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This document was created in response to a Freedom of Information request made to CSIRO.

FOI Number: FOI2011/48

Date: 12 December 2011

Request: Copy of the IRS Overhead Costing Review undertaken by CSIRO and PWC

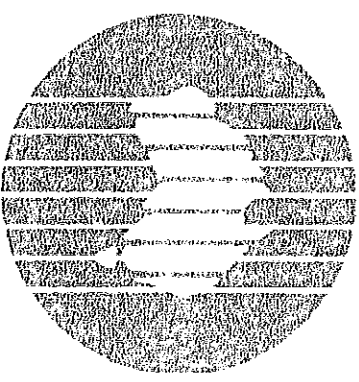
Document: CSIRO IRS Overhead Costing Review - Reissued

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**CSIRO**  
**IRS Overhead**  
**Costing Review**

Reissued

17 September 2008



**CSIRO**

PRICewaterhouseCOOPERS 

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# 1 Executive summary

## Introduction

The Commonwealth Scientific and Industrial Research Organisation (CSIRO), is Australia's national science agency and one of the largest and most diverse research agencies in the world.

The Industrial Research Services (IRS) is one of the key Themes in the CSIRO Materials Science and Engineering (CMSE) division. The CMSE division is focused on delivering outcomes for the Australian manufacturing sector. IRS provides technical services including testing and consulting services to the Australian construction products and services industry. IRS competes with other publicly and privately funded bodies which provide competitive offerings against a range of CMSE IRS activities.

CSIRO are investigating whether a stand-alone overhead structure can be applied to IRS and if this meets the Australian Government's Competitive Neutrality Guidelines and the Competitive Neutrality Guidelines.

## Summary

If IRS were to operate as a stand-alone or spin-off model it is likely from the analysis in Sections 5,6 and 7 that the cost of overheads under the spin-off or stand-alone models would be equivalent or less than under the CSIRO Common Costing Framework depending on the assumptions, particularly those regarding market rentals. Prima facie, however, reducing IRS's overheads with it remaining in CSIRO would mean an increase in the overheads charged to other Themes within CMSE and CMSE may operate at a deficit for 2008-09 as Enterprise overhead rates for CSIRO have been set. This may also cause CSIRO to breach the competitive neutrality guidelines.

Competitive Neutrality would apply to both models given IRS would be conducting a business and this business would be significant under both models. However, with the move to a stand-alone or spin-off model a re-affirmation of the key questions as to the application of Competitive Neutrality should be undertaken.

The cost recovery guidelines do not apply given Competitive Neutrality applies, and would only need to be considered if this were to not be the case.

## 2 Objective

CSIRO are investigating whether a stand-alone overhead structure can be applied to IRS and if this meets the Competitive Neutrality and Cost Recovery Guidelines. The objective of the review was to create two indicative IRS's overhead costing models, based on:

1. The methodology used to develop the overhead costing model currently used by CSIRO Publishing; and
2. IRS operating as a stand-alone business.

The review specifically focused on the following:

- Gaining an understanding of the current overhead structure under which IRS operates – the CSIRO Common Costing Framework (CCF)
- Determining indicative overhead costings for IRS:
  - based on the CSIRO stand-alone model; and
  - as though the business was operating on a stand-alone basis, using approximate cost estimates.
- Consideration of Australian Government requirements, including:
  - Competitive Neutrality Guidelines; and
  - Cost Recovery Guidelines.

