equivalent entities;
- Access to various corporate overheads free of charge or at reduced rates, including office accommodation, payroll services, human resource services, and marketing and information technology services; and
- Cash flow advantages through budget arrangements which give Agencies access to funds at the start of the financial year.

Potential Disadvantages

- Difficulty in accessing taxation benefits of depreciation, investment allowances and other deductions (eg. through the transfer of taxation losses);
- Public sector award conditions and higher public sector superannuation contributions;
- Lower degree of managerial autonomy, due to the requirement to comply with Ministerial directives;
- Higher accountability costs given the public sector's reporting and regulatory requirements;
- Lack of flexibility in reducing or restructuring corporate overheads;
- Constitutional and legal constraints (eg. being subject to Freedom of Information, Ombudsman legislation and Treasurer's Instructions); and
- Requirement to undertake non-commercial activities.

Application of the Competitive Neutrality Principles

The Application Statement contains a timetable and policy guidelines for the implementation of the competitive neutrality principles within Tasmania.

There are two separate models of competitive neutrality, referred to as the "corporatisation" model and the "full cost attribution" model The application of the full cost attribution model is the focus of this paper and applies to Agencies undertaking SBAs. Reference should be made to the Application Statement for information regarding the corporatisation model, which applies to GBEs.

The responsibility for implementing the competitive neutrality principles lies with Agencies. The Application Statement required each Agency to have identified its SBAs by 30 June 1997 and to provide the Treasury with a statement on the application of the competitive neutrality principles to the SBAs, including an implementation timetable. Agencies are thereafter required to report to the Treasury at six monthly intervals on progress in implementing the competitive neutrality principles.

Compliance by Agencies in the implementation of the competitive neutrality principles is important to the Government's overall effort of implementing the National Competition Policy. The Government is required to report annually to the National Competition Council on its progress in implementing the competitive neutrality principles. Satisfactory progress in fulfilling the Government's competitive neutrality commitment is an important component of the Government's overall performance on National Competition Policy, and influences the assessment made by the National Competition Council's recommendation regarding the payment or otherwise of special financial grants from the Commonwealth to the State.

Defining "Significant Business Activity"

The competitive neutrality principles apply only to those business activities of an Agency which are "significant".

Tasmanian Agencies provide a great number and variety of goods and services, including:

- health services for public and private patients;
- primary, secondary and post secondary education;
- land valuation services;
- mapping and surveying services;
- legal services, both criminal and civil;

- police and justice services;
- prison services;
- quarantine services; and
- parks and wildlife services.

Tasmania has adopted a broad definition of business activity, requiring only that an Agency produce goods and/or services in an actual, or potentially, competitive market.

Certain activities are excluded from this definition:

- isolated and one-off transactions are not business activities. Business activities must involve repetition and regularity and be conducted in a business like manner;
- regulatory or policy functions are not business activities and neither is the imposition of fees and charges associated with performing such functions;
- taxing and licensing activities excluded under Part IV of the Commonwealth Trade Practices Act; and
- services provided and used solely by State government departments, whether or not under a tied contract arrangement, will not be subject to the competitive neutrality principles agreed under the CPA.

Whether a business activity is 'significant' will depend upon a number of factors, the most important of which is the impact of the activity on the relevant market. Financial size must also be considered. Table 2 in the Application Statement lists some potential SBAs undertaken by Agencies.

Complaints Mechanism

The Government Prices Oversight Commission (GPOC) is responsible for overseeing the review of complaints against the application of the competitive neutrality principles within State and Local Government.

In accordance with the *Application of the Competitive Neutrality Principles under National Competition Policy* and the *National Competition Policy - Competitive Neutrality Principles Complaints Mechanism Statement of Processes* papers, GPOC will:

- only consider complaints by a person or business adversely affected by the failure to comply with the *Application of the Competitive Neutrality Principles under National Competition Policy* paper and any associated implementation guidelines;

- only consider complaints after the Agency, against which the complaint is made, has had the opportunity to review its actions;
- report on its findings jointly to the Minister for Finance and the Portfolio Minister; and

- make its recommendations public in an annual report.