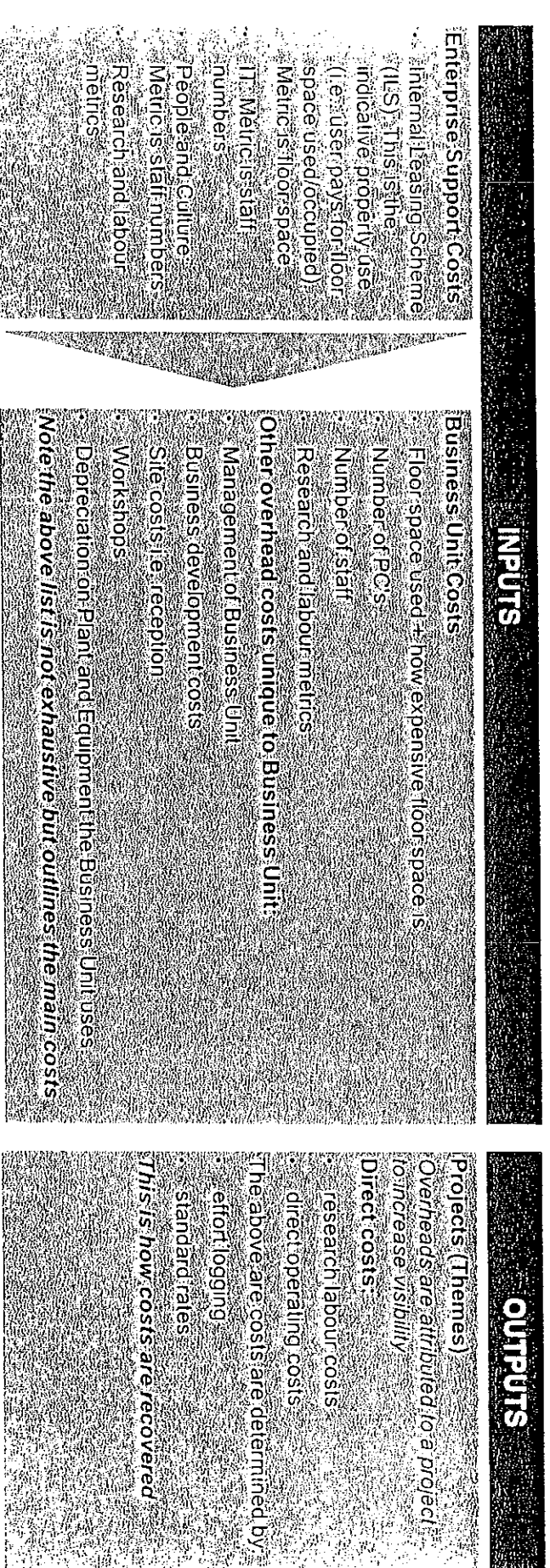
# 3 Approach

The key activities in this review included:

- **Data gathering:** During this stage, existing data and documents were identified in consultation with the relevant stakeholders and sourced. The information gathered at this stage formed the basis of the fieldwork and development of the review criteria.
- **Fieldwork:**
  - **Quantitative and qualitative data analysis:** During this stage of the review, quantitative and qualitative data collected was analysed and stand-alone models developed for IRS based on the CSIRO stand-alone model and as though the business was operating on a stand-alone basis, using approximate cost estimates. This analysis formed the basis of the review.
  - **Modelling:** Developing the stand-alone models for IRS.
  - **Stakeholder consultation:** This stage of the review involved discussions with key CSIRO, IRS and CSIRO Publishing staff to gain an understanding of the Common Costing Framework utilised by CSIRO, the current IRS overhead structure and the CSIRO stand-alone model. Stakeholders consulted are listed below:
    - Publishing: Robert Beltramello, Financial Controller, CSIRO Publishing
    - IRS: Felicity Dillon - Finance Manager, CMSE & Niche Manufacturing
    - CCF: Mark Hardwick, Executive Manager, Financial Services, CSIRO Corporate Finance and Steve Fitzgerald, Common Costing Framework Owner.
- **Reporting**

# 4 Overview of CSIRO Common Costing Framework

CSIRO applies a single costing methodology for all work across the organisation for both internal and external costing purposes. There are 3 tiers to the Common Costing Framework (CCF). The diagram below outlines how it is applied:



## Assumptions:

- No researchers in the Business Units
- The more infrastructure intensive (i.e. floor space used and how expensive the floor space is) increases the cost to the Business Unit
- The more capital intensive a Business Unit is also increases the cost to the Business Unit

## Key points:

- The ratio for CMSE (the CCF Business Unit) applies to all CMSE Themes
- Projects are the investment points which Themes are linked to i.e. IRS is a Theme of CMSE
- The full costs of CMSE are recovered in Projects
- Labour costs are based on grades i.e. rate/hr = labour rate. There is a different OH rate depending on the grades used in each Business Unit
- Performance is measured at the Theme level i.e. profit/(loss)

# 5 Existing CMSE enterprise and divisional overheads

Based on the CCF, the cost structure for CMSE is summarised:

Division Support Costs	
Chief	
Div Mnt	
Research Program Leader	
PA Reception	
OHSE	
HR	
Training	
Image Tech	
Comms	
Recovery of site costs	
Workshops	
Stores	
Site Services	
Canteen	
Relocation	
Library	
IT	
Commercialisation	
BD	
Finance	
Research Admin	
Comcare	
Web Mnt	
Lease	
Build Services	
Material Science Facility	
Materials Characterisation	
ITS	
Depreciation	
Total Division Costs	
Total Enterprise Support Costs	
Total Overhead Costs	37,362,60

OVERHEAD 02



# 6 Existing IRS enterprise and divisional overheads

Based on the CCF, the cost structure for IRS is summarised:

*11. S and D overheads are calculated on actual theme usage rather than headcount*

Divisional Support Costs	
Chief	
Div Mntl	
Research Program Leader	
PA Reception	
OHSE	
HR	
Training	
Image Tech	
Commis	
Recovery of site costs	
Workshops	
Stores	
Site Services	
Canteen	
Relocation	
Library	
IT	
Commercialisation	
BD	
Finance	
Research Admin	
Comcare	
Web Mntl	
Lease	
Build Services	
Material Science Facility	
Materials Characterisation	
LS	
Depreciation	
Total Division Costs	
Total Enterprise Support Costs	
Total Overhead Costs	3,250,560

OVERHEAD 02

# 7 Indicative IRS overheads based on CSIRO standalone alone model

CSIRO Publishing covers all its operating costs - including its attribution of corporate overheads - from external revenue. Publishing receives no allocation of internal revenue. Therefore it was agreed that the amount of corporate overheads payable by Publishing would be based on the costs a comparable business would likely incur rather than being based upon a driver of total revenue.

We have applied a similar standalone model to IRS using the assumptions indicated in the table.

Divisional Support Costs			Enterprise Support Costs		
	Amount (\$,000)	Comment		Amount (\$,000)	Comment
Chief					
Div Mgt					
Research Program Leader					
Patception					
OLISE					
HR					
Training					
Image Tech					
Comms					
Recovery of site costs					
Workshops					
Stores					
Site services					
Cannell					
Relocation					
Library					
IT					
Commercialisation					
BD					
Finance					
Research Admin					
Concave					
Web Mgt					
Lease					
Build Services					
Material Science Facility					
Materials Characterisation					
ILS					
Depreciation					
<b>Total Division Costs</b>	<b>\$978.2</b>				

Deletion

Enterprise Support Costs		
	Amount (\$,000)	Comment
	0708	
<b>Total Enterprise Costs</b>	<b>\$49.1</b>	

Deletion

IRS Totals		
	Amount (\$,000)	Comment
	0708	
<b>Total Division Costs</b>	<b>\$1,027.3</b>	
<b>Total Enterprise Costs</b>	<b>\$1,027.3</b>	

# 8 Indicative IRS overheads based on a spin-off scenario

Based on experience and consultation with industry, the table below outlines an indicative stand-alone overhead cost model (note: as with all other models presented in this report, salaries are excluded from figures listed).

			Enterprise Support Costs	
		Amount (\$,000)	Comment	
Board fees			Assumes 6 board members @ \$10k/yr	
General overhead			Includes costs associated with utilities, travel, security of the building and occupants, cleaning, insurance and the like. Excludes establishment costs as a standalone entity.	
Payroll and recruiting			Includes costs associated with payroll administration and provision of data/recruitment process management. OHS case management, staff performance issues, advice as issues arise. Excludes establishment costs as a standalone entity.	
IT operation costs			Includes costs associated with management of an ICT platform incorporating desktop and server administration, sit and 2nd level helpdesk, phone (including mobiles), system backups, server maintenance and support (including associated peripherals) and local project management, local area network maintenance and support, video and audio requirements (video conferencing), software licensing and support.	
Business development			Includes costs associated with ongoing promotion of the organisation to customers. Excludes establishment costs as a standalone entity.	
Legal advisers			Includes costs associated with standard ongoing compliance and contracting costs. Excludes establishment costs as a standalone entity.	
Finance: standalone accounting and tax			Includes costs associated with financial reporting, budget preparation, cash management, annual financial statement preparation, liaison with external auditors, accounts payable, invoicing and accounts receivable, bank account maintenance and petty cash, month end journals and reconciliations, travel allowance calculation and payment, BAS preparation and submission, FB return, GST and taxation issues. Excludes establishment costs as a standalone entity.	
Administration			Includes costs associated with contract administration, internal and external mail, courier collection and delivery, stores, receiving, banking, stationery, supplies, purchasing, records management and filing, inventory and stocktaking, asset disposal, management and preparation of policy and procedures relating to risk management.	
Rent (ILS)			CSIRO estimate based on market rentals. Note current charges are \$7049. Current ten for North Ryde is \$604.8 with market rental estimate of \$1339pm.	
Depreciation			IRS estimate	
<b>Total Enterprise Costs</b>		<b>\$2,850.5</b>		