Links with Other Reforms

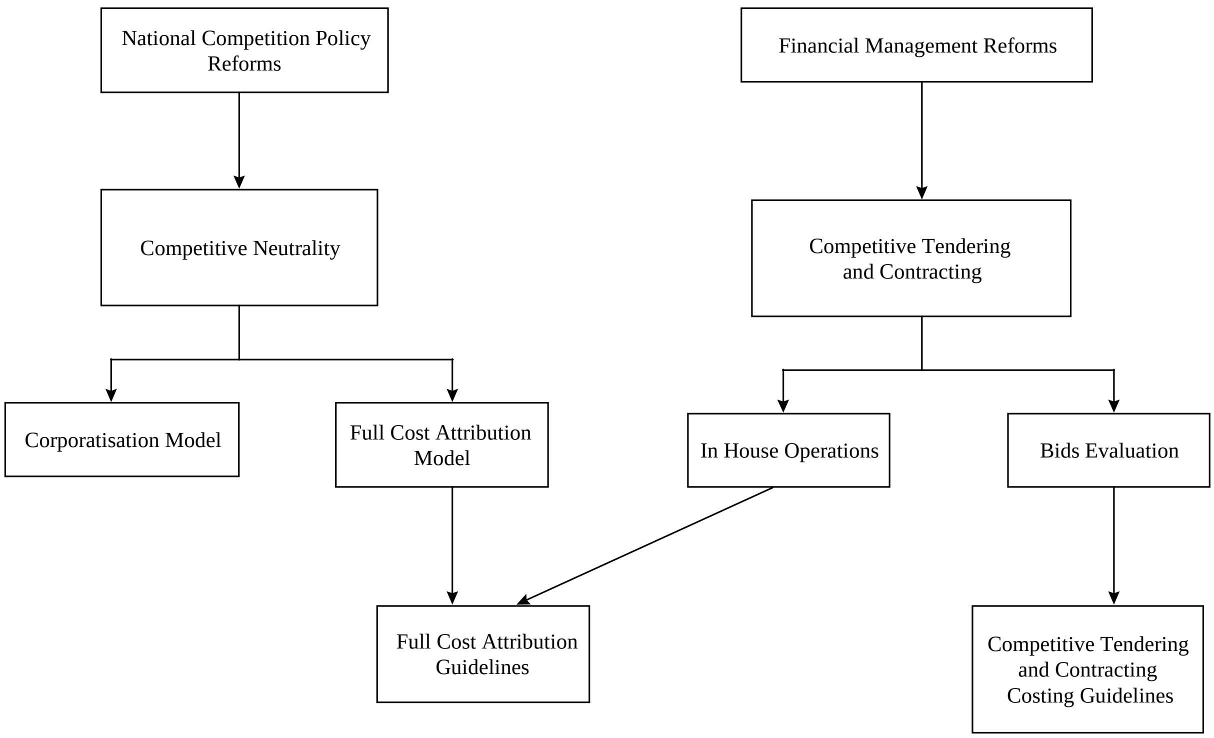
The implementation of accrual accounting will assist in the application of the FCA model. This reform will also enable the realisation of the management benefits provided by accrual information and will support a number of other financial management reform initiatives, including:

- the Outputs methodology;

- strategic asset management; and

- competitive tendering and contracting.

The following diagram illustrates the relationship between National Competition Policy reforms and Tasmania's Financial Management reforms.



3: Background to Costing

Pre-Requisites for Full Cost Attribution

The availability of accurate and comprehensive financial information is an essential pre-requisite for the successful implementation of the FCA model.

In this regard, the introduction of accrual reporting and accounting is a key component of the Government's financial management reform strategy, and its implementation has been integrated with the total framework of financial management reform.

The implementation is being undertaken in three stages, involving the introduction of accrual reporting and accounting for all departments over the three year period to 1998-99:

- introduction of accrual reporting by 30 June 1997;
- introduction of accrual accounting by 30 June 1998; and
- introduction of accrual-based financial management by 30 June 1999.

While the capacity of Agencies to meet the accrual reporting requirement was independent of whether accounting records were kept on an accrual basis, Agencies have implemented their own financial management information systems and should be working towards a deadline of 30 June 1998 for the implementation of systems which will allow accrual accounting.

While Agency financial management systems must satisfy accrual accounting requirements, they may not initially provide the detailed dissection of expenditure required for FCA. A review of the ability of the accounting system of each Agency to recognise the detailed dissection for FCA will need to be undertaken to determine the extent to which costs can be attributed to particular activities before a decision is made to use a supplementary costing system.

Accurate and consistent costing permits more informed price setting, the calculation of fair internal transfer prices and simplifies any future competitive tendering and contracting decisions. For the full cost attribution model to be effective, the accounting system adopted by an Agency:

- must be based upon accrual accounting, which greatly improves the ability to properly cost activities;
- should reflect valuations of specific assets used at the SBA level ie. provide for a factor representing the use of assets at the SBA level;
- should enable compliance with Australian Accounting Standard AAS 29 - "Financial Reporting by Government Departments" and other generally

accepted accounting principles in the preparation of the financial statements; and

- should enable transparency of information, such that costing information at SBA level is capable of being linked to published financial statements.

"Ringfencing" the Significant Business Activities

An effective form of organisational separation, or "ringfencing", is central to maintaining confidence in the legitimacy of FCA. This can be achieved by:

- separating the SBA to be costed from all aspects of service regulation and specification;

- introducing a degree of commercial autonomy to the SBA, including the discipline of a requirement to cover costs and return an appropriate profit; and

- enhancing the transparency of the relationship between the SBA and the rest of the Agency's activities by requiring explicit identification and funding of any non-commercial objectives.

Where an Agency competes with the private sector, the competitive neutrality principles require that any subsidies provided by the Agency to the SBA are transparent in the Agency's decision making process.

Whilst it is ideal to separate a SBA structurally to establish its real cost, in some instances the degree of separation may be limited to merely an accounting separation to enable the financial relationships between the various activities of the Agency to become more transparent.