Delivered

# 9 Competitive neutrality

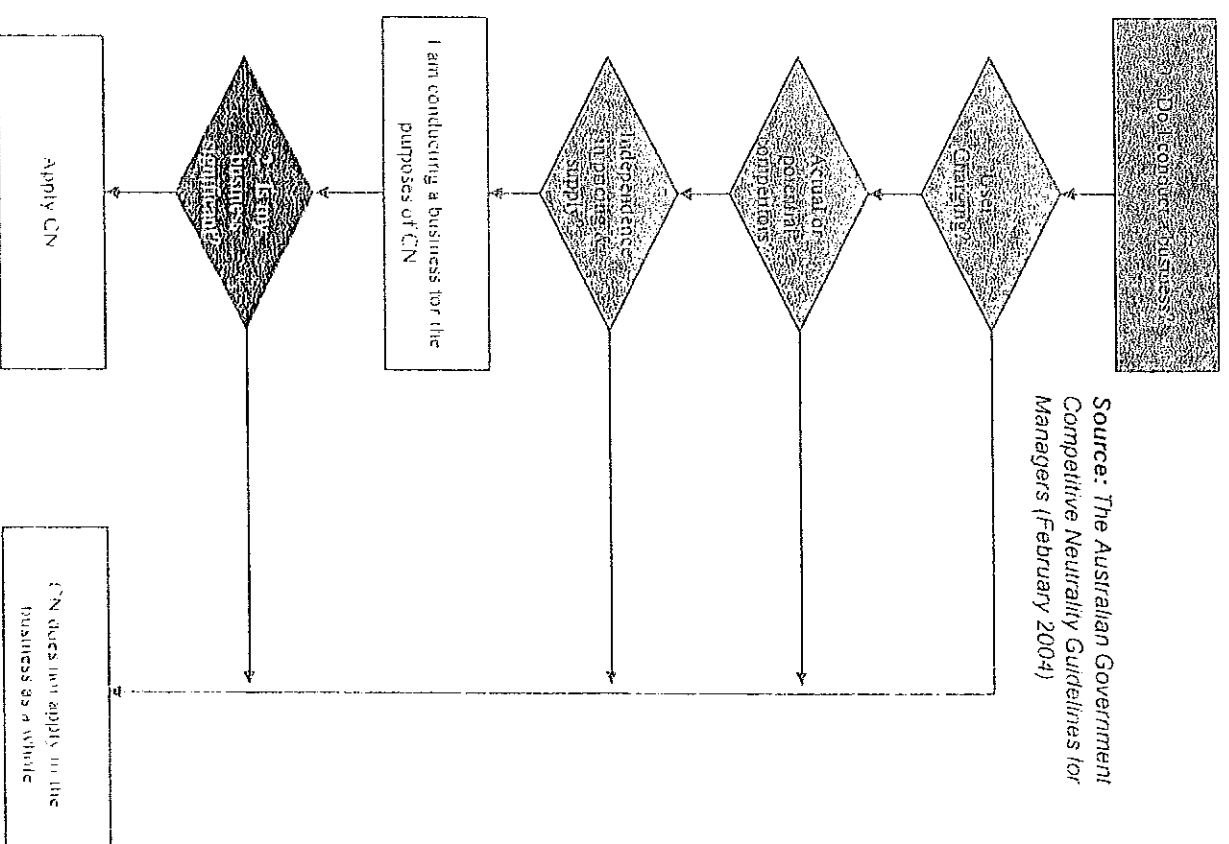
**Background:** The Australian Government Competitive Neutrality Guidelines for Managers (February 2004) applies to significant business activities of entities subject to the Financial Management and Accountability Act 1997 and Commonwealth Authorities and Companies Act 1997 (CAC Act). CSIRO is a CAC Act body. The Australian Government's Competitive Neutrality (CN) policy aims to ensure that significant government businesses do not enjoy competitive advantages over competitors simply by virtue of their public ownership.