Agencies should separate policy and regulatory activity from operational or service delivery activities to ensure there is no conflict of interest or that business activities do not enjoy any regulatory advantage over their private sector competitors.

The Costing Concept

Costing is the process of gathering and reporting information about the costs of providing an activity. There are several costing methodologies which will provide a cost for undertaking an activity. Which methodology is the most appropriate to use will vary depending on the circumstances.

The methodology to be adopted by Agencies as the basis for FCA, unless otherwise approved and after consultation with Treasury, is Outputs Costing, as per the *Guidelines for the Costing of Outputs* paper.

4: Full Cost Attribution (FCA)

Introduction

The relevant cost concept to be used in establishing in-house cost benchmarks is full cost attribution. The application of full cost attribution results in a cost that reflects direct costs, overheads and competitive neutrality costs.

Fully Attributed Cost

The fully attributed cost of a SBA is the value of all resources consumed by an Agency in the provision of that SBA (ie. full cost) plus competitive neutrality costs (ie. imputed costs).

Fully attributed cost can conveniently be described as consisting of:

i) operating costs (direct and indirect) per unit or period; ***plus***

ii) capital costs (direct and indirect) per similar unit or period; ***plus***

iii) competitive neutrality costs per similar unit or period.

i) Operating Costs

Operating costs need to reflect both direct and indirect costs. Direct costs are those costs which are directly related to a SBA and include direct wages and materials where they are used solely for the purposes of the SBA concerned. Costs which apply to a number of SBAs and require some form of allocation are referred to as indirect costs (eg. executive overheads may be spread across a number of SBAs). Indirect costs also relate to the internal area of organisational support supplied by other areas of an Agency to enable the delivery of goods and/or services by the SBA. For further explanation of direct and indirect costs, refer to Appendix 2 and the *Guidelines for the Costing of Outputs* paper.

ii) Capital Costs

The use of non-current assets involves two aspects of cost:

- costs associated with the use, consumption or dissipation of the asset over its useful life. In accounting terms, this is referred to as depreciation, in respect of physical assets and amortisation, in respect of intangible assets; and

- the notional opportunity cost of capital, (ie. the cost associated with the fact that capital is tied up in the non-current asset and is not able to be utilised elsewhere).

Assets Subject to Lease Arrangements

Operating Leases

Where Agency assets used in a SBA are subject to an operating lease via a non-related third party under an arms length transaction, then the cost of the lease payments is to be included in the FCA of the SBA. No provision or adjustment for the opportunity cost of capital will be required for these assets as the assumption is that the third party is already making a provision for a rate of return on the assets in the lease charge.

Finance Leases

Agencies cannot enter into finance leases in their own name. However, if as a result of a past arrangement, an asset used in a SBA was acquired by the Crown by way of a finance lease, then the acquisition is, in substance, borrowing. As such, the lease payments comprise a component for interest and a component for the reduction in the lease liability. As the interest component is determined as a result of an arms length transaction, it is reasonable to assume that the lessor is effectively making its required rate of return on its capital. Where the Agency is responsible for the lease payments the Agency should not include an opportunity cost of capital for these assets (see opportunity cost of capital calculation below).

Internal Charging

Where assets are subject to internal charging between business units of an Agency, ie. not subject to an arms length transaction, the internal hire rate is not to be used as an equivalent operating lease charge. Rather, an actual depreciation and opportunity cost of capital will need to be calculated on the same basis as Agency assets.

Agency Assets

Where assets are controlled by an Agency, the Agency is not responsible for funding the lease payments and/or any other associated costs of the assets used for the purposes of the SBA, recognition of the capital cost of the assets is achieved by including a component for depreciation of the assets in the full cost. Depreciation, based on the written down current cost of the assets, should be used when calculating the full cost of the SBA.

Opportunity Cost of Capital

The opportunity cost of capital involves recognition of the fact that resources tied up in the assets could have been utilised elsewhere to generate returns. Calculation of the opportunity cost of capital should be based on the written down current cost of the non-current assets and working capital used by the SBA, multiplied by a predetermined rate.

Where the Agency is responsible for lease payments to finance the purchase of an asset, the interest component of the payments should be deducted before arriving at the opportunity cost of capital, if it has already been included in operating costs. This is to avoid any double counting.

The rates for calculating the opportunity cost of capital should be discussed with officers from the Commercialisation and Financing Branch of Treasury on a periodic basis as the rates may be subject to adjustment from time to time, based on prevailing market conditions. Separate rates will not be determined for different types or classes of assets utilised within the one SBA. Rather, the rate determined will be one which reflects the total risk involved in the overall SBA.

In the event that actual capital charging is introduced by the Government and imposed on Agencies, such that they are charged for the use of assets controlled by them but purchased using central Government funds, then for FCA purposes the actual capital charge imposed will be used, rather than the notional capital charge calculation as detailed here. That is, there will not be a duplication of charging for capital.

iii) Competitive Neutrality Costs

In addition to including both operating and capital direct and indirect costs, competitive neutrality principles require that, when establishing FCA in SBAs where taxes, guarantee fees and regulations are currently not imposed, an equivalent component must be included in the costs. This will ensure that there is full attribution for these costs in establishing prices charged for goods and services. It should be noted, however, that these costs do not necessarily have to actually be incurred. That is, there is no requirement for taxes and guarantee fees to actually be paid and are treated as notional costs for FCA purposes.

Taxation

Whilst allowing for a component of taxation costs in FCA of a SBA is important, and represents a part of the overall objective in ensuring competitive neutrality, it should be noted that tax based adjustments are just a part of the total cost. Therefore, to the extent that taxation costs are relevant, identifiable and quantifiable, they should be included in the cost of a SBA.

Examples of taxes and other legislative employment obligations which apply in the private sector and which should be considered when undertaking FCA are as follows:

- Income Tax
- Fringe Benefits Tax
- Stamp Duty
- Debits Tax
- Council Rates
- Wholesale Sales Tax
- Payroll Tax
- Financial Institutions Duty (FID)
- Land Tax

Income Tax

As Agencies are exempt from the application of the *Income Tax Assessment Act 1936* (Cth) (ITAA), Agencies do not have in place any systems or processes to calculate income tax. However, under the competitive neutrality principles, Agencies are required to factor income tax into the costs of their SBAs.

For FCA purposes, a simple approach regarding income tax is preferred, whereby taxation is calculated using the "Accounting Profit" model. Under this model, tax is the SBA's accounting profit multiplied by the current company tax rate.

Whilst it is recognised that the Accounting Profit Model involves some element of estimation and in some circumstances may differ from what might otherwise be costed if a more sophisticated approach is used, it should be understood that there is a trade-off between accuracy and the cost of implementation. The recommended approach may have some shortcomings in reflecting what may otherwise be the true cost. However, the model adopted is more simple to implement, with a corresponding saving in resources invested in its calculation.

Whilst use of the Accounting Profit Model is preferred under these Guidelines, Agencies may adopt another model of calculation if approval by Treasury is received prior to implementation.

Wholesale Sales Tax

There are a number of alternative models for implementing a wholesale sales tax equivalent (WSTE) regime, but it is recommended that the Multiple Average Sales Tax Equivalent Rate Model, be adopted. This model is applied to the State's Government Business Enterprises. The Model is relatively simple to introduce and once established has very low administrative costs. Alternative models for calculating wholesale sales tax equivalent have high administration costs which may place Agencies at a competitive disadvantage to private sector competitors.

To introduce the Multiple Average Sales Tax Equivalent Model, Agencies must undertake a detailed review of purchases by the SBA to determine the amount and rates of sales tax which would have been paid, had the Agency have been subject to Commonwealth wholesale sales tax. An average rate, or rates, of sales tax is calculated from the sampling process which is then applied to all future purchases by the SBA, until such time as the rates are reviewed (the maximum period before a review must be undertaken is three years).

For a detailed overview of the WSTE regime, reference should be made to the following papers:

- *Wholesale Sales Tax Equivalent Regime - Discussion Paper on Framework and Methodology;* and
- *Wholesale Sales Tax Equivalence Regime - Guidelines on the Conduct of Sampling by Government Business Enterprises.*

The Treasury will provide advice to Agencies on the implementation of the WSTE regime.

Fringe Benefits Tax

Due to the method of calculating fringe benefits tax currently in use in Australia, ie. applying a grossing up factor and the subsequent fringe benefits tax paid being an eligible deduction in the tax return for a tax paying entity, Government bodies not falling under a Commonwealth tax system or State tax equivalent regime incur a disadvantage because they are unable to utilise the tax deduction available to private enterprise. Accordingly, there is an additional cost for government as a result of the grossing up of benefits.

As with all disadvantages imposed on government as a result of its status of being Government, the impact of additional costs borne should be removed from the calculation of the fully attributed cost of a SBA. Special recognition of factors such as the additional burden of fringe benefits tax, higher costs associated with defined benefit superannuation schemes etc should all be removed, or alternatively, offset against other advantages, such that the result is to arrive at a net position.

Payroll Tax

Whilst Agencies, in total, pay payroll tax, SBAs may not be individually attributed with the cost. For FCA of a SBA, allowance for an amount relating to payroll tax must be included where the payroll costs of the SBA exceeds the payroll tax threshold amount. When calculating the payroll costs, Agencies should include any support staff not directly part of the SBA, but still providing a service to the SBA.

Stamp Duty

When costing a SBA, Agencies need to allow a component for stamp duty where transactions undertaken by a SBA would ordinarily attract a stamp duty liability. Such transactions include purchase or rental of real estate, leasing and contractual arrangements.

Council Rates and Land Tax

Whilst Agencies may, in total, pay Council rates and land tax for premises or properties controlled by the Agency or related body/organisation, SBAs may not be individually attributed with the cost. To arrive at a fully attributed cost position, allowance needs to be made in the costs of the SBA for the Council rates and land tax which would be charged on the premises/properties utilised by a SBA.

If the Agency is currently renting the premises at which the SBA is undertaken from a non-related third party, it is reasonable to assume that the lessor should be recouping rates and land tax in the commercial rent charged. In this case, no separate adjustment for rates and/or land tax should be necessary.