## Current Application of Competitive Neutrality in

**IRS:** IRS is currently competing in accordance with CN guidelines under the current model, the Common Costing Framework. If IRS moved to operate under a stand-alone overhead structure CN would still apply. The following key questions were answered to determine the application of CN if IRS moved to a stand-alone model:

1. Am I conducting a business? and
2. Is the business significant? (Cost/benefit test)

The diagram on the right illustrates the steps taken to address the above key questions.



## 9 Competitive neutrality (cont)

### 1. Am I conducting a business?

- There must be charging for goods or services (not necessarily to the final customer)
- There must be an actual or potential competitor (private or public sector)
- Managers of the activity have a degree of independence in relation to the production or supply of the good or service and the price at which it is provided

IF YES can be answered to all of the above questions, then a business is being conducted. The next step is to determine if the business is significant for CN purposes

#### Assessment:

The answer to this question would be YES given the only change to IRS's business would be their move to operating under a stand-alone overhead structure. All three points above would still be met in that IRS provides testing and consulting services to the Australian construction products and services industry alongside other public or private funded bodies for a fee.

### 2. Is my business significant?

Significance is not solely determined on business size or the amount of resources utilised. The following business activities are considered significant for CN purposes:

- all Government Business Enterprises and their subsidiaries
- all Commonwealth Companies
- all Business Units
- baseline costing for activities undertaken for market testing purposes
- public sector bids over \$10 million
- business activities not in these categories that are undertaken within (non-GBE) Prescribed Agencies and Commonwealth Authorities or Departments, with a commercial turnover of at least \$10 million per annum

CN must be applied to significant business activities but only to the extent that the benefits outweigh the costs.

#### Assessment:

The answer to this question would also be YES given that IRS's sole business is to provide testing and consulting services to the Australian construction products and services industry.

An analysis of the industry the IRS operates in was undertaken by Audit to gain a understanding of the size of the market. Given the broad coverage of IRS services, looking at the wider industry was the best approach. This analysis is provided on the next page.

## 9 Competitive neutrality (cont)

### Industry Analysis

#### *Mining and Other Technical Services*

The Mining and Other Technical Services industry was analysed as the closest provider of services which IRS also provides. This Class consists of units mainly engaged in providing scientific and technical services. Included are enterprises mainly engaged in collecting, collating or analysing meteorological information, or in supplying meteorological forecasts, or in providing scientific testing services.

Testing services are provided by this industry for the agricultural sector, the mining sector, the manufacturing sector, and the construction sector. The major segments of this industry in Australia are pollution monitoring services, weather station operations, technical services for the mining sector (particularly testing in relation to exploration activities), forensic science, construction materials testing, and general laboratory operations which may undertake testing for general product safety and quality.

### KEY STATISTICS

Statistic	Value	Unit
Industry Revenue	*4,300.0	Million AUD
Revenue Growth (2006 to 2007)	*12.6	%
Number of Enterprises	*4,700.0	Units
Employment	*30,000.0	Units
Exports	*215.0	Million AUD
Imports	*215.0	Million AUD
Year: 2007	*IBISWorld estimate	

**Note** - Private companies are not included in this analysis as a market segment as the bulk of research conducted privately is the result of basic research conducted by institutions such as the CSIRO or universities. Basic research often unveils the possibility of products or the basis of products which businesses then conduct developmental research on, generating products via which a profit can be generated.

## 9 Competitive neutrality (cont)

### *Market Size*

The Other Technical Services industry includes a broad range of scientific testing and analysis and demand is influenced by expenditure in mineral and petroleum exploration, non-residential construction, and other research and development undertaken in Australia. This industry competes for the total market for scientific testing measuring and analysis, against other multi-disciplined professional industries, such as firms undertaking scientific research into agriculture, biological, physical or social sciences and included in ANZSIC L7810 (Scientific Research), and establishments mainly engaged in providing engineering consultancy services (ANZSIC L7823, Consulting Engineering Services).