Financial Institutions Duty (FID), Debits Tax

To the extent that FID and Debits Tax costs are material for a SBA, based on the financial transactions which would be required to underpin such an activity, then allowance should be made for them in the costing exercise. However, as with all costs, materiality should be emphasised rather than simply the process.

Guarantee Fees

Agencies are not permitted to borrow funds in their own right. However, the NCP requires Governments to impose on Agency's SBAs a guarantee fee which is calculated on the difference in interest rate or cost of funds obtained by the SBA and that which would have been obtained if the SBA did not enjoy an implicit or explicit guarantee from Government.

No adjustment for Guarantee Fees is currently required to be made by Agencies as a factor for this is provided for in the notional opportunity cost of capital calculation for Agencies. Similarly, if actual capital charging is implemented at a later date, then it is anticipated that the charge would also capture a component representative of the Guarantee Fee and require no further adjustment.

Transparency of Costs

FCA must be adopted to ensure that an Agency is aware of the fully attributed cost for a SBA and can compare that cost with the cost of alternative suppliers. Any subsidies provided by an Agency to a SBA must be transparent in the Agency's decision making process.

By publishing costs and explicit subsidies in its Annual Report, an Agency also ensures that such costs become transparent to both consumers and taxpayers.

5: The Costing Process

Costing

Once a SBA has been identified, the steps to follow to determine the fully attributed cost should always be the same. Only the type of SBA will change each time, not the steps taken in determining the cost.

This chapter provides an outline of the costing process and does not purport to be a complete guide to costing.

The Costing Process

The general process of costing and cost allocation involves a number of definable steps, as follows:

1. define the SBA for which a cost is required;

2. map the SBA activity flows and identify any sub-activities and cost relationships which are associated with the SBA;

3. select and collect the direct costs that will be traced to the SBA;

4. determine which indirect costs will be allocated to the SBA, including the competitive neutrality costs, and, if there are any with common cost relationships, the groups in which they will be collected to facilitate allocation;

5. establish a cost allocation base for each of the cost groups; and

6. undertake the costing.

Defining the SBA to be Costed

It is essential that a clear and unambiguous definition of the SBA is undertaken before any other steps are undertaken. Without a clear definition of the SBA, it will be difficult to determine its full and accurate cost. A poorly defined SBA will hamper the determination of the true cost relationships of the activity and may result in an arbitrary cost allocation process, possibly causing a distortion in the cost figures.

Defining the SBA may appear relatively simple and straight forward. However, it is important to note that the whole process hinges on the accurate definition and identification of the SBA.

Relating Costs to the Relevant Accounting Period

The way that SBAs are costed is very important. If not done properly, costings may be distorted and decision making by the Agency, correspondingly, then becomes distorted. As discussed above, incorrect definition or costing of SBAs may cause problems, including:

- under funding, following the movement of an incorrectly costed SBA and its associated budget from one Agency to another;

- inappropriate allocation of internal resources; and

- inability to identify correctly opportunities for improved performance and efficiency.

In addition, if costs are not allocated to, or across, the appropriate period or time frame, resultant costs may be higher than they should be (if spread over too short a period or too few a number of activities), or lower than they should be (if not accrued correctly, costs may be included in another period, or not even be recognised as being relevant if the activity process is not adequately mapped out).

Whilst these points need to be taken into consideration when determining costs, it should be remembered that:

- the longer the period being costed, the simpler it should be to identify the relevant costs as they tend to become more direct than indirect;

- indirect costs, whilst requiring allocation to the SBA in question, should be apportioned to the relevant SBA on a basis which is practical, reasonable, rational and internally consistent. The method adopted to estimate indirect costs should be technically appropriate to the circumstances and clearly documented so that the cost data produced can be verified; and

- generally, Agencies should avoid assigning significant resources to the allocation of a small bundle of indirect costs at the expense of other major aspects.

The reference to the allocation of indirect costs should also be interpreted as requiring Agencies to incorporate the calculation and allocation of amounts relating to competitive neutrality costs, as appropriate.

In Summary

When applying these principles, it is important to remember that whatever the purpose of the costing exercise, the approach used and the assumptions made in deriving the costs must be explicitly stated.

Therefore, all costs must be verifiable, that is, capable of being confirmed through independent analysis.

Case Study

Agency XYZ has been reviewing its operations to determine the fully attributed cost of the services currently provided by one of its significant business activities.

Background and Assumptions

The business activity employs 24 full time equivalent staff. Some costs can be directly traced to the activity from the financial system. However, there are a number of costs which the activity shares with other activities, including the Division Executive, Head Office and a range of corporate services (Accounting and Finance, Personnel and Payroll, Information Technology etc.).

For the purposes of this case study, it is assumed that these shared costs ie. indirect costs, have already been allocated on an appropriate basis. The actual process of allocating these costs is not demonstrated in this case study. It is also assumed that there exists sufficient information on the allocation of the common indirect costs in general accounting textbooks and the *Guidelines for the Costing of Outputs*. Accordingly, this information is not duplicated in the case study.

The case study focuses on the less commonly addressed issues associated with competitive neutrality principles. These issues include the calculation of the opportunity cost of capital and competitive neutrality costs.

Whilst the case study utilises a number of rates, eg. on-cost rates, discount rates etc. the rates used throughout the case study are for illustrative purposes only. At all times Agencies need to research the correct rates applicable for them to use and not view the rates used in the case study as the relevant rate to adopt for CTC analysis.

For the purposes of this case study, guarantee fees are not separately identified as it is assumed that they are incorporated in the opportunity cost of capital.

Step 1: Costing the in-house service

In-house fully attributed cost (see Schedule 1)

The in-house fully attributed cost is calculated to gauge a measure of efficiency of operations as compared to external service providers. It comprises the following four components:

a) Direct costs

Direct salary costs are based on the number of full time equivalent staff involved in providing the service. Calculation should be based on the sum of the gross salaries (and related on-costs) of the individuals who provide the service. For the purposes of this example, it is assumed that:

- all employees are full time permanent staff; and
- are contributing members to the defined benefit superannuation fund.

As previously stated, it should be noted that percentages shown for on-costs for this example are indicative only, and Agencies are required to determine appropriate on-cost rates.

Superannuation rates may vary significantly depending on the profile of the work force (eg. full time/part time tenure, length of service and award provisions), while different workers' compensation rates may apply to different Agencies and occupation groups.

Care should be taken regarding the adoption of on-cost factors to ensure that only the component which relates to the current period is captured, and that a rate which may make some provision for costs associated with incidents in previous periods but not recognised in the previous periods, is not included in the calculation of the fully attributed cost. For example, workers' compensation rates may include a component for the cost of claims occurring in this period as well as prior period claims.

Advice on payroll tax calculations and thresholds can be obtained from the Revenue and Gaming Division of Treasury.

For the purposes of this case study it has been assumed that annual leave loading has been annualised into the salary. If annual leave loading is not annualised, it should be included as a separate wage element in the costing exercise.

Other direct (non-salary) costs are those operating costs that can be directly traced to the business activity, such as materials, consultancies and motor vehicle costs.

b) Allocated share of indirect costs

Indirect costs may be allocated to the business activity in a number of different ways. For example, personnel and payroll costs may be allocated on the basis of staff numbers, while rent/accommodation costs may have been allocated on the basis of floor space. Under activity based costing, the aim is to select the most appropriate allocation mechanism to best reflect the actual costs incurred by the activity. (Refer to "*Guidelines for the Costing of Outputs*", issued by the Department of Treasury and Finance for further information regarding allocation methods). For the purposes of this case study, it is assumed that indirect costs have been fully allocated according to appropriate allocation methods.

It is further assumed in this case study that allocated costs from other cost centres includes the written down current cost depreciation of any assets used by those cost centres and, accordingly, no further adjustment for this needs to be made to indirect costs.

c) Notional cost of free services received

The Agency made enquires in the market place to establish a reasonable estimate of the cost of equivalent services to those provided free of charge to the business activity by other government and non-government agencies (eg. tenancy services provided by Government Building Services Branch of Treasury).

d) Capital costs

Depreciation is calculated based on the written down current costs of the assets used directly by the activity. The depreciation amounts are calculated in Table 1. The difference between the closing written down current cost and the opening written down current cost in the first year reflects the purchase of assets costing a total of $100 000 at the start of year 1 (ie. at time zero for NPV analysis). The $100 000 was made up of $25 000 for furniture and fittings, $22 000 for office equipment and $53 000 for plant and equipment. It is also assumed there were minor decreases in the replacement cost of the assets each year when they were revalued. (Replacement costs are assumed to have fallen due to advances in technology).

Depreciation rates are again only indicative and Agencies need to refer to:

- *Guidelines for the Recording, Valuation and Reporting of Non-Current Physical Assets in Tasmanian Government Departments,* issued by the Department of Treasury and Finance, Tasmania in June 1995;
- *Treasurer's Instructions* issued by the Department of Treasury and Finance under the *Financial Management and Audit Act 1990.*

Specifically, inner Budget sector Agencies should refer to:

- *Treasurer's Instruction 702: "Financial Statements";*
- *Treasurer's Instruction 901: "Asset Valuations";* and
- Australian Accounting Standard AAS 4 "Depreciation of Non-Current Assets".

Table 1

Depreciation of existing assets used exclusively by this service/activity

Year 1	**Opening written down current cost**	**Purchases**	**Depreciation Rate**	**Depreciation Amount**	**Closing written down current cost**
	$	$	%	$	$
Furniture and fittings	80 000	25 000	15	15 750	89 250
Office equipment	100 000	22 000	25	30 500	91 500
Plant and equipment	150 000	53 000	20	40 600	162 400
Total	330 000	100 000		86 850	343 150

Purchases shown in the above table were made at the start of the first year.