This industry also competes for a share of the total technical services market against the in-house operations of government agencies, mining companies, and manufactures. Other Technical Services industry revenue is estimated by IBISWorld to total \$4,450 million in 2007-08, with value added of \$3,335 million or approximately 0.3% of Australia's GDP (in constant 2006-07 prices). The industry is estimated by IBISWorld to comprise employment totalling 30,000 persons in 5,200 establishments in 2007-08, up from 5,088 establishments in the June 2006 Counts of Australian Businesses (ABS Cat. No. 8165.0). In June 2006, 55% of industry establishments were non-employer establishments (generally sole proprietorships), and 2,277 establishments had payroll employment.

Other industries which may be of interest are as follows:



## 9 Competitive neutrality (cont)

### *Scientific Research in Australia*

This class consists of units mainly engaged in undertaking research in the agricultural, biological, physical or social sciences.

#### KEY STATISTICS

Statistic	Value	Unit
Industry Revenue	*1,831.6	Million AUD
Revenue Growth (2006 to 2007)	*0.8	%
Number of Enterprises	*3,387.0	Units
Employment	*10,235.0	Units
Year: 2007	* IBISWorld estimate	

**Note** - Private companies are not included in this analysis as the bulk of research conducted privately is the result of basic research conducted by institutions such as the CSIRO or universities. Basic research often unveils the possibility of products or the basis of products which businesses then conduct developmental research on, generating products via which a profit can be generated.

### *Engineering Consultancy Services in Australia*

This class consists of units mainly engaged in providing consultant engineering services. Also included are units mainly engaged in providing quantity surveying services. Consulting engineering establishments are mainly engaged in applying physical laws and principles of engineering to a broad range of activities in the areas of construction, manufacturing, mining transport and the environment. Assignments undertaken by consultants may involve: provision of advice, preparation of feasibility studies, preparation of preliminary and final plans and designs, provision of technical services during the construction or installation phase, and inspection and evaluation of engineering and environmental projects. The principal activities of consultant engineering establishments involve the design and management of: construction and engineering infrastructure projects; environmental projects; and industrial processes and equipment.



## 9 Competitive neutrality (cont)

### KEY STATISTICS

Statistic	Value	Unit
Industry Revenue	*18,900.0	Million AUD
Revenue Growth (2006 to 2007)	*7.1	%
Number of Enterprises	*14,300.0	Units
Employment	*90,500.0	Units
Exports	*1,065.0	Million AUD
Imports	*1,615.0	Million AUD
Year: 2007	* IBISWorld estimate	

The above analysis indicates that the industry IRS operates in is significant in size and turnaround. Given the competition faced IRS would need to ensure that the benefits outweigh the costs for their business activities.

#### *Cost/Benefit Test*

CN should be implemented unless the costs exceed the benefits. Hence, the general assumption is that the benefits of CN generally outweigh the costs. The costs of the application of the CN policy should be largely administrative and include changes to accounting systems, reviews of activities, general administration and asset valuations. It is likely from the analysis in Sections 5, 6 and 7 that the cost of overheads under the spin-off or stand-alone model would be equivalent or less than under the CSIRO CCF depending on the assumptions, particularly those regarding market rentals. Hence, CN would apply with the move to a stand-alone model.

### Taxation

Another consideration with CN is taxation.

In the past, many government business activities were able to obtain certain advantages over their private sector rivals as a result of their public ownership. These advantages included exemption from taxes, lower costs of finance due to government guarantees and exemption from regulations affecting private sector activity. Such advantages gave unfair advantage to government owned businesses and encouraged resources to flow to them regardless of their efficiency.

## 9 Competitive neutrality (cont)

CN principles aim to remove this unfair advantage. The principles also remove the impediment to efficient resource allocation that had arisen from the regulatory advantage of government owned businesses. They ensure these businesses face the same costs and commercial pressures that face their private sector competitors.