Year 2	**Opening written down current cost[1]**	**Purchases**	**Depreciation Rate**	**Depreciation Amount**	**Closing written down current cost**
	$	$	%	$	$
Furniture and fittings	85 000	-	15	12 750	72 250
Office equipment	88 000	-	25	22 000	66 000
Plant and equipment	162 000	-	20	32 400	129 600
Total	335 000	-		67 150	267 850

Note 1: The opening written down current cost and closing written down current cost from the previous year vary slightly due to minor decreases in the replacement cost of the assets when revalued each year.

Year 3	Opening written down current cost	Purchases	Depreciation Rate	Depreciation Amount	Closing written down current cost
	$	$	%	$	$
Furniture and fittings	70 000	-	15	10 500	59 500
Office equipment	65 000	-	25	16 250	48 750
Plant and equipment	130 000	-	20	26 000	104 000
Total	265 000	-		52 750	212 250

Opportunity cost of capital

Opportunity cost of capital is calculated by applying a required rate of return to the average written down current cost of total non-current assets. For the purposes of this case study the required rate of return is 8 per cent. Note that 8 per cent is an illustrative rate for the purpose of this exercise and that the actual rate will be subject to advice from the Commercialisation and Financing Branch of Treasury.

In Year 1, as shown below, an average total assets of $336 575 is obtained by adding the opening and closing written down current cost ($330 000 + $343 150) and dividing by 2. (Note that in this example the use of average total assets understates the opportunity cost of capital in Year 1, because all new assets were assumed to be acquired at the start of Year 1. It would be more common for assets to be acquired throughout the year, in which case average total assets would be a better basis for the calculation of opportunity cost of capital).

Year	Rate		Average total assets	Opportunity cost of capital
	%		$	$
Year 1	8	(330 000+343 150)/2	336 575	26 926
Year 2	8	(335 000+267 850)/2	301 425	24 114
Year 3	8	(265 000+212 250)/2	238 625	19 090

Working capital

Opportunity cost of working capital is calculated by applying a required rate of return to the average excess of current assets over current liabilities. Again, for the purposes of this example, an illustrative rate of 8 per cent has been used. The average working capital is assumed to be $30 000 for the three (3) years. In calculating the dollar amount of average working capital, Agencies would need to prepare a balance sheet for the activity under consideration.

Year	Rate	Average working capital **	Opportunity cost of working capital
	%	$	$
Year 1	8	30 000	2 400
Year 2	8	30 000	2 400
Year 3	8	30 000	2 400

[****** Assuming average working capital (current assets less current liabilities) remains at $30 000 for the three years].

Competitive neutrality adjustments

These adjustments are required in accordance with NCP Competitive neutrality principles statements issued by the State Government. Where Agencies are exempt from taxes and charges ordinarily levied on private sector providers, the notional equivalent cost of the exempt taxes and other charges should be added to the fully attributed in-house cost.

Schedule 1 - In-house fully attributed cost

	Rate	Year 1	Year 2	Year 3
Direct costs		$	$	$
Direct labour		720 000	720 000	720 000
Overtime		6 000	6 000	6 000
On-costs	**Rate**			
Accruing long service leave	2.50%	18 000	18 000	18 000
Fringe benefits tax paid		6 000	6 000	6 000
Payroll tax	7.00%	50 820	50 820	50 820
Superannuation	11.00%	79 860	79 860	79 860
Workers' compensation	4.50%	32 670	32 670	32 670
Cleaning		5 600	5 600	5 600
Consultancies		25 000	25 000	25 000
Information Technology charges		2 500	2 500	2 500
Maintenance - office equipment		4 700	4 700	4 700
Materials		15 000	15 000	15 000
Motor vehicle costs		4 000	4 000	4 000
Power		2 300	2 300	2 300
Professional development/training		5 000	5 000	5 000
Rent (accommodation)		13 500	13 500	13 500
Stationery, postage		12 000	12 000	12 000
Telephone		1 800	1 800	1 800
Travel		8 000	8 000	8 000
Allocated share of indirect costs (overheads)				
(assuming wdcc depreciation of shared assets is included)				
Accounting and finance services		2 400	2 400	2 400
Cleaning		3 500	3 500	3 500
Division executive and related staff costs		26 400	26 400	26 400
Head office overheads		6 600	6 600	6 600
Information Technology services		35 000	35 000	35 000
Personnel and payroll services		18 000	18 000	18 000
Rent/accommodation		4 000	4 000	4 000
Other corporate overheads (eg. library, security, interest etc.)		6 000	6 000	6 000
Land and local govt. taxes		1 100	1 100	1 100
Notional cost of free services received				
Solicitor General services		2 100	2 100	2 100
Tenancy services		2 000	2 000	2 000
Capital costs				
Depreciation		86 850	67 150	52 750
Opportunity cost of capital		26 926	24 114	19 090
Opportunity cost of working capital		2 400	2 400	2 400
+ or - Competitive neutrality adjustments				
FID, debits tax and stamp duty		800	800	800
Sales tax		8 000	8 000	8 000
Total in-house fully attributed cost		**1 244 826**	**1 222 314**	**1 202 890**

Appendix 1: Additional references

Additional references relating to this paper include the following:

- *Wholesale Sales Tax Equivalent Regime - Discussion Paper on Framework and Methodology,* issued by Department of Treasury and Finance, Tasmania and Arthur Andersen, January 1995;

- *Wholesale Sales Tax Equivalence Regime - Guidelines on the Conduct of Sampling by Government Business Enterprises*, issued by Department of Treasury and Finance, Tasmania, April 1995;

- *Guidelines for the Recording, Valuation and Reporting of Non-Current Physical Assets in Tasmanian Government Departments,* issued by the Department of Treasury and Finance, Tasmania in June 1995;

- *Treasurer's Instructions* issued by the Department of Treasury and Finance under the *Financial Management and Audit Act 1990*; and

- *The Application of Competitive Neutrality Principles to the State Government Sector*, issued by the Department of Treasury and Finance, Tasmania in July 1996.

Appendix 2: Costs Defined

Direct Costs

Direct costs relate to the actual provision of services to a client, regardless of whether the client is internal or external. Direct costs include, but are not limited to, direct salaries and wages, associated salary oncosts, dedicated materials and equipment.

A Direct cost, as the name implies is able to be allocated to an activity based on its direct correlation to the activity.

Indirect Costs

Indirect costs relate to the internal areas of organisational support required to enable the organisation to deliver services to the community efficiently and effectively.

It is in the area of indirect costs that the decision as to whether particular costs should be included in an activity based costing allocation calculation or not becomes clouded. An Agency's indirect costs might include some or all of the following, though, once again this list is not exhaustive:

- general administration
- promotion
- debt collection
- reception
- leasing
- training
- electricity
- cleaning
- payroll
- records
- maintenance
- insurance
- information technology

Indirect costs are not able to be allocated as easily as direct costs but must be allocated based on some logical criteria. Some examples of bases of allocation of indirect costs include labour hours, number of full time equivalents, and square metres of space occupied. For further suggestions regarding the basis of allocation of indirect costs, please refer to the *Guidelines for the Costing of Outputs* document, prepared by Treasury. The advantages and disadvantages of the various methods of allocation are also discussed in this document. For further examples of direct and indirect costs, and how the concepts relate to each other to arrive at the fully attributed cost, refer to Attachments 1 and 2.

Attachment 1

Type of Costs included for Full Cost Attribution

Possible Direct Costs

- Staffing costs (including oncosts such as training and travel)
  - Base wage or salary
  - Shift Loading
  - Superannuation
  - Other allowances (eg on-call allowance)
  - Uniforms
  - Protective Clothing
  - Workers Compensation
  - Insurance Premium
  - Housing
  - Office Accommodation
  - Equipment
  - Other Office Consumables
  - Overtime
  - Leave Loading
  - Retirement/Severance benefits
  - Travel Expenses
  - Training
  - Payroll Tax
  - Fringe Benefits Tax
  - Air Conditioning/water subsidies
  - Power
  - Stationery
- Consumable Supplies
- Office Equipment
- Maintenance
- Depreciation
- Interest

Possible Indirect Costs

- Includes Corporate Services Costs

Capital Costs

- Opportunity Cost of Capital

Taxation

- State Government
  - Income Tax Equivalent
  - Wholesale Sales Tax Equivalent
  - Capital Gains Tax Equivalent
  - Land tax
  - FID
  - Debits Tax
  - Stamp Duties
  - Motor Tax
  - Franchise & Licence Fees
  - Guarantee Fees
- Local Government
  - Rates

Attachment 2

Summary of various types of cost:

Direct Operating Costs	$
Direct Labour	xxxxxx
Direct Materials, Services and Accommodation	xxxxxx
Indirect Operating Costs	
Indirect Labour	xxxxxx
Indirect Materials and Services	xxxxxx
Capital Costs	
Opportunity Cost of Capital	xxxxxx
Services and Resources received "free of charge"	xxxxxx
Competitive Neutrality Costs	xxxxxx

Fully Attributed Cost	xxxxxxx
	======

Appendix 3: Glossary of Terms

Terms used within this Guideline have the following meaning:

'business activity' means an activity undertaken by a Government agency to produce goods and/or services for use in an actually or potentially competitive market;

'competitive neutrality principles' means the principles stated in the CPA that require Government businesses to operate without any net competitive advantage simply as a result of their public ownership;

'CPA' means the Competition Principles Agreement and is one of the Intergovernmental Agreements relating to NCP;

'FCA' means Full Cost Attribution;

'GBE' means a statutory authority included in Schedule 1 of the GBE Act;

'GBE Act" means the *Government Business Enterprises Act 1995*;

'Government agency' includes any Government entity which is not a PTE, PFE or GBE;

'GPOC' means the Government Prices Oversight Commission established by the *Government Prices Oversight Act 1995*;

'Guide" means *Guide to Implementing Full Cost Attribution Principles for Government Agencies*;

'NCP' means National Competition Policy;

'PFE' means an enterprise classified as a Public Financial Enterprise under the Australian Bureau of Statistics Government Financial Statistics Classification;

'PTE' means an enterprise classified as a Public Trading Enterprise under the Australian Bureau of Statistics Government Financial Statistics Classification;

'SBA' means significant business activity;

'Treasury' means the Department of Treasury and Finance, Tasmania.