### *Taxation Equivalent Regime*

If you are managing a government business activity that operates as a Business Unit, a significant business activity within an FMA Act agency or a CAC Act body that has a tax exemption, then you will operate under a taxation equivalent regime (TER). This category also includes other significant commercial activities that operate from within non-commercial CAC Act bodies. The TER system requires you to calculate your tax liability in a comparable manner to your competitors and to make an equivalent payment to the Official Public Account (OPA).

CSIRO does not currently calculate and remit Taxation Equivalent Regime (TER) amounts. The Department of Finance and Deregulation (DoFD) has always suggested that significant businesses as defined by CN principles in a particular area may be liable to pay. The threshold is \$10 million of CN related activity in a particular business area before remitting applies.

IRS at present is not liable due to falling under the threshold. However, with the move to a stand-alone overhead structure this would need to be reassessed on a regular basis as the business grows to ensure the threshold requirements are met.

# 10 Cost recovery guidelines

The Australian Government Cost Recovery Guidelines applies to all Financial Management and Accountability Act 1997 agencies and also to those Commonwealth Authorities and Companies Act 1997 (CAC Act) bodies that have been notified under sections 28 or 43 of the CAC Act. CSIRO is a CAC Act body.

IRS currently does not apply the Cost Recovery Guidelines as they are subject to Competitive Neutrality Principles. This is an exclusion under the cost recovery policy (see 'Exclusions' below).

**What is Cost Recovery:** Cost recovery is the recovery of some or all of the costs of a particular activity. These fall into two broad categories:

1. fees for goods and services
2. 'cost recovery' taxes i.e. levies, excises and customs duties.

**Exclusions:** Exclusions under the cost recovery guidelines include:

- any form of intra-agency or inter/intra-governmental charging;
- charges by government business enterprises. These businesses operate in competitive or potentially competitive markets and are subject to competitive neutrality principles;
- other commercial charging arrangements in competitive or potentially competitive markets that comply with competitive neutrality principles (eg. commercial research);
- general taxation;
- repayments of loans to the Australian Government;
- receipts from asset sales, rental of property, royalties, including the sale of rights to access resources;
- fines and pecuniary penalties;
- payments by customers to non-Australian Government organisations and firms where Commonwealth policies may affect prices

# 10 Cost recovery guidelines (cont)

- receipts from one-off specific policy measures that have explicitly been recognised by the Government as not being subject to the cost recovery policy – for example where the Australian Government introduces a levy to fund an exceptional policy measure. Ministers must obtain the Finance Minister's agreement where it is proposed to exempt a significant cost recovery arrangement that is new, materially amended or which has been reviewed (as part of the Government's review schedule) on the grounds that it is a 'one-off specific policy measure'
- charges relating to industry-government partnerships;
- statutory marketing levies; and
- fees charged by courts and tribunals.

*Source: Australian Government Cost Recovery Guidelines July 2005*

**Why Cost Recover:** Cost recovery can improve the efficiency with which Australian Government products and services are produced and consumed. Note that cost recovery may not be appropriate where:

- it is not cost effective
- it would be inconsistent with government policy objectives
- it would stifle competition and industry innovation

**Applicability to IRS:** Cost recovery does not apply to IRS under the stand-alone model as CN applies. However, if CN were not to apply to IRS then IRS would need to assess the case for cost recovery for each activity or product. If IRS proposed to introduce cost recovery arrangements then IRS would need to seek government policy approval.

# 11 Conclusions

It is likely that the cost of overheads under the spin-off or stand-alone model would be equivalent or less than under the CSIRO CCF depending on the assumptions, particularly those regarding market rentals. Prima facie, however, reducing IRS's overheads would mean an increase in the overheads charged to other Themes within CMSE and CMSE may operate at a deficit for 2008-09 as Enterprise overhead rates for CSIRO have been set.

With the move to a stand-alone model CN would still apply however, a re-affirmation that this is the case should be undertaken by taking into account the following key questions:

1. Am I conducting a business? and
2. Is the business significant? (Cost/benefit test)

IRS would need to document their responses to the above and conduct a cost/benefit analysis to determine if steps 1 and 2 had been met. This would only be relevant if IRS continued to operate within CSIRO.

If competitive neutrality does not apply to IRS as a spin-off model in CSIRO then IRS will need to assess the case for cost recovery for each activity or product. If IRS proposes to introduce cost recovery arrangements then IRS should seek government policy approval.

